

Economic and Financial Outlook

t**tt**b analytics

May 2023



Global Economy

- **Global economic steadily rebounded, led by tourism.** International tourists reached 80% of Pre-pandemic level in the first quarter of 2023.
- **Productions activities slightly improved but not solid yet.** This was in line with the slow boosts of merchandise exports of US and EU, while UK's trade remained in a steadily worsened conditions.
- **Global inflation steadily subsided with inserting pressure** from non-energy demand and OPEC cut.
- **G3 labor markets remained strong.** However, high interest rate and living costs greatly weighed on domestic demands. Together with soft global demands, G3 productions are expected to slowly gain stronger momentums in coming periods.
- **Chinese economy steadily recovered** after the nation stepped out of strict COVID19 measures. While domestic demands, as represented by retail sales, grew strongly, merchandise exports also registered an expansion.
- **Japanese economy steadily advanced in Q1 of 2023.,** supported by domestic demands with a weakness in merchandise exports.

Domestic Economy

- **In Mar23, the Thai economy slowed** compared to the previous month. **Private consumption remained stable after durable goods had a good expansion in the preceding period.** On the other hand, activities in the service sector continued to improve, following a good outturn in the number of Thai and foreign tourists.
- **Private investment indicators declined** due to the investment in machinery and equipment softened and a decline in registered commercial cars. Investment in construction also decreased.
- **The value of merchandise exports excluding gold declined from the previous month,** which was in line with weaker manufacturing production and private investment.
- **The number of foreign tourist arrivals increased from the previous month** mainly due to the recovery of Chinese tourists after China allowed group tours to travel to Thailand. Tourists from Europe (exc. Russia) and Malaysia continued to pick up.
- **Headline inflation in Apr23 eased to 16-month low** due to the further drop in food prices, as well as the core inflation, which also declined to below 2%.

Financial Market

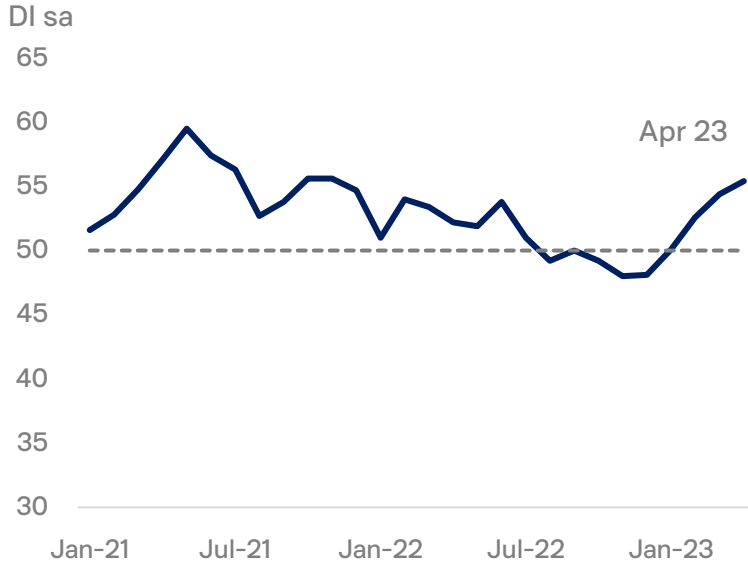
- **Major central banks around the world hiked policy rate to curb rising inflation but with slower pace.** Market participants have pointed to possibilities of the Federal Reserve holding the policy interest rate as inflation pressures are lowered.
- **Investors went into long term bond tenor, for both US and Thai bond, due to recession concerns.** Moreover, 10y-2y yield spread for US government bond dropped below zero, signaling higher possibility of coming US economy recession. Meanwhile, 10y-2y yield spread for Thai government bond was still in positive territory.
- **USDTHB largely appreciated in April, ending 34.13 level.** It could be around 34.00-34.50 in May. US Dollar would appreciate in short-term as investors expect that the debt ceiling deal would succeed in order to avoid the US debt defaults.

PART 1

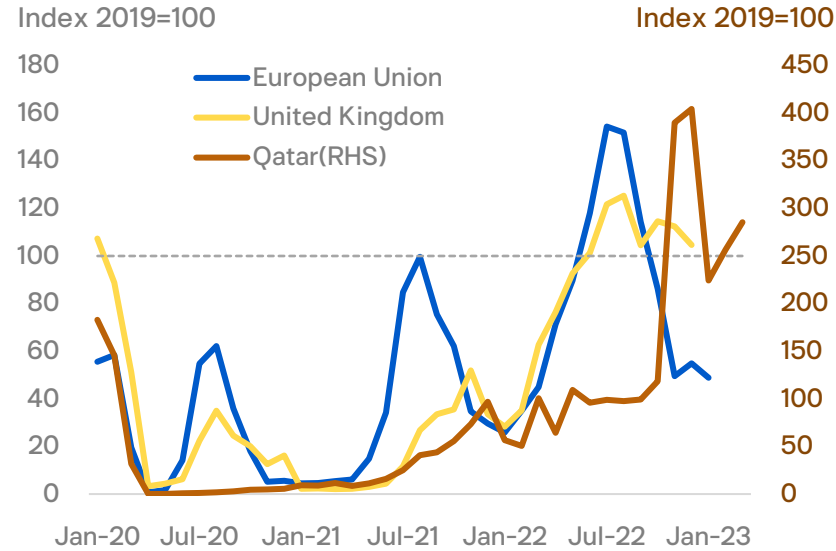
Global Economy



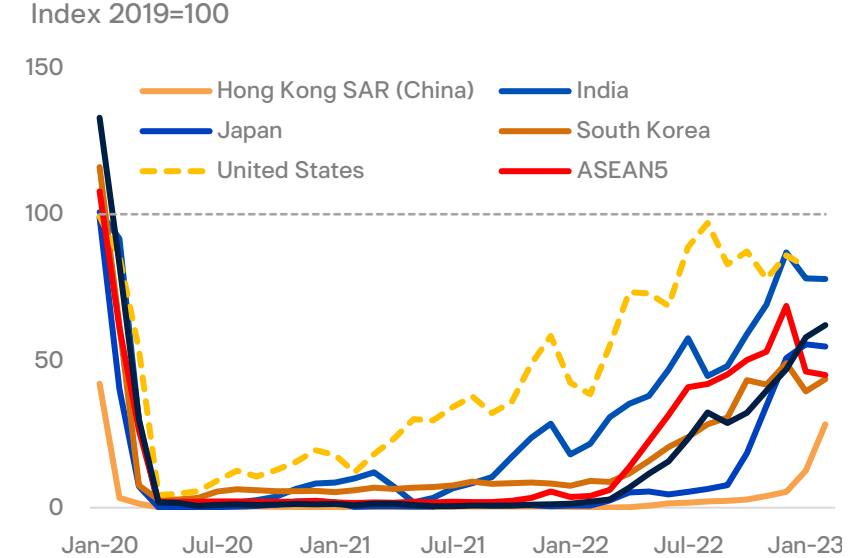
Global Services PMI



Tourist arrivals – EU, UK, Qatar

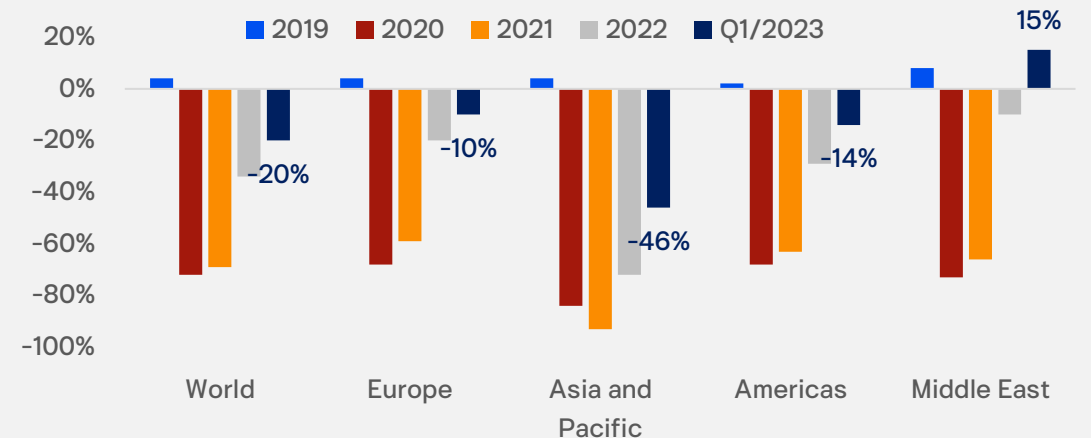


Tourist arrivals – US & Asia

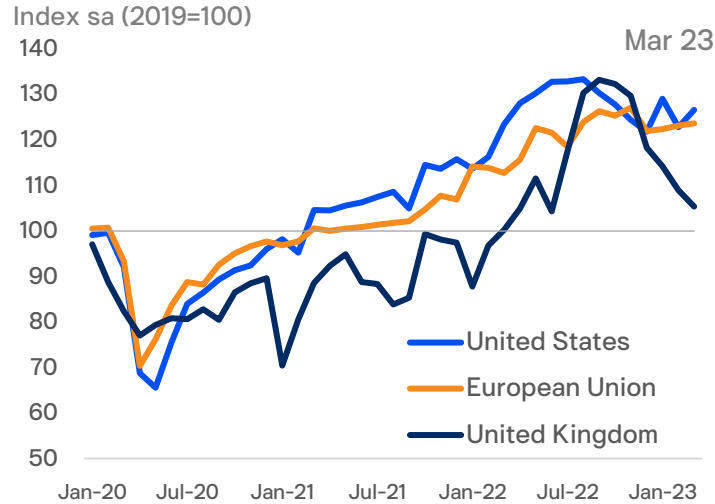


- **Global economy rebounded steadily mainly from tourism-led service.** International tourist arrivals reached 80% of pre-pandemic levels in the first quarter of 2023, boosted by strong results in Europe (reach 90% of pre-pandemic) and the Middle East (15% over pre-pandemic level).
- **Supportive factor for Northern Hemisphere in this summer,** backed by 1) robust pent-up demand, 2) the sustained recovery of air connectivity, and 3) the recent reopening of China and other major Asian markets and destinations.

Foreign tourist arrivals: Regional perspectives



G3 Exports of Goods

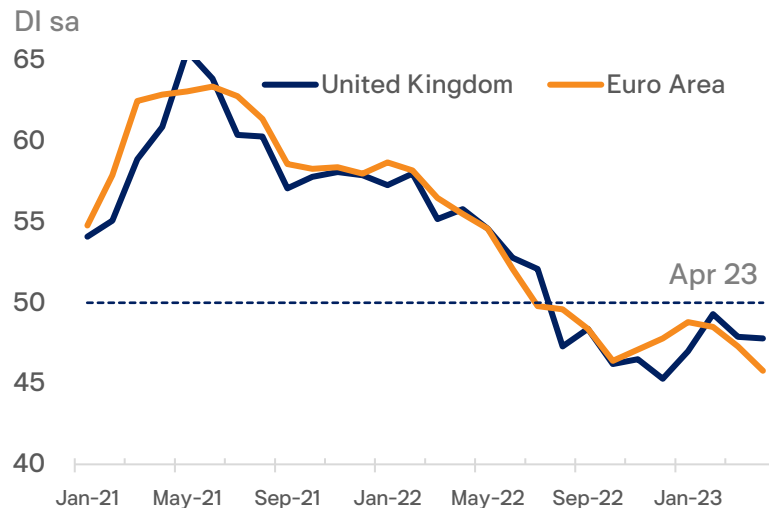


Top 100 World Fleet in Operation

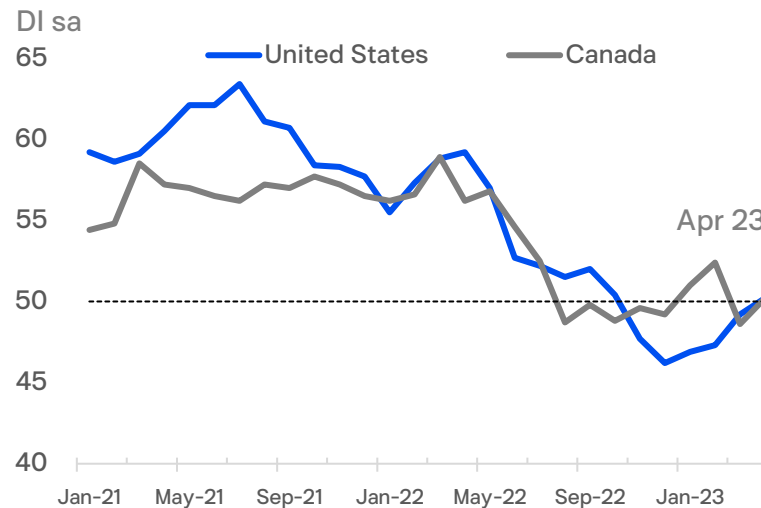


- PMI manufacturing in April 2023 pointed to a slow improvement in production activities, but not solid yet. Productions in EU and UK encountered ongoing challenges. Meantime, productions in key Asian nations were led by India with a small improvement of the rest.
- US and EU's exports of goods seemed to slowly get boosted from the end of year 2022. This was excepting for the UK, whose trade turned worsened continuously.

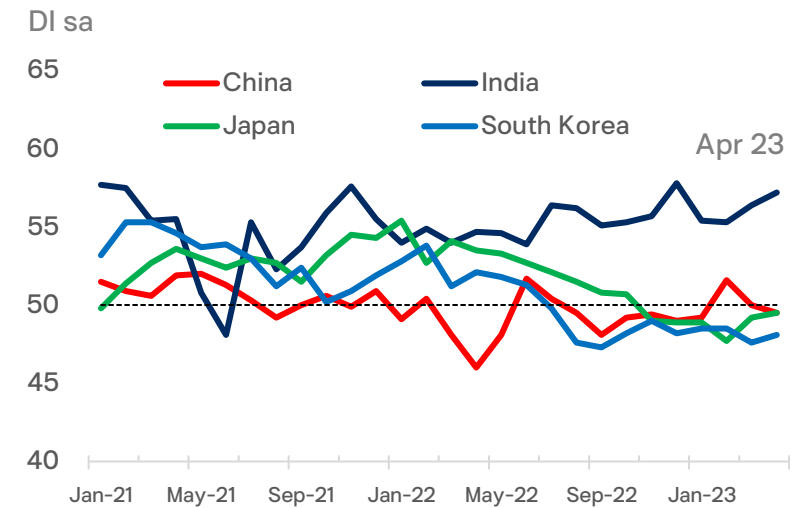
Manufacturing PMI – Europe & UK



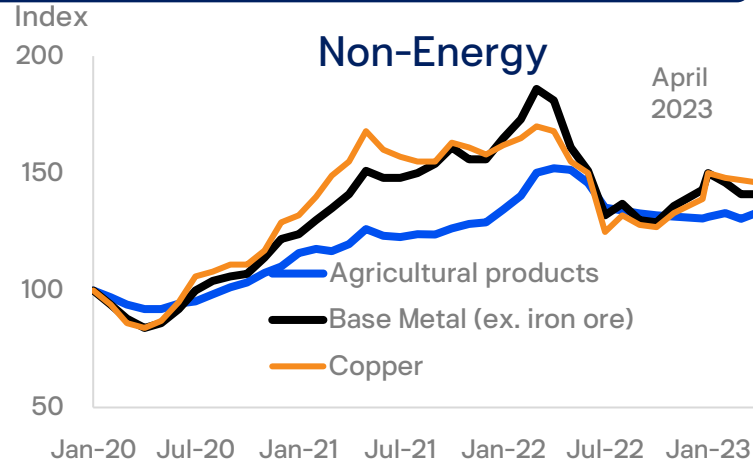
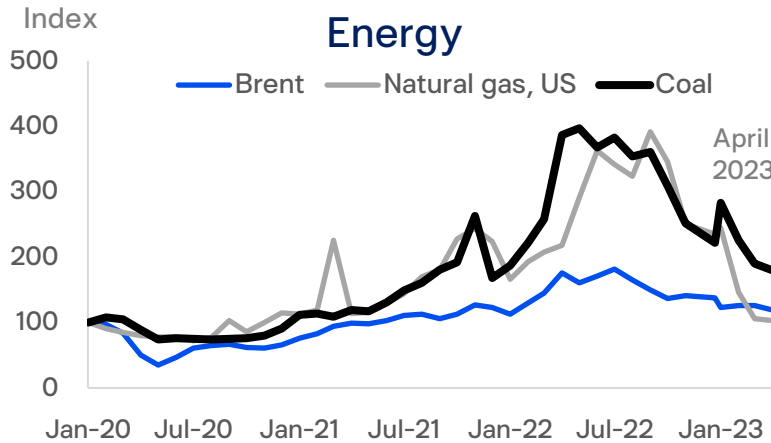
Manufacturing PMI - North America



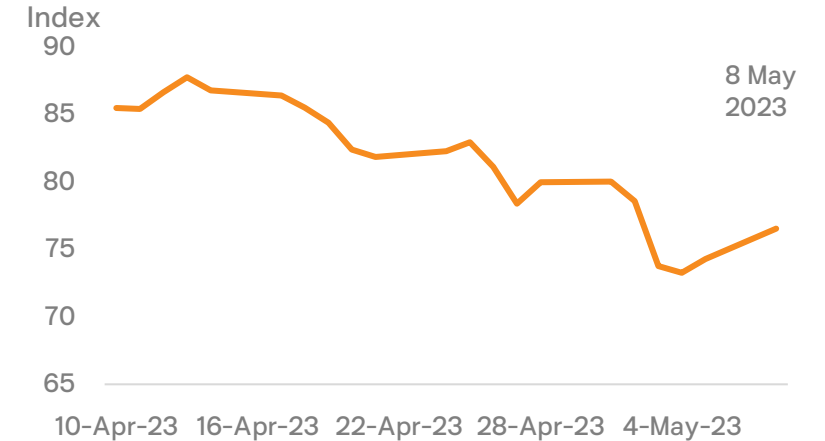
Manufacturing PMI - Asia



Commodity Price Index

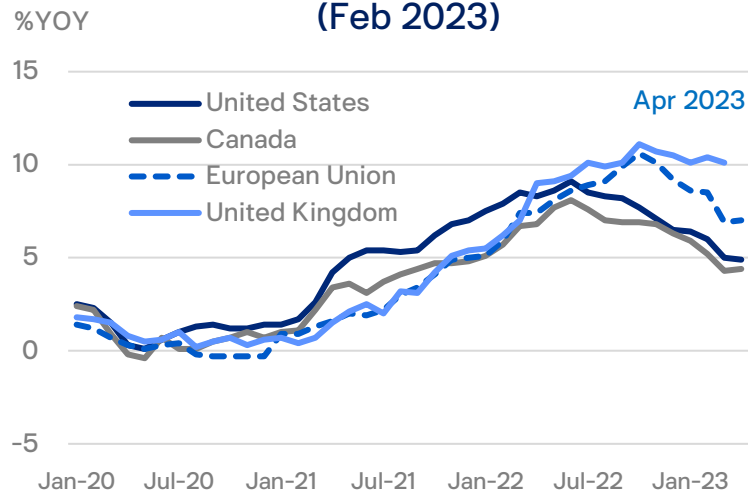


OPEC Daily Oil price

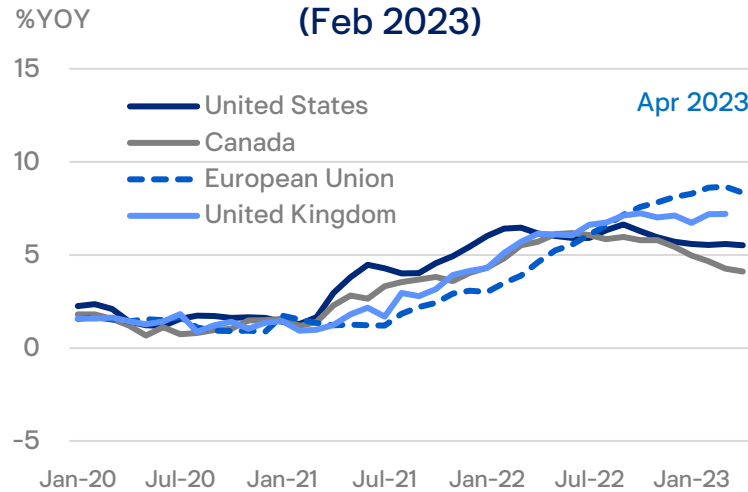


Global inflation

Headline inflation (Feb 2023)



Core inflation (Feb 2023)

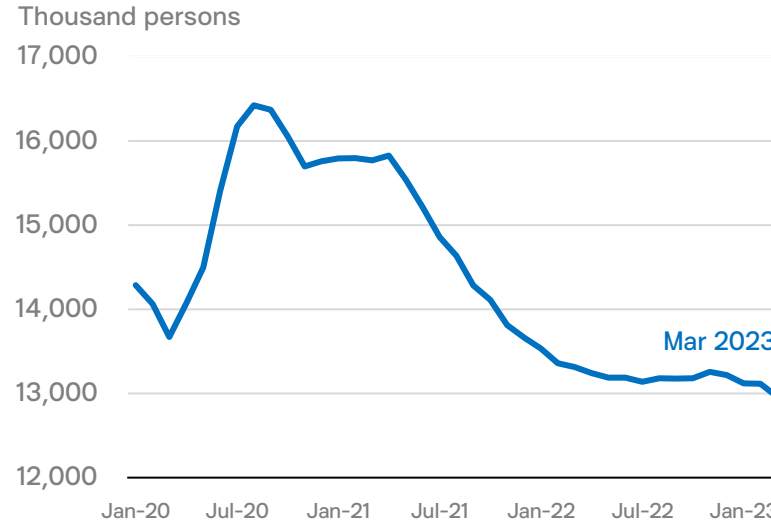


- Pressure on global inflation steadily subsided in April 2023 due to continuously declines in energy commodity prices. Meantime, supply chain pressure elevated.
- However, greater pressure would arise from elevated non-energy prices and OPEC petroleum cut.
- Therefore, global headline inflation would decline more slowly, with stubborn core inflation onwards.

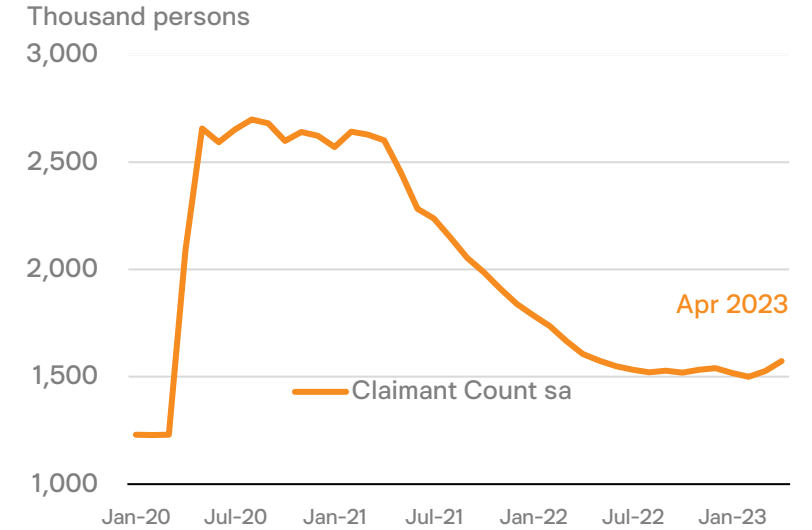
US Jobless Claims (sa)



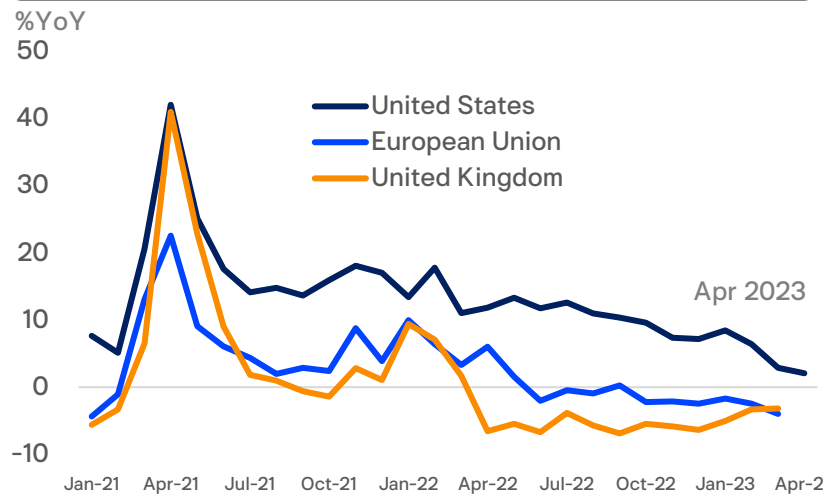
EU unemployed persons (sa)



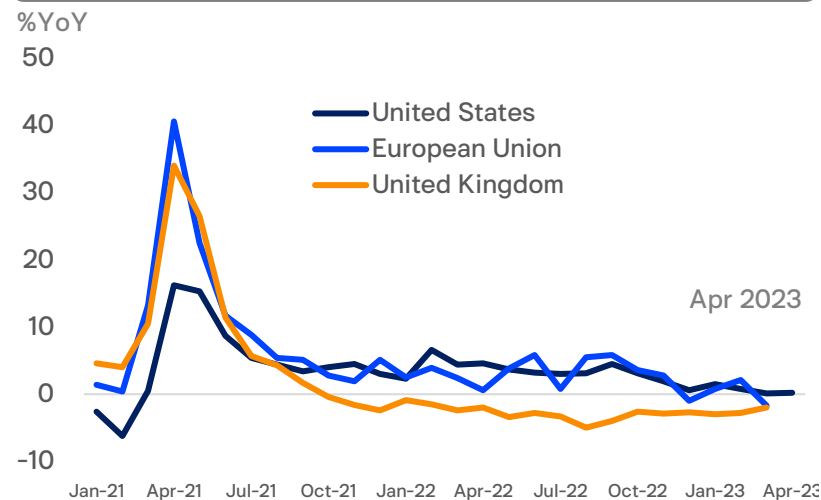
UK Claimant counts (sa)



Retail sales



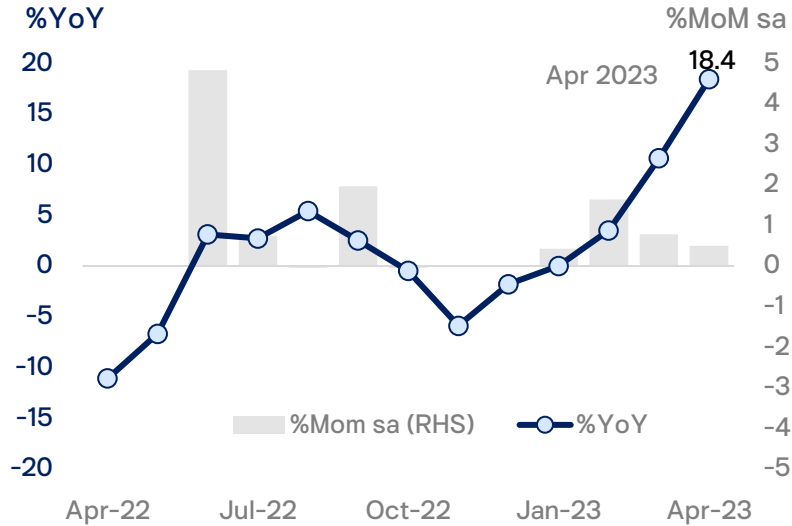
Industrial production



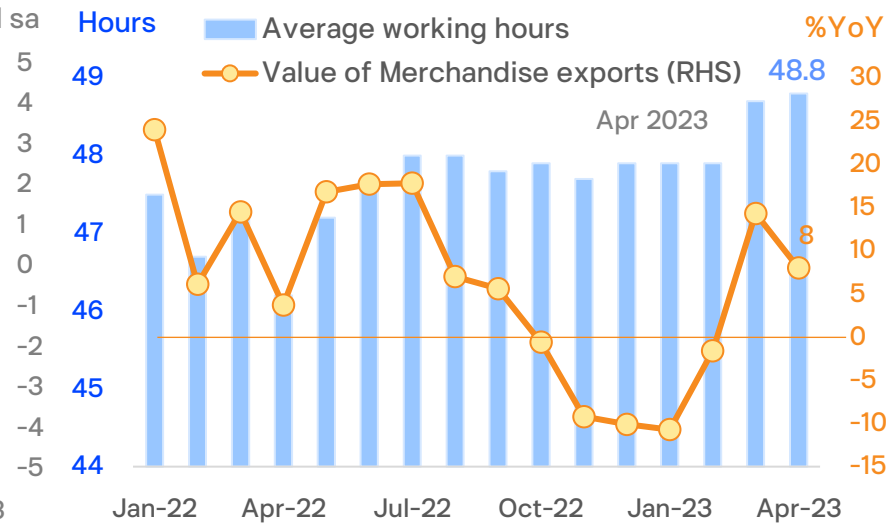
- **G3 Unemployment data expressed a softening momentum in labor markets, but overall conditions remained strong. However, G3 domestic demands were not solid yet since high prices and rising borrowing cost weighed on consumers' affordability.**
- **Together with soft global demands, G3 productions are also expected to slowly gain stronger momentums in coming periods.**

Chinese economy has steadily returned on track after the withdrawal of anti-COVID measures

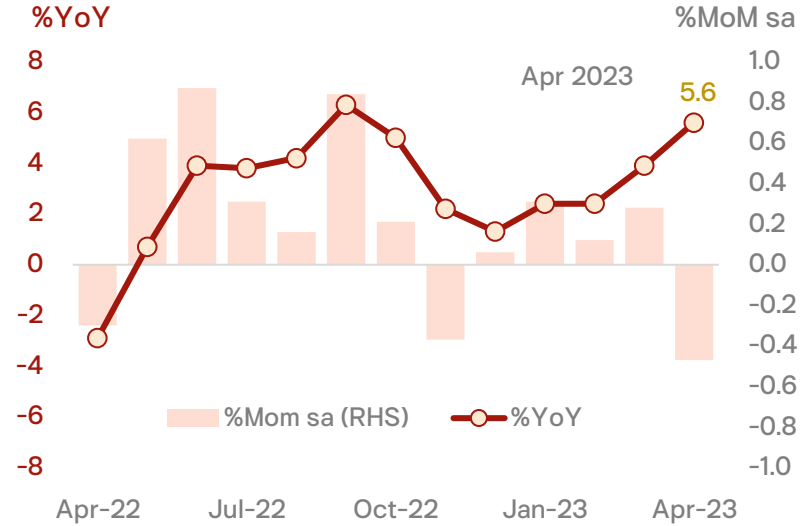
Retail sales



Exports and Working hours

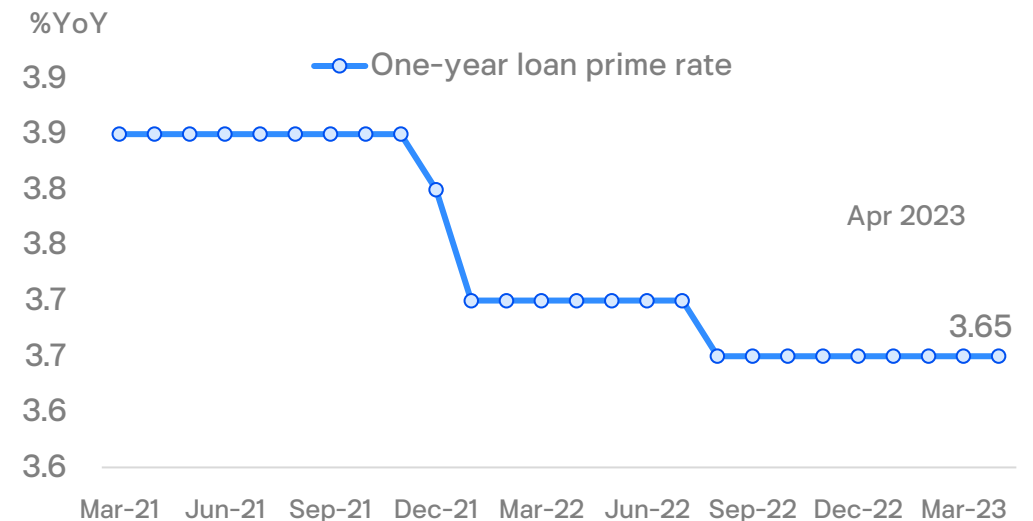


Industrial productions



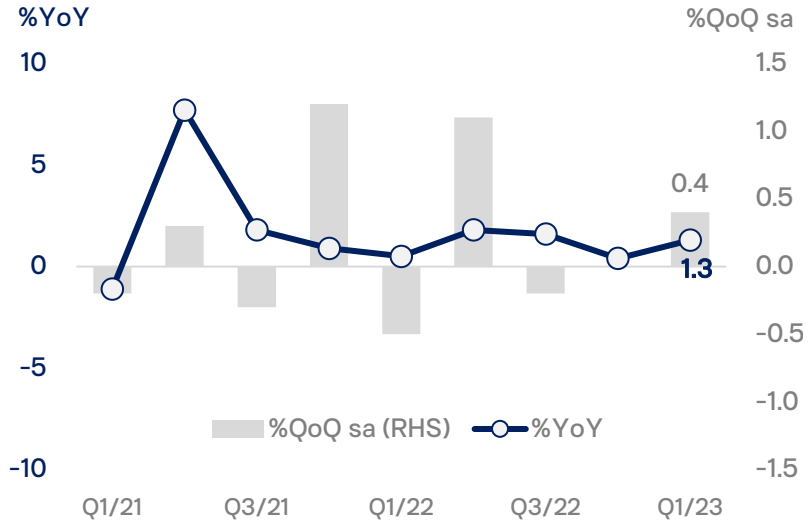
- **Chinese economy** steadily recovered. Retail sales grew strongly by 18.4% yoy. Exports expanded 8%yoy. It marks the second straight month of expansion amid a favorable comparison with last year when the country was in lockdown, and efforts to increase trade with developed countries. Industrial output rose 5.6% with the improving sign in the expansion in domestic demands and merchandise export values from China.
- Regarding monetary policy, PBoC left its key lending rates steady for the eighth straight month at April fixing.

Loan prime rate

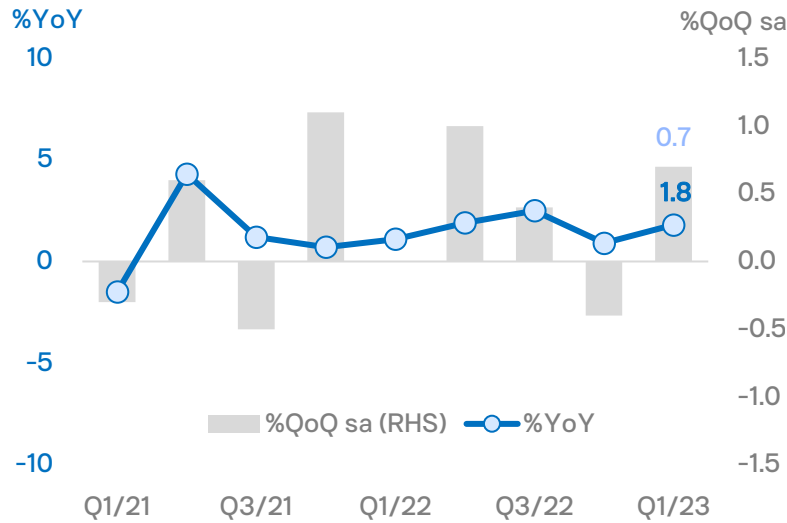


Japanese economy has been recovered, mainly driven by domestic demands and tourism

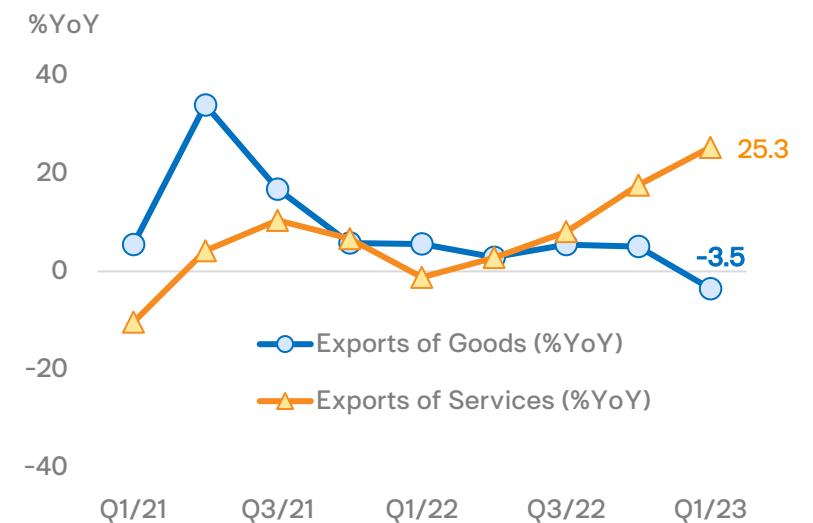
Gross domestic products



Domestic demands

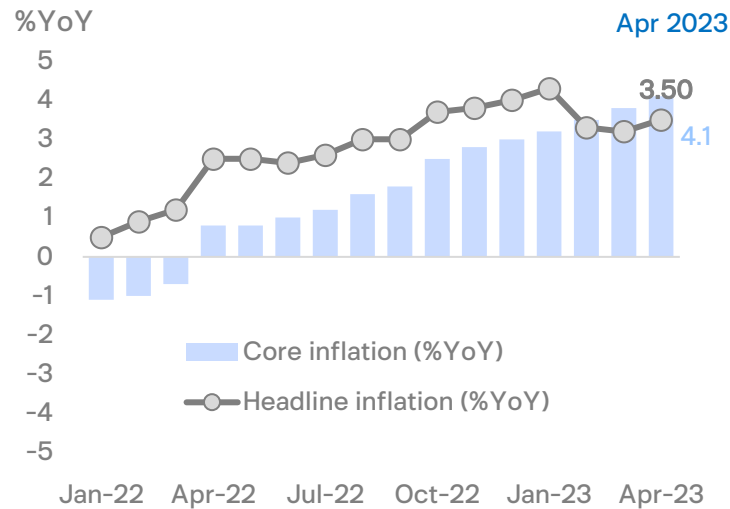


Exports of Goods & Services

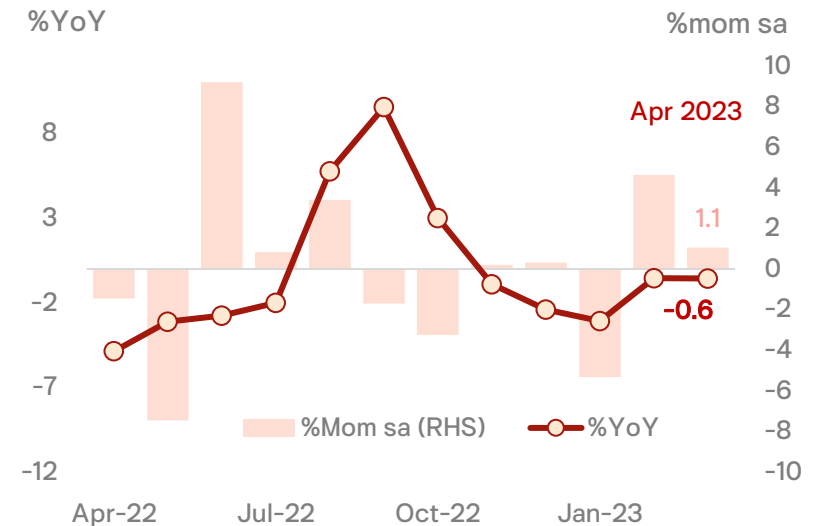


- Japanese economy steadily advanced 1.6% YoY in Q1/2023, beyond market expectation of a 0.7% growth. It was mainly supported by an acceleration in private consumption following the removal of all pandemic measures. Also, business investment unexpectedly grew robustly. While exports of Goods contributed negatively, exports of services expanded continuously.
- Inflation rose to 3.5% YoY in April 2023, but when excluding food and energy, core inflation increase steadily at 4.10% YoY.

Inflations



Industrial production



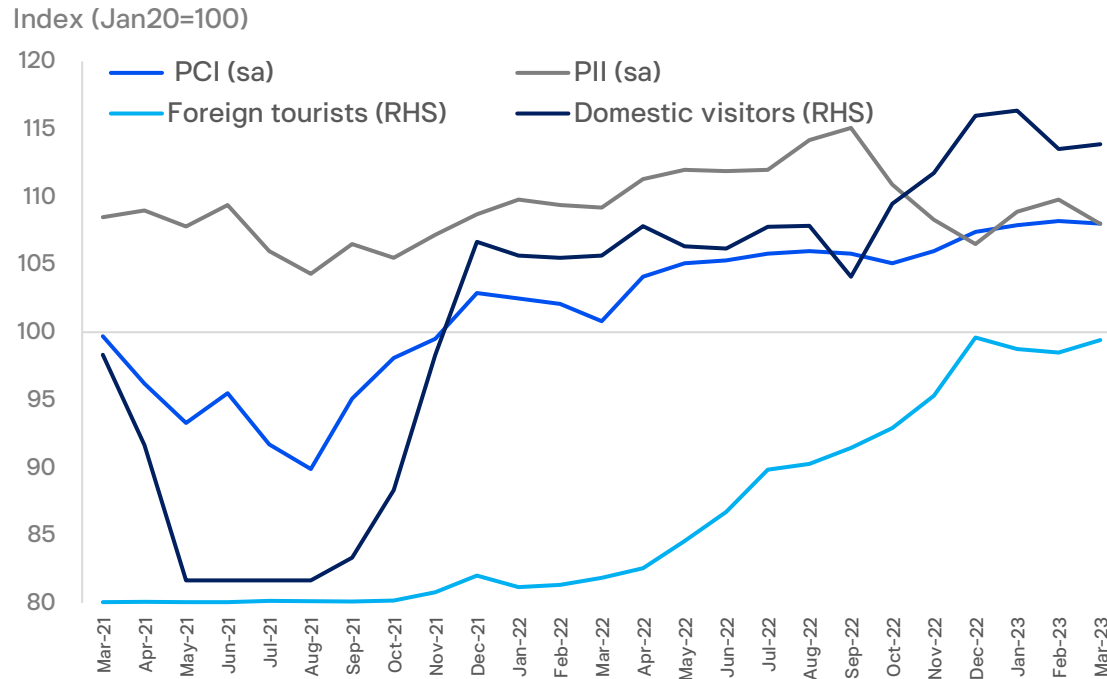
PART 2

Thai Economy

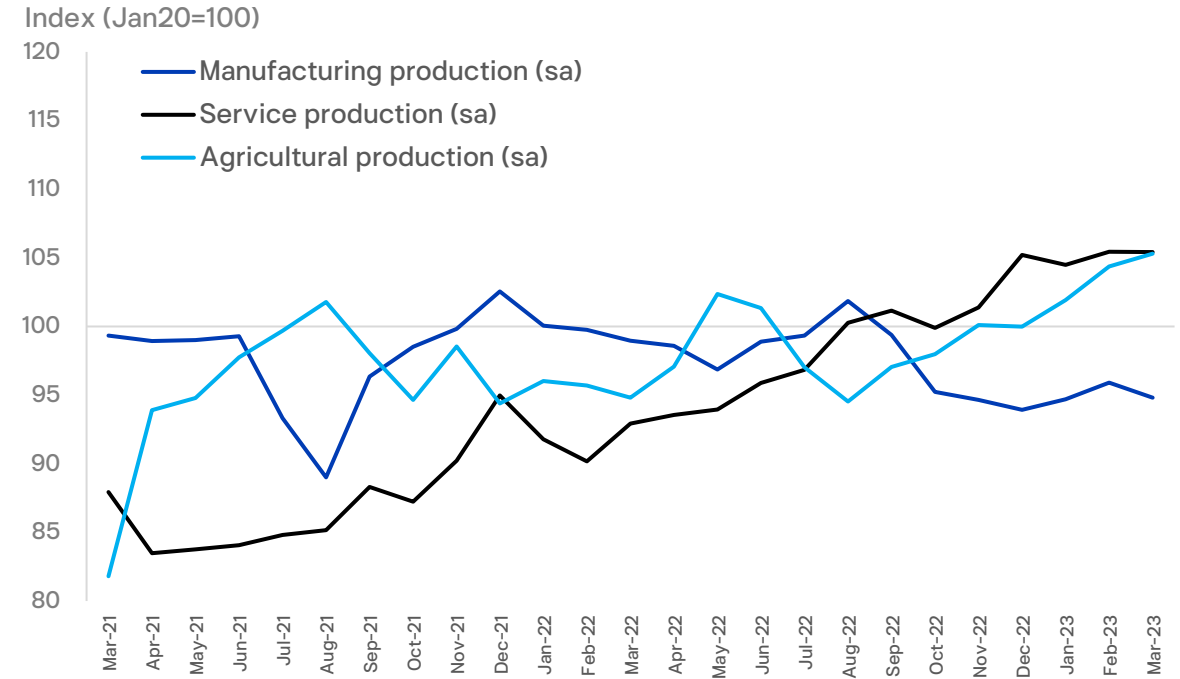


Thai economy slowed down compared to the previous month in line with weaker manufacturing production and private investment

Demand-side indicators



Supply-side indicators



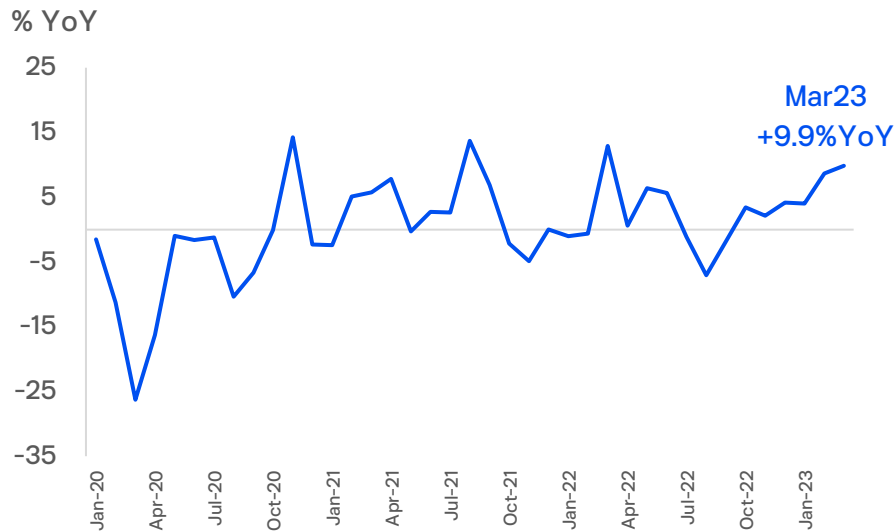
Leading Economic Index (sa) (Jan2020=100)

Leading Economic Index and Components (SA)	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23
Authorized Capital of Newly Registered Companies (Million Baht)	152.0	1,000.5	83.0	119.1	167.2	140.0	113.7	198.0	114.7	120.8	118.6	109.0	1,708.1
Construction Areas Permitted (1000 sq. m)	128.7	88.6	98.2	100.8	78.6	112.0	112.6	78.8	100.3	103.6	86.9	97.5	105.6
Export Volume index (exclude Gold)	115.2	115.3	119.0	117.1	114.6	110.3	114.2	107.6	106.7	107.3	107.7	110.9	110.5
Business Sentiment Index (3 months)	103.0	105.5	104.2	105.9	104.1	105.0	104.4	101.2	102.4	103.8	106.9	106.9	109.0
SET index	112.0	110.1	109.9	103.6	104.1	108.2	105.0	106.2	108.0	110.2	110.4	107.1	106.3
Oil Price Inverse Index (Dubai)	0.9	1.0	0.9	0.9	1.0	1.0	1.1	1.1	1.2	1.3	1.2	1.2	1.3

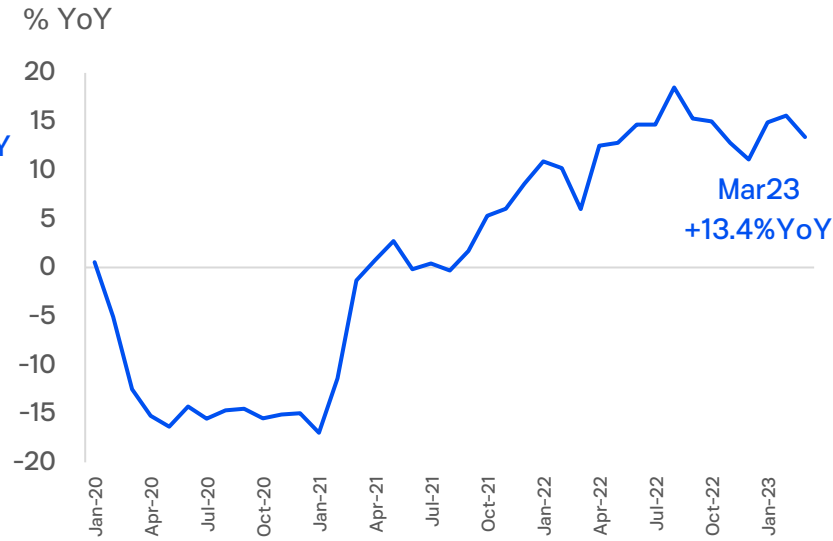
Services activities continued to grow but slower pace



Agriculture Production Index



Services Production Index

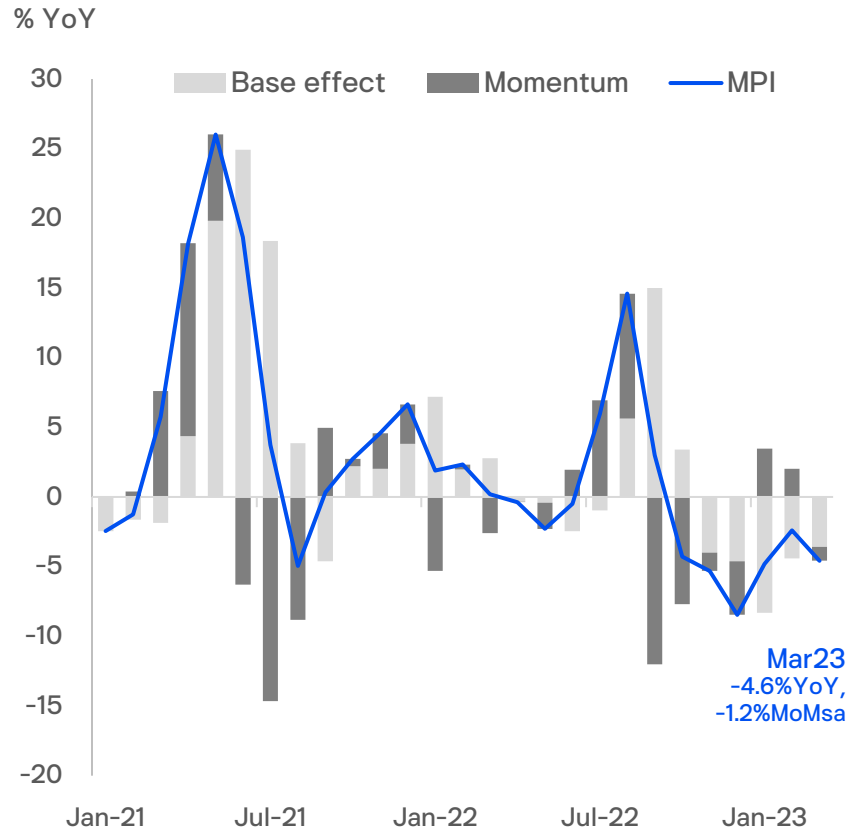


- As of Mar23, Agricultural Production Index was expanded at 9.9%YoY, compared to 8.7%YoY in preceding month. This was mainly due to the higher production of sugarcane, rice and fruits. In Service Production Index (SPI) showed up by 13.4%YoY in line with the business service related to tourism. However, service production regarding to commerce and logistic activities dropped remarkably.

Service Production Index (Base Jan 2020=100)

	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23
Wholesale and retail trade; repair of motor vehicles and motorcycles	103.5	102.0	103.7	105.1	106.2	108.4	109.1	109.2	109.8	109.8	109.2	109.7	109.0
Transportation and storage	74.3	72.3	77.3	80.9	81.8	82.5	80.8	80.8	81.9	86.4	83.7	81.1	84.3
Accommodation and food service activities	29.1	32.7	35.4	39.5	47.4	48.3	50.9	55.2	62.3	75.2	73.8	70.5	76.1
Information and communication	115.2	101.9	109.0	117.6	107.7	122.1	128.2	121.0	120.0	131.9	145.8	110.5	132.0
Financial and insurance activities	113.3	106.7	108.3	108.3	106.8	110.8	110.3	105.9	108.4	112.3	116.9	117.9	117.4
Real estate activities	125.9	119.6	121.6	122.9	119.6	125.4	123.2	120.2	124.8	130.8	127.4	128.1	127.7
Professional, scientific and technical activities	126.2	120.5	118.7	123.2	118.2	127.3	126.5	131.6	131.2	140.0	131.9	119.9	140.7
Administrative and support service activities	88.2	77.9	83.3	85.3	79.8	90.0	89.3	93.7	93.5	98.4	94.0	96.3	107.5
Public administration and defence; compulsory social security	92.1	112.9	102.4	101.6	106.5	109.0	111.9	102.2	101.2	101.2	104.5	112.7	101.1
Service Production Index	93.9	94.5	94.9	96.8	97.7	101.3	102.3	100.7	102.2	106.1	106.5	105.3	106.4

Manufacturing Production Index (MPI)



MPI by sector (Base Jan 2020=100)

Contribution	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23
Food products (16.2%)	0.2	-0.4	-2.3	-0.5	6.0	14.6	3.0	-4.3	-5.3	-8.5	-4.8	-2.4	-4.6
Beverages (3.8%)	0.2	-0.4	-2.3	-0.5	6.0	14.6	3.0	-4.3	-5.3	-8.5	-4.8	-2.4	-4.6
Tobacco products (0.5%)	0.2	-0.4	-2.3	-0.5	6.0	14.6	3.0	-4.3	-5.3	-8.5	-4.8	-2.4	-4.6
Textiles (1.6%)	0.2	-0.4	-2.3	-0.5	6.0	14.6	3.0	-4.3	-5.3	-8.5	-4.8	-2.4	-4.6
Wearing apparel (1.9%)	0.2	-0.4	-2.3	-0.5	6.0	14.6	3.0	-4.3	-5.3	-8.5	-4.8	-2.4	-4.6
Leather products (0.9%)	0.2	-0.4	-2.3	-0.5	6.0	14.6	3.0	-4.3	-5.3	-8.5	-4.8	-2.4	-4.6
Paper products (2.9%)	0.2	-0.4	-2.3	-0.5	6.0	14.6	3.0	-4.3	-5.3	-8.5	-4.8	-2.4	-4.6
Coke and refined petroleum products (9.6%)	0.2	-0.4	-2.3	-0.5	6.0	14.6	3.0	-4.3	-5.3	-8.5	-4.8	-2.4	-4.6
Chemicals (8%)	0.2	-0.4	-2.3	-0.5	6.0	14.6	3.0	-4.3	-5.3	-8.5	-4.8	-2.4	-4.6
Pharmaceutical products (1.2%)	0.2	-0.4	-2.3	-0.5	6.0	14.6	3.0	-4.3	-5.3	-8.5	-4.8	-2.4	-4.6
Rubber and plastics products (8.9%)	0.2	-0.4	-2.3	-0.5	6.0	14.6	3.0	-4.3	-5.3	-8.5	-4.8	-2.4	-4.6
Other non-metallic mineral products (5.5%)	0.2	-0.4	-2.3	-0.5	6.0	14.6	3.0	-4.3	-5.3	-8.5	-4.8	-2.4	-4.6
Basic metals (3.6%)	0.2	-0.4	-2.3	-0.5	6.0	14.6	3.0	-4.3	-5.3	-8.5	-4.8	-2.4	-4.6
Fabricated metal products (1.9%)	0.2	-0.4	-2.3	-0.5	6.0	14.6	3.0	-4.3	-5.3	-8.5	-4.8	-2.4	-4.6
Computer and electronic products (8.9%)	0.2	-0.4	-2.3	-0.5	6.0	14.6	3.0	-4.3	-5.3	-8.5	-4.8	-2.4	-4.6
Electrical equipment (3%)	0.2	-0.4	-2.3	-0.5	6.0	14.6	3.0	-4.3	-5.3	-8.5	-4.8	-2.4	-4.6
Machinery and equipment (2.7%)	0.2	-0.4	-2.3	-0.5	6.0	14.6	3.0	-4.3	-5.3	-8.5	-4.8	-2.4	-4.6
Motor vehicles (13.9%)	0.2	-0.4	-2.3	-0.5	6.0	14.6	3.0	-4.3	-5.3	-8.5	-4.8	-2.4	-4.6
Other transport equipment (1.1%)	0.2	-0.4	-2.3	-0.5	6.0	14.6	3.0	-4.3	-5.3	-8.5	-4.8	-2.4	-4.6
Furniture (1.5%)	0.2	-0.4	-2.3	-0.5	6.0	14.6	3.0	-4.3	-5.3	-8.5	-4.8	-2.4	-4.6
Others (2.4%)	0.2	-0.4	-2.3	-0.5	6.0	14.6	3.0	-4.3	-5.3	-8.5	-4.8	-2.4	-4.6
MPI (%YoY)	0.2	-0.4	-2.3	-0.5	6.0	14.6	3.0	-4.3	-5.3	-8.5	-4.8	-2.4	-4.6

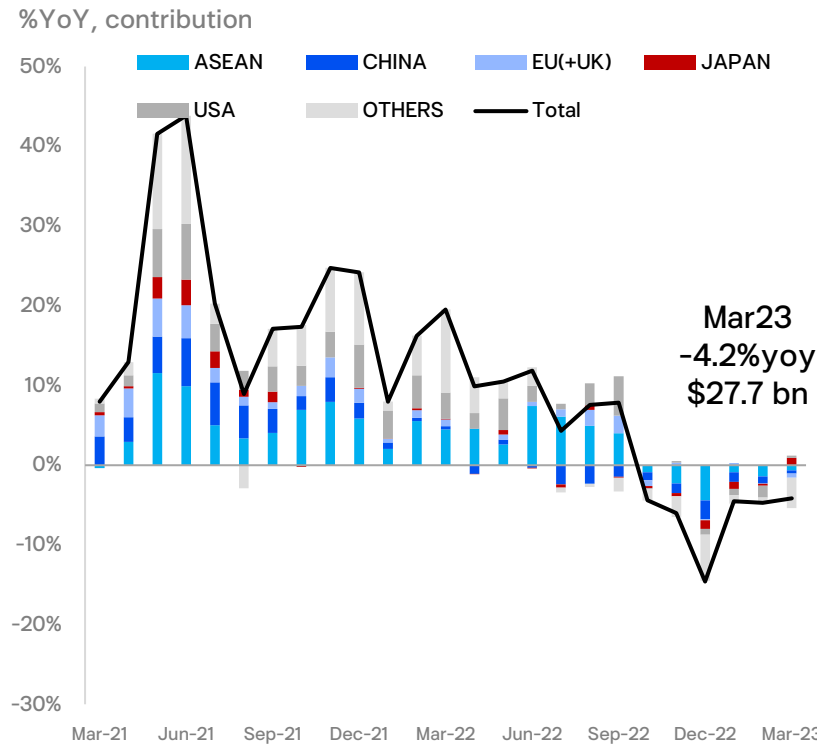
- As of Mar23, Manufacturing Production Index (MPI) was contracted at 4.6%YoY, which dropped further from the previous month in several categories, especially in food products and electronics. These were mainly due to the overproduction performing in preceding period. However, auto and HDD production improved in this month.

Thailand's export contracted by 4.2% better than market expectation, which was mainly due to the increase in export of computer and parts, auto and refinery oil

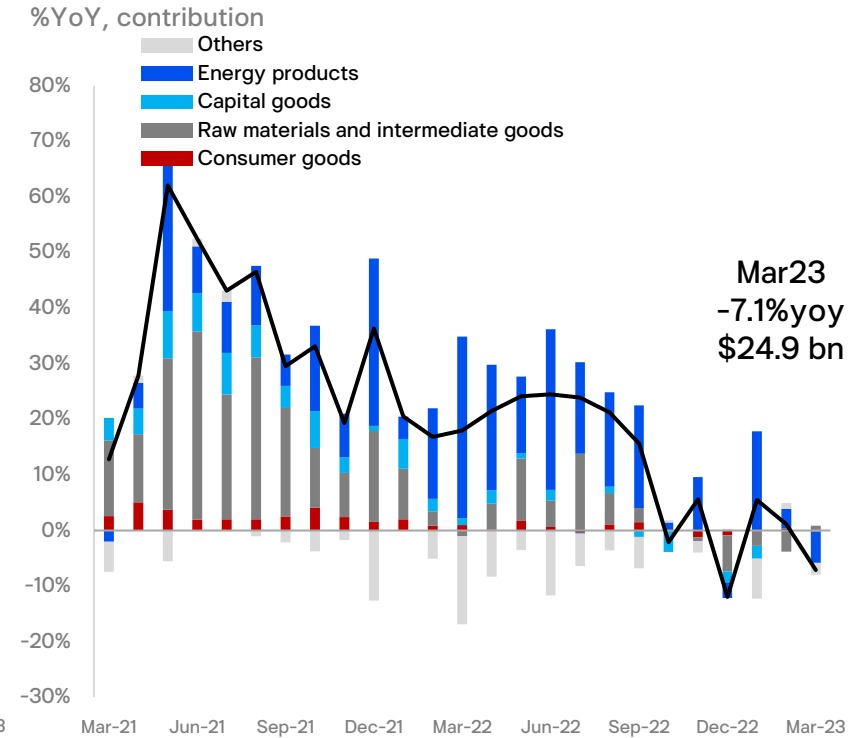


Exports value by product and destination*

	2Q22	3Q22	4Q22	Jan-23	Feb-23	Mar-23
Auto and parts	-6.0%	8.8%	-3.3%	9.2%	3.6%	1.4%
Computer and parts	-6.7%	-0.9%	-23.6%	-21.2%	-22.9%	-6.0%
HDD	-11.4%	-12.0%	-33.5%	-42.0%	-45.1%	-13.8%
Rubber	-0.4%	-2.0%	-5.9%	-8.2%	-3.6%	-2.4%
Integrated circuit	9.4%	11.4%	0.6%	-3.3%	4.1%	-1.3%
Refinery oil	63.7%	10.4%	-25.7%	16.2%	-3.7%	1.1%
Electronic machinery	14.0%	4.5%	-5.8%	-2.1%	-1.0%	-13.7%
Plastic pallet	4.7%	-13.9%	-26.7%	-30.0%	-29.2%	-20.7%
Chemical products	3.6%	-8.0%	-25.1%	-17.6%	-19.7%	-19.3%
Jewelry	20.4%	37.5%	-7.3%	-6.4%	-5.8%	-33.1%
Total (%yoy)	10.7%	6.6%	-8.5%	-4.5%	-4.7%	-4.2%



Imports value by groups*



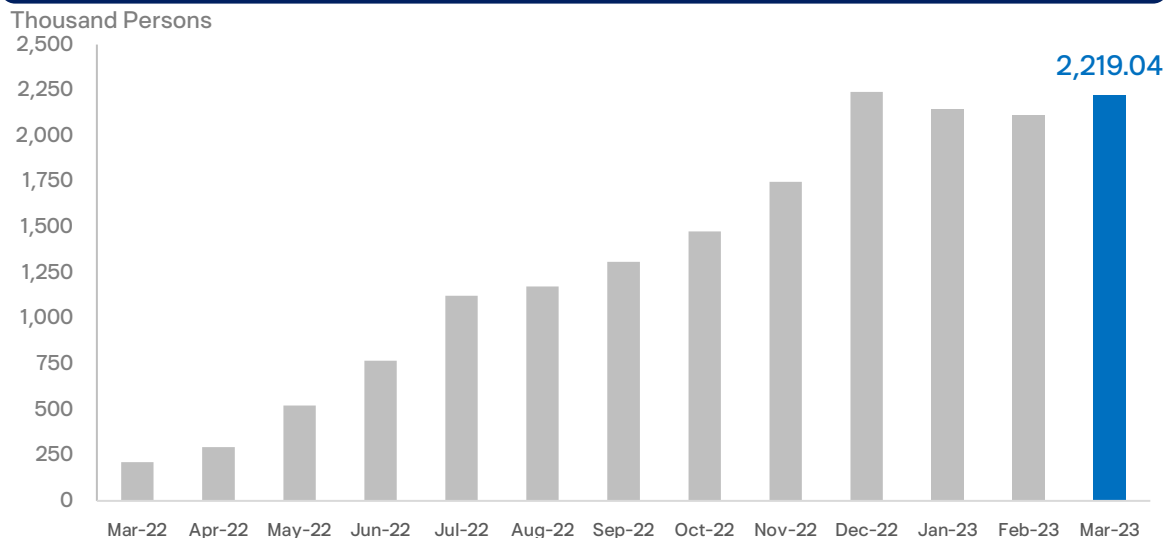
%yoy,value	2019	2020	2021	2022	2023YTD
Total export	-2.6% \$246 bn	-5.9% \$232 bn	17.1% \$272 bn	5.5% \$287 bn	-4.5% \$70.3 bn
Total import	-4.8% \$236 bn	-12.7% \$206 bn	29.8% \$267 bn	13.6% \$303 bn	-0.5% \$73.3 bn

- Export value in Mar23 contracted by 4.2%YoY, better than market expectation. Exports of major products improved, particularly in computers and parts, HDD and auto and parts and refinery oil. Moreover, export of arms, munitions used in official services sent to Japan increased significantly.
- On the other hand, imports dropped by 7.1%YoY, slower growth for second consecutive month resulting from the energy products declined remarkably.

Source: Ministry of Commerce, Bank of Thailand and ttb analytics
Remark: Custom basis

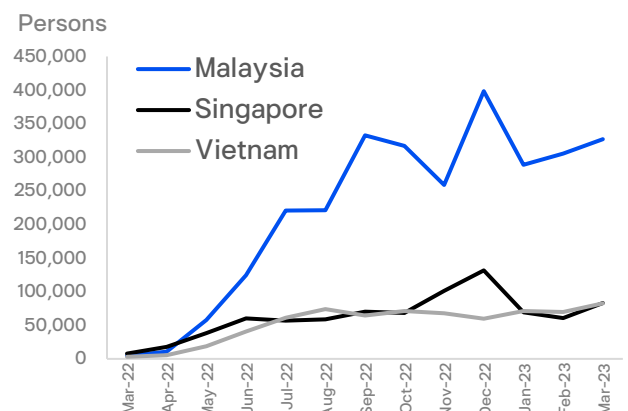
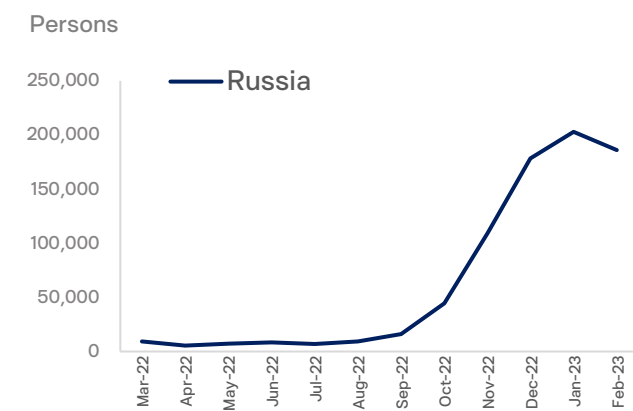
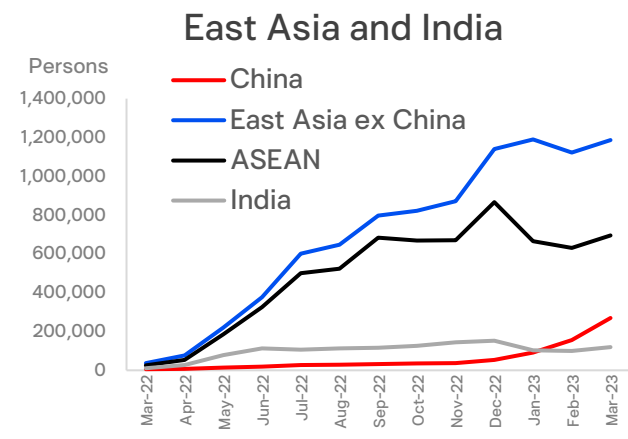
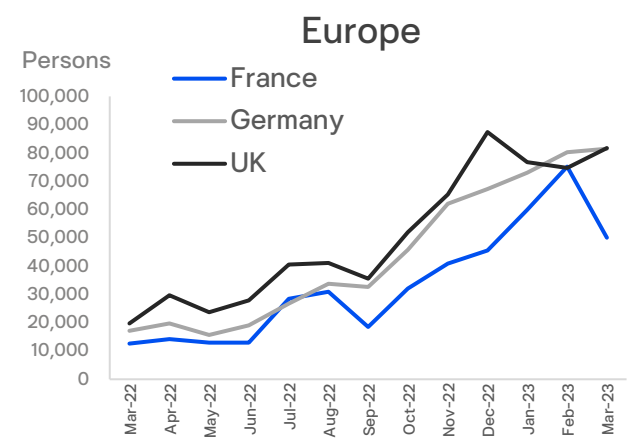
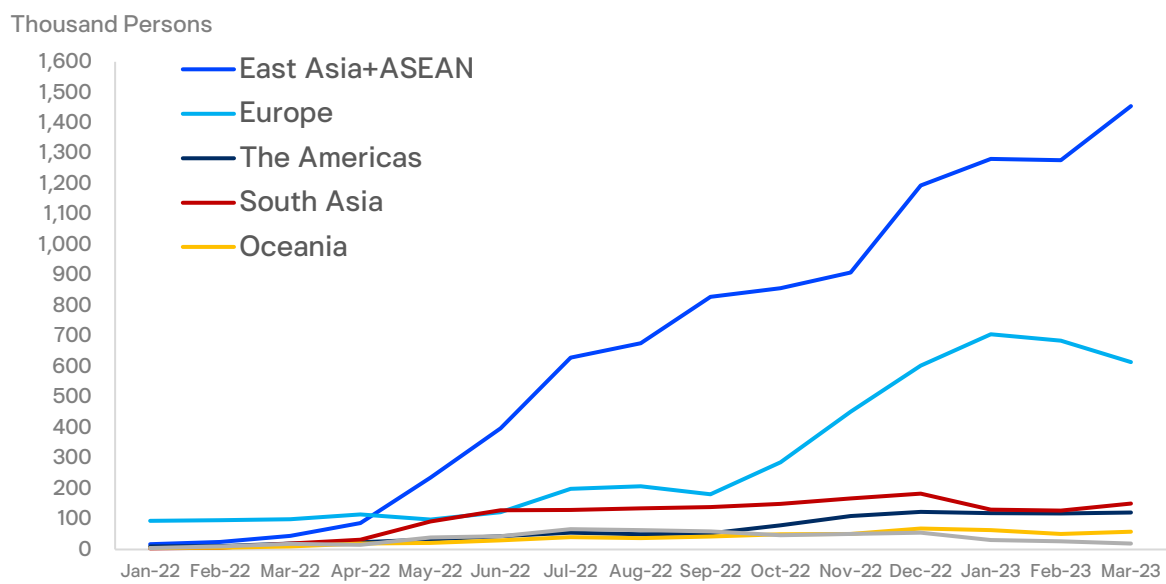
Foreign arrivals in March improved, particularly in ASEAN and China

Total Foreign Tourist Inbounds



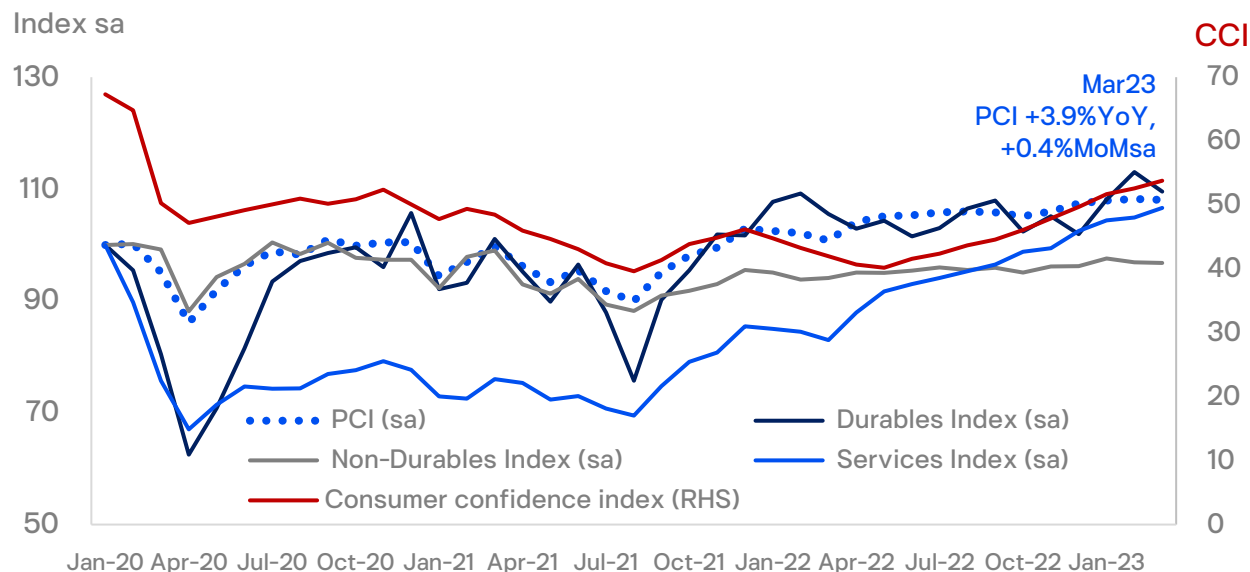
- As of Mar23, foreign tourists improved slightly to 2.2 million. This was due to the recovery of Chinese tourists after China allowed group tours to travel, and the Malaysia continued to pick up. However, middle east tourists dropped in this month as Ramadan Islamic calendar.

Foreign Tourist Inbounds by key regions

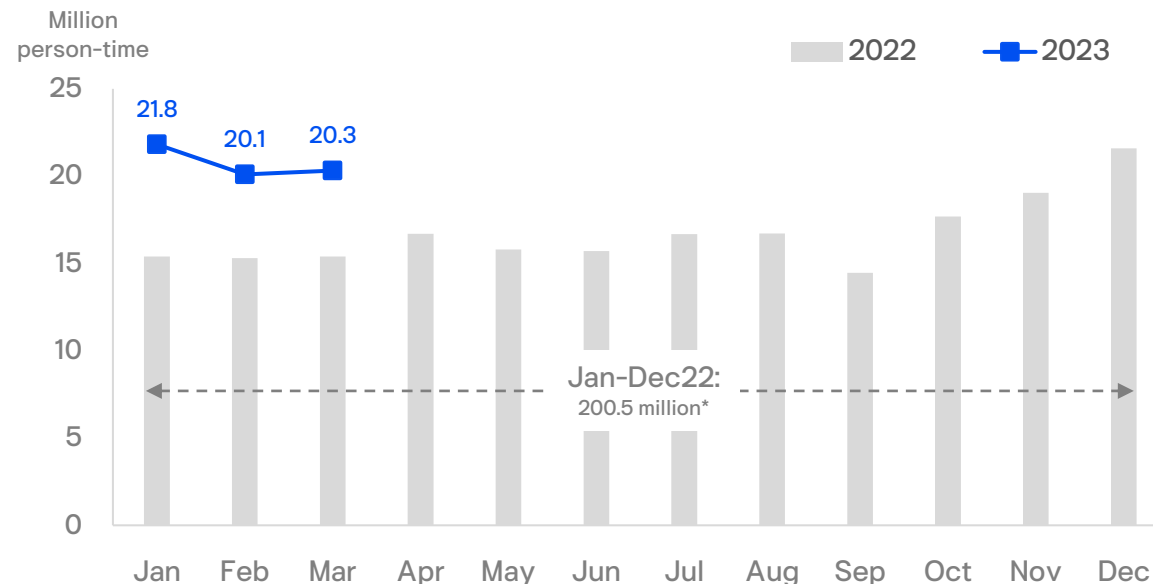


Private consumption remained stable in this month

Private Consumption Indicators (SA)

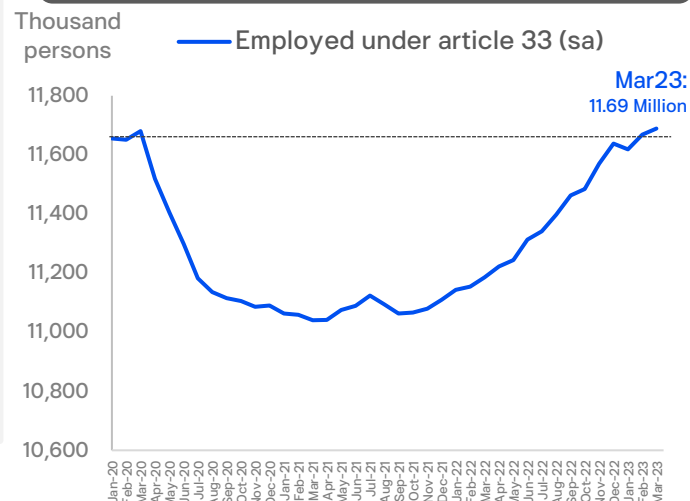


Thai domestic visitors

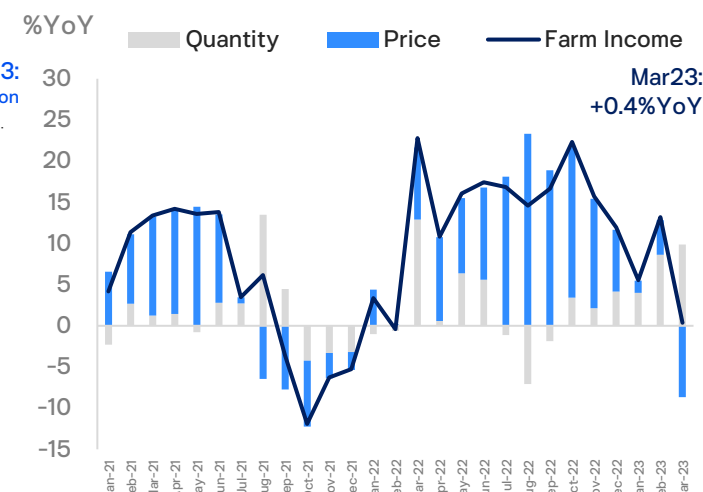


- Private consumption indicators was likely to remain from the previous month. Spending in service sectors continued to increase in line with increasing numbers of Thai and foreign tourists.
- However, consumption of durable goods declined due to lower sales of passenger cars after a good performance in the preceding period.
- Nonetheless, factors supporting household spending continued to improve both in terms of employment and consumer confidence.

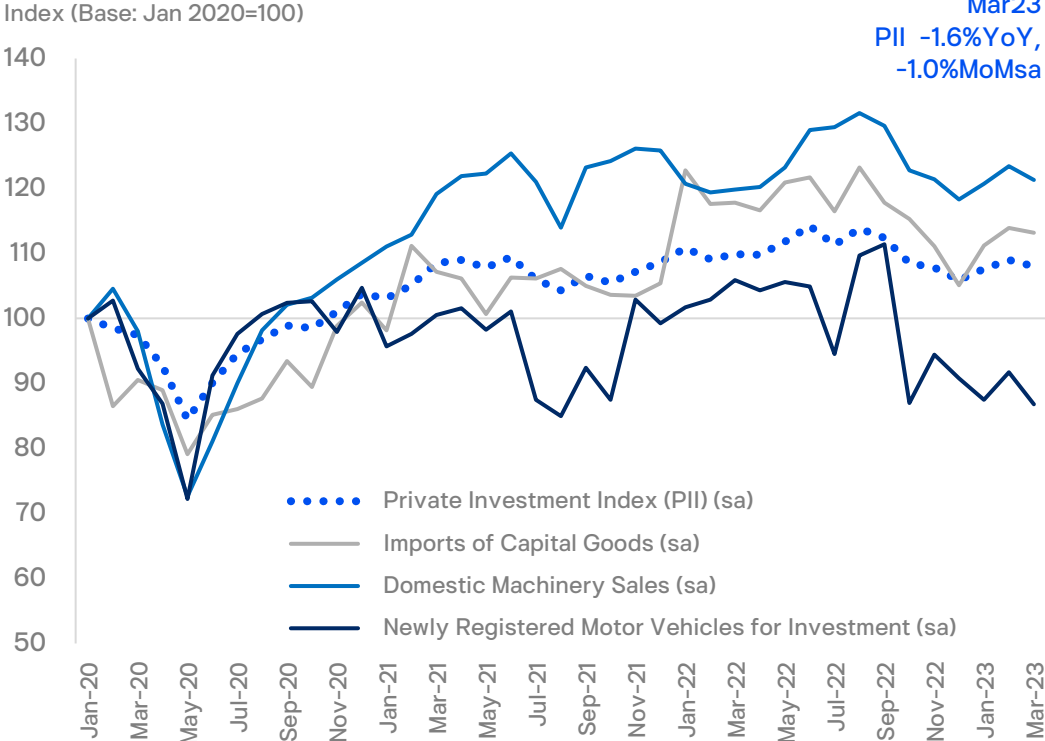
Employment M33



Farm Incomes

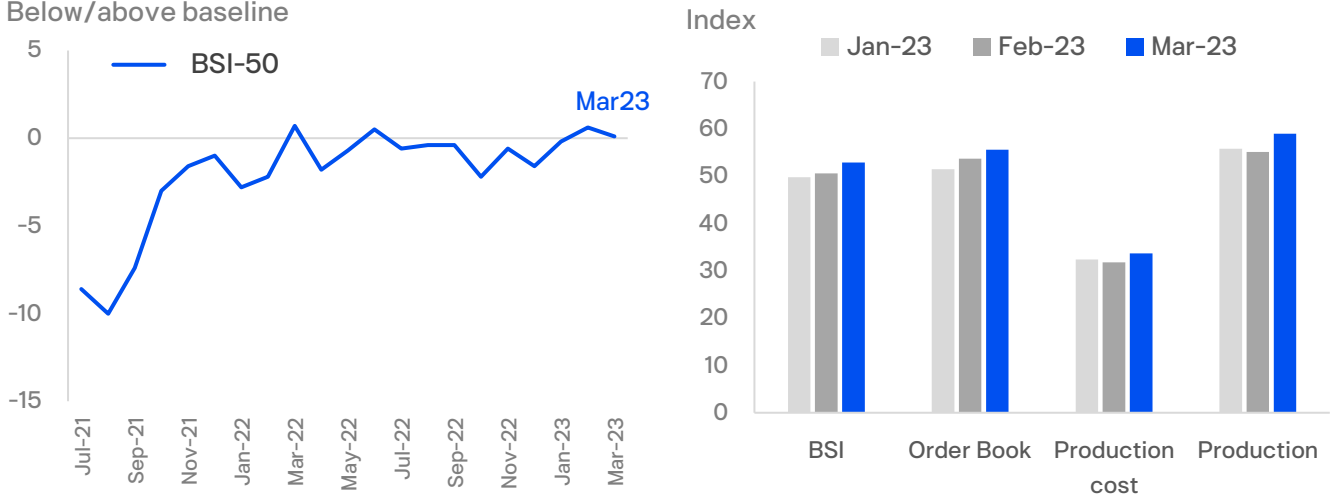


Private Investment Indicators (SA)

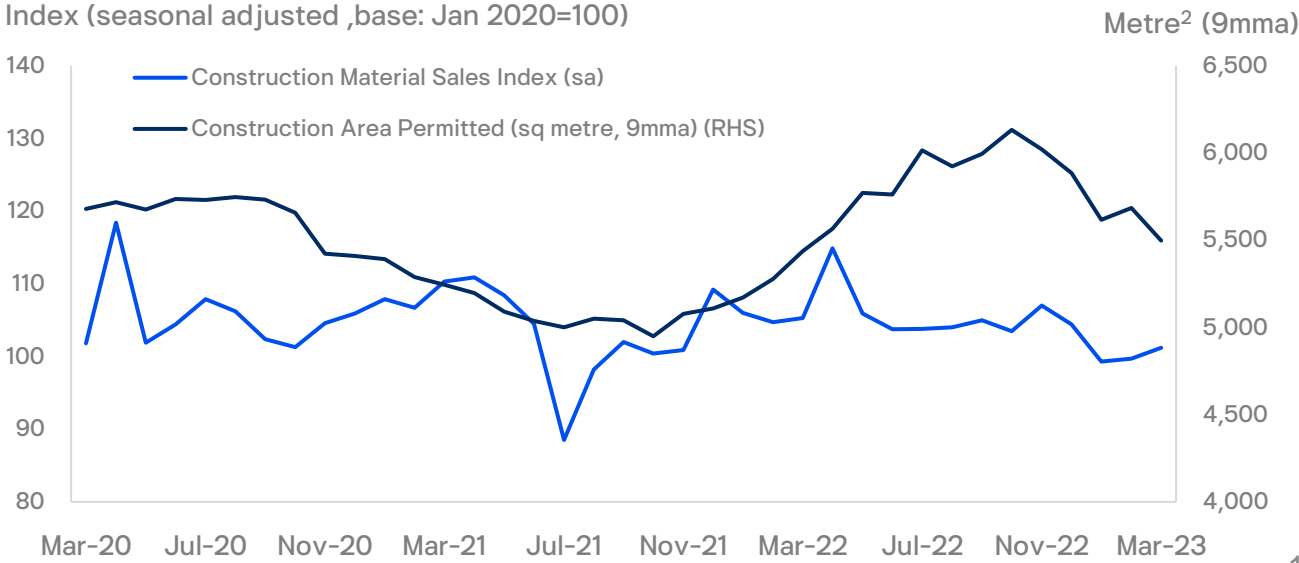


- Private investment indicators decreased from the previous month. Investment in machinery and equipment softened mainly due to lower sales of domestic machinery
- and a decline in registered commercial cars. Investment in construction also decreased following a lower
- outturn of permitted area for construction, despite higher sales of construction materials.

Business Sentiment Index

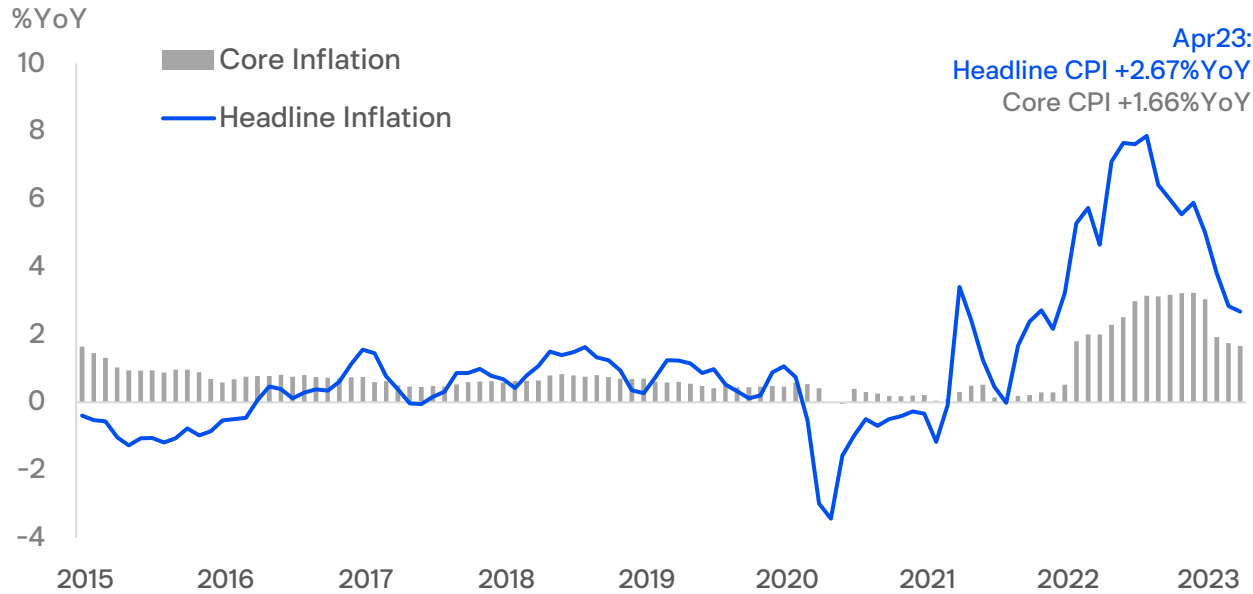


Construction sector (SA)

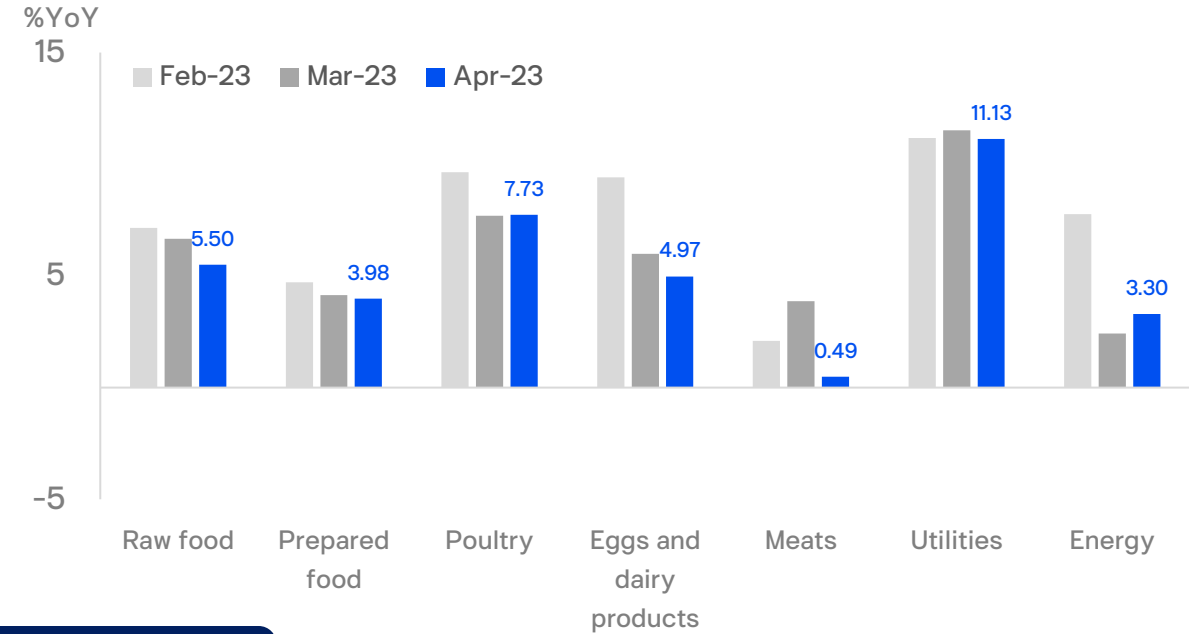


Headline inflation in April continued easing to 2.67%, below upper-bound range of 3% for second consecutive month

Headline vs core inflation



Price change in top categories



Historical Thai Inflation (%yoy)

%YoY	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
HCPI	2.17	5.19	-0.83	3.3	3.81	3.01	2.19	1.9	-0.9	0.19	0.67	1.07	0.71	-0.84	1.24	6.08	3.58
Food	4.08	11.56	4.54	5.43	7.94	4.89	3.41	3.94	1.14	1.6	0.01	0.41	2.32	1.23	-0.12	6.91	5.78
Housing	0.13	-3.19	-1.55	2.03	1.31	2.73	1.9	1.41	0.59	-0.99	0.17	1.03	0.42	-1.02	-1.69	4.81	3.09
Transport	2.72	6.38	-9.41	3.81	1.73	1.58	1.34	0.09	-6.52	-1.75	2.37	2.31	-1.14	-4.53	7.81	9.10	1.45
Core CPI	1.08	2.29	0.27	0.95	2.36	2.10	1.01	1.59	1.05	0.74	0.55	0.71	0.52	0.29	0.24	2.50	2.09

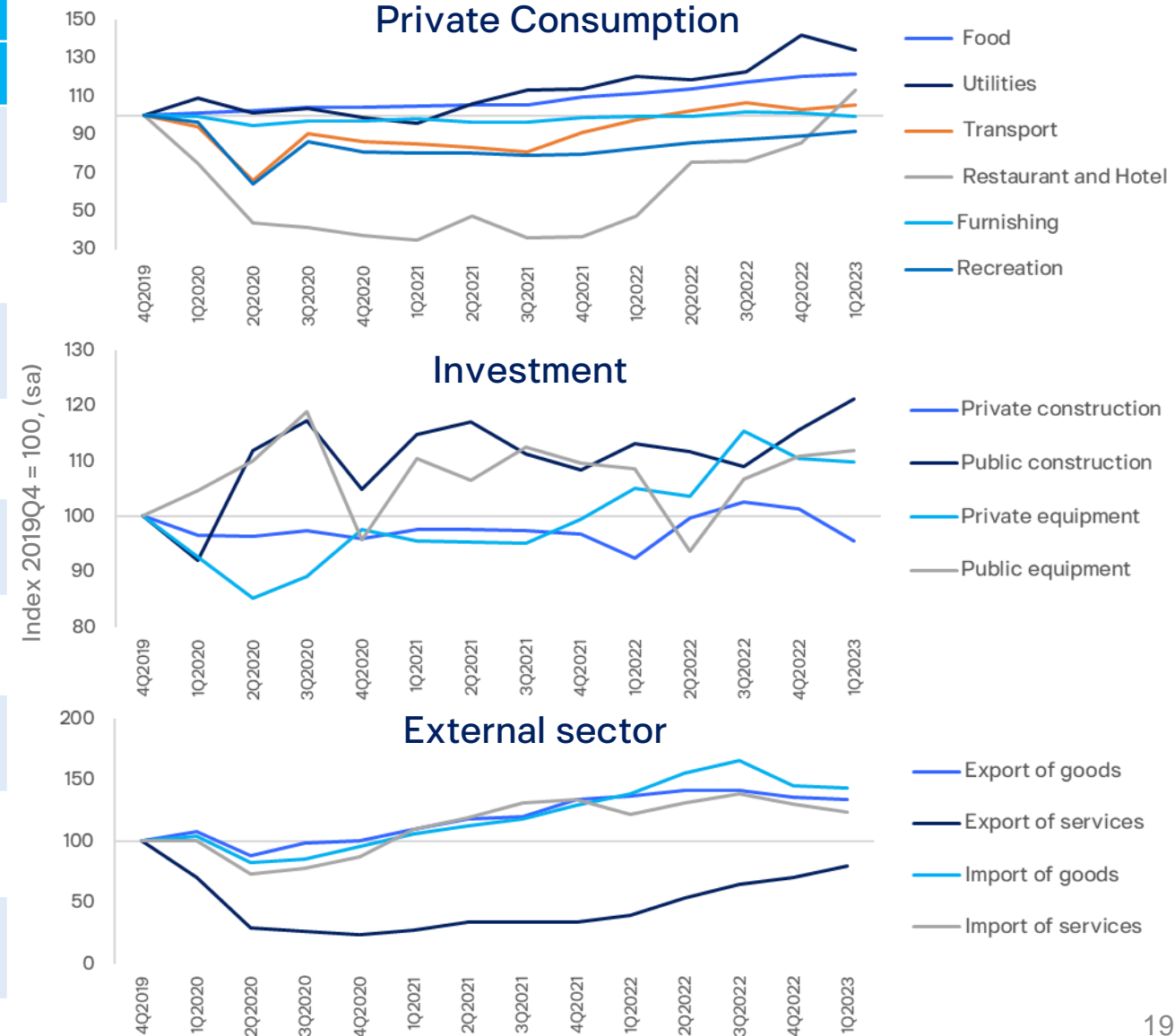
- The headline consumer price index (CPI) dropped to 2.67%YoY in Apr23, easing to 16-month low. This was due to the continued easing of food prices in many categories. The core inflation was also below the 2% territory to 1.66%YoY.
- The commerce ministry remained headline inflation forecast to 2.2% this year (mid range of forecast).

GDP Q1/23 expanded 2.7%yoy, continually improved from previous quarter

GDP growth composition (%yoy)

% compared to previous year	2021	2022	2022				2023
			Q1	Q2	Q3	Q4	Q1
GDP	1.5	2.7	2.3	2.6	4.6	1.4	2.7
Private consumption (59%)	0.6	6.3	3.5	7.1	9.1	5.6	5.4
Private investment (18%)	3.0	5.1	2.9	2.3	11.2	4.5	2.6
Government consumption (17%)	3.7	0.2	8.2	2.7	-1.5	-7.1	-6.2
Public investment (8%)	3.4	-4.9	-3.8	-8.8	-6.8	1.5	4.7
Export of goods (54%)	15.3	1.3	9.7	4.3	2.3	-10.5	-6.4
Import of goods (50%)	18.2	5.4	6.6	9.9	11.2	-5.9	-3.3
Export of Service (5%)	-19.9	65.8	35.5	47.7	79.2	94.9	87.8
Import of Service (9%)	16.0	-0.6	-3.3	-1.9	3.7	-0.9	8.9

Growth path development from pre-covid level



PART 3

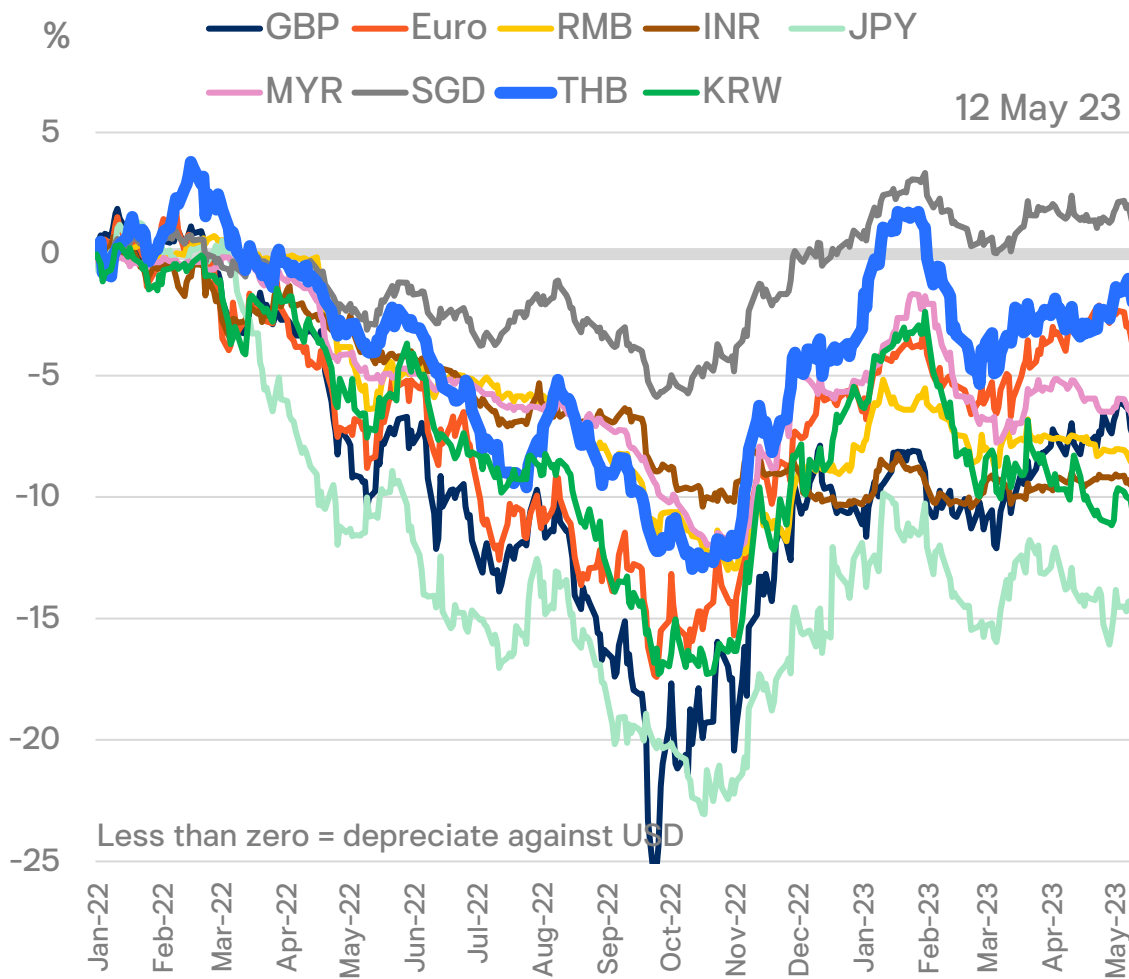
Financial Market



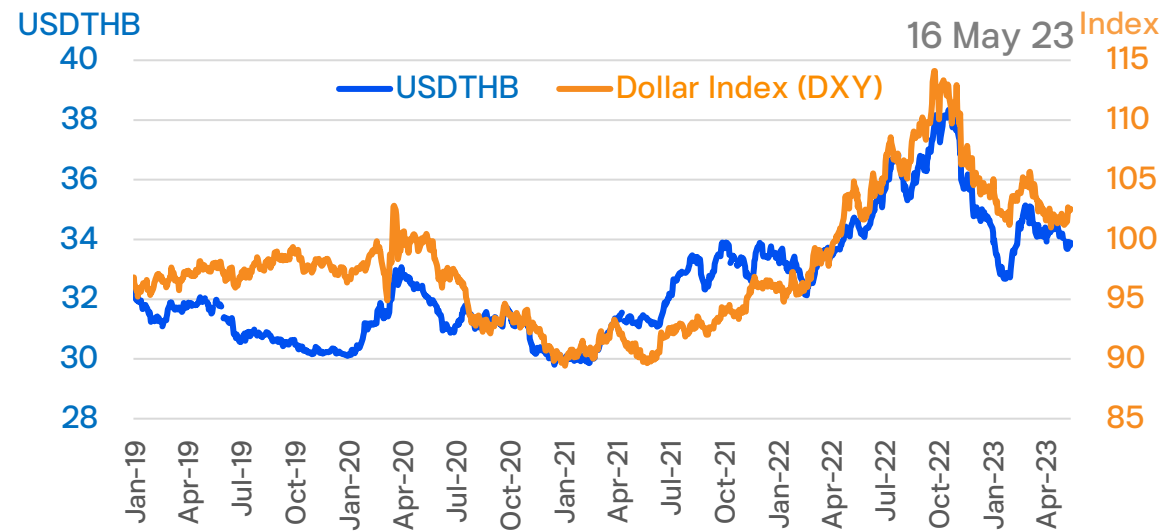
US dollar stepped lower as a result of lessening economic data



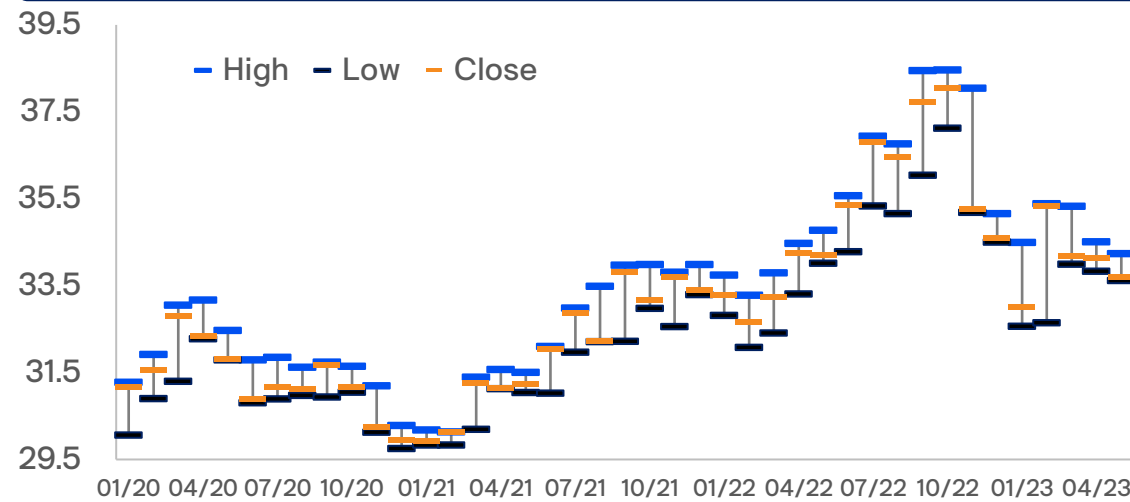
Major Asian currencies against USD



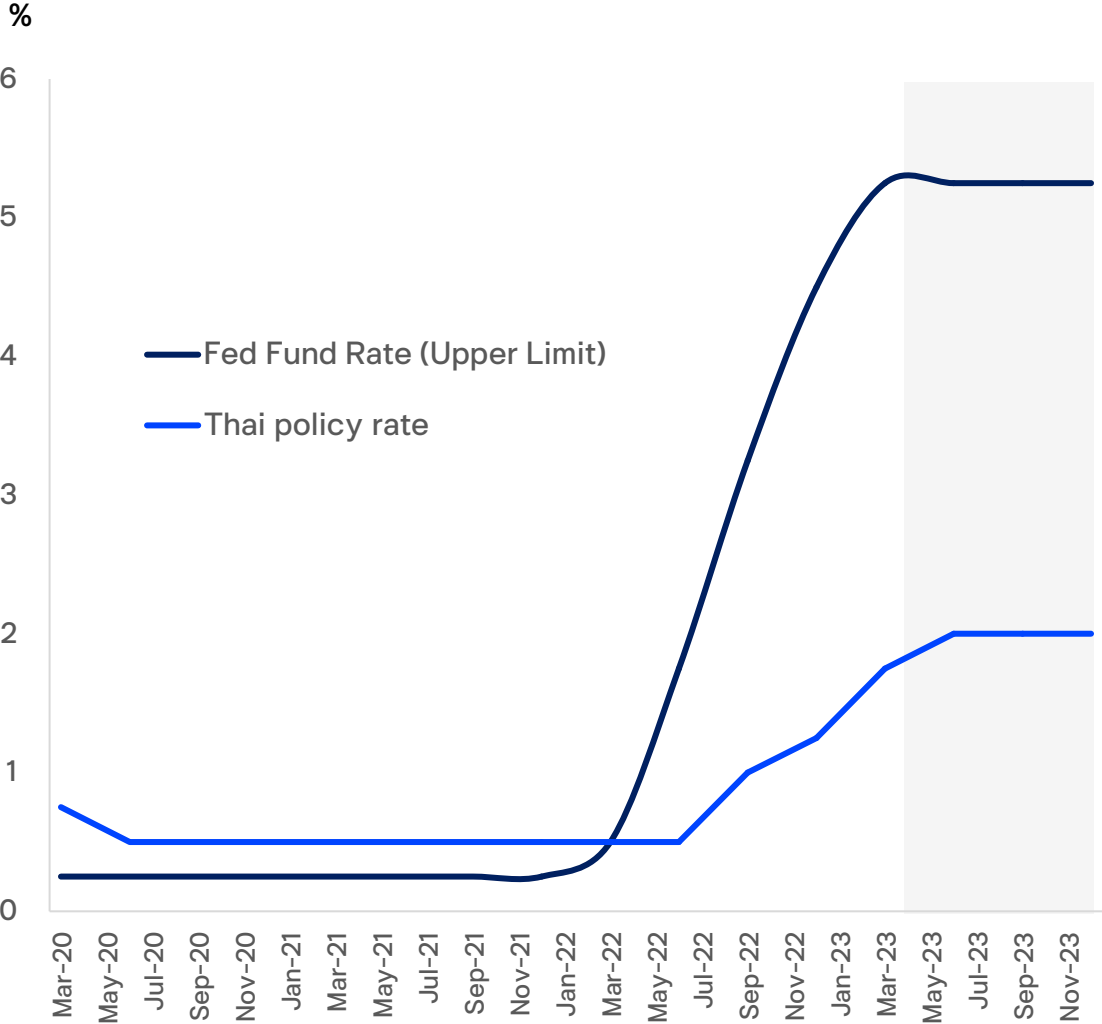
Dollar Index / USDTHB



Average daily range of USDTHB



FED-BOT policy rate forecast



USDTHB Projection





USDTHB

- USDTHB ending 34.13 level in April and is hovered around 33.50 – 34.20 in May 2023.
- The US annual consumer price index for April rose 4.9%, slightly lower than 5% expected by the economists. Meanwhile, core reading moved up by 5.5%, easing from 5.6% in March.
- Fed raised its benchmark interest rate by another 25-basis point to 5.00-5.25% on 2nd-3rd May meeting and signaled it may pause its fastest monetary policy tightening since 1980s, though keeping a hawkish bias.



EURTHB

- EURTHB ending 37.61 level in April and is hovered around 37.40 – 37.80 in May 2023.
- The ECB raised interest rate by 25 basis points as expected on 4th May, marking a slowdown from a recent string of more aggressive 50-point hike. However, in the statement, the ECB's Governing Council warned that the inflation outlook continues to be "too high for too long".
- Inflation data in the Eurozone inched lower in April to 5.6% while headline inflation also edged higher for the first time in six months to 7%.



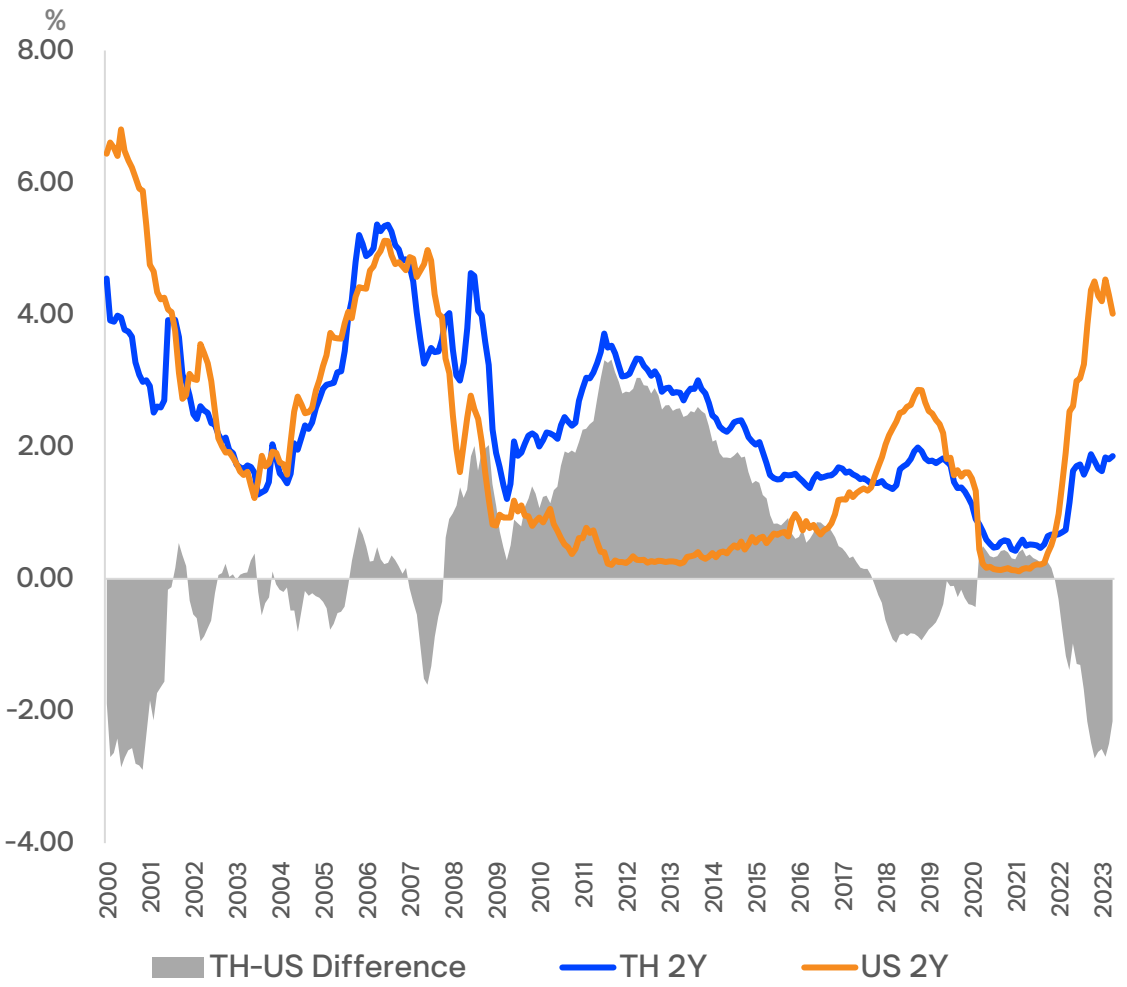
JPYTHB

- JPYTHB ending 0.254 level in March and is hovered around 0.258 – 0.252 in May 2023.
- The Bank of Japan (BOJ) kept ultra-low interest rates at -0.1% and that for the 10-year bond yield around zero but announced plan to review its past monetary policy moves to gradually phase out previous massive stimulus program.
- Japan's core consumer inflation hit 3.1% in March and an index excluding fuel costs rose at the fastest annual pace in four decades in a sign of broadening price pressure.

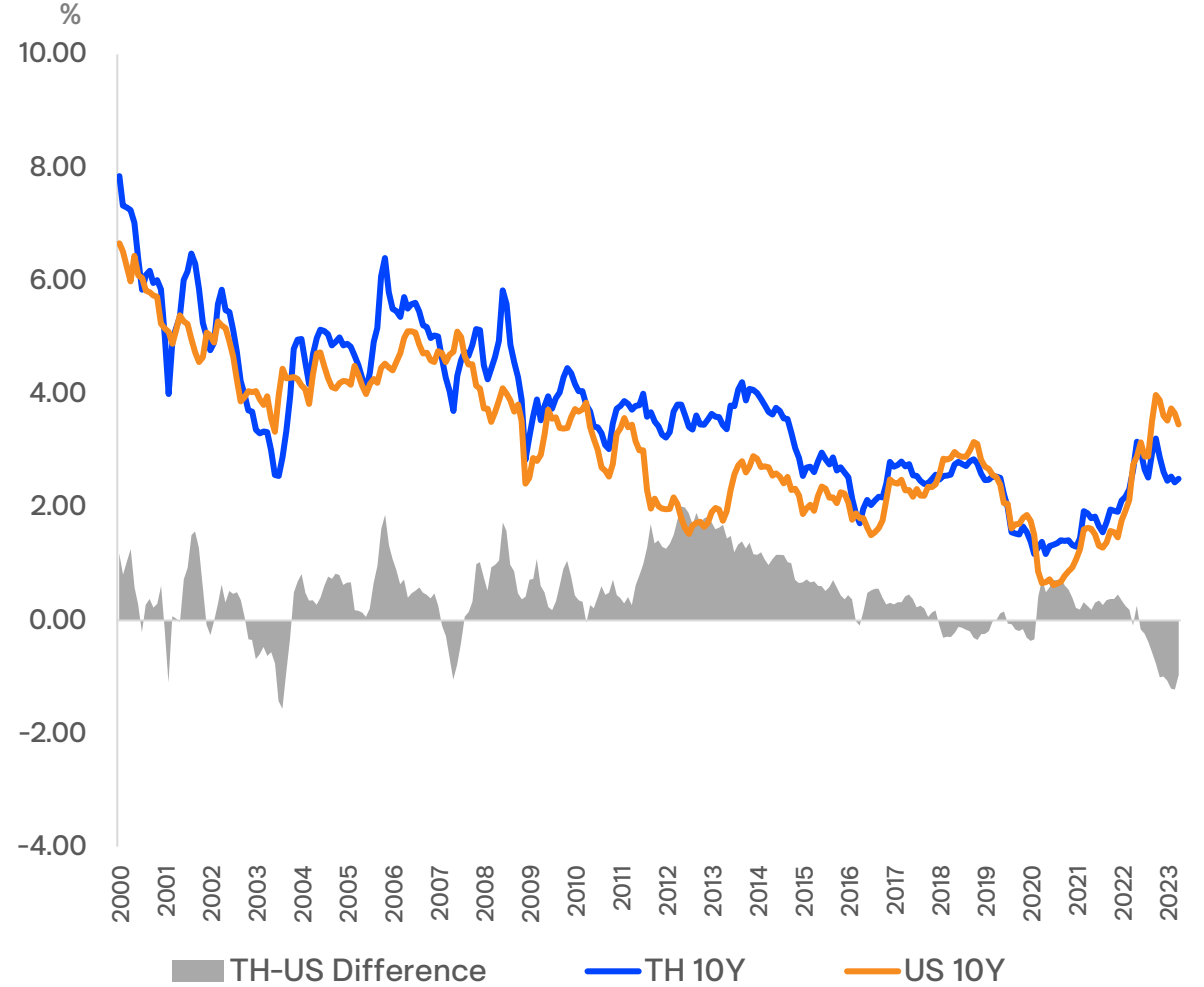
Moreover, greater divergence observed in the short tenure, while the long one aligned



2Y bond yield gap and comparison



10Y bond yield gap and comparison



Source : CEiC and ttb analytics

The logo features the lowercase letters 'ttb' in a bold, sans-serif font. The first 't' is blue, the second 't' is orange, and the 'b' is dark blue. To the right of the 'ttb' is a vertical line, followed by the word 'a.n.a.l.y.t.i.c.s' in a dark blue, sans-serif font with dots between each letter.