

Economic and Financial Outlook

t**tt**b analytics

Mar 2023



Global Economy

- **Global manufacturing PMI in February 2023 showed recession is not severe than expected.** US and Europe have showed signs of pulling out of downturns.
- **China growth has picked up sharply**, mainly driven by services sector. However, its manufacturing sector has softened due to weak global demand conditions but is expected to resume soon.
- **While global energy prices and supply chain pressure have steadily eased, non-energy price rose in metals**, mainly that of iron ore. This was due to the greater pressure from China's iron ore restocking and a supply slump in key exporters. Overall pressure on global inflations have however dropped steadily.
- **Declining but elevated inflation, Federal Reserves would continue in hawkish stance with smaller size of rate hike** amid strong labor market condition.
- **With rising interest rate environment, several nations have recently faced difficulty to service high level of public debts**, especially European counterpart. In the meantime, they have left with limited fiscal buffers to tackle the spikes in food and energy prices.

Domestic Economy

- **In Jan23, Thai economy improved from the previous month. Private consumption indicators increased on the back of government's stimulus measures and thanks to the tourism expenditure.** while consumption of durable goods improved, following a pick-up in delivery of vehicles' backlog orders.
- Private investment indicators, picked up from investment in machinery and equipment. Investment in construction, however, declined from both permitted areas for construction and sales in construction material.
- **The value of merchandise exports, excluding gold, performed gradually improved**, which was in line with development in the manufacturing production and private investment indicators.
- **Foreign tourists dropped slightly** in this month but remaining over 2 million persons. The major decrease came from short-haul groups. However, Russia and Europe tourists continuously rebounded.
- **Headline inflation in Feb23 eased to 13-month low** due to the further drop in food and energy prices, as well as the core inflation, which declined to below 2% for the first time in a year.

Financial Market

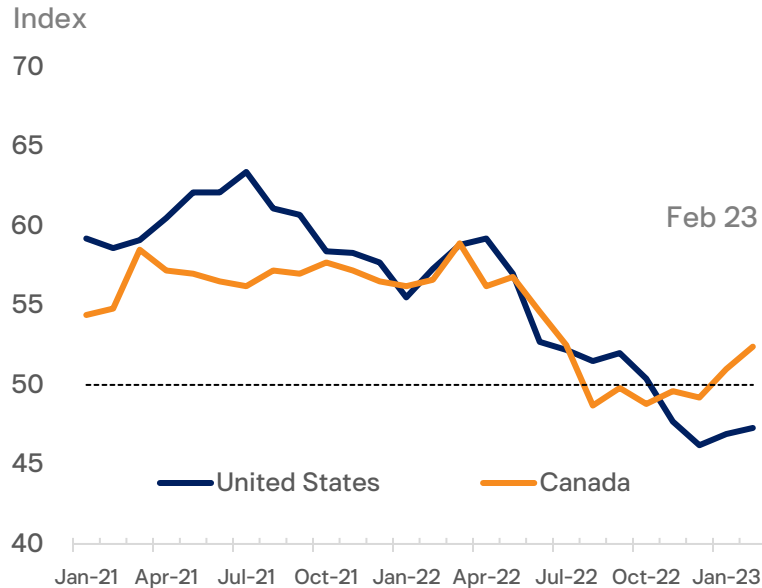
- **Major central banks around the world hike policy rate to curb rising inflation but with slower pace.** Market participants have lowered possibilities of the Federal Reserve delivering 50-bps rate hike on 21-22 March meeting as worries about US banking system loom large.
- **Investors went into long 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 depreciated in February, ending 35.14 level.** It could be around 34.50-35.00 in March. US Dollar would appreciate in short-term as better-than-expected US jobs report raised the likelihood of the Federal Reserve keeping on with its inflation-fighting interest rate hikes for longer.

PART 1

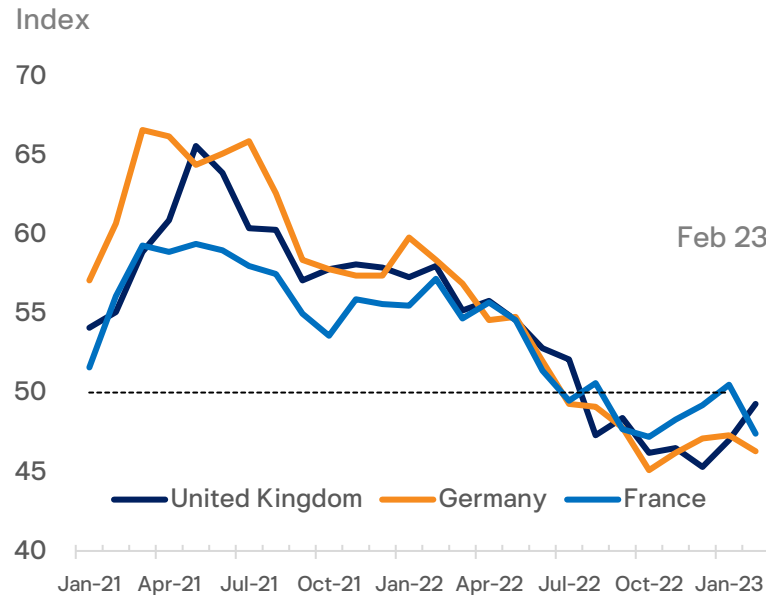
Global Economy



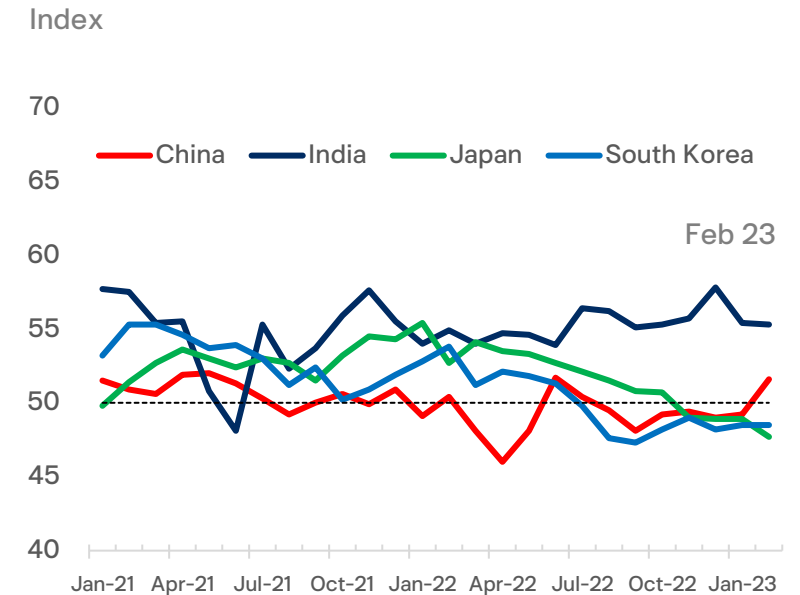
Manufacturing PMI - North America



Manufacturing PMI - Europe & UK

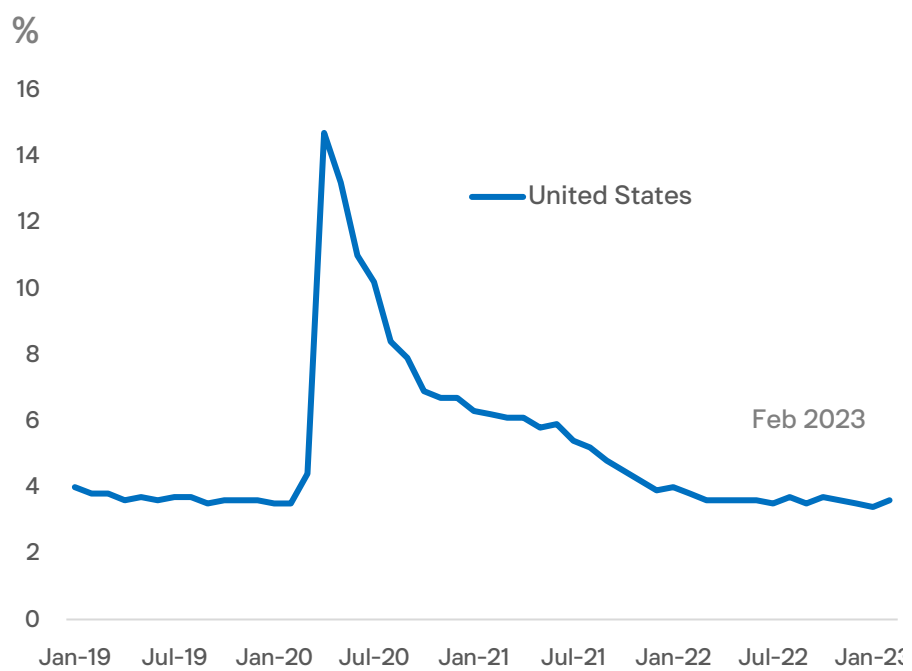


Manufacturing PMI - Asia

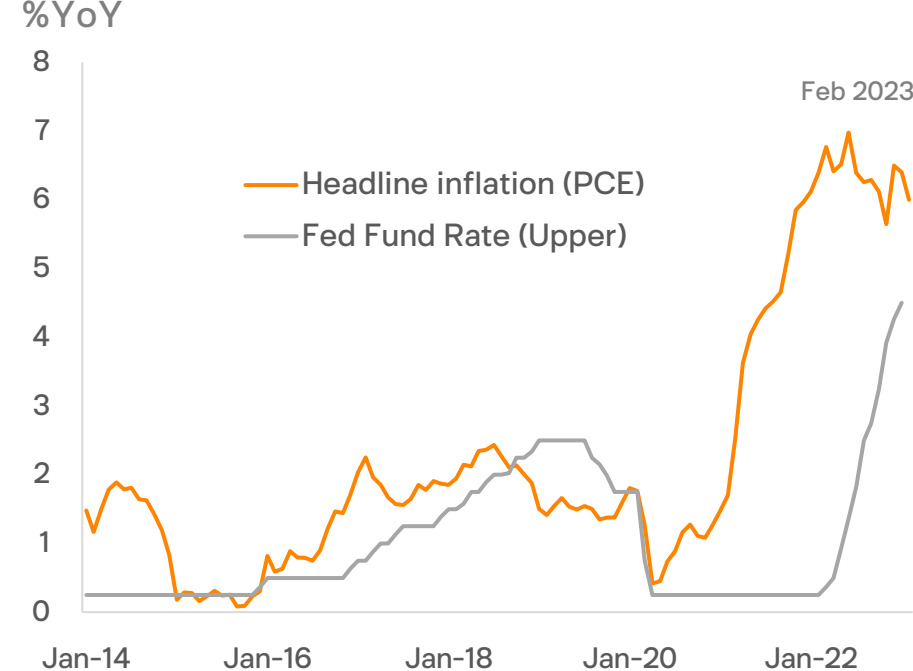


- **Global manufacturing PMI in February 2023 showed that recession is not severe as expected.** Growth was led by services sector, but manufacturing output also pointed a return to growth.
- Both the US and Europe showed signs of pulling out of downturns, while growth picked up sharply in mainland China. India continued to record the strongest expansion of the world's major economies.
- With reduced recession risks, a peaking of price pressures, improved supply chains and a reopening of the Chinese economy helped spur demand have boosted business confidence and hiring.

Unemployment rate



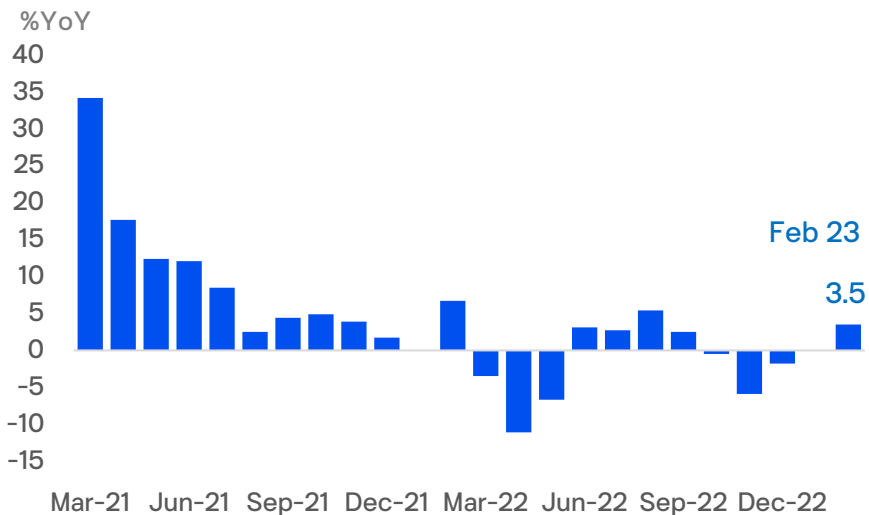
US inflation and its policy rate



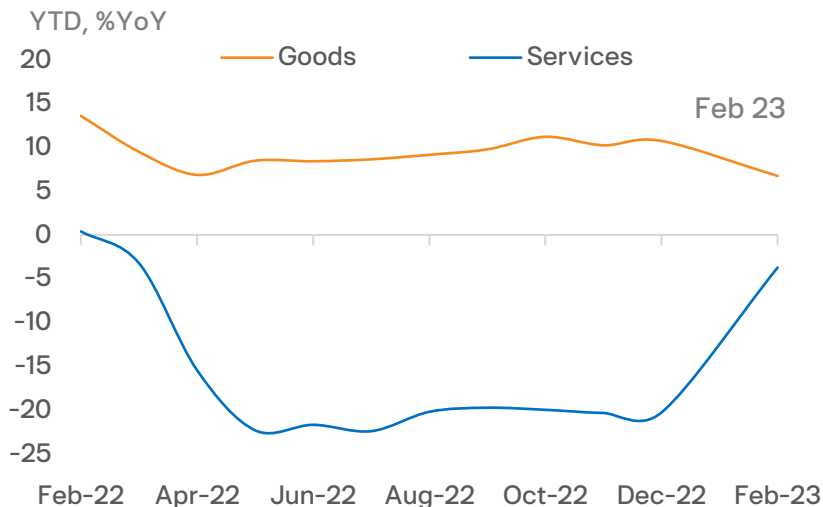
▪ **Global crude oil, continuously declined but remained at high level. Likewise, the US inflation elevated. Meantime, labor market in the US have been in strong condition, shown by a similar level of unemployment rate to pre-covid crisis. Taken these two factors into account, Federal reserves is expected to further keep hiking its policy rate at least in the first half of 2023 in order to take inflation back to the target range.**

China rebounded evidently, driven mainly by services sector

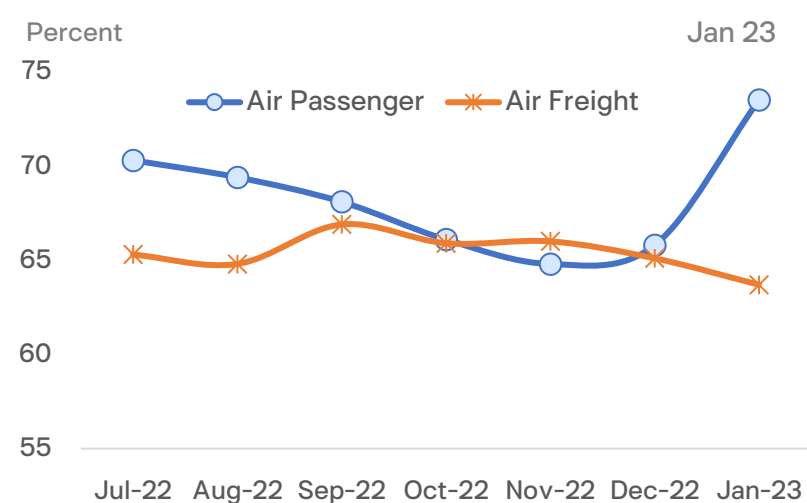
Retail sales



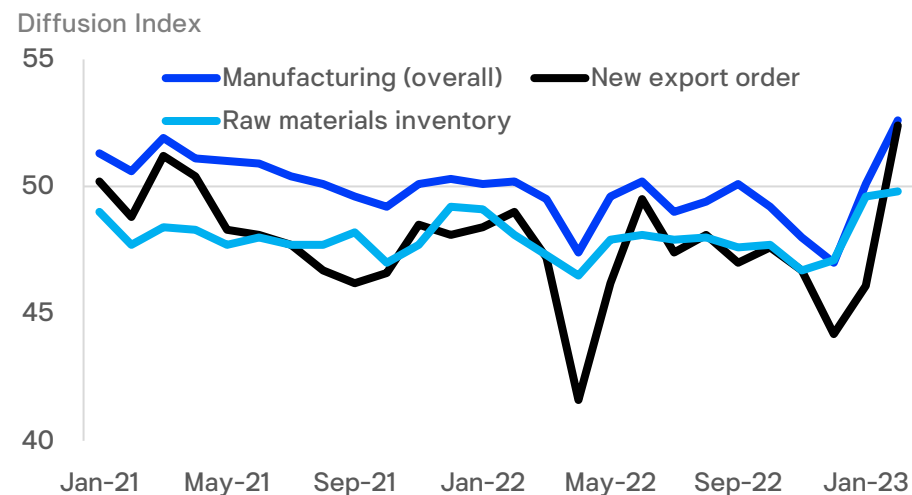
Online retail sales



Air load factors

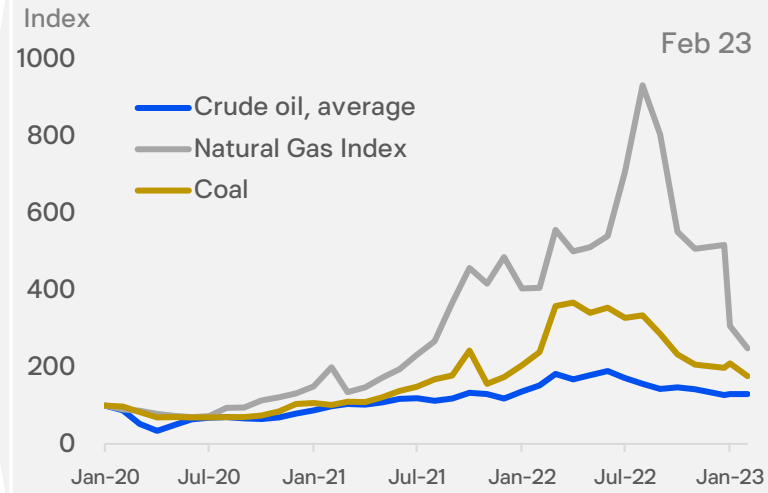
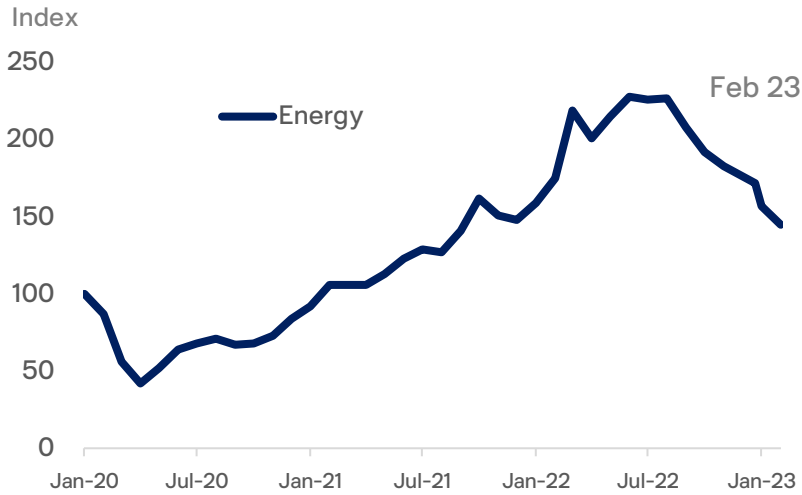


Surveyed Manufacturing PMI (NBS)



- **Mainland China is rebounding evidently**, whose business activity rose at the steepest rate since mid-2022, linked to reviving activity and spending after the reopening of the economy in January 2023.
- **Service sector in China led the upturn**, as represented by online services sales and air passenger load.
- **Meanwhile the manufacturing sector softened** due to weak global demand conditions but expected to surge back more clearly later.

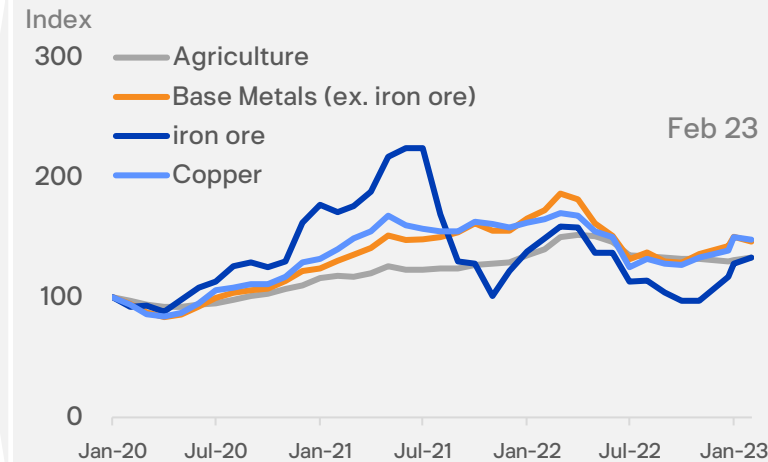
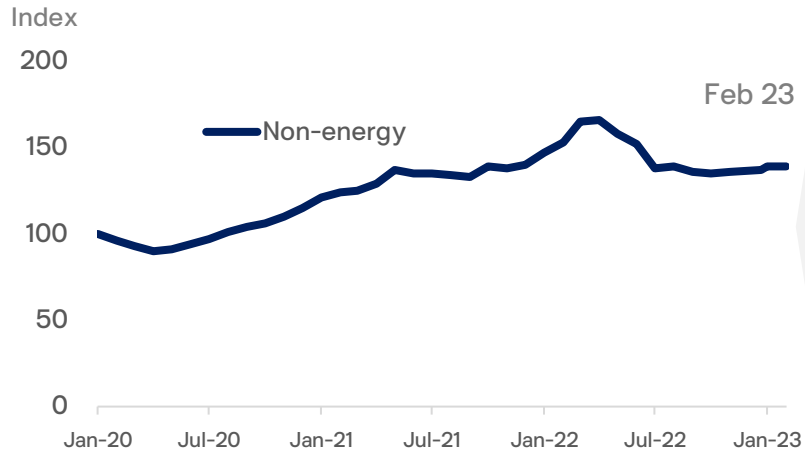
Energy Commodity



Global Supply Chain Pressure Index

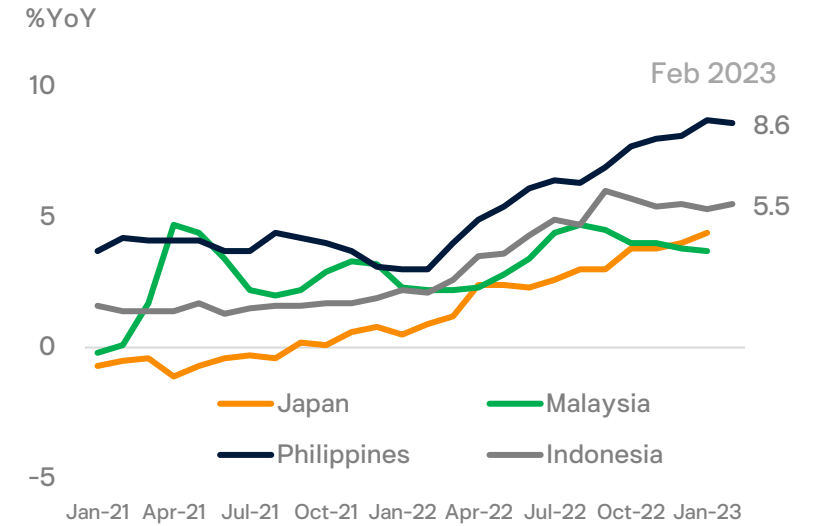
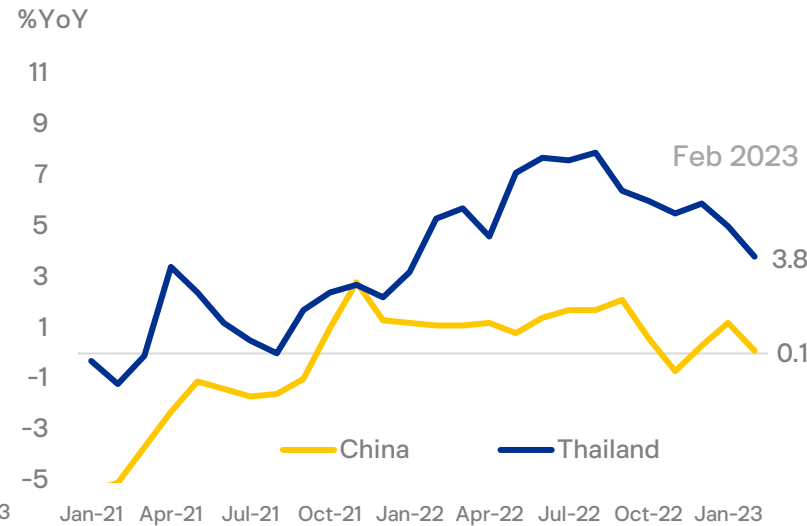
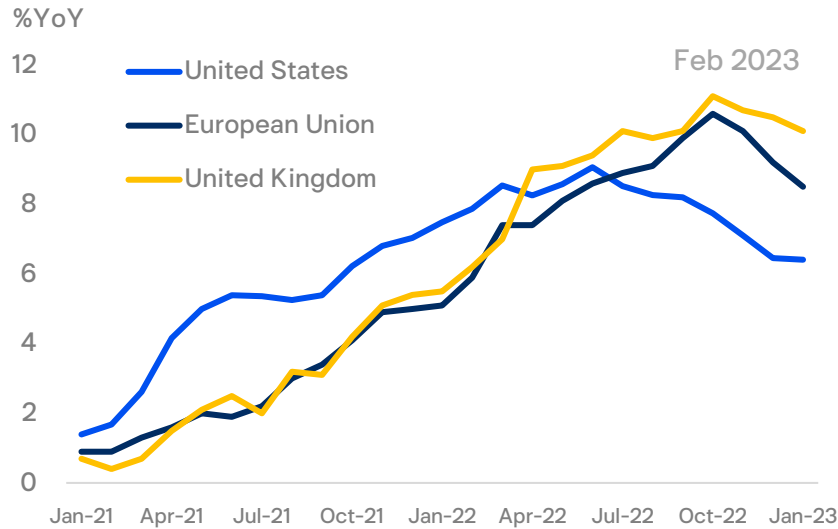


Non-energy Commodity



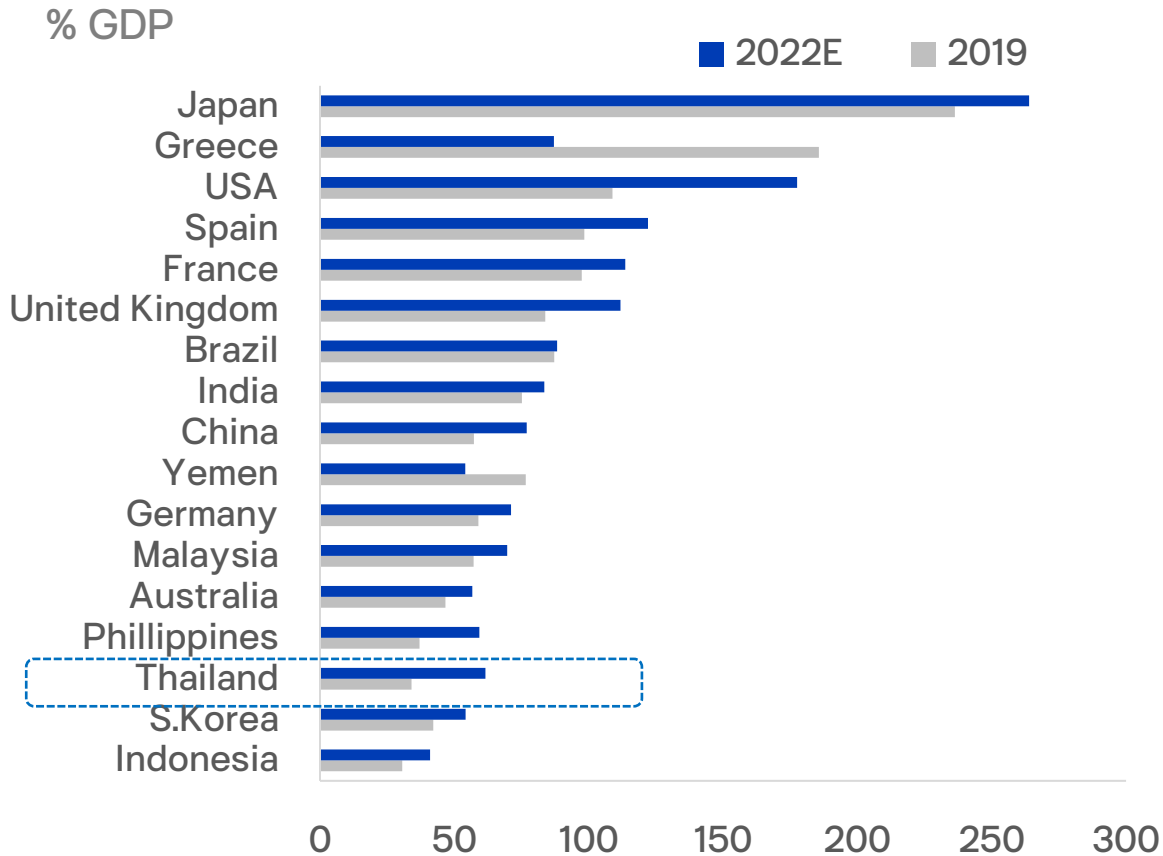
- **Global energy prices dropped steadily** across categories. European gas stocks have been in high level, alleviating pressure on gas prices. However, A rebound of Chinese demands will be a key driver of higher oil prices in 2023.
- **Metal prices, especially iron ore rose** due to China's restocking and a supply slump in key exporters, Australia and Brazil.
- Global supply chain conditions returned to normal, with the greatest contribution from a drop in European Area delivery times.

Global Inflation

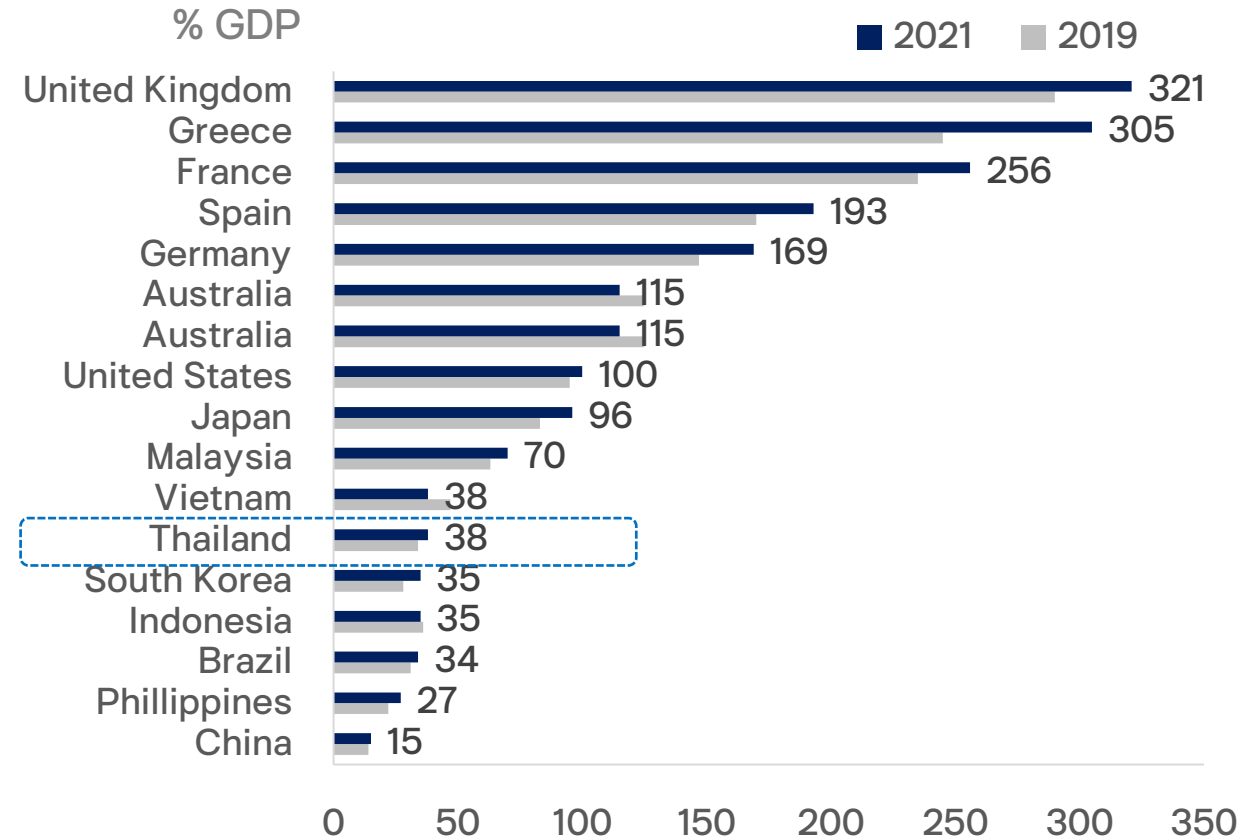


- Global inflations pressure have been easing but overall levels remained elevated. This was due to declines in overall global commodities' prices together with an ease of global supply chain situation. However, a recovering demands in China could insert pressure on commodity prices.**

Public debt



External debt



- Global governments have recently faced difficulty in tackling the spikes in food and energy prices in the periods that policy buffers have been largely exhausted after two years of pandemic. Moreover, with rising rate environment, several nations have faced increasingly difficulty, especially Europe, due to high levels of public debts.

PART 2

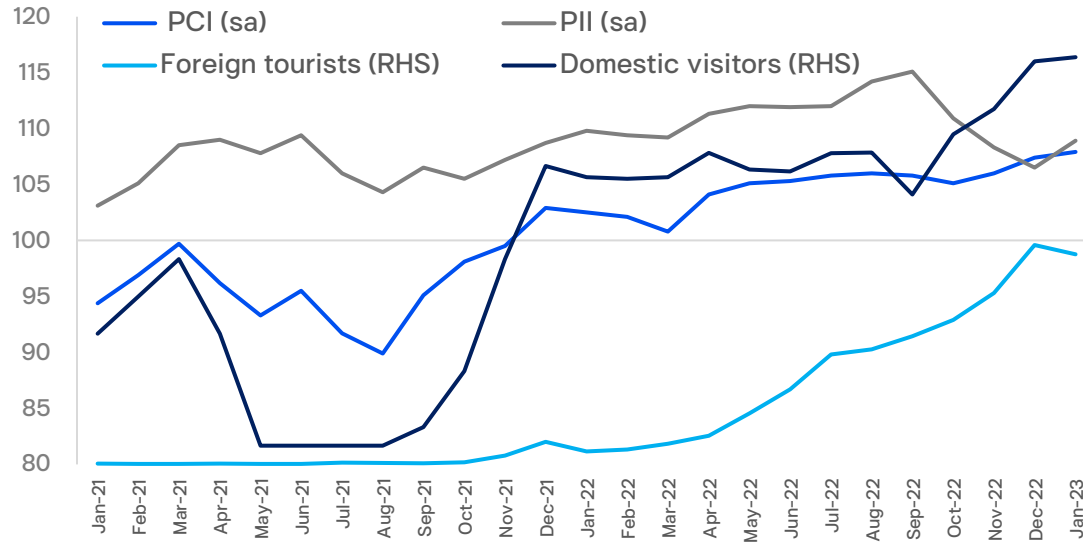
Thai Economy



Thai economy improved from the previous month, thanks to tourism and government's stimulus measure

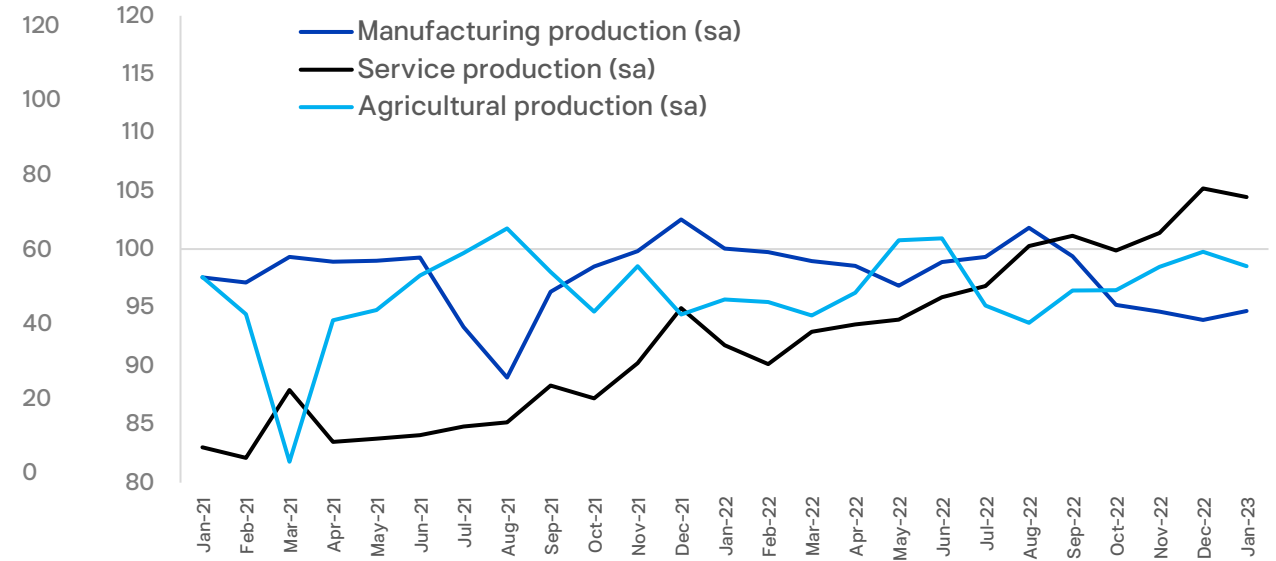
Demand-side indicators

Index (Jan20=100)



Supply-side indicators

Index (Jan20=100)

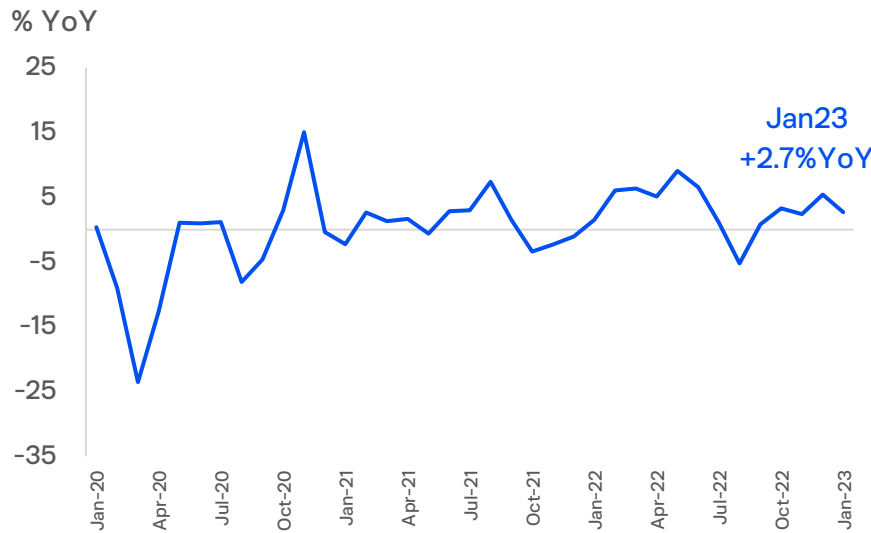


Coincident Economic Index (sa)

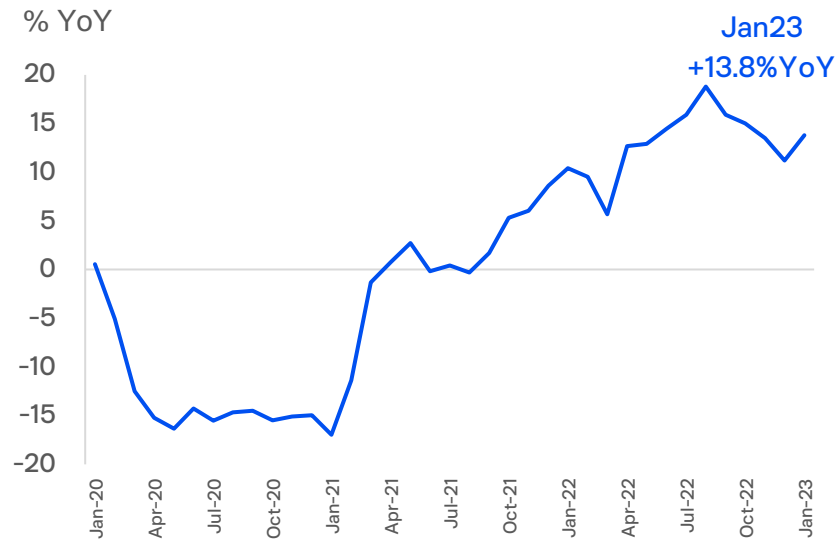
| | Sep-21 | Oct-21 | Nov-21 | Dec-21 | Jan-22 | Feb-22 | Mar-22 | Apr-22 | May-22 | Jun-22 | Jul-22 | Aug-22 | Sep-22 | Oct-22 | Nov-22 | Dec-22 |
|------------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Coincident Economic Index (sa) | 99.0 | 99.9 | 100.5 | 100.8 | 100.7 | 100.9 | 100.9 | 100.5 | 100.3 | 100.6 | 100.5 | 101.1 | 96.7 | 96.0 | 95.0 | 95.2 |
| Import Volume index (exclude Gold) | 102.1 | 104.3 | 99.8 | 115.9 | 104.9 | 107.9 | 112.5 | 109.6 | 109.2 | 109.4 | 110.5 | 110.0 | 112.7 | 105.3 | 95.8 | 98.8 |
| Manufacturing Production Index | 96.3 | 98.5 | 99.8 | 102.5 | 99.5 | 99.6 | 99.3 | 98.9 | 97.1 | 99.1 | 99.9 | 102.9 | 100.5 | 95.9 | 95.0 | 94.3 |
| Gross Value Added Tax at 2000 price (Million baht) | 52,842 | 55,047 | 61,594 | 57,139 | 56,930 | 58,144 | 58,511 | 57,467 | 56,777 | 58,146 | 55,517 | 57,152 | 58,682 | 59,022 | 55,602 | 55,700 |
| Sales Benzene, Gasohol & Diesel Index | 79.9 | 86.6 | 91.8 | 102.8 | 98.4 | 95.7 | 89.2 | 96.9 | 97.8 | 92.8 | 94.7 | 93.7 | 96.6 | 94.6 | 94.8 | 98.8 |
| VAT Hotel & Restaurant Index | 29.2 | 36.9 | 45.1 | 48.1 | 38.2 | 48.8 | 48.7 | 53.7 | 56.0 | 58.3 | 62.2 | 60.3 | 68.0 | 71.0 | 75.5 | 76.3 |
| Imports of Capital Goods at 2010 price (Million USD) | 3,863.7 | 3,812.8 | 3,807.0 | 3,878.4 | 3,926.9 | 3,851.8 | 3,853.0 | 3,767.0 | 3,943.3 | 4,181.3 | 3,973.6 | 4,251.2 | 4,065.8 | 3,917.5 | 3,671.3 | 3,893.6 |
| Domestic Machinery Sales at 2010 price (Million THB) | 88,249 | 88,945 | 90,303 | 90,123 | 91,033 | 92,003 | 87,812 | 92,390 | 91,711 | 85,131 | 92,271 | 90,998 | 96,296 | 92,351 | 89,681 | 88,063 |

Services activities regarding to tourism activities continued to expand, while commerce activities improved

Agriculture Production Index



Services Production Index



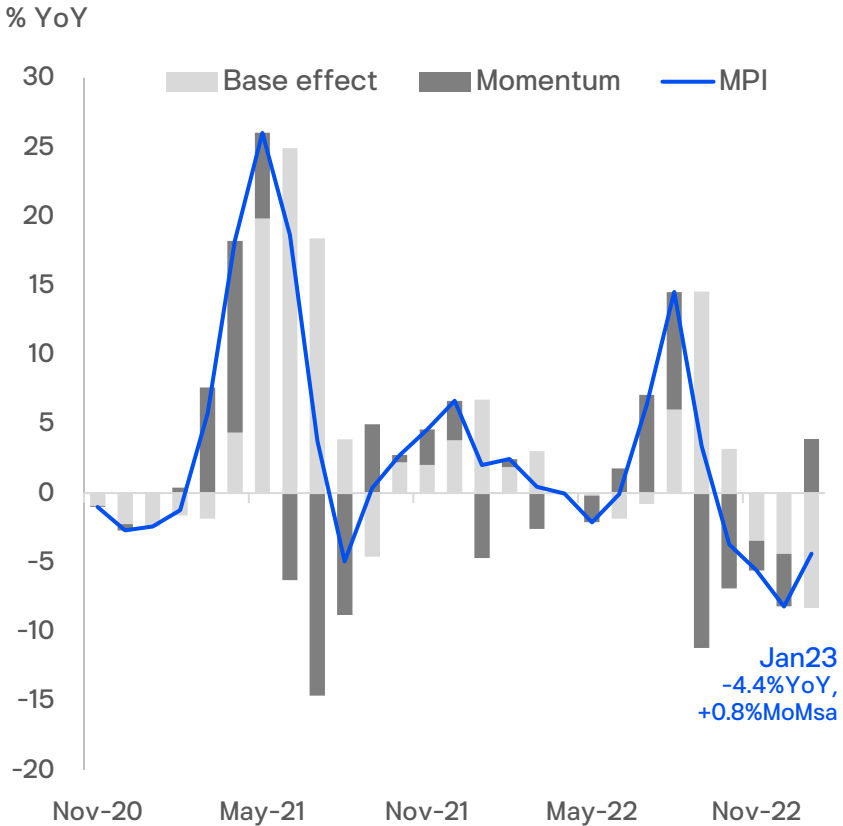
As of Jan23, Agricultural Production Index was expanded at 2.7%YoY, compared to 5.4%YoY in Dec. This was mainly due to the lower production of cassava. In Service Production Index (SPI) showed a good sign of recovery, up by 13.8%yoy in line with the business service related to tourism. Moreover, service production regarding to commerce activities improved as a result from government stimulus.

Service Production Index (Base Jan 2020=100)

| | Dec-21 | Jan-22 | Feb-22 | Mar-22 | Apr-22 | May-22 | Jun-22 | Jul-22 | Aug-22 | Sep-22 | Oct-22 | Nov-22 | Dec-22 | Jan-23 |
|----------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Wholesale and retail trade; repair of motor vehicles and motorcycles | 100.6 | 100.1 | 101.5 | 103.4 | 102.0 | 103.7 | 105.0 | 106.2 | 108.4 | 109.0 | 109.1 | 109.8 | 109.8 | 109.7 |
| Transportation and storage | 70.3 | 68.9 | 68.1 | 73.8 | 71.9 | 76.8 | 80.9 | 82.8 | 83.5 | 81.8 | 81.7 | 82.6 | 87.2 | 85.5 |
| Accommodation and food service activities | 30.4 | 27.9 | 28.0 | 29.1 | 32.7 | 35.4 | 39.5 | 47.4 | 48.3 | 50.9 | 55.2 | 62.3 | 75.2 | 73.8 |
| Information and communication | 121.4 | 111.3 | 102.1 | 115.3 | 101.9 | 109.1 | 117.6 | 107.0 | 121.3 | 127.3 | 122.7 | 121.6 | 135.3 | 122.2 |
| Financial and insurance activities | 115.5 | 112.8 | 110.9 | 113.3 | 106.7 | 108.3 | 108.3 | 106.8 | 109.7 | 109.1 | 106.2 | 109.0 | 110.8 | 115.7 |
| Real estate activities | 133.9 | 123.3 | 121.6 | 125.9 | 119.6 | 121.6 | 122.9 | 119.6 | 125.4 | 123.2 | 120.2 | 124.8 | 130.8 | 130.2 |
| Professional, scientific and technical activities | 125.1 | 118.1 | 107.9 | 126.1 | 120.4 | 118.6 | 123.0 | 118.5 | 127.2 | 126.3 | 131.5 | 130.9 | 141.0 | 129.9 |
| Administrative and support service activities | 85.1 | 80.2 | 76.3 | 88.2 | 77.8 | 83.3 | 85.1 | 79.7 | 89.9 | 89.0 | 93.5 | 93.2 | 99.0 | 92.0 |
| Public administration and defence; compulsory social security | 106.5 | 102.1 | 97.6 | 92.1 | 112.9 | 102.4 | 101.6 | 106.5 | 109.0 | 111.9 | 102.2 | 101.2 | 101.2 | 104.5 |
| Service Production Index | 95.9 | 92.7 | 91.0 | 93.8 | 94.5 | 94.9 | 96.8 | 97.8 | 101.2 | 102.1 | 100.9 | 102.4 | 106.2 | 105.5 |

Manufacturing Production Index (MPI)

MPI by sector (Base Jan 2020=100)



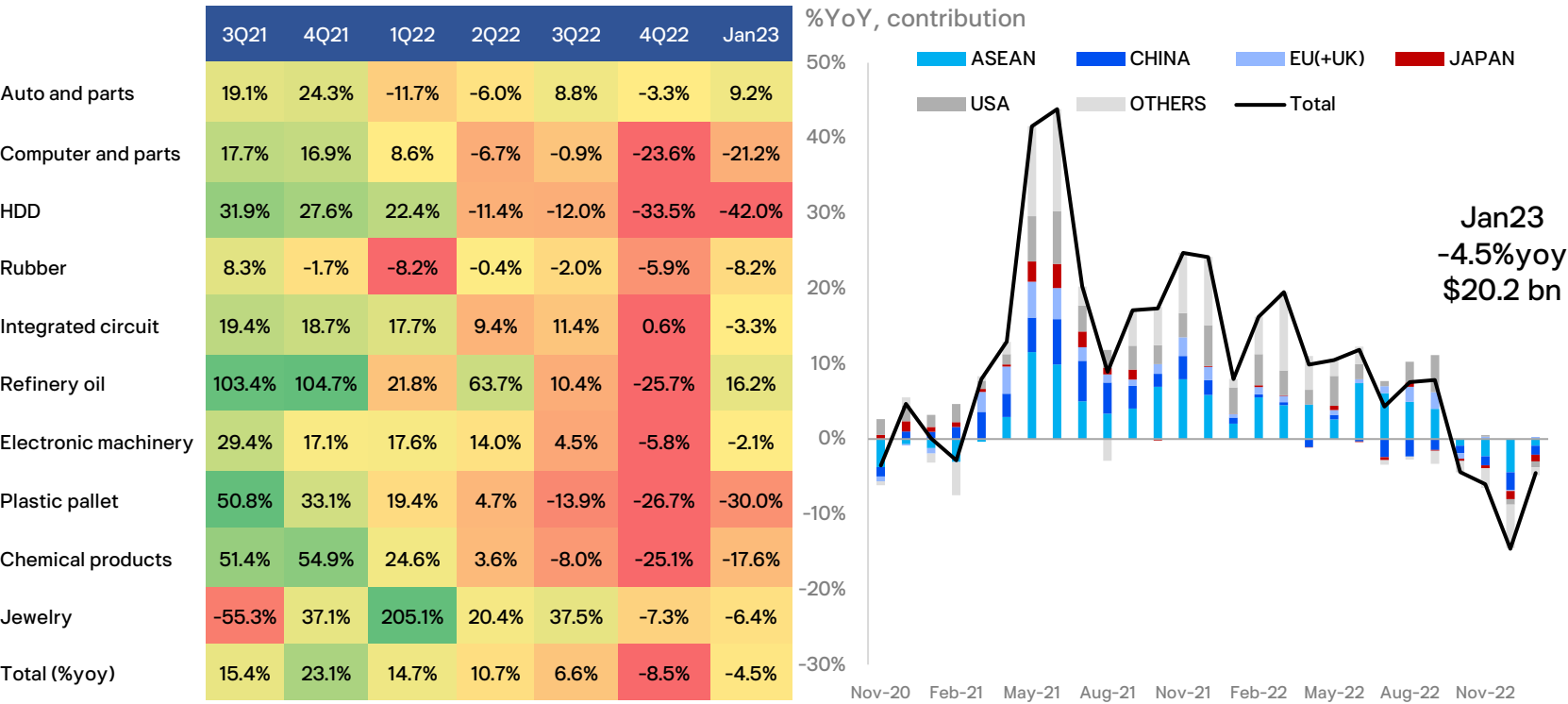
| Contribution | Oct-21 | Nov-21 | Dec-21 | Jan-22 | Feb-22 | Mar-22 | Apr-22 | May-22 | Jun-22 | Jul-22 | Aug-22 | Sep-22 | Oct-22 | Nov-22 | Dec-22 | Jan-23 |
|--------------------------------------------|------------|------------|------------|------------|------------|------------|-------------|-------------|-------------|------------|-------------|------------|-------------|-------------|-------------|-------------|
| Food products (16.2%) | | | | | | | | | | | | | | | | |
| Beverages (3.8%) | | | | | | | | | | | | | | | | |
| Tobacco products (0.5%) | | | | | | | | | | | | | | | | |
| Textiles (1.6%) | | | | | | | | | | | | | | | | |
| Wearing apparel (1.9%) | | | | | | | | | | | | | | | | |
| Leather products (0.9%) | | | | | | | | | | | | | | | | |
| Paper products (2.9%) | | | | | | | | | | | | | | | | |
| Coke and refined petroleum products (9.6%) | | | | | | | | | | | | | | | | |
| Chemicals (8%) | | | | | | | | | | | | | | | | |
| Pharmaceutical products (1.2%) | | | | | | | | | | | | | | | | |
| Rubber and plastics products (8.9%) | | | | | | | | | | | | | | | | |
| Other non-metallic mineral products (5.5%) | | | | | | | | | | | | | | | | |
| Basic metals (3.6%) | | | | | | | | | | | | | | | | |
| Fabricated metal products (1.9%) | | | | | | | | | | | | | | | | |
| Computer and electronic products (8.9%) | | | | | | | | | | | | | | | | |
| Electrical equipment (3%) | | | | | | | | | | | | | | | | |
| Machinery and equipment (2.7%) | | | | | | | | | | | | | | | | |
| Motor vehicles (13.9%) | | | | | | | | | | | | | | | | |
| Other transport equipment (1.1%) | | | | | | | | | | | | | | | | |
| Furniture (1.5%) | | | | | | | | | | | | | | | | |
| Others (2.4%) | | | | | | | | | | | | | | | | |
| MPI (% YoY) | 2.7 | 4.5 | 6.7 | 1.9 | 2.4 | 0.2 | -0.4 | -2.3 | -0.5 | 6.0 | 14.6 | 2.9 | -4.2 | -5.4 | -8.4 | -4.4 |

- As of Jan23, Manufacturing Production Index (MPI) was contracted at 4.4%YoY, compared to the previous month at contracted 8.2%YoY. The better momentum were mainly from 1) the returned gradually to normal level of oil refineries production and the increase production of motor vehicle. However, the HDD production remained subdued.

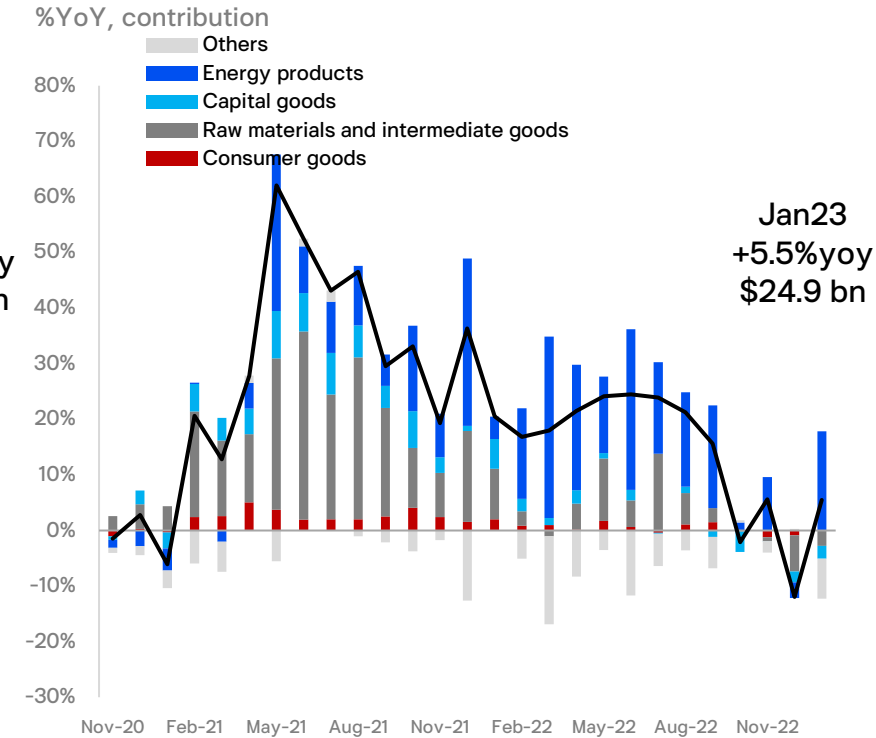
Thailand's export rebounded, but still contracted for the fourth consecutive month



Exports value by product and destination*



Imports value by groups*

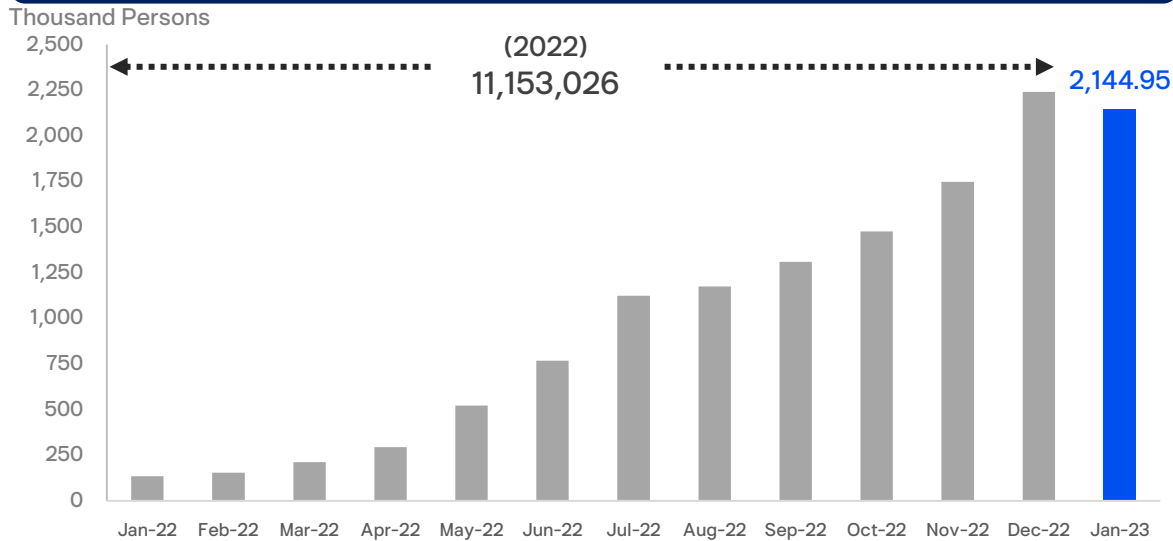


| %yoy,value | 2019 | 2020 | 2021 | 2022 | Jan-2023 |
|--------------|-------------------|--------------------|-------------------|-------------------|--------------------|
| Total export | -2.6% \$246 bn | -5.9% \$232 bn | 17.1% \$272 bn | 5.5% \$287 bn | -4.5% \$20.2 bn |
| Total import | -4.8% \$236 bn | -12.7% \$206 bn | 29.8% \$267 bn | 13.6% \$303 bn | 5.5% \$24.9 bn |

- Export value in Jan23 contracted by 4.5%YoY, comparing to the contraction of 14.6% in the month earlier. Exports of major products decreased, particularly in computers, equipment, and parts, rubber products, jewelry (excluding gold), plastic pellets, and chemical products.
- On the other hand, imports increased by 5.5%yoy because of an increase of fuel-oil related and vehicle-related products, resulting in a trade deficit of USD 4.6 bn.

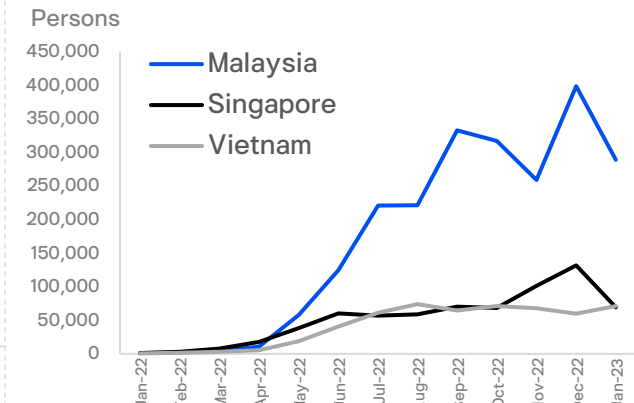
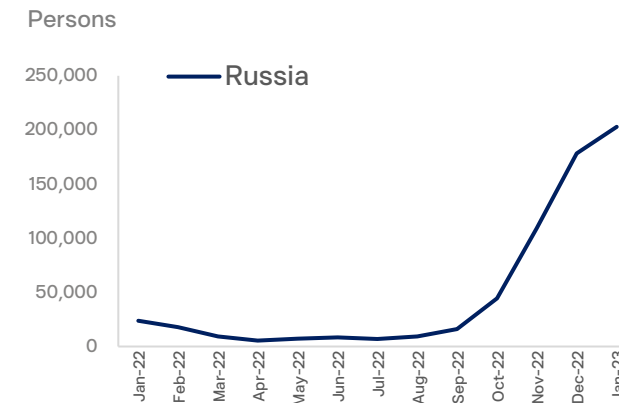
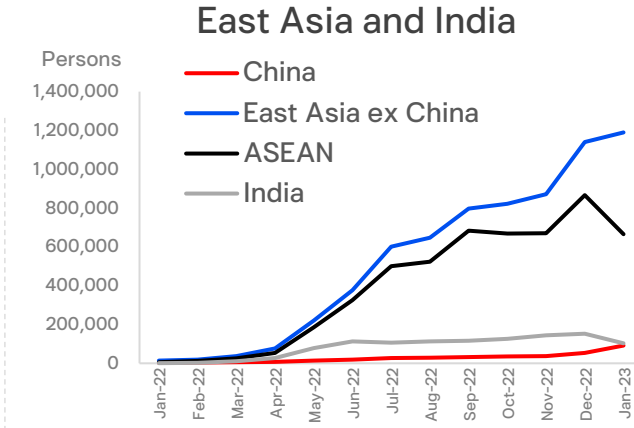
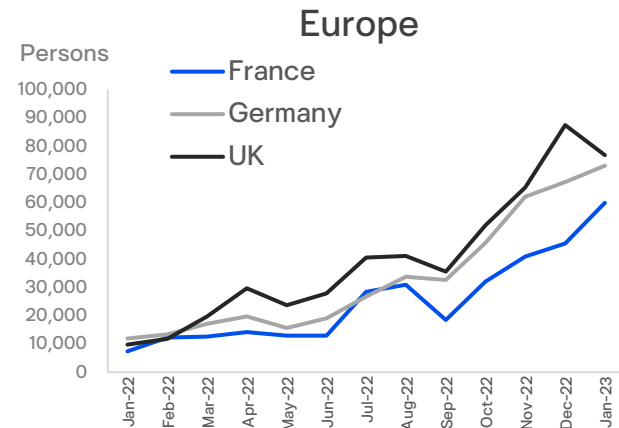
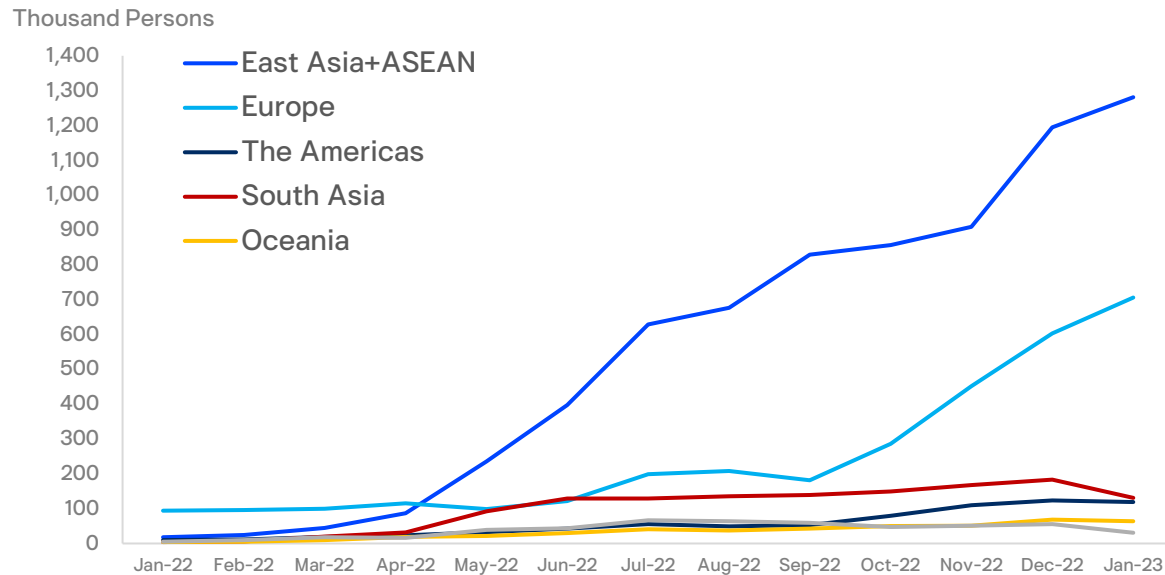
Foreign arrivals dropped slightly from ASEAN tourists

Total Foreign Tourist Inbounds



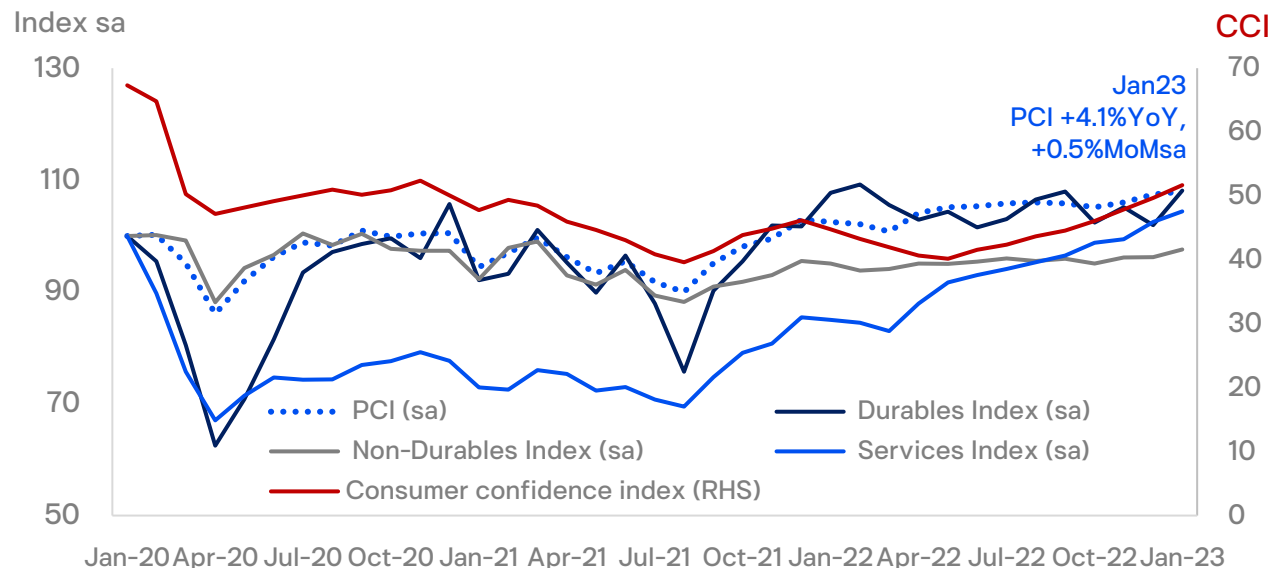
- As of Jan23, foreign tourists dropped slightly to 2.14 million. This was due to the short-haul tourists decreased following reopening policies in other countries particularly in ASEAN tourists. The major groups still came from East Asia, led by Malaysia. Russia and some European tourists also remained high in momentum.

Foreign Tourist Inbounds by key regions

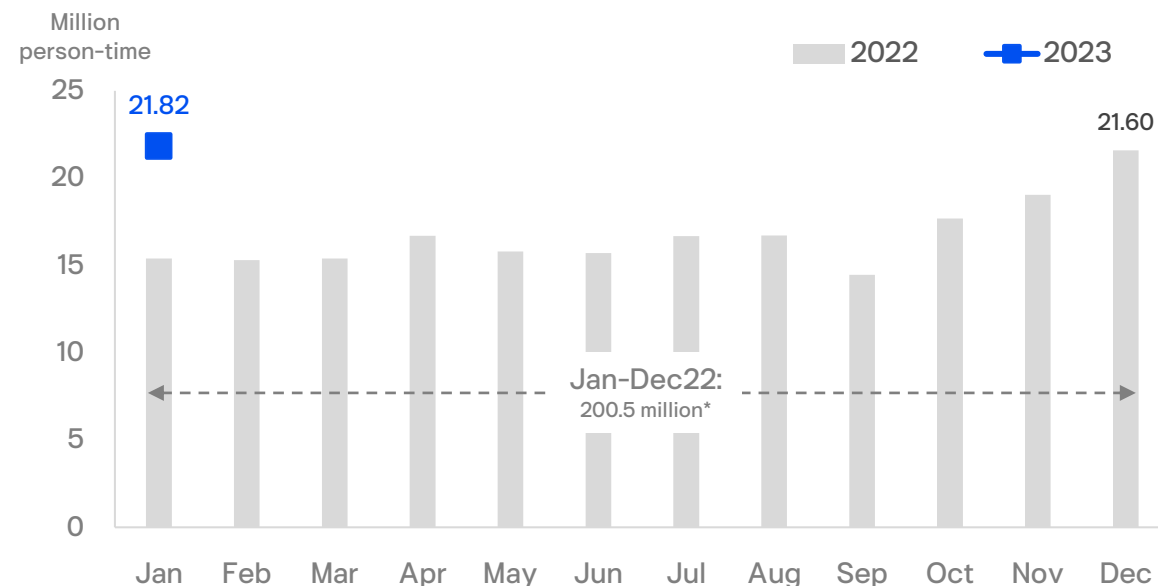


Private consumption increased in almost all categories

Private Consumption (SA)

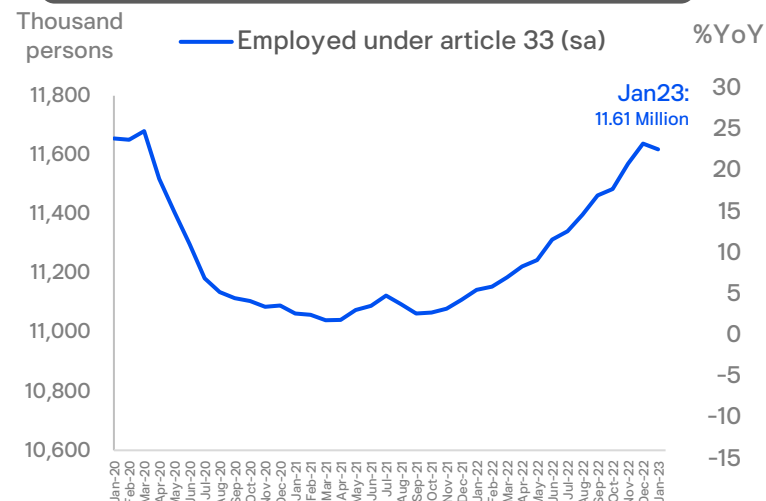


Thai domestic tourism visitors

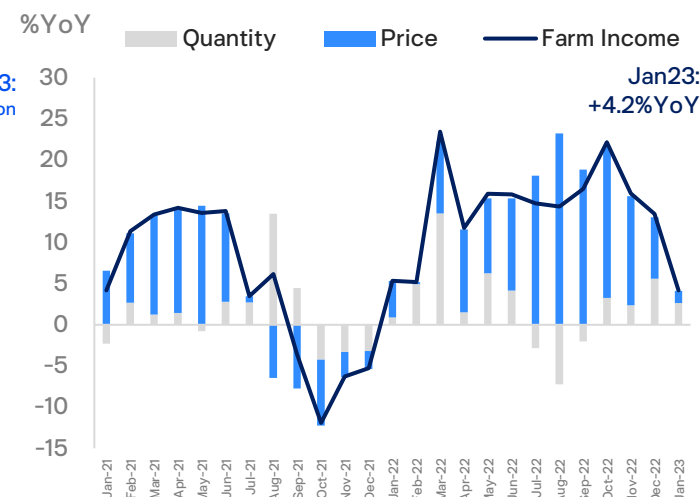


- Private consumption indicators in Jan23 increased slightly from the previous month in almost all categories.
- Spending on non-durable goods also edged up thanks partly to the government's stimulus measures, while spending on semi-durable goods slightly softened.
- However, the elevated living costs still weighed down on consumption.

Employment M33



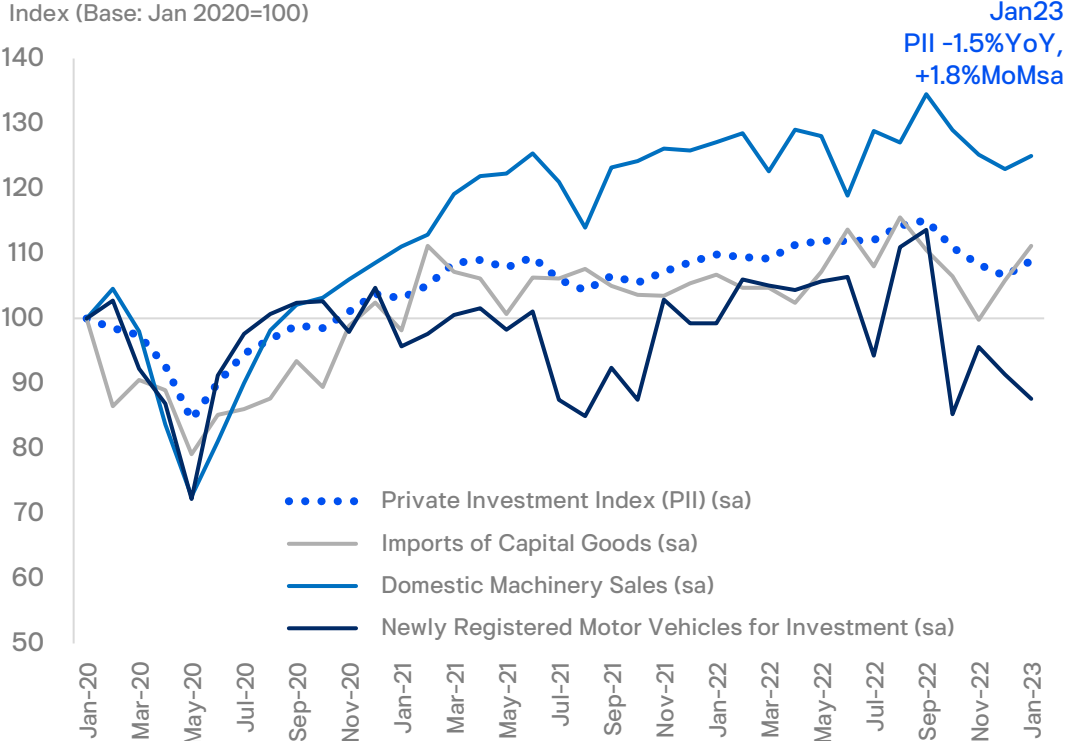
Farm Incomes



Private investment picked up from investment in machinery and equipment

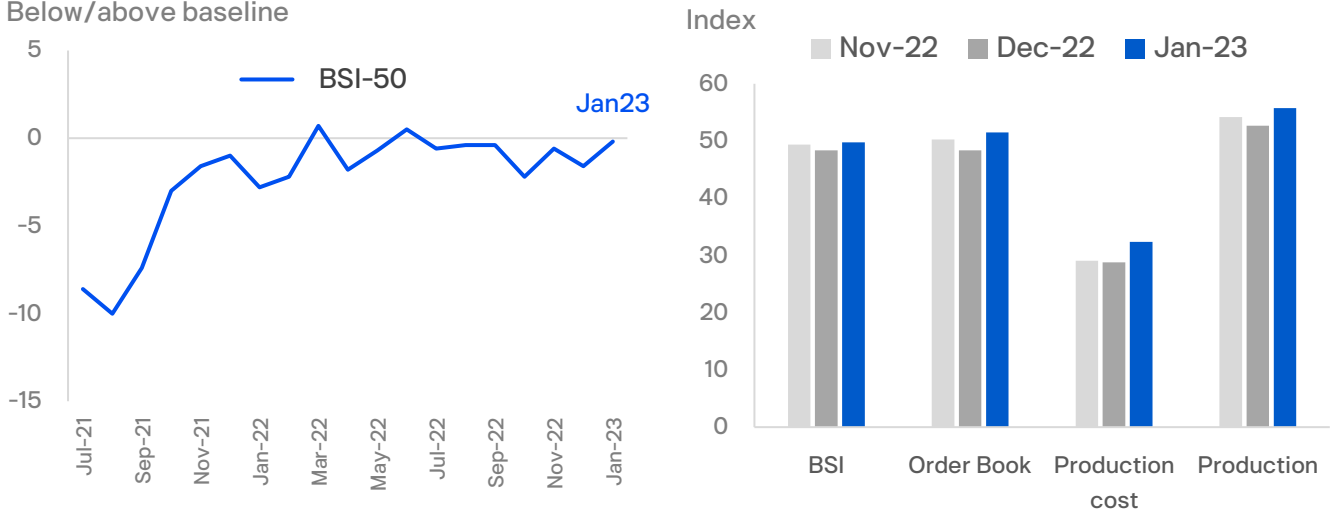


Private Investment Indicators (SA)

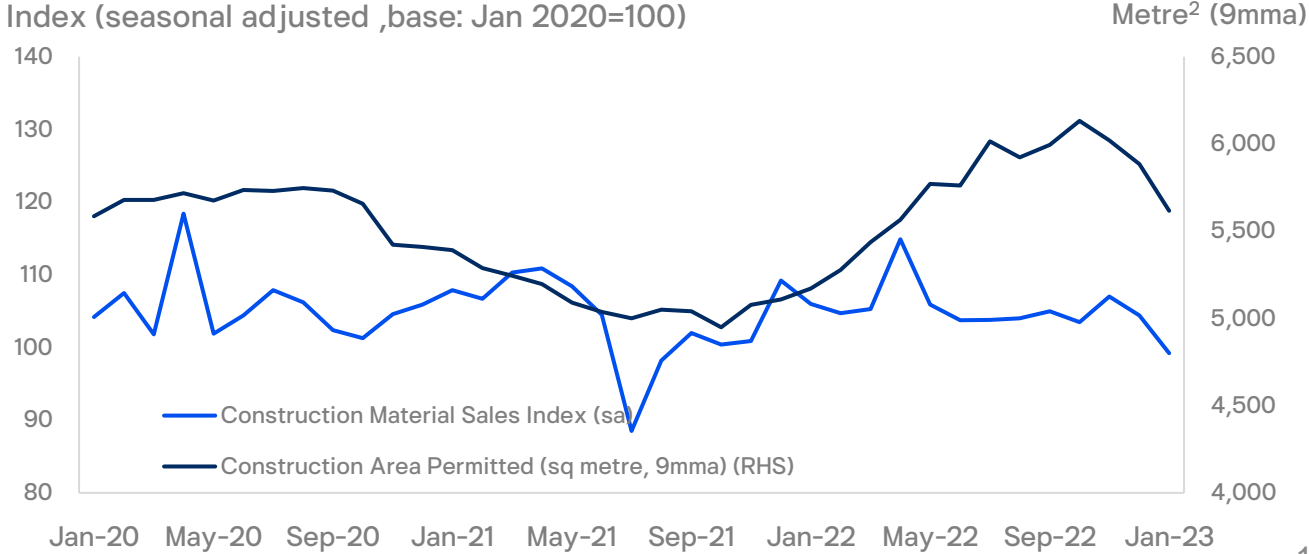


- Indicators on private investment in Jan23 picked up from investment in machinery and equipment, following increases in import of capital goods and domestic sales of machinery.
- However, Investment in construction, declined from both permitted areas for construction and sales in construction material.

Business Sentiment Index

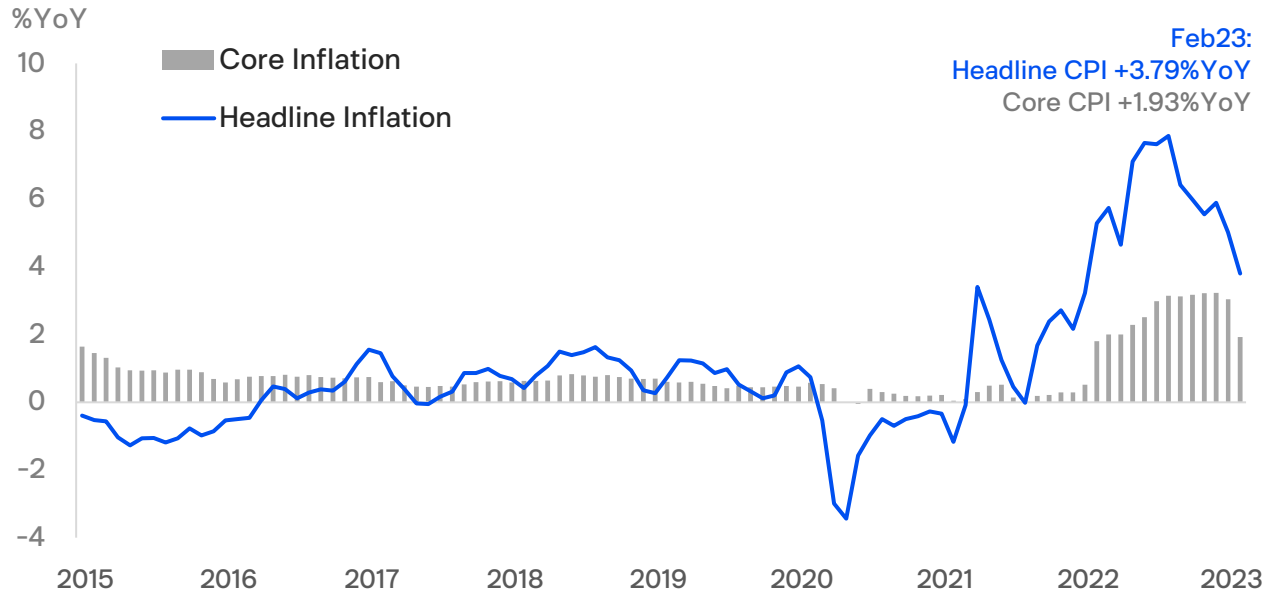


Construction sector (SA)

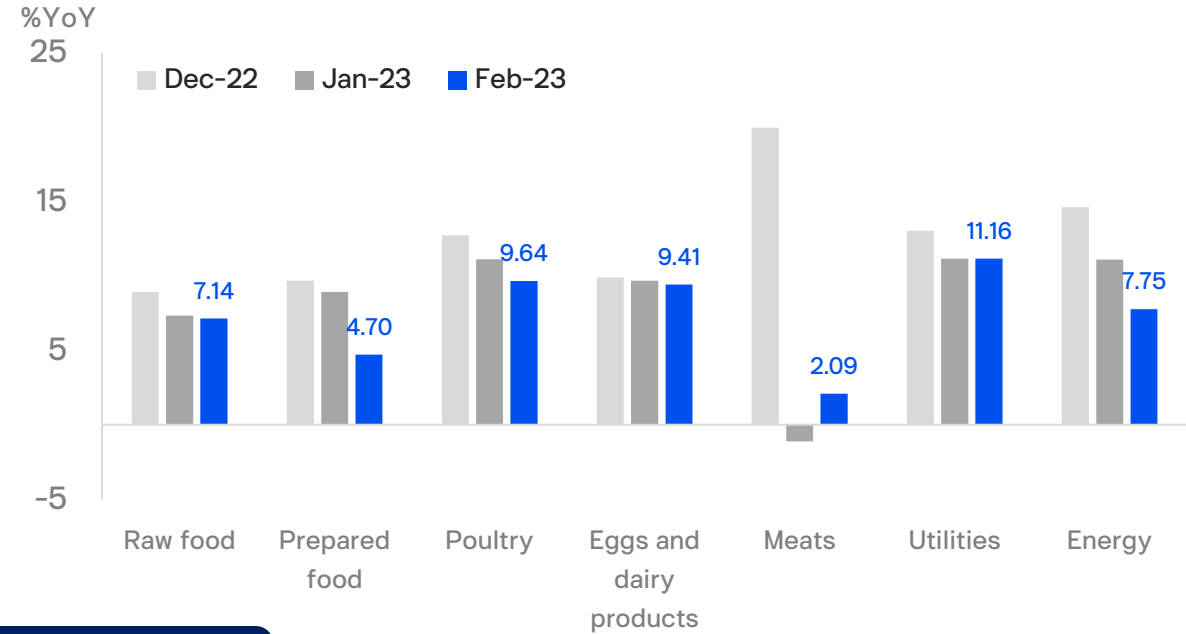


Headline inflation eased to 13-month low

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 | 4.40 |
| 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 | 6.71 |
| 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 | 3.10 |
| 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 | 3.35 |
| 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 | 2.48 |

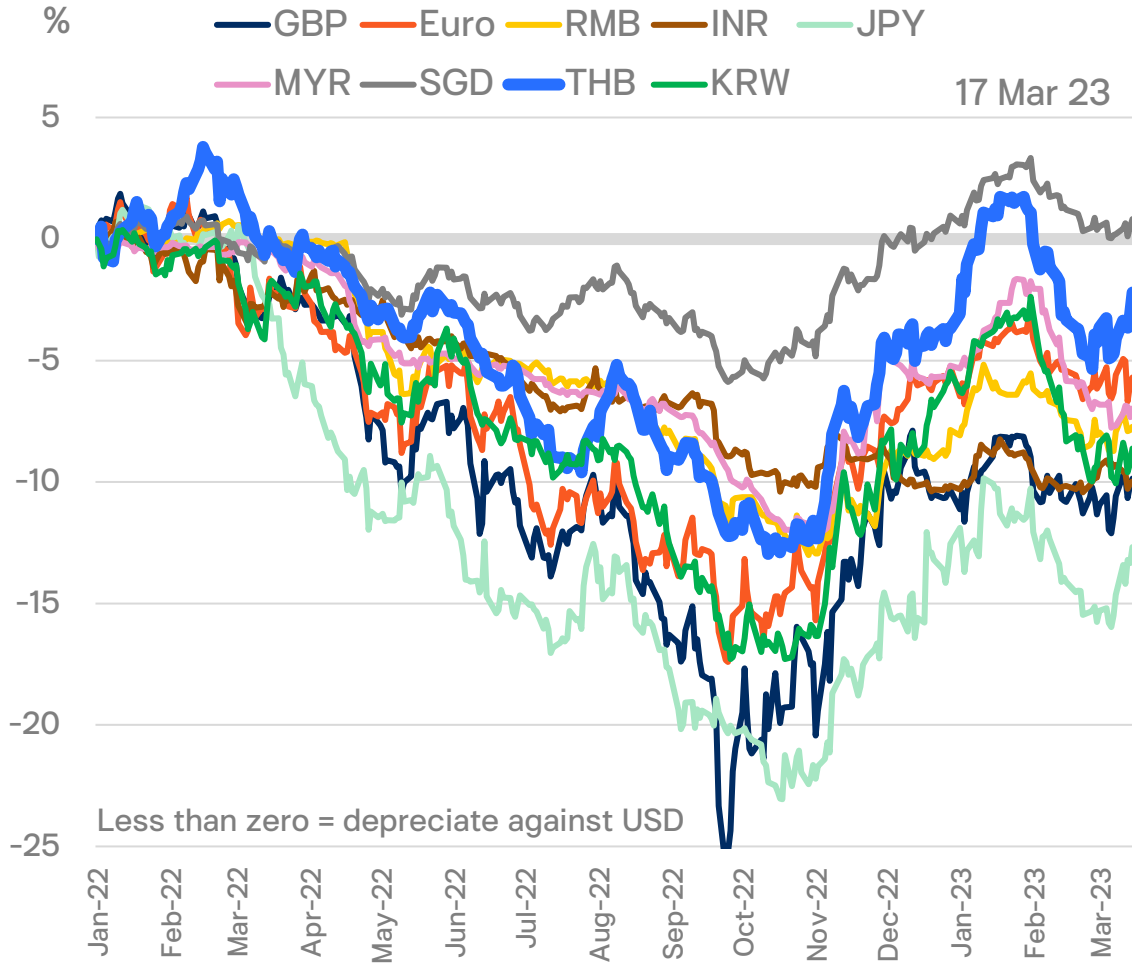
- The headline consumer price index (CPI) dropped to 3.79%YoY in Feb23, compared to 5.02%YoY in previous month. This was due to the ease of energy and food prices in many categories. The core inflation was also below the 3% territory at 1.93%YoY.
- The commerce ministry is projecting inflation to slow in March and is maintaining its forecast for headline inflation at 2% to 3% this year.

PART 3

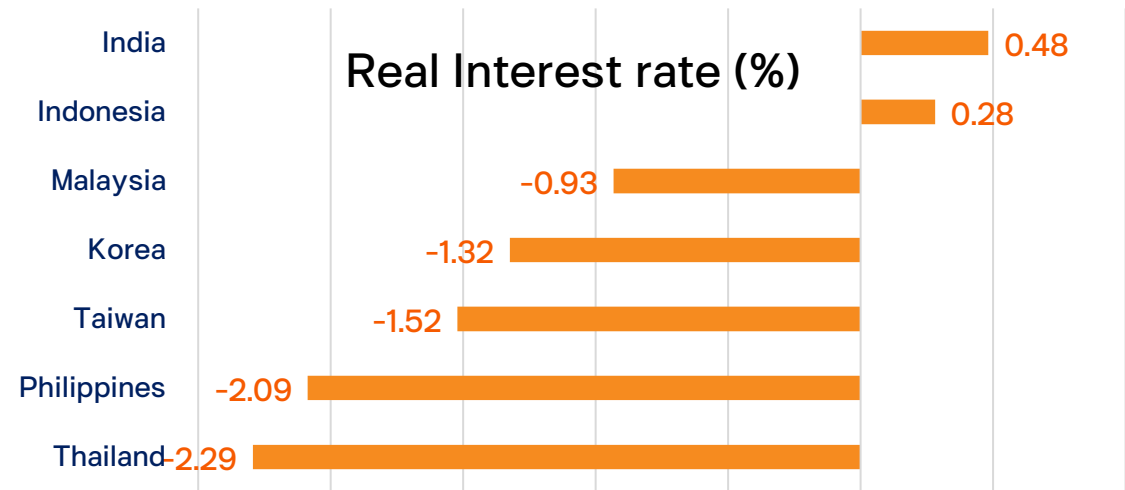
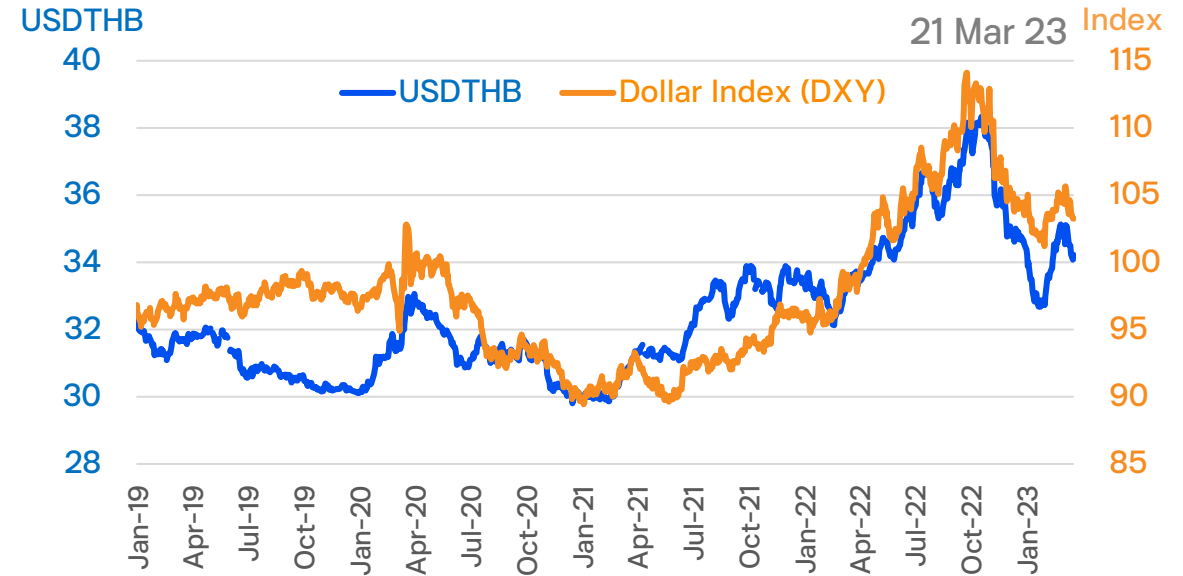
Financial Market



Major Asian currencies against USD



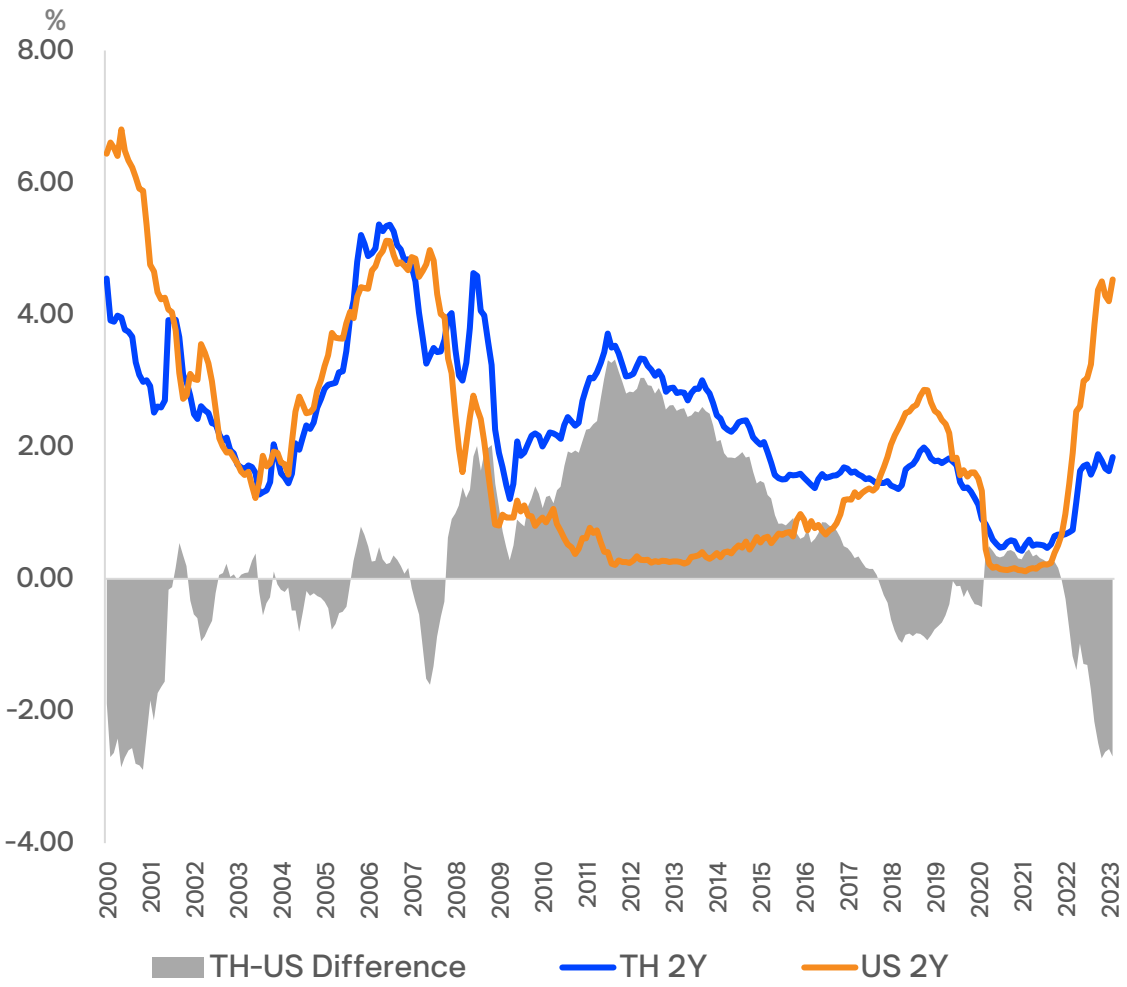
Dollar Index / USDTHB



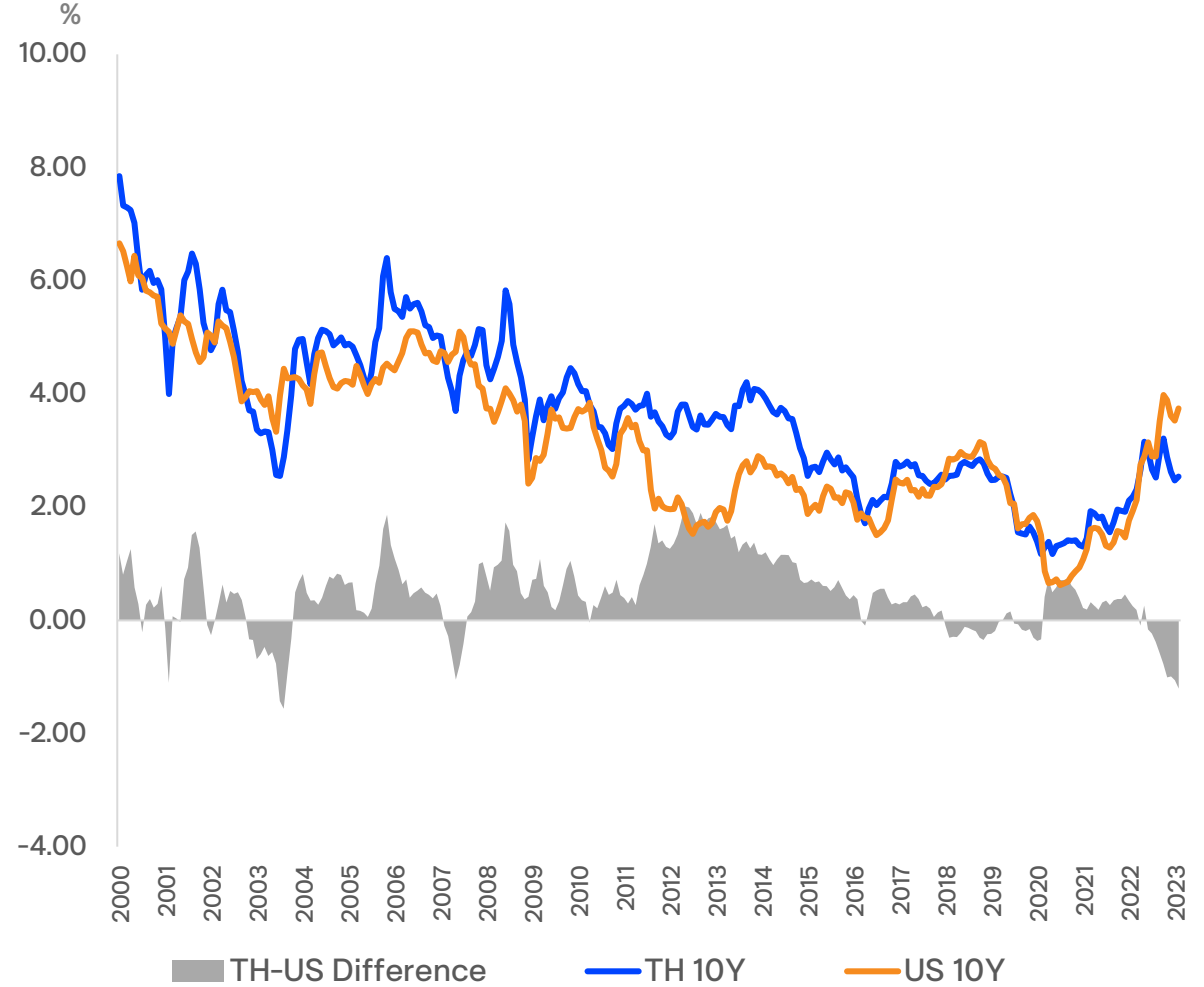
Moreover, greater divergence observed in the short tenure, while the long one aligned



2Y bond yield gap and comparison

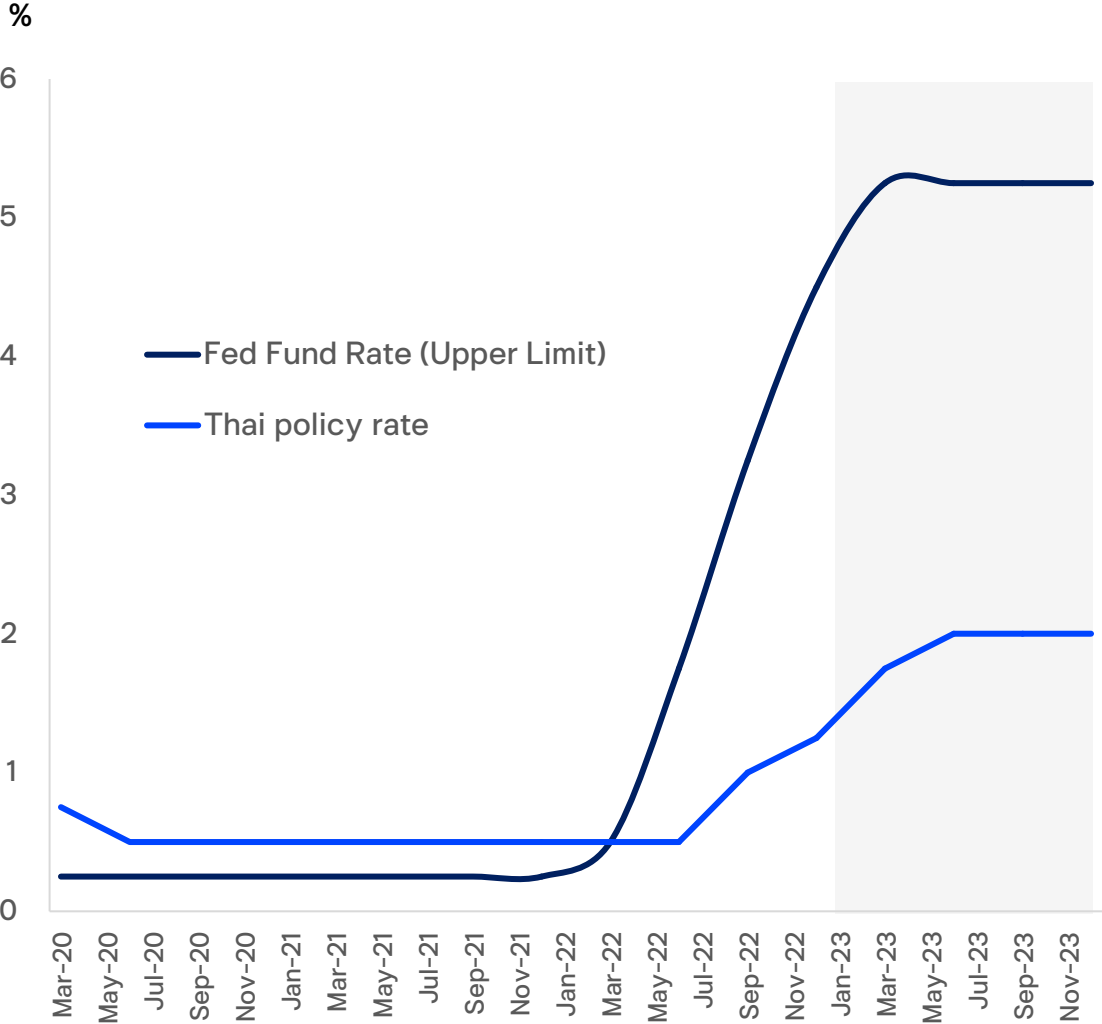


10Y bond yield gap and comparison

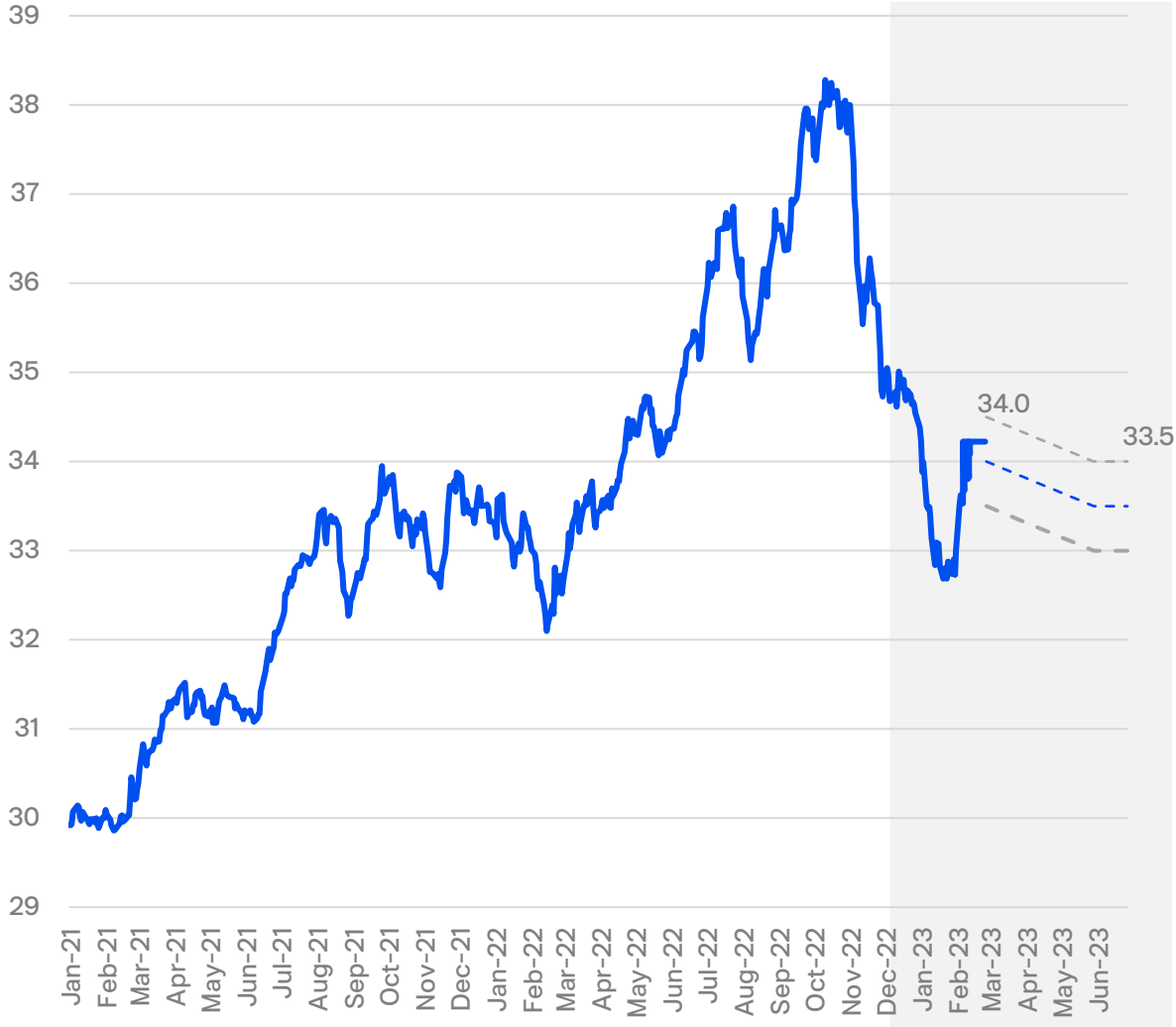


Source : CEiC and ttb analytics

FED-BOT policy rate forecast



USDTHB Projection





USDTHB

- USDTHB ending 35.14 level in February and is hovered around 34.50 – 35.10 in March 2023.
- The annual rate of US headline inflation dropped to 6.0% in February 2023 from 6.4% in the previous month, the lowest since September 2021 but in line with market forecast.
- Fed Chair Jerome Powell said in the testimony against the Congress that Fed is likely to hike rates more than previously expected; however, the market settled once again into a consensus that the Fed will raise interest rates by 25 basis points following the faded concerns over the US banking sector.



EURTHB

- EURTHB ending 37.21 level in February and is hovered around 36.80 – 37.20 in March 2023.
- Recent economic data tends to suggest that the Eurozone's largest economy i.e., Germany has weathered energy price crisis better than had been feared.
- German industrial production rebounded by more than expected in January, up by 3.5% after a revised drop of 2.4% in the prior month. However, consumers are still under pressure as retail sales fell 0.3% in February, albeit being improved from the 5.3% drop in January but still below expectations.



JPYTHB

- JPYTHB ending 0.258 level in February and is hovered around 0.254 – 0.257 in March 2023.
- Bank of Japan held interest rates at record lows and said it will continue with its very soft monetary policy in the last meeting with Governor Haruhiko Kuroda in control.
- The latest GDP figure showed Japan's economy stagnated in the fourth quarter of 2023 with the annual growth of only 0.1%, below the market expectations of 0.8%. The economic weakness amid pressure from high inflation and weak manufacturing would pose challenges on monetary policy conduct going forward.

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.