

Economic and Financial Outlook

ttb analytics

Dec 2023





Global Economy

- In November 2023, global economic momentum had been continuously softened with weak productions and services activities. This is in accordance with the influences of monetary policy tightening in major economies, which comes to an end in December. Market participants have put more weights on interest rate cuts from major central banks over the next year.
- US economic activity had been expanding at a modest pace with supports from labor market resilience and private consumption.
- China's economy slowly recovered with moderate domestic demands while economic policies will continue to provide support for economic recovery



Thai Economy

- In October 2023, the Thai economy continued to recover. Private consumption and investment improved in most categories. The number of foreign tourist arrivals rebounded slightly compared to previous month in several nationalities, especially from the coming of long-haul tourists, while tourists from China and India remained.
- The value of merchandise exports in October expanded further in a year, that increased from the previous month in key agricultural, agro-industry and industrial products. Meanwhile import growth turned positive in 8 months following the import of capital goods.
- Headline inflation in November 2023 was contracted in second-consecutive month, which was due mainly to energy prices including electricity and retail oil price, on the back of government measures. Moreover, food prices also dropped further regarding to high-base effect and less supply of fresh food. Meanwhile, core inflation increased slightly decreased due to higher prepared food prices.



Financial Markets

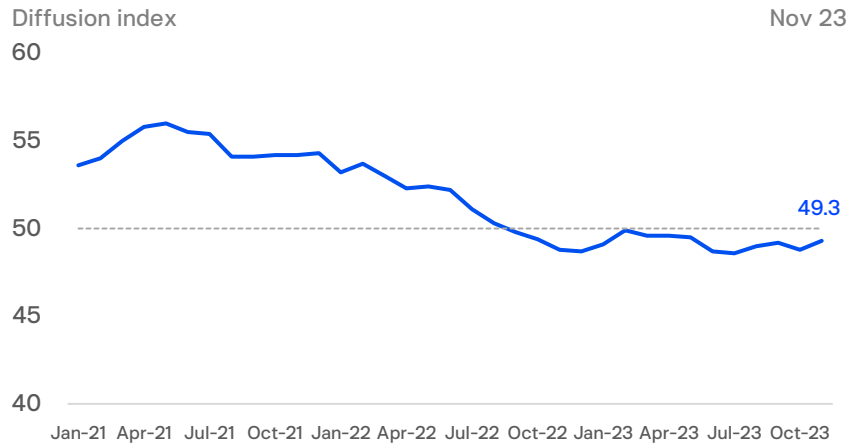
- Major central banks are near the end of their hiking cycle. Market participants and futures market have pointed out possibilities that the Fed would start cutting interest rates as early as in March 2024.
- Investors went into long term bond tenor, for both US and Thai bond, due to anticipation that policy rates move toward their peaks. Meanwhile, 10y-2y yield spread for Thai government bond was still in positive territory.
- USDTHB appreciated in November, ending 34.96 level. It could be around 34.80-35.50 in December. US Dollar dropped from its high levels following market bets of Fed cutting interest rates.

PART 1

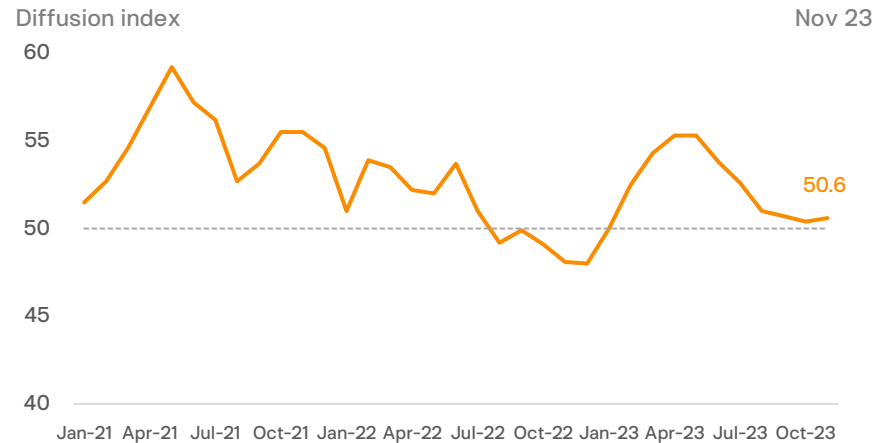
Global Economy



Global Manufacturing PMI



Global Service PMI



- The global economic expansion further decelerated in the third quarter 2023.
- The manufacturing output further contracted especially in major economies.
- The service sector remained in expansion, but the rate of growth continued to trend lower to the weakest since January 2023.

Manufacturing PMI by countries

| | Q1/2022 | Q2/2022 | Q3/2022 | Q4/2022 | Q1/2023 | Q2/2023 | Sep-23 | Oct-23 | Nov-23 |
|-----------------|---------|---------|---------|---------|---------|---------|--------|--------|--------|
| Global | 53.0 | 52.2 | 49.8 | 48.7 | 49.6 | 48.7 | 49.2 | 48.8 | 49.3 |
| US | 58.8 | 52.7 | 52.0 | 46.2 | 49.2 | 46.3 | 44.3 | 44.8 | 47.2 |
| UK | 55.2 | 52.8 | 48.4 | 45.3 | 47.9 | 46.5 | 49.8 | 50.0 | 49.4 |
| EU | 56.3 | 51.6 | 48.1 | 47.5 | 47.3 | 43.4 | 43.4 | 43.1 | 44.2 |
| Euro Zone | 56.5 | 52.1 | 48.4 | 47.8 | 47.3 | 43.4 | 43.4 | 43.2 | 44.4 |
| Germany | 56.9 | 52.0 | 47.8 | 47.1 | 44.7 | 40.6 | 39.6 | 40.8 | 42.6 |
| France | 54.7 | 51.4 | 47.7 | 49.2 | 47.3 | 46.0 | 44.2 | 42.8 | 42.9 |
| Italy | 55.8 | 50.9 | 48.3 | 48.5 | 51.1 | 43.8 | 46.8 | 44.9 | 44.4 |
| Spain | 54.2 | 52.6 | 49.0 | 46.4 | 51.3 | 48.0 | 47.7 | 45.1 | 46.3 |
| Asia exc. China | 53.0 | 52.3 | 50.9 | 50.2 | 50.5 | 50.7 | 50.5 | 49.8 | 50.5 |
| China | 48.1 | 51.7 | 48.1 | 49.0 | 50.0 | 50.5 | 50.6 | 49.5 | 50.7 |
| Australia | 57.7 | 56.2 | 53.5 | 50.2 | 49.1 | 48.2 | 48.7 | 48.2 | 47.7 |
| India | 54.0 | 53.9 | 55.1 | 57.8 | 56.4 | 57.8 | 57.5 | 55.5 | 56.0 |
| Japan | 54.1 | 52.7 | 50.8 | 48.9 | 49.2 | 49.8 | 48.5 | 48.7 | 48.3 |
| Korea | 51.2 | 51.3 | 47.3 | 48.2 | 47.6 | 47.8 | 49.9 | 49.8 | 50.0 |
| Indonesia | 51.3 | 50.2 | 53.7 | 50.9 | 51.9 | 52.5 | 52.3 | 51.5 | 51.7 |
| Thailand | 51.8 | 50.7 | 55.7 | 52.5 | 53.1 | 53.2 | 47.8 | 47.5 | 47.6 |

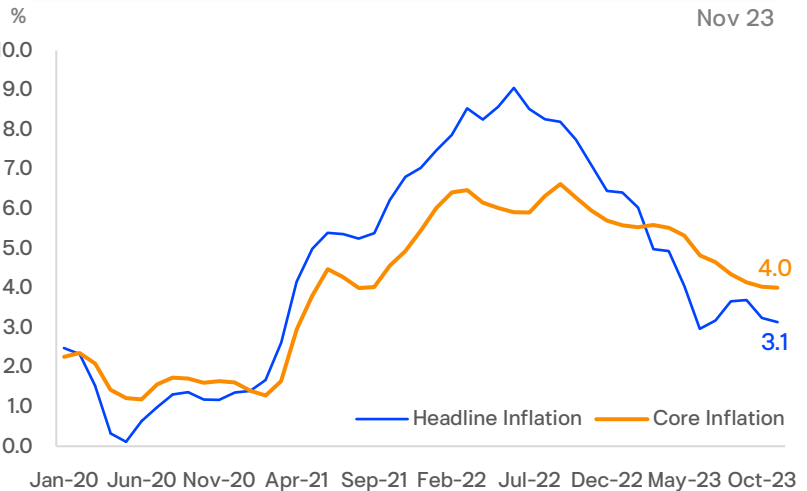
Service PMI by countries

| | Mar-22 | Jun-22 | Sep-22 | Dec-22 | Mar-23 | Jun-23 | Sep-23 | Oct-23 | Nov-23 |
|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| World | 53.5 | 53.7 | 49.9 | 48 | 54.3 | 53.8 | 50.7 | 50.4 | 50.6 |
| US | 61.3 | 53.4 | 52.4 | 43.0 | 54.7 | 54.5 | 49.2 | 49.8 | 51.5 |
| UK | 60.9 | 57.0 | 54.3 | 49.5 | 54.3 | 54.4 | 51.3 | 50.8 | 52.3 |
| EU | 55.6 | 53.0 | 48.8 | 49.8 | 55.0 | 52.0 | 48.7 | 47.8 | 48.7 |
| Germany | 56.1 | 52.4 | 45.0 | 49.2 | 53.7 | 54.1 | 50.3 | 48.2 | 49.6 |
| France | 57.4 | 53.9 | 52.9 | 49.5 | 53.9 | 48.0 | 44.4 | 45.2 | 45.4 |
| Italy | 52.1 | 51.6 | 48.8 | 49.9 | 55.7 | 52.2 | 49.9 | 47.7 | 49.5 |
| Spain | 53.4 | 54.0 | 48.5 | 51.6 | 59.4 | 53.4 | 50.5 | 51.1 | 51.0 |
| Asia exc. China | 49.8 | 55.6 | 52.7 | 52.9 | 55.9 | 55.2 | 55.6 | 53.3 | 52.6 |
| China | 42.0 | 54.5 | 49.3 | 48.0 | 57.8 | 53.9 | 50.2 | 50.4 | 51.5 |
| Australia | 55.6 | 52.6 | 50.6 | 47.3 | 48.6 | 50.3 | 51.8 | 47.9 | 46.0 |
| India | 53.6 | 59.2 | 54.3 | 58.5 | 57.8 | 58.5 | 61 | 58.4 | 56.9 |
| Japan | 49.4 | 54 | 52.2 | 51.1 | 55 | 54 | 53.8 | 51.6 | 50.8 |

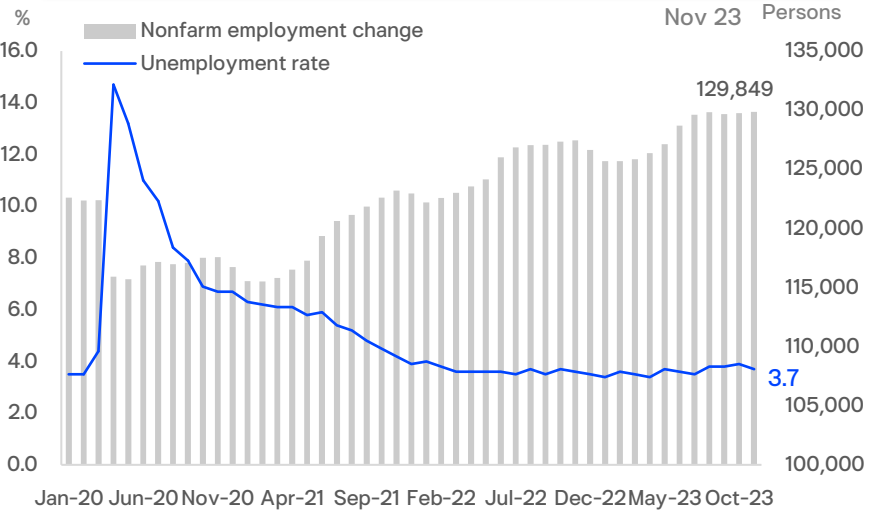
Fed is anticipated to cut interest rates next year while economic conditions remained resilient



US inflation rates



US labor market

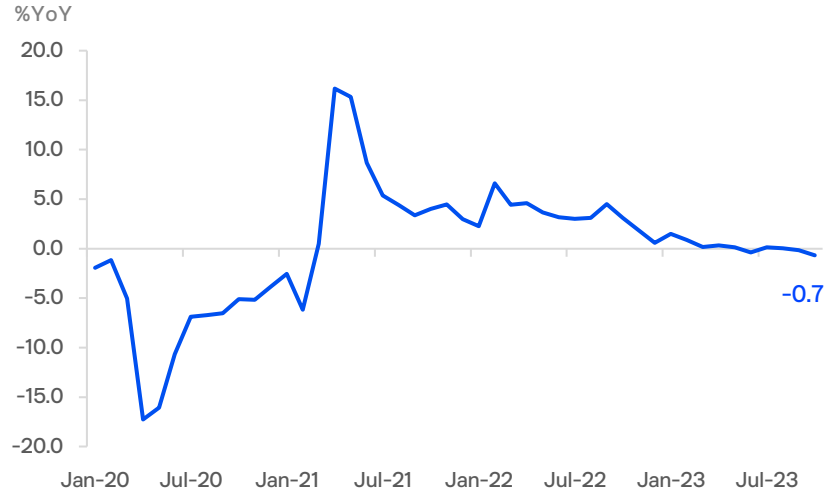


US economy The US economy remains underpinned by the labor market, and strong retail sales. The resilience of the consumer provides credibility to the Fed achieving a soft landing, but should also be a signal to markets that the Fed is not likely to cut rates as quickly and as much as the markets now have priced in. The Federal Reserve held interest rates steady on Wednesday and signaled in new economic projections that the historic tightening of monetary policy engineered over the last two years is at an end and lower borrowing costs are coming in 2024.

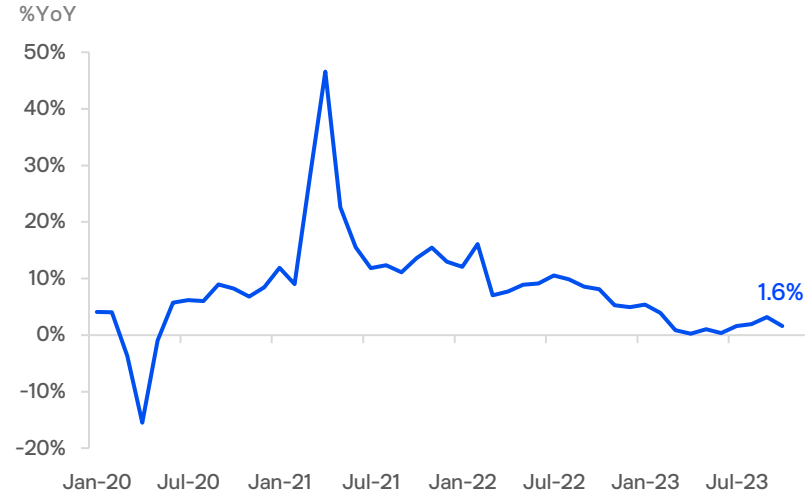
US GDP growth rate



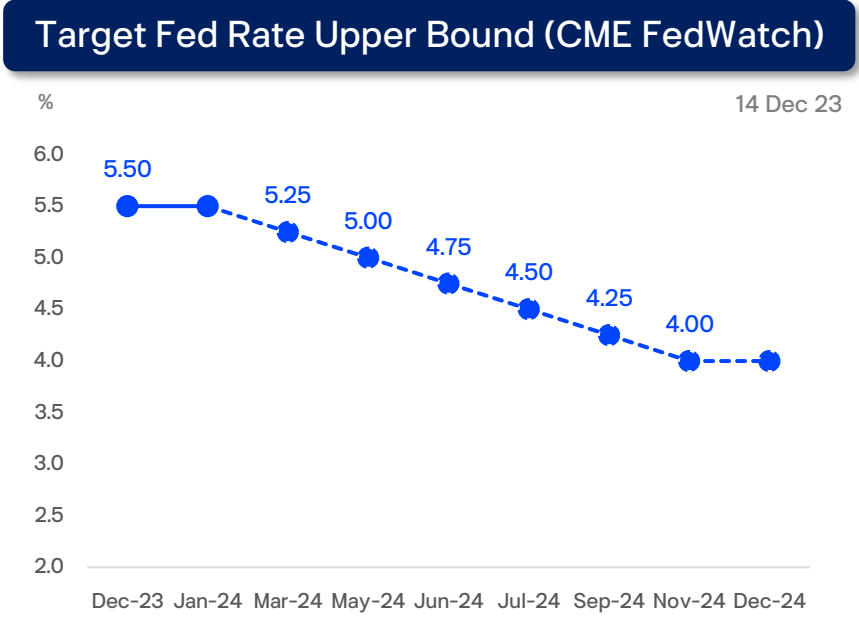
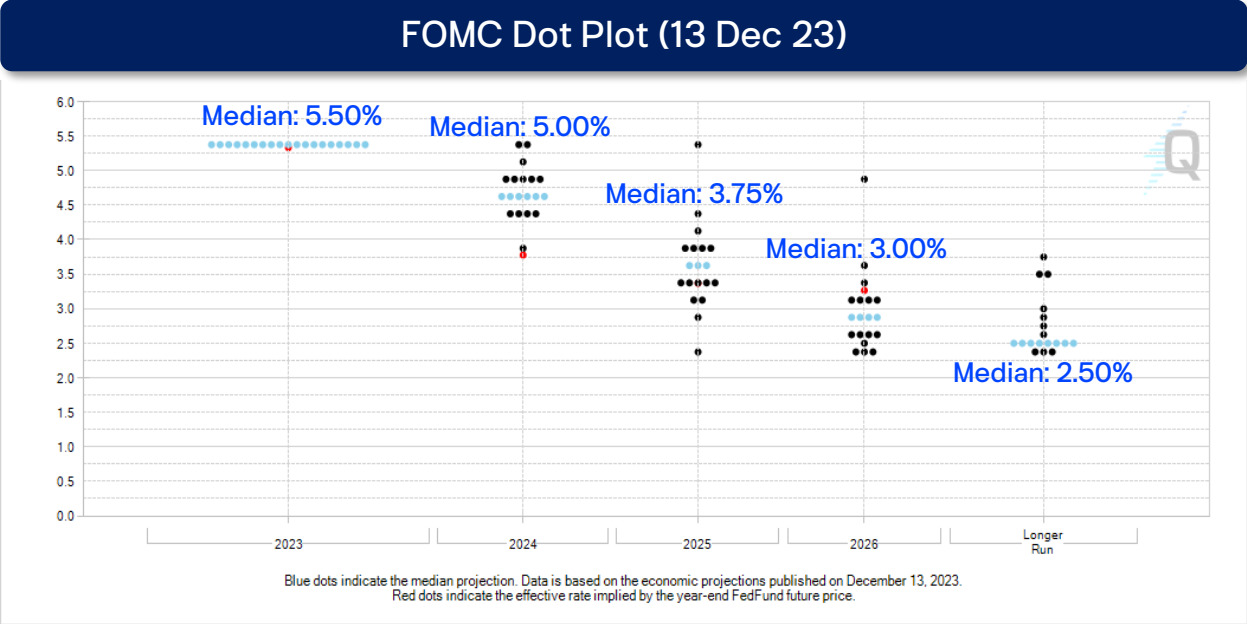
US Industrial Production



US Retail Sales



Source: CEIC, and ttb analytics



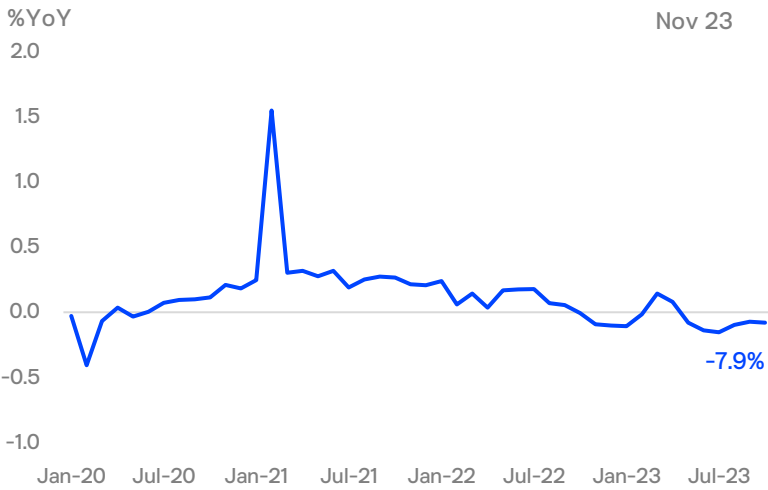
US economy The recent dot plot of Federal Reserve signaled in new economic projections that US interest rate increases have come to an end and lower borrowing costs are coming in 2024. A near unanimous 17 of 19 Fed officials project that the policy rate will be lower by the end of 2024, with the median projection showing the rate falling three-quarters of a percentage point from the current 5.25%-5.50% range. No officials see rates higher by the end of next year. The Fed kept interest rates steady for the third meeting in a row, as was widely expected.

Traders are now pricing in a 67.5% probability of a rate cut in March, up from 49% earlier Fed's meeting, and a 60.3% likelihood by May, according to the CME Group's FedWatch Tool.

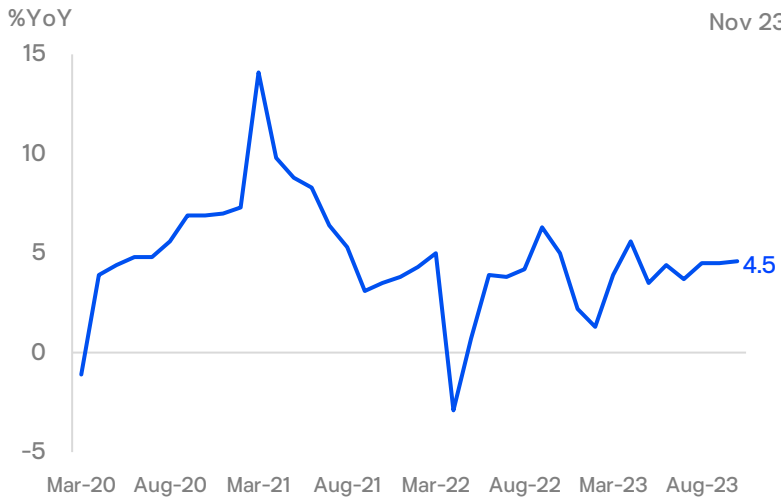
Chinese economy China's property sector worsened in November as negative home buyer sentiment and indebted developers drove down sales and investment, while broader retail sector activity missed forecasts, suggesting more support is needed to shore up demand.

Industrial output grew faster than expectations and marked the strongest growth since September 2022. Meanwhile, retail sales accelerated from last month but missed analysts' expectations mainly fueled by the low base effect in 2022 when COVID curbs disrupted consumers and businesses.

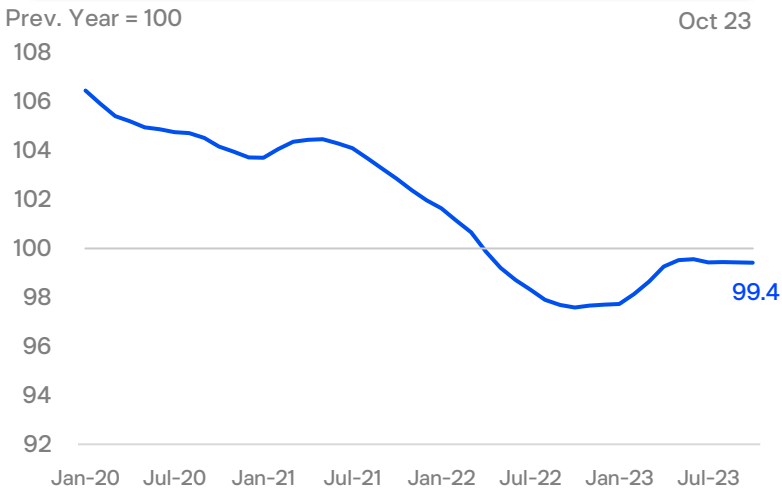
China Merchandise exports



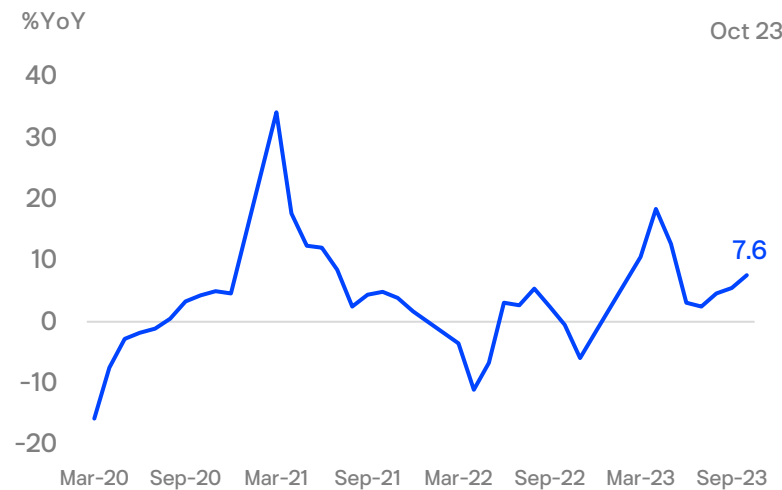
China Industrial Production



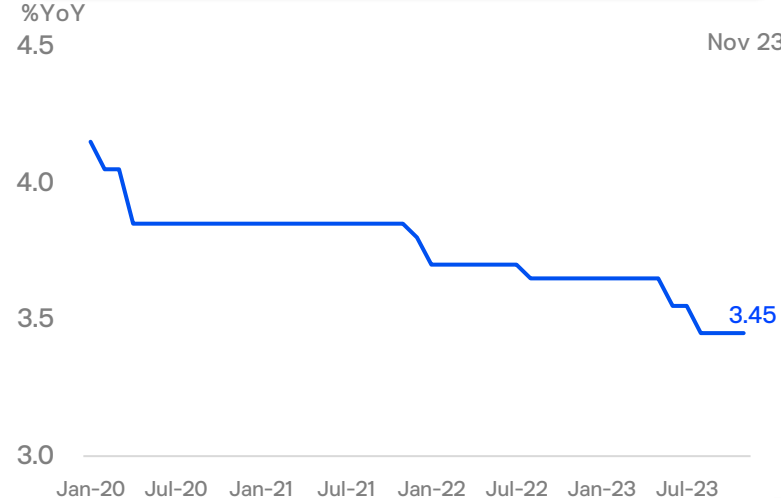
China Property Price



China Retail sales



China 1Y Loan Prime Rate



Source: CEIC, and ttb analytics

PART 2

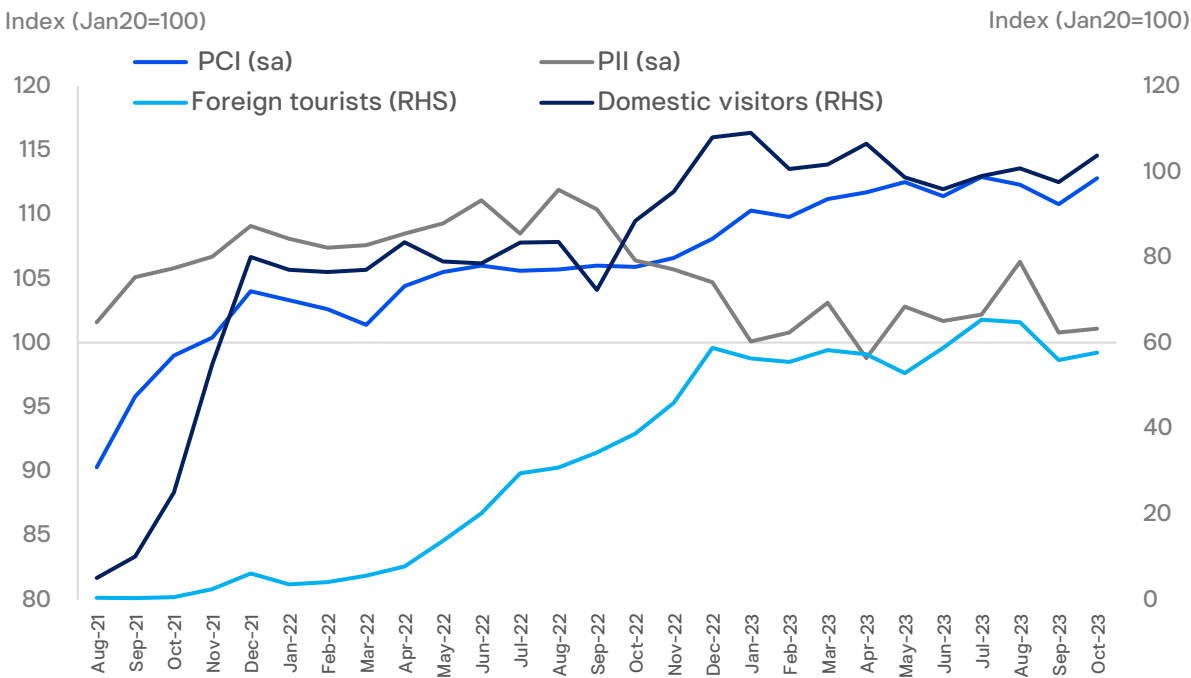
Thai Economy



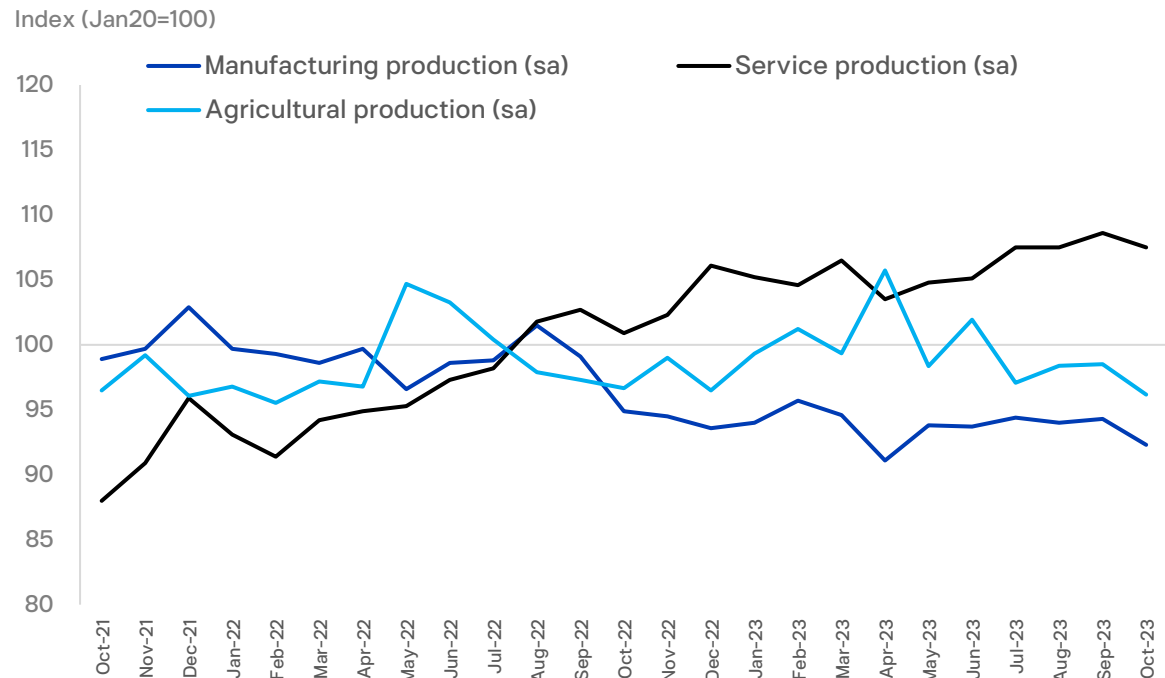
In October, domestic demand likely to improve, tourism rebounded slightly



Demand-side indicators



Supply-side indicators



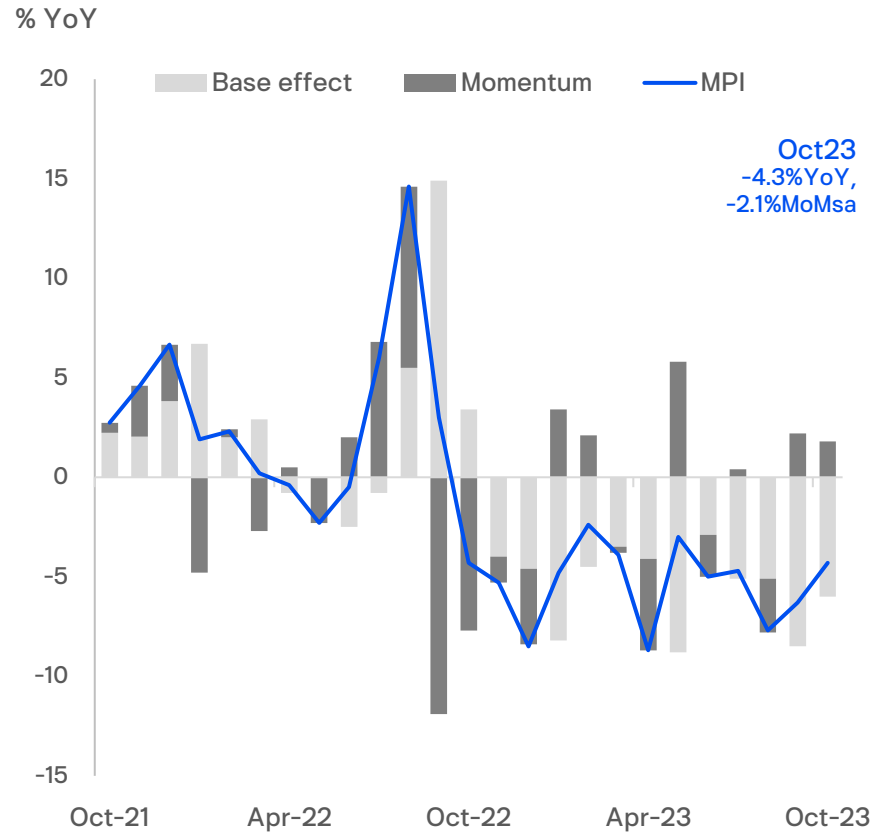
Leading Economic Index (sa) (Jan2020=100)

| Leading Economic Index and Components (SA) | Oct-22 | Nov-22 | Dec-22 | Jan-23 | Feb-23 | Mar-23 | Apr-23 | May-23 | Jun-23 | Jul-23 | Aug-23 | Sep-23 | Oct-23 |
|---|--------|--------|--------|--------|--------|---------|--------|--------|--------|--------|--------|--------|--------|
| Authorized Capital of Newly Registered Companies (Million Baht) | 197.9 | 114.6 | 120.7 | 118.5 | 108.9 | 1,707.8 | 119.2 | 163.2 | 227.6 | 95.2 | 141.9 | 138.2 | 156.1 |
| Construction Areas Permitted (1000 sq. m) | 78.3 | 99.7 | 103.0 | 86.4 | 96.9 | 103.9 | 94.7 | 98.2 | 102.5 | 115.2 | 96.4 | 125.4 | 101.5 |
| Export Volume index (exclude Gold) | 106.3 | 106.1 | 105.2 | 106.8 | 110.5 | 109.3 | 108.1 | 110.2 | 111.5 | 109.2 | 107.1 | 112.0 | 110.5 |
| Business Sentiment Index (3 months) | 101.4 | 102.6 | 104.0 | 107.3 | 107.3 | 109.3 | 109.1 | 108.6 | 108.5 | 106.6 | 105.6 | 106.4 | 104.9 |
| SET index | 106.2 | 108.0 | 110.2 | 110.4 | 107.1 | 106.3 | 101.0 | 101.3 | 99.3 | 102.8 | 103.4 | 97.2 | 91.3 |
| Oil Price Inverse Index (Dubai) | 1.1 | 1.2 | 1.3 | 1.2 | 1.2 | 1.3 | 1.2 | 1.3 | 1.3 | 1.3 | 1.2 | 1.1 | 1.1 |

Source: Bank of Thailand and ttb analytics.

Manufacturing production dropped from previous month in major products

Manufacturing Production Index (MPI)



MPI by sector (Base Jan 2020=100)

| Contribution | Oct-22 | Nov-22 | Dec-22 | Jan-23 | Feb-23 | Mar-23 | Apr-23 | May-23 | Jun-23 | Jul-23 | Aug-23 | Sep-23 | Oct-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) | -4.3 | -5.3 | -8.5 | -4.8 | -2.4 | -3.9 | -8.7 | -3.0 | -5.0 | -4.7 | -7.7 | -6.3 | -4.3 |

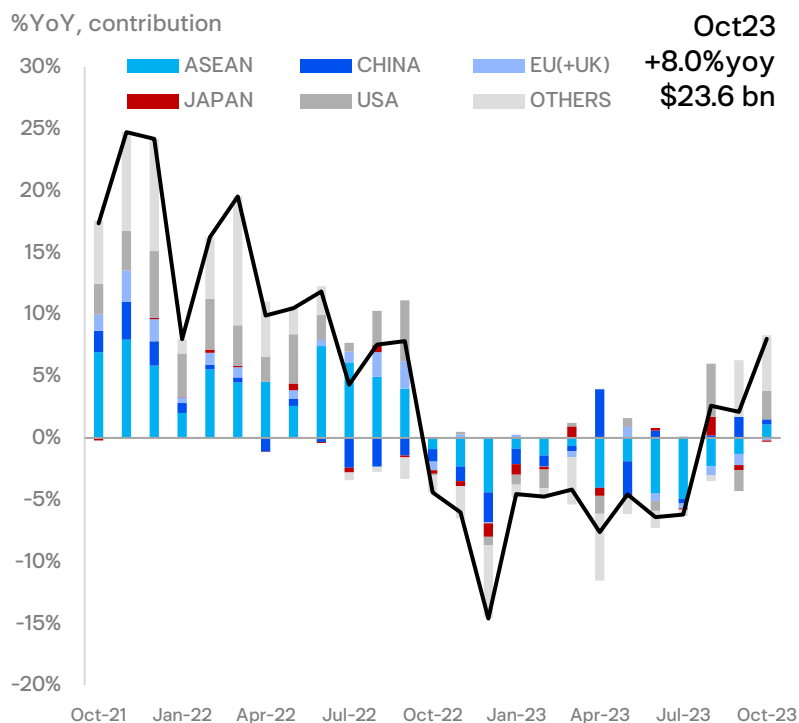
- As of Oct23, Manufacturing Production Index (MPI) was contracted at 4.3%YoY, compared to the month earlier at 6.3% contraction. Food products dropped sharply after a good expansion in preceding months as well as hard disk drives (HDD) and automotive production. However, production of petroleum improved regarding to the recovery after temporary refinery operation cease.

Thailand export growth in October highest in more than a year

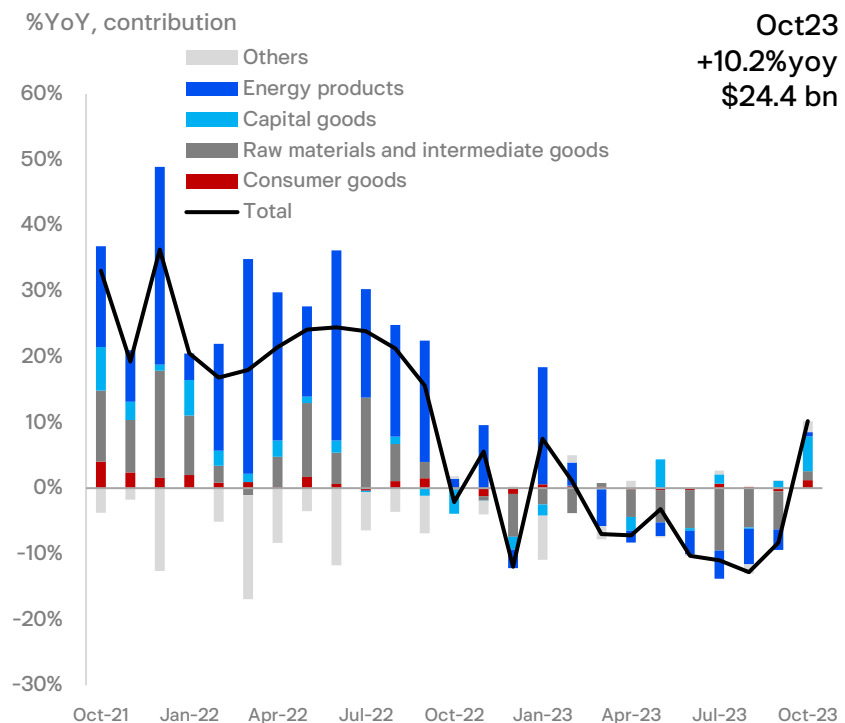
Exports value by product and destination*

Unit: %YoY

| | 1Q/23 | 2Q/23 | 3Q/23 | Jul-23 | Aug-23 | Sep-23 | Oct-23 |
|----------------------|--------------|--------------|--------------|--------------|-------------|-------------|-------------|
| Auto and parts | 4.4% | 6.5% | 10.5% | 24.6% | 5.2% | 3.3% | 9.0% |
| Computer and parts | -15.0% | -15.3% | -25.1% | -24.2% | -26.9% | -24.3% | -4.2% |
| HDD | -28.8% | -37.0% | -40.4% | -46.3% | -48.4% | -33.7% | -29.0% |
| Rubber | -4.6% | -8.3% | -5.4% | -6.2% | -4.7% | -5.5% | 0.1% |
| Integrated circuit | -0.3% | 2.9% | 16.4% | 3.2% | 39.8% | 5.1% | 4.6% |
| Refinery oil | 4.0% | -29.1% | -1.5% | -38.0% | 21.2% | 27.3% | 65.1% |
| Electronic machinery | -6.2% | -5.9% | 5.4% | 6.0% | 6.4% | 4.1% | 7.8% |
| Plastic pallet | -26.5% | -22.6% | -10.4% | -15.8% | -9.9% | -5.3% | 3.1% |
| Chemical products | -18.9% | -17.0% | -20.2% | -30.6% | -11.1% | -18.1% | -10.7% |
| Jewelry (ex gold) | 22.3% | 2.0% | 8.5% | -2.8% | -10.4% | 27.3% | 8.7% |
| Total | -4.5% | -6.1% | -0.5% | -6.2% | 2.6% | 2.1% | 8.0% |



Imports value by groups*



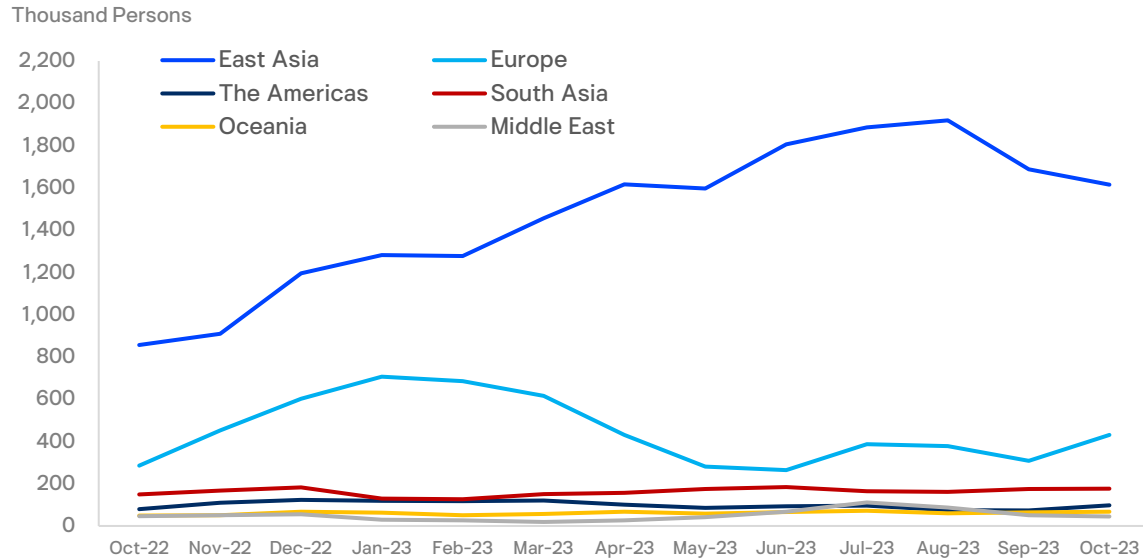
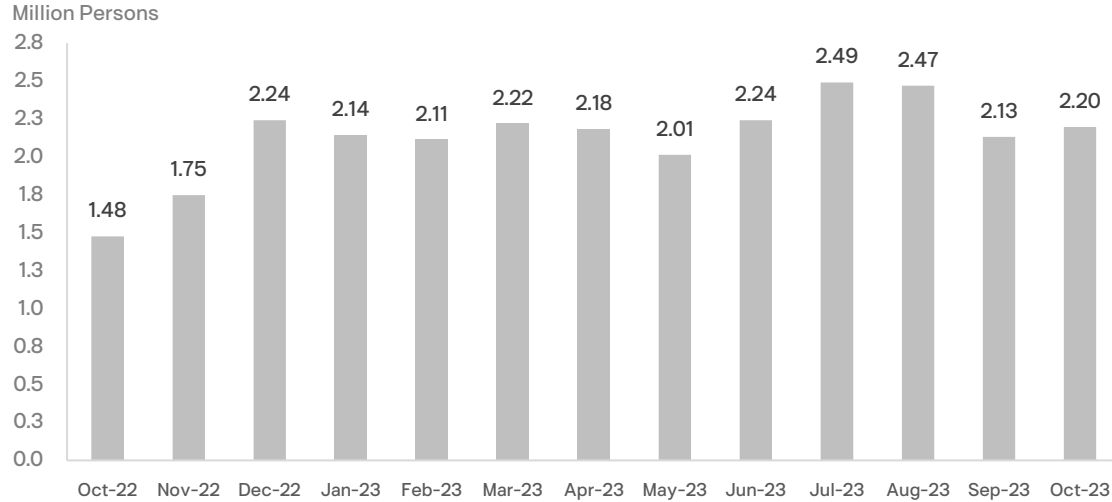
| %yoy,value | 2019 | 2020 | 2021 | 2022 | 2023YTD |
|---------------------|--------------------------|---------------------------|--------------------------|--------------------------|----------------------------|
| Total export | -2.6% \$246 bn | -5.9% \$232 bn | 17.1% \$272 bn | 5.5% \$287 bn | -2.7% \$236.6 bn |
| Total import | -4.8% \$236 bn | -12.7% \$206 bn | 29.8% \$267 bn | 13.6% \$303 bn | -4.6% \$243.3 bn |

- Export value in Oct23 grew 8.0%YoY, which was the third-consecutive month expansion, and highest in 13 months, partially from the low-base effect and trade rebound. That increased from the previous month in major categories, especially 1) agricultural and agro-industry products (e.g. rice, tapioca, fruits) 2) IT-related products (e.g. computer and parts, IC, transistor) and 3) automotive and parts.
- On the other hand, imports value turned 10.2%YoY expansion in 8 months from most import categories

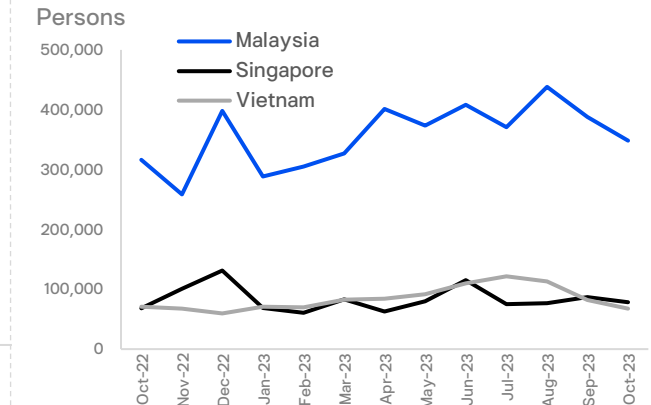
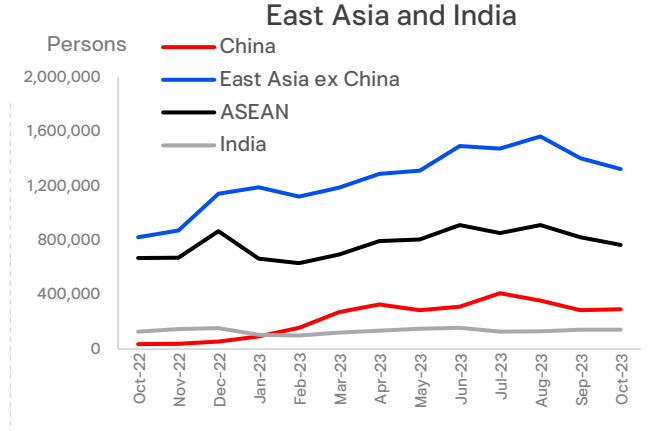
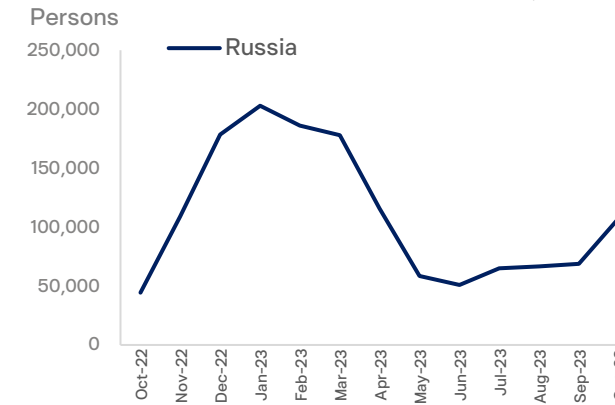
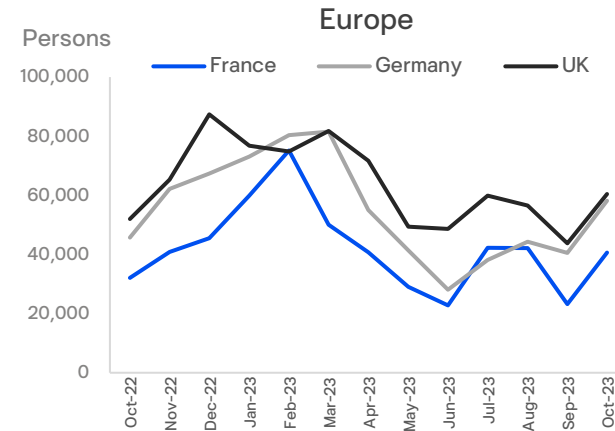
Foreign arrivals slightly improved from long-haul tourists



Total Foreign Tourist Inbounds



Foreign Tourist Inbounds by key regions

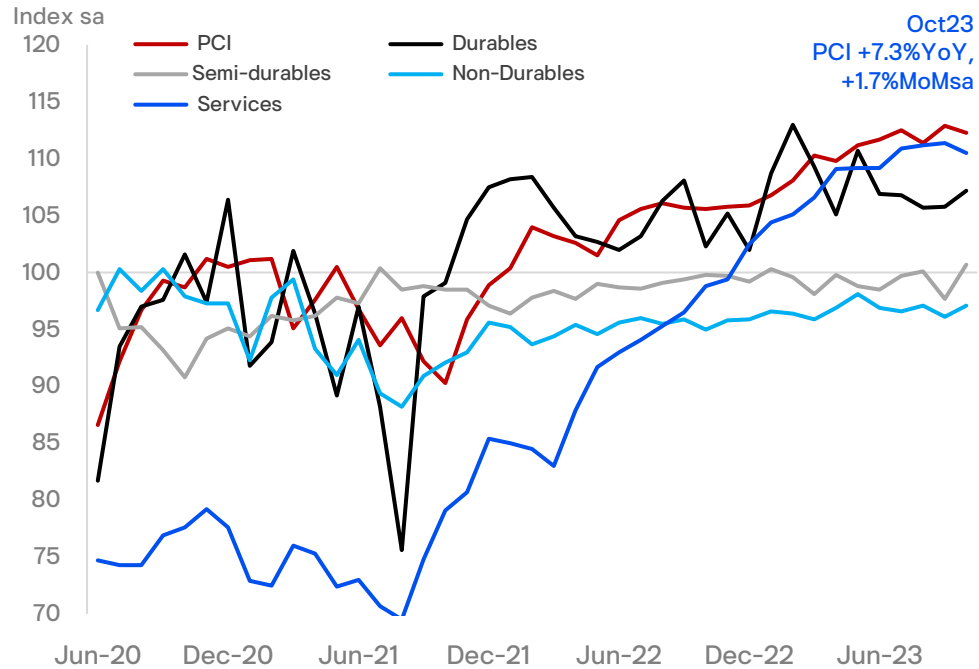


- As of Oct23, foreign tourist arrivals was at 2.20 million, slightly improved from the previous month in several nationalities, especially in long-haul destination while tourists from China and India remained.

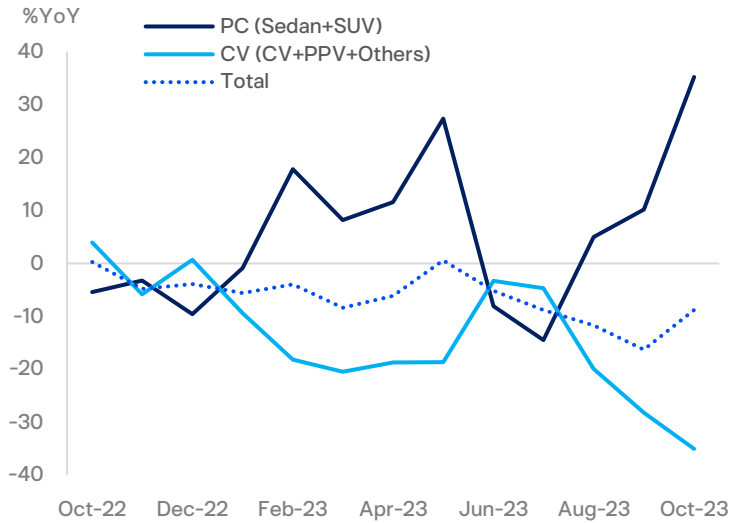
Private consumption increased in almost all categories



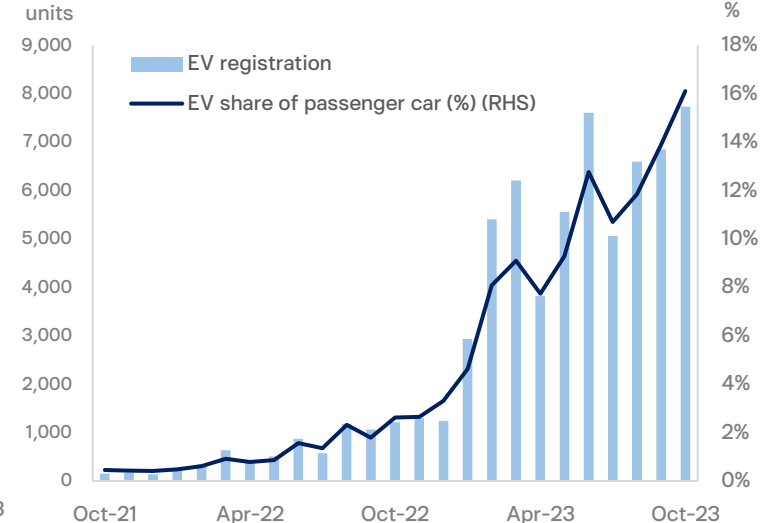
Private Consumption Indicators (SA)



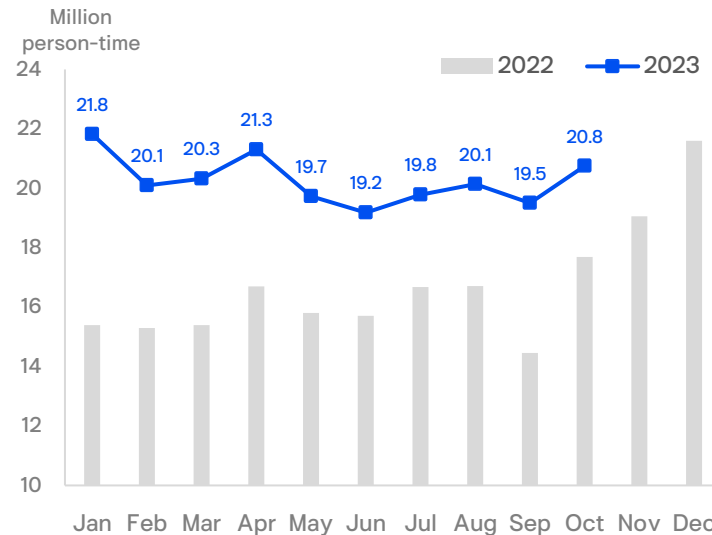
Domestic car sales



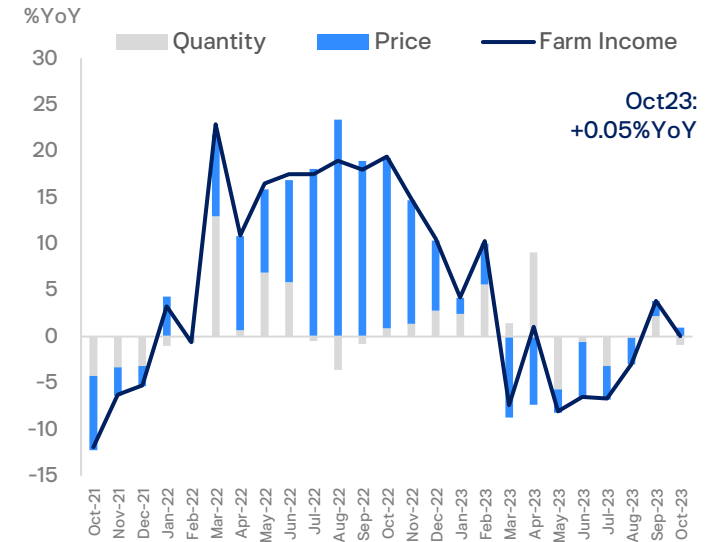
EV registration



Thai domestic visitors*



Farm Incomes

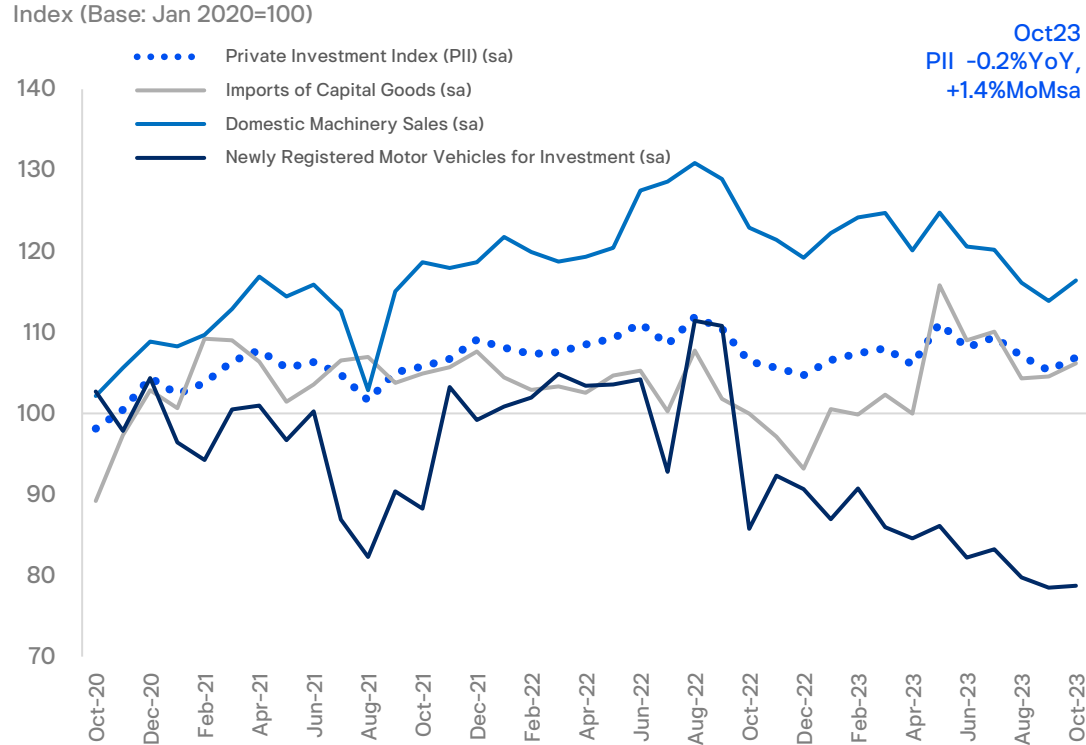


- Private consumption indicators, increased from the previous month in almost all categories, except spending in services, which softened from lower spending in the hotel and restaurant category. This was in line with the lower number of Thai and foreign tourists.
- Nevertheless, increases in consumption continued to be supported by improvement in employment and consumer confidence.

Private investment improved slightly from the previous month

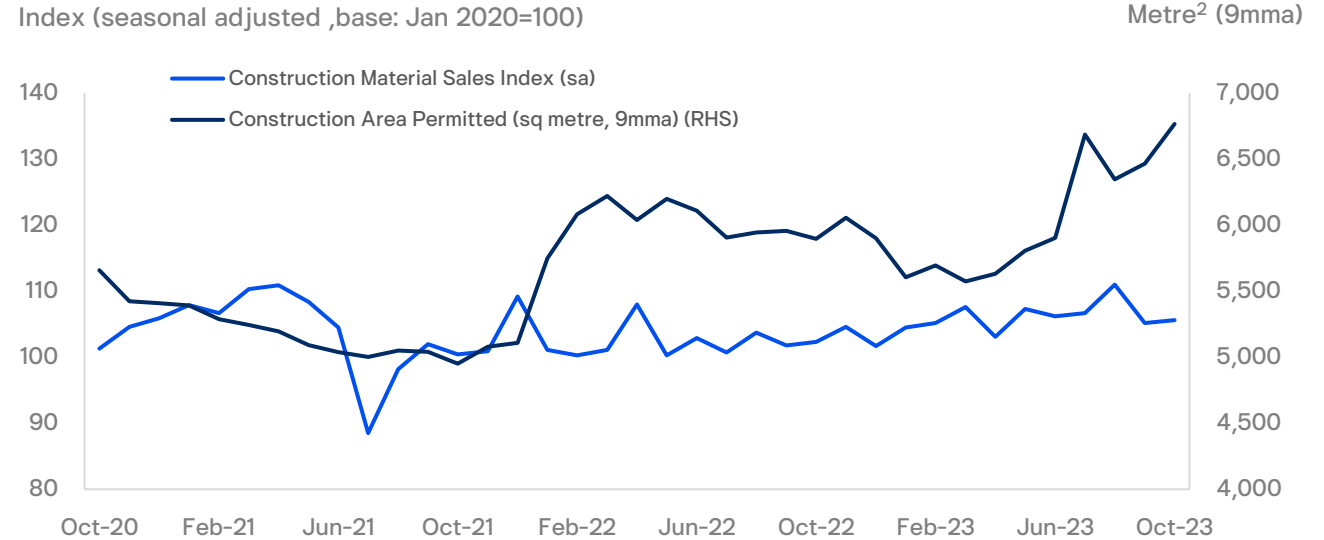


Private Investment Indicators (SA)

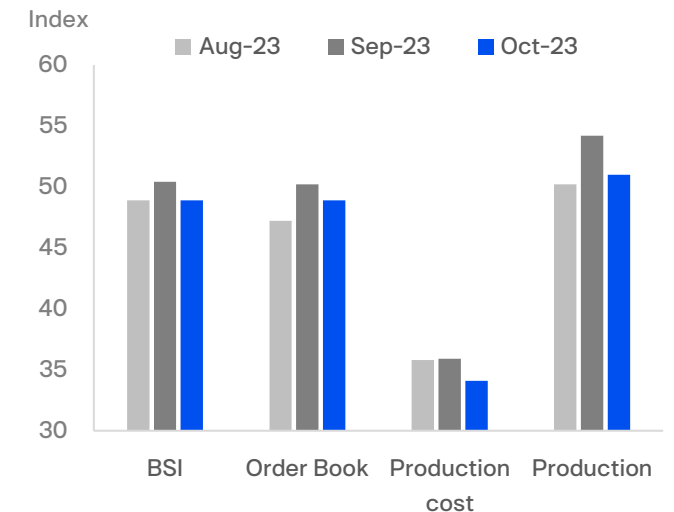
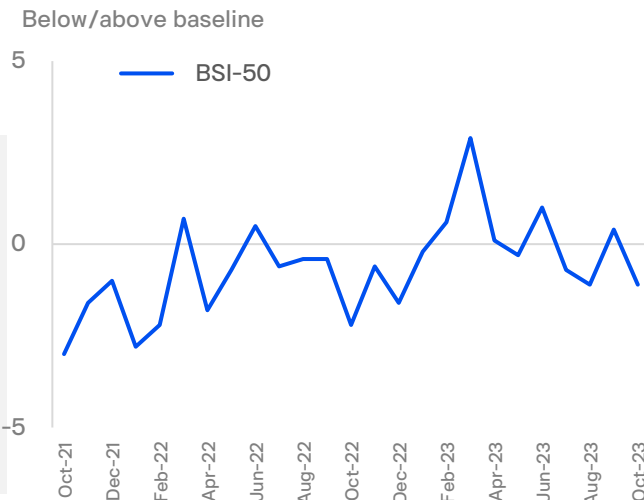


- Private investment indicators, improved from the previous month. Investment in machinery and equipment increased from higher sales of domestic machinery as well as higher imports of capital, while registrations of commercial vehicle remained flat from the previous month.
- Investment in construction also improved from increases in both permitted area for construction and sales of construction materials.

Construction sector (SA)



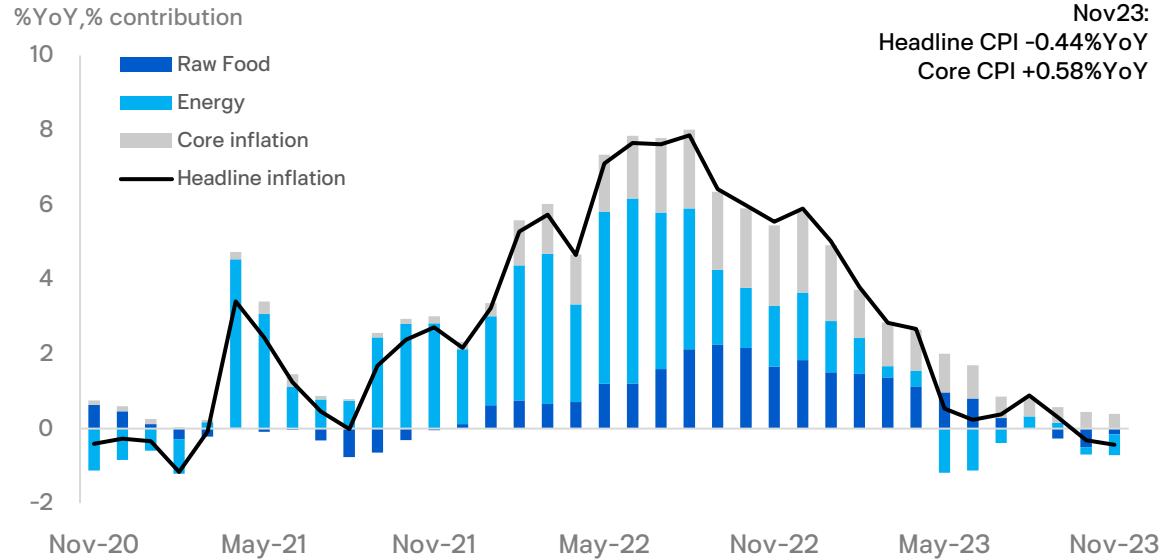
Business Sentiment Index



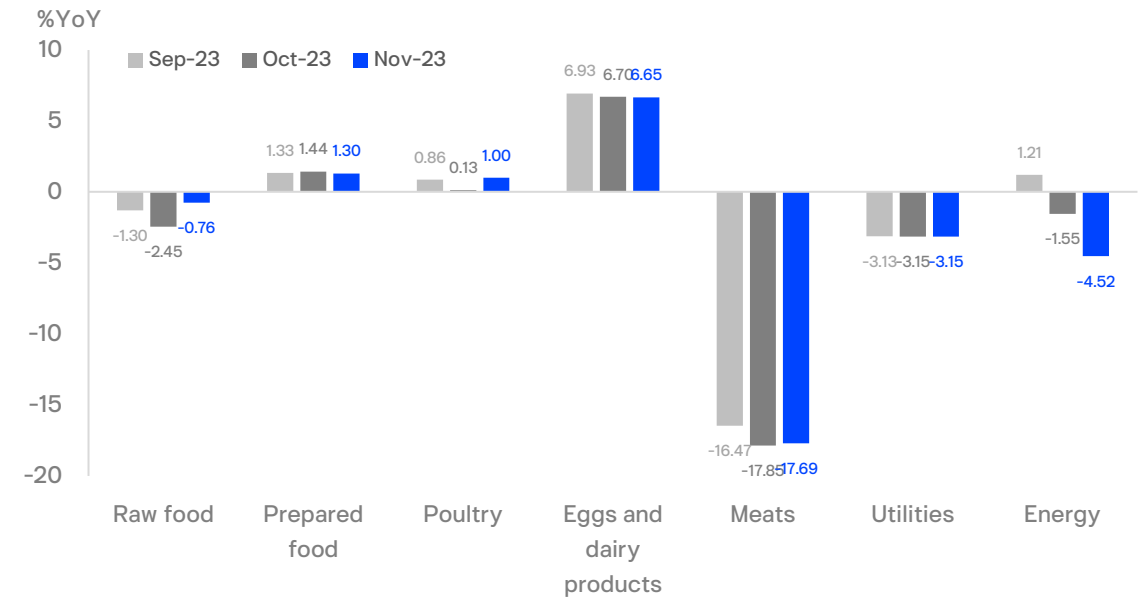
November's headline inflation down negative again for second-consecutive month, lowest in 33 months, while the core remained



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 | 1.90 | -0.9 | 0.19 | 0.67 | 1.07 | 0.71 | -0.84 | 1.24 | 6.08 | 1.40 |
| Food | 4.08 | 11.56 | 4.54 | 5.43 | 7.94 | 4.89 | 3.41 | 3.94 | 1.14 | 1.60 | 0.01 | 0.41 | 2.32 | 1.23 | -0.12 | 6.91 | 2.87 |
| Housing | 0.13 | -3.19 | -1.55 | 2.03 | 1.31 | 2.73 | 1.90 | 1.41 | 0.59 | -0.99 | 0.17 | 1.03 | 0.42 | -1.02 | -1.69 | 4.81 | 1.39 |
| 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 | -0.87 |
| 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 | 1.33 |

*Jan-Nov23

- The headline inflation (CPI) dropped to -0.44%YoY in November, compared to the previous month at -0.31%.
- This was mainly due to the decrease of energy prices such as electricity and diesel regarding to government measures, as well as major food prices also dropped, including meat, poultry, seafood and seasoning. However, the core inflation was slightly decrease to 0.58%YoY.
- During Jan-Nov23, headline and core inflation was 1.40% and 1.33% respectively in line with the target inflation.

Economic forecast 2023-2024 (Dec23)

| %YoY | 2022 | 2023 (Q1-Q3) | 2023E | 2024F* |
|-------------------------------|------------|--------------|------------|------------|
| GDP | 2.7 | 1.9 | 2.4 | 3.1 |
| Private consumption | 6.3 | 7.3 | 6.4 | 3.2 |
| Private investment | 5.1 | 2.2 | 0.8 | 2.9 |
| Government consumption | 0.2 | -5.2 | -4.5 | 2.7 |
| Public investment | -4.9 | 0.3 | -0.4 | 2.3 |
| Export value** | 5.5 | -3.8 | -1.1 | 2.0 |
| Import value** | 12.8 | -6.0 | -3.9 | 2.9 |
| Foreign arrivals (M. persons) | 11.2 | 20.0 | 27.5 | 33.1 |
| Headline inflation | 6.1 | 1.8 | 1.3 | 2.0 |
| Policy rate (% period-end) | 1.25 | 2.5 | 2.5 | 2.5 |

Positive factors

- Private consumption expected to rise thanks to reducing cost-of-living and stimulus measures
- Tourism sectors continued to recover, particularly in number of foreign tourist arrivals, to boost up degree of income distribution

Negative factors

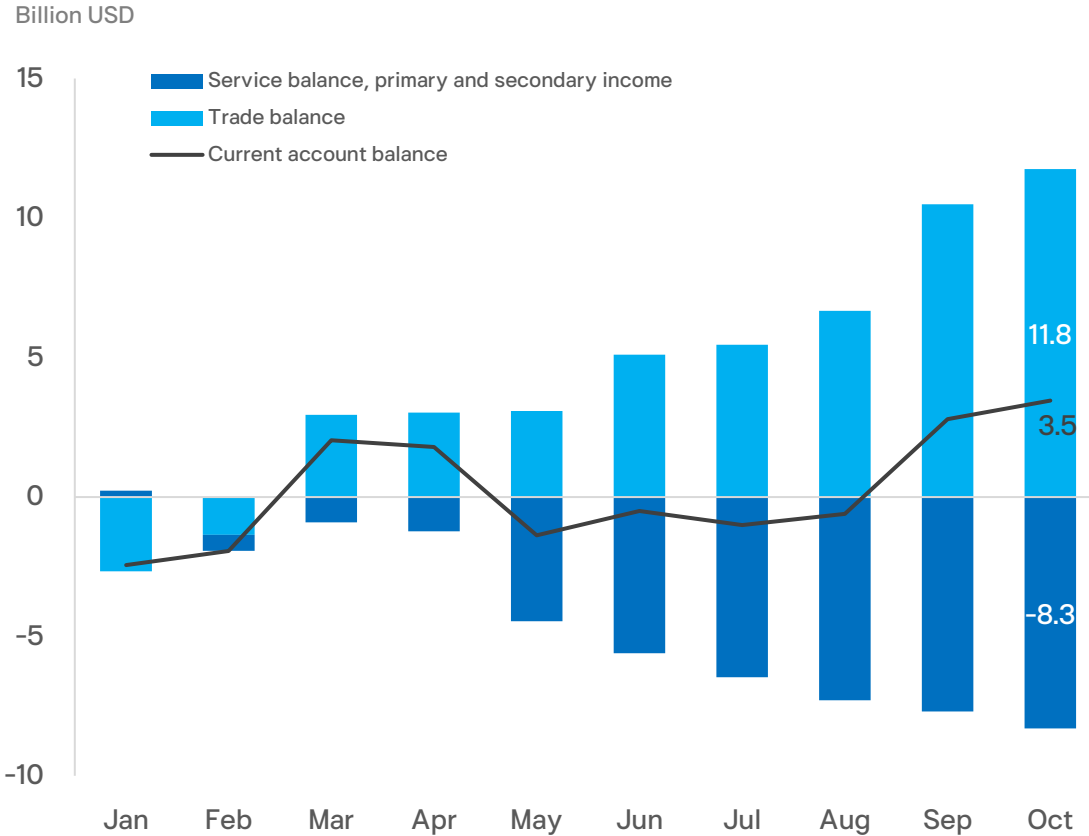
- Household and small business spending may be more fragile regarding to persistently high debt and tighten lending
- Delays in government investment reimbursement, which also partially affect overall investment sentiment
- Agricultural production may decrease from drought (El Niño)

What to keep eyes on

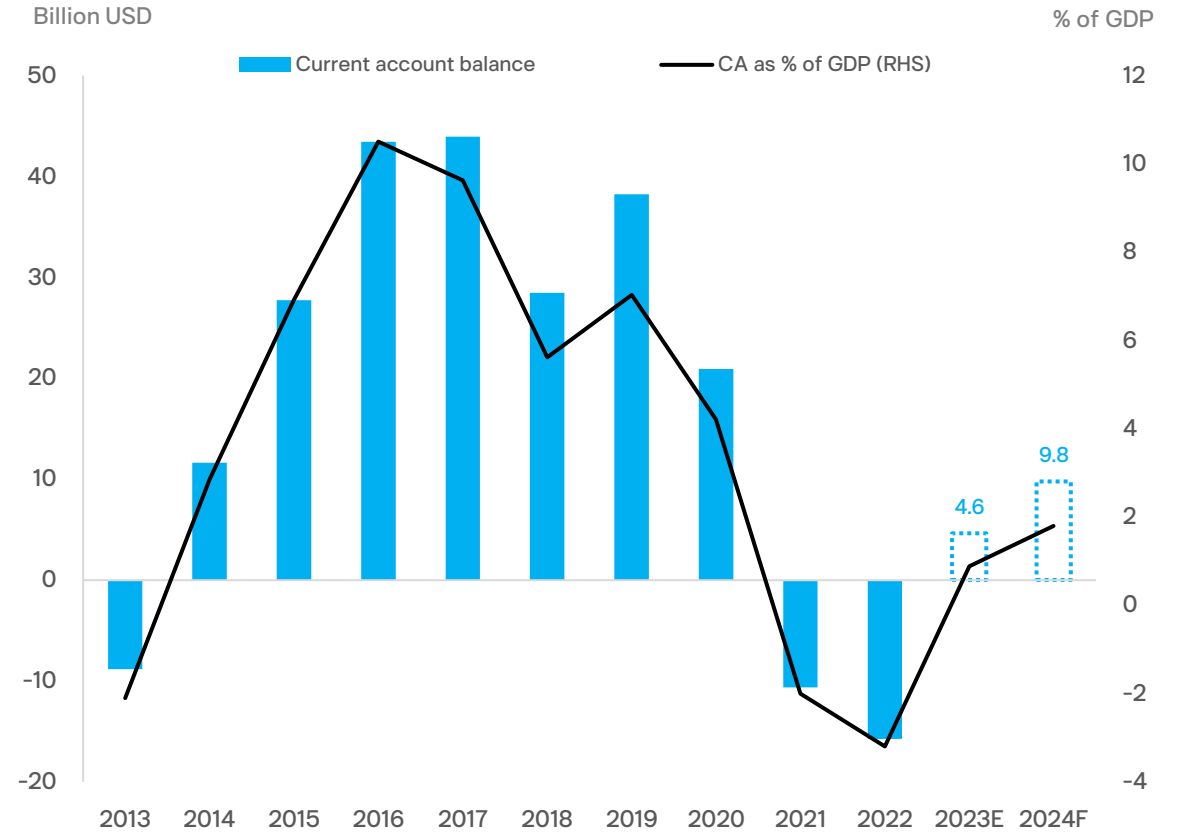
- Global economic and trade recovery highly uncertain amid geopolitical risks
- Household debt insolvency
- Thailand's economic stability front seems more fragile as more limited fiscal space

C/A surplus to be sustained, and expected to improve further next year due to better momentum in service balance

Accumulated current account balance, 2023



Annual current account and projection*



- During first 10 months of 2023, Thailand's current account balance turned surplus thanks mainly to the net positive figures in merchandise trade and the gradual improve in service balance, primary and secondary income.
- We expected that current account surplus to be sustained this year at USD 4.6 bn and could be more surplus in 2024 at USD 9.8 bn due to better momentum on both merchandise trade, tourism revenue and fund inflow.

PART 3

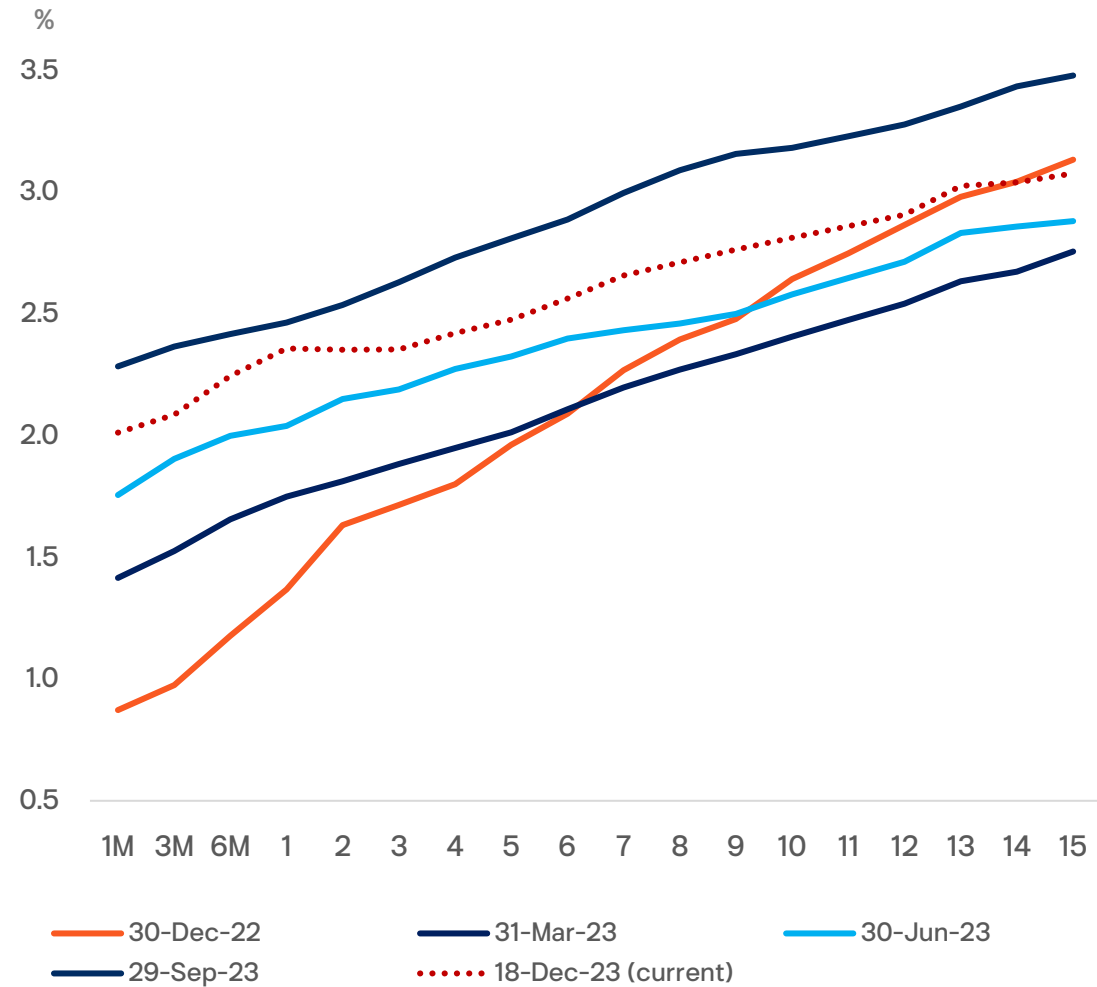
Financial Market



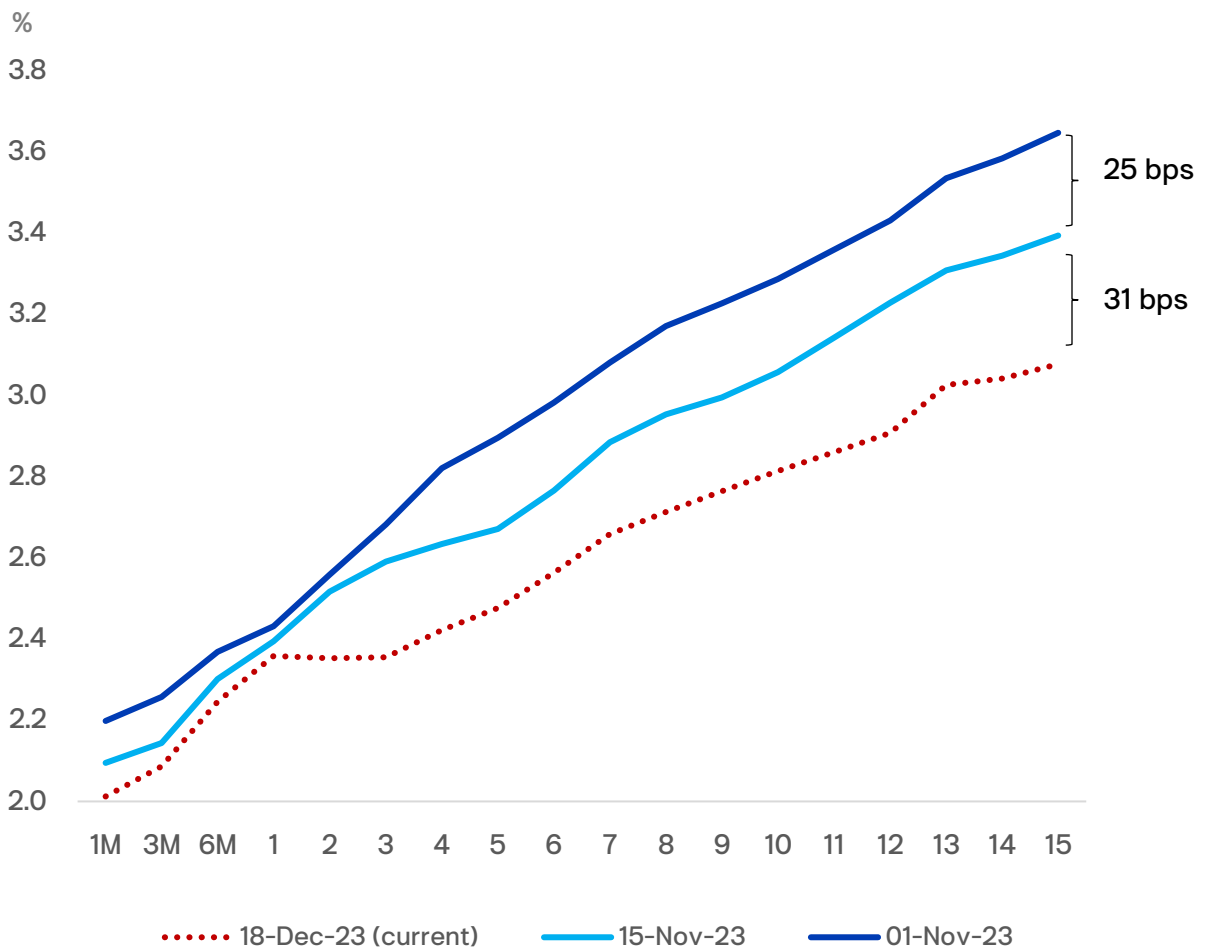
10Y TGB dropped dramatically after Fed forecasts easing rates next year



Thai government bond yield curve



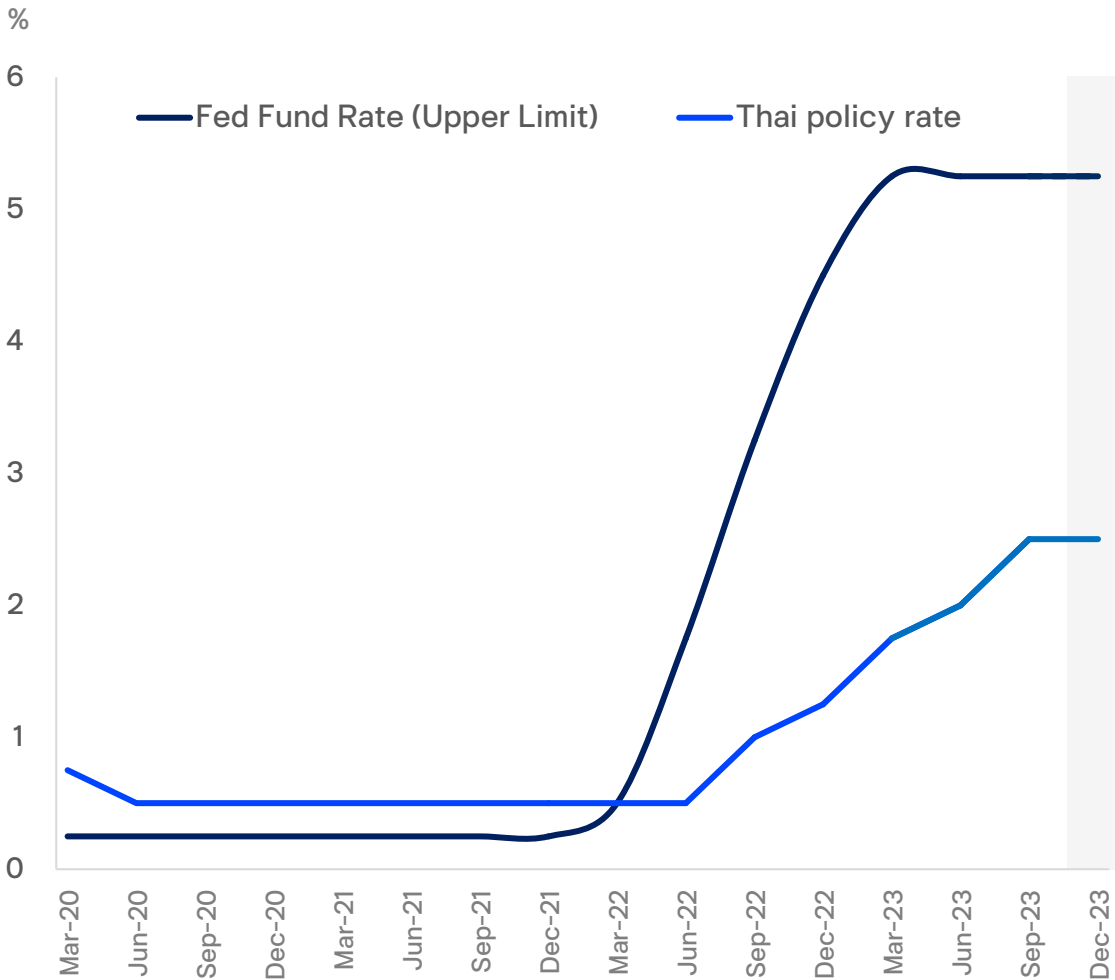
Thai government bond yield curve after Fed forecasts easing rates 3 times next year



Thai policy rate maintained at 2.50% at the end of 2023



FED-BOT policy rate forecast



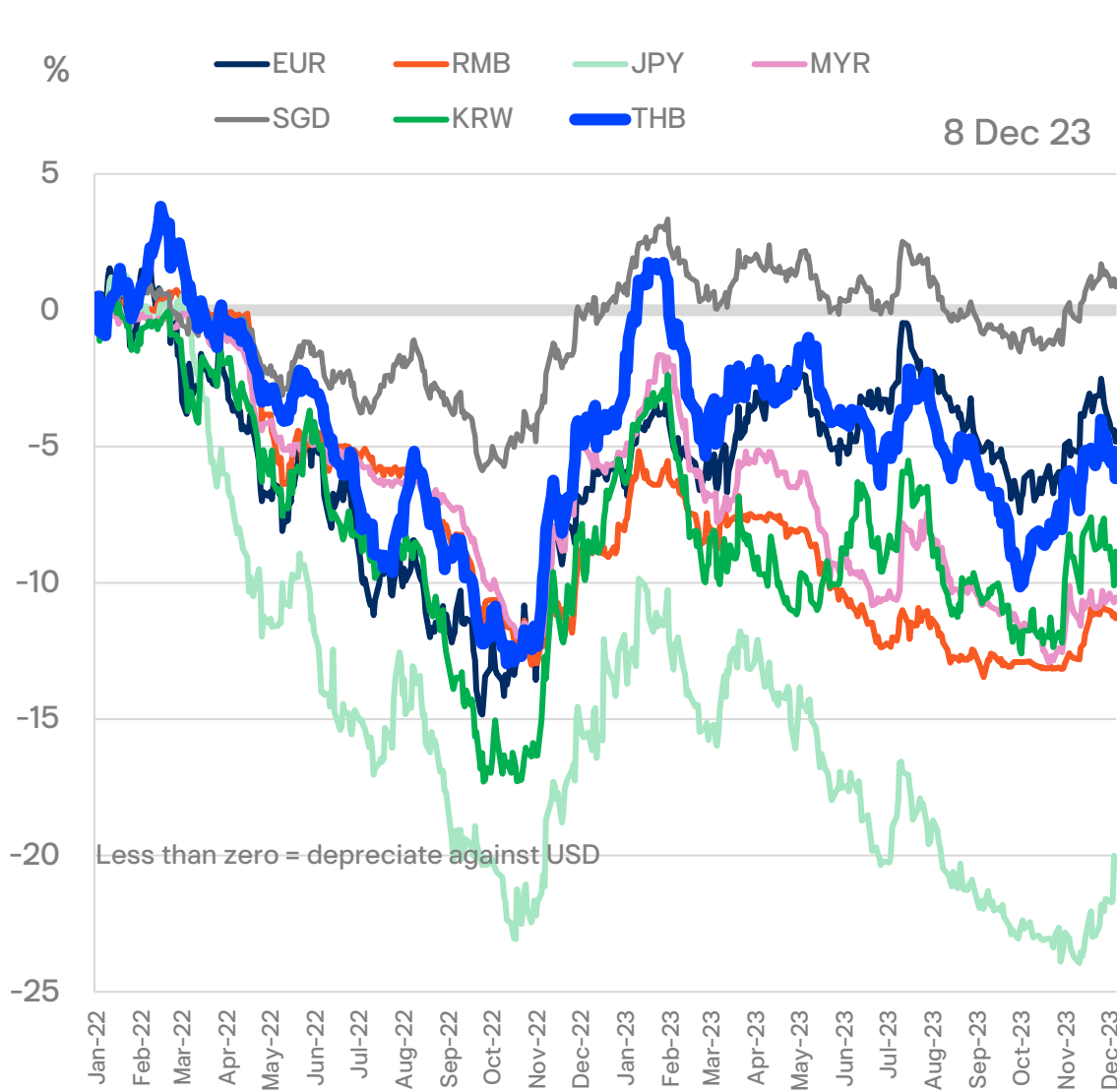
USDTHB Projection



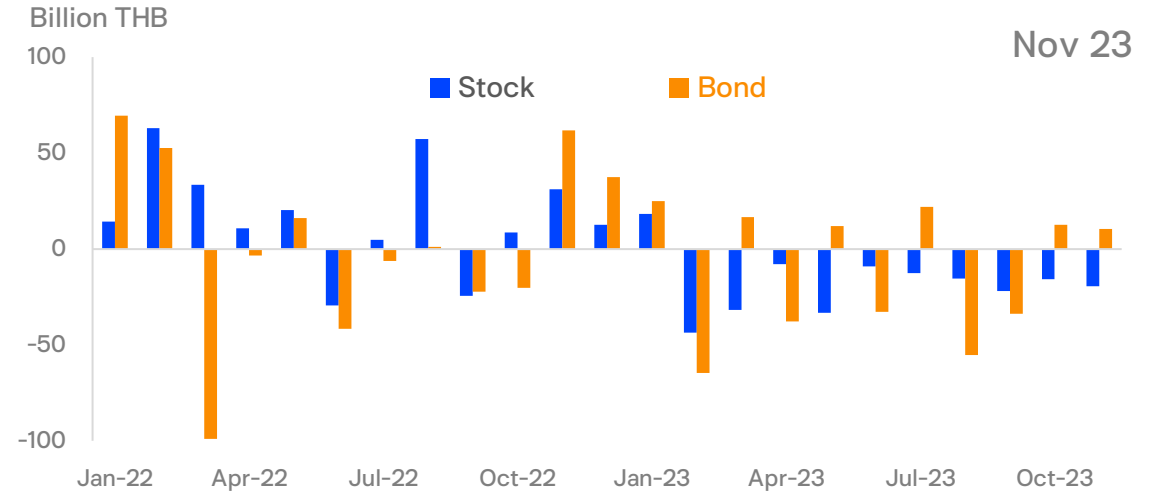
US dollar weakened after Fed signals cut in rates next year



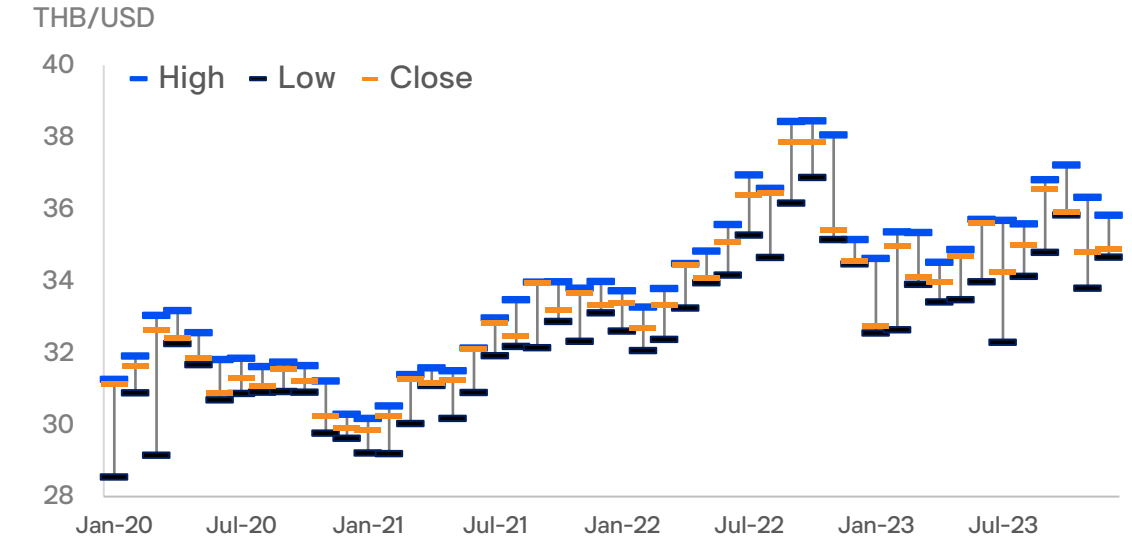
Major Asian currencies against USD



Fund flows in Thai equity and bond markets



Average daily range of USDTHB



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.