

Economic and Financial Outlook

ttb analytics

May 2022

Global Economy

- **April PMIs data showed deteriorating situation in the manufacturing sector in European countries** as the impact from Ukraine-Russia crisis prolonged, causing rising prices and supply chain issues. Zero-Covid policy in China caused contraction in both manufacturing and service sector further in April, tumbling to the lowest level since 2020
- **U.S. market data remained strong, supporting FED hike plan.** Retail sales growth advanced in April, surprisingly, due to the rebound in automobile sales. Rising prices also partially affected the growth in retail sales. Excluding food and energy, core retail sales in April advanced as well.
- **European Union inflation continued to grow significantly 7.8% in March due to food and energy price.** EU faces highest inflation in decades, ECB displayed interests to tighten in the second half of the year
- **China's retail and factory activity fell sharply in April** as wide COVID-19 lockdowns confined workers and consumers to their homes and severely disrupted supply chains, casting a long shadow over the outlook for the world's second-largest economy

Domestic Economy

- **As of Mar2022, Thai economy continued to recover** but with weaker momentum from domestic demands.
- The growths in manufacturing, services and agricultural products slightly decelerate.
- **External sectors grow robustly** led by strong foreign demands for exports and a strong rebound in foreign tourists after allowing for Test & Go procedure. However, foreign demands might be impacted by geopolitical risk and rising global commodity prices.
- **Consumption turned weaker** mainly due to the impact from rising living cost. Employment and farm incomes steadily improved with remaining fragility.
- **Investment stabilized** in line with machinery sales and newly registered vehicles. Construction activities outside EEC relatively weakened due to higher cost of materials. Business sentiment dropped.
- **Government accelerated its capital budget spending** but the financial and economic stimulus package has less room left for future disbursement.
- **Inflation in Mar22 accelerated further** from rising in energy and food price.

Financial Market

- **USDTHB remained in high level in May around 34.00 - 34.80 level.** Dollar strengthened from strong economic number, pointing to a 50 bps increase in June. Current Account became positive for the first time since November 2021 due to greater trade balance.
- Japanese Yen led the depreciation of Asian currencies, dropping more than 10% since last year
- DXY continued its long bullish run from last month, extending its run to 105 before dropping down from risk-off sentiments on Chinese economy
- **The Federal reserve hiked the policy rate by 50 bps in May, making the highest consecutive hike since 2000.** Market still widely expects 50 bps hike in the next Federal Reserve meeting in June, after Powell's comments on the necessity to increase interest rate until price levels are controlled. Inflation data in April displayed smaller number with 8.3% growth in April.
- Thai government bond yield rose significantly in May following US rate hike. Bond switching from MOF also pushed long term TGB. Markets expect 2-3 rate hike from MPC as Thai inflation rose.

PART 1

Global Economy

Manufacturing tumbled in April as supply chain issues rose. China's service sector on a decline



Manufacturing PMI

	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22
Australia	56.8	58.2	59.2	57.7	55.1	57.0	57.7	58.8
China	50.0	50.6	49.9	50.9	49.1	50.4	48.1	46.0
India	53.7	55.9	57.6	55.5	54.0	54.9	54.0	54.7
Indonesia	52.2	57.2	53.9	53.5	53.7	51.2	51.3	51.9
Japan	51.5	53.2	54.5	54.3	55.4	52.7	54.1	53.5
South Korea	52.4	50.2	50.9	51.9	52.8	53.8	51.2	52.1
Thailand	48.9	50.9	50.6	49.5	51.7	52.5	51.8	51.9
Canada	57.0	57.7	57.2	56.5	56.2	56.6	58.9	56.2
United States	60.7	58.4	58.3	57.7	55.5	57.3	58.8	59.2
Germany	58.4	57.8	57.4	57.4	59.8	58.4	56.9	54.6
France	55.0	53.6	55.9	55.6	55.5	57.2	54.7	55.7
Italy	59.7	61.1	62.8	62.0	58.3	58.3	55.8	54.5
United Kingdom	57.1	57.8	58.1	57.9	57.3	58.0	55.2	55.8
Spain	58.1	57.4	57.1	56.2	56.2	56.9	54.2	53.3

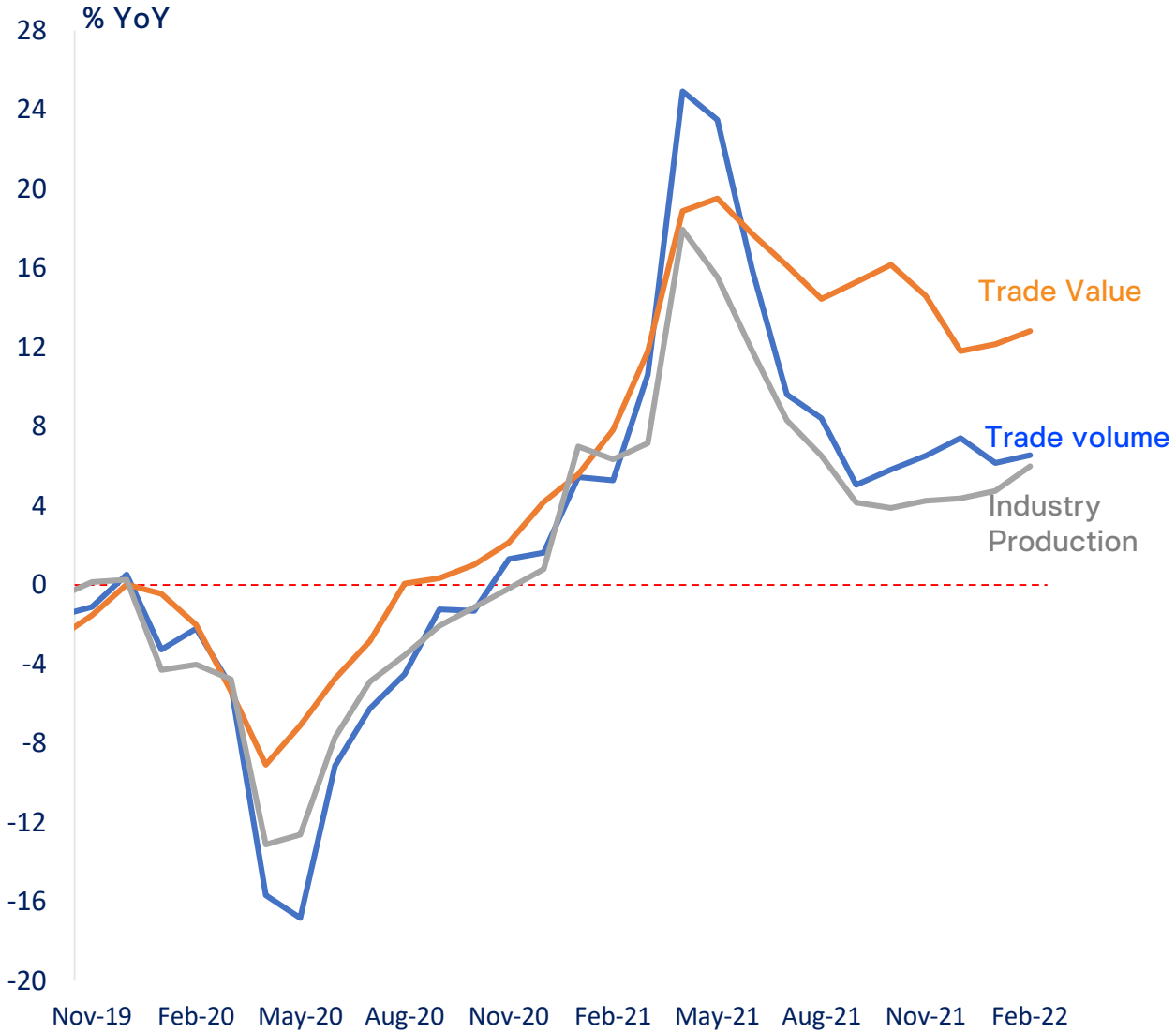
Service PMI

	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22
Australia	45.5	51.8	55.7	55.1	46.6	57.4	55.6	56.1
China	53.4	53.8	52.1	53.1	51.4	50.2	42.0	36.2
Japan	47.8	50.7	53.0	52.1	47.6	44.2	49.4	50.7
India	55.2	58.4	58.1	55.5	51.5	51.8	53.6	57.9
United States	54.9	58.7	58.0	57.6	51.2	56.5	58.0	55.6
Germany	56.2	52.4	52.7	48.7	52.2	55.8	56.1	57.6
France	56.2	56.6	57.4	57.0	53.1	55.5	57.4	58.9
Italy	55.5	52.4	55.9	53.0	48.5	52.8	52.1	55.7
United Kingdom	55.4	59.1	58.5	53.6	54.1	60.5	62.6	58.9
Spain	56.9	56.6	59.8	55.8	46.6	56.6	53.4	57.1

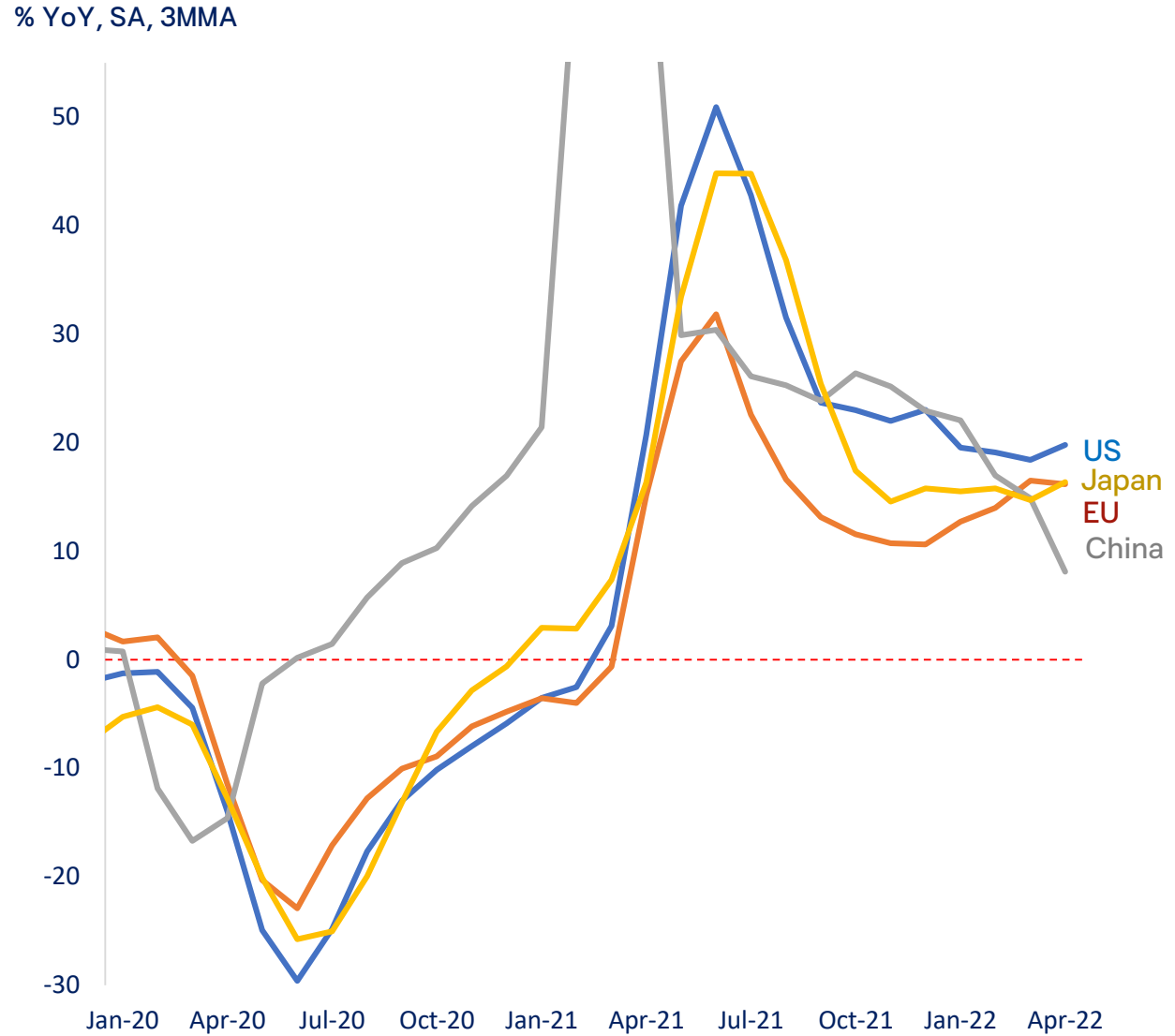
- PMIs which are early indicators for economic activities suggested that most countries have positive outlooks toward manufacturing and service sector in the expansion zone (above 50).
- April PMIs data showed deteriorating situation in the manufacturing sector in European countries as the impact from Ukraine-Russia crisis prolonged, causing rising prices and supply chain issues. Zero-Covid policy in China caused contraction in both manufacturing and service sector further in April, tumbling to the lowest level since 2020

Global trade value advanced along with production, Chinese exports dropped

Global trade and industrial production advanced in February

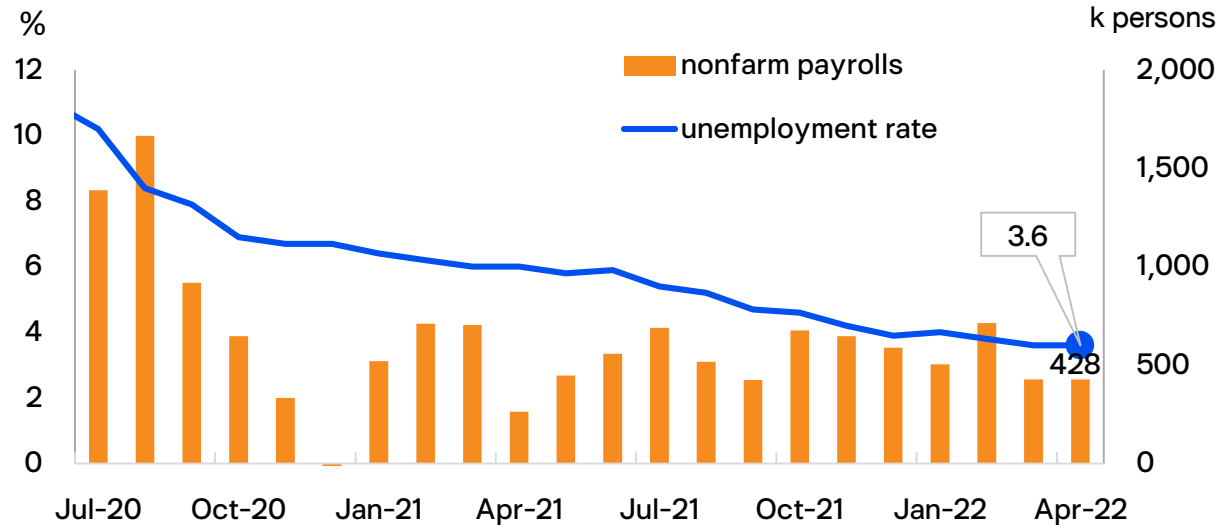


Exports from China dropped significantly in April

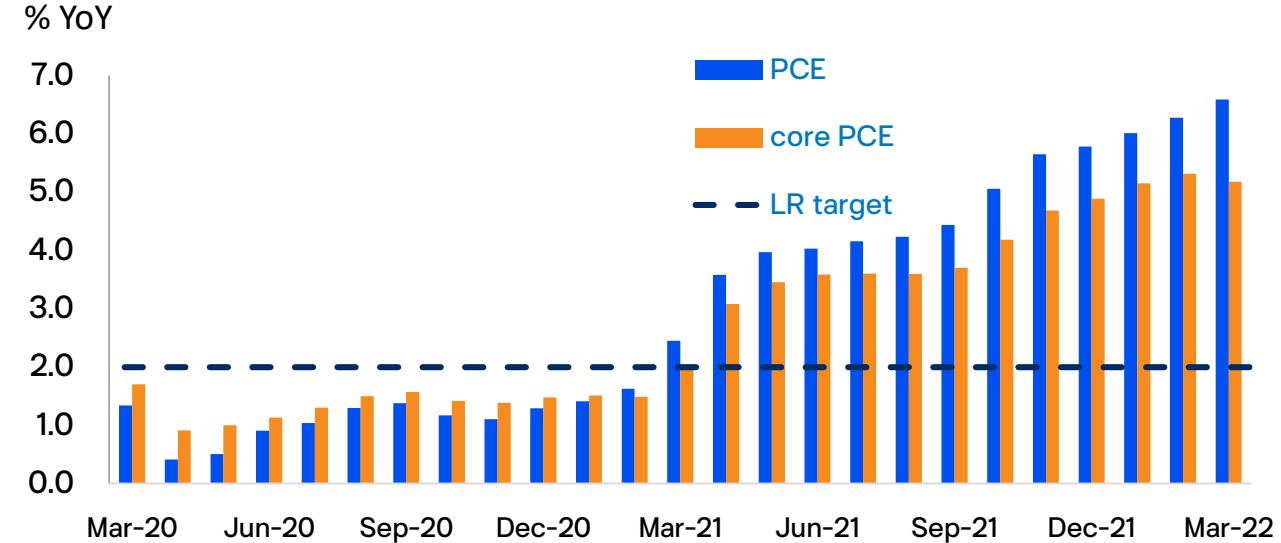


Source: CEIC and ttb analytics

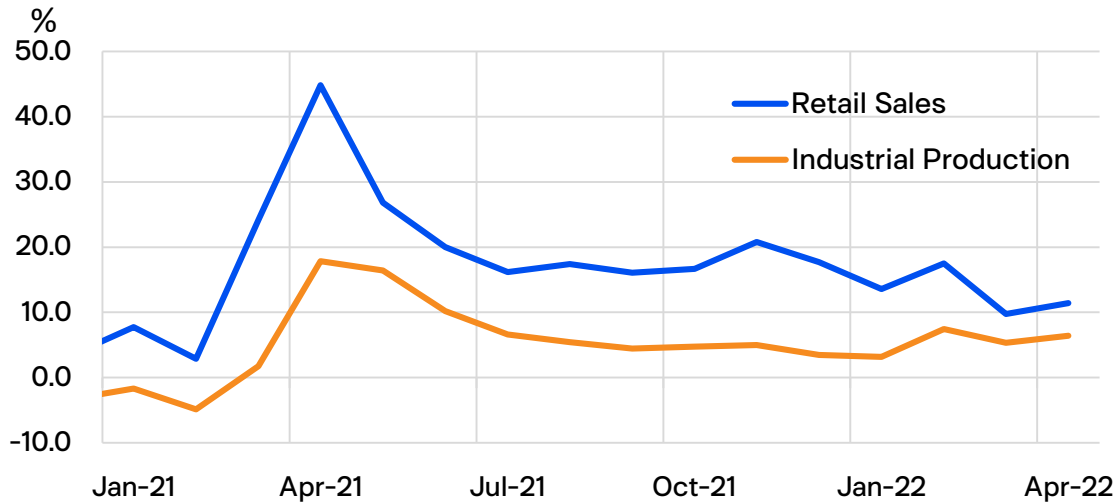
Nonfarm payrolls number remained strong in April



Inflation climbed due to rising prices of various goods



Retail sales growth advanced from auto sales

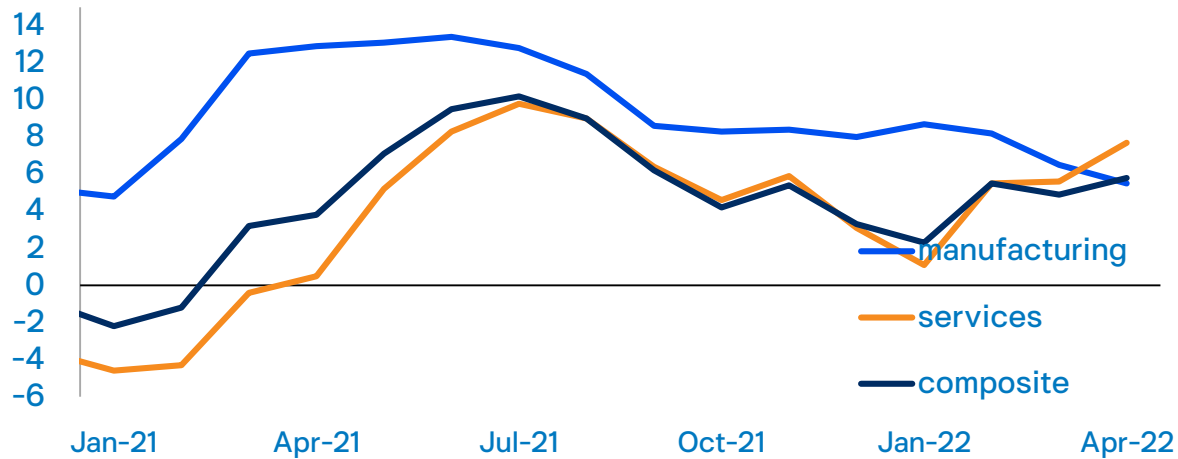


- In April, nonfarm payroll increased by 428,000 new jobs, exceeding market expectation. The numbers clearly showed strong improvement in U.S. labor market that would allow FED to aggressively hike in June. The unemployment rate remained at 3.6%
- Retail sales growth advanced in April, surprisingly, due to the rebound in automobile sales. Rising prices also partially affected the growth in retail sales. Excluding food and energy, core retail sales in April advanced as well.
- In March, price continued to rise from both goods and service sector as energy price spiked from limited supply. PCE rose 6.6% yoy while core PCE rose 5.2%.

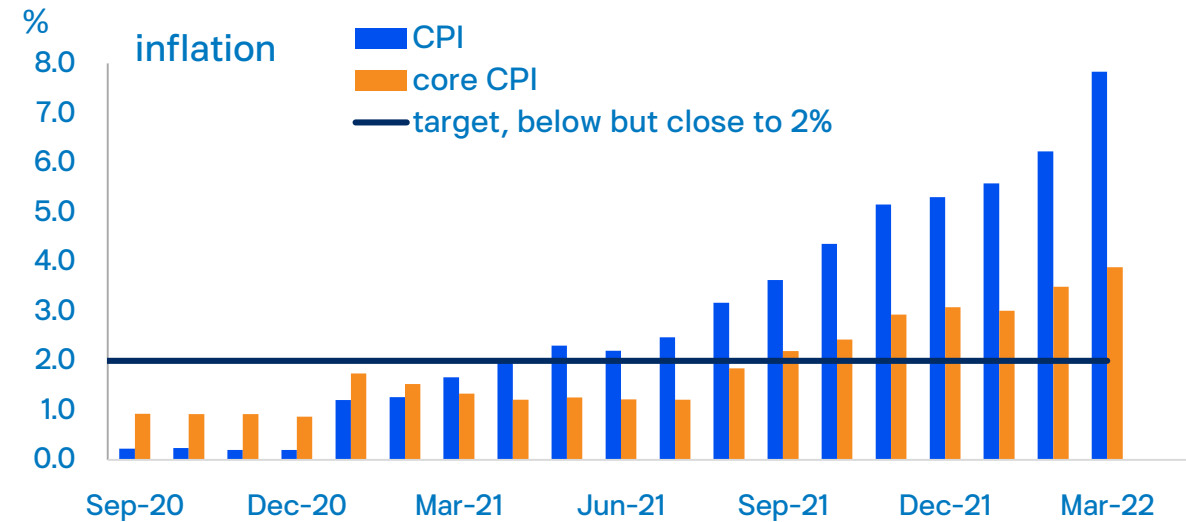
EU Manufacturing outlook deteriorated, energy price pushed Eurozone inflation

Service outlook returned as Omicron cases dropped

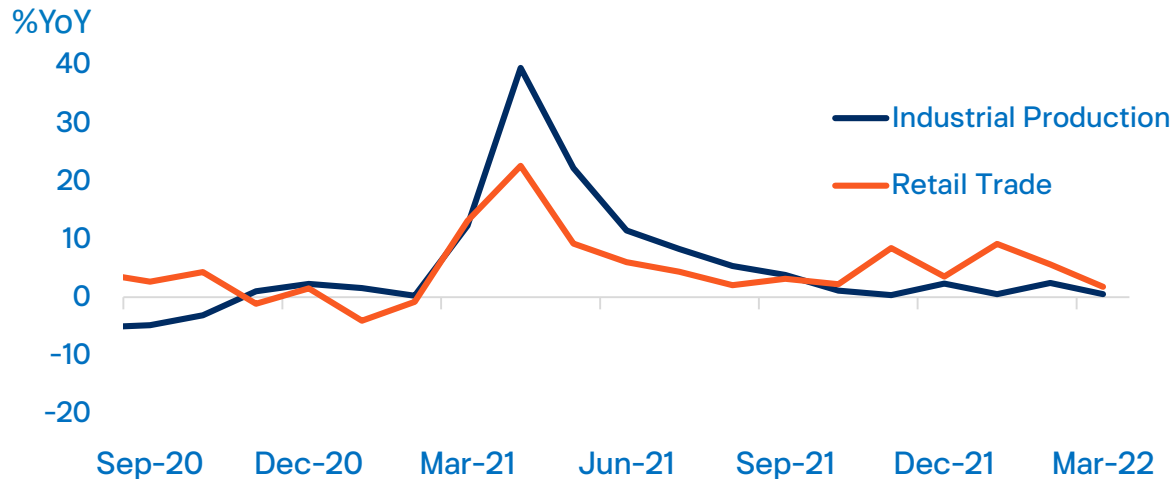
%MoM, deviations from 50, + expansion - contraction



Inflation spiked to historic high



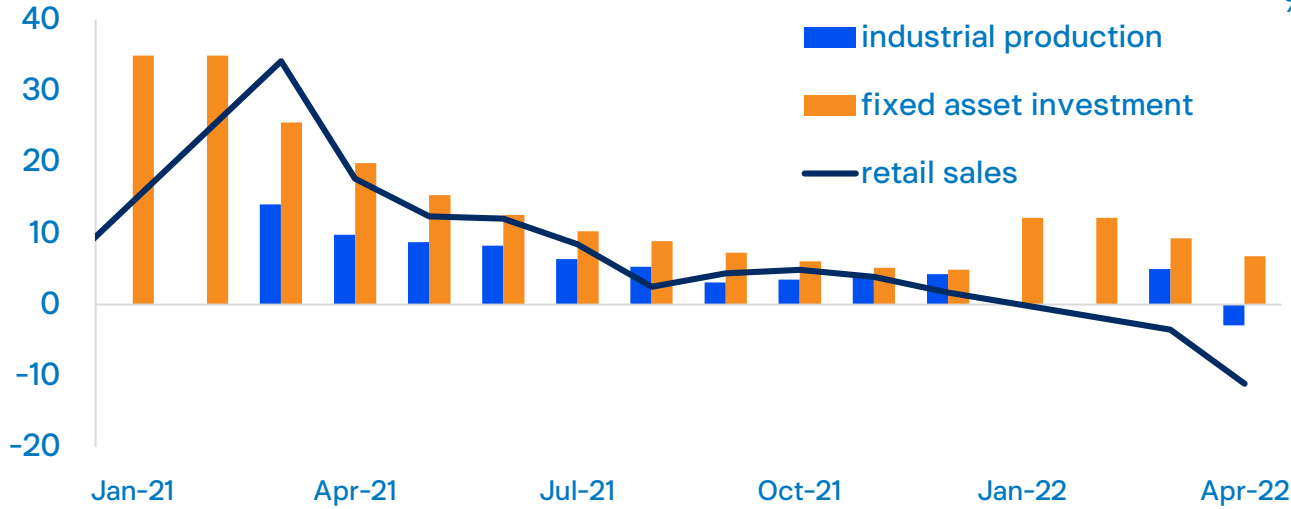
Retail rebounded in January



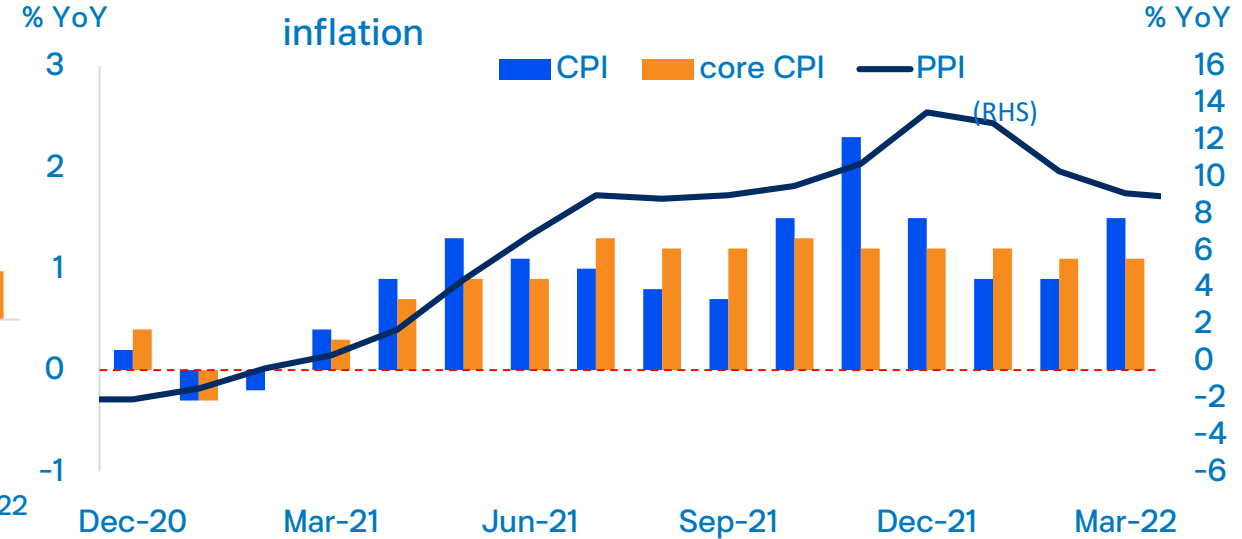
- In April, manufacturing sector faced higher pressure from supply chain disruption and higher energy cost. Service and composite outlook remained moderate.
- European Union inflation continued to grow significantly 7.8% in March due to food and energy price. Core inflation increased from last month to 3.9%. EU faces highest inflation in decades, ECB displayed interests to tighten in the second half of the year.
- Retail trade decreased further in March, as rising prices pressured purchasing powers. Retail trade grew 1.8% in March while industrial production remained flat at 0.6%.

China's economy worsen in April from lockdown, hitting both retails and productions

Lockdown impact started to show as retail sales dropped

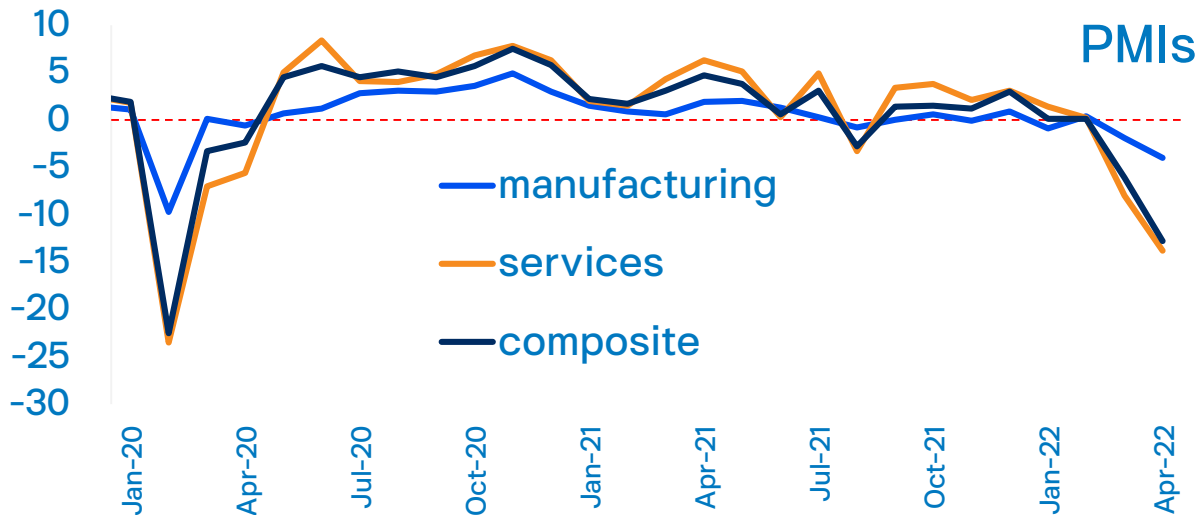


Inflation rose again in March



China cut reserve ratio to add more liquidity

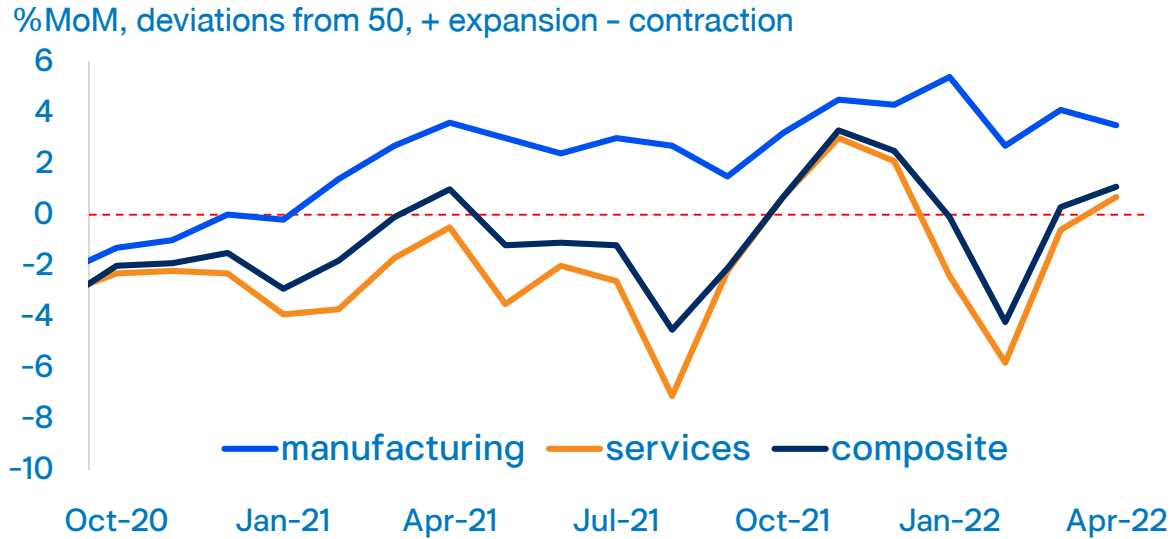
%MoM, deviations from 50, + expansion - contraction



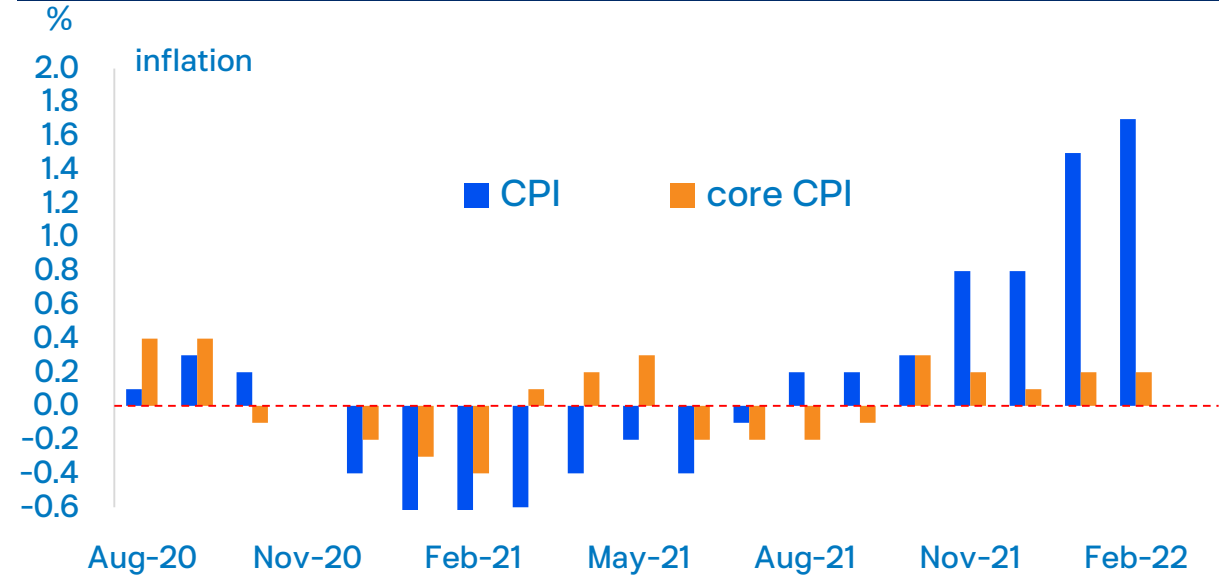
- China's retail and factory activity fell sharply in April as wide COVID-19 lockdowns confined workers and consumers to their homes and severely disrupted supply chains, casting a long shadow over the outlook for the world's second-largest economy.
- Retail sales in April shrank 11.1% from a year earlier, the biggest contraction since March 2020. Industrial production fell 2.9% while fixed asset investment dropped but remained positive at 9.3%
- China's official 2022 growth target of around 5.5% is looking harder and harder to achieve as officials maintain draconian zero-COVID policies. The economy grew 4.8% in the first quarter. April's PMI in both manufacturing and service sectors dropped lowest since 2020Q1

Japan's service outlook advanced, pointing towards economic recovery in Q2

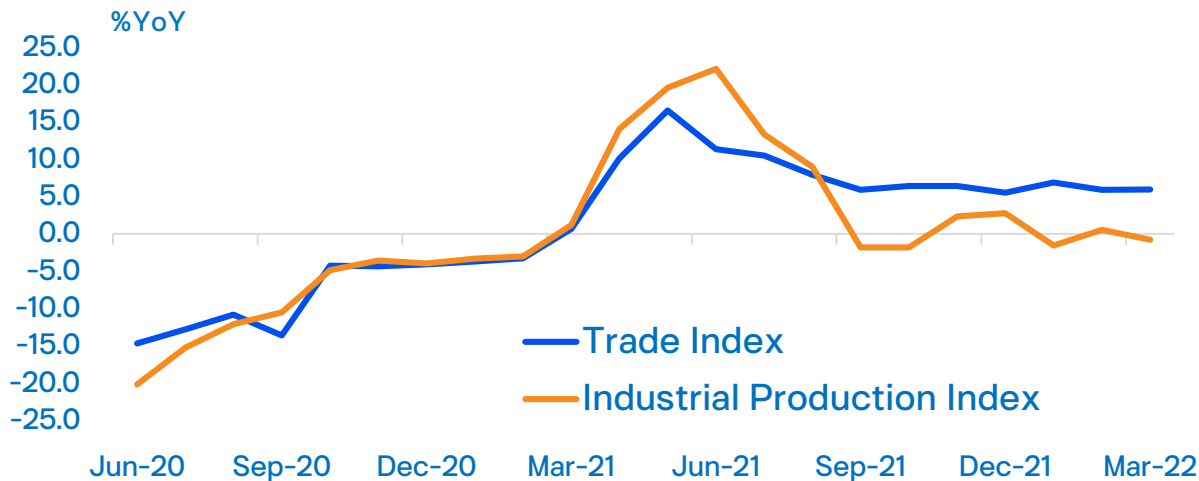
Service outlook took a hit from returning Covid-19 cases



Japan's inflation spiked from energy price



Trade remained stable while production expanded



- Japan's economy shrank at an annualized rate of 1.0% in January-March from the previous quarter. Service outlooks rebounded further in April due to easing government measure. Impact from Russia seemed to be minimal for the manufacturing sector. The composite PMI returned to positive territory, suggesting a return in Japanese economy in Q2.
- The Bank of Japan continued its monetary policy ultra-loose, despite historically weak Japanese yen, Bond outflows continued. Inflation continued to rise in February due to high energy price. CPI expanded highest in a year at 1.7% while core CPI expanded 0.2%.
- Trade and industrial production stabilized from last month. Trade index rose 5.9%. Industrial production contracted 0.8%

PART 2

Thai Economy

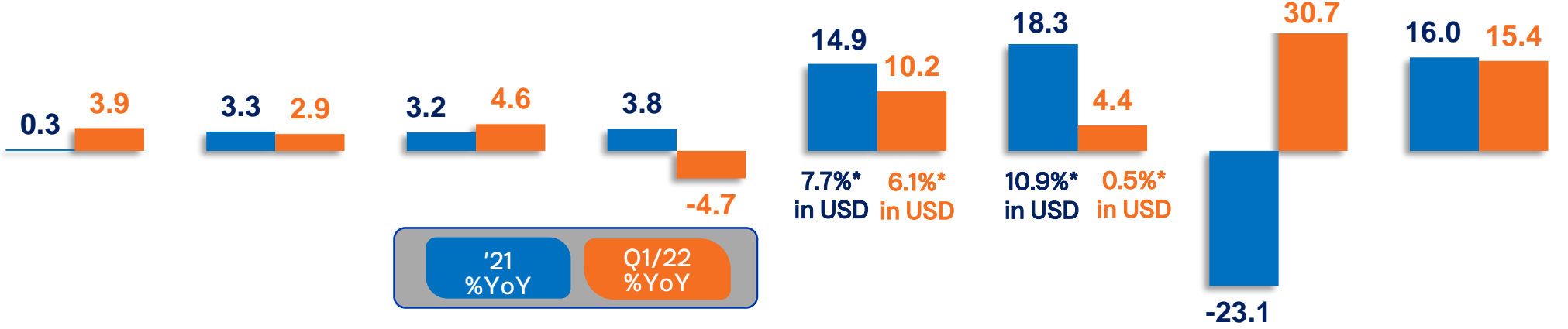


GDP Q1/2022: Thai economy slowly recovered from last year

Private Consumption	Private Investment	Government Consumption	Government Investment	Export Goods	Import Goods	Total export services	Total import services
share (55%)	(16%)	(18%)	(8%)	(66%)	(60%)	(5%)	(12%)

GDP

2021	1.5%
Q1/22	2.2%

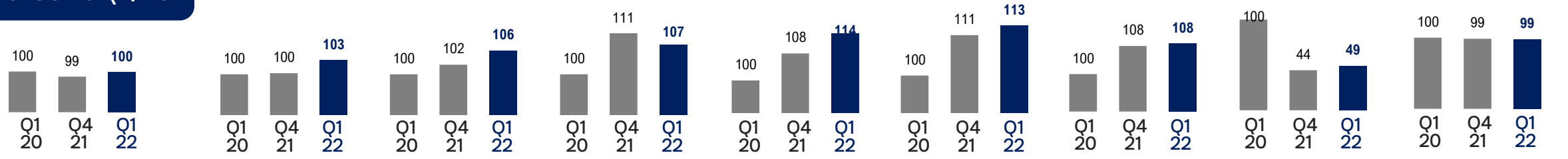


'21 %YoY Q1/22 %YoY

Contribution Q1/22



Comparison to Pre-Covid Q1/20

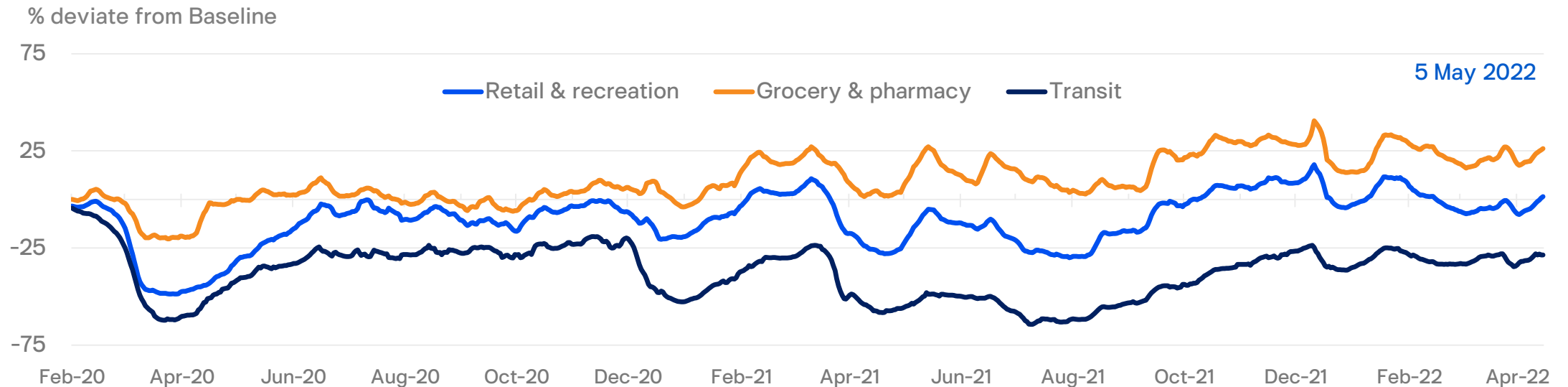


Indicator	Q1 20	Q4 21	Q1 22
GDP constant Price 2002	100	99	100
Private Consumption	100	100	103
Private Investment	100	102	106
Government Consumption	100	111	107
Government Investment	100	108	114
Export Goods	100	111	113
Import Goods	100	108	108
Total export services	100	44	49
Total import services	100	99	99

Coincident Economic Index (sa)

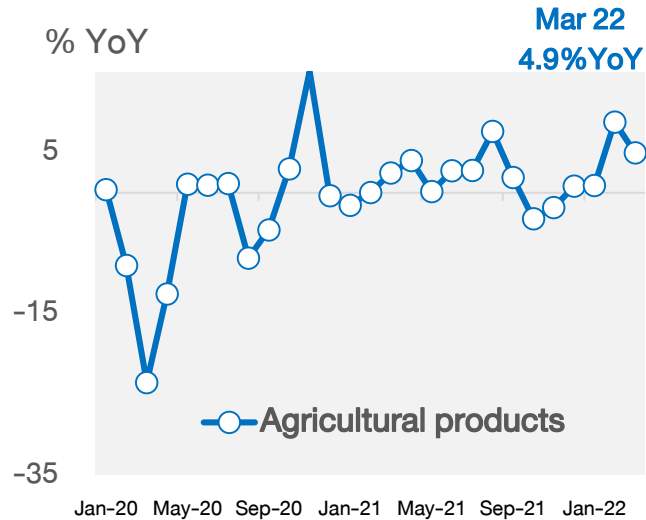
	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
Production															
Coincident Economic Index (sa)	98.1	99.9	100.3	99.3	99.9	99.9	99.1	98.1	99.2	99.9	100.6	100.8	100.8	101.1	100.9
Import Volume index (exclude Gold)	94.5	107.7	105.2	104.0	110.4	105.9	111.5	112.2	107.6	104.7	104.6	117.2	107.4	111.4	117.7
Manufacturing Production Index	97.6	97.4	99.5	99.0	99.2	99.2	93.2	88.9	96.3	98.5	99.8	102.7	99.5	99.8	99.0
Gross Value Added Tax at 2000 price (Million baht)	43,409	57,337	59,456	51,121	54,119	55,296	53,973	54,606	52,782	54,952	61,446	57,035	56,767	57,940	56,225
C															
Sales Benzene, Gasohol & Diesel Index	81.7	99.5	107.7	89.3	82.2	87.9	75.3	70.6	80.3	86.6	91.7	102.5	98.1	95.3	88.5
VAT Hotel & Restaurant Index	31.3	33.9	39.9	30.4	29.5	36.0	35.8	33.2	39.8	41.4	43.5	44.0	38.0	41.0	40.5
I															
Imports of Capital Goods at 2010 price (Million USD)	3,731.9	4,139.2	4,099.3	4,042.5	3,941.7	4,075.8	4,107.8	4,162.5	4,092.4	4,057.4	4,015.8	4,078.0	4,137.0	3,950.7	3,933.0
Domestic Machinery Sales at 2010 price (Million THB)	77,330	78,812	80,572	81,890	82,508	84,082	81,837	76,252	83,576	84,810	84,171	83,607	86,179	85,727	85,555

Google Mobility Report

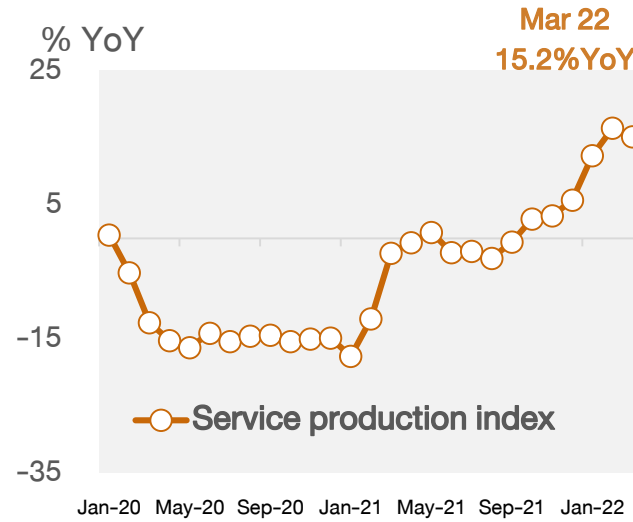


Economic activity growth in all sectors decelerated in Mar 2022

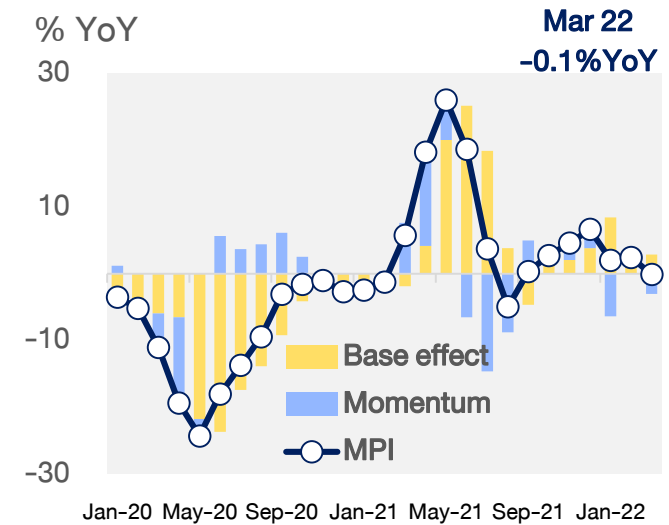
Agriculture



Services



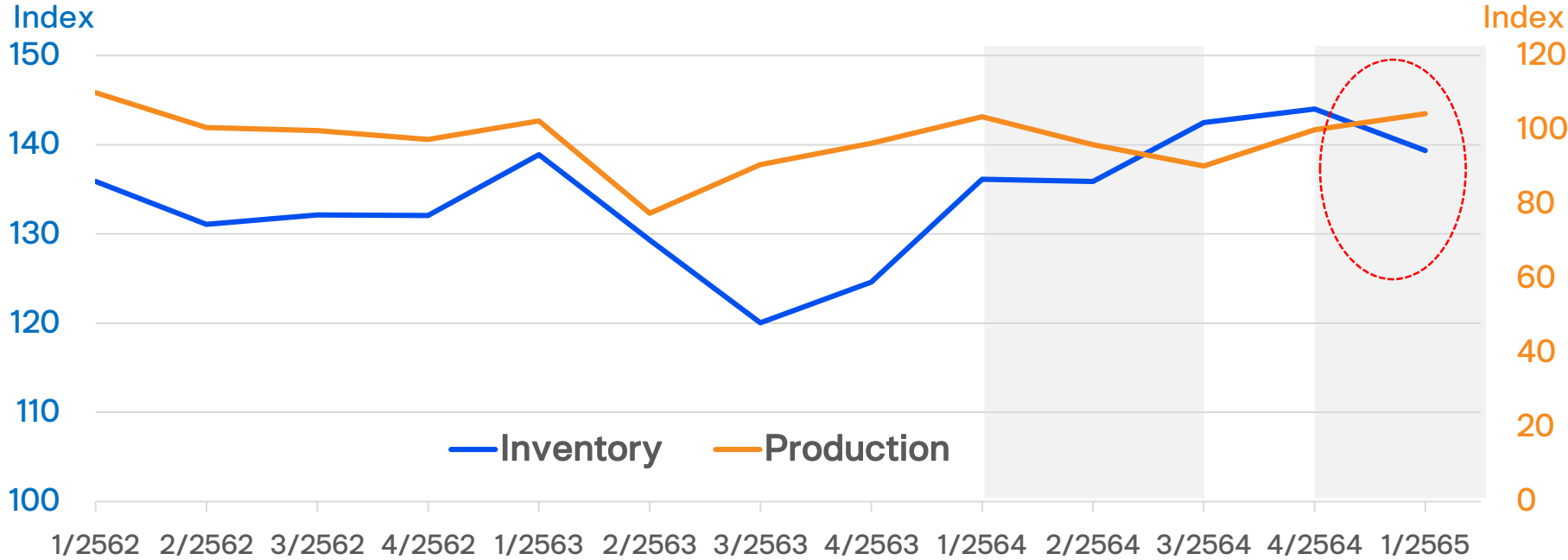
Manufacturing



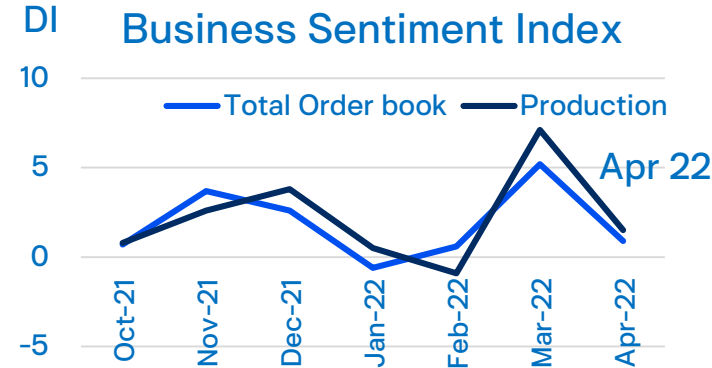
Service Production Index

	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
Service Production Index	91.1	90.7	91.7	91.2	92.3	92.8	91.3	89.6	90.8	92.5	93.8	94.3	101.8	113.4	123.9
Wholesale and retail trade; repair of motor vehicles and motorcycles	62.6	65.4	73.2	66.2	66.4	66.5	63.4	61.8	64.6	66.2	68.3	73.2	70.1	69.3	75.3
Transportation and storage	11.4	14.8	17.9	11.7	2.4	2.2	1.8	1.7	3.8	8.0	20.2	30.4	27.9	28.0	29.1
Accommodation and food service activities	100.1	89.1	115.8	101.2	110.0	104.4	97.3	111.9	118.4	100.3	110.4	123.9	111.8	100.4	118.0
Information and communication	96.7	97.2	99.6	93.7	96.3	98.7	96.8	96.9	99.1	97.2	97.8	99.0	97.8	99.6	102.4
Financial and insurance activities	105.0	101.2	102.0	93.5	97.4	99.3	116.7	116.4	121.3	121.1	128.0	134.1	124.5	124.9	124.8
Real estate activities	97.5	94.6	113.8	102.3	101.8	107.2	103.0	97.9	107.0	113.7	115.7	127.8	123.3	112.9	127.4
Professional, scientific and technical activities	72.7	72.3	84.0	76.4	76.0	79.5	86.8	70.7	81.3	75.1	82.6	86.8	83.6	79.7	87.7
Administrative and support service activities	101.5	98.2	107.4	103.6	102.2	99.4	102.8	107.9	113.8	105.7	101.0	106.5	105.0	100.3	94.7
Public administration and defence; compulsory social security	82.4	81.5	87.1	82.3	82.3	82.5	82.9	82.9	86.4	85.3	88.0	92.5	92.6	94.9	100.3

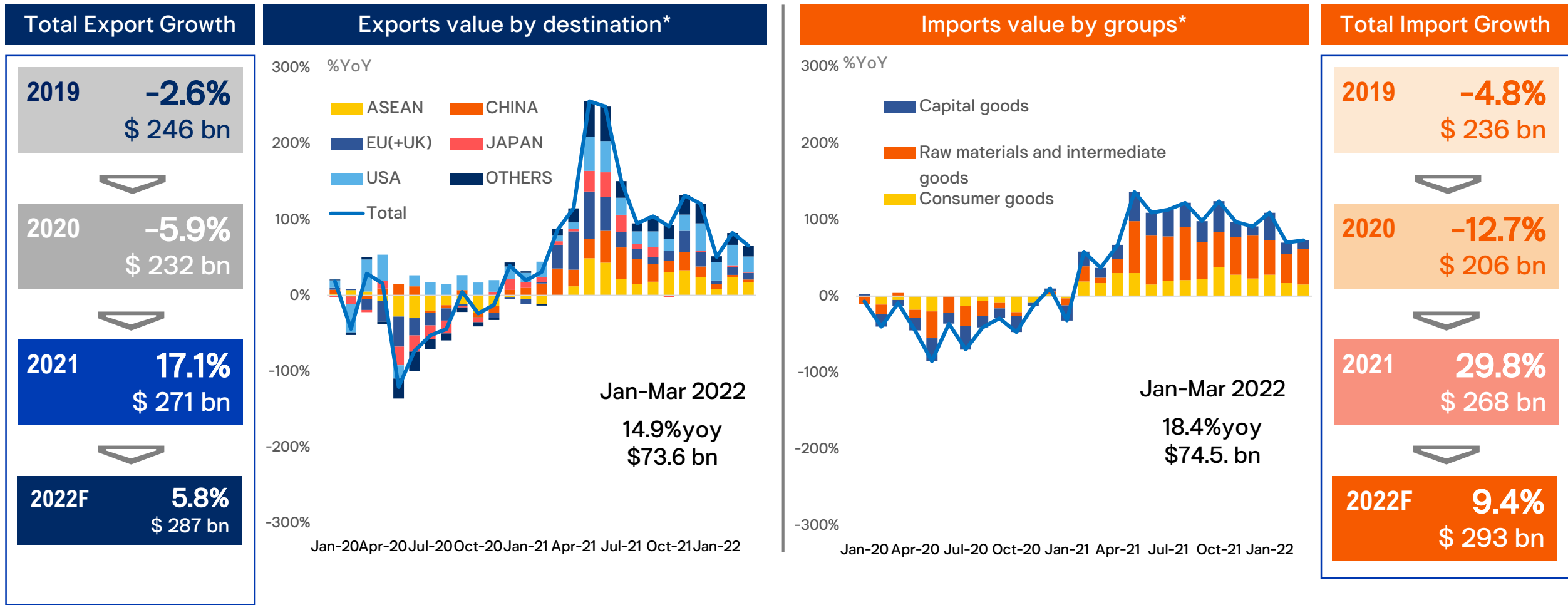
Thailand's production and inventory index



- The figures express better export and production in Q1/22, in line with easing global supply chain pressure.
- However, such pressure remains high and the business sentiment for production and export order turned worse again in coming period.



In 2021, Thai exports remain in a recovery path despite new Omicron Variant outbreak



- In the first quarter, Thai exports was attributed to increased demand for Thai products in the United States (+24%yoy), Switzerland (+1,220% from gold), Singapore (56%) Indonesia (38%) and India market (33%),
- Thai Imports, the increased value of imports was largely due to the energy price increase (+86.2%) and the importation of raw materials for conversion into finished products for export (raw-semi material +17.6%).

In 2022, Thailand export will grow 5.8% due to global demand recovery with inflation

**Total Export
Mar 2022**
(USD term)
14.9 %
(Mar 2021 +2.4%)

**Total Export
2022F**
(USD term)
5.8%
(FY 2021 +17.1%)



Global demand recovery



Recovery of global supply chain capacity



Baht Depreciation



Negative Factor

Geopolitics Risk

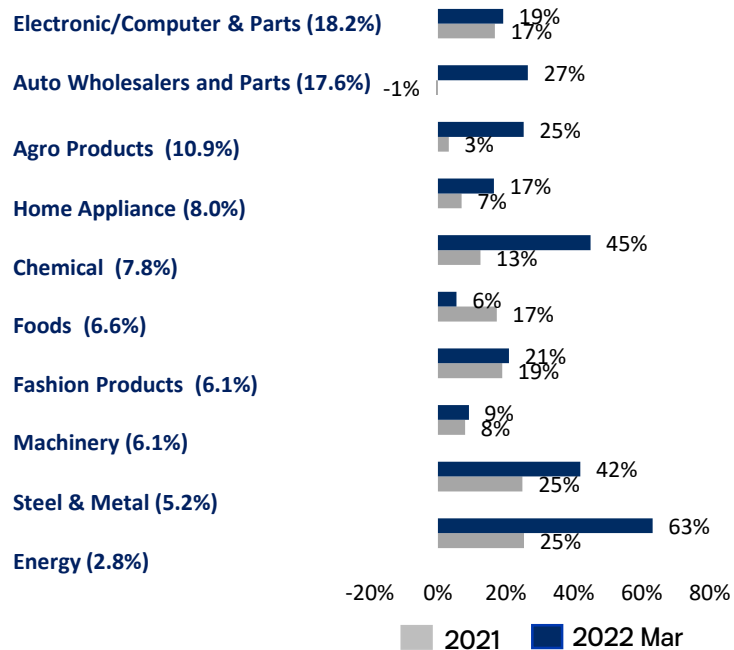


High commodity price & Rising Inflation

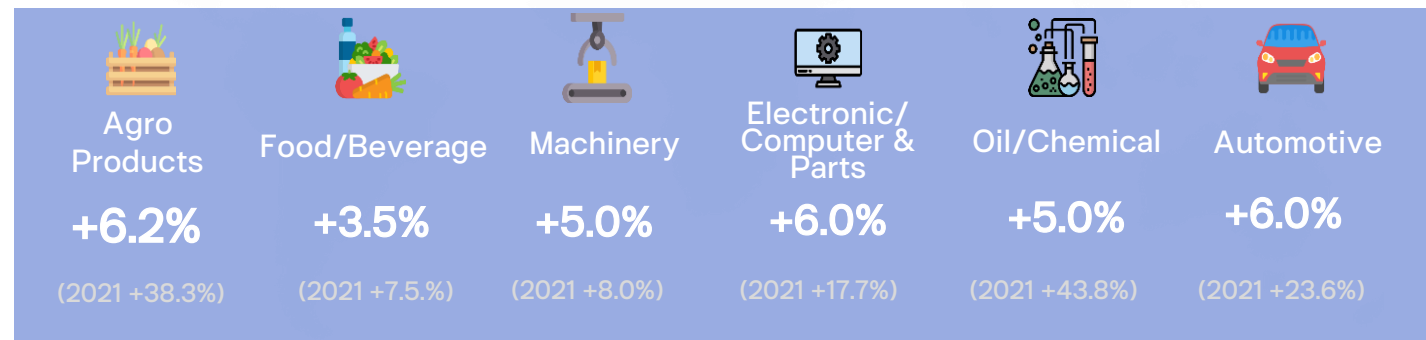


New Outbreak of Covid-19 Omicron

Top 10 Export by Sector* %YOY



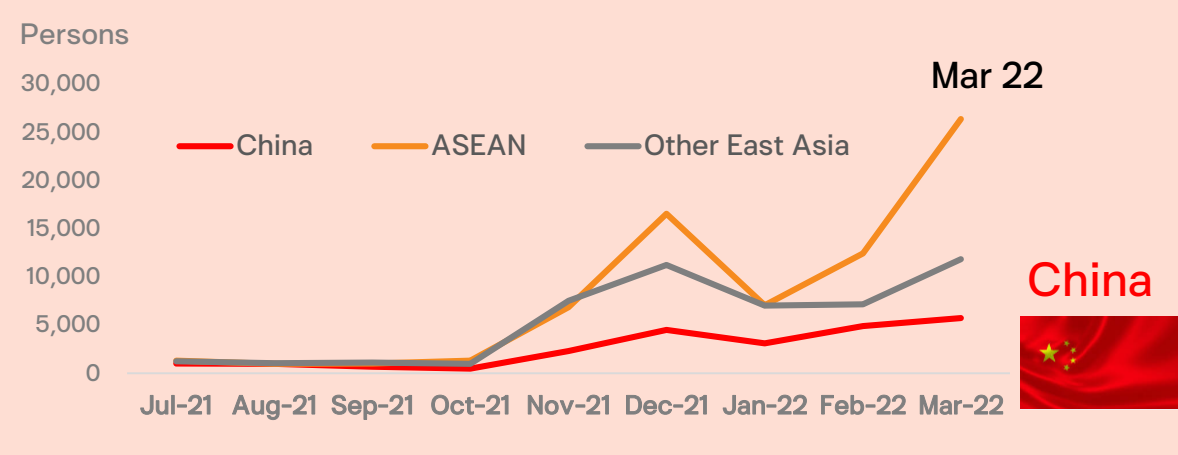
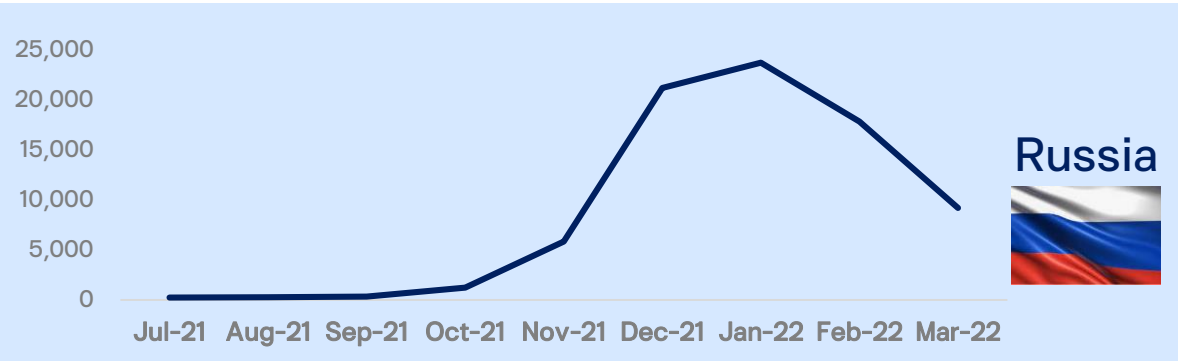
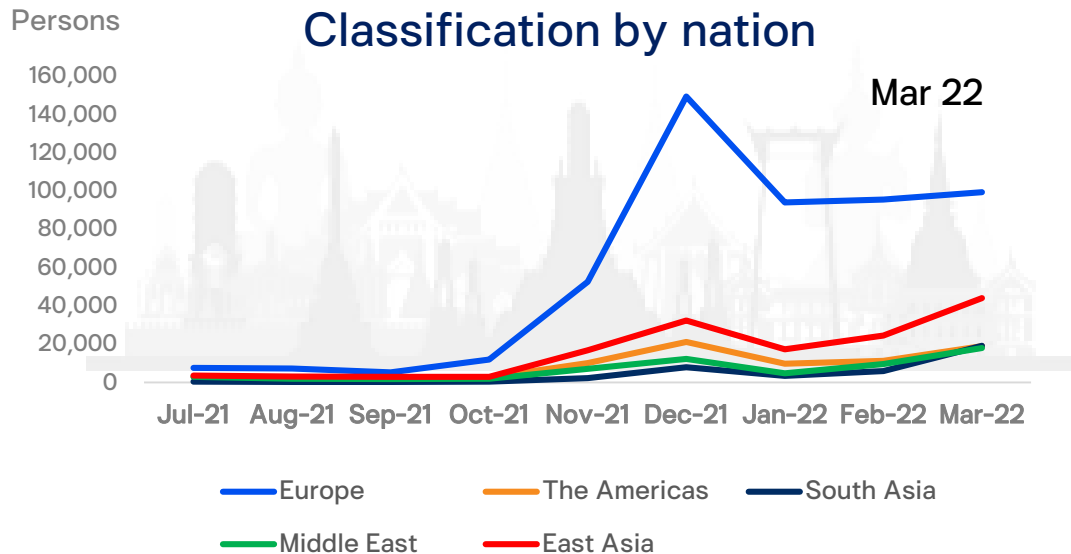
Export Growth by Industry Groups 2022F



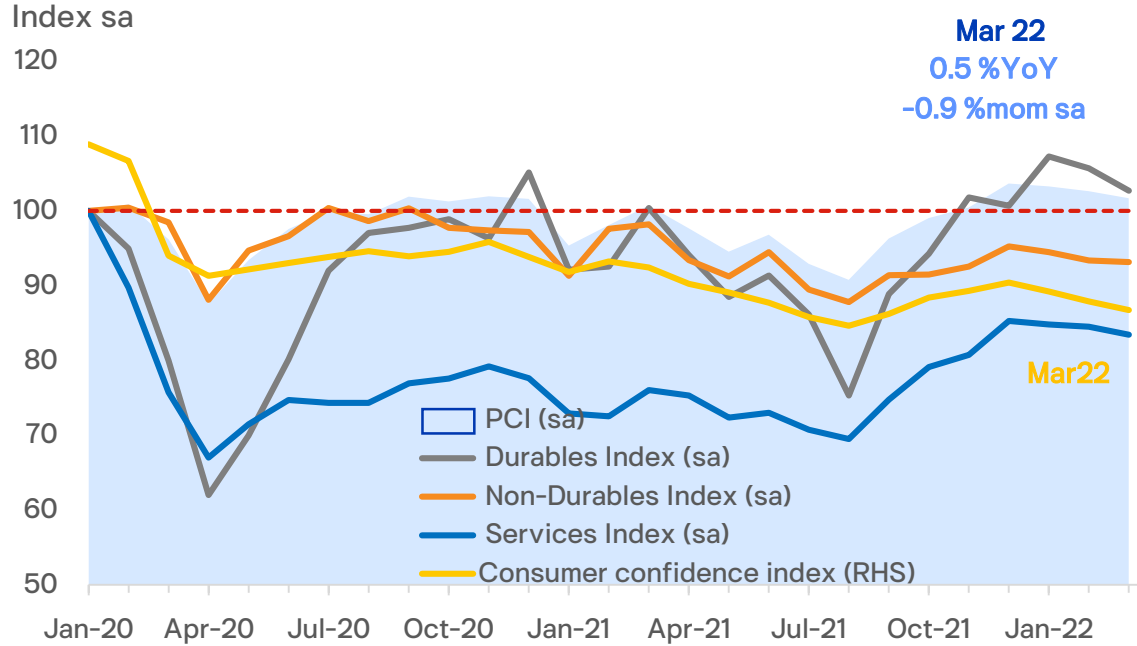
Total Foreign Tourist Inbounds



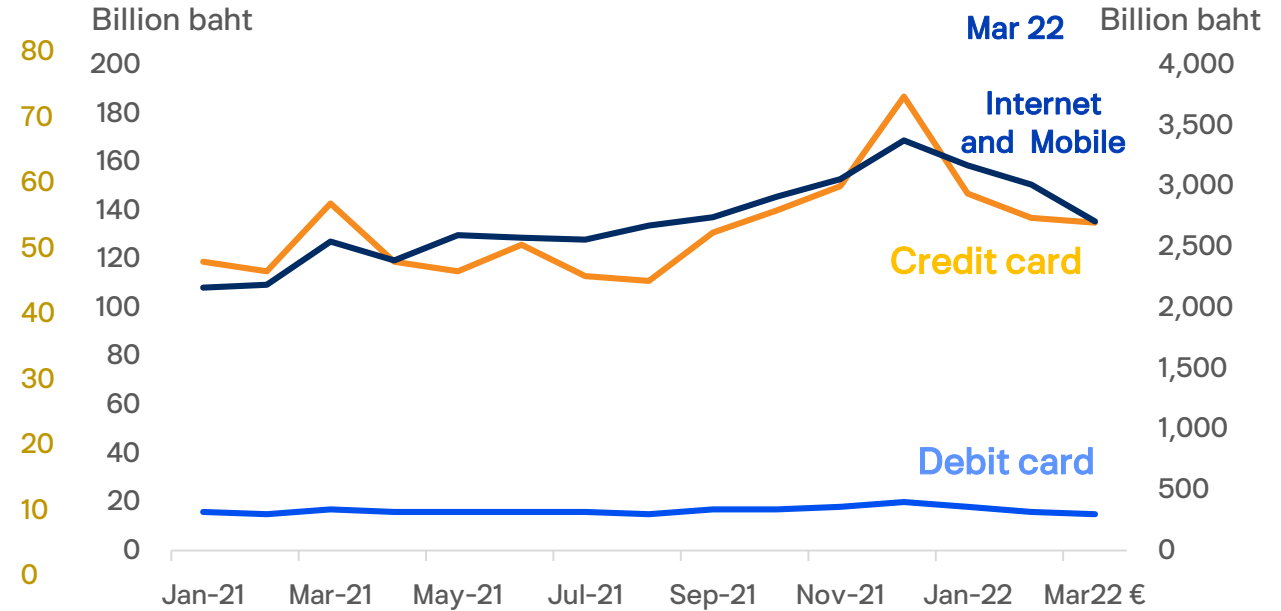
- As of Mar22, foreign tourist continuously rose after reimplemting a Test & Go procedure for inbound tourists since February 2022. China slowly recovered, whereas Russia dropped dramatically after the war began.
- Towards another step of border reopening, Thailand will waive RT-PCR test requirement for fully vaccinated travelers in May 2022, which will strengthen the recovery of foreign tourists.



Private Consumption (SA)



Retail Payment across different channel

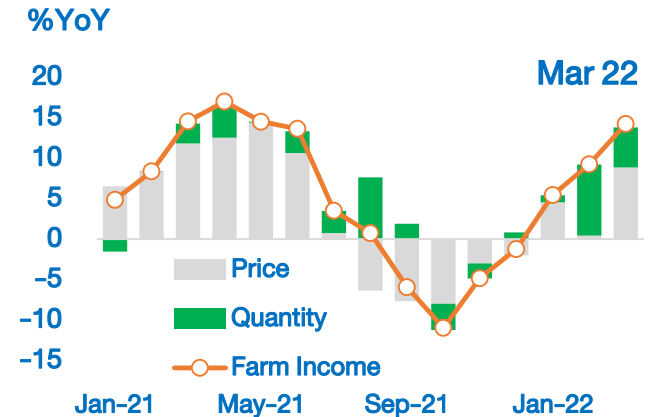


- Private consumption in Mar22 continuously weakened from last month in all categories due to intensified Omicron outbreak and higher living costs.
- Retail payments, as a sign of purchasing powers, continued in its decreasing trend since January 2022.
- However, Consumption's fundamentals steadily improved. Farm incomes continuously grew by 14.2%yoy due to rising agricultural prices. Non-farm Employment also continuously improved.

Employment M33



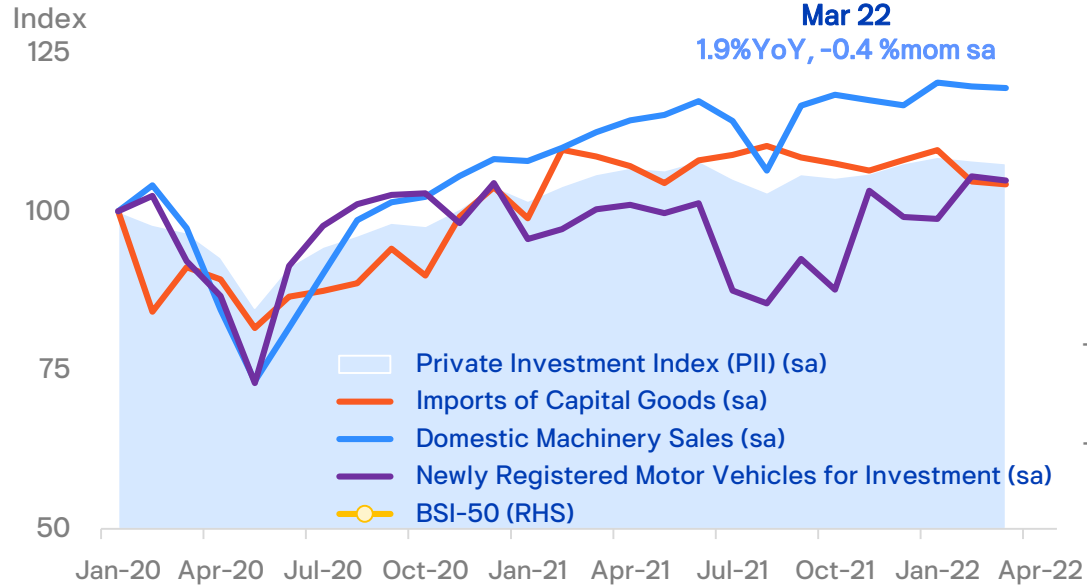
Farm Incomes



Private investment stabilized but BSI dropped due to profit, orders and production

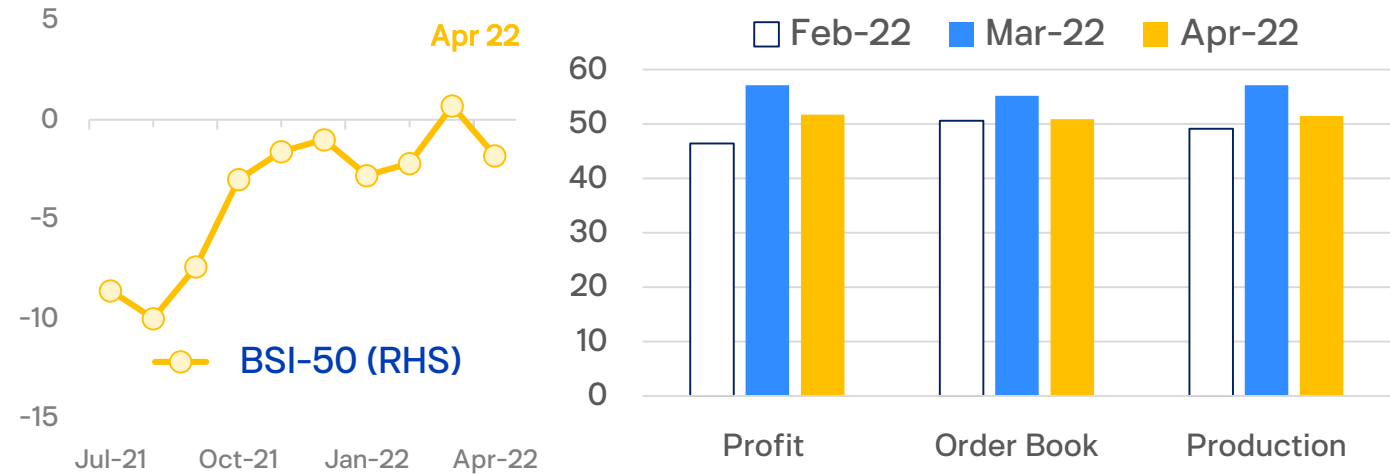


Private Investment (SA)

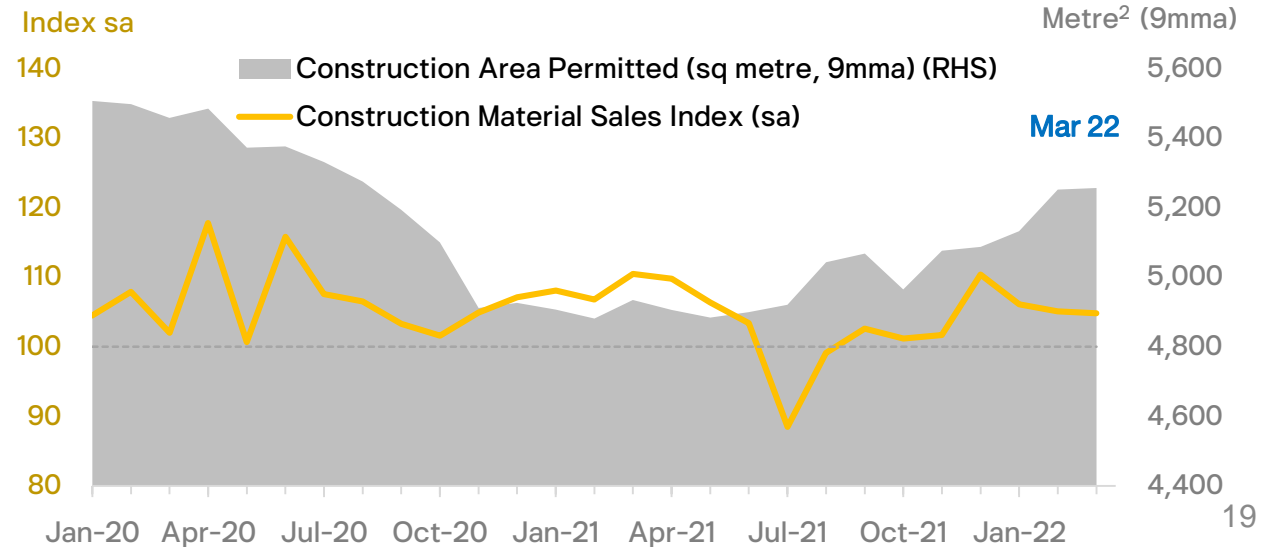


- Private investment slightly stabilized, domestic machinery sales and newly registered vehicles remained elevate from last month. However, imports of capital goods dropped. Business sentiment in coming months declined due to a reduction in profit, order books and production activities.
- Construction activities outside EEC relatively weakened due to higher cost of materials, as shown by further decline in construction material sales index. However, overall construction activities in EEC area continues.

Business Sentiment Index

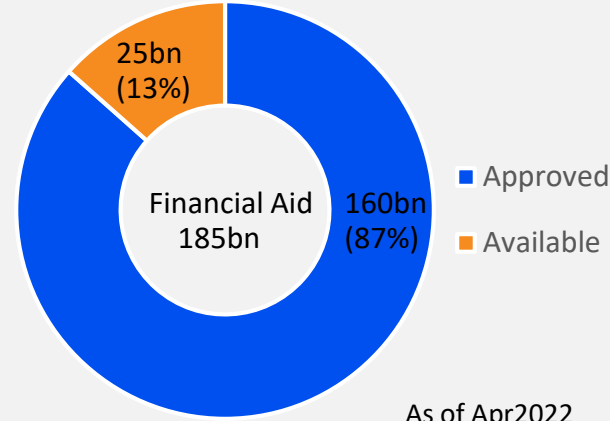
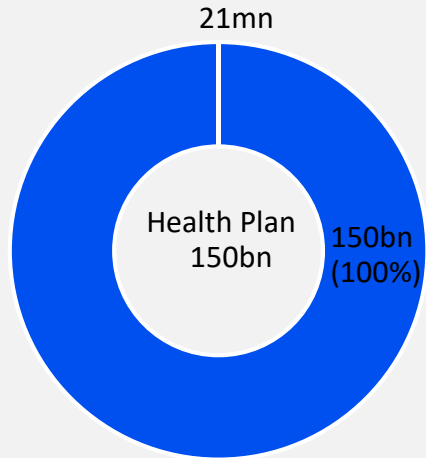


Construction sector (SA)

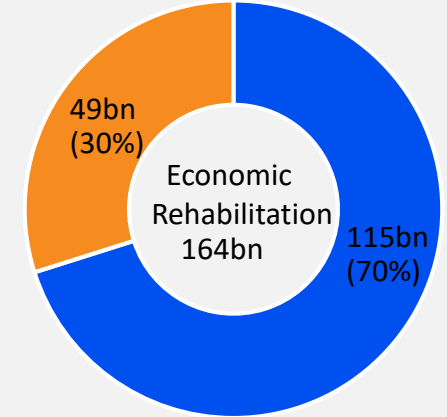


Only THB74bn out of the THB500bn emergency loan decree to support economy in 2022

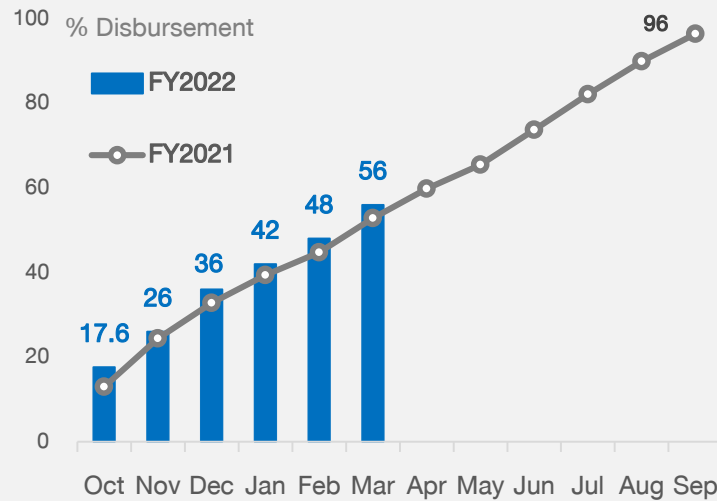
Progress on the 500-billion-baht executive decree



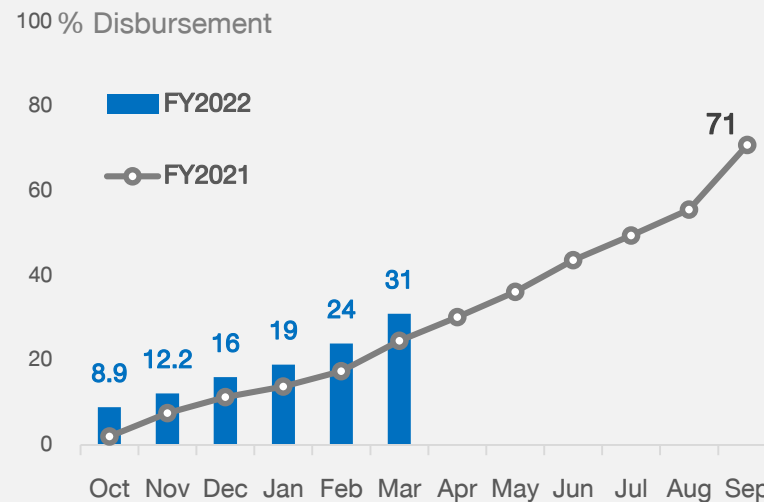
As of Apr2022



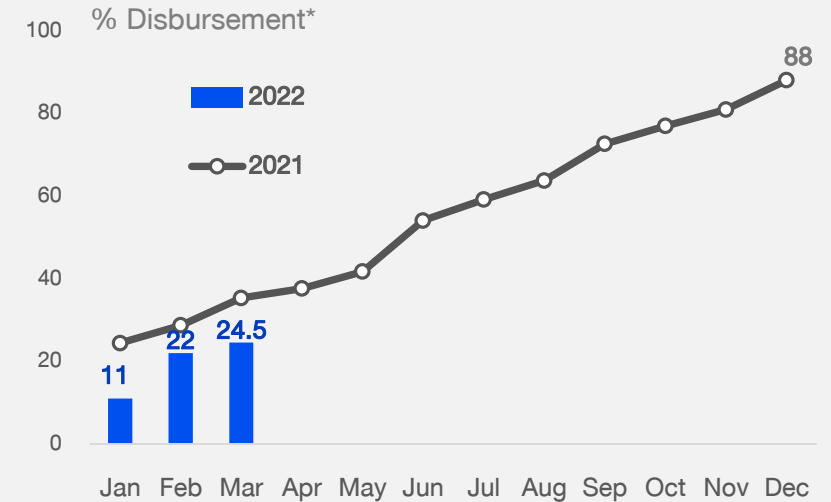
Current Expenditures(FY22) : 1,402bn



Public Investment Expenditures(FY22) : 188bn



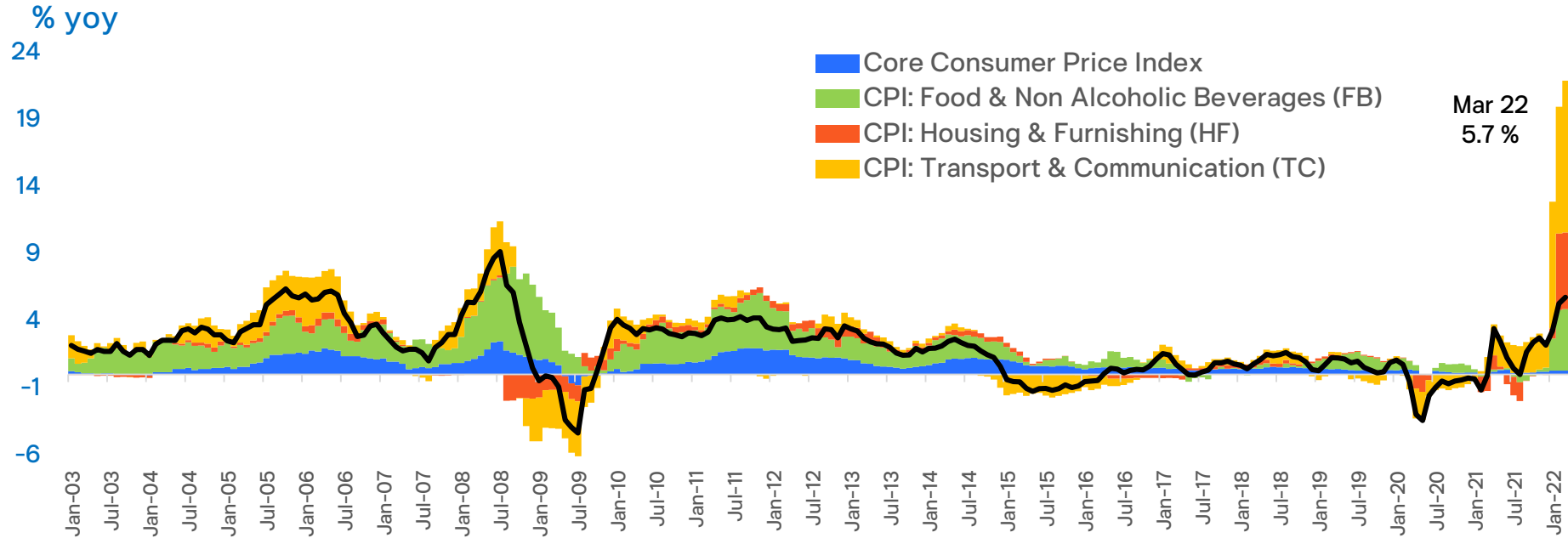
State Owned Enterprise Investment (as of Mar2022) : 82bn



Source: NESDC, FPO, SEPO and ttb analytics

* Accumulated disbursement / Full year Plan

Thailand's inflation 2022

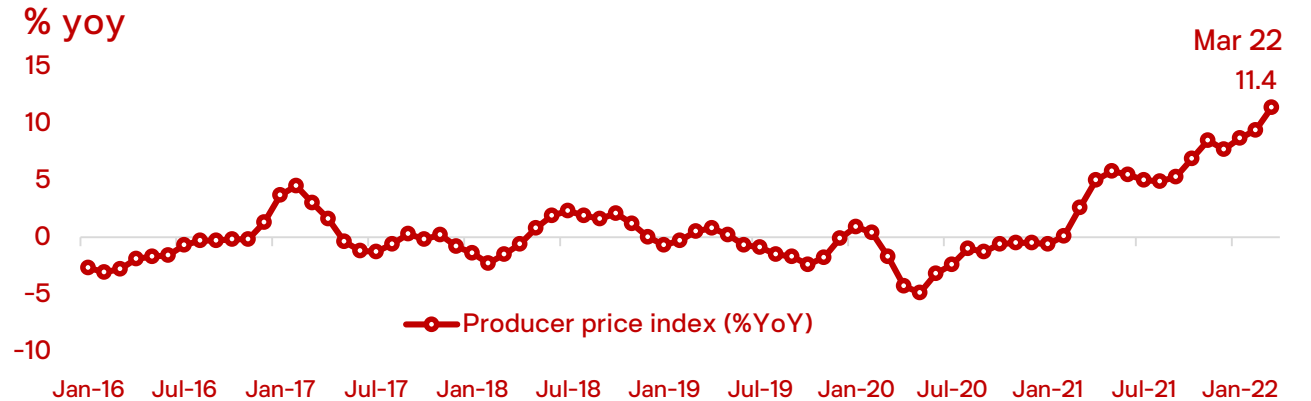


(%YoY)	Mar-22
Headline inflation	5.7
Core (67.1%)	2.0
Raw Food (20.6%)	3.2
Energy (12.4%)	32.4

Dubai oil price 2022



Producer price index



PART 3

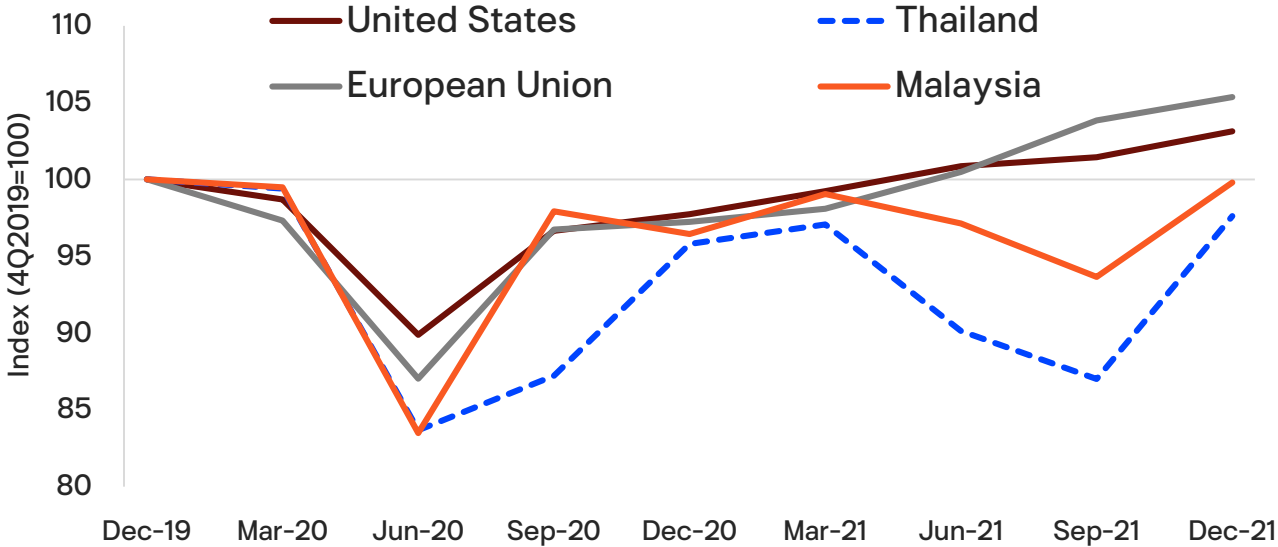
Financial Market



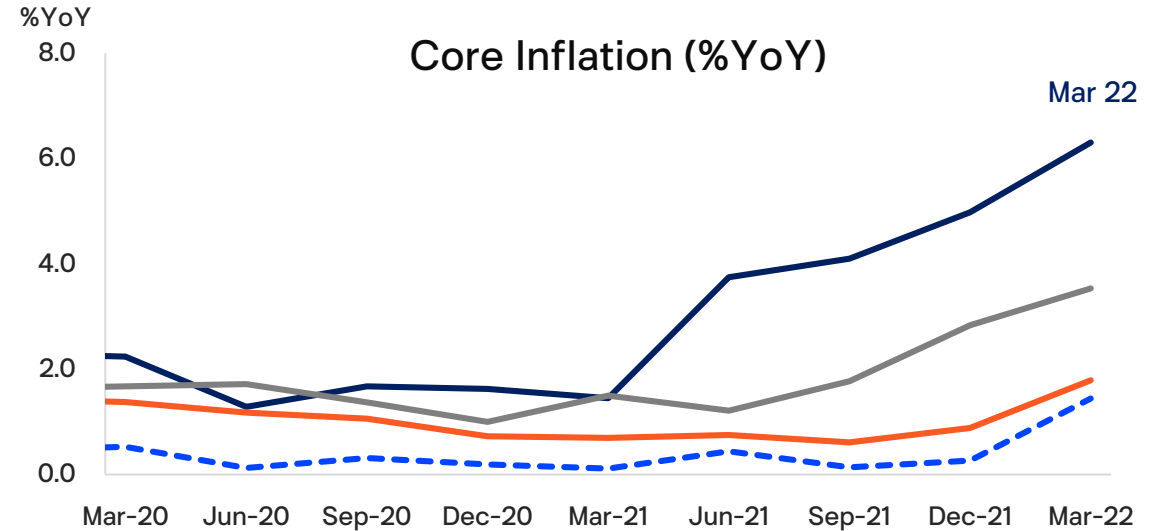
Global divergence in economic recovery and inflation dynamic



GDP (normalized level)

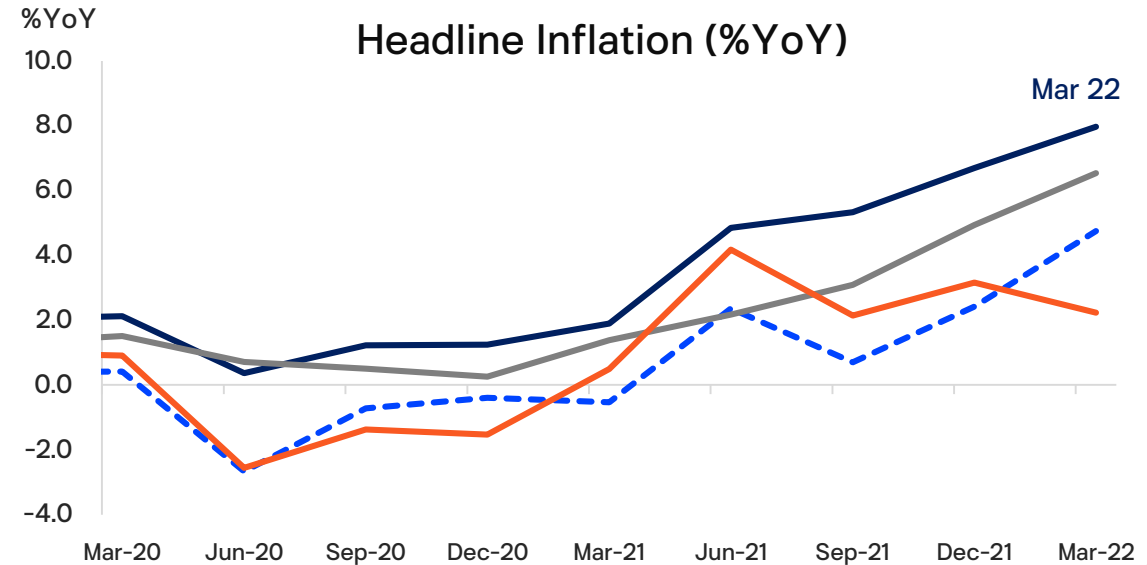


Inflation

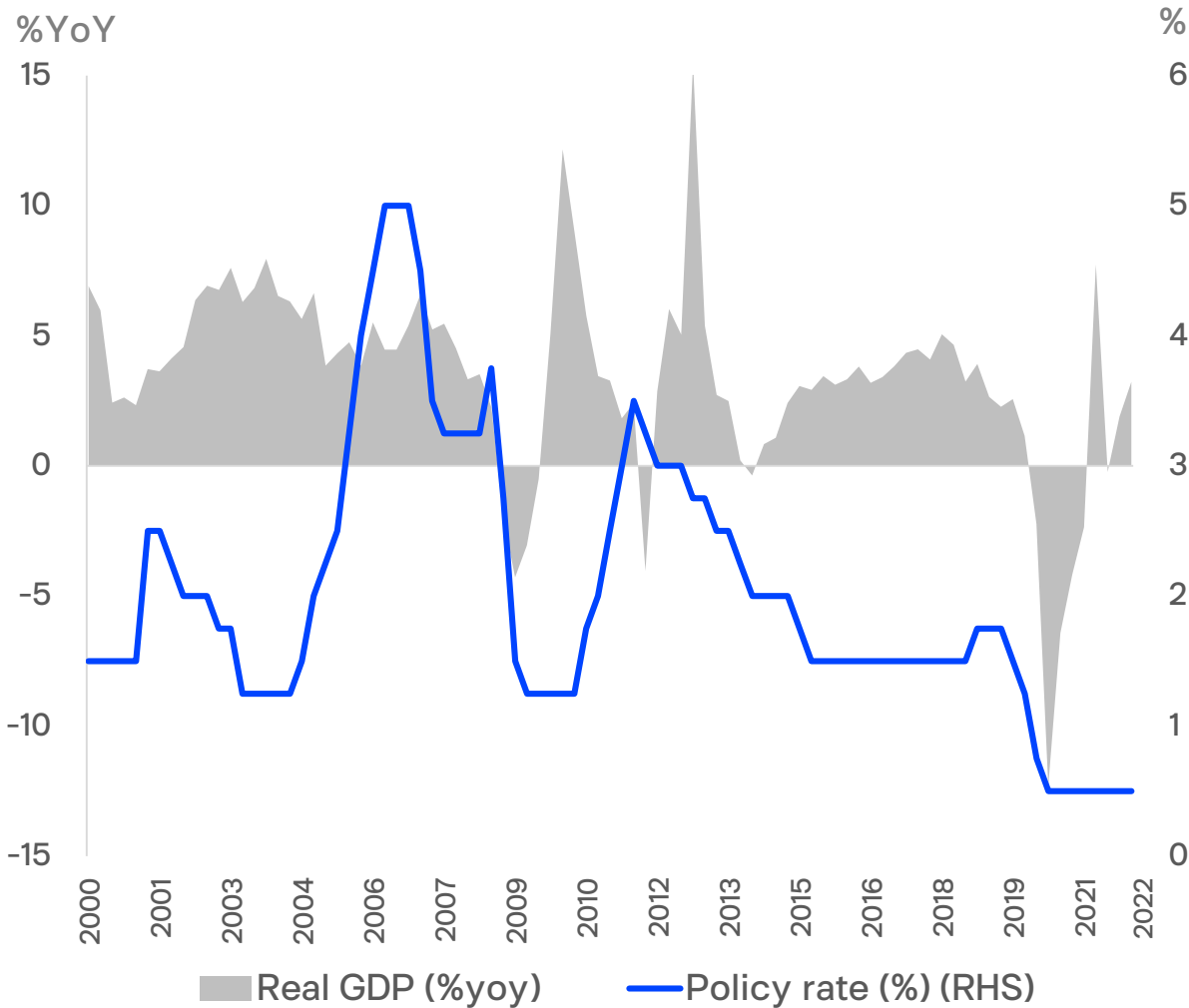


Monetary policy rate action

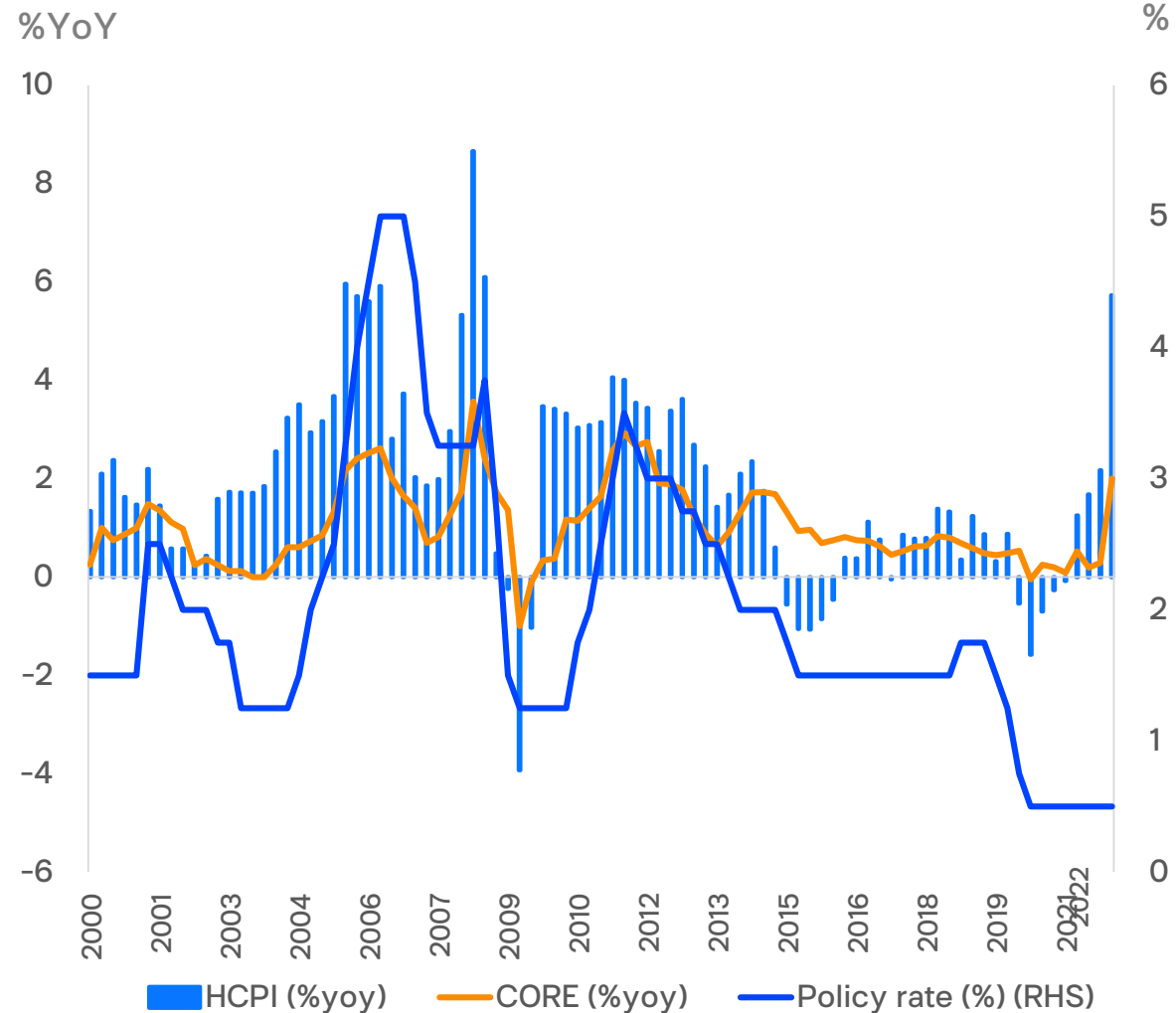
	Previous RP (%) (Lowest during crisis)	Latest rate hike (bps)	Current RP (%)	Further tightening signal
FED	0.00-0.25	50 (May22)	0.75-1.00	Jun22
ECB	0.00	25 (Apr 11)	0.00	July22
BNM	1.75	25 (May22)	2.00	"begin reducing accommodation with gradual manner"
BOT	0.50	25 (Dec18)	0.50	-
BOK	0.50	25 (Apr22)	1.50	-



Real GDP vs Policy rate response

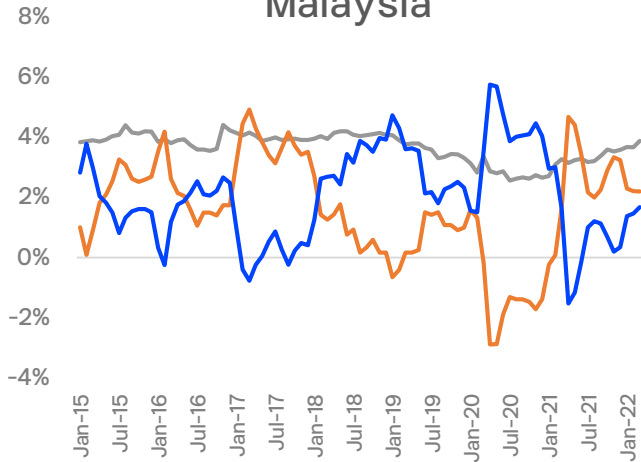


Inflation vs Policy rate response

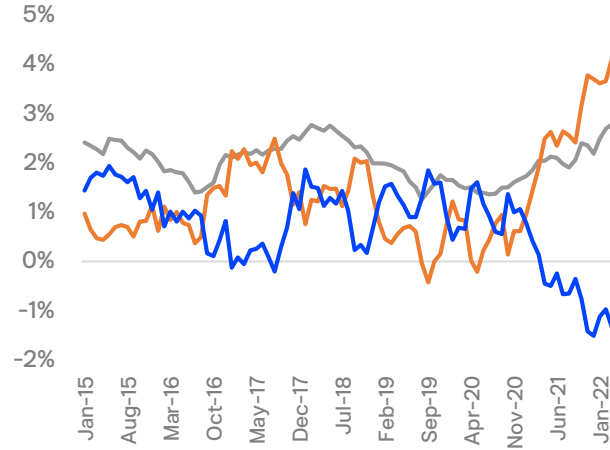


10Y real yield in emerging markets

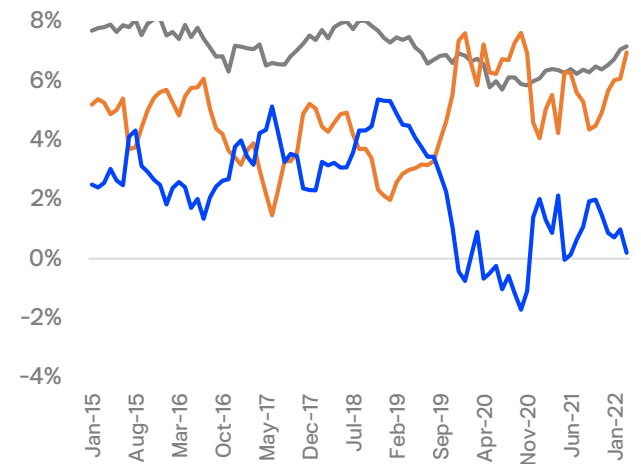
Malaysia



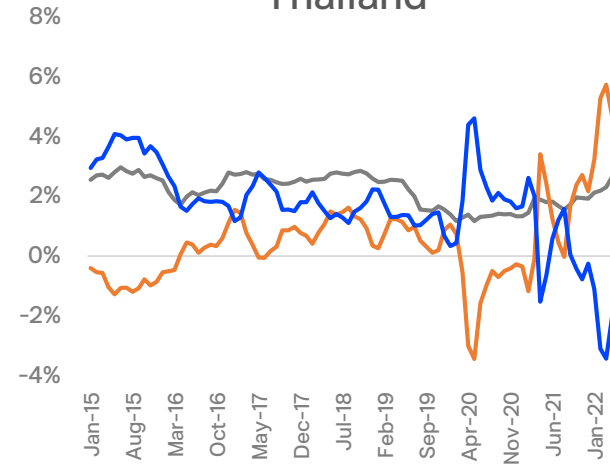
South Korea



India

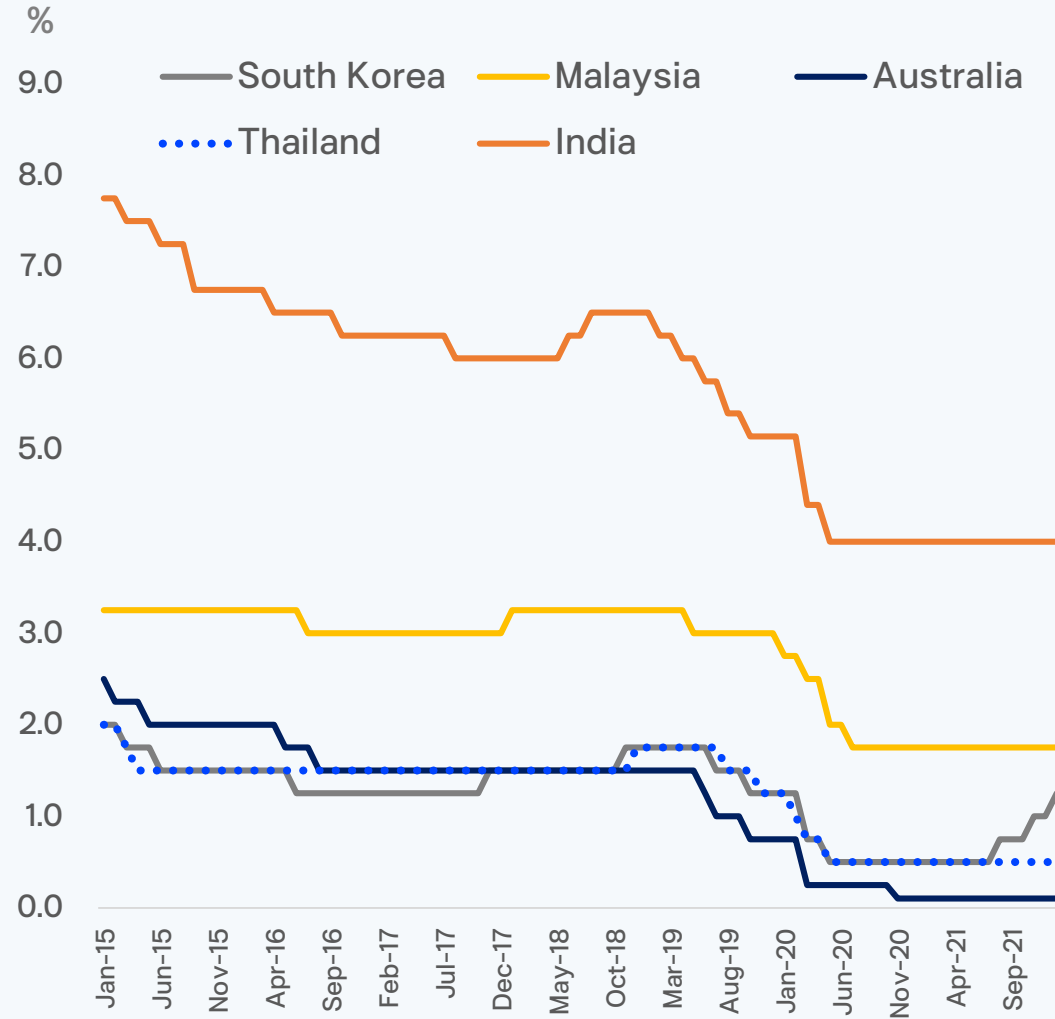


Thailand



— 10Y Treasury (%) — Headline inflation (%YoY) — Real yield (%)

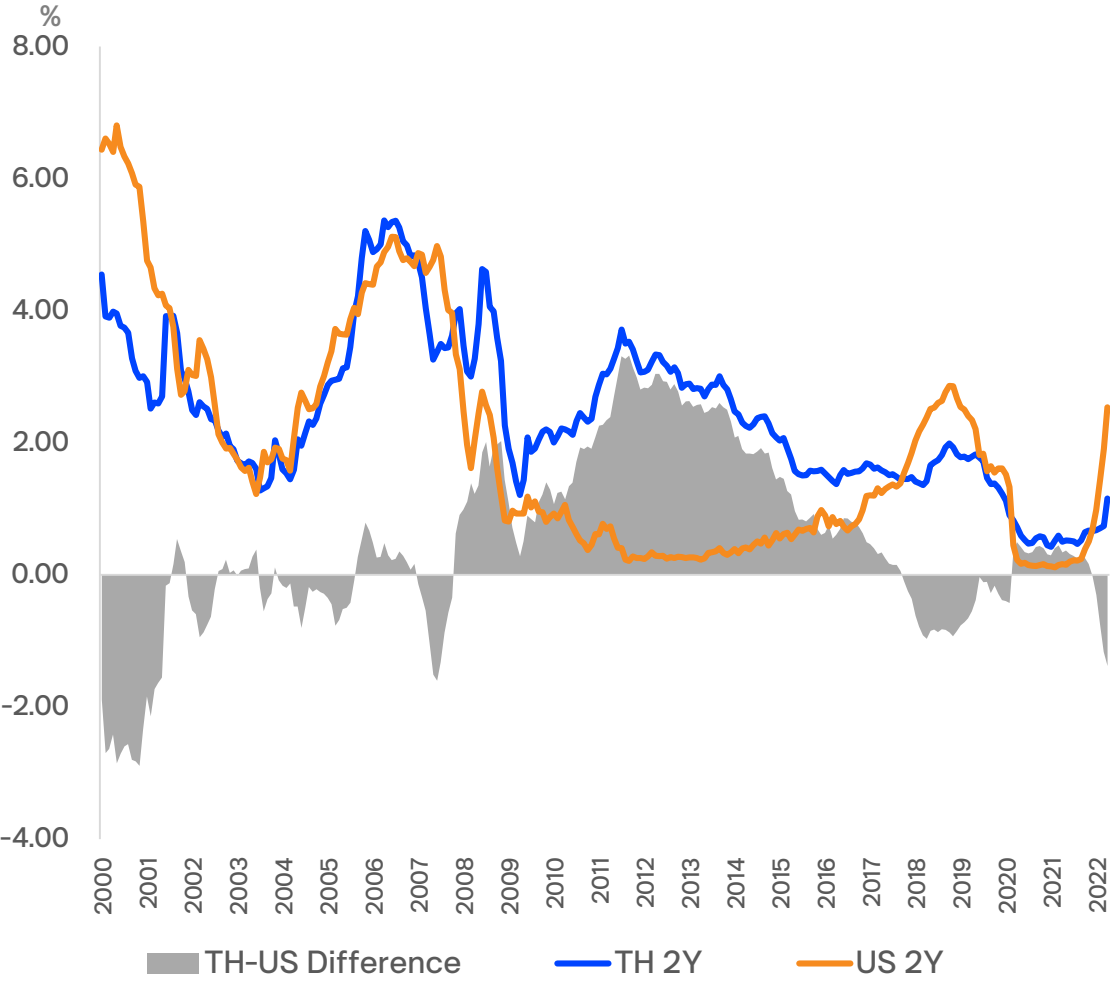
Policy rate comparison



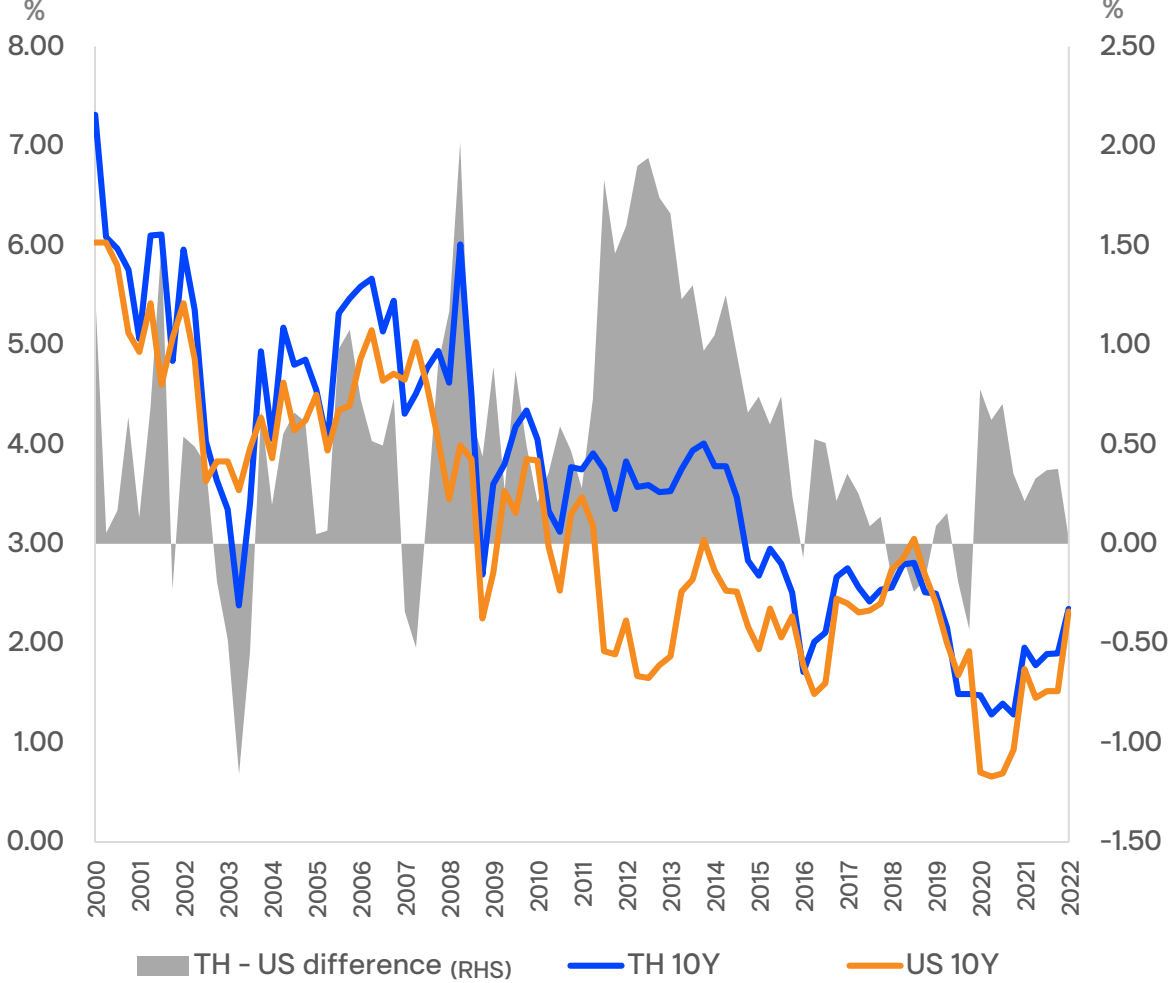
Moreover, greater divergence observed in the short tenure, while the long one aligned



2Y bond yield gap and comparison



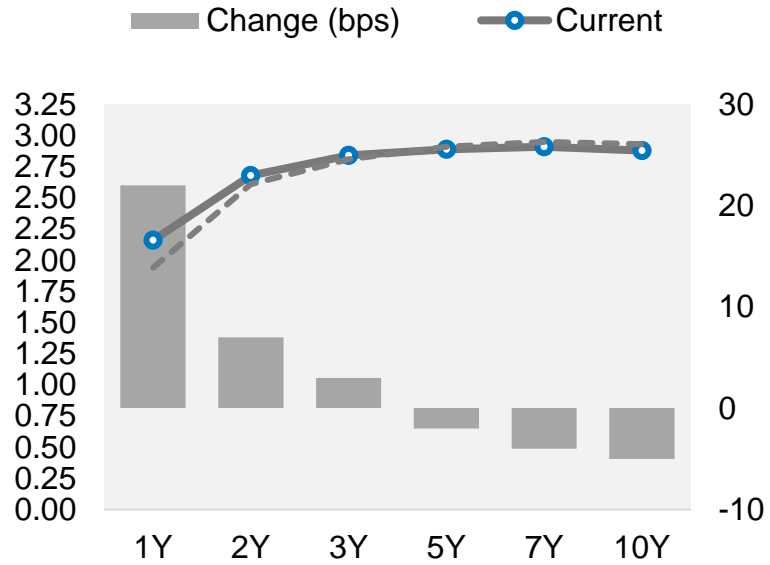
10Y bond yield gap and comparison



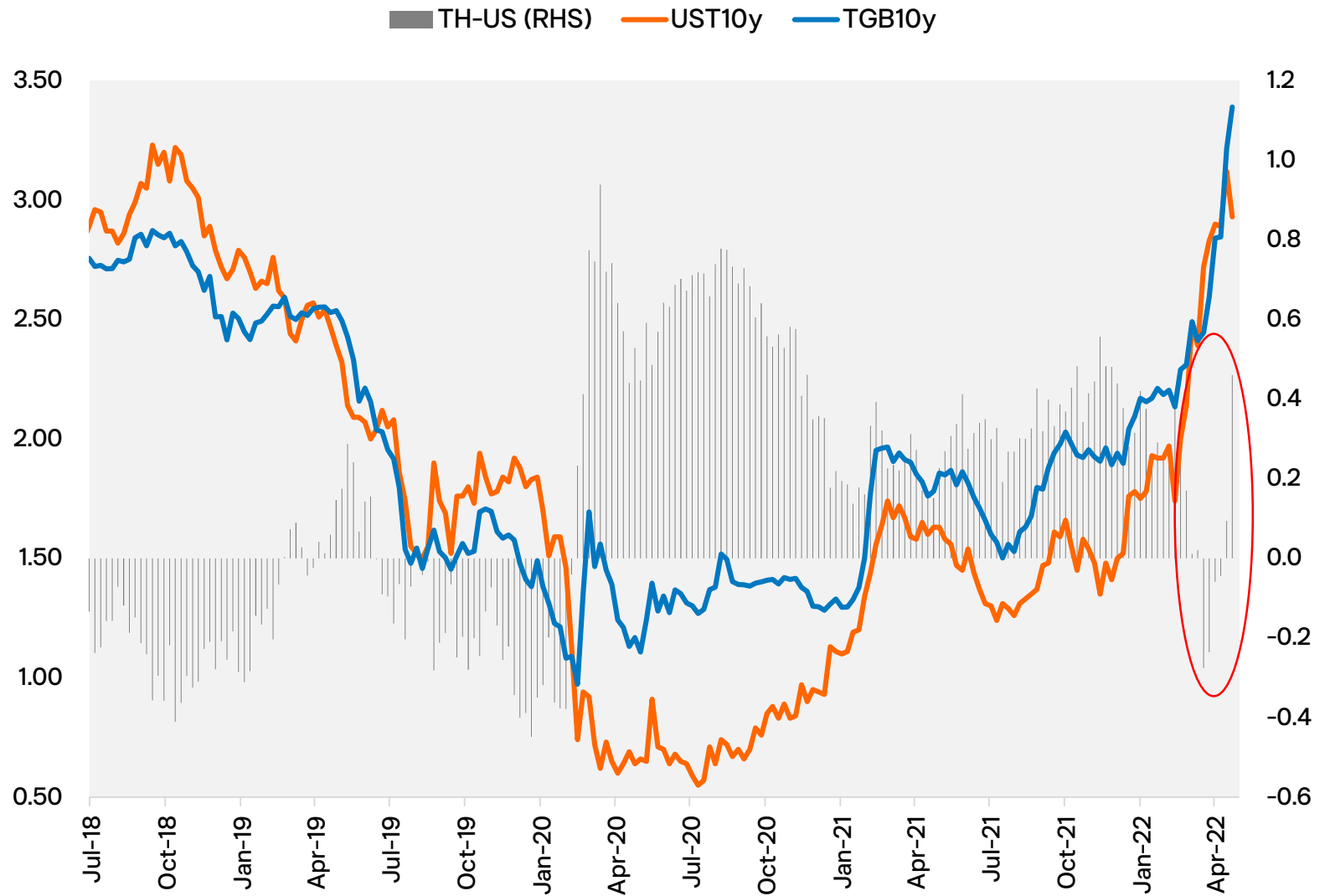
Spike in long-term TH bond yield reversed the gap in May, resulting from MOF bond switching



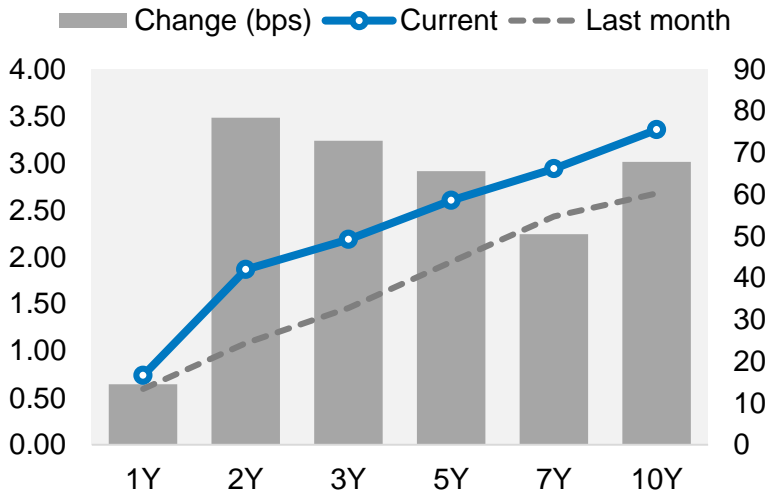
UST yield curve



UST-TGB 10 year yield curve



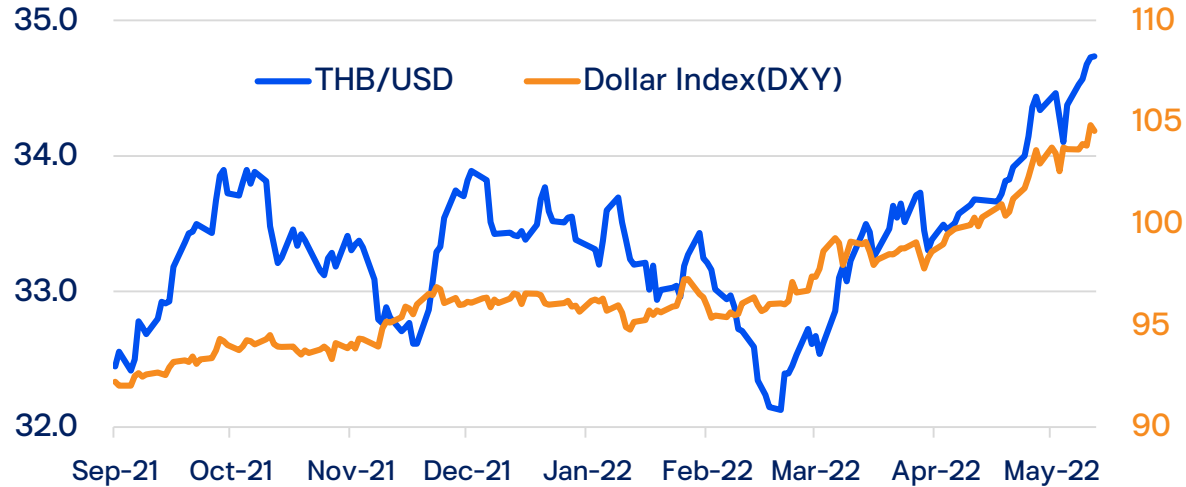
TGB yield curve



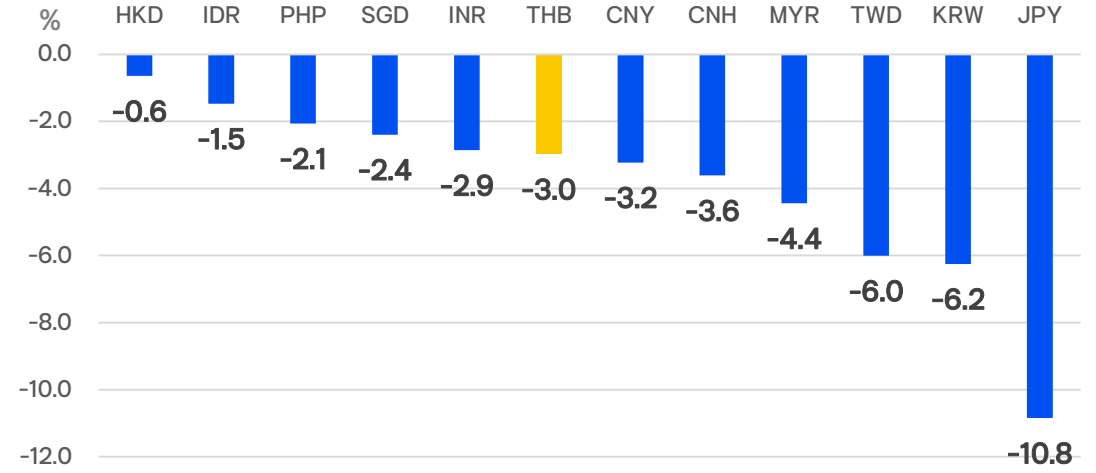
Source : CEIC, ThaiBMA, and ttb analytics

Dollar Strengthened due to policy disparity, Current account rose to a positive territory

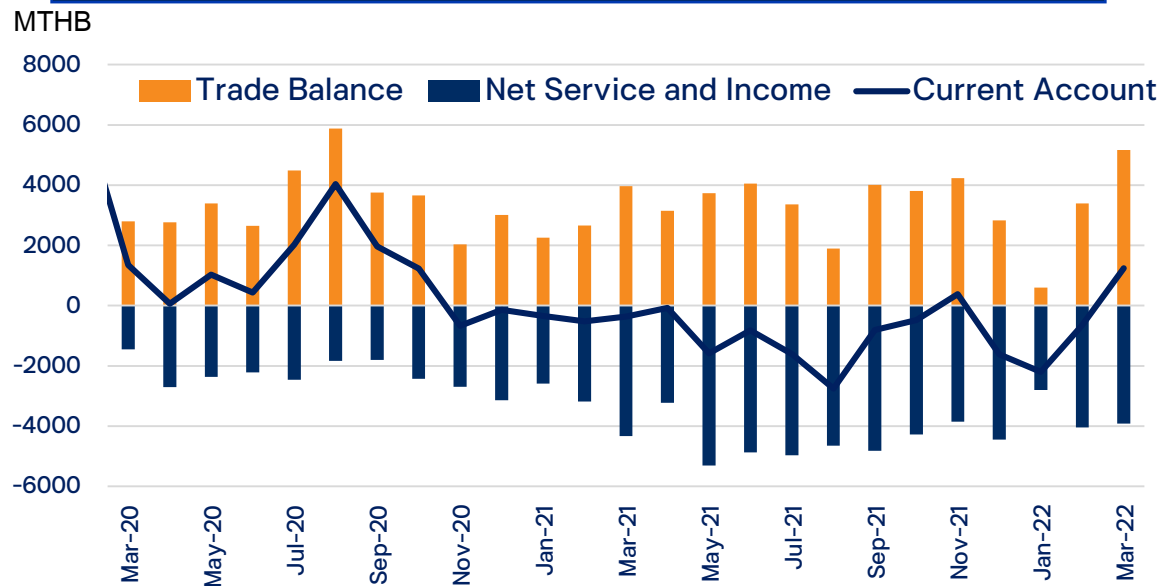
USDTHB and DXY



Change in Asian currencies (%YTD)



Thai Current Account remained in negative



Projection

June-22

34.80

September-22

34.30

December-22

33.90

- USDTHB remained in high level in May around 34.00 - 34.80 level. Dollar strengthened from strong economic number, pointing to a 50 bps increase in June. Current Account became positive for the first time since November 2021 due to greater trade balance.
- Japanese Yen led the depreciation of Asian currencies, dropping more than 10% since last year
- DXY continued its long bullish run from last month, extending its run to 105 before dropping down from risk-off sentiments on Chinese economy

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.