NESDC ECONOMIC REPORT

Thai Economic Performance in Q2 and Outlook for 2023

Macroeconomic Strategy and Planning Division Press Release 9.30 a.m. August 21, 2023

The Thai economy in the second quarter expanded by 1.8 (%YoY), slowing down from a growth of 2.6 percent in the previous quarter. After seasonally adjusted, the economy expanded by 0.2 percent from the first quarter (%QoQ_SA). **In the first half of 2023,** the economy grew by 2.2 percent.

On expenditure side, private consumption accelerated. Private investment and export of services slowed down, while export of goods, public investment and government expenditure contracted.

On the production side, wholesale and retail trade; repair of motor vehicles and motorcycles sector accelerated. Electricity, gas, steam and air conditioning supply sector returned to expansion while accommodation and food service activities sector, transportation and storage sector, construction sector, and agricultural sector decelerated.

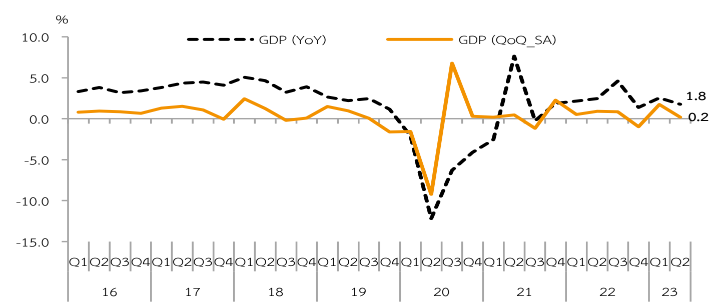
Economic Projection for 2023

(%YoY)	2022		2023		
	Year	Q4	Q1	Q2	Year (f)
GDP (CVM)	2.6	1.4	2.6	1.8	2.5 - 3.0
Investment[1/]	2.3	3.9	3.1	0.4	1.6
Private	5.1	4.5	2.6	1.0	1.5
Public	-4.9	1.5	4.7	-1.1	2.0
Private Consumption	6.3	5.6	5.8	7.8	5.0
Government Consumption	0.2	-7.1	-6.3	-4.3	-3.1
Export of Goods[2/]	5.4	-7.5	-4.5	-5.6	-1.8
Volume[2/]	1.2	-10.4	-6.4	-5.8	-1.8
Import of Goods[2/]	14.0	-2.3	2.0	-5.0	-1.1
Volume[2/]	1.2	-10.1	-2.6	-4.0	-0.6
Current Account to GDP (%)	-3.0	1.2	2.7	-1.5	1.2
Inflation	6.1	5.8	3.9	1.1	1.7 - 2.2

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

The Thai economy in 2023 is projected to expand in the range of 2.5 - 3.0 percent. Key supporting factors include: (1) the favorable growth of private consumption; (2) the continual recovery of tourism sector; and (3) the continual expansion in both private and public investments. Consumption and investment are expected to increase by 5.0 percent and 1.6 percent, respectively. Headline inflation is estimated to be in the range of 1.7 - 2.2 percent and the current account is projected to record a surplus of 1.2 percent of GDP.

Thai economy in Q2/2023



Source: NESDC

The economic management for the remaining of year 2023 needs to prioritize on key following issues: **(1) Maintaining the favorable economic and political environment as well as ensuring the economic stability and cushioning the impact from uncertain global financial markets and economy; (2) Maintaining the growth momentum from public expenditure and investment,** by (i) accelerating the disbursement of carry-over budget and SOEs' budget during the FY2024 annual budget bill has not yet enacted, (ii) precipitating the disbursement procedure of FY2024, and (iii) preparing the project under the FY2024 budget to be ready for a disbursement; **(3) Catalyzing the recovery in tourism and related service sector,** by: (i) organizing the tourism promotion events along with promoting the Long-Term Resident VISA (LTR) to attract high potential foreign visitors particularly long-stay group; (ii) promoting domestic tourism especially in the potential secondary provinces; and (iii) promoting the development of high-quality tourism; **(4) Supporting agricultural production and farmers' income,** by (i) protecting and cushioning the impacts of climate change, in particular, the water management to be sufficient for the cultivation; (ii) distributing additional income share of agricultural products to the farmers; (iii) supporting the measures to mitigate the farmer's risks under the efficient crop insurance scheme from the climate change; and (iv) cushioning the impact from the rising agricultural material cost; **(5) Fostering export growth,** by: (i) facilitating export procedure and lowering related costs; (ii) boosting exports to major markets with strong economic recovery coupled with expanding to new potential markets with high purchasing power; (iii) stimulating the export of goods that become beneficial from trade barrier measure; (iv) utilizing benefits from the Regional Comprehensive Economic Partnership (RCEP); along with expediting the ongoing Free Trade Agreement negotiations and exploring for new trade partners; (v) protecting and rectifying problems risen from trade barriers especially non-tariff measures from the major trade partners; and (vi) enhancing the competitiveness of the export sectors; and **(6) Stimulating private investment,** by: (i) speeding up projects already approved and obtained investment promotion certificates in 2020 - 2022 to start their actual investments; (ii) solving difficulties and obstacles hindering investors and entrepreneurs from investing and doing business including labor shortages in manufacturing sector as well as enhancing high-skilled labors to be brace the new targeted industries; (iii) implementing proactive investment promotions and facilitating investors in targeted industries; (iv) stimulating investments in the Eastern Economic Corridor (EEC) and Special Economic Corridors; and (v) supporting investment in the key economic areas and transportation projects to be in accordance with the development plan.

1. The Thai Economy in Q2/2023

Expenditure Side:

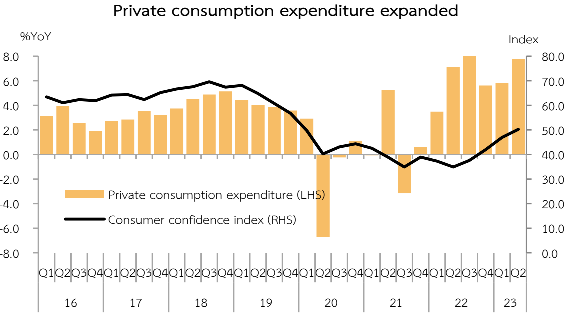
In the second quarter of 2023, private consumption expenditures accelerated and expanded at a high rate. Private investment decelerated, while export of goods continued to decline.

Private consumption expanded by 7.8 percent, accelerating from 5.8 percent in the previous quarter, and the highest growth in 3 quarters.

Private consumption expenditures advanced by 7.8 percent, accelerating from a 5.8-percent growth in the previous quarter, following the continual growth in most spending categories and recorded as the highest level in 3 consecutive quarters. The growth was in line with the improvement of employment and non-farm income and a recovery in tourism sector. Meanwhile, the consumer confidence index stood at the highest level in 14 quarters. **The expenditure in services** expanded at a high growth rate of 13.8 percent, continuing from 12.6 percent in the previous quarter, and mainly contributed by an accelerated growth of the financial and health services sectors at 11.5 percent and 5.6 percent, respectively. Also, the spending on restaurants & hotel, and recreation & culture continued to expand favorably by 49.1 percent and 6.2 percent, respectively. **The expenditure in non-durable goods** expanded by 4.2 percent, increasing from 2.3 percent in the previous quarter, following an accelerated spending on food and non-alcoholic which grew by 4.0 percent, compared with a 3.6-percent growth in the previous quarter. Likewise, the spending on electricity, gas and other fuels returned to positive growth for the first time in five quarters at 11.8 percent. **The expenditure on durable goods** expanded by 3.2 percent, up from 2.4 percent in the previous quarter. This was in line with the purchase of vehicles which grew by 10.8 percent, accelerating from 4.1 percent in the previous quarter. Meanwhile, **the expenditure in semi-durable goods** expanded by 0.7 percent, decelerating from 1.3 percent in the previous quarter. This was due to the deceleration of the spending on the clothing & footwear at 3.8 percent from 4.5 percent in the previous quarter, while the spending on furnishings, household equipment & routine maintenance of the house dropped by 1.7 percent, a continual decrease from 2.1 percent in the previous quarter. The acceleration of private consumption expenditures in this quarter was in line with the consumer confidence index towards the economic situation which increased to 50.3 from 46.9 in the previous quarter, remarked as the highest level in fourteen quarters.

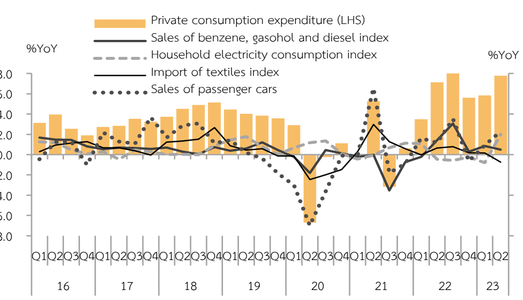
In the first half of 2023, private consumption expenditures expanded by 6.8 percent, continuing from a 7.3-percent growth in the second half of 2022.

Private consumption expenditure expanded



Source: NESDC, University of the Thai Chamber of Commerce

Private consumption expenditure and key indicators



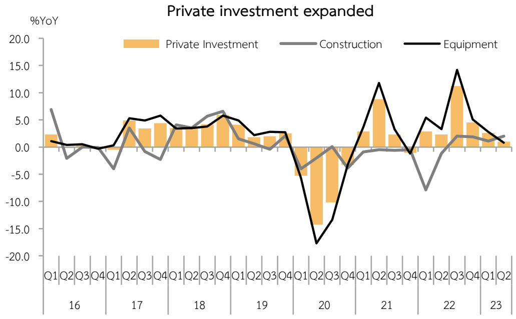
Source: NESDC, BOT, Department of Energy Business

Private investment expanded by 1.0 percent, decelerating from 2.6 percent in the previous quarter, following the deceleration of investment in the machinery and equipment, while the construction accelerated.

Private investment expanded by 1.0 percent, decelerating from 2.6 percent in the previous quarter. **The investment in machinery and equipment** grew by 0.8 percent, decelerating from 2.8 percent in the previous quarter. The slowdown was in line with the decelerated growth in the domestic machinery sales at 0.1 percent, compared with a 3.3-percent growth in the previous quarter. The number of newly registered motor vehicles for investment purpose also declined by 18.1 percent, continuing from a 14.6-percent decrease in the previous quarter. Meanwhile, **the investment in construction** expanded by 2.0 percent, improving from 1.1 percent in the previous quarter. This was mainly due to a recovery of non-dwelling construction which grew by 0.1 percent, rebounding from a 5.3-percent drop in the previous quarter. The Business Sentiment Index (BSI) in this quarter stood at 50.3, compared with 51.1 in the previous quarter.

In the first half of 2022, private investment expanded by 1.8 percent, continuing from a 7.6-percent growth in the second half of 2022.

Private investment expanded



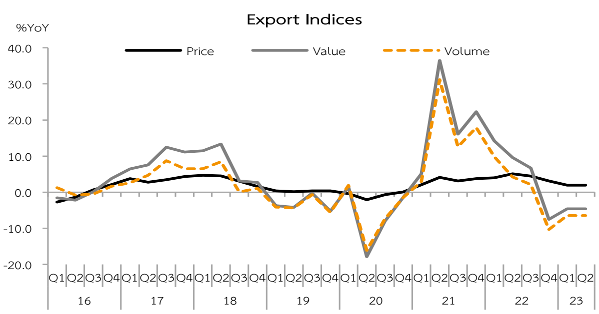
Source: NESDC

Exports in US dollar terms continued to decline from the previous quarter. This was due to the economic slowdown in trading partners. Export value in the second quarter of 2023 was recorded at 70.3 billion US dollars or fell by 5.6 percent, continued to a 4.5-percent decrease in the previous quarter. **The export volume index** declined by 5.8 percent, continuing to a 6.4-percent decrease in the previous quarter mainly due to the reduction of export volume of all product categories. **The export price** increased by 0.3 percent, decelerating from 2.0 percent in the previous quarter following the deceleration of export price of all product categories. Excluding unwrought gold, export value declined by 5.7 percent, compared with a 2.3-percent decrease in the previous quarter. **In Baht terms,** export value was recorded at 2,423 billion Baht, fallen for two quarters consecutively by 5.4 percent, compared with a 1.9-percent increase in the previous quarter.

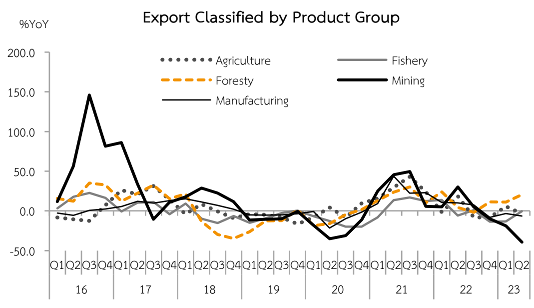
Export value in US dollar terms continually decreased by 5.6 percent, following the economic slowdown in trading partners.

Export value excluding unwrought gold fell by 5.7 percent.

In the first half of 2023, export value stood at 140.1 billion US dollars, decreased by 5.1 percent, continued to a 0.7-percent decrease in the second half of 2022. The export volume index declined by 6.0 percent, while the export price grew by 1.1 percent. In Baht terms, export value was recorded at 4,795 billion Baht or fell by 3.7 percent, compared with a 9.0-percent increase in the second half of 2022.



Source: Bank of Thailand



Source: Bank of Thailand

Export value of agricultural commodities declined by 3.5 percent, in line with the reduction of export volume by 5.4 percent while export price increased by 2.1 percent. **Export value of manufacturing products** fell by 6.5 percent, continued to a 3.3-percent decrease in the previous quarter. **Export value of fishery products** declined by 0.6 percent, in line with a decrease in export volume by 2.4 percent while export price rose by 1.9 percent. **Export value of other products** fell by 8.2 percent.

Export value of agricultural commodities declined due to a decrease in exports of rubber.

Export items with decreased value included machinery & equipment (1.5 percent), vehicle parts & accessories (3.3 percent), animal food (24.6 percent), rubber (40.2 percent), metal & steel (19.0 percent), computer parts & accessories (29.6 percent), and chemicals & petrochemical products (19.9 percent). On the other hand, **export items with increased value** included parts of electrical appliances (44.8 percent), durian (19.6 percent), sugar (34.9 percent), pick up and trucks (17.7 percent), rice (17.5 percent), and passenger car (10.0 percent).

Export value of manufacturing products continually fell.

Export value of fishery products decreased.

Export Value of Major Product in US Dollar Term

%YoY	2022							2023			Share Q2/23
	Year	H1	H2	Q1	Q2	Q3	Q4	H1	Q1	Q2	
Agriculture	**1.0**	**9.9**	**-8.2**	**-1.8**	**18.6**	**-8.4**	**-8.0**	**-0.03**	**5.6**	**-3.5**	**9.2**
Rice	14.9	30.7	4.0	17.3	46.8	12.5	-2.0	20.9	24.4	17.5	1.5
Rubber	-7.9	4.7	-19.8	6.2	3.0	0.2	-37.5	-38.9	-37.7	-40.2	1.1
Durian	-7.7	4.3	-29.1	-48.3	9.8	-53.1	96.4	29.0	218.9	19.6	3.7
Other fruits	8.9	36.8	-9.3	-1.9	73.3	-8.8	-9.8	-1.8	9.0	-7.6	1.0
Manufacturing	**4.8**	**10.4**	**-0.5**	**10.7**	**10.2**	**7.7**	**-8.0**	**-4.9**	**-3.3**	**-6.5**	**87.2**
Food	18.0	28.4	8.4	27.4	29.3	21.5	-3.5	-2.9	3.5	-8.9	7.7
Sugar	92.4	146.4	48.3	184.2	116.8	121.2	-8.3	33.5	32.1	34.9	2.0
Fish, canned, prepared, or preserved	14.0	11.7	16.2	3.3	20.9	28.0	6.2	-6.6	-2.3	-10.8	0.9
Tapioca & cassava starch	6.5	11.3	1.9	5.8	18.9	7.5	-3.2	-32.4	-29.9	-35.5	0.4
Fruits & vegetables, canned, prepared, or preserved	-25.8	-10.8	-36.8	-8.2	-13.2	-34.3	-39.3	-5.3	-6.3	-4.2	0.4
Beverages	5.6	2.6	9.0	4.9	0.5	15.8	2.4	1.2	-1.5	3.9	1.1
Rubber products	-12.6	-19.4	-4.1	-25.0	-13.1	-8.0	0.2	-6.1	0.3	-12.3	2.2
Animal food	15.8	23.9	8.0	26.3	21.6	22.0	-4.4	-22.5	-20.4	-24.6	0.8
Electronics	3.7	9.3	-1.2	17.1	2.5	5.0	-7.2	-7.1	-8.1	-6.1	11.3
- Computer	0.6	21.1	-11.6	67.6	-17.8	10.2	-31.4	88.0	19.2	205.5	0.6
- Computer parts & accessories	-11.1	1.2	-22.1	15.1	-10.1	-13.2	-31.2	-27.2	-24.9	-29.6	3.7
- Integrated circuits & parts	9.3	13.4	5.5	17.7	9.4	11.0	0.5	1.3	-0.2	2.9	3.4
Electrical appliances	2.7	3.3	2.1	7.4	-0.9	7.4	-2.8	6.9	4.6	9.5	9.9
- Air conditioning machines	8.8	3.4	15.9	5.6	1.0	38.7	-1.6	4.5	12.6	-5.1	2.1
- Refrigerators	-7.1	1.5	-16.5	6.8	-3.3	-1.4	-30.7	-18.9	-18.8	-19.0	0.7
- Parts of electrical appliances	13.4	4.4	22.6	4.9	3.8	13.5	31.7	36.0	27.3	44.8	3.2
Metal & steel	3.9	20.5	-10.7	19.6	21.4	-3.4	-17.9	-16.8	-14.3	-19.0	5.1
Automotive	-1.0	-4.8	2.9	-5.8	-3.6	9.0	-2.3	2.9	2.1	3.8	14.1
- Passenger car	-29.8	-49.3	-1.1	-50.3	-48.3	-6.2	2.8	19.7	29.0	10.0	2.0
- Pick up and trucks	-8.9	-20.6	3.7	-28.8	-9.5	15.1	-4.8	11.4	5.5	17.7	2.7
- Vehicle parts & accessories	-0.2	2.7	-3.1	3.5	1.9	2.3	-8.4	-5.8	-8.2	-3.3	6.4

Export Value of Major Product in US Dollar Term

%YoY	2022 Year	2022 H1	2022 H2	2022 Q1	2022 Q2	2022 Q3	2022 Q4	2023 H1	2023 Q1	2023 Q2	Share Q2/23
Machinery & equipment	6.3	7.2	5.4	6.6	7.9	11.2	-0.1	-1.2	-1.0	-1.5	8.1
Jewellery	31.6	40.5	24.5	39.6	41.3	50.6	3.6	12.6	21.9	3.7	2.7
Chemicals & Petro-chemical Products	-3.2	11.3	-16.3	18.8	4.8	-8.7	-23.7	-20.8	-21.7	-19.9	7.5
Petroleum products	14.5	46.1	-8.7	23.5	64.4	10.2	-25.8	-17.0	3.3	-29.4	3.5
Medicinal and surgical equipment and supplies	-2.9	-1.6	-4.3	-4.5	1.3	2.6	-10.6	5.7	8.0	3.7	0.8
Toiletries and cosmetics	16.0	21.3	10.9	18.5	24.2	18.2	4.1	0.8	0.8	0.7	1.2
Fishery	**-2.1**	**2.8**	**-6.3**	**13.9**	**-5.8**	**1.1**	**-13.5**	**-6.6**	**-13.2**	**-0.6**	**0.6**
Crustaceans	-7.7	-3.8	-10.7	8.1	-12.0	-4.3	-16.9	-0.4	-11.2	8.7	0.3
Fish	0.2	4.8	-4.2	14.7	-4.1	6.6	-14.2	-20.5	-24.3	-16.5	0.1
Other Exports	**73.3**	**160.2**	**-0.3**	**548.6**	**4.3**	**20.2**	**-24.7**	**-28.7**	**-36.9**	**-8.2**	**1.9**
Non-monetary gold (excl. articles of goldsmiths)	81.2	177.9	2.8	681.8	-0.8	24.1	-22.9	-34.9	-46.9	-1.3	1.8
Total Exports (Customs basis)	**5.7**	**12.7**	**-1.0**	**14.8**	**10.8**	**6.7**	**-8.2**	**-5.4**	**-4.5**	**-6.2**	**100.0**
Exports, f.o.b. (BOP basis)	**5.4**	**11.8**	**-0.7**	**14.2**	**9.6**	**6.5**	**-7.5**	**-5.1**	**-4.5**	**-5.6**	**99.1**
Export Value (exclude gold)	**4.3**	**9.6**	**-0.8**	**9.3**	**9.8**	**6.2**	**-7.3**	**-4.0**	**-2.3**	**-5.7**	**97.3**

Source: Bank of Thailand

Export markets: Exports to the main markets decreased whereas exports to the secondary markets such as Australia, United Kingdom, South Africa and Saudi Arabia expanded. Exports to the US declined for three consecutive quarters by 3.3 percent, primarily attributed to a decrease in exports of automatic data processing machines, rubber products, and iron, steel and products. **Exports to China** fell for five quarters consecutively by 0.7 percent mainly due to a reduction in exports of rubber product, polymers of ethylene, and automatic data processing machines. **Exports to Japan** dropped for four consecutive quarters by 2.3 percent, following a decrease in exports of prepared poultry, polymers of ethylene, and automatic data processing machines. **Exports to ASEAN (5)** reduced for three quarters consecutively by 12.4 percent, as a result of a reduction in exports to Malaysia and Singapore. **Exports to CLMV** declined for three quarters consecutively by 19.3 percent, in line with a decrease in exports to Vietnam and Cambodia. **Exports to EU (27)** decreased for three quarters consecutively by 2.6 percent, due to a decline in exports of automatic data processing machines, rubber product and machinery and parts. **Exports to India** returned to decrease by 19.4 percent, in line with a decrease in exports of polymers of ethylene, chemical products, animal or vegetable fats and oils. Meanwhile, **exports to Australia** returned to expand by 15.0 percent, supported by an increase in exports of motor cars and parts, automatic data processing machines, and machinery and parts. **Exports to the United Kingdom** expanded for four consecutive quarters by 20.4 percent, due to an increase in exports of prepared poultry, and motor cars, parts and accessories. **Exports to South Africa** increased for two quarters consecutively by 15.8 percent, in line with the growth in exports of motor cars, parts and accessories, rice, and spark-ignition reciprocating internal combustion piston. **Exports to Saudi Arabia** rose for seven consecutively quarters by 22.3 percent, attributed to an increase in exports of motor cars, parts and accessories, woods and wood products, and machinery and parts.

Exports to the main markets declined whereas exports to the secondary markets expanded.

Export Value to Key Markets in US Dollar Term

%YOY	2022 Year	2022 H1	2022 H2	2022 Q1	2022 Q2	2022 Q3	2022 Q4	2023 H1	2023 Q1	2023 Q2	Share Q2/23 (%)
Total Exports (Mil US$) (Customs basis)	287,425	149,193	138,232	73,607	75,586	72,239	65,994	141,170	70,280	70,890	100.0
(%YoY)	**5.7**	**12.7**	**-1.0**	**14.8**	**10.8**	**6.7**	**-8.2**	**-5.4**	**-4.5**	**-6.2**	
United States	13.4	20.4	7.1	23.1	17.8	15.9	-1.3	-3.6	-3.9	-3.3	16.5
Japan	-1.4	1.1	-3.8	1.3	0.9	-0.3	-7.3	-1.3	-0.3	-2.3	8.5
EU (27)	5.2	5.7	4.7	5.6	5.7	15.0	-4.7	-2.4	-2.2	-2.6	7.7
China	-7.6	0.8	-15.7	4.1	-1.8	-17.7	-13.5	-3.7	-7.4	-0.7	14.2
ASEAN (9)	10.5	18.1	3.3	17.0	19.2	18.9	-10.4	-9.9	-4.1	-15.4	23.2
- ASEAN (5)*	9.7	25.2	-3.7	27.3	23.3	11.8	-17.3	-7.5	-2.4	-12.4	13.7
- CLMV**	11.5	9.7	13.5	5.0	14.2	29.3	-0.3	-13.2	-6.4	-19.3	9.5
Australia	2.1	-2.8	7.2	-2.3	-3.4	17.8	-1.8	0.0	-13.3	15.0	4.1
Hong Kong	-13.0	-1.9	-23.6	5.0	-7.2	-22.6	-24.7	-6.7	-3.4	-9.6	3.8
Middle East (15)	21.7	22.8	20.6	16.6	29.1	33.0	10.5	-1.0	9.5	-10.7	3.4
India	22.6	46.4	3.6	33.0	60.1	14.0	-5.9	-8.8	3.7	-19.4	3.4
South Korea	8.7	18.5	-0.8	23.2	14.6	7.7	-9.7	-5.7	-0.5	-10.4	2.3
Taiwan	1.0	8.9	-6.8	9.7	8.3	-1.9	-11.3	-5.1	-2.6	-7.3	1.8
United Kingdom	15.6	7.7	24.2	18.1	-2.1	33.3	16.5	11.1	2.8	20.4	1.6
South Africa	-6.4	0.9	-12.9	-4.5	6.9	-14.5	-11.1	21.4	27.1	15.8	1.2
United Arab Emirates	23.1	25.5	20.9	20.4	30.6	47.1	0.7	-4.1	10.3	-17.3	1.0
Saudi Arabia	24.9	11.0	39.4	5.4	17.0	36.2	42.3	31.9	41.7	22.3	0.8

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

Major Export Products in The First Half of 2023

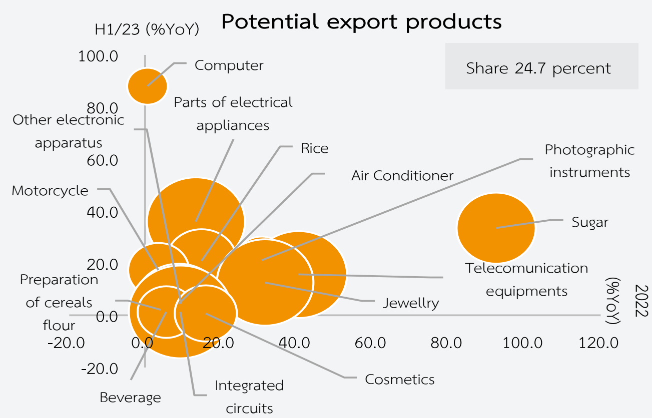
Export value in the first half of 2023 decreased by 5.1 percent, compared with a 5.4-percent growth in 2022 and in line with the economic slowdown in key trading partners' economies. Considering the change in the main export products at the first half of 2023 and 2022 which are accounting for 93.0 percent of total export value, the products could be divided into 4 groups, **1) potential export products, 2) recovering export products, 3) decreasing export products from high export base last year, and 4) continually decreasing export products.** The detail was as follows:

1. Potential export products: export value of products grew in the first half of 2023 and 2022, **accounting for 24.7 percent** of total export value. The products were such as parts of electrical appliances, sugar, telecommunication equipment, jewelry, and rice. This indicates increasing demand and opportunity to promote these products to maintain the market momentum in the future.

2. Recovering products: export value of products returned to expand in the first half of 2023 while decreasing in 2022, **accounting for 9.6 percent** of total export value. The products were such as durian, passenger car, pickup and trucks, as well as medicinal equipment. These could be other potential products in 2023 showing the return of demand in key trading partners.

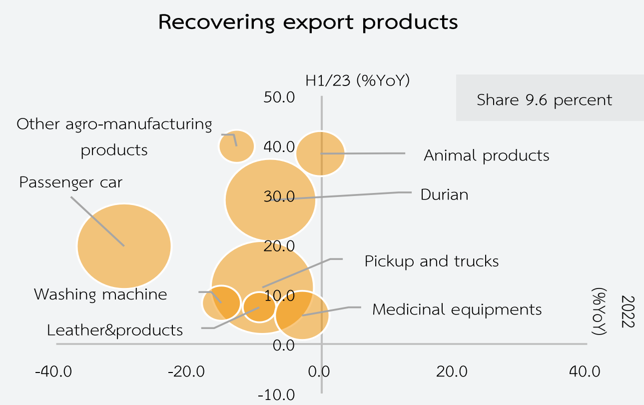
3. Decreasing products from high export base last year: export value of products dropped in the first half of 2023, but grew in 2022, **accounting for 30.8 percent** of total export value. The products were such as fish canned, furniture, animal food due to the decreasing demand in trading partners and petroleum products, iron and steel in line with lowing production especially the US market.

4. Continually decreasing export products: export value of products that decreased in the first half of 2023 and 2022, **accounting for 27.9 percent** of total export value. The products were such as rubber product, vehicle parts, rubber, computer parts, and chemicals & petro-chemical products. These products needed to be closely monitored and should be supported.



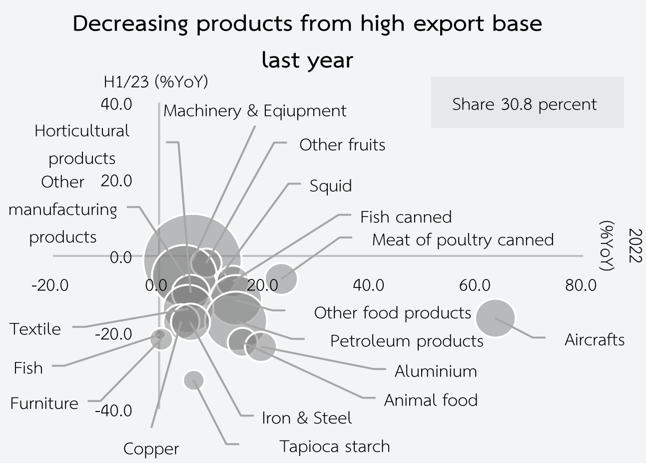
Source: Bank of Thailand evaluated by NESDC

Remark: Bubble size : Export share (%)



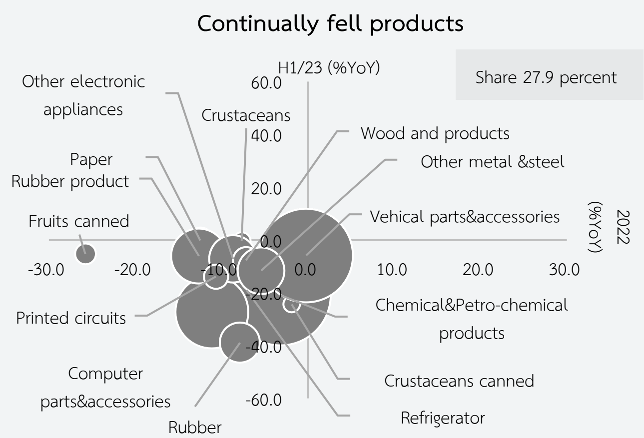
Source: Bank of Thailand evaluated by NESDC

Remark: Bubble size : Export share (%)



Source: Bank of Thailand evaluated by NESDC

Remark: Bubble size : Export share (%)



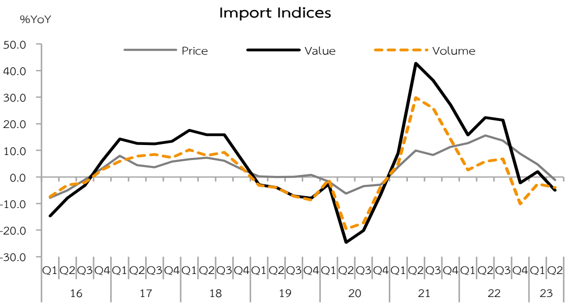
Source: Bank of Thailand evaluated by NESDC

Remark: Bubble size : Export share (%)

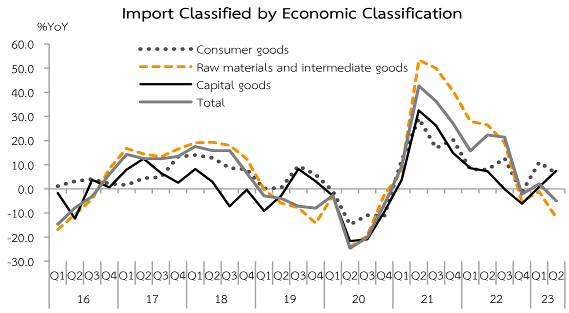
Import value in US dollar terms declined by 5.0 percent, compared with a 2.0 percent growth in the previous quarter.

Import value in US dollar terms was recorded at 68.1 billion US dollars declined by 5.0 percent, compared with a 2.0 percent growth in the previous quarter and in accordance with decreasing manufacturing production and export value. Total import volume and total import price diminished by 4.0 percent and 1.1 percent, respectively. The drop was in line with the reduction of import volume and import price in raw materials and intermediate goods which decreased by 6.6 percent and 5.8 percent, respectively. Import value excluding the non-monetary gold (except for articles of goldsmiths) decreased by 4.7 percent. **In Baht terms,** the import value stood at 2,348 billion Baht, decreasing by 4.9 percent and compared with a 4.6 percent growth in the previous quarter.

In the first half of 2023, import value was recorded at 135.0 billion US dollars or decreased by 1.7 percent, compared with a 9.3 percent growth in the second half of 2022. Total import volume decreased by 3.2 percent while total import price increased by 1.8 percent. In Baht terms, import value was recorded at 4,615 billion Baht or dropped by 0.4 percent.



Source: Bank of Thailand



Source: Bank of Thailand

By categories, the import value of raw materials and intermediate goods contracted by 12.1 percent, continuing from a contraction of 1.2 percent in the previous quarter, corresponding with a decrease in manufacturing production. Import volume and import price declined by 6.6 percent and 5.8 percent, respectively. **Import value of other goods** dropped by 13.3 percent, followed by a reduction in imports of non-monetary gold and other imports. **Import value of consumer goods** increased by 6.4 percent, continuing with an 11.0-percent increase in the previous quarter. This was followed by a substantial increase in private consumption expenditures. Import volume and import price rose by 4.0 percent and 2.3 percent, respectively. **Import value of capital goods** increased by 7.5 percent. Import volume and import price rose by 7.0 percent and 0.4 percent, respectively.

Import Value of Major Product in US Dollar Term

%YoY	2022							2023			Share Q2/23 (%)
	Year	H1	H2	Q1	Q2	Q3	Q4	H1	Q1	Q2	
Consumer goods	**6.5**	**8.0**	**5.1**	**8.1**	**8.0**	**12.7**	**-1.5**	**8.7**	**11.0**	**6.4**	**12.6**
- Exclude vehicles	5.3	9.0	1.9	9.3	8.7	9.4	-4.8	0.7	3.2	-1.9	11.1
Food, beverage & dairy products	14.6	14.8	14.4	13.4	16.2	17.6	11.3	0.9	1.0	0.8	2.5
Vehicles	32.2	-8.9	88.2	-12.2	-5.5	107.8	74.7	177.8	179.1	176.6	1.5
Medicinal and pharmaceutical products	-6.9	29.2	-31.3	52.8	10.3	-39.4	-22.0	-14.7	-19.2	-9.6	1.2
Animal & fishery products	5.8	1.4	10.3	9.1	-5.2	14.2	6.9	0.7	1.9	-0.5	1.2
Cellular phone	-11.4	-7.3	-15.0	-17.7	8.1	35.4	-39.1	-14.3	-4.8	-25.0	1.0
Raw materials and intermediate goods	**16.4**	**27.2**	**6.7**	**28.0**	**26.6**	**19.1**	**-5.2**	**-6.9**	**-1.2**	**-12.1**	**64.9**
- Exclude fuel	5.7	13.7	-1.9	16.0	11.5	4.3	-8.3	-8.0	-4.1	-11.7	45.9
Parts of electronics and electrical appliances	8.8	17.3	1.2	19.9	14.9	7.7	-5.3	-2.1	-0.8	-3.4	15.0
Crude oil	53.1	83.6	29.5	70.4	94.7	61.0	4.7	-5.5	11.6	-18.2	12.0
Chemicals & petro-chemical products	6.6	16.3	-2.6	18.6	14.3	5.4	-11.0	-16.3	-10.5	-21.4	8.9
Materials of base metal	-0.5	15.7	-15.5	18.3	13.5	-8.6	-22.6	-21.1	-14.6	-26.8	8.1
Natural gas	109.4	171.3	75.7	262.0	113.8	233.3	-10.7	10.0	-1.1	21.9	4.2
Petroleum products	20.5	32.4	10.4	30.6	34.0	16.3	4.9	-14.8	-13.4	-16.0	2.3
Capital goods	**2.1**	**7.9**	**-3.2**	**8.6**	**7.3**	**-0.1**	**-6.2**	**4.1**	**0.7**	**7.5**	**18.7**
Other machinery and mechanical appliances & parts	2.1	5.8	-1.5	8.3	3.4	-0.7	-2.4	-1.5	-4.4	1.4	7.7
Transformers, generators, motors and accumulators	6.7	8.6	5.0	7.3	9.9	7.3	2.6	4.5	6.0	2.9	1.8
Computer	-15.7	3.1	-28.4	21.3	-12.7	-19.8	-37.6	41.8	-16.3	111.9	1.8
Aircrafts, ships, floating structures, and locomotive	11.3	49.4	-17.3	26.5	68.4	9.3	-28.6	3.8	18.5	-5.4	1.5
Measuring, checking and precision instruments	-0.1	-2.6	2.5	-6.1	1.0	1.7	3.5	3.2	6.3	0.3	1.3
Other Imports	**21.4**	**-14.4**	**70.9**	**-42.9**	**49.9**	**138.1**	**14.8**	**-13.1**	**-12.8**	**-13.3**	**3.8**
Non-monetary gold (excl. articles of goldsmiths)	32.0	-18.8	114.1	-54.1	103.6	245.8	23.4	-19.2	-24.2	-15.2	2.7
Other imports, n.i.e.	-2.2	-2.1	-2.3	9.9	-12.4	-1.0	-3.7	1.1	9.6	-8.1	1.1
Total Imports (Customs basis)	**12.8**	**18.9**	**7.1**	**16.3**	**21.5**	**18.9**	**-4.1**	**-3.5**	**0.2**	**-6.9**	**100.0**
Imports, f.o.b. (BOP basis)	**14.0**	**19.1**	**9.3**	**15.8**	**22.3**	**21.4**	**-2.3**	**-1.7**	**2.0**	**-5.0**	**91.8**
Import Value (Exclude gold)	**13.4**	**20.9**	**6.4**	**21.2**	**20.7**	**16.3**	**-3.1**	**-1.1**	**2.8**	**-4.7**	**89.1**

Source: Bank of Thailand

Import Volume Indices by Economic Classification

Volume indices	2022							2023		
	Year	H1	H2	Q1	Q2	Q3	Q4	H1	Q1	Q2
Consumer goods	1.6	2.8	0.5	3.5	2.2	6.9	-5.3	5.3	6.5	4.0
Raw materials and intermediate goods	1.3	6.9	-4.3	7.9	6.0	3.8	-12.3	-4.4	-2.3	-6.6
Capital goods	-0.7	4.2	-5.2	5.0	3.4	-3.2	-7.2	3.4	-0.3	7.0
Total Imports	**1.2**	**4.2**	**-1.8**	**2.7**	**5.8**	**6.8**	**-10.1**	**-3.2**	**-2.6**	**-4.0**

Source: Bank of Thailand

Import Price Indices by Economic Classification

Price indices	2022							2023		
	Year	H1	H2	Q1	Q2	Q3	Q4	H1	Q1	Q2
Consumer goods	4.9	5.1	4.7	4.4	5.7	5.4	4.0	3.3	4.3	2.3
Raw materials and intermediate goods	15.0	19.0	11.3	18.6	19.4	14.7	8.0	-2.4	1.2	-5.8
Capital goods	2.9	3.6	2.1	3.3	3.8	3.2	1.1	0.7	1.0	0.4
Total Imports	**12.7**	**14.2**	**11.2**	**12.8**	**15.6**	**13.7**	**8.8**	**1.8**	**4.8**	**-1.1**

Source: Bank of Thailand

Term of trade expanded for the first time in ten quarters as export price increased by 0.3 percent, while import price decreased by 1.1 percent. Thus, the term of trade stood at 97.3, increasing from 95.9 in the same quarter last year and from 95.8 in the previous quarter. The term of trade was below 100 for six quarters consecutively.

Term of trade returned to expand for the first time in ten quarters.

In the first half of 2023, term of trade stood at 96.6, compared with 96.5 in the second half of 2022 as import price increased by 1.8 percent, faster than the growth of export price which grew by 1.1 percent.

Trade balance in the second quarter of 2023 was recorded a surplus of 2.2 billion US dollars, lower than a surplus of 2.9 billion US dollars in the previous quarter and a surplus of 2.7 billion US dollars in the same quarter of last year. **In Baht terms,** trade balance was recorded a surplus of 75.1 billion Baht, lower than a surplus of 104.4 billion Baht in the previous quarter and a surplus of 93.3 billion Baht in the same period last year.

Trade surplus was at 2.2 billion US dollars, lower than a surplus recording in the same quarter last year.

In the first half of 2023, trade balance was recorded a surplus of 5.1 billion US dollars, compared with a surplus of 3.3 billion US dollars in the second half of 2022, and a surplus of 10.3 billion US dollars in the same period last year. **In baht terms,** trade balance was recorded a surplus of 179.4 billion Baht, compared with a surplus of 121.3 billion Baht in the second half of 2022.

Term of trade

%YoY	2022							2023		
	Year	H1	H2	Q1	Q2	Q3	Q4	H1	Q1	Q2
Term of trade*	96.5	97.2	96.5	98.5	95.9	96.0	97.0	96.6	95.8	97.3
%YOY	-7.8	-8.4	-6.7	-7.8	-9.1	-8.1	-5.2	-0.6	-2.7	1.4

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

Accommodation and food services activities, agricultural, transport and storage, wholesale and retail trade; repair of motor vehicles and construction sector slowed down compared to the previous quarter. Electricity, gas, stream and air conditioning sectors returned to expanded. Meanwhile, manufacturing sector declined for the third consecutive quarter.

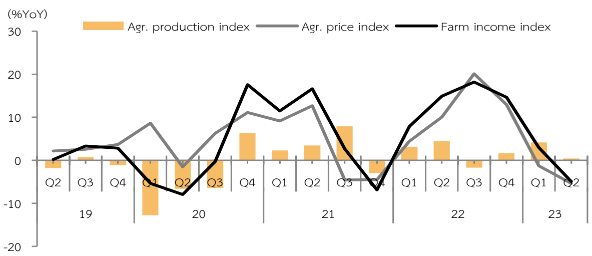
Production Side:

Agriculture, forestry, and fishing sector expanded by 0.5 percent, slowing down from a 6.2-percent growth in the previous quarter, mainly due to a decline in major crops production, especially sugarcane and fruits. Meanwhile, livestock and fisheries expanded. This was in line with a growth of Agricultural Production Index at 0.4 percent, slowing down from a 4.1 percent in the previous quarter. Major agricultural products with production expansion included: (i) **paddy** (17.5 percent), as a result of the price incentive enhanced farmers to expand plantation areas. (ii) **maize** (25.1 percent), owing to the favorable prices in the recent period and the government's policy to encourage farmers to cultivate maize after the rice cultivation season which led to an expansion of plantation areas, along with favorable weather condition, (iii) **swine** (7.4 percent), and (iv) **white shrimp** (14.4 percent). On the other hand, major agricultural products with production contraction included (i) **sugarcane** (-66.2 percent), due to less rainfall than the previous year, coupled with persistently high fertilizer prices and insufficient sugarcane maintenance. (ii) **fruits** (-10.5 percent), especially durian (-7.1 percent) as a result of the unfavorable weather conditions, and some yields being affected by the outbreak of diseases. (iii) **oil palm** (-5.3 percent) and (iv) **cassava** (-4.1 percent), etc. Agricultural Price Index decreased for the second consecutive quarter by 5.4 percent. following a decrease in main agricultural products such as (i) **rubber** (-28.3 percent), (ii) **oil palm** (-44.7 percent), (iii) **swine** (-14.6 percent), and (iv) **white shrimp** (-15.2 percent). However, some major agricultural price index still increased, including paddy (12.3 percent), and fruits (8.8 percent), etc. A decline in several agricultural price indexes thus led to **Farm Income Index** decreased for the first time in the sixth quarters with a 4.9-percent contraction.

Agriculture, forestry, and fishing sector expanded by 0.5 percent, slowed down from the previous quarter, following a decline in major crops, especially sugarcane and fruits. Agricultural Price Index decreased for the second consecutive quarter, thus led to Farm Income Index decreased for the first time in the sixth quarters.

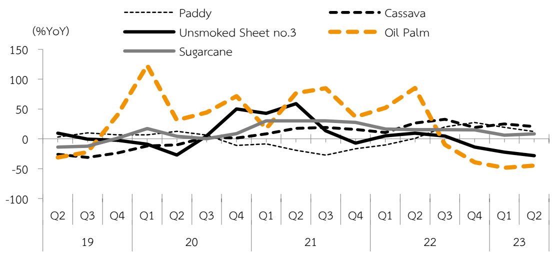
In the first half of 2023, agriculture, forestry, and fishing sector increased by 3.4 percent, compared with a 1.2-percent growth in the second half of 2021. In details, Agricultural Production Indexes expanded by 2.5 percent. Agricultural Price Indexes decreased by 3.4 percent and Farm Income Index decreased by 0.6 percent.

Farm Income Index decreased by 4.9 percent
due to the decrease of agricultural price index



Source: Office of Agricultural Economics

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



Source: Office of Agricultural Economics

Manufacturing sector declined for the third consecutive quarter by 3.3 percent, continuing from a 3.0-percent contraction in the previous quarter, according to a decrease in all production groups. In particular, manufacturing industries of the export-oriented industries were affected by the economic slowdown of major trading partners. This was in accordance with a decrease in the Manufacturing Production Index (MPI) of 5.6 percent. **Manufacturing Production Index of the industries of the export-oriented industries (with export share of more than 60 percent to total production)** declined by 12.2 percent, continuing from a 13.7-percent decline in the previous quarter. The main decline in production was manufacture of computers and peripheral equipment decreasing by 29.4 percent in line with the fact that production of hard disk drives (HDD) declined, while manufacture of furniture decreased by 33.7 percent, following the decrease in global market demand. **Manufacturing Production Index of the domestic-oriented industries (with export share of less than 30 percent to total production)** declined by 4.1 percent, continuing from a 1.8-percent decline in the previous quarter. This was mainly due to a plunge in manufacture of basic iron and steel fell for the sixth consecutive quarter by 21.1 percent as China (the world's No. 1 producer and exporter) accelerated its production and exported more steel than last year and manufacture of fertilizers and nitrogen compounds declined for the fourth consecutive quarter by 30.7 percent due to an increase in domestic chemical fertilizer stocks. **Manufacturing Production Index of the industries (with 30 - 60 percent export share to total production)** declined for the first time in four quarters by 1.1 percent, compared to a 2.3-percent growth in the previous quarter. This was mainly due to a decline in manufacture of prepared animal feeds which decreased by 9.7 percent following a fall in demand from global market such as the US and Japan. However, manufacture of motor vehicles continued to increase for the eleventh consecutive quarter by 6.2 percent. In particular, production for export of passenger cars and commercial vehicles grew by 27.6 percent and 9.9 percent, respectively, especially major markets such as Australia, Saudi Arabia and Mexico. **The average capacity utilization rate** for the quarter was 57.64 percent, lower than 63.81 percent in the previous quarter and lower than 61.20 percent in the same quarter of the previous year. Only two key industries had capacity utilization above 80 percent which were manufacture of plastics and synthetic rubber in primary forms (87.36 percent) and manufacture of refined petroleum products (85.00 percent). On the other hand, 30 industries had capacity utilization below 50 percent, including manufacture of computers and peripheral equipment (48.04 percent), manufacture of electric motors, generators, transformers and electricity distribution and control apparatus (47.55 percent) and manufacture of finished plastics products (46.82 percent) etc.

Manufacturing sector declined for the third consecutive quarter by 3.3 percent following a decline in all production groups.

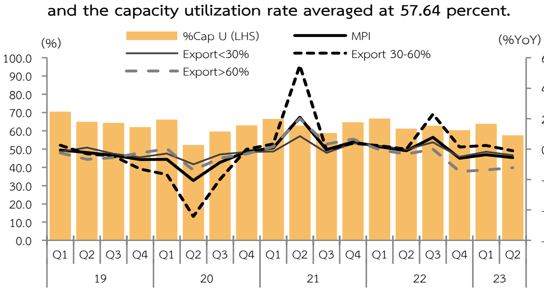
The average capacity utilization rate was 57.64 percent, lower than 63.81 percent in the previous quarter and lower than 61.20 percent in the same quarter of the previous year.

Manufacturing production index with negative growth included computers and peripheral equipment (-29.4 percent), basic iron and steel (-21.1 percent), wearing apparel, except tailoring and dressmaking (-29.8 percent), furniture (-33.7 percent), and other rubber products (-13.4 percent), etc.

Manufacturing production index with positive growth included motor vehicles (6.2 percent), sugar (19.0 percent), motorcycles (17.3 percent), other articles of paper and paperboard (8.3 percent), and refined petroleum products (0.5 percent), etc.

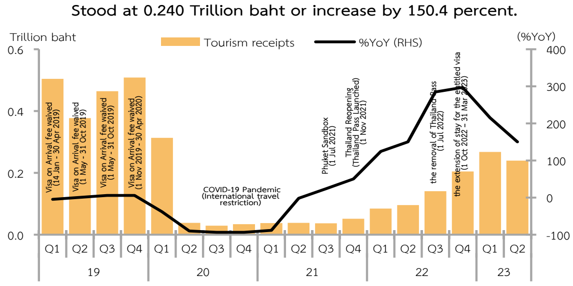
In the first half of 2023, manufacturing sector decreased by 3.2 percent, with the Manufacturing Production Index decreasing by 4.6 percent and the average capacity utilization rate at 60.72 percent.

Manufacturing Production Index decreased by 5.6 percent
and the capacity utilization rate averaged at 57.64 percent.



Source : Office of Industrial Economics

Services receipts of Tourism for Q2/2023
Stood at 0.240 Trillion baht or increase by 150.4 percent.



Source: Bank of Thailand

Accommodation and food service activities sector maintained continuous expansion at a high rate of 15.0 percent, decelerating from 34.3 percent in the previous quarter. This deceleration was partially attributed to the high expansion base in the same period last year. In this quarter, **the number of foreign tourists stood at 6.437 million people** (shared of 74.62 percent of pre-COVID-19 outbreak period). The top three international arrivals were from Malaysia, China and India. This trend aligned an increase in the number of flights and routes offered by international airlines. **International tourism receipts[1] stood at 0.240 trillion Baht** rising for eight consecutive quarters by 150.4 percent. **The top international arrivals by region in this quarter** mainly came from Asia and the Pacific 5.017 million people (shared of 77.93 percent), rose by 377.4 percent, Europe 0.977 million people (shared of 15.17 percent), rose by 176.7 percent, and The Americas 0.280 million people (shared of 4.35 percent), rose by 189.2 percent, respectively. The domestic tourism by Thai travelers increased continuously at a significant rate of 24.7 percent, driven by many extended holidays as well as tourism promotion measures through festivals and annual provincial fairs. **Thai tourism receipts[2] stood at 0.188 trillion Baht,** rising by 22.6 percent. The top three most visited provinces (excluding Bangkok) by Thai tourists consisted of Kanchanaburi 3.453 million people (shared of 5.73 percent), Chonburi 3.403 million people (shared of 5.65 percent), and Phetchaburi 2.662 million people (shared of 4.42 percent). An increase in both international and domestic tourism receipts led to the total amount of tourism revenue[3] in this quarter reaching 0.428 trillion Baht which rose by 71.7 percent. **The average occupancy rate stood at 66.93 percent,** which was lower than the 70.24 percent in the previous quarter, but higher than the 42.80 percent in the same period last year.

Accommodation and food service activities sector continued to expand at a high rate of 15.0 percent, mainly driven by a high growth in foreign tourist arrivals and a continued increase in domestic tourism.

The total amount of tourism revenue in this quarter stood at 0.428 trillion Baht which rose by 71.7 percent.

The average occupancy rate was 66.93 percent, which was lower than the 70.24 percent in the previous quarter but higher than the 42.80 percent in the same period last year.

In the first half of 2023, accommodation and food service activities sector expanded by 23.9 percent. The number of foreign tourists stood at 12.915 million people, increased by 520.6 percent. The total amount of tourism revenue was 0.892 trillion Baht, marking an increase of 86.3 percent. The average occupancy rate was 68.58 percent.

Wholesale and retail trade; repair of motor vehicles and motorcycles sector increased by 3.4 percent, continuing from a 3.3-percent expansion in the previous quarter. This growth was largely driven by the favorable expansion of household spending and the continuing improvement of the tourism sector. This was in line with an increase in Wholesale and Retail Sales, and Repair of Motor Vehicles Composite Index. In details, (i) **Wholesale Index (except motor vehicles and motorcycles)** increased by 3.3 percent due to an expansion in other types of specialized goods wholesale such as gas fuel wholesale. especially gasoline (ii) **Retail Sales Index (except motor vehicles and motorcycles)** increased by 0.05 percent as a result of an increase in retail sale in non-specialized stores, (iii) **Wholesale and Retail Sales, and Repair of Motor Vehicles Index** decreased by 2.5 percent due to a decline in Sales of automotive parts and accessories and sales of motor vehicles, especially for commercial vehicles, due to a decline in demand resulting from the rush to buy commercial vehicles in the previous period. This was also partly due to the high base last year. However, in sale, maintenance and repair of motorcycle parts and accessories growing for the fifth consecutive quarter.

Wholesale and retail trade; repair of motor vehicles and motorcycles sector increased by 3.4 percent, in tandem with a favorable expansion of household expenditure as well as a continued improvement of the tourism sector.

In the first half of 2023, In the first half of 2023, wholesale and retail trade; repair of motor vehicles and motorcycles sector increased by 3.4 percent. Wholesales Index (except motor vehicles and motorcycles) rose by 4.1 percent, and Retail Sales Index (except motor vehicles and motorcycles) grew by 0.3 percent. Meanwhile, Wholesale and Retail Sales, and Repair of Motor Vehicles Index decreased by 3.7 percent.

Transportation and storage sector increased by 7.5 percent, decelerating from a high growth of 12.1-percent in the previous quarter. This was in line with the slowdown in Transportation Services Composite Index, attributed to (i) a 43.9-percent increase in air transport services, decelerating from 76.5-percent in the previous quarter; (ii) a 5.4-percent increase in land transport and transport via pipelines services, decelerating from 10.8-percent in the previous quarter; and (iii) a 0.2-percent increase in water transport services, decelerating from a 0.5-percent in the previous quarter. Additionally, warehousing and support activities for transportation rose by 7.9 percent, accelerating from a 4.1-percent growth in the previous quarter. Besides, postal and courier activities increased by 8.9 percent, compared to a growth of 9.0 percent in the previous quarter, in line with an expansion of entrepreneur revenue.

Transportation and storage sector increased by 7.5 percent, decelerating from the previous quarter. This was in line with the slowdown in Air, Land, and Water Transport Services, while warehousing and support activities for transportation expanded.

In the first half of 2023, transportation and storage sector increased by 10.0 percent. Transport services rose by 10.1 percent, attributed to a 62.3-percent increase in air transport services, an 8.7-percent increase in land transport and transport via pipelines services, and a 0.4-percent increase in water transport services, respectively. Additionally, warehousing and support activities for transportation rose by 6.0 percent, while postal and courier activities expanded by 9.0 percent.

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[1] International tourism receipts refer to Service receipt of Tourism from the balance of payment table. (source: Bank of Thailand)

[2] Thai tourism receipts refer to Domestic Tourism Statistic. (source: Ministry of Tourism & Sports)

[3] The total amount of tourism revenue refers to an aggregation of the international tourism receipts and Thai tourism receipts.

Electricity, gas, steam and air conditioning supply sector increased by 5.7 percent, returned to expand after a 4.3-percent decrease in the previous quarter, in response to an increase in electricity generation and gas separation plant activities. In accordance with the recovery of electricity, gas, and air conditioning production index, this was mainly attributed to (i) the power generation index expanded by 8.8 percent, an improvement compared to a 2.3 percent-decrease in the previous quarter according to an increase in electricity usage of households and businesses sector by 17.8 percent and 13.9 percent, respectively, while electricity usage in the industrial sector decreased by 3.4 percent, in consonance with a decrease in industrial production. The average temperature in this quarter was 31.32 degree Celsius, the highest level on record, and (ii) the natural gas production index expanded for the first time in eight quarters by 12.2 percent, an improvement compared to a 7.8-percent decrease in the previous quarter, in agreement with increasing demand for natural gas especially for electricity production. Nevertheless, usage as a raw material for the production of plastics and organic chemicals and as a fuel for vehicles in the transport sector declined.

Electricity, gas, steam and air conditioning sectors resumed growth at 5.7 percent compared to a 4.3-percent drop in the previous quarter. This was in line with the increase in electricity generation and gas separation plant activities.

In the first half of 2023, electricity, gas and air conditioning sectors increased by 0.8 percent.

Construction sector continued to increase by 0.4 percent, decelerating from a 3.9-percent growth in the previous quarter, following the decline in public construction while private construction continued to expand. In this quarter, **Public construction** decreased for the first time in three quarters by 0.6 percent, compared to a 5.8-percent growth in the previous quarter. This was a result of government construction, which declined for the first time in three quarters by 1.6 percent, compared with an 8.3-percent increase in the previous quarter. This was in line with the decrease in disbursements by the Ministry of Transport. Especially, the land transport system state enterprise construction increased for the fifth consecutive quarter by 1.2 percent, compared with a 1.3 percent-growth in the previous quarter. This was mainly in line with the progress of major infrastructure developments such as the cooperation between the government of the Kingdom of Thailand and the government of the People's Republic of China for development of high-speed rail systems to connect regions Bangkok - Nong Khai Section (Phase 1, Bangkok - Nakhon Ratchasima) (SRT) and the MRT Purple Line Project, Tao Poon - Rat Burana Section (Kanchanaphisek Ring) (MRTA). Private sector increased for the fourth consecutive quarter by 2.0 percent, accelerating from a 1.1-percent growth in the previous quarter, following the expansion of construction of non-residential construction, especially factory buildings. Residential construction (such as condominiums and single detached houses) and other construction slowed down from the previous quarter. Nonetheless, the construction of commercial buildings declined. Construction Material Price Index (CMI) dropped for the first time in 11 quarters by 1.2 percent following a decline in steel price index (-13.9 percent), asphalt and asphalt concrete (-19.5 percent) and cement (-2.2 percent).

Construction sector grew by 0.4 percent, decelerating from the previous quarter. following the declined in public construction while private construction continued to expand. Construction Material Price Index fell for the first time in 11 quarters.

In the first half of 2023, construction sector grew by 2.1 percent, with public construction rose by 2.6 percent (government and state-owned enterprise construction increased by 3.3 percent and 1.3 percent respectively) and Private construction increased by 1.6 percent.

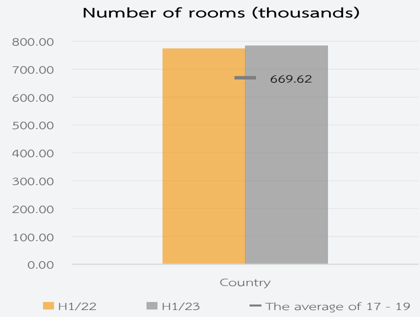
Internal Tourism Situation[1]

During the first six months of 2023, there were 154.99 million internal tourists-time[2] (accounting for 103.81 percent of pre-Covid-19 level[3]), increased by 56.7 percent compared to the same period last year, while the number of rooms in accommodation[4] for 2023 reached 785,266 rooms, increasing by 17.3 percent from the pre-Covid-19 level. Notably, the homestay[5] (shared of 0.96 percent) substantially rising by 59.1 percent from the pre-Covid-19 level. The majority of newly registered accommodations were from small businesses[6].

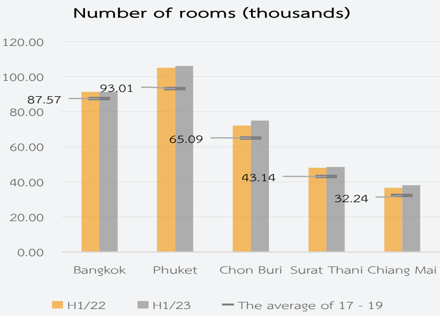
The occupancy rate (OR) stood at 68.58 percent on average, higher than 39.56 percent recorded in the same period last year, but remaining lower than 72.5 percent in the pre-Covid-19 level. Meanwhile, the average length of stay reduced to 8.67 days from 8.93 days in the pre-Covid-19 period. The revenue from domestic tourism was worth 892 billion-Baht, accounting for 64.64 percent of the pre-epidemic level, increased by 86.3 percent growth compared to the same period last year.

1 Internal Tourism comprises (1) Domestic Tourism refers to residents traveling within the country, and (2) Inbound Tourism refers to a non-resident traveling to another country for tourism.
2 Visitors consists of Tourists, referring to those who stay overnight and excursionists, referring to those who do not stay overnight.
3 The pre-Covid-19 refers to the average of 2017-2019
4 Data from the Tourism Market Research Center, Tourism Authority of Thailand.
5 The top three accommodation with the highest growth rates (excluding other types) in 2023 compared to the pre-COVID-19 period were homestays (shared of 0.96 percent), expanded by 59.1 percent; resorts (shared of 31.12 percent) grew by 19.8 percent, and hotels (shared of 54.58 percent) grew by 17.5 percent.
6 Data sourced from the Business Registration Statistics of the Accommodation by Department of Business Development, Ministry of Commerce.

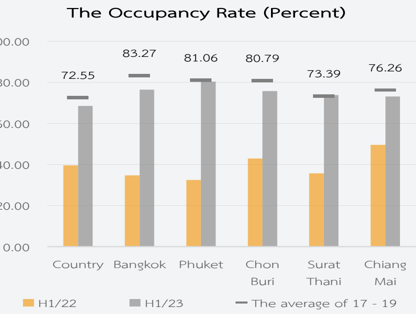
Internal Tourism Situation (cont.)



Source: TAT Intelligence Center



Source: TAT Intelligence Center



Source: Ministry of Tourism & Sports

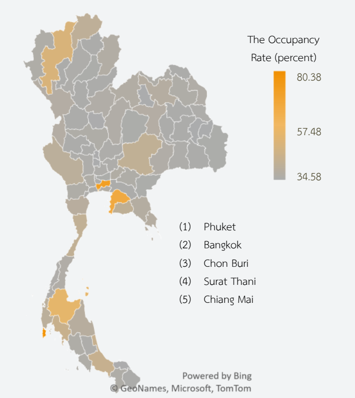
When considering domestic tourism situation by province, it was found that the top five provinces with the highest occupancy rate and revenue from visitors were Phuket (80.38 percent occupancy rate and 182.6 billion Baht in revenue, shared of 19.14 percent of total revenue), Bangkok (76.50 percent occupancy rate and 348.4 billion Baht in revenue, shared of 36.53 percent of total revenue), Chon Buri (75.77 percent occupancy rate and 104.2 billion Baht in revenue, shared of 10.92 percent of total revenue), Surat Thani (73.85 percent occupancy rate and 23.3 percent in revenue, shared of 0.08 percent of total revenue), and Chiang Mai (73.18 percent occupancy rate and 40.8 billion Baht in revenue, shared of 4.28 percent of total revenues).

Only Phuket and Bangkok contributed over 55.67 percent of total revenue, highlighting the concentration of domestic tourism in the Major Cities[7]. Conversely, the three provinces with the lowest occupancy rate and revenue from visitors were Amnat Charoen (34.58 percent occupancy rate and 1.4 hundred in revenue), Nongbua Lumphoo (35.72 percent occupancy rate and 1.2 hundred million Baht in revenue), and Yasothon. (40.13 percent occupancy rate and 2.4 hundred million Baht in revenue), all located in the Secondary Cities[8].

However, when considering the increase in the occupancy rate and the growth rate of revenue from visitors in the first half of 2023 compared to the same period in 2019, it was found that provinces with significant increases in occupancy rates include Chiang Rai, Nakhon Phanom and Nan. Additionally, provinces with the highest growth rates of revenue from visitors are Phayao, Samut Songkhram and Buri Ram. These provinces are the Secondary Cities featuring notable tourist attractions, including famous cultural and religious sites, accommodations highlighting nature and picturesque settings, as well as tourist spots offering water-based activities.[9]

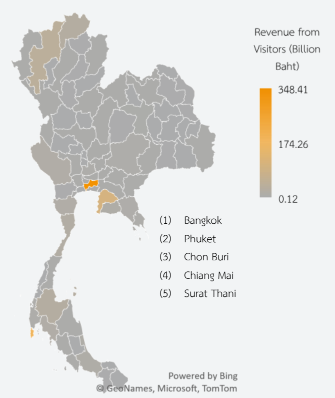
In the next phase, the government should focus on promoting and stimulating tourism in the Secondary Cities to create a more balanced distribution of tourists and to consistently generate tourism income for the Secondary Cities, whilst concurrently strengthening the public and private collaboration to enhance the potential of various critical tourism aspects. This includes (1) establishing strategic position in each province to attract tourism and offer diverse experiences for tourists, thereby fostering word-of-mouth and ensuring repeat visits in the future (2) developing products and services that highlight local identity or utilize locally sourced materials to add value to products and services and (3) elevating infrastructure and transportation systems to ensure comprehensive

The Occupancy Rate in the first half of 2023



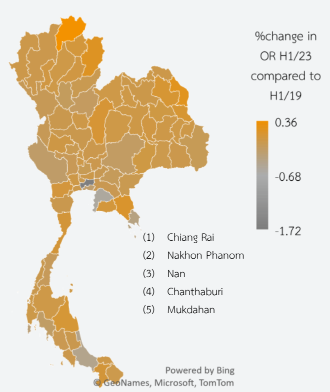
Source: Ministry of Tourism & Sports

Revenue from Visitors in the first half of 2023



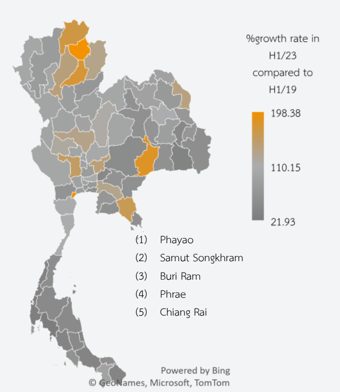
Source: Ministry of Tourism & Sports

Increase in occupancy rate in the first half of 2023 compared to 2019 (percent)



Source: Ministry of Tourism & Sports

Growth rate of revenue from visitors in the first half of 2023 compared to 2019 (percent)



Source: Ministry of Tourism & Sports

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[7] The Major 22 Cities are Bangkok, Nakhon Pathom, Nonthaburi, Samut Sakhon, Samut Prakan, Chachoengsao, Pathum Thani, Phuket, Chonburi, Krabi, Chiang Mai, Surat Thani, Songkhla, Phang Nga, Prachuap Khiri Khan, Rayong, Phetchaburi, Kanchanaburi, Nakhon Ratchasima, Phra Nakhon Si Ayutthaya, Khon Kaen and Saraburi.

[8] The Secondary 55 Cities consists of Kalasin, Kamphaeng Phet, Chanthaburi, Chainat, Chaiyaphum, Chumphon, Chiang Rai, Trang, Trat, Tak, Nakhon Nayok, Nakhon Phanom, Nakhon Si Thammarat, Nakhon Sawan, Narathiwat, Nan, Bueng Kan, Buri Ram, Prachin Buri, Pattani, Phayao, Phatthalung, Phichit. Phitsanulok, Phetchabun, Phrae, Maha Sarakham, Mukdahan, Mae Hong Son, Yasothon, Yala, Roi Et, Ranong, Ratchaburi, Lop Buri, Lampang, Lamphun, Loei, Si Sa Ket, Sakon Nakhon, Satun, Samut Songkhram, Sa Kaew, Sing Buri, Sukhothai, Suphan Buri, Surin, Nong Khai, Nong Bua Lamphu, Ang Thong, Amnat Charoen, Udon Thani, Uttaradit, Uthai Thani, Ubon Ratchathani.

[9] Google Trends search statistics from January 1st to June 30th,2023.

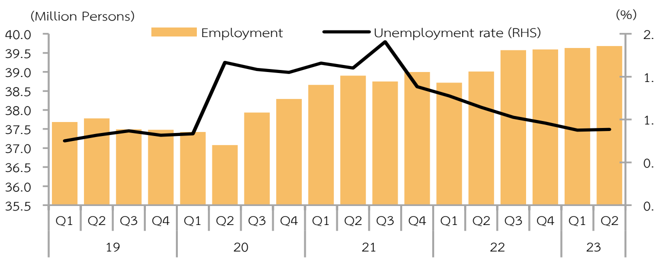
Employment rose for the twelfth consecutive quarter, following an increase in non-agricultural employment while agricultural employment declined. The unemployment rate was slightly higher than the previous quarter but lower than the same quarter last year. In the second quarter of 2023, the number of employed people amounted to 39.68 million people, a 1.7-percent increase compared to a 2.4-percent increase in the previous quarter, which was classified as employed Thais of 36.93 million (93.08 percent share), an increase of 0.5 percent, and employed foreigners of 2.75 million people (6.92 percent share), an increase of 21.1 percent. **Non-agriculture employment** (70.68 percent share) continued to increase for the fifth consecutive quarter by 2.5 percent, in accordance with an increase in employment in accommodation and food service activities, construction and wholesale and retail trade; repair of motor vehicles and motorcycles. **Agricultural employment** (29.24 percent share) decreased by 0.2 percent, partly due to the return of workers to the labor market in the industrial and service sectors, in consonance with a decrease in some major agricultural products such as rubber, oil palm and swine, etc. **The unemployment rate** in this quarter was at 1.06 percent, slightly higher than 1.05 percent in the previous quarter, still lower than 1.37 percent in the same quarter of the previous year. **The average number of unemployed people** recorded at 4.29 hundred thousand people, higher than the 4.21 hundred thousand unemployed in the previous quarter, yet lower than the unemployed number of 5.47 hundred thousand people in the same quarter last year.

In the first half of 2023, employment increased by 2.0 percent and the unemployment rate stood at 1.06 percent.

Employment rose for the twelfth consecutive quarter, following the fifth consecutive quarter of increase in non-agricultural employment while agricultural employment declined

The unemployment rate stood at 1.06 percent, higher than 1.05 percent in the previous quarter but lower than 1.37 percent in the same quarter last year.

Employment decreased by 1.7 percent following a increasing in non-agricultural sector while agricultural sector employment Unemployment rate was low at 1.06 percent.



Source: National Statistical Office

Employed Persons by Industry

%YOY	Share	2022							2023		
	Q2/23	Year	H1	H2	Q1	Q2	Q3	Q4	H1	Q1	Q2
Employed	100.00	1.0	0.2	1.8	0.1	0.3	2.1	1.5	2.0	2.4	1.7
- Agricultural	29.32	-1.2	0.6	-2.9	2.4	-1.2	-2.4	-3.4	0.7	1.6	-0.2
- Non-Agricultural	70.68	2.0	0.0	4.1	-0.8	0.9	4.3	3.9	2.6	2.7	2.5
Manufacturing	15.75	1.4	-0.1	2.9	-1.6	1.5	1.4	4.4	0.4	0.4	0.3
Construction	5.85	-3.5	-6.3	-0.3	-4.2	-8.5	0.4	-1.0	2.0	-1.8	6.0
Wholesale and retail trade; repair of motor	17.35	4.2	5.1	3.2	2.0	8.3	4.5	2.0	2.4	4.4	0.5
Accommodation and food service activities	8.06	0.5	-5.3	7.5	-4.4	-6.1	8.3	6.6	10.0	8.2	11.7
Total labor force (Million persons)		39.90	39.69	40.12	39.62	39.76	40.09	40.14	40.29	40.28	40.31
Employed (Million persons)		39.22	38.86	39.58	38.72	39.01	39.57	39.59	39.65	39.63	39.68
Unemployment (Million persons)		0.53	0.58	0.48	0.61	0.55	0.49	0.46	0.43	0.42	0.43
Unemployment Rate (%)		1.33	1.45	1.19	1.53	1.37	1.23	1.15	1.06	1.05	1.06

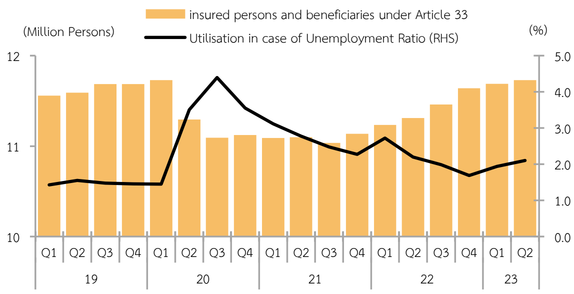
Source : National Statistical Office (NSO)

Labor in the Social Security System: The number of insured people in the social security system continued to increase for the ninth consecutive quarter. The unemployment rate among insured persons under article 33 increased from the previous quarter, but lower than the same quarter last year. In the second quarter of 2023, the total number of social security beneficiaries increased for the ninth consecutive quarter by 2.0 percent. This consisted of compulsory insurers under article 33 which increased for the seventh quarter continuously by 3.6 percent, compared to a 4.1-percent increase in the previous quarter, in line with an increase in insured persons in the manufacturing and service sectors (such as construction, accommodation and food service activities, wholesale and retail trade; repair of motor vehicles and motorcycles and manufacturing sector), and voluntarily insured persons under article 40 which increased by 1.1 percent compared with a 1.3-percent increase in the previous quarter. Nevertheless, voluntarily insured persons under article 39 continued to decline for the fourth quarter by 2.7 percent. **The unemployment rate among insured person under article 33** in this quarter was 2.13 percent, higher than 1.94 per quarter in the previous quarter but lower than 2.17 percent in the same quarter last year. The average number of unemployed was 2.50 hundred thousand people, higher than 2.27 hundred thousand in the previous quarter and higher than the number of 2.45 hundred thousand people in the same quarter last year.

The number of insured persons in the social security system increased for the ninth consecutive quarter by 2.0 percent in line with the increase in the compulsory insured person under article 33 and the voluntary insured person under article 40, while the voluntary person under article 39 continued to decline for the fourth quarter.

The unemployment rate among insured person under article 33 in this quarter was 2.1 percent, higher than 1.9 percent in the previous quarter but lower than 2.2 percent in the same quarter last year.

There are 11.7 million insured persons and beneficiaries under Article 33
and 1.9 percent of them are receiving unemployment benefits



Source: The Social Security Office ,Ministry of labour

Number of social security beneficiaries

Registered Applicants (Thousand persons)	2022								2023	
	Year	H1	H2	Q1	Q2	Q3	Q4	H1	Q1	Q2
Insured Persons (article 33)[1/]	11,638	11,313	11,638	11,234	11,313	11,462	11,638	11,725	11,689	11,725
Insured Persons (article 39)[2/]	1,880	1,902	1,880	1,920	1,902	1,899	1,880	1,850	1,866	1,850
Insured Persons (article 40)[3/]	10,881	10,812	10,881	10,767	10,812	10,855	10,881	10,935	10,911	10,935
Total Insured Persons	**24,399**	**24,027**	**24,399**	**23,920**	**24,027**	**24,216**	**24,399**	**24,511**	**24,466**	**24,511**
Utilisation in case of Unemployment	197	245	197	306	245	228	197	250	227	250
Utilisation in case of Unemployment Ratio (%)	1.7	2.2	1.7	2.7	2.2	2.0	1.7	2.1	1.9	2.1

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 an self-employed person or informal workers age who must be over 15 years of age, but under 60 years of age.

Mismatching in the Thai Labor market

Thai labor market has improved continuously after the relaxation of COVID-19 pandemic. This is reflected in the number of employments in Q2-2023 recorded as 39.68 million workers or 98.44 percent of all labor forces, increasing by 1.7 percent compared with the same period last year. The unemployment rate was also recorded as 1.06 percent, downed from 1.33 percent in 2022 and close to 0.98 percent in 2019 (Pre-COVID-19 Spreading). However, major issues concerned in the Thai labor market are quality of labor and mismatching between demand and supply which can limit the productivity development in production sector.

From the survey data on labor demand of projects approved to receive BOI investment promotion measures between 2018 - 2022, the number of labors demand increased from 95,566 persons in 2018 to 168,992 persons in 2022. However, when only considering the education degree, the proportion of labor demand with bachelor's degree or higher fell from 30.1 percent of total labor demand in 2018 to 17.2 percent of total labor demand in 2022. The proportion of labor demand with vocational education also slightly reduced from 23.7 percent of total labor demand in 2018 to 22.5 percent of total labor demand in 2022. Nevertheless, the proportion of labor demand with secondary education increased from 41.1 percent of total labor demand in 2018 to 57.3 percent of total labor demand in 2022. Additionally, looking at only labor demand with bachelor's degree or higher comparing to with vocational education, the proportion of labor demand with bachelor's degree or higher on average during 2018 - 2022 was recorded as 45.6 percent while the proportion of labor demand with vocational education was recorded at 54.4 percent of total labor demand.

Table 1: Labor Force Demands from Investment Promotion Projects

	Number (Persons)					Proportion (Percentages)					
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022	2018-2022 (Average)
Bachelor's degree and higher	28,757	20,113	22,801	25,581	29,037	30.1	21.1	15.5	16.1	17.2	20.0
Vocational certificate (Diploma - Higher)	22,608	22,551	32,178	37,817	38,079	23.7	23.7	21.9	23.7	22.5	23.1
Labor force with bachelor's degree and higher, and vocational certificate	**51,365**	**42,664**	**54,979**	**63,398**	**67,116**	**53.8**	**44.8**	**37.4**	**39.8**	**39.7**	**43.1**
Secondary education (Grade 6 - Grade 12)	39,299	46,971	82,899	81,563	96,786	41.1	49.4	56.2	51.2	57.3	51.1
Others	4,902	5,471	9,385	14,390	5,090	5.1	5.8	6.4	9.0	3.0	5.9
Total	**95,566**	**95,106**	**147,263**	**159,351**	**168,992**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Labor force with bachelor's degree and higher, and vocational certificate	**51,365**	**42,664**	**54,979**	**63,398**	**67,116**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Bachelor's degree and higher	28,757	20,113	22,801	25,581	29,037	**56.0**	**47.1**	**41.5**	**40.3**	**43.3**	**45.6**
Vocational certificate (Diploma - Higher)	22,608	22,551	32,178	37,817	38,079	**44.0**	**52.9**	**58.5**	**59.7**	**56.7**	**54.4**

Source : Labor Force Demand Survey from Investment Promotion Projects (January – December 2022)

Thailand Board of Investment (BOI)

Mismatching in the Thai Labor market (cont.)

Moreover, from the survey data on labor demand of projects approved to receive BOI investment promotion in Eastern Economic Corridor (EEC) in 2022 classified by education for 419 projects with the total labor demand of 52,322 workers, the highest proportion of labor education degree's demand was secondary level, recorded as 59.1 percent of total labor demand in EEC. Vocational degree came in second with 25.2 percent. In contrast, demand for bachelor's degree or higher was only 14.7 percent of total labor demand in EEC. Considering labor demand in targeting industries, the education degree that automobile industry and electrical and electronic industry required was secondary education with 63.9 percent and 63.2 percent of total labor demand in each industry, respectively. The demand for vocational education were at 22.5 percent and 23.6 percent of total labor demand in each industry, respectively. While, the labor with bachelor's degree or higher were only at 13.5 percent and 12.9 percent of total labor demand in each industry, respectively. The industry with highest number of labor demand for bachelor's degree or higher was digital industry and Agricultural and food industry, while robotic and biotechnology industry prefers vocational education. On the other hand, considering the number of students in education system in 2021, the number of students studying in bachelor's degree or higher were at 1,902,692 persons. Despite a decreasing number from 2,171,663 persons in 2018, the number was much higher than students studying in vocational level in 2022 recorded as 374,962 persons (83.5 percent for students in bachelor's degree or higher compared with 16.5 percent of students in vocational level).

The data evidently reflected mismatching issue for the Thai labor market due to the inconsistent between supply and demand of labor. That is, fresh graduates in bachelor's degree education dominate the labor market, and this could lead to underemployment. Consequently, the proportion of unemployed persons with bachelor's degree might be higher and could limit the Labor market in the next term.

Table 2: Labor Force Demands of BOI-Promoted Companies in Targeting Industries within the Eastern Economic Corridor (EEC) in 2022, Categorized by Educational Attainment

	Number of Projects	Number of Labor Force Demands (Persons)	Labor Force Demand Percentage by Education Level (%)			
			Bachelor's Degree and higher	Vocational Certificate	Secondary Education	Others
Automotive Industry	59	15,890	13.5	22.5	63.9	0.1
Electrical Appliances and Electronics Industry	51	14,042	12.9	23.6	63.2	0.3
Medical Industry	17	7,291	9.5	19.7	70.0	0.8
Petrochemical Industry	42	2,669	20.0	29.9	50.0	0.1
Advanced Agriculture and Food Industry	15	947	33.7	24.8	31.1	10.2
Automation And Robotics Industry	1	244	30.3	69.7	0.0	0.0
Digital Industry	5	114	94.7	5.3	0.0	0.0
Biotechnology Industry	2	22	4.5	77.3	18.2	0.0
Others	227	11,103	18.0	33.1	46.4	2.6
Total	**419**	**52,322**	**14.7**	**25.2**	**59.1**	**1.0**

Source: Labor Force Demand Survey of BOI-Promoted Companies in Targeting Industries within the EEC (January –December 2022)

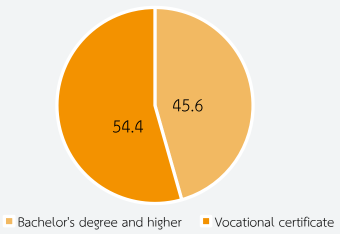
Thailand Board of Investment (BOI)

Table 3: Number and Proportion of Students in Higher Education (Bachelor's degree and higher) and Vocational Education

	2018	2019	2020	2021	2018-2021 (Average)
Bachelor's degree and higher (Persons)	2,171,663	2,076,924	2,058,249	1,902,692	2,052,382
Vocational certificate (Persons)	366,870	378,738	387,411	374,962	376,995
Total (Persons)	**2,538,533**	**2,455,662**	**2,445,660**	**2,277,654**	**2,429,377**
Bachelor's degree and higher (Percentages)	85.5	84.6	84.2	83.5	84.5
Vocational certificate (Percentages)	14.5	15.4	15.8	16.5	15.5
Total (Percentages)	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

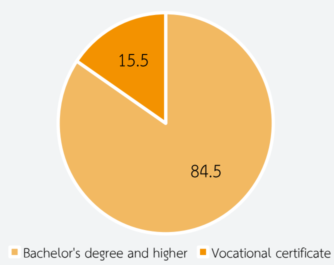
Source: National Statistical Office of Thailand (NSO)

Proportion of Labor Force Demands from Investment Promotion Projects (2018 – 2022 Average)



Source: Thailand Board of Investment (BOI)

Proportion of Students in Higher Education (Bachelor's degree and higher) and Vocational Education (2018 – 2021 Average)



Source: National Statistical Office (NSO)

Fiscal Conditions:

On the revenue side, in the third quarter of the fiscal year 2023 (April - June 2023), the net government revenue collection stood at 795.8 billion Baht, increasing by 3.2 percent compared with the same quarter of the previous year. The growth was contributed by the following factors: **(1) A 56.7-percent rise in revenue from other government agencies** which resulted from special revenues including the remittance of extra-budgetary fund's excess liquidity, outstanding payments from the previous years of the Thai Credit Guarantee Corporation (TCG), and revenue submission from the conversion of the petroleum concession system to the Production Sharing Contract (PSC) system by the Department of Mineral Fuels. **(2) An 8.6-percent increase in personal income tax. (3) A 3.1-percent increase in corporate income tax** reflecting an improvement in economic activities. **(4) A 10.7-percent rise in automobile excise tax** due to increased automobile production to fulfill car orders after the alleviation of the semiconductor shortage.

In Q3/FY2023, the net government revenue collection increased by 3.2 percent due to an increase in revenue from other government agencies, personal income tax, corporate income tax, and automobile excise tax.

However, **the excise tax on oil and oil products saw a decrease of 22.9 percent** following the government measures to alleviate the burden on households impacted by the rising of global crude oil prices. Specifically, the excise tax rate on diesel fuel was reduced by 5 Baht per liter, and the excise tax rate on jet fuel was decreased from 4.726 Baht per liter to 0.200 Baht per liter. Meanwhile, **the collection of VAT declined by 4.8 percent** compared to the same quarter of the previous year due to a reduction in the value of imported goods.

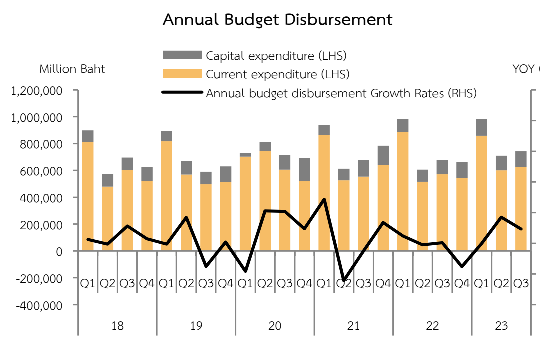
For the first 9 months of the fiscal year 2023, the net government revenue collection amounted to 1,956.5 billion Baht, increasing by 5.2 percent from the same period last year, and was 7.5 percent above the revenue estimation stated in the 2023 budget bill, mainly due to the following factors: **(1) Revenue collections from the Revenue Department**, especially from corporate income tax, VAT, and personal income tax, were higher than anticipated. **(2) Revenues from other government agencies** surpassed estimations due to special revenues including the remittance of extra-budgetary fund's excess liquidity, cellular royalty from the National Telecom Public Company Limited (NT), excess proceeds from the sale of debentures issued to compensate for budget deficits, and outstanding payments from the previous years of the Thai Credit Guarantee Corporation (TCG). **(3) The revenue from the Customs Department** exceeded the target following the growth in imports and special revenue from additional import duties arising from the adjudication of the import tax dispute case related to auto parts. However, **the revenue collected by the Excise Department** was lower than the projection due to the reduced excise tax rate on diesel fuel to mitigate the impact on populace's cost of living.

For the first 9 months of FY2023, the net government revenue collection was higher than the same period last year and exceeded the estimation stated in the 2023 budget bill by 5.2 percent and 7.5 percent, respectively.

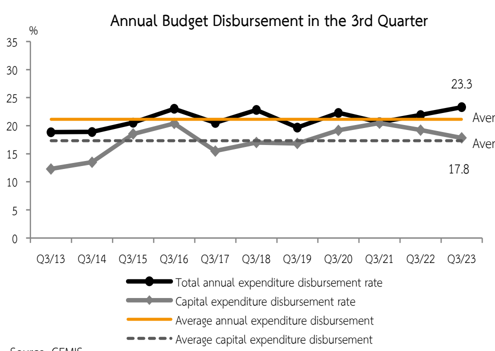
On the expenditure side, the total budget disbursement in the third quarter of the fiscal year 2023 stood at 811.9 billion Baht[4], reflecting an increase of 2.6 percent from the same quarter last year. The government disbursements were as follows: **(i) The disbursement of 2023 annual budget was** 742.4 billion Baht, increasing from the same quarter last year by 9.3 percent. The disbursement rate was at 23.3 percent. **The current expenditure** disbursement amounted to 625.5 billion Baht, increasing by 9.6 percent from the same quarter last year. The primary driver for this rise was an increase in disbursements from other expenditures category. The disbursement rate was at 24.7 percent, higher than 22.5 percent in the same quarter last year. Meanwhile, **the capital expenditure** disbursement was marked at 116.8 billion Baht, increasing from the same quarter last year by 7.8 percent. This was mainly due to disbursements in general subsidies as well as land and construction category. The disbursement rate was at 17.8 percent, lower than 19.2 percent in the same quarter last year. **(ii) The carry-over budget disbursement** stood at 27.9 billion Baht, decreasing from the same quarter last year by 12.2 percent, the disbursement rate was at 14.7 percent. **(iii) State-owned enterprises' capital expenditure budget (excluding PTT)** amounted to 50.2 billion Baht[5], decreasing from the same quarter last year by 10.2 percent, primarily due to reduction in disbursements of the Electricity Generating Authority of Thailand (EGAT), and the National Telecom Public Company Limited (NT).

In Q3/FY2023, the total budget disbursement increased by 2.6 percent as a result of the annual budget disbursement.

The 2023 annual budget disbursement rate was at 23.3 percent in which the rate of current and capital expenditure disbursement stood at 24.7 and 17.8 percent, respectively.



Source: GFMIS



Source: GFMIS

[4] 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).

[5] The number was included the 7.3 billion Baht of the capital spending allocated from the annual budget and the carry-over budget.

For the first 9 months of the fiscal year 2023, the total budget disbursement amounted to 2,748.4 billion Baht, marking a 5.7 percent decrease from the same period last year, with the following details. **(i) The 2023 annual budget disbursement** was recorded at 2,434.2 billion Baht with a disbursement of 76.4 percent, higher than 73.2 percent in the same period last year. This total comprised 2,084.7 billion Baht for current expenditure which had a disbursement rate of 82.4 percent (higher than 77.8 percent in the same period last year), and 349.5 billion Baht for capital expenditure with a disbursement rate of 53.3 percent (slightly higher than a 52.5 percent in the same period last year). **(ii) The disbursement of the carry-over budget** was reported at 131.4 billion Baht, with its disbursement rate being 69.0 percent. **(iii) The state-owned enterprises' capital expenditure budget (excluding PTT)** saw a disbursement of 160.9 billion Baht[6] in which the top five SOEs that disbursed the highest capital expenditure were the Provincial Electricity Authority (PEA), the State Railway of Thailand (SRT), the Electricity Generating Authority of Thailand (EGAT), the Metropolitan Electricity Authority (MEA) and the National Telecom Public Company Limited (NT). **(iv) The COVID-19 loan B.E. 2563 – 2564 (1.5-trillion-Baht)** was disbursed by 47.4 billion Baht.

For the first 9 months of FY2023, the total budget disbursement declined by 5.7 percent. The contraction was caused by a reduction in the carry-over budget disbursement, state-owned enterprises capital expenditure budget and the 1.5-trillion Baht COVID-19 loan disbursement.

Public Debt: at the end of June 2023, the accumulated public debt stood at 10.9 trillion Baht, equivalent to 61.1 percent of GDP, yet remained under the fiscal disciplinary framework. The total public debt comprised 10.8 trillion Baht of domestic loans (60.2 percent of GDP), and 172.3 billion Baht of foreign loans (1.0 percent of GDP).

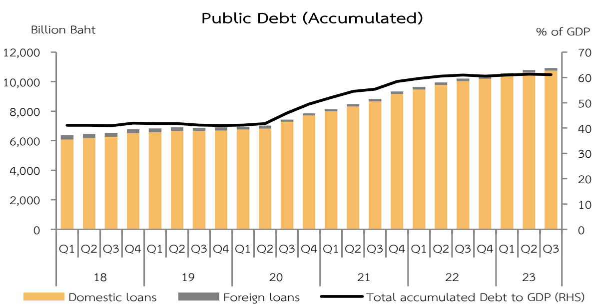
For the first 9 months of FY2023, the 2023 annual budget disbursement rate was at 76.4 percent in which the rate of current and capital expenditure disbursement stood at 82.4 percent and 53.3 percent, respectively.

Fiscal Balance: in the third quarter of fiscal year 2023, the budgetary balance recorded a surplus of 29.3 billion Baht combined with a deficit of 10.8 billion Baht on non-budgetary balance. In addition, the government conducted a cash balance management through the borrowing of 140.7 billion Baht. Therefore, the cash balance after debt financing recorded a net surplus of 159.2 billion Baht. Taking into account the treasury reserve from the end of the second quarter of fiscal year 2023 which amounted to 193.6 billion Baht, the overall fiscal balance at the end of June 2023 equaled to 352.8 billion Baht.

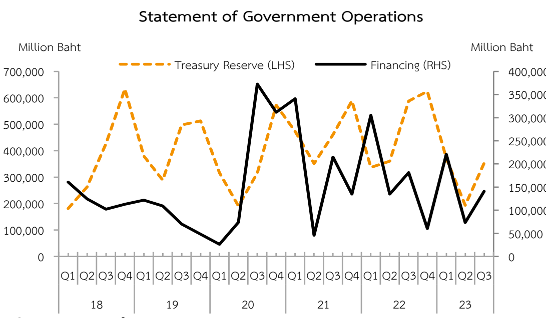
At the end of June 2023, the public debt was equivalent to 61.1 percent of GDP, remained under the fiscal disciplinary framework.

For the first 9 months of the fiscal year 2023, the budgetary balance recorded a deficit of 608.5 billion Baht combined with a deficit of 98.0 billion Baht on non-budgetary balance. In addition, the government conducted a cash balance management through the borrowing of 435.2 billion Baht. Therefore, the cash balance after debt financing recorded a net deficit of 271.2 billion Baht.

At the end of June 2023, the government's fiscal statement remained at a strong level where the fiscal balance stood at 352.8 billion Baht.



Source: Public Debt Management Office



Source: Ministry of Finance

Financial Conditions:

In the second quarter of 2023, the policy interest rate stood at 2.00 percent per annum increased from 1.75 percent in the previous quarter. In the 3^{rd} meeting on 31^{st} May 2023, the Monetary Policy Committee (MPC) decided to increase the policy rate by 25 basis points. Therefore, the policy rate increased from 1.75 percent per annum to 2.00 percent per annum. The MPC assessed that the Thai economy is expected to continue expanding, driven primarily by tourism and private consumption. Headline inflation has returned to meet the target range due to the easing price pressure from electricity bills and oil prices. However, Inflationary risks has still persisted, steaming from both demand pressures thanks to domestic growth and supply pressures resulting from higher cost pass-through, contingent upon upcoming government economic policies. The overall financial system remains resilient but it is necessary to closely monitor the global financial market developments and volatilities as well as the debt serviceability of SMEs and low-income households. The monetary policy stance of Thailand was in line with major central banks and some Asian central banks. These included, for example, the Federal Reserve (Fed), the European Central Bank (ECB), and the Bank of England (BOE) increased their policy rates by 25 basis points, 50 basis points, and 75 basis points respectively. Additionally, the central banks in Canada, Australia, New Zealand, and Malaysia raised the policy rates by 25 basis points, 50 basis points, 75 basis points, and 25 basis points respectively. Furthermore, the central banks in Japan, Philippines, Indonesia, South Korea, and India kept their policy rates unchanged at -0.10 percent, 6.75 percent, 5.75 percent, 3.50 percent, and 6.50 percent respectively. On the other hand, the central banks in Vietnam and China cut their policy rates by 50 basis points and 10 basis points respectively.

The BOT continued to raise the policy rate in tandem with policy direction of major central banks.

[6] The number was included the 25.5 billion Baht of the capital spending allocated from the annual budget and the carry-over budget.

In July 2023, the Fed, the ECB, the central banks in Canada and Russia rose their policy rates by 25 basis points, 25 basis points, 25 basis points, and 100 basis points respectively.

Recently, in August 2023, the BOE and Bank of Thailand increased the policy rates at the same pace by 25 basis points each.

Policy Interest Rate

(%) At the end of period	2021	2022					2023						
	Year	Year	Q1	Q2	Q3	Q4	Q1	Q2	Apr.	May.	Jun.	Jul.	Aug.
USA	0.00-0.25	4.25-4.50	0.25-0.50	1.50-1.75	3.00-3.25	4.25-4.50	4.75-5.00	5.00-5.25	4.75-5.00	5.00-5.25	5.00-5.25	5.25-5.50	5.25-5.50
EU	0.00	2.50	0.00	0.00	1.25	2.50	3.50	4.00	3.50	3.75	4.00	4.25	4.25
England	0.25	3.50	0.75	1.25	2.25	3.50	4.25	5.00	4.25	4.50	5.00	5.00	5.25
Canada	0.25	4.25	0.50	1.50	3.25	4.25	4.50	4.75	4.50	4.50	4.75	5.00	5.00
Australia	0.10	3.10	0.10	0.85	2.35	3.10	3.60	4.10	3.60	3.85	4.10	4.10	4.10
Thailand	0.50	1.25	0.50	0.50	1.00	1.25	1.75	2.00	1.75	2.00	2.00	2.00	2.25
New Zealand	0.75	4.25	1.00	2.00	3.00	4.25	4.75	5.50	5.25	5.50	5.50	5.50	5.50
Russia	8.50	7.50	20.00	9.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	8.50	8.50
Malaysia	1.75	2.75	1.75	2.00	2.50	2.75	2.75	3.00	2.75	3.00	3.00	3.00	3.00
Vietnam	2.50	4.50	2.50	2.50	3.50	4.50	3.50	3.00	3.50	3.50	3.00	3.00	3.00
China	3.80	3.65	3.70	3.70	3.65	3.65	3.65*	3.55	3.65	3.65	3.55	3.55	3.55
Brazil	9.25	13.75	11.75	13.25	13.75	13.75	13.75	13.75	13.75	13.75	13.75	13.75	13.25
Japan	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10
Philippines	2.50	6.00	2.50	3.00	4.25	6.00	6.75	6.75	6.75	6.75	6.75	6.75	6.75
Indonesia	3.50	5.50	3.50	3.50	4.25	5.50	5.75	5.75	5.75	5.75	5.75	5.75	5.75
Korea, South	1.00	3.25	1.25	1.75	2.50	3.25	3.50	3.50	3.50	3.50	3.50	3.50	3.50
India	4.00	6.25	4.00	4.90	5.90	6.25	6.50	6.50	6.50	6.50	6.50	6.50	6.50

Source: Collected by NESDC

Commercial banks and SFIs raised their lending and deposit rates in accordance with the monetary policy stance of the BOT.

Large-size and medium-sized commercial banks as well as specialized financial institutions (SFIs) continuously raised their deposit and lending rates following the monetary policy stance of the BOT. Large-sized and medium-sized commercial banks as well as SFIs, elevated their 12-Month fixed deposit rates to 1.40, 1.00, and 1.45 percent per year, comparing with their rates in the previous quarter at 1.15, 0.83, and 1.15 percent per year, respectively. In addition, they increased their Minimum Loan Rates (MLR) to 6.96, 8.05, and 6.79 percent per year, comparing with their rates in the previous quarter at 6.56, 7.70, and 6.34 percent per year, respectively. Besides, real deposit and lending rates increased from -1.79 and 4.04 percent to 1.05 and 7.04 percent per year, respectively. This was because of both rising nominal rates and a deceleration in headline inflation.

In July 2023, deposit and lending rates of commercial banks and SFIs was unchanged from the end of the second quarter. Nevertheless, a slight increase in headline inflation affected real deposit and lending rates, declined to 0.90 and 6.89 percent per year, respectively.

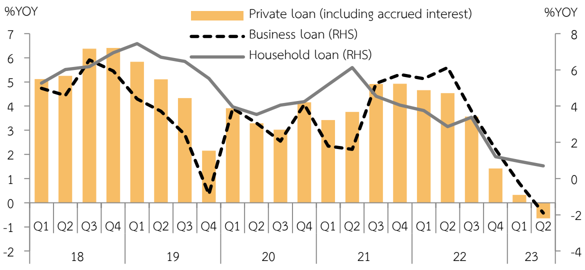
Private loans outstanding of depository institutions expanded by 1.0 percent, decelerated from a 1.5 percent expansion in the previous quarter. This was because of a decline in business loans from commercial banks and loan under Public Service Account (PSA) from Specialized Financial Institutions (SFIs). In contrast, household loans expansion was close to the pace in previous quarter

Private loans outstanding of commercial banks contracted from the previous quarter. At the end of the second quarter of 2023, private loans outstanding of commercial banks, dropped by 0.7 percent, comparing with a 0.3 percent deceleration in the preceding quarter. This was due to a continually decline in business loans by 1.9 percent, compared to a 0.3 percent drop in the previous quarter. The contraction was partly because of (i) Banks tightened their credit standards especially for Small and Medium Enterprises (SMEs), as their risks were raising from both increasing interest rates and partially economic recovery, especially export-related sectors that had not fully recovered yet. (ii) Lenders decided to postpone their investments owing to uncertainty in the global economy and awaiting economic policies from the new government (iii) a loan repayment from several firms. **In addition, major sectors causing business loan contraction, included** (i) Manufacturing loan, especially loan for food products, and loan for chemicals and chemical products and (ii) Wholesale and retail trade; repair of motor vehicles and motorcycles loan, especially loan for wholesale and retail trade (except for motor vehicles and motorcycles). In contrast to a slowdown of production sector, loans for financial and insurance activities were continually expanding from the previous quarter, reflecting a good pace in financial sector activities.

In addition, household loans expanded by 0.7 percent, slightly decelerating from 0.9 percent in the previous quarter. This was mainly due to the slowdown of housing and personal consumption loans.

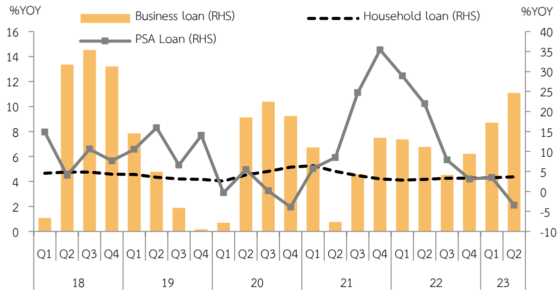
Private loans outstanding of Specialized Financial Institutions (SFIs) during the second quarter of 2023, expanded by 2.6 percent, decelerated from a 3.9 percent in the previous quarter. This was mainly due to a decline at 3.4 percent of loan under Public Service Account (PSA) since financial measures related to COVID-19 gradually expired. However, household loans and business loans expanded by 3.6 and 11.1 percent, respectively, comparing with the expansion in the previous quarter at 3.5 and 8.7 percent respectively. This was partially caused by SFIs raising their lending rates at a slower pace than commercial banks.

Private loans (including accrued interest) of commercial banks contracted from the previous quarter



Source : Bank of Thailand

Private loans (including accrued interest) of specialized financial institutions decelerated from the previous quarter



Source : Bank of Thailand

Thai Baht against US dollar depreciated, compared to the previous quarter. In the second quarter of 2023, an average exchange rate was at 34.50 Baht per US dollar, depreciating by 1.71 percent from the previous quarter. The depreciation of the Thai Baht was influenced partly by the signal from the Federal Reserve (Fed) to continue monetary policy tightening in the second half of the year, the depreciation of Chinese Yuan, attributed to below-than-expected Chinese economic growth and uncertainty surrounding the domestic political situation, adversely affected investors' confidence, leading to foreign capital outflows.

Thai Baht against the US dollar depreciated compared to the previous quarter, driven by the Fed's tightening its monetary policy stance and uncertainty of Thailand's political situation.

The depreciation of Thai Baht was correlated to other regional currencies, such as the Japanese Yen, South Korea Won, Malaysian Ringgit, Chinese Yuan, Philippine Peso, Taiwanese dollar, Singapore dollar, and Vietnamese Dong. In contrast, the Indonesian Rupiah and Indian Rupees appreciated, compared to the previous quarter.

Simultaneously, when comparing with major trading partners/competitors, Thai Baht depreciated, reflecting by a decrease in the average Nominal Effective Exchange Rate (NEER) by 0.43 percent from the previous quarter (an average of 119.82). Similarly, The average US dollar index stood at 102.57, decreasing from 103.39 in the previous quarter.

In July 2023, the monthly average of Thai Baht was at 34.63 Baht per US dollar, appreciated by 0.81 percent from the previous month. This appreciation corresponded with US dollar's devaluation, due to Fed's rate getting closer to the end of its hiking cycle.

SET Index decreased from the previous quarter. In the second quarter of 2023, SET index closed at 1,503.1 points, decreased by 6.6 percent from the previous quarter. This was mainly caused by (i) The uncertain political situation, especially concerning the formation of a new government and the direction of economic policies. (ii) Fed and major central banks continuously maintained their tightening stance on their monetary policy, and (iii) concerned over governance in the Stock Exchange of Thailand, caused by specifically problematic situations within some listed companies. In the second quarter of 2023, foreign investors had a net sell position of 50.3 billion Baht, which continued from net sell position of 56.9 billion Baht in the previous quarter. Industrial groups with negative growth were technology (-13.2 percent), industrials (-11.6 percent), consumer products (-9.8 percent), agro and food industry (-7.1 percent), property and construction (-6.6 percent), resources (-6.6 percent), and services (-5.0 percent).

SET Index declined from the preceding quarter as a result of political situation in Thailand and the monetary policy tightening by major central banks.

The decline of SET index was consistent with other regional stock markets, such as China (-5.1 percent), Malaysia (-3.2 percent), Indonesia (-2.1 percent), and Philippines (-0.5 percent). In contrast, there was an expansion in other regional stock markets, including India (9.7 percent), Taiwan (6.6 percent), Vietnam (5.2 percent), and South Korea (3.5 percent).

In July 2023, SET index increased by 3.5 percent to 1,556.1 points from the end of June 2023. This was primarily attributed to a higher-than-expected financial performance of some listed companies on the Stock Exchange of Thailand (SET) for the second quarter of 2023.

Government bond yields increased. In the second quarter of 2023, both short-term and long-term government bond yields shifted upward. Short-term government bond yields rose following the policy rate hike by the Bank of Thailand (BOT). Similarly, long-term government bond yields rose in correlation with US government bond yields and the decline of clean price index. At the end of the second quarter of 2023, 2-year government bond yield was at 2.15 percent, increasing from 1.81 percent at the end of the previous quarter. Correspondingly, 10-year government bond yield stood at 2.58 percent, increasing from 2.41 percent at the end of the previous quarter. In term of net trading position, foreign investors registered a net sell of 58.4 billion Baht, compared to a net sell of 23.0 billion Baht in the previous quarter. Total new registered corporate bond was at 595.8 billion Baht, mainly attributed to finance and securities, energy, and property development.

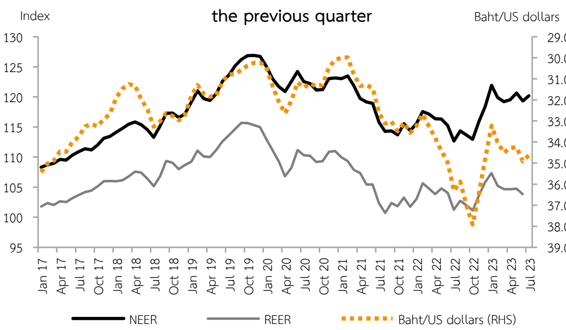
Government bond yields increased in both short and long terms.

In July 2023, short-term and long-term government bond yields remained relatively unchanged, compared to the previous month, aligning with Thailand's policy rate, and insignificant changes of the clean price index.

Capital and financial account recorded a net outflow of 2.5 billion US dollars in the first quarter of 2023, contrasting with a 3.1 billion US dollars inflow in the previous quarter. This was primarily contributed by a net outflow by Thai investors in term of direct and portfolio investments, as well as a net outflow by foreign investors in term of portfolio investments. However, there was a continually registered net inflow in term of direct investment by foreign investors.

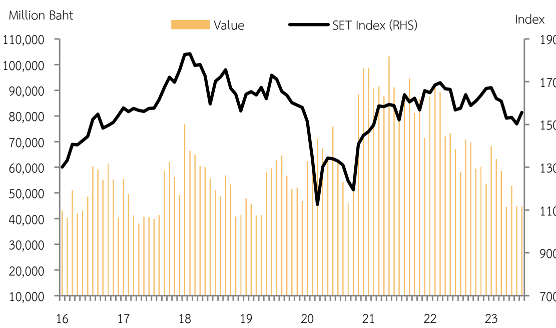
Capital and financial account recorded a net outflow, driven by an outflow in term of both direct and portfolio investments by Thai investors.

Thai Baht depreciated against US dollars from the previous quarter



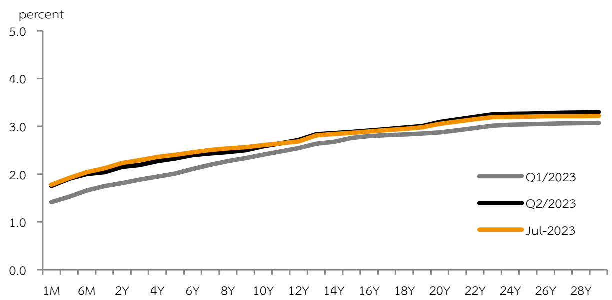
Source : CEIC, Bank of Thailand

SET Index and SET average turnover decreased from the previous quarter



Source: SET

Government short-term yield and long-term yield increased



Source: ThaiBMA

Capital Flow

(Billion USD)	2021					2022					2023
	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	Q1
- Direct Investment	-4.5	2.3	-1.4	-1.4	-4.0	2.6	2.0	-0.4	0.1	0.9	-0.8
Thai investor	-19.2	-3.5	-3.0	-4.6	-8.0	-7.6	-3.7	-1.2	-2.0	-0.7	-2.9
Foreign investor	14.6	5.8	1.6	3.2	4.0	10.2	5.7	0.9	2.1	1.6	2.0
- Portfolio Investments	-11.9	-10.0	-3.7	0.0	1.9	5.8	2.6	1.9	-0.8	2.0	-5.9
Thai investor	-16.8	-10.5	-3.7	-0.2	-2.5	-2.5	-1.3	1.0	-0.3	-1.9	-3.1
Foreign investor	4.9	0.4	-0.1	0.2	4.4	8.2	3.9	0.9	-0.4	3.8	-2.8
Others	10.4	1.0	2.5	4.0	2.9	-5.2	-0.9	-1.7	-2.8	0.2	4.2
Capital and financial account	-6.0	-6.7	-2.7	2.6	0.8	3.2	3.7	-0.2	-3.5	3.1	-2.5

Source: BOT

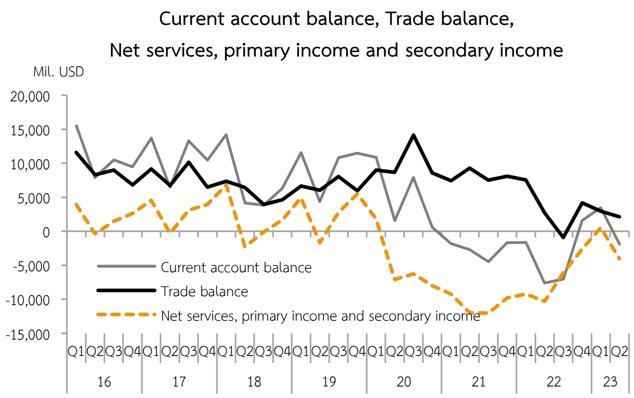
Current account in the second quarter of 2023 was registered a deficit of 1.9 billion US dollars (64.1 billion Baht), compared with a 7.6 billion US dollars deficit (262.4 billion Baht) in the same quarter last year and a 3.5 billion US dollars surplus (121.7 billion Baht) in the previous quarter. This was a result of a surplus of 2.2 billion US dollars in trade balance recorded lower than a 2.7 billion US dollars surplus in the same quarter last year. However, services, and primary and secondary income registered a deficit of 4.1 billion US dollars, compared with a 10.3 billion US dollars deficit in the same period last year.

Current account returned to deficit for the first time in three quarters due to the service deficit from remittance profits.

In the first half of 2023, current account was recorded a surplus of 1.6 billion US dollars (57.6 billion Baht), compared with a 5.5 billion US dollars deficit (197.7 billion Baht) in the second half of 2022, and a 9.2 billion US dollars deficit (316.2 billion Baht) in the same period last year.

International reserve at the end of June 2023 stood at 218.2 billion US dollars, decreasing from 222.3 billion US dollars at the end of June 2022. **In Baht terms,** international reserve at the end of June 2023 stood at 7,769.3 billion Baht, lower than 7,844.0 billion Baht at the end of June 2022.

International reserve at the end of June 2023 stood at 218.2 billion US dollars, reducing from the same period last year.



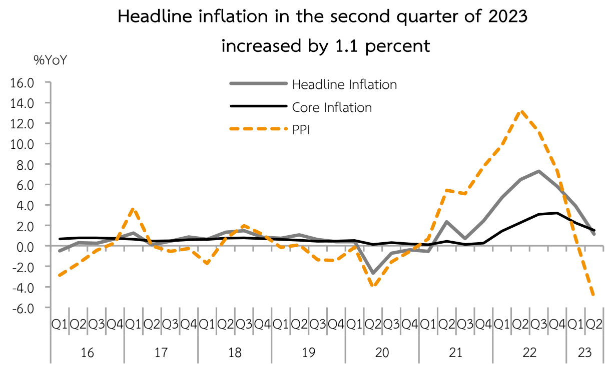
Source: Bank of Thailand

Headline inflation: In the second quarter of 2023, headline inflation was averaged at 1.1 percent, slowing down for three consecutive quarters. **Food and non-alcohol beverage** price index increased by 4.0 percent, compared with 6.2 percent in the previous quarter, followed by an increase in the price index of poultry & frog, eggs and dairy products, and prepared food which increased by 7.5 percent, 6.3 percent, and 3.7 percent respectively. **Non-food and beverage** price index decreased by 0.8 percent, the first decline in nine quarters, in line with a 5.3-percent drop in energy price due to decreasing in index price of vehicles & vehicle operation by 6.0 percent. **Core inflation** was averaged at 1.5 percent, downed from 2.2 percent in the previous quarter[7].

In the first half of 2023, headline inflation was averaged at 2.5 percent, compared with 6.5 percent in the second half of 2022, while core inflation was averaged at 1.9 percent. compared with a 3.1 percent in the second half of 2022.

In July 2023, headline and core inflations were at 0.4 percent and 0.9 percent, respectively.

Headline inflation was averaged at 1.1 percent, slowing down for three consecutive quarters, due to a deceleration in food and non-alcohol beverage prices, while non-food and beverage declined according to decreasing energy price.



Source: Ministry of Commerce

Producer Price Index (PPI): In the second quarter of 2023, PPI decreased by 5.0 percent which was the first decline in 10 quarters, following the drop in all categories. **The price of manufactured products** decreased by 5.0 percent, following a decline in the price of petroleum products, chemicals, chemical products, and rubber and plastic products which fell by 32.9 percent, 10.4 percent, and 7.0 percent, respectively. **The price of mining products** decreased by 13.3 percent, associated with the contraction in the price of petroleum & natural gas which contracted by 15.3 percent. **The price of agricultural & fishery products** decreased by 1.5 percent, corresponding with decreasing price of agricultural products and fisheries product[8].

In the first half of 2023, Producer Price Index decreased by 2.2, the first decline since the second half of 2020, compared with a 9.2-percent increase in the second half of 2022.

Producer Price Index (PPI) decreased by 5.0 percent, the first decline in 10 quarters since the fourth quarter of 2020.

7 In July 2023, headline and core inflations were at 0.4 percent and 0.9 percent, respectively. In the average of 7M 2023, headline and core inflations were at 2.2 percent and 1.7 percent, respectively.

8 In July 2023, Producer Price Index (PPI) dropped by 5.1 percent, decreasing for five consecutive months. In the average of 7M2023, PPI dropped by 2.7 percent.

2. Crude Oil price in Q2 of 2023

The crude oil price in the global market declined from the previous quarter and the same period last year. In the second quarter of 2023, the average crude oil price in four major markets (WTI, Brent, Dubai, and Oman) stood at 76.0 US dollars per barrel, decreased by 30.1 percent from the 108.8 US dollars per barrel on average recorded in the same period of last year and the price fell by 4.6 percent from 79.7 US dollars per barrel recorded in the previous quarter.

The crude oil price in the global market decreased from the previous quarter and the same period last year.

Key reasons leading to a decrease in the global crude oil price in this quarter were (i) investors' concern over the continuation of the policy rate hike from the Fed and central banks of main-economic countries that could affect the expansion of the world economy and oil market demand, (ii) an increase in the US commercial crude oil inventories in the second quarter of 2023 (the second quarter of the inventories was average at 461 million barrels, increased by 10.5 percent compared with 417 million barrels in the same period last year), and (iii) investors' negative outlook toward China's economic recovery that would be slower than expectation.

In the first half of 2023, the average crude oil price in four major markets (Dubai, Oman, Brent, and WTI) stood at 77.9 US dollars per barrel, decreased by 23.7 percent from the average at 102.1 US dollars per barrel recorded at the same period last year. Also, crude oil price decreased by 14.4 percent from the average at 91.0 US dollars per barrel recorded at in the second half of 2022.

Crude oil price

Year		USD per Barrel					(%YoY)				
		WTI	BRENT	DUBAI	OMAN	Average	WTI	BRENT	DUBAI	OMAN	Average
2020	Year	39.6	43.4	42.4	41.8	42.0	-30.4	-32.2	-33.0	-34.2	-32.3
2021	Year	68.1	70.9	69.5	69.3	69.4	72.1	63.4	63.8	65.5	65.4
2022	Year	94.2	98.8	96.2	96.5	96.5	38.4	39.4	38.4	39.4	38.9
	H1	101.4	104.7	101.9	100.8	102.1	63.5	60.7	60.0	59.7	60.8
	H2	87.2	93.2	90.7	92.9	91.0	18.1	21.9	20.9	23.6	21.1
	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
	Q3	91.4	97.5	96.5	100.7	96.5	29.6	33.2	34.3	40.0	34.3
	Q4	82.6	88.6	84.7	84.7	85.1	7.1	11.1	8.0	8.0	8.6
2023	H1	74.6	79.8	78.6	78.7	77.9	-26.5	-23.8	-22.9	-21.9	-23.7
	Q1	76.0	82.1	80.2	80.4	79.7	-19.7	-16.1	-16.5	-16.6	-17.2
	Q2	73.1	77.3	76.9	76.9	76.0	-33.0	-31.2	-29.1	-27.0	-30.1
	Apr.	78.8	82.8	82.6	82.7	81.7	-21.9	-21.3	-19.4	-20.1	-20.7
	May.	71.7	75.7	75.0	75.0	74.3	-34.7	-32.6	-30.5	-29.2	-31.8
	Jun.	70.3	75.0	74.7	74.7	73.7	-38.3	-36.2	-34.1	-29.5	-34.6
	Jul.	75.2	79.7	79.8	79.9	78.6	-24.9	-24.4	-22.6	-24.6	-24.1
	7M	74.6	79.7	78.7	78.8	78.0	-26.3	-23.9	-22.9	-22.4	-23.8

Source: Thaioil Plc and EPPO.

3. The World Economy in Q2 of 2023

The world economy in the second quarter of 2023 continued to expand in line with the expansion of domestic consumption and the recovery of the service sector. This growth was perceptible through the Services Purchasing Managers' Index (PMI), which continued to improve since the latter half of 2022, and registered the highest level in several quarters. As a result, the overall economy accelerated compared to the previous quarter, especially for the major economies such as the US and China. On the other hand, the impetus for economic advancement originating from declines in exports[9] and industrial production waned in both major industrial economies and Asia. This circumstance was reflected in the Manufacturing PMI below 50.0 and registering the lowest since the 2020 COVID-19 crisis across numerous countries.

Amid the protracted geopolitical conflict between Russia and Ukraine, and the intensified tension between the US and China, the decline in production and international trade of major economies resulted in sluggish growth within emerging and developing economies in Asia. Meanwhile, inflationary pressures began to abate, a consequence attributed to elevated policy rate hikes and a mitigation of supply chain constraints. Consequently, major central banks began to hold and slow their paces of rate increase in the second quarter[10].

The U.S. economy expanded by 2.6 percent (Advance estimate), accelerating from 1.8 percent in the previous quarter, the highest growth in five quarters. After seasonal adjustment, the U.S. economy grew by 2.4 percent, accelerating from the 2.0-percent growth in the preceding quarter (%QoQ saar). The accelerating economy is driven by the continual expansion of private consumption, especially in durable goods and services, in line with rising services PMI and Consumer Confidence Index of 54.3 and 105.4 respectively, the highest level in five quarters. Meanwhile, non-residential investment continued to expand by 4.6 percent, accelerating from 2.7 percent in the preceding quarter, in accordance with the robust recovery of the labor market as reflected by the highest level of nonfarm employment in June 2023 at 156.2 million persons, increasing by 732,000 positions from the previous quarter. Nevertheless, residential investment declined for seven consecutive quarters by 15.8 percent, continuing from a 19.0-percent decrease in the previous quarter, primarily attributed to an increase in policy rates and real estate prices. Similarly, exports decreased by 6.6 percent, compared with a 7.2-percent expansion in the prior quarter, the first contraction in 10 quarters. Meanwhile, the manufacturing PMI was at 48.3, below 50 for the third consecutive quarter. However, the government expenditure continually grew in line with raising compensations of both state and local governments. In addition, the federal government and the Congress on June 1st, 2023 agreed to raise the debt ceiling together with reducing federal spending, resulting in mitigate restraints on government spending[11]. Meanwhile, the inflation rate (PCE Price Index) was at 3.7 percent, slowing down from 4.9 percent in the previous quarter. Correspondingly, the US Federal Reserve's Monetary Policy Committee (FOMC) decided to keep its policy rate at 5.00 - 5.25 percent during the meeting on 13th - 14th June 2023 after raising its benchmark rate by 0.25 percent during the meeting on 2nd-3rd May 2023, the tenth consecutive increase since March 2022. However, the FOMC decided to maintain its expansionary monetary policy to restore full employment and accommodate the inflation to achieve the monetary policy target of 2.0 percent.

The Eurozone economy expanded by 0.6 percent, decelerating from 1.1 percent in the previous quarter, which was the lowest economic growth rate in the past 9 years. In particular, the Germany's economy, the largest economy of all member states, fell by 0.1 percent, declining for the second consecutive quarter, while other major member economies also grew at a slower pace[12]. This was a result of declines in exports and industrial production as shown in the average Manufacturing PMI of 44.7, lowering than 50 for the fourth consecutive quarter, which was in line with the value of exports in the first two months of the second quarter that dropped by 1.1 percent, compared with an expansion of 3.9 percent in the previous quarter. However, the economy was still supported by the recovery of the service sector, as reflected in the Service PMI, which rose to an average of 54.4, compared with 52.8 in the last quarter. At the same time, the Consumer Confidence Index was at (-17.0), which was an improvement from (-19.6) in the previous quarter and was the highest level in five quarters. While the labor market continued to recover, where the unemployment rate in the second quarter hit a record low of 6.4 percent, the same as the previous quarter. Besides, headline inflation stood at 6.2 percent, decelerating from 8.0 percent in the previous quarter. However, core inflation remained at a record high at an average of 5.5 percent, the same as the previous quarter. As a result, the Monetary Policy Committee of the European Central Bank (ECB) continued to raise the policy rate and reduce the size of liquidity support measures continuously[13]. Meanwhile, the European Union continued to carry out a large-scale fiscal

[9] The value of exports in the second quarter of Japan and South Korea fell by 4.0 percent and 12.0 percent, continuing from declines of 8.0 percent and 12.7 percent in the previous quarter, respectively. The US and Chinese exports in the second quarter fell by 6.6 percent and 5.4 percent, compared with 7.2 percent and 0.1 percent growth in the previous quarter, respectively

[10] The Us Federal Reserve raised the policy rate by another 0.25 percentage point at the May 2023 meeting before holding it steady at the June meeting. Meanwhile, the central banks of South Korea, India, Indonesia and the Philippines kept their policy rates steady through the second quarter after continuously increasing in the previous period.

[11] The Congress passed the bill to raise the debt ceiling, which would reduce deficits by 1.5 trillion US dollars by 2033 and temporarily suspend the debt ceiling set at 31.4 trillion US dollars until January 2025. Correspondingly, this avoided the risk of a default on its debts during this period.

[12] The French, Italian and Spanish economies grew by 0.9 percent, 0.6 percent and 1.4 percent in the second quarter 2023, compared with 0.9 percent, 2.0 percent and 4.2 percent in the previous quarter, respectively.

[13] At meetings on April 16th and May 4th, 2023, the European Central Bank (ECB) raised its policy interest rates by 0.50 percent and 0.25 percent, respectively, resulting in the refinancing operations rate, marginal lending facilities rate and deposits facility rate at the end of the second quarter were 3.75 percent, 4.00 percent and 3.25 percent, respectively. Meanwhile, to mitigate the impact of interest rate hikes, the ECB continued to enhance liquidity under the Pandemic Emergency Purchase Program (PEPP) until 2024. While the ECB also lowered liquidity from the Asset Purchase Program (APP) until June 2023, as well as accelerated the repayment of loans obtained through the 3rd round of low-interest loans to commercial banks (TLTROs III) earlier than expected. However, the ECB still uses a mechanism to mitigate the impact of rate hikes. (Transmission Protection Instrument: TPI) by purchasing assets, especially government bonds of member countries that face volatility in the financial market in order to reduce risks that may occur to member countries'

measure (Next Generation EU) to revitalize the post-pandemic economy and adjust socio-economic structures to reduce dependence on imported energy[14].

The Japanese Economy expanded by 2.0 percent in the second quarter, same as the previous quarter due to a continually improving domestic consumption, with a 0.2-percent growth in private consumption, compared with 2.7 percent in the preceding quarter. This is in line with Service PMI at 55.1, increasing from 53.8 in the first quarter, the highest record. Nevertheless, export of goods in the second quarter has declined for five consecutive quarters at the pace of 4.0-percent contraction continuing from an 8.0-percent contraction in the first quarter. Meanwhile, for the labor market, the unemployment rate remained at a low level while labor market conditions have tightened especially in the service sector[15]. This consequently led to an increase of average wage at 2.0 percent in the second quarter, accelerating from 1.0 percent in the previous quarter. Moreover, both private and public investment expanded owing to a low policy rate and budget disbursement in FY2023. Headline inflation stood at 3.3 percent, a drop from 3.6 percent in the first quarter, mainly due to a decline in energy price from comprehensive measures enacted last year. Notwithstanding, the Bank of Japan (BOJ) continued to conduct an expansionary monetary policy to achieve the policy target of core inflation at 2.0 percent[16].

The Chinese economy expanded by 6.3 percent, accelerating from 4.5 percent in the previous quarter, and was the highest growth in 8 quarters. The economic recovery was mainly supported by the improvement of domestic demand and the continual recovery of the service sector, reflected by the service PMI increasing to 55.8 from 55.2 in the previous quarter, the highest level in 10 quarters. Similarly, retail sales grew by 10.7 percent, continuing from a 10.6-percent increase in the previous quarter. In addition, the significant expansion in this quarter was partly due to the low-base effect in the same period last year, when the economy was still severely affected by the COVID-19 pandemic. Nevertheless, manufacturing productions and exports were still affected by the global economic slowdown and the US trade restrictions. Hence, the economic recovery was still constrained as reflected in decline in export value by 5.4 percent, down from a 0.1-percent growth in the prior quarter, while manufacturing PMI stood at 50.3, remaining the same as the previous quarter. Moreover, China's private investment continued to suffer from liquidity problem and high debt burden in the real estate sector, which, thus, made the real estate investment continually decline[17]. Meanwhile, the inflation rate dropped to 0.1 percent from 1.3 percent in the previous quarter, the lowest level in 9 quarters. Consequently, the People's Bank of China (PBOC) decided to continue its expansionary monetary stance[18] as well as maintained fiscal stimulus measures to support the economic recovery[19].

The Newly industrialized economies (NIEs) experienced slow growth from the preceding quarter, due to the decline in exports[20], in line with the global economic slowdown. Singapore's economy expanded by 0.5 percent, compared to a 0.4-percent expansion in the previous quarter, driven by the recovering service sector, especially tourism. South Korea's economy grew by 0.9 percent. Hong Kong's economy expanded by 1.5 percent, slowing down from the 2.9-percent growth in the previous quarter. Meanwhile, Taiwan's economy grew by 1.5 percent, recovering from a 2.9-percent contraction in the prior quarter, the first expansion in 3 quarters. The growth was mainly contributed

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14 The Next Generation EU (NGEU) project has set up the budget framework for Member States to propose projects aligning with the main objectives of the project to apply for funding through Recovery and Resilience Facility (RRF), which is the main tool for pushing various projects under the NGEU. The total budget that all member states can request through the RFF is up to 7,238 billion euros, divided into 3,858 billion euros in loans and 3,380 billion euros in subsidies, during the year 2021 - 2026. The objectives of the Next Generation EU project are to provide assistance to those affected by the pandemic and rising fuel prices, encourage green economic reform, push up digital economic transformation, reform the general and vocational education system by supporting innovation and science. Thus ultimately, the economy and society could be sustainable and able to withstand external impacts. The project is also for boosting competitiveness and reducing economic dependence on foreign countries. especially in the energy sector. Thus far, as of 21st July 2023, the program has already approved 153 billion euros, or 21.1 percent of the total budget.

15 The unemployment rate in the second quarter stood at 2.7 percent, retaining from 2.6 percent in the preceding quarter. Besides, according to the Monthly Topic No.27 "Spatial Labor Shortage" on June 30th, 2023, presented by the cabinet office, the labor shortage has become one of the main problems in the service sector. The main reason is labor demand and supply mismatch as well as aging society and comprehensive measures to increase the budget in the healthcare service. Moreover, The Short-Term Economic Survey of Enterprises in Japan (Tankan) in June 2023 indicates that employment diffusion indexes in the individual service and accommodation sector were at -47 percent and -69 percent respectively. On the other hand, the manufacturing and overall DIs were at -20 percent and -32 percent respectively.

16 In the Monetary Policy Meeting in April 27th - 28th and June 15th - 16th, 2023, the BOJ decided to maintain its short-term and long-term policy rate at -0.1 percent and 0.0 percent respectively, together with purchase of 10-year JGBs at 0.5 percent every business day through fixed-rate purchase in the range of ±0.5 percent (Yield Curve Control: YCC), as well as purchase of exchange-traded funds (ETFs) and Japan real estate investment trusts (J-REITs) as necessary with upper limits of about 12 trillion yen and about 180 billion yen (Quantitative and Qualitative easing: QQE) YCC

17 Fixed assets investment in the second quarter of 2023 declined by 10.4 percent, decelerating from a 2.3-percent growth in the previous quarter and was the lowest growth in 13 quarters. Meanwhile, investment in real estate fell by 14.3 percent, compared with a 6.5-percent contraction, which had been declining for the fifth consecutive quarter.

18 On June 15th, 2023, the People's Bank of China (PBOC) decided to cut its one-year Medium-term Lending Facility (MLF) rate from 2.75 percent to 2.65 percent, which was the first rate cut in 10 months. On June 13th, 2023, the PBOC also cut its seven-day reverse repurchase rate from 2.0 percent to 1.9 percent. Furthermore, on June 20th, 2023, the PBOC decided to lower the one-year Loan Prime Rate (LPR) from 3.65 percent to 3.55 percent as well as cut five-year LPR from 4.3 percent to 4.2 percent and maintained the Required Reserve Ratio (RRR) at 7.6 percent.

19 Major measures included: (i) Value-added tax (VAT) exemption for small taxpayers with less than 100,000 yuan in monthly sales and the reduction of land-use tax collection in urban areas for logistics entrepreneurs' warehouses. (ii) The extension of tax break measures for new energy vehicles (NEVs) until the end of 2027 and (iii) The implementation of an infrastructure system to facilitate NEVs by increasing the number of electric chargers for EVs in rural areas to achieve full-service public charging stations throughout the country, financing by local government special-purpose bonds.

20 The export values of Singapore, South Korea, and Taiwan in the second quarter of 2023 fell for the third consecutive quarter by 14.5 percent, 12.0 percent, and 17.0 percent, respectively. Meanwhile, the export value of Hong Kong decreased by 13.3 percent, declining for the fifth consecutive quarter.

by the recovery of private consumption, government expenditure, and tourism sector following the country's reopening in the first quarter. While inflationary pressures remained high despite a slowdown from the prior period[21] Hence, the central banks of NIEs countries decided to maintain their tightening policy stance[22].

The ASEAN economy continued to expand following strong growth of private consumption. Categorically, the economies of Indonesia, the Philippines, Malaysia, and Vietnam grew by 5.2 percent, 4.3 percent, 2.9 percent, and 4.1 percent in the second quarter, continuing from 5.0 percent, 6.4 percent, 5.6 percent, and 3.3 percent in the previous quarter, respectively. Nevertheless, economic downturn in major trading partners led to a plunge in export of goods[23] In the meantime, as the inflation rates in the region began to convert to the policy targets and the global financial market remains volatile, many central banks thus decided to pause their policy rate hike[24].

Real GDP and Exports of Key Economies

(%YoY)	GDP						Exports of Goods (USD)								
	2020	2021	2022		2023		2020	2021	2022			2023			
	Year	Year	Q4	Year	Q1	Q2	Year	Year	Q3	Q4	Year	Q1	Q2	May	Jun
US	-2.8	5.9	0.9	2.1	**1.8**	**2.6**	-13.3	23.0	24.4	8.8	18.4	**7.2**	**-6.6**	-6.4	-8.0
Eurozone	-6.1	5.3	1.7	3.5	**1.1**	**0.6**	-9.1	14.3	20.2	14.9	18.0	**8.6**		-2.3	
United Kingdom	-11.0	7.6	0.6	4.1	**0.2**	**0.4**	-11.3	13.6	20.4	5.0	11.5	**6.1**	**2.8**	0.5	4.8
Australia	-1.9	5.2	2.7	3.7	**2.5**		-7.3	37.2	14.7	15.0	19.7	**3.9**	**-16.0**	-13.4	-19.7
Japan	-4.3	2.1	0.4	1.0	**2.0**	**2.0**	-9.1	17.9	-2.0	-4.6	-1.2	**-8.0**	**-4.0**	-5.5	-3.8
China	2.2	8.4	2.9	3.0	**4.5**	**6.3**	4.0	29.7	10.0	-6.9	7.0	**0.1**	**-5.4**	-8.0	-13.9
India	-6.0	8.9	4.5	6.7	**6.1**		-14.7	43.0	7.8	-2.1	14.6	**-2.0**	**-14.1**	-10.3	-18.8
South Korea	-0.7	4.3	1.4	2.6	**0.9**	**0.9**	-5.5	25.7	5.8	-10.0	6.1	**-12.7**	**-12.0**	-15.4	-6.0
Taiwan	3.4	6.5	-0.8	2.4	**-2.9**	**1.5**	4.9	29.3	3.4	-8.7	7.4	**-19.2**	**-17.0**	-14.1	-23.4
Hong Kong	-6.5	6.4	-4.2	-3.5	**2.9**	**1.5**	-0.5	26.0	-11.6	-22.0	-9.3	**-18.0**	**-13.3**	-15.5	-11.2
Singapore	-3.9	8.9	2.1	3.6	**0.4**	**0.5**	-4.1	22.1	19.5	-4.4	12.7	**-5.2**	**-14.5**	-12.4	-14.9
Indonesia	-2.1	3.7	5.0	5.3	**5.0**	**5.2**	-2.7	41.9	27.2	8.0	26.1	**1.4**	**-17.8**	0.9	-21.2
Malaysia	-5.5	3.3	7.1	8.7	**5.6**	**2.9**	-2.3	27.5	29.5	2.4	17.6	**-1.6**	**-14.6**	-3.8	-18.4
Philippines	-9.5	5.7	7.1	7.6	**6.4**	**4.3**	-8.1	14.5	0.6	8.6	5.7	**-13.2**	**-5.6**	1.9	0.8
Vietnam	2.9	2.6	5.9	8.0	**3.3**	**4.1**	6.9	18.9	16.4	-6.9	10.6	**-11.8**	**-12.2**	-9.1	-11.0

Source: CEIC, compiled by Office of the National Economic and Social Development Council

[21] The inflation rates of Singapore, South Korea, Taiwan, and Hong Kong in the second quarter of 2023 stood at 5.1 percent, 3.2 percent, 2.0 percent, and 2.0 percent, compared with 6.2 percent, 4.7 percent, 2.6 percent, and 1.9 percent in the previous quarter, respectively

[22] On May 25th, 2023, the Bank of Korea decided to maintain its policy rate at 3.50 percent for the third time since February 2023 after the seventh consecutive hike since April 2022.

[23] The export value of Indonesia and Malaysia in the second quarter declined by 17.8 percent and 11.1 percent, compared with an expansion of 1.6-percent and 2.8-percent in the previous quarter, respectively. Meanwhile, The export value of Philippines and Vietnam in the second quarter continued to contract at the rate of 5.4 percent and 12.2 percent from a 13.2-percent and an 11.7-percent contraction in the previous quarter.

[24] The headline inflation of Indonesia in the second quarter is at 3.9 percent, declining from 5.2 percent in the preceding quarter, returning to its policy target at 2.0 - 4.0 percent. Hence, the central bank of Indonesia decided to maintain its policy rate at 5.75 percent in the meeting on June 22nd, 2023. Meanwhile, the headline inflation of Malaysia in the second quarter was 2.8 percent, declining from 3.6 percent in the previous quarter, returning to its policy target at 2.5 - 3.5 percent. Nevertheless, the central bank of Malaysia decided to continue its policy rate hike from 2.75 percent to 3.0 percent in the meeting on May 3, 2023. Headline inflation of Vietnam in the second quarter is at 2.4 percent, declining from 4.2 percent in the first quarter, lower than its target at 4.5 percent. As a result, the central bank of Vietnam decided to decrease its policy rate from 3.5 percent to 3.0 percent in the meeting on June 19, 2023. However, Headline inflation of the Philippines in the second quarter is at 6.0 percent, which despite a drop from 8.0 percent in the first quarter, still higher than its target at 2.0 - 4.0 percent. Notwithstanding, the central bank of the Philippines still maintained its policy rate at 6.25 percent in the meeting on June 22nd, 2023.

4. The World Economic Outlook for 2023

The global economy is anticipated to exhibit decelerated growth in 2023, attributable to the slowdown in major economies, and emerging and developing economies. The slowdown prospect will be a result of heightened policy interest rates by major central banks during earlier periods, as to mitigate high inflationary pressures. As a result of high policy rates, the resumption of domestic demand has been hindered and financial markets are further tightening. At the same time, international merchandise trade is still facing restrictions from the ongoing trade protection measures, especially conspicuous is the escalating trade discord between the US and China[25] which affects industrial production and exports in many countries. Nonetheless, the global economy in the second half of the year is expected to continue its expansion, largely driven by a revival in the service sector, especially those related to tourism, together with a slower rate hike, consequent to the softened inflationary pressures. However, the global economy is still expected to face some downside risks, especially from possible prolong-than-expected inflationary pressures. This is due to the intensifying geopolitical conflict between Russia and Ukraine as well as the risk of climate volatility, affected by the El Niño which potentially affect food prices in the world market. This could lead the central bank to resume tighter monetary policy and will further intensify the risk of the financial market volatility and augment the burden of debt. In addition, the Chinese economy remains under constraints of high debt problems in the real estate sector that will discourage a recovery in domestic demand. Meanwhile, the export sector has been affected by the US trade and investment protectionism measures. Against this backdrop, **in the baseline scenario, the world economy and world trade volume in 2023 are expected to expand by 2.8 percent and 2.1 percent, slowing from 3.2 percent and 5.4 percent in 2022, respectively.**

The US economy is expected to expand by 1.2 percent, slowing down from a 2.1-percent in 2022, but revising upward from a 0.9-percent expansion in previous estimation, owing to the favorable expansion of private consumption and non-residential investment. Likewise, limitations due to uncertainty of public debt ceiling negotiation have been resolved. Similarly, instability of financial institutions has been contained. Nevertheless, the economy in the second half of 2023 is anticipated to slow down in line with high lending rates on private investment, especially on residential investment. In addition, the manufacturing sector continues to slow down, reflected by the manufacturing PMI in July 2023 at 49.0, compared with 52.2 in the same period of the last year, below 50 for the third consecutive month, in line with the unemployment rate in July 2023 at 3.8 percent, remaining the same as last month, but increasing by 3.1 percent from April 2023. Meanwhile, the Fitch credit rating agency, on August 1st, 2023 downgraded US Long-Term Foreign Currency Issuer Default Rating from AAA to AA+, which will undermine the recovery in domestic demand and investor confidence along with reduced government spending for the rest of 2023 in accordance with the Fiscal Responsibility Act[26] . Besides, the inflation rate (PCE Price Index) and the Core PCE Price Index in July 2023 remain at high levels at 3.2 percent and 4.7 percent, respectively. Consequently, the Fed tends to maintain the tightening policy stance until achieving the inflation target[27].

Eurozone economy is expected to grow by 0.8 percent, increasing from the previous projection of 0.5 percent, in line with the more-than-expected expansion in the second quarter, but slowing down from 3.5 percent in 2022. The slowdown is attributed to deteriorations in industrial production and exports, which is in line with the sluggish global economy and the tightening monetary policy adopt by the ECB. This is reflected in the Manufacturing PMI in July 2023 at 42.7, down from 43.4 in the previous month, recording the lowest level in 38 months. In addition, domestic demand is still fragile, as reflected by the retail price index that grew by 3.7 percent, decelerating from 4.0 percent in the previous quarter, the lowest expansion in 22 months. The inflation rate has persisted at an elevated echelon. Against the backdrop of the prolonged hostilities between Russia and Ukraine, the risk of ascending prices for commodity and energy[28] retains its pronounced stance. Consequently, the ECB is likely to continue to tighten monetary policy[29] which could affect the recovery of both investment and domestic consumption. However, the resumption in service sector is expected to be the crucial factor for the Eurozone economy in the second half of the year. This windfall was illustrated in the Service PMI in July 2023 at 50.9, which was

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25 The US President, on August 9th, 2023, issued an Executive Order, entitled “Addressing United States Investments in Certain National Security Technologies and Products in Countries of Concern”, in which the US prohibits certain types of investment in certain categories of high-tech industry in China, which consists of quantum information technology, semiconductor and microelectronic technology, and artificial intelligence (AI) systems. This is to prevent the use of such technology for military use against the US and her allies. The US also urged allied nations to take such measures as well.

26 Fiscal Responsibility Act. is an agreement between the federal government and the Congress in lifting the debt ceiling by reducing the government budget by 1.5 trillion US dollars in 10 years or by 2033.

27 According to the FOMC meeting on 25th-26th July 2023, the committee decided to raise the policy rate by 0.25 percent, to a range of 5.25 – 5.50 percent, the highest rates since January 2001. Hence, in the baseline scenario, the Fed will continue to raise its rate hike in June 2023 and then remain unchanged till the end of 2023.

28 Especially when Russia banned Ukraine from exporting goods via the Black Sea after the agreement to allow the transportation of goods through the said channel ended in July 2023. However, member states economies tend to reduce their dependence on Russian energy by a large proportion as share of Russian gas imports fell to 9.6 percent in July 2023 from 29.7 percent and 18.9 percent in February 2021 and 2022, respectively, making regional energy prices less vulnerable to prolonged conflict.

29 After the European Central Bank Monetary Policy Committee (MPC) meeting on July 27th, 2023, the ECB decided to raise the policy rate by 0.25, such that interest rates on refinancing operations, the marginal lending facility and deposits facility increased from 4.00 percent, 4.25 percent, and 3.50 percent to 4.25 percent, 4.50 percent and 3.75 percent, respectively. This was the ninth consecutive hike and reached the highest rates since the 2008 financial crisis. The ECB has also lowered money supply by terminating the reinvest of principal payments from maturing securities under the Asset Purchase Programme (APP), since June 2023. At the same time, the ECB continues to reinvest principal funds under the Pandemic Emergency Purchase Program (PEPP). This will continue at least until the end of 2024

higher than 50.0 for the seventh consecutive month. Moreover, the eurozone economy would also be supported by the EU's massive fiscal measures[30]

The Japanese economy is anticipated to grow by 1.5 percent in 2023, same as the previous estimation, accelerating from 1.0 percent in 2023. This is mainly due to a recovery in domestic demand in the post-pandemic period, especially in service and tourism-related sectors[31] , reflected by service PMI in July 2023 at 53.8, consecutively higher than 50.0 for 11 months. Moreover, public investment is expected to continuously expand, in particular, the comprehensive measure enacted in FY2022 that has a disbursement plan until FY2025. Meanwhile, private investment is likely to get some spillover from these comprehensive measures, as well as a recovery of the stock market such that the Nikkei 225 index reached 33,753.33 point on July 3rd, 2023, the highest figure in 33 years. This results from a recovery of other major stock markets along with resolving the struggle in the semiconductor supply chain which supports the automobile and exporting sectors. However, a global economic downturn still takes a toll on manufacturing and export sectors, with manufacturing PMI in July 2023 at 49.6, lower than 50.0 for the second consecutive month. In the meantime, labor market conditions have become more tightened while the wage in the manufacturing and service sector are still escalating[32] For monetary policy, the Bank of Japan still decided to conduct its expansionary policy in order to achieve the inflation target at 2.0 percent[33] In the baseline scenario, it is expected that the Bank of Japan will maintain the expansionary policy throughout the year, resulting in more depreciated pressure on Japanese yen[34].

The Chinese economy is expected to grow by 4.9 percent in 2023, accelerating from 3.0 percent in 2022, remaining the same as the previous estimation. However, the economy in the latter half of 2023 is forecasted to slow down as manufacturing productions and exports are severely affected by additional export restrictions[35] along with the US protectionism trade measures. Consequently, the manufacturing PMI in July 2023 decreased to 49.2, the lowest level in 6 months, and the value of export in July 2023 also fell by 15.4 percent, compared with a 13.9-percent decrease in the previous month, the lowest contraction in 41 months. Meanwhile, private investment remains undermined by liquidity shortage and high debt burden in the real estate sector[36], together with the impact of the high-base effect in the latter half of the year. Meanwhile, the inflation rate in July 2023 decreased by 0.3 percent, compared with a 0.0-percent in the prior month, the lowest level in 30 months, owing to the contraction in meat prices and fuels for vehicles prices[37]. The decrease in the price level indicates the potential for the Chinese economy to experience deflation. This is particularly concerning due to the downward pressure on demand side, stemming from the sluggish growth in domestic demand. This slowdown is evident in July 2023 retail sales, which slightly grew by 2.5 percent compared to a 3.1-percent increase in the previous month. Nevertheless, there's a likelihood that the Chinese economy will receive support from the continued expansionary monetary policy aiming to ensure ample liquidity for the economy together with the government fiscal stimulus measures[38].

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[30] According to the long-term expenditure framework (Multiannual Financial Frameworks: MFF) of the European Union during 2021 - 2027, with the total budget framework of 1.216 trillion euros, which also includes additional budget from the Next Generation EU economic recovery plan of 806.9 billion euros. As of 5th August 2023, a total of 3.76 billion euros from the total budget of 723.8 billion euros have been approved under the RRF, comprising 2.69 billion euros in subsidies and 1.07 billion euros in loans. As for other temporary measures to revitalize and stimulate the economy, the total budget allocated now amounts to 2.02 trillion euros.

[31] The Chinese government has allowed group tours in Japan since August 10th, 2023.

[32] The Japanese Trade Union Confederation has declared a new wage during the Spring Wage Offensive in July 2023, with a 30-year highest raise at 3.58 percent. In detail, SMEs' wage rose by 3.23 percent while the large enterprises' wage rose by 3.99 percent. According to the summary, this is mainly due to a low level of wage for a long time, together with higher price as well as comprehensive measures investing in human capital.

[33] In the Monetary Policy Meeting on July 27th- 28th, the Bank of Japan decided to maintain its short-term and long-term policy rate at -0.1 percent and 0.0 percent respectively. Nevertheless, the committee agreed to purchase 10-year JGBs at 1.0 percent every business day through fixed-rate purchase instead of 0.5 percent in the range of ±0.5 percent. Headline inflation in July 2023 stood at 3.3 percent, accelerating from 3.2 percent in June.

[34] The exchange rate in July 2023 was at 141.21 yen per US Dollar, depreciating from 137.30 yen per US Dollar in the second quarter.

[35] On July 3rd, 2023, the Ministry of Commerce of the People's Republic of China (MOFCOM) announced export control measures on gallium and germanium, two rare metals that are widely used in the technology industries such as semiconductors, telecommunication equipment, and electric cars. This will officially take effect from August 1st, 2023. Exporters of both metals or products containing such metals have to require an export license. This is the countermeasures in response to the US government that has continuously implemented export controls against China.

[36] Country Garden, the biggest real estate development company in China, has encountered liquidity shortages and missed interest payments in early August 2023. This will affect the overall sentiment in the Chinese real estate sector, along with the liquidity management of other companies.

[37] Food prices in July 2023 declined by 1.7 percent, compared with a 2.3-percent growth in the previous month. This was due to a 26-percent drop in pork prices, compared with a 7.2-percent contraction in the previous month, owing to an oversupply of pork after the outbreak of African Swine Fever had ended. Meanwhile, the prices of fuels for vehicles in July 2023 fell by 13.2 percent, compared with a 17.6-percent decrease in the previous month, which had been declining for the fifth consecutive month.

[38] According to the meeting of the Communist Party's Politburo on July 24th, 2023, the Chinese government has articulated a set of pivotal economic policies to support the economic recovery in the latter half of 2023. This initiative comes in response to observable indications of waning economic momentum within the Chinese economy during the second quarter of 2023, with notable prominence in the real estate sector. Major measures are as follows: (i) the economic stimulus measures to boost domestic consumption, especially in automotive, electronic products, and home appliances, as well as accelerating the issuance of local government's Special-Purpose Bonds to facilitate investment in infrastructure, (ii) measures to support the real estate sector by extending an easing of restriction on bank lending for real estate developers and an additional one-year extension on loan repayment until December 31st, 2024, in order to ensure delivery of residential properties, (iii) the resolution of local government debt matters, (iv) The facilitation of industrial elevation and transformation, underscored by the advocacy of the new infrastructure investments such as 5G, AI, Block Chain, Cloud Computing etc., in order to boost China's capacity to attain self-sufficiency along its industrial value chains, and (v) foster capital market development by improving the business ecosystem for private enterprises and platform economy to rebuild investors' confidence in China.

The Newly Industrialized Economies (NIEs) are expected to mostly slow down in line with the contraction in exports and manufacturing production[39] Thus, Taiwan and Singapore's economies are projected to grow by 1.8 percent and 1.8 percent, slowing down from 2.5 percent and 3.6 percent in 2022, respectively. Meanwhile, South Korea's economy is projected to expand by 1.4 percent, softening from 2.6 percent in 2022, in accordance with a decline in exports and manufacturing production. Hong Kong's economy is expected to increase by 3.5 percent, recovering from a 3.5-percent contraction in 2022, driven by the expansion of the tourism sector and private consumption. While inflationary pressures have been slowing down, prompting the central banks of NIEs to scale back their rate hike[40], the central banks may keep their rates high until achieving the inflation target.

ASEAN economies are expected to slow down following a downturn in major trade partners. Nevertheless, the economies still get supporting factors from a pickup in domestic demand and tourism. Meanwhile, central banks are likely to restrain their policy rate after a downward in inflationary pressure[41] The economies of Indonesia, Malaysia, the Philippines, and Vietnam are predicted to expand by 5.0 percent, 4.2 percent, 5.6 percent, and 5.5 percent, decelerating from 5.3 percent, 8.7 percent, 7.6 percent, and 8.0 percent in 2022, respectively. Yet, there are some revisions of the Indonesia, the Philippines, and Vietnam economy from 4.5 percent, 5.2 percent, and 5.2 percent, respectively, mainly due to a faster-than-anticipated recovery of domestic demand.

US-China Technological Trade War

7 Mar 2016
The US Department of Commerce added Chinese telecommunications equipment manufacturer ZTE to the Entity List, which means American companies cannot sells goods or services to ZTE without a license due to the sale of certain technologies to Iran and North Korea.

13 Jul 2018
The US government lifted the ZTE Denial order.

15 May 2018
The US Department of Commerce added Huawei to the Entity List according to the US Department of Justice indict of financial fraud and money laundering

13 Aug 2018
The US Department of Commerce passed the new law to control technology that are essential to US national security.

19 Aug 2019
The US Department of Commerce added Huawei subsidiaries in UK, France, Germany, and Singapore to the Entity List

27 Apr 2020
The US Department of Commerce expands export controls to prevent entities in China, Russia, and Venezuela from utilizing militarily.

15 May 2020
- The US Department of Commerce amends its foreign-produced direct product (FDP) rule and the Entity List to target Huawei's acquisition of American software and technology.
- Taiwan Semiconductor Manufacturing Company (TSMC) announces the construction of a second US manufacturing site.

15 Jun 2020
The US Department of Commerce announces technology not normally subject to export controls can be disclosed to Huawei.

17 Aug 2020
The US Department of Commerce again modifies the foreign-produced direct product rule to further limit semiconductor producer developed outside the US.

26 Sep 2020
The US Department of Commerce added Semiconductor Manufacturing International Corporation (SMIC) to the Entity List to prevent using US technology for military purpose.

8 Nov 2020
The White House declared Executive Order to curb US investment in Chinese firms that involved with the military.

9 Aug 2022
The White House enacted CHIPS Act 2022 to increase budget on semiconductor research and development by 0.28 trillion US dollar in order to less rely on Chinese export and supply chain.

31 Aug 2022
The US government imposed new export control licensing requirements for sales to China of NVIDIA and AMD.

8 Mar 2023
The Netherlands government announces new export controls on semiconductor manufacturing technology that complement US restrictions.

7 Oct 2022
The US Department of Commerce imposed an export control on semiconductor and artificial intelligence to China and modified version on October 31.

31 Mar 2023
Japan announces export restrictions on 23 types of semiconductor manufacturing equipment. All three countries are home to current manufacturers of advanced

21 May 2023
The Chinese government retaliated by banning chip purchases from US firm Micron for use in "critical information infrastructure"

3 Jul 2023
The Chinese government declared export control on Rare-earth Material including Gallium and Germanium which is the main ingredient for semiconductor

30 Jun 2023
The Dutch government imposed ASML's chip manufacturing machinery export control to China according to an announcement in January 2023.

9 Aug 2023
On August 9, 2023, the US White House declared the executive order to ban US investment on Chinese firms in three sectors, i.e., quantum computing, semiconductor and microelectronics, and artificial intelligence (AI). This means that the Chinese government cannot utilize US assets for the military purpose.

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39 The contraction in exports is reflected in Hong Kong's and Singapore's manufacturing PMI of 49.4 and 51.3, declining from 52.3 and 58.0 in the same period last year, respectively. Meanwhile, the export values of South Korea and Taiwan in May 2023 decreased by 16.5 percent and 104 percent, compared with the contraction in the previous month at 6.0 and 23.4 percent, declining for the tenth and eleventh consecutive month, respectivdy.

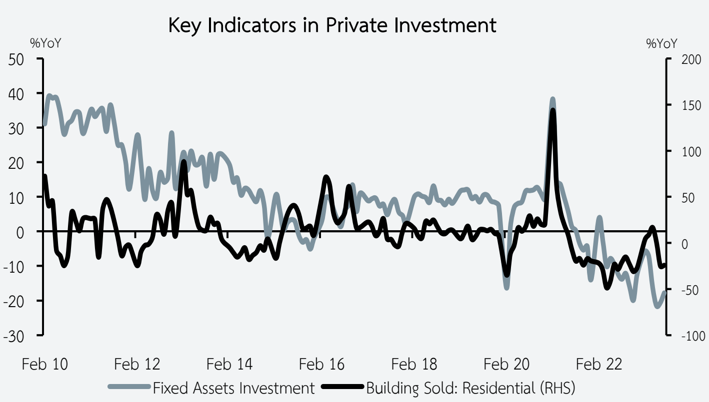
40 On July 13th, 2023, the Bank of Korea decided to maintain its policy rate at 3.50 percent for the fourth consecutive time since February 2022 after the seventh consecutive hike since April 2022.

41 The central bank of Indonesia still decided to maintain the policy rate at 5.75 percent in the July 25th meeting. Similarly, the central bank of Malaysia agreed to keep the policy rate at 3.0 percent in the July 6th meeting.

China's Economic Recovery Still Faces Limitations

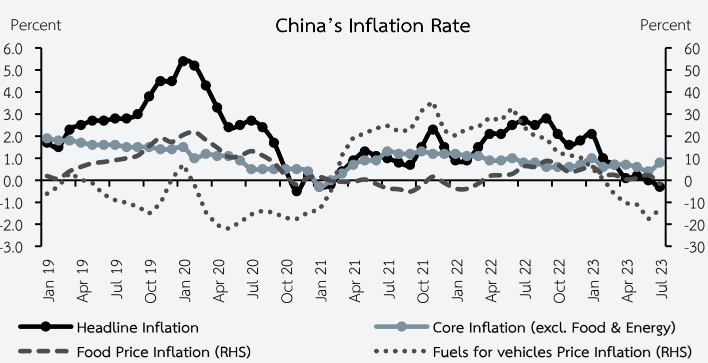
The Chinese economy expanded by 4.5 percent and 6.3 percent in the first and the second quarter of 2023, respectively. Overall, the Chinese economy in the first half of 2023 grew by 5.5 percent, representing the outlook for an economic recovery from the lowest-base effect in two years at 3.0 percent in 2022. The economic growth was mainly contributed by the recovery of service sector and domestic spending after lifting the zero-COVID containment measures and the border reopening since January 8th, 2023. However, The Chinese economic recovery over the next period is likely to face significant limitations including: (i) Private investment remains low due to the impact of liquidity shortages and a high debt burden in the real estate sector, which has led to decreases in the number of home sales and new housing loans. Moreover, on August 17th, 2023, the Evergrande Group, the world's most heavily indebted real estate developer, filed for bankruptcy protection in a US court. There are also risks that other companies will be unable to make the required payments on their debt obligations. (ii) The weakening domestic consumption as the effect of pent-up demand faltered, in line with the consumer confidence index that remains low. Meanwhile, the labor market still faces limitations as the unemployment rate for young workers aged between 16 to 24 hit a record high of 21.3 percent in June 2023[1], which is a major constraint on the recovery of domestic consumption. Therefore, the sluggish domestic demand coupled with the decrease in the price level of commodities and energy has caused the inflation rate of China in July 2023 to fall by 0.3 percent, the lowest level in 30 months, and raised the risk of the economy slipping into deflation. (iii) Manufacturing productions and exports are still affected by the global economic slowdown and trade restrictions by the US and its allies. and (iv) Public debt stood at a high level of 51.5 percent of GDP, especially local-government debt at 30.5 percent. This will limit the implementation of fiscal stimulus measures over the next period.

Amidst the economic slowdown, the Chinese government has implemented monetary and fiscal policies to stimulate the economy. The key fiscal measures include tax incentives such as VAT exemption for small taxpayers with less than 100,000 yuan in monthly sales along with tax break measures to bolster consumption of new energy vehicles (NEVs), electronic products, and home appliances. In terms of monetary policies, the People's Bank of China (PBOC) decided to continue its expansionary monetary stance by lowering the one-year Medium-term Lending Facility (MLF) rate from 2.65 percent to 2.50 percent on August 15th, 2023, the lowest rate since it was introduced in 2014. In addition, the PBOC also cut its seven-day reverse repurchase rate from 1.90 percent to 1.80 percent to stimulate the economy and increase liquidity for commercial banks and the business sector.

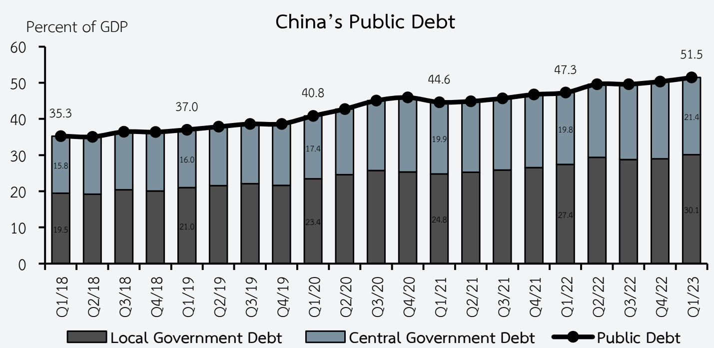


Source: CEIC as of 17 August 2023

Source: CEIC as of 17 August 2023



Source: CEIC as of 17 August 2023



Source: CEIC as of 17 August 2023

[1] According to the National Bureau of Statistics of China, from August 2023, the release of urban surveyed unemployment data by age group will be temporarily suspended until the situation recovers.

5. Thai Economic Outlook for 2023

The Thai economy in the second half of 2023 is likely to improve from the first half, mainly attributable to the favorable expansion of private consumption, recovery of the tourism sector, continuous expansion of investment, and the low growth base in the fourth quarter. However, the economy still experiences limitations and important risk factors, including domestic political conditions that may affect the economic sentiment, the global economic slowdown that could hinder international trade, the financial conditions of households and business sectors which could also undermine resumption of domestic demand, and risk from climate variabilities that may affect agricultural production and thus deteriorate farmer income.

Supporting factors for the economic growth

1) **Favorable expansion of domestic consumption**, where private consumption in the first half of the year registered a robust growth rate of 6.8 percent, accelerating from 5.3 percent in 2022 and surpassing the ten-year average of 2.9 percent, attributable to stronger consumption growth of almost all product categories, especially vehicles and services related to domestic tourism. The pronounced surge in domestic consumption finds congruence with the enhancement in employment conditions, as reflected by the continued improvement in non-farm employment, especially in the tourism-related service sector such as accommodation and food services sector, where employment significantly increased by 11.7 percent. In addition, the unemployment rate in the second quarter of 2023 remained exceptionally low at 1.1 percent, which was the same rate as in the previous quarter and was close to the pre-pandemic level of 1.0 percent in 2019. Simultaneously, the confidence sentiment was very high, as underlined by the Consumer Confidence Index in the second quarter of 2023 at 55.8, the highest level in 13 quarters. Nonetheless, the tendency of domestic demand during the rest of the year is expected to grow at a satisfactory pace, supported by the tight labor market, in line with the improvement in employment, especially in the tourism-related service. In addition, inflationary pressure is likely to decline, as seen from the inflation rate in June at 0.2 percent, which is the lowest level in 22 months, and in July, remaining as low as 0.4 percent, which can further support the expansion of domestic demand.

2) **The recovery of the tourism sector** following the increasing trend of both domestic and international tourists. In the first seven months, the inbound visitors to Thailand reached 15,391,104 persons, marking an impressive escalation of 380.3 percent in comparison to the corresponding figure of 3,204,177 tourists observed in the same period of the last year. Moreover, this surge in momentum is further exemplified by the 1,081,453 tourist arrivals during August 1st-13th, 2023, approximately an average of 83,189 visitors per day. The leading countries of origin are Malaysia, China, South Korea, India, and Vietnam. Moreover, the visitor figures from most of these nations have rebounded to the pandemic level. Meanwhile, the figure of Chinese tourists in the first seven months reached 1,852,446 visitors with 409,327 visitors in July, increasing from 311,888 visitors in June. The number is expected to increase further during the last quarter, especially during the mid-autumn festival and the national day (Golden Week). Furthermore, the occupancy rate has returned to the pre-pandemic level[42] The figure in the second quarter stood at 66.9 percent, compared to 68.0 percent in the same quarter of 2019. In the meantime, domestic tourism continuously recovers, considering the number of domestic tourists in the second quarter of 60,326,425 tourists-time, improving from 48,281,926 tourists-time in the same period of last year, marking a 24.9-percent increase. This results in a total number of 122,944,946 tourists-time during the former half of 2023, compared to 94,328,987 tourists-time in the same period of 2022, reflecting a 30.3 percent expansion. Moreover, the tourism sector over the rest of the year will be driven by the key government's stimulus package including the "Unseen New Series" from the Tourism Authority of Thailand aiming to support secondary provinces.

3) **The expansion of investment in both private and public.** Private investment in 2023 is likely to expand continuously, supported by the amount of applications for investment promotion in the first half of 2023, with the cumulative investment value of these applications reaching 364 billion baht, marking a substantial increase of 69.4 percent in comparison to the corresponding period in the previous year[43]. Moreover, the areas of land allocated for industrial estate in the second quarter of 2023 increased to 190,150 Rais, growing by 5.6 percent from the same period of last year. In particular, those in the Eastern Economic Corridor (EEC) was 146,666 Rais, increasing by 8.5 percent from the same period of last year. In addition, the momentum of private investment is anticipated to gain impetus through the progression of projects under the public-private partnership (PPP). For public investment in 2023, it is likely to expand according to the FY2023's capital budget framework that has been cumulatively disbursed during the first three quarters of FY2023 (October to June), with a total of 349.5 billion baht, (53.3 percent from the budget framework of 655.2 billion baht), increasing by 17.9 percent from the same period of FY2022. Furthermore, the public investment will also be supported by continual progress of the state-owned enterprises investment in major infrastructure investment projects in 2023.

[42] The 7-month accumulated number of tourists from Malaysia, South Korea, India, and Vietnam stood at 2,445,950 visitors, 913,168 visitors, 888,807 visitors, and 631,448 visitors, respectively. This accounted for 109.0 percent, 85.1 percent, 77.8 percent, and 96.9 percent compared to the pre-pandemic level (2019), respectively.

[43] In the first half of 2023, the application projects for investment promotion total 891 projects, expanding by 17.7 percent from the same period of last year. Similarly, the amount of applications for investment promotion that have been approved and issued certificates in the first half of 2023 total 377 billion baht and 235 billion baht, representing an increase of 0.4 percent and 7.8 percent compared to the same period of the previous year, respectively.

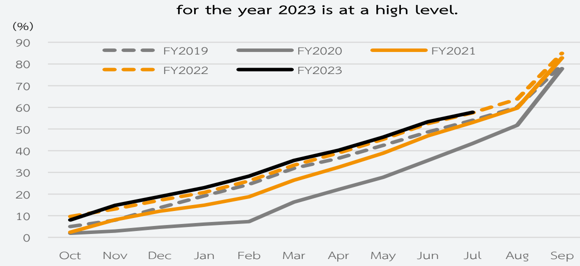
4) **Low-base effect** from the low economic growth during the last quarter of last year, owing to declines in exports and industrial production as a result of the slowdown in global economy and trade volume since the fourth quarter of 2022, coupled with low capacity utilization rates in many industries. It is expected that during the rest of the year, the recovery of capacity utilization, together with the continuous expansion of production and export of motor vehicles as well as the expected recovery of electronic cycles in the global market as demand continues to increase, exports and industrial production are likely to resume their expansion in the last quarter of 2023.

Sustaining Economic Growth Through Public Investment

As public investment remained an essential driving force for Thailand's economic growth in 2023, it is crucial to monitor the primary drivers behind such investment, including, the disbursement of capital expenditure from the annual budgetary framework, investments within the state-owned enterprises' investment framework, and initiatives in the public-private partnership (PPP) projects. For the fiscal year 2023, the annual budget allocation amounted to 3.185 trillion Baht, representing an increase of 2.7 percent from the previous year. Of this, 2.53 trillion Baht is allocated for current expenditure and 655 billion Baht for capital expenditure, an increase of 16.1 percent from the previous year. A comprehensive review of the cumulative disbursement rate over the first 9 months of FY2023 indicates a consistent acceleration in the disbursement of capital expenditure since the start of the fiscal year. This reflects a rate of accumulated capital expenditure disbursement in 2023 that is higher many previous years, in line with the push to expedite spending on key infrastructure projects under the Ministry of Transport. Furthermore, in 2023, it is anticipated that capital expenditure on top 10 state-owned enterprises' investment projects will amount to 84,020.34 billion Baht, representing 59.6 percent of the estimated capital expenditure disbursement by state-owned enterprises on key investment projects. For the first 9 months of FY2023, cumulative disbursement of state-owned enterprises stood at 47,067.34 billion Baht with a disbursement rate of 56.02 percent. Simultaneously, the promotion for PPP projects also contributed to sustaining the growth momentum of public investment. In 2023 alone, the Public-Private Partnership Policy Committee approved 4 joint-investment projects with a total value of 98,799 billion Baht, comprising approximately 12,498 billion Baht from public sector investment, and 86,301 billion Baht from private sector investment.

However, a delay in establishing the new government and the announcement of the Annual Budget Expenditure Act B.E. 2567 (A.D. 2024) is anticipate to impact public investment in the fourth quarter of 2023, continuing into 2024, especially investment for new projects. Thus, to maintain the economic growth momentum driven by public investment, it is crucial to prioritize expediting disbursements from both the carry-over budget and the capital expenditure of state-owned enterprises during the period when the Annual Budget Expenditure Act B.E. 2567 (A.D. 2024) has not been enacted. Moreover, a preparation for project disbursement readiness is also essential, along with establishing targets and monitoring disbursement results of government agencies to ensure spending efficiency once the Annual Budget Expenditure Act B.E. 2567 (A.D. 2024) comes into effect.

The cumulative capital expenditure disbursement rate for the year 2023 is at a high level.



Disbursement Rate of Government Agencies with High Capital Expenditure

Unit: percent

Agency	FY2019	FY2020	FY2021	FY2022	9MFY2022	9MFY2023
Department of Highways	73.8	77.4	86.1	90.1	62.4	70.6
Department of Rural Roads	86.9	82.3	89.3	90.6	65.5	66.4
Royal Irrigation Department	81.1	80.6	82.0	82.5	60.6	66.0
Department of Public Works and Town & Country Planning	65.7	65.3	62.1	46.4	32.2	27.3

Project	Amount (Trillion Baht)	Cumulative Disbursement Rate (%)
National highways network construction project	62,133.2	76.6
National highways network maintenance project	22,137.7	91.6
Rural roads network maintenance project	17,763.3	80.9
Rural roads network and bridge development project for transportation and logistics system	15,247.3	64.5

Top 10 of state-owned enterprises significant investment projects of 2023

Unit: Million Baht

Project	SOEs	Sector	Operational Approval	Disbursement Estimation	Disbursement 9M/FY2566	Disbursement Rate (%)
The first phase of the Thai-Sino high-speed rail linking Bangkok and Nong Khai (Bangkok-Nakhon Ratchasima section)	SRT	transport sector	143,280.94	18,138.21	14,253.72	78.58
The MRT purple line project: Tao Pun - Rat Burana	MRT	transport sector	91,974.00	10,646.56	11,673.90	109.65
Transmission system and distribution system development project, phase 2	PEA	energy sector	28,585.93	10,552.04	4,077.35	38.64
The expressway linking Rama III Road-Dao Khanong and the western Outer Ring Road	EXAT	transport sector	20,767.34	8,608.31	4,885.27	56.75
Railway construction project: Ban Phai - Maha Sarakham - Roi Et - Mukdahan - Nakhon Phanom	SRT	transport sector	61,273.31	7,498.62	1,517.50	20.24
The government complex: Zone C area	DAD	commerce and services sector	17,343.86	6,129.02	1,782.07	29.08
The twelfth power distribution system improvement and expansion plan, Year 2017 - 2021	MEA	energy sector	17,277.73	5,938.96	1,483.80	24.98
Railway construction project: Den Chai - Chiang Rai - Chiang Khong	SRT	transport sector	76,368.66	5,752.88	3,072.74	53.41
The 9th waterworks improvement master plan	MWA	public utility sector	28,142.50	5,459.68	4,316.50	79.06
Mae Moh power plant units 8-9 replacement project	EGAT	energy sector	42,557.14	5,296.06	4.49	0.08

source: NESDC

[1] There are 65 key investment projects with total value of 1.41 trillion Baht.

Risks and limitations to economic growth

1) **Political conditions** may affect the economic sentiment. The process of forming the new government has led to a delay in the preparation of the FY2024 annual budget. The endorsement of draft legislation and regulations pertinent to state governance, particularly those related to economic measures, could also be affected as these processes require approval from the new cabinet. Thus, this delay can impede the business sector's confidence, as it awaits clarity regarding governmental policies. In the baseline scenario, it is expected that the budget preparation process for the year 2024 will delay for 6 months, resulting in the budget being able to be disbursed in the third quarter of fiscal year 2024.

2) **Global economic deceleration and financial market volatilities** as a result of key risk factors that need to be closely monitored and assessed including: (i) a slowdown trend of global economy due to a continuation of interest rate hikes enacted by major central banks due to high inflationary pressure which has led to tightening financial market and higher borrowing cost. The result can potentially exert a dampening influence on growth prospects in major economies. This might hinder a recovery of domestic consumption and investment in major economies. Notably, countries with substantial high ratios of foreign currency debts are more exposed to the economic instability; (ii) prolonged geopolitical conflicts which hamper international trade and investment as well as overall global economic recovery. In particular, the ongoing tension between the US and China has sparked new trade barrier measures that might lead to escalation of trade and investment protectionism measures along with technological competition, for example, the US investment ban, and the China's rare-earth export control[44] Moreover, the dispute between Russia and Ukraine is still highly uncertain and likely to be protracted which would affect the commodity and energy prices and thus aggravate the inflationary pressure; and (iii) slower-than-expected Chinese economic recovery due to the limitation in domestic investment especially in real estate sector that still face the liquidity crisis. In addition, the Chinese growth would be constraints by the decelerated trend of domestic consumption which has led inflation to a record low of (-0.3) percent, the first contraction in 19 months. Meanwhile, the unemployment rate among the younger generation rose, which is likely to hinder domestic consumption. Furthermore, intensified US trade barrier measures could curb Chinese manufacturing and export sectors.

3) **Remaining high levels of household and corporate debts amidst rising interest rates,** where the ratio of Non-Performing Loans (NPLs) and Special Mention Loans (SMLs) to total loans of small and medium enterprises (SMEs) remained high at 7.4 percent and 12.2 percent in the first quarter of 2023. However, the ratio remained above pre-pandemic levels at 4.7 percent and 3.1 percent in the same quarter of 2019[45], respectively. Similarly, the ratio of household debt to GDP in the first quarter of 2023 stood at 90.6 percent, slightly decreasing from 91.4 percent in the prior quarter, though remaining high compared to the pre-pandemic level at 82.7 percent in the same quarter of 2019. Thus, the high debt burden in business and household sectors might constrain the recovery of both domestic demand and debt servicing ability amid rising interest rates, especially SMEs and low-income households as well as those debtors in the agricultural sector who have been under the debt moratorium measure, which recently abolished[46] In addition, debtors obligated to specialized financial institutions (SFIs) and non-banks have not yet fully recovered from the impact of COVID-19.

4) **Impact of climate variability on agricultural production.** An estimation by the World Meteorological Organization (WMO) on July 4th, 2023, projected that there is a 90 percent possibility that the Asia-Pacific region experiencing an El Niño state in the second half of 2023, spanning 6 to 12 months. Besides, in July 2023, the global surface temperature hit the highest record at 17.23 degrees Celsius, which caused many countries to face a severe heat wave. Within Thailand, the average maximum temperature during the same month stood at 39.3 degrees Celsius, surpassing the normal average by 0.9 degrees Celsius. In addition, the rainfall tends to be lower than the normal average, which is in line with the cumulative rainfall data during the first 7 months of 2023, indicating that rainfall tends to be lower than the normal levels in all areas, about 5 percent lower than the average rainfall over the past 30 years. Thus, the amount of water in the major dams for the 2023/24 cultivation season is likely to be low and may affect agricultural production.

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[44] On August 9th, 2023, the US White House declared the executive order "Addressing United States Investments in Certain National Security Technologies and Products in Countries of Concern". This means a ban of US investment on Chinese firms in three sectors, i.e., quantum computing, semiconductor and microelectronics, and artificial intelligence (AI). In other words, the Chinese military cannot utilize US assets for their benefits such as weapon development, cryptology, as well as preventing spillover from US technology.

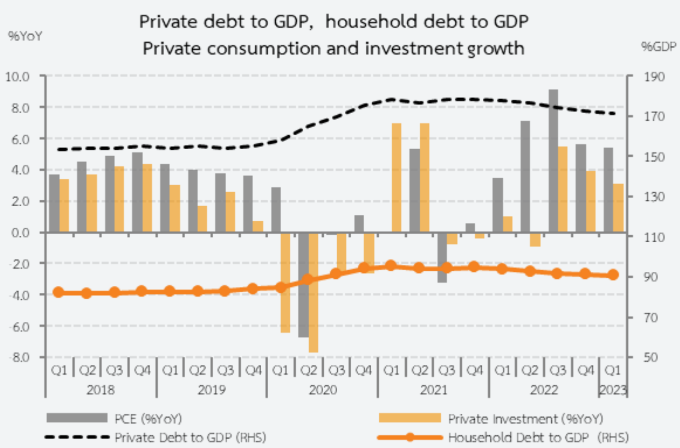
[45] On June 30th, 2023, the Bank of Thailand (BOT) has improved the coverage of its data on household debt in order to reflect the actual burden of debt by including new lenders from Student Loan Fund (SLF), National Housing Authority, Pico Finance, and non-saving cooperatives. As a result, the total outstanding amount of household loans in the first quarter of 2023 increased by 770 billion baht as well as the household debt-to-GDP ratio increased from 86.3 percent to 90.6 percent.

[46] The debt moratorium measure ended on April 9th, 2023, while the loan rehabilitation program has been extended for another year and will be ended on April 9th, 2024.

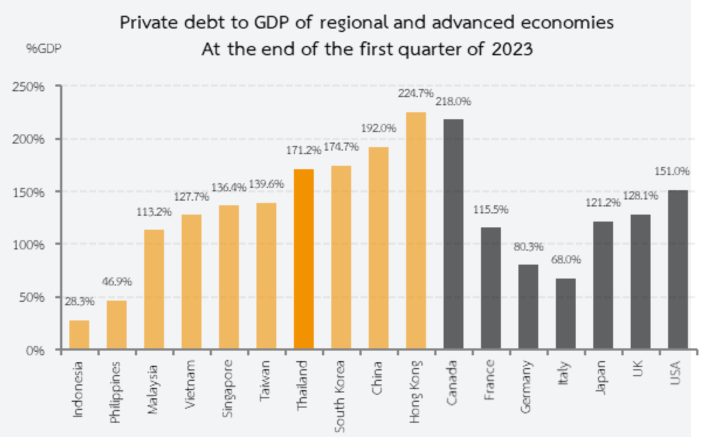
Household debt and measures to sustainably address debt problems.

At the end of the first quarter of 2023, Thailand's private debt to Gross Domestic Product (GDP) was at 172.2 percent, decreasing from 178.6 percent during the Covid-19 crisis but still higher than debt ratio in other regional and advanced economies, which was averaged at 131.5 and 126.0 percent to GDP, respectively. Besides, the current debt level also exceeded the pre-pandemic level of 153.8 percent to GDP in the first quarter of 2019. **Focusing on household debt, it was counted at 90.6 percent to GDP at the end of the first quarter of 2023,** though reduced from the peak of 95.5 percent to GDP in the first quarter of 2021 but remained relatively high. In detail, the composition of household debt consisted of; (I) Loan for real estate purchase (33.5 percent of household loan) (II) Loan for personal consumption (26.8 percent of household loan) (III) Loan for own business (18.2 percent of household loan) (IV) Loan for vehicle purchase or hire purchase (11.3 percent of household loan) and (V) Loan for other purpose (10.1 percent of household loan). This elevated debt level requires prompt attention to address debt problems, particularly for debtors who have persistent debts and debt problems.

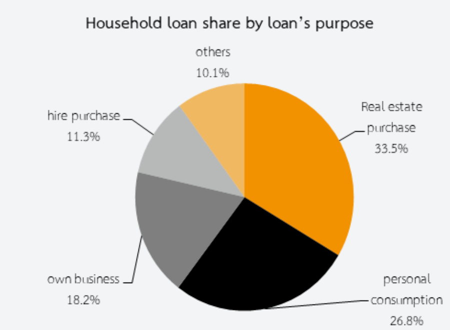
According to data from the National Credit Bureau, Non-Performing Loans (NPLs)[1] accounted for 0.95 trillion Baht (9.4 million accounts) in the first quarter of 2023, compared to 0.78 trillion Baht (5.7 million accounts) in the first quarter of 2019. **In detail, NPLs from commercial banks[2] amounted to 0.50 trillion Baht (2.7 percent of total loans),** which is a decrease from 0.45 trillion Baht during the pre-COVID-19 period in the first quarter of 2019 These NPLs from commercial banks are mainly counted from the following loan; (i) Personal consumption loans (29.0 percent of total NPLs), such as housing loans and hire purchase loans; (ii) Wholesale and retail trade; repair of motor vehicles and motorcycles loans (24.0 percent of total NPLs); and (iii) Manufacturing loans (20.4 percent of total NPLs). **Meanwhile NPLs from Specialized Financial Institutions (SFIs)[3] were at 0.28 trillion Baht or 4.2 percent of total loans from SFIs.** This amount increased from 0.20 trillion Baht during the pre-pandemic period in the first quarter of 2019. Most of NPLs from SFIs are counted from these loans; (i) Personal consumption loans (44.9 percent of total NPLs), such as housing loans and other personal consumption loans (without collateral); (ii) Agriculture, forestry and fishing loans (31.2 percent of total NPLs), and (iii) Wholesale and retail trade; repair of motor vehicles and motorcycles loans (5.9 percent of total NPLs),



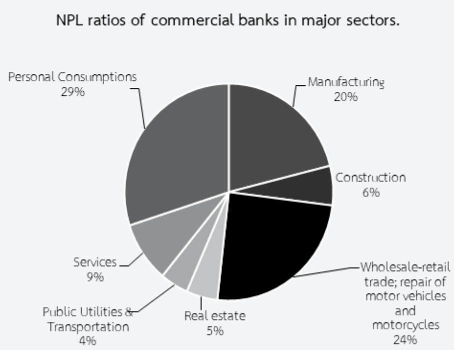
Source: NESDC, CEIC, Bank of Thailand



Source : CEIC



Source: Bank of Thailand



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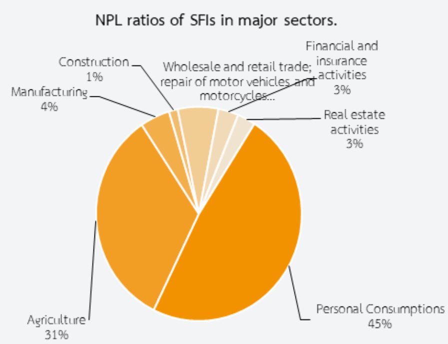


Source: Fiscal policy office

1 Debtor account status code 21 (NPLs accounted for as a results of Covid-19) was at 0.31 trillion Baht (4.4 million account) at the end of the first quarter of 2023, decreasing from its peak of 0.41 trillion Baht in August 2022 and 4.7 million account in October 2022. This amount is comprised of (i) NPLs from SFIs 60 percent (ii) NPLs from Non-Bank 30 percent and (iii) NPLs from commercial bank 10 percent.

2 Bank of Thailand database

3 Fiscal Policy Office

Household debt and measures to sustainably address debt problems. (cont.)

The government, particularly the Bank of Thailand (BOT), as the regulator in financial sector, has been consistently working with financial institutions to address household debt problems as follows: (i) Coping with existing debt issues, such as refinancing support, debt consolidation support, and debt clinic projects (to relief debt); (ii) Providing liquidity support, such as reducing personal loan installments, implementing debt payment holidays, lowering credit card minimum payment rates, and extending credit lines and repayment period. However, these measures have not been sufficient to reduce household debt to a level below the monitoring threshold of 80.0 percent to GDP. Although the economy has been recovering recently and household incomes have started to bounce back, there are some groups whose income improvement remains slow and vulnerable. Thus, in order to cope with future debt problems in a well-targeted and effective manner, the BOT has announced new measures to sustainably address Thailand's household debt problems, focusing on improving debt throughout the entire debt journey, both formal and informal debt. These measures addressing debt at all stages, including before applying for a loan, while signing a loan contract, being a debtor, having debt problems, and being filed a lawsuit or having debts sold off. Initially, the following set of measures will be announced: **(i) Responsible Lending (RL) guidelines**, which require creditors to lend in a responsible and fair manner for debtors throughout their debt journey. This includes not encouraging excessive lending, providing fair loan's contract terms, and assisting debtors with persistent debt to fully repay their loans; **(ii) Risk-based pricing (RBP) mechanism** which will promote access to formal loan by charging interest rate based on the borrowers' risk profile. Lower-risk borrowers will be charged lower interest rates, while borrowers with higher risks will have more opportunity to access credit through formal channels; **(iii) Debt service ratio (DSR) limits**, aimed at preventing over-indebtedness of borrowers by ensuring that debtor have the capacity to repay their debts.

Measures to sustainably address debt problems

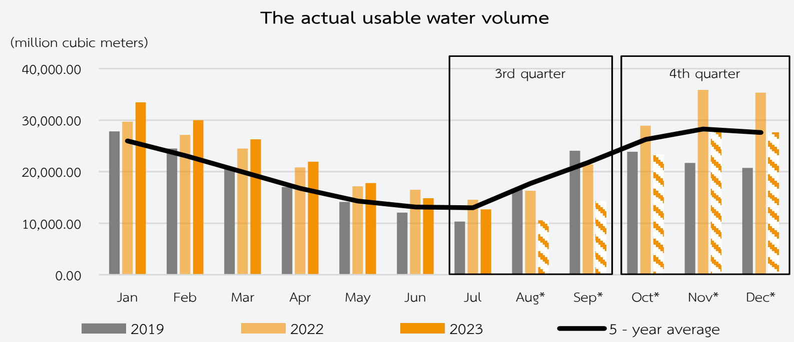
measures	Principle	Debt journey		
		Before indebted	Indebted	Debt problems
Responsible Lending Guidelines	Creditors must provide full and fair information throughout the entire debt journey to encourage good financial discipline and ensure an	- provide clear and full information that does not lead to over-indebtedness	- encourage (i) good financial discipline (ii) on time repayment habits (iii) repay debt installment	- provide solutions to assist debtors in a manner that best suit their debt affordability.
Assisting persistent debtors	Assist borrowers of revolving personal loans who show signs of being unable to fully repay their loans (with interest payments higher than principal payments) by offering a loan restructuring	-	- Debtors who only making interest payment will be offered debt restructuring program to enable them to fully repay their loans.	-
Risk Base Pricing Mechanism	Implement a risk-based pricing mechanism by charging an interest rate based on the borrowers' risk profile. This mechanism will promote financial discipline and increase access to formal loans for those borrowers with higher risks.	- borrowers with good credit history will have better loan's terms. - borrowers with risks above the ceiling will be able to	– Debtors have tools to foster repayment discipline to lessen interest burden in future.	-
Limit Debt Service Ratio (DSR)	Limit the Debt Service Ratio to ensure that borrowers will have sufficient disposable income for their living expenses and future shocks, which	- Debtors have sufficient disposable income for their living.	- Debtors have sufficient income for future shocks.	- NPLs will decrease.

Source: Bank of Thailand

In addition to those measures, effectively and sustainably addressing household debt problems will require cooperation from all relevant stakeholders, which includes: (i) enhancing financial literacy and financial discipline; (ii) promoting responsible lending among all creditors; (iii) Establishing mechanisms to offer debt advice and to mediate debt; (iv) laying the necessary foundations, such as developing credit database and alternative data source for risk assessment and debt monitoring purposes. This could increase flexibility of loan terms to match borrower's cash-flow patterns, thereby reducing the demand for informal loans. Furthermore, in order to sustainably address these debt problems, efforts to increase people's income whilst simultaneously addressing debt problems should be implemented.

Climate Variability and Economic Value of the Agricultural Sector

In the last quarter of 2023, El Niño[1] conditions are likely to intensify. Then, the strength will become weakened during the first two months of 2024 and return to severe El Niño conditions until April 2024 **In Thailand**, during the third quarter of 2023[2] (July-September), the average temperature is projected to surpass normal levels[3], increasing by approximately 0.5 - 1.0 °C from the current readings. Concurrently, the country is expected to experience below-average rainfall, consistent with the data observed for the initial seven months of 2023, which has shown subpar rainfall across all regions. This shortfall is 5 percent lower than the average rainfall recorded over the past 30 years. Consequently, the water levels in dams for the 2023/24 planting season are likely to be diminished, potentially impacting agricultural production. Nevertheless, the current water available in dams and reservoirs as of August 16th, 2023, stands at 15,359 million cubic meters, equivalent to 21.7 percent of the total water storage capacity. Though this figure is lower than the 2022 level of 18,973 million cubic meters (26.7% of capacity) and the average of the past five years, it still surpasses the water levels observed in 2019 (18.5% of capacity), as well as those in 2015 and 2016 (15.0% and 14.5% of capacity, respectively). During those years, severe drought conditions led to declines in agricultural production by 6.5 percent in 2015 and 1.2 percent in 2016. The trajectory of the latter half of 2023 will also be influenced by the remaining year's rainfall, particularly if it remains low.



Note: - The actual usable water volume from August to December 2023 is estimated by the Office of the National Economic and Social Development Council.
- 2019 (January to May) is when El Niño conditions occur.

According to the impact of climate variability, as per information from the Office of Agricultural Economics, Ministry of Agriculture and Cooperatives[4], the forecast indicates the trend in the output of the five major agricultural products during the second half of 2023 (July to December) compared to the baseline scenario projected in November 2022 which excludes weather variability. Additionally, it also considers the combined scenario of climate variability, as predicted in June 2023. Finding are; **(1) paddy** (21.73 percent of the total agricultural output[5]) is expected to yield 25.50 million tons, down from the 26.79 million tons originally expected in the baseline scenario, excluding weather variability. This represents a 4.8 percent decrease from the previous forecast[6] and resulted in a decrease in the value of rice from the baseline scenario by 14,241.78 million Baht; **(2) rubber** (20.23 percent of the total agricultural output) is expected to produce 3.10 million tons, up from the expected 3.04 million tons. or an increase of 2.1 percent from the previous forecast. As a result, the value of rubber increased by 2,274.61 million Baht; **(3) oil palm** (1.92 percent of the total agricultural output) is expected to yield 8.03 million tons, down from the expected 8.82 million tons or a decrease of 9.0 percent from the previous forecast. As a result, the value of oil palm decreased by 3,803.79 million Baht; **(4) sugarcane** (6.25 percent of the total agricultural output) is expected to yield 15.04 million tons, down 35.7 percent from the previous forecast. As a result, the value of sugar cane decreased by 10,436.26 million Baht; and **(5) cassava** (3.29 percent of the total agricultural output) is expected to yield 8.67 million tons, down 5.9 percent from the previous forecast. As a result, the value of cassava decreased by 1,615.58 million Baht.

Overall, in the latter half of 2023, it is expected that the total output of five major agricultural products will be 60.33 million tons, a decrease of 10.90 million tons from the previous forecast. Hence, El Niño will cost the economic value of five major agricultural products of 27,822.79 million Baht.

Therefore, under the trend of facing the El Niño condition that may affect the drought in the future. The government supposedly ought to watch over, monitor, and assess the situation closely in order to implement measures for managing water resources to be sufficient for cultivation. This can be done by prioritizing the allocation of water by the condition of the cultivated area, as well as increasing the water storage efficiency at the plot level and finding a reserve water source along with promoting the modification of plant types and methods to become suitable the area.

[1] El Niño occurs when the winds weaken and change direction, blowing from the east side of the Pacific Ocean towards the west side of the Pacific. This causes warm ocean currents to flow towards the southern parts of the Americas. As a result, the eastern and southeastern regions of Asia, as well as Australia, experience the reduction of rainfall and drought conditions, while the southern coast of the America receives increase of rainfall.

[2] Forecasted average temperatures and accumulated nationwide rainfall for the third quarter of 2023, sourced from the Thai Meteorological Department under the Ministry of Digital Economy and Society.

[3] The normal values of average temperature and average rainfall refer to the monthly average temperature and monthly rainfall of Thailand over a 30-year period (1991 - 2020).

[4] The yield in the second half of 2023 represents the agricultural production forecast data as of June 2023, which has been released by the Office of Agricultural Economics, Ministry of Agriculture and Cooperatives. (Including weather variability or El Niño factor)

[5] The proportion of agricultural production amounts in 2005 is sourced from the Office of Agricultural Economics, Ministry of Agriculture and Cooperatives.

[6] Previous forecast, this is the forecast data for agricultural production as of November 2022 of the Office of Agricultural Economics. Ministry of Agriculture and Cooperatives (not including climate variability or El Niño factors)

Key assumptions for 2023 economic projection

World Economic Projection and Other Key Assumptions

	Actual Data			Projections for 2023	
	2020	2021	2022	May 15th, 2023	Aug 21st, 2023
World Economic Growth (%)[1/]	-3.0	5.5	3.2	2.7	2.8
US	-2.8	5.9	2.1	0.9	1.2
Eurozone	-6.1	5.3	3.5	0.5	0.8
Japan	-4.3	2.1	1.0	1.5	1.5
China	2.2	8.4	3.0	4.9	4.9
Global Trade Volume (%)	-7.8	10.1	5.4	2.1	2.1
Exchange Rate (Baht/US Dollar)	31.3	32.0	35.1	32.8 - 33.8	33.5 - 34.5
Dubai Crude Oil (US Dollar/Barrel)	42.1	69.5	96.2	80.0 - 90.0	77.0 - 87.0
Export Price (US Dollar) (%)	-0.8	3.3	4.2	(-1.0) - 0.0	(-0.5) - 0.5
Import Price (US Dollar) (%)	-3.6	8.3	12.7	(-2.0) - (-1.0)	(-1.0) - 0.0
Income from Tourism (Trillion Baht)[2/]	6.7	0.4	11.2	28.0	28.0
Number of foreign tourists (Million persons)	0.34	0.09	0.46	1.27	1.03

Notes: [1/] World economic growth is a trade-weighted average of key economic partners in 2019 (15 economies)
[2/] base on the Bank of Thailand's balance of payment data and forecasted by the NESDC.

Source: NESDC as of 21st August 2023

1) **The world economy and global trade volume in 2023** are projected to grow by 2.8 percent and 2.1 percent, close to the growths of 2.7 percent and 2.1 percent in the previous estimation, but softening from 3.2 percent and 5.4 percent in 2022. The adjustments are in accordance with the economic growth in the first half of 2023. In detail, the revised assumptions for US and Euro economic growth are 1.2 percent and 0.8 percent compared to 0.9 percent and 0.5 percent in the previous projection assumptions, respectively. Nevertheless, the economy in the second half of 2023 is expected to slow down mainly owing to the continual policy rate hikes from the previous period, the geopolitical conflict between Russia and Ukraine, and US-China trade war.

2) **The average value of Thai Baht in 2023 is expected to be within the range of 33.5 - 34.5 Baht per US dollars,** appreciating from an average of 35.1 Baht per US dollars in 2022 but depreciating from 32.8 - 33.8 Baht per US dollars in the previous estimation. The adjustment is due to the depreciation trend of Thai Baht during the first 7 months with an average of 34.26 Baht per US dollars. This follows the appreciation of the US Dollar due to the continually increasing policy interest rate, while the Chinese Yuan is likely to depreciate due to stagnated economic recovery. In addition, the Thai Baht depreciated due to concerns over the domestic political situation. Nonetheless, Thai Baht throughout 2023 is expected to appreciate gradually in line with the improvement in the tourism sector that will benefit foreign tourism receipts and improve current account surplus, coupled with the slowing interest rate hike by the US Fed and the increasing trend of real interest rate after high inflationary pressure subsided.

3) **The average Dubai crude oil price** in 2023 is expected to be in the range of 77.0 - 87.0 US dollars per barrel, revising downward from the previous assumption of 80.0 - 90.0 US dollars per barrel and down from an average of 96.2 US dollar per barrel in 2022, attributable to lower than expected crude oil prices in the second quarter of 76.9 US dollars per barrel. This is in line with the first 7-month averaged crude oil prices of 79.0 US dollars per barrel, following the global economic slowdown, especially sluggish Chinese economic recovery. In addition, it is also due to the appreciation of the US dollar, following the US Federal Reserve's interest rate hike. Nonetheless, it is expected that crude oil price will slowly increase during the rest of the year, owing to crude oil production cuts by the Organization of the Petroleum and Allied Countries (OPEC+)[47], coupled with global rig counts and crude oil inventories that remain below pre-pandemic levels[48] At the same time, there are uncertainties and protracted conflicts between Russia and Ukraine that may affect energy prices as well as the trend of energy use during the winter is expected to be lower than the normal average temperature.

4) **The export and import prices in terms of US dollars** in 2023 are expected to increase by (-0.5) - 0.0 percent and (-1.0) - 0.0 percent, slowing down from 4.2 percent and 12.7 percent in 2022, respectively, and increasing from the assumptions in the previous projection of (-1.0) - 0.0 percent and (-2.0) - (-1.0) percent, respectively.

5) **The international tourism receipts in 2023** is expected to reach 1.03 trillion baht, increasing from 0.46 trillion baht in 2022 yet a downward revision from 1.27 trillion baht in the previous projection. This is mainly due to an actual data of per-head spending which is lower than the previous estimation, along with a revision of tourism receipts in the Bank of Thailand's balance of

47 The Joint Ministerial Monitoring Committee meeting of the Petroleum Producing Countries and Allies (OPEC+) held on August 4th, 2023 has confirmed a production cut of 2 million barrels per day. Until the end of 2024, while Saudi Arabia also announced an extension to reduce production off 1 million barrels per day until September 2023

48 The global number of operational oil rigs in July 2023 stood at 722 rigs, compared with 833 rigs during July 2019. While the US crude oil inventory at the end of August 2023 was at 1,267 million barrels, compared with 1,222.0 million barrels at the end of 2022

payment[49]. Meanwhile, the total number of international tourist arrivals in 2023 is anticipated to be 28.0 million persons, rising from 11.2 million in the last year, still no revision from previous projection. The figure during the former half of 2023 is 12.9 million persons, in accordance with our projection. The number is still expected to improve in the latter half of the year especially in the last quarter which is normally high-season[50]

6) **The budget disbursement** is expected to be as follows: (i) the FY2023 annual budget disbursement rate of 91.5 percent of the overall budget, declining from 92.5 percent in the previous projection. In detail, the current budget is expected to be disbursed at 97.0 percent, equal to the previous assumptions and compared with 99.2 percent in the previous fiscal year. Similarly, the capital budget is expected to be at 70.0 percent, declining from 75.0 percent in the previous projection and compared with 73.7 percent in the previous fiscal year. For the FY2024's annual budget bill, there is risk of a delay of 6 months in approving and implementing the budget, which is scheduled for disbursement in the third quarter of FY 2024; (ii) the carry-over budget disbursement rate of 82.4 percent, declining from 86.2 percent in the previous projection, and compared with 90.1 percent in FY2022 (the disbursement rate consisted of current and capital budget at 90.0 equivalent to the previous projection and 80.0 percent declining from 85.0 percent in the previous projection, respectively); and (iii) the state-owned enterprises' capital budget disbursement of 65.0 percent of total budget, declining from 70.0 percent in the previous projection, or approximately 320 billion baht in line with delay of the budgetary process in the second quarter of 2023.

The Thai economic outlook 2023

The Thai economy in 2023 is projected to expand by 2.5 - 3.0 percent (with a midpoint average of 2.8 percent), accelerating from a 2.6-percent growth in 2022. Headline inflation is expected to be within a range of 1.7 - 2.2 percent and the current account is projected to record a surplus of 1.2 percent of GDP, compared with a deficit of 3.0 percent in 2022.

In the press release dated on August 21st, 2023, the NESDC estimated that the Thai economy in 2023 is expected to expand by 2.5 - 3.0 percent, with the midpoint forecast of 2.8 percent. The forecast was adjusted to be narrower and a downward revision from 2.7 - 3.7 percent (with a midpoint average of 3.2 percent) in the previous projection released on May 15th, 2023. The corresponding revisions to the key growth components to be consistent with changing conditions and revised assumptions are as follows:

1) **The Thai economy expanded by 1.8 percent in the second quarter of 2023, lower than the previous forecast** released on May 15th, 2023. With 2.6 percent growth in the first quarter, the Thai economy in the first half of 2023 grew by 2.2 percent, less than the lower bound of the previous estimation. The slower-than-expected growth of the Thai economy in the second quarter was due to: **(1) the lower-than-expected merchandise exports in the second quarter.** This was in line with a decelerating demand in major trading partners that were affected by heightened policy interest rates as a response to the high inflationary pressures. In addition, the slow recovery of the Chinese economy has limited export activities across several Asian countries. This has shown a continual decrease in Thailand's export since the last quarter of 2022. The slowdown resonated with diminished manufacturing production and private investment in the second quarter; and **(2) the low disbursement of capital budget** which hindered the public investment growth momentum. The capital budget disbursement rate under the FY2023's annual budget in the third quarter was at 17.8 percent of the total capital budget, lower than 19.2 percent in the same period last year. Therefore, the capital budget disbursement rate in the first nine months was 53.3 percent of the total capital budget, lower than 55.0 percent in the previous projection. Likewise, the state-owned enterprises' capital budget disbursement rate in the third quarter was below expectation. This was in line with the decrease in state-owned enterprises' capital budget framework from 518.8 billion baht in 2022 to 493.3 billion baht in 2023.

2) **The revisions of assumptions and key components of economic growth** that impact overall outlook to differ from the previous projection include: **(1) a downward revision of goods export** to be in accordance with the 6.1 percent drop in export volume in the first half of 2023. There is also a slowdown in the world trade volume amid the prolonged geopolitical conflict and uncertainty over escalating trade protectionism between the US and China. Therefore, the export of goods in terms of volume is expected to decrease by 1.8 percent, compared to a 1.1-percent decline in the previous projection. In addition, the assumptions for private investment and import of goods are downwardly revised to be in line with the change of export forecast; **(2) the downward revision on budget disbursement rates under the FY2023's annual budget, including the current budget, carry-over budget,** and state-owned enterprises' capital budget to be in line with actual disbursement in the first three quarters of FY2023. Meanwhile, the disbursement in the last quarter could be lower than expected due to the delays in the government formation and the FY2024 budgetary process. The disbursement of the capital budget in the last quarter of the FY2023 is expected to be disbursed by 18.7 percent of the total capital budget, lower than 20.0 percent in the previous estimate. The disbursement of the annual budget in the first quarter of FY2024 are expected to be at 17.2 percent of the total annual budget, including the disbursement rates of current and capital budget of 20 percent and 6 percent, respectively. The state-owned enterprises' capital budget is expected to be disbursed by 65.0 percent, lower than 70.0 percent in the previous projection. Therefore, under these revised baseline assumptions, government consumption is expected to decrease by 3.1 percent, compared with 2.6 percent in the previous projection. Meanwhile, public investment is

[49] The Bank of Thailand revised the tourism receipts in balance of payment during the first quarter from 0.28 trillion baht to 0.25 trillion Baht, and during the 2022 from 0.56 trillion baht to 0.46 trillion Baht.

[50] The number of Chinese tourists is expected to be 4.0 million, a downward revision from 4.2 million in the previous projection. This mainly results from a slower-than-expected pace of recovery. Nevertheless, the number still tends to increase in the remainder of 2023.

expected to expand by 2.0 percent, compared with 2.7 percent in the previous projection; **(3) a downward revision of the revenue from foreign tourists,** from 1.27 trillion baht to 1.03 trillion Baht. This is in line with the majority of arrival foreign tourists that tend to be short-haul travelers from Asia region, particularly Malaysia, Vietnam, Laos and Singapore, tending to exhibit lower average spending compared to those long-haul counterparts from the western countries. Moreover, there is the database revision of tourism receipts under the current account balance by the Bank of Thailand which contributes to the lower services surplus compared to the previous projection; and **(4) an upward revision of private consumption,** aligns with the strong growth in the first half of 2023 which grew by 6.8 percent, surpassing the previous projection.

Key components of Economic growth

1) **Total consumption: (1) Private consumption expenditure** is expected to increase by 5.0 percent, continuing from a 6.3-percent growth in 2022 and an upward revision from a 3.7-percent in the previous estimation, owing to the improvement in labor market and income base from the non-agricultural sectors, particularly those related to tourism, together with a favorably high level of consumer confidence index.**(2) Government consumption expenditure** is projected to decline by 3.1 percent, compared with a 0.2-percent expansion in 2022 and a downward revision from a 2.6-percent reduction in the previous estimation. This was in accordance with the downward revision of disbursement rate assumption of the current budget under the FY2024 annual budget due to delay in government formation.

2) **Total investment** is expected to increase by 1.6 percent, continuing from a 2.3-percent in 2022, but a downward revision from a 2.1-percent expansion in previous estimation. **(1) Private investment** is estimated to increase by 1.5 percent, slowing down from a 5.1-percent growth in 2022, and a downward revision from a 1.9-percent growth in previous estimation. This was in accordance with the declines in export and import of goods in line with the slowdown in the global trade volume and a low-capacity utilization rate. **(2) Public investment** is anticipated to grow by 2.0 percent, continuing from a 4.9-percent decrease in the previous year, and a downward revision from a 2.7-percent growth in previous estimation. This was in accordance with the downward revision of disbursement rate assumption of the capital budget under FY2024 and State-Owned Enterprises' investment budget.

3) **Export value of goods in US dollar term** is anticipated to decrease by 1.8 percent, compared with a 5.4-percent growth in 2022, and a downward revision from a 1.6-percent reduction in previous estimation. The export volume in 2023 is expected to decrease by 1.8 percent, compared with a 1.1-percent decline in the previous estimation. Meanwhile, the export price assumption is upwardly revised from (-1.0) - 0.0 percent to (-0.5) - 0.5 percentage growth. This was in accordance with the actual export price in the first half of the year. Together with the downwardly revised assumptions on the revenues from inbound tourists, it is expected that the export quantity of goods and services will continue to increase by 5.0 percent, downwardly revised from a 6.9-percent growth in previous estimation, slowing down from a 6.8-percent growth in 2022.

4) **Import value of goods in US dollar term** is expected to contract by 1.1 percent, compared with a 14.0-percent growth in 2022, and revised from a 1.9-percent contraction in the previous estimation. The import volume is forecasted to decline by 0.6 percent, compared with a 0.4-percent reduction in the previous estimation, and in line with a slower pace of export of goods and private investment. Meanwhile, the import price assumption is upwardly revised from (-2.0) - (-1.0) percent to (-1.0) - 0.0 percent. It is expected that the import quantity of goods and services will increase by 1.1 percent, downwardly revised from a 1.6-percent growth in previous estimation, slowing down from a 4.1-percent growth in 2022.

5) **Trade balance** is estimated to register a surplus of 11.6 billion US dollars, compared with a surplus of 13.5 billion US dollars in 2022, and upwardly revised from a surplus of 11.4 billion US dollars in the previous estimation. Meanwhile, service account is anticipated to register a surplus due to the increasing revenues from inbound tourists. Consequently, the current account is expected to register a surplus of 6.6 billion US dollars (1.2 percent of GDP) in 2023, compared with a deficit of 14.7 billion US dollars (3.0 percent of GDP) in 2022.

6) **Economic stability:** headline inflation is expected to be in the range of 1.7 - 2.2 percent (with a midrange of 2.0 percent), a downward revision from a range of 2.5 - 3.5 percent (with a midrange of 3.0 percent), decelerating from 6.1 percent in 2022. This is in tandem with a downward revision of crude oil price assumption as well as a decreasing energy and food prices trend.

6. Economic Management for the remainder of 2023

The economic management for the remaining of year 2023 needs to prioritize on key following issues:

1) **Maintaining the favorable economic and political environment** as well as ensuring the economic stability and cushioning the impact from uncertain global financial markets and economy, together with geopolitical conflicts that might take a heavy toll on the Thai economic growth and stability.

2) **Maintaining the growth momentum from public expenditure and investment,** by (i) accelerating the disbursement of carry-over budget and SOEs' budget during the FY2024 annual budget bill that has not yet enacted, (ii) precipitating the disbursement procedure of FY2024, (iii) preparing the project under the FY2024 budget to be ready for a procurement and disbursement after FY2024 annual budget bill is enacted, and (iv) scrutinizing the project achievement and monitoring for efficiency.

3) **Catalyzing the recovery in tourism and related service sector,** by: (i) organizing the tourism promotion events along with promoting the Long-Term Resident VISA (LTR) to attract high potential foreign visitors particularly long-stay group as well as stimulating the spending of the tourists particularly the ones from ASEAN, Asia, and China, of which the latter is likely to visit Thailand during the Golden Week in the second half of the year; (ii) promoting domestic tourism especially in the potential secondary provinces that have not fully recovered; and (iii) promoting the development of high-quality tourism, as well as enhancing and recovering toward high-quality and sustainable tourism.

4) **Supporting agricultural production and farmers' income,** by (i) protecting and cushioning the impacts of climate change, in particular, the water management to be sufficient for the cultivation, as well as forewarn within the area that might face drought; (ii) distributing additional income share of agricultural products to the farmers; (iii) supporting the measures to mitigate the farmer's risks under the efficient crop insurance scheme from the climate change; and (iv) cushioning the impact from the rising agricultural material cost.

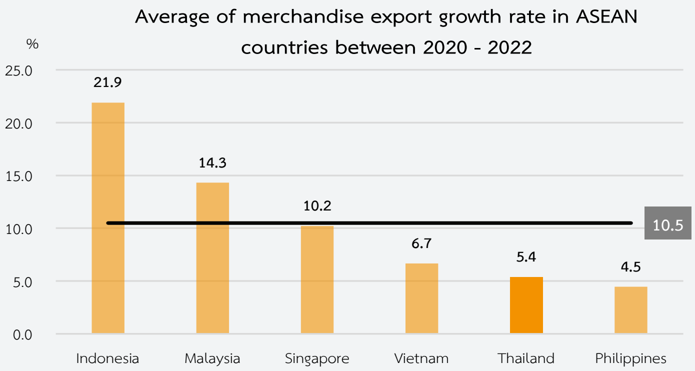
5) **Fostering export growth** to not hinder economic growth, by: (i) facilitating export procedure and lowering related costs; (ii) boosting exports to major markets with strong economic recovery coupled with expanding to new potential markets with high purchasing power, for example, Middle East, South Asia, ASEAN, as well as cross-border trade; (iii) stimulating the export of goods that become beneficial from trade barrier measure both US and China, along with encouraging Thai Multi-National Corporates to increase the production in domestic plants; (iv) utilizing benefits from the Regional Comprehensive Economic Partnership (RCEP); along with expediting the ongoing Free Trade Agreement negotiations and exploring for new trade partners; (v) protecting and rectifying problems risen from trade barriers especially non-tariff measures from the major trade partners, in particular, European Carbon Border Adjustment Mechanism (CBAM), and US Clean competition act; (vi) encouraging the business sector to appropriately manage risk of exchange rate fluctuation; and (vii) enhancing the competitiveness by improving quality of agricultural, food, and manufacturing products to achieve international requirement and standard, along with restructuring the manufacturing sector by utilizing cutting-edge innovation and technology to boost the productivity

6) **Stimulating private investment**, by: (i) speeding up projects already approved and obtained investment promotion certificates in 2020 - 2022 to start their actual investments; (ii) solving difficulties and obstacles hindering investors and entrepreneurs from investing and doing business including labor shortages in manufacturing sector as well as enhancing high-skilled labors to be brace the new targeted industries; (iii) implementing proactive investment promotions and facilitating investors in targeted industries under the 5-year Investment Promotion Strategic Plan (2023 - 2027) to attracted the investors in S-curve industries; (iv) stimulating investments in the Eastern Economic Corridor (EEC) and ongoing Special Economic Corridors, as well as expediting other regional Special Economic Corridors; (v) supporting investment in the key economic areas and transportation projects to be in accordance with the development plan.

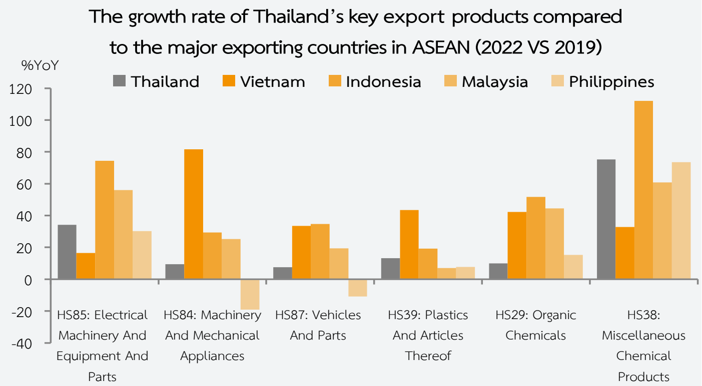
Thailand's exports situation amid the Change in Global Value Chains (GVCs)

After the global trade situation faced various risks, such as the trade dispute between the US and China, COVID-19, prolonged conflict between Russia and Ukraine, the slowdown of global economic due to rising policy rates from major economies to tackle inflationary pressures, the world trade volume (goods and services) during 2020 - 2022, only grew by 2.6 percent on average, lower than the average of 3.6 percent in the previous 3 years (2017 - 2019)[1].

Considering the average growth of Thai exports compared with other ASEAN countries, such as Indonesia, Malaysia, Singapore, Vietnam and the Philippines during 2020 - 2022, Thai exports grew by 5.4 percent, lower than the average growth in the other 6 ASEAN countries which grew by 10.5 percent. By countries on average, the export value of products of Indonesia, Malaysia and Singapore expanded significantly by 21.9 percent, 14.3 percent and 10.2 percent, respectively, while Vietnam's exports grew by an average of 6.7 percent. This reflected that export potential in each country was different after the relaxation of the pandemic



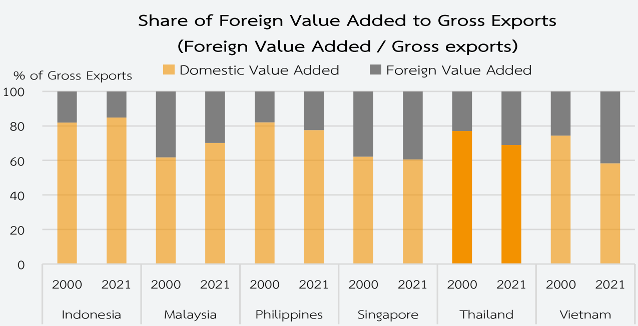
Source: Global Trade Atlas, Calculated by NESDC



Source: Global Trade Atlas, Calculated by NESDC

Considering the growth rate of the export value of Thailand's key product groups in 2022 compared to the year 2019 (before the COVID-19), compared with the ASEAN countries for the same products, the data showed that Thai major export categories grew slower than ASEAN countries, such as machinery and mechanical appliances, electrical, machinery and equipment and parts, plastics and articles thereof, and organic chemicals. When comparing Thai export's products with the other major exporting countries to global markets, classified by income level, the proportion of Thai export products in all categories exporting to high-income countries was low; on the other hand, the proportion of exports to low-income countries was somewhat high, compared with other exporting countries. This could explain a slower pace and recovery of exports than other exporting countries.

In addition, the results from the analysis of Thai export under the changes in global value chains over the past 20 years (2000 - 2021) through the Trade in Value Added (TiVA)[2] database, collected by Asian Development Bank (ADB), found that participation in the global value chain of Thai and ASEAN countries, particularly, the export of industrial products increased but still positioned as the downstream. This reflected that the increased participation in the GVCs was partially the result of being a export production base for foreign direct investment with. Thus, the businesses are highly depending on importing raw materials and intermediate goods from others, especially from headquarter countries. This helped Foreign Value Added (FVA)[3] of Thai and ASEAN to increase. However, for Malaysia, its participation rate in GVC declined in industrial exported products but its position in the GVCs shifts toward midstream exporting country. This was partly because Malaysia could enhance the production capability and develop innovation by reducing the dependence on imports of raw materials and intermediate products from foreign countries to produce its export products. Meanwhile, Indonesia was positioned as a midstream in GVCs as a producer heavily relying on domestic inputs.



Source: TiVA Database (ADB MRIO), Calculated by NESDC

Therefore, it is essential to increase the level of participation rate of the Thailand's manufacturing industry in the GVCs by emphasizing on driving the Thai manufacturing sector to be an upstream country in GVCs. The actions required include: (i) research and development on Thai quality and product standards to meet requirements of high-income countries; (ii) increasing investment in machinery, innovation and the Thailand's labor; (iii) developing the capabilities of Thai entrepreneurs, especially SMEs, along with developing supportive domestic industries related to small parts or raw material sources; and (iv) promoting the utilization of the service sector to create the value added (Servicification) to support business expansion in the global value chain.

1 IMF, World Economic Outlook Database, April 2023
2 https://wits.worldbank.org/gvc/gvc-trade-table.html
3 Gross exports are comprised of the Domestic Value Added (DVA) plus Foreign Value Added (FVA).

The decoupling between the United States and China

The competition between the United States and China has become increasingly pronounced since 2018 from the trade restrictions between the two. Those restrictive measures have significantly transformed the landscapes of the international trade and investment, particularly the decoupling of supply chain between the two economies. Both countries emphasize on enhancing domestic productions by becoming less interdependent on imports of raw materials and marketplaces from each other. Instead, the countries have diversified their sources through the import from other areas, particularly from Asia, including Thailand.

U.S. import share from China (Percent)

(Percent)	HS Code	2003-2007	2008-2012	2013-2017	2018-2022
U.S. imports from China	ALL	14.4	18.2	20.7	18.4
U.S. key imported products from China					
Products with decreased share after trade war					
Data processing machines (Incl. HDD, SSD)	8471	43.4	61.4	63.1	50.8
Telephone sets and smartphones	8517	25.2	45.0	61.1	57.2
Television receivers	8528	23.1	40.3	45.2	44.7
Products with decreased share before trade war					
Agricultural products	01-15	5.5	5.9	5.2	3.5
Agricultural and food processed products	16-24	4.0	5.5	4.9	3.4
Textiles and wearing products	50-67	32.0	44.6	42.6	35.7
Furniture and miscellaneous products	94-95	59.3	65.5	60.8	54.4
Products with increased share after trade war					
Chemical products	28-38	3.9	6.3	7.2	7.5
Electric storage batteries	8507	28.8	34.9	29.8	33.2
Vehicles and parts	87	2.1	3.8	4.6	5.2

Source: Global Trade Atlas

Note: HDD: Hard Disk Drive, SSD: Solid State Drive

China import share from U.S. (Percent)

(Percent)	HS Code	2003-2007	2008-2012	2013-2017	2018-2022
China imports from U.S.	ALL	7.7	7.2	8.3	6.6
China key imported products from U.S.					
Products with decreased share after trade war					
Soya beans	1201	40.6	44.0	37.4	25.4
Metal products	72-83	5.6	6.8	6.6	4.0
Electronic integrated circuits	8542	5.4	4.6	4.9	3.8
Motor cars	8703	8.3	13.7	23.7	19.4
Products with stable share before trade war					
Turbo-jets	8411	50.1	57.5	56.3	56.3
Products with increased share after trade war					
Maize (corn)	1005	31.8	66.9	35.4	39.6
Mineral oils and products	27	0.5	0.7	1.5	3.4
Chemical products	28-38	11.8	11.1	10.8	10.9
Machines for semiconductors	8486		15.4	14.4	15.6
Measuring, Checking, Precision (Incl. Medical instruments)	90	8.4	8.3	11.3	13.0

Source: Global Trade Atlas

According to the data, U.S. imports from China showed an upward trend before the trade war. In particular, the average share of imports from China to the U.S. was around 17.8 percent during 2003-2017. Key imported goods included electronic products, electrical appliances, machinery, and furniture. However, during the trade war (2018-2022), the average import share from China to U.S. dropped to 18.4 percent compared to 20.7 percent during 2013 - 2017. This was prominent for electronic products which significantly declined in import share. For instance, (i) data processing machines (including HDD, SSD) dropped from 63.1 percent to 50.8 percent (ii) telephone sets and smartphones, from 61.1 percent to 57.2 percent, and (iii) television receivers from 45.2 percent to 44.7 percent. On the other hand, some products witnessed an increase in import share during the trade war compared to 2013 - 2017, such as (i) chemical products rose from 7.2 percent to 7.5 percent, (ii) electric storage batteries from 29.8 percent to 33.2 percent, and (iii) vehicles and parts rising from 4.6 percent to 5.2 percent.

For China, China's imports from the U.S. displayed a consistent upward trend before the trade war. The average import share from the U.S. to China was about 7.7 percent during 2003 - 2007, with significant import products, including soya beans, machinery, and crude oil. However, the average import share from the US to China during the trade war (2018 - 2022) decreased to 6.6 percent from 8.3 percent during 2013 - 2017. Several products experienced a decrease in import shares, including (1) soya beans dropped from 37.4 percent to 25.4 percent, (2) metal products from 6.6 percent to 4.0 percent, and (3) motor cars from 23.7 percent to 19.4 percent. However, some categories observed an increase in import share, including (1) maize (corn) rose from 35.4 percent to 39.6 percent, (2) mineral oils and products from 1.5 percent to 3.4 percent, and (3) machines for semiconductors from 14.4 percent to 15.6 percent.

The decoupling between the United States and China (cont.)

U.S. import share from ASEAN (Percent)

(Percent)	HS Code	From ASEAN 2013-2017	From ASEAN 2018-2022	From Thailand 2013-2017	From Thailand 2018-2022
U.S. imports from ASEAN	ALL	6.5	9.2	1.3	1.5
U.S. Important import products from ASEAN					
Products with increased share after trade war					
Agricultural and food processed products	16-24	8.3	12.1	4.0	3.5
Chemical products	28-38	3.9	4.1	0.2	0.2
Textiles and wearing products	50-67	19.3	24.0	1.0	0.9
Data processing machines (Incl. HDD, SSD)	8471	10.0	10.3	5.4	5.9
Electric storage batteries	8507	4.5	6.2	0.1	0.2
Telephone sets and smartphones	8517	12.1	21.2	2.9	3.1
Television receivers	8528	4.1	6.5	2.5	1.8
Vehicles and parts	87	0.5	1.0	0.3	0.5
Furniture and miscellaneous products	94-95	8.2	15.9	0.7	0.9
Products with decreased share after trade war					
Agricultural products	01-15	10.6	9.2	1.5	1.3

Source: Global Trade Atlas

China import share from ASEAN (Percent)

(Percent)	HS Code	From ASEAN 2013-2017	From ASEAN 2018-2022	From Thailand 2013-2017	From Thailand 2018-2022
China imports from ASEAN	ALL	11.3	14.0	2.2	2.2
China Important import products from ASEAN					
Products with increased share after trade war					
Mineral oils and products	27	9.5	11.2	0.5	0.2
Chemical products	28-38	8.9	9.3	2.0	1.6
Metal products	72-83	5.0	15.1	0.6	1.1
Turbo-jets	8411	0.2	0.5	0.0	0.2
Machines for semiconductors	8486	8.9	11.7	0.2	0.1
Motor Cars	8703	0.4	1.7	0.4	1.6
Measuring, Checking, Precision (Incl. Medical instruments)	90	5.7	9.6	1.7	1.9
Products with decreased share after trade war					
Maize (corn)	1005	9.5	4.0	2.4	0.0
Electronic integrated circuits	8542	19.4	18.0	1.5	1.4

Source: Global Trade Atlas

At the same time, U.S. and China have begun to shift their trade pattern through increasing import from the ASEAN countries to substitute import from the other. The average share of U.S. imports from ASEAN increased from 6.5 percent during 2013 - 2017 to 9.2 percent in 2018 - 2022. The products experienced an increase in import share included (i) agricultural and food processed products from 8.3 percent to 12.1 percent due to an increase in Singapore's import share, (ii) textiles and wearing products from 19.3 percent to 24.0 percent due to an increase in Vietnam’s import share, (iii) telephone sets and smartphones from 12.1 percent to 21.2 percent due to a significant increase in Vietnam’s import share from 3.5 percent in 2013 - 2017 to 13.8 percent in 2018 - 2022, (iv) television receivers from 4.1 percent to 6.5 percent also due to an increase in Vietnam’s import share, (v) vehicles and parts from 0.5 percent to 1.0 percent due to an increase in Thailand’s import share from 0.3 percent in 2013 - 2017 to 0.5 percent in 2018 - 2022, and (vi) furniture and miscellaneous products from 8.2 percent to 15.9 percent due to an increase in Vietnam’s import share. However, there were products experiencing a decline of import share during the trade war period, for example, agricultural products, which decreased from 10.6 percent in 2013 - 2017 to 9.2 percent in 2018 - 2022.

In terms of China’s trade with ASEAN, China’s share of the imported content in ASEAN has substantially increase since the trade war. The average share of China's imports from ASEAN during 2018 - 2022 was 14.0 percent, increasing from 11.3 percent during 2013 - 2017. Significant products observing an increase share were (i) mineral oils and products from 9.5 percent to 11.2 percent due to an increase in Malaysia’s import share, (ii) metal products from 5.0 percent to 15.1 percent, with the increase in Indonesia's import share, (iii) turbo-jet from 0.2 percent to 0.5 percent due to an increase in Thailand’s import share from 0.0 percent to 0.2 percent, (iv) machines for semiconductors from 8.9 percent to 11.7 percent due to an increase in Singapore’s import share rising from 7.6 percent to 9.5 percent, and (v) motor cars from 0.4 percent to 1.7 percent with an increase in Thailand’s import share growing from 0.4 percent to 1.6 percent. Nonetheless, some products experienced decreasing import share, such as (i) maize (corn) from 9.5 percent in 2013 - 2017 to 4.0 percent in 2018 - 2022, and (ii) electronic integrated circuits from 19.4 percent in 2013 - 2017 to 18.0 percent in 2018 - 2022.

In brief, the challenging period of technological and trade competition dynamics between the U.S. and China has not only led to the global supply decoupling between the two, but also influence the international trade and investment pattern, particularly for ASEAN economies including Thailand. Therefore, monitoring of changes is essentially required to mitigate any impacts and seek for opportunities for Thailand at the same time. Though Thailand benefits from the situation, but the share of Thailand import is relatively lower than some of other ASEAN neighboring countries for particular products, such as electronic products. To grasp the fullest benefit, enhancing the production innovation is needed in order to position in the global supply chain alongside with developing preferences promoting investments in new potential industries, as well as, increasing labor capacity to match the demand.

Economic Projection for 2023[1/]

	Actual Data			Projection for 2023	
	2020	2021	2022	May 15th, 2023	Aug 21st, 2023
GDP (at current prices: Bil. Baht)	15,661.1	16,166.6	17,370.2	18,395.1	18,169.3
GDP per capita (Baht per year)	225,311.4	231,986.1	248,677.2	262,633.3	259,409.3
GDP (at current prices: Bil. USD)	500.5	505.5	495.3	552.4	534.4
GDP per capita (USD per year)	7,200.7	7,254.1	7,090.9	7,886.9	7,629.7
GDP Growth (CVM, %)	-6.1	1.5	2.6	2.7 - 3.7	2.5 - 3.0
Investment (CVM, %)[2/]	-4.8	3.1	2.3	2.1	1.6
Private (CVM, %)	-8.1	3.0	5.1	1.9	1.5
Public (CVM, %)	5.1	3.4	-4.9	2.7	2.0
Private Consumption (CVM, %)	-0.8	0.6	6.3	3.7	5.0
Government Consumption (CVM, %)	1.4	3.7	0.2	-2.6	-3.1
Export volume of goods & services (%)	-19.7	11.1	6.8	6.9	5.0
Export value of goods (Bil. USD)	227.0	270.6	285.2	280.8	280.1
Growth rate (%)[3/]	-6.5	19.2	5.4	-1.6	-1.8
Growth rate (Volume, %)[3/]	-5.8	15.5	1.2	-1.1	-1.8
Import volume of goods & services (%)	-13.9	17.8	4.1	1.6	1.1
Import value of goods (Bil. USD)	186.6	238.2	271.6	269.4	268.5
Growth rate (%)[3/]	-13.6	27.7	14.0	-1.9	-1.1
Growth rate (Volume, %)[3/]	-10.5	17.9	1.2	-0.4	-0.6
Trade balance (Bil. USD)	40.4	32.4	13.5	11.4	11.6
Current account balance (Bil. USD)	20.9	-10.6	-14.7	7.9	6.6
Current account to GDP (%)	4.2	-2.1	-3.0	1.4	1.2
Inflation (%)					
CPI	-0.8	1.2	6.1	2.5 - 3.5	1.7 - 2.2
GDP Deflator	-1.3	1.7	4.7	2.2 - 3.2	1.5 - 2.0

Source: Office of the National Economic and Social Development Council, 21st August 2023

Note: [1/] Data were 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 is based on the Bank of Thailand's data, which follows the Balance of Payment system.

www.nesdc.go.th