

Economic and Financial Outlook

ttb analytics

Dec 2022

Global Economy

- **Global price pressure has been further easing** as can be seen by declines in energy and non-energy commodity prices and freight rate.
- **Global economic activities faced deepening contraction** in both manufacturing and services sector with a prominent downturn in Europe and soften momentum in Asian nations.
- **Global trade has been declining since Q3/22** with a recent export slowdown across G3 and Asian nations, pronouncing a greater risk of recession in 2023.
- **Regarding G3 economy, apart from declining exports, domestic demands have also softened** while inflation elevated. This triggered a new course of smaller-size interest rate hike.
- **Chinese economy has faced multiple headwinds** with a surge in infection after abrupt relaxation of harsh COVID-19 restrictions, **Japanese economy is about to weaken further** due to export slowdown, COVID-19 case surge and deterioration in households' purchasing powers.
- **ASEAN economy are to remain robust** from continuous support of domestic demands, while merchandised exports have eased.

Domestic Economy

- **In Oct 22, Thai economy continued to recover but at a slower pace for fourth consecutive month. Private consumption indicators slightly declined** from the previous month. Nevertheless, service sectors continued to improve in line with increases in foreign tourist figures. Several fundamental factors including employment, income, and consumer confidence continued to improve.
- **Private investment indicators slightly declined** in this month, mainly from the machinery and equipment category corresponding with overall industrial production.
- **The value of merchandise exports (ex. gold) contracted in all categories**, mainly from major industrial products (computer and parts, plastic pallet ,etc). By key partners, mostly also declined.
- **Foreign tourists in Oct increased consecutively** to reach a new peak since pandemic. The major groups still came from East Asia. Moreover, Russia and Europe tourists returned.
- **Headline inflation in Oct decelerated further** due to food prices dropped and energy price stabilized while core inflation remained mark over 3% level.

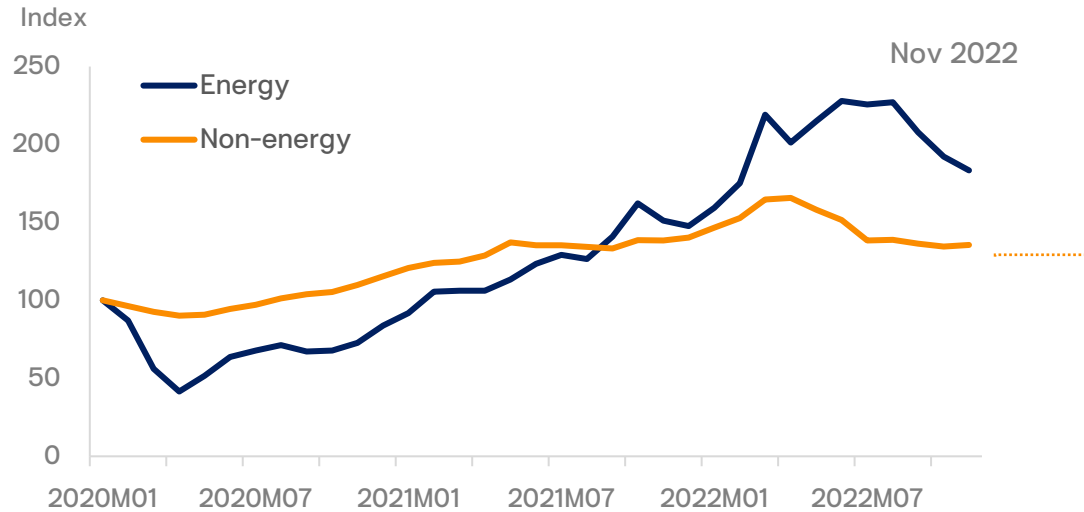
Financial Market

- **Major central banks around the world hiked policy rate to curb rising inflation.** The Federal Reserve hike 50 bps on 14-15 December. Meanwhile, the next rate decision of Federal Reserve is expected for at least 75 bps by the end of 2023.
- **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, negative yield curve signal 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 November, ending 35.35 level.** It could be around 34.50-35.00 in December. Dollar would tend lower in short term on soft inflation data and slower pace of Fed's interest rate hikes.

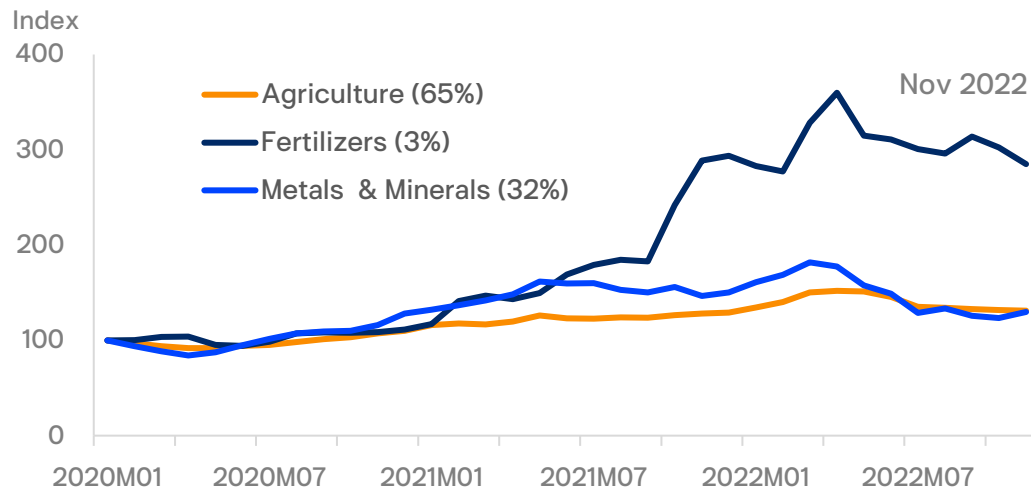
PART 1

Global Economy

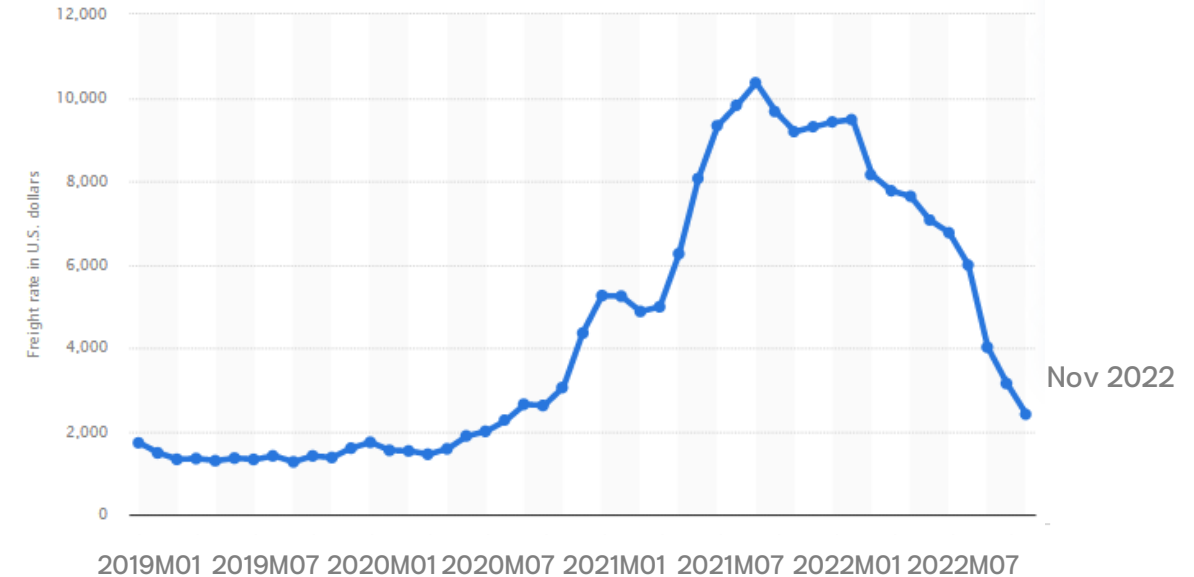
World Commodity Index



Non-Energy Group

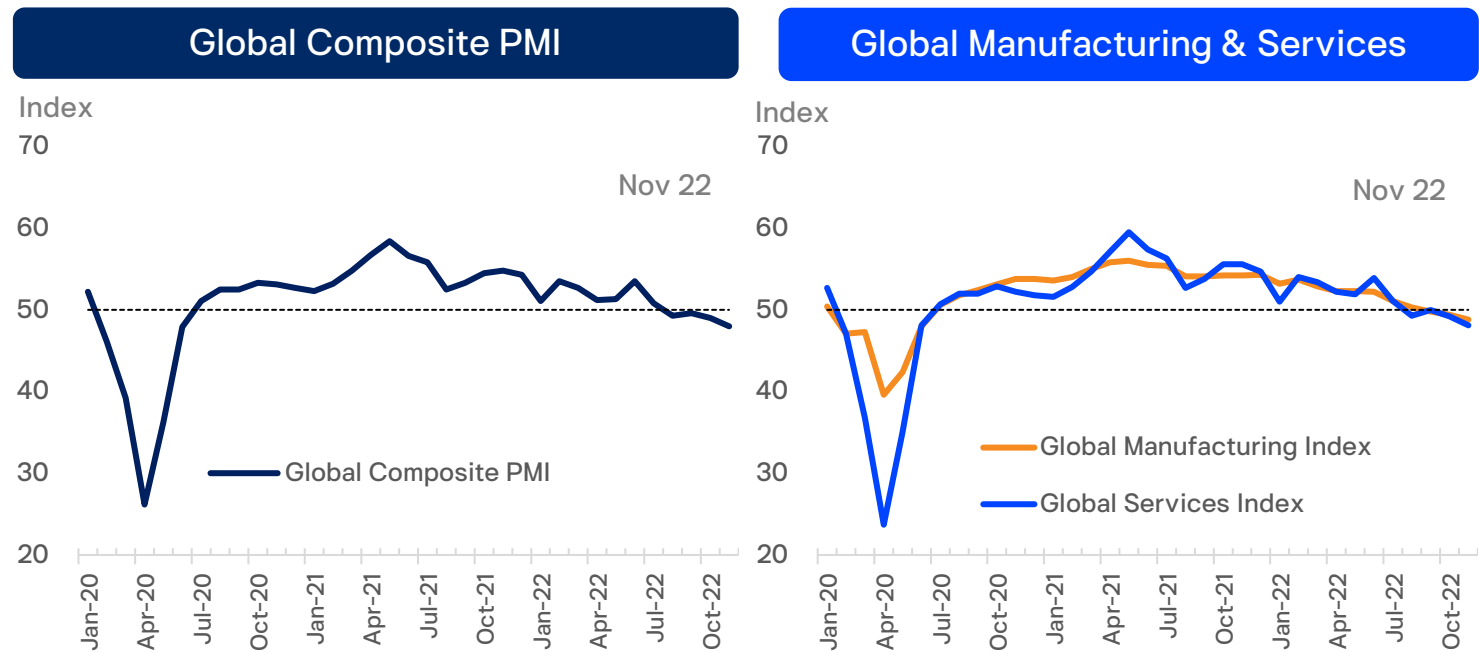


Global container freight rate index (US dollar)



- **Global price pressure has been easing as can be seen by declines in energy and non-energy commodity prices.** Global energy prices have dropped due to a moderation in demands and a gradual shift towards renewable energy. Moreover, that of non-energy group have been stabilized. It is noteworthy that even though fertilizer costs have softened but overall remained at high level.
- **Also, supply problem has been gradually resolved as shown by declines in global freight costs.** After the global freight rates faced a steep increase in 2021, it dropped to be at 2,400 USD, 5-times lower than last year's.

Global slowdown has been continuing, with broader weakening momentum across nations

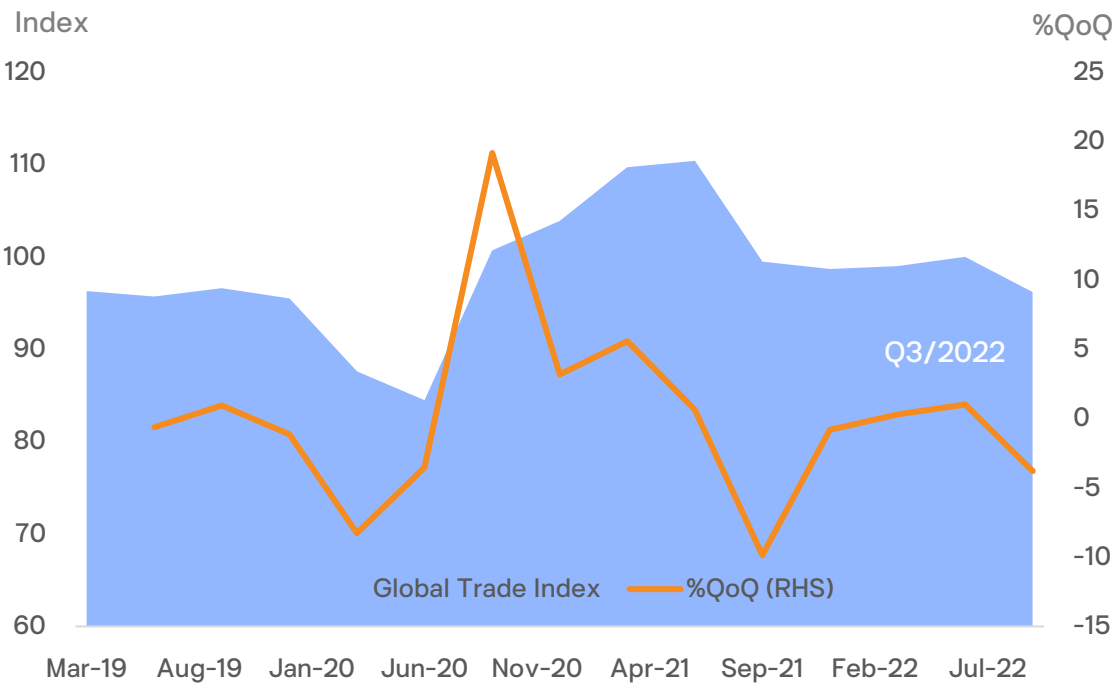


- Global slowdown has continued into the end of the year 2022, as reflected by a further drop in Global Composite PMI of November 2022 at 48, down from 49 in October 2022. This was due to deepening contraction in activities of both manufacturing and services sector.
- From regional perspective, we can see a downturn accelerated midway in European continent. Meanwhile, there were weakening momentum in United states as well as some key nations in Asia: China, Japan and South Korea.

	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	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22
Australia	57.2	56.9	56.8	59.7	60.4	58.6	56.9	52.0	56.8	58.2	59.2	57.7	55.1	57.0	57.7	58.8	55.7	56.2	55.7	53.8	53.5	52.7	51.3
China	51.5	50.9	50.6	51.9	52.0	51.3	50.3	49.2	50.0	50.6	49.9	50.9	49.1	50.4	48.1	46.0	48.1	51.7	50.4	49.5	48.1	49.2	49.4
India	57.7	57.5	55.4	55.5	50.8	48.1	55.3	52.3	53.7	55.9	57.6	55.5	54.0	54.9	54.0	54.7	54.6	53.9	56.4	56.2	55.1	55.3	55.7
Japan	49.8	51.4	52.7	53.6	53.0	52.4	53.0	52.7	51.5	53.2	54.5	54.3	55.4	52.7	54.1	53.5	53.3	52.7	52.1	51.5	50.8	50.7	49.0
South Korea	53.2	55.3	55.3	54.6	53.7	53.9	53.0	51.2	52.4	50.2	50.9	51.9	52.8	53.8	51.2	52.1	51.8	51.3	49.8	47.6	47.3	48.2	49.0
Indonesia	52.2	50.9	53.2	54.6	55.3	53.5	40.1	43.7	52.2	57.2	53.9	53.5	53.7	51.2	51.3	51.9	50.8	50.2	51.3	51.7	53.7	51.8	50.3
Thailand	49.0	47.2	48.8	50.7	47.8	49.5	48.7	48.3	48.9	50.9	50.6	49.5	51.7	52.5	51.8	51.9	51.9	50.7	52.4	53.7	55.7	51.6	51.1
United States	59.2	58.6	59.1	60.5	62.1	62.1	63.4	61.1	60.7	58.4	58.3	57.7	55.5	57.3	58.8	59.2	57.0	52.7	52.2	51.5	52.0	50.4	47.7
Canada	54.4	54.8	58.5	57.2	57.0	56.5	56.2	57.2	57.0	57.7	57.2	56.5	56.2	56.6	58.9	56.2	56.8	54.6	52.5	48.7	49.8	48.8	49.6
United Kingdom	54.1	55.1	58.9	60.9	65.6	63.9	60.4	60.3	57.1	57.8	58.1	57.9	57.3	58.0	55.2	55.8	54.6	52.8	52.1	47.3	48.4	46.2	46.5
Germany	57.1	60.7	66.6	66.2	64.4	65.1	65.9	62.6	58.4	57.8	57.4	57.4	59.8	58.4	56.9	54.6	54.8	52.0	49.3	49.1	47.8	45.1	46.2
France	51.6	56.1	59.3	58.9	59.4	59.0	58.0	57.5	55.0	53.6	55.9	55.6	55.5	57.2	54.7	55.7	54.6	51.4	49.5	50.6	47.7	47.2	48.3
Italy	55.1	56.9	59.8	60.7	62.3	62.2	60.3	60.9	59.7	61.1	62.8	62.0	58.3	58.3	55.8	54.5	51.9	50.9	48.5	48.0	48.3	46.5	48.4
Spain	49.3	52.9	56.9	57.7	59.4	60.4	59.0	59.5	58.1	57.4	57.1	56.2	56.2	56.9	54.2	53.3	53.8	52.6	48.7	49.9	49.0	44.7	45.7

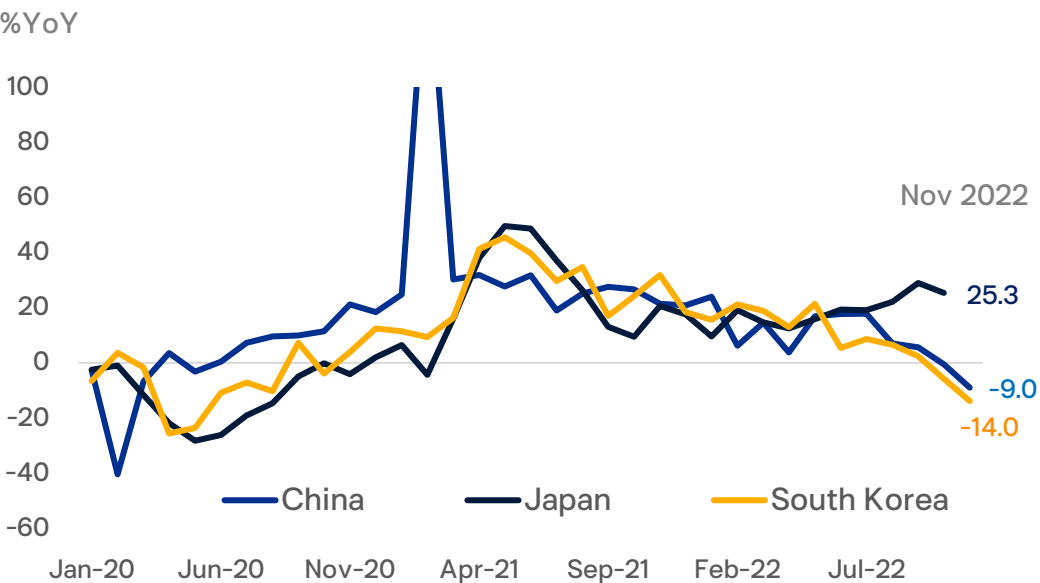
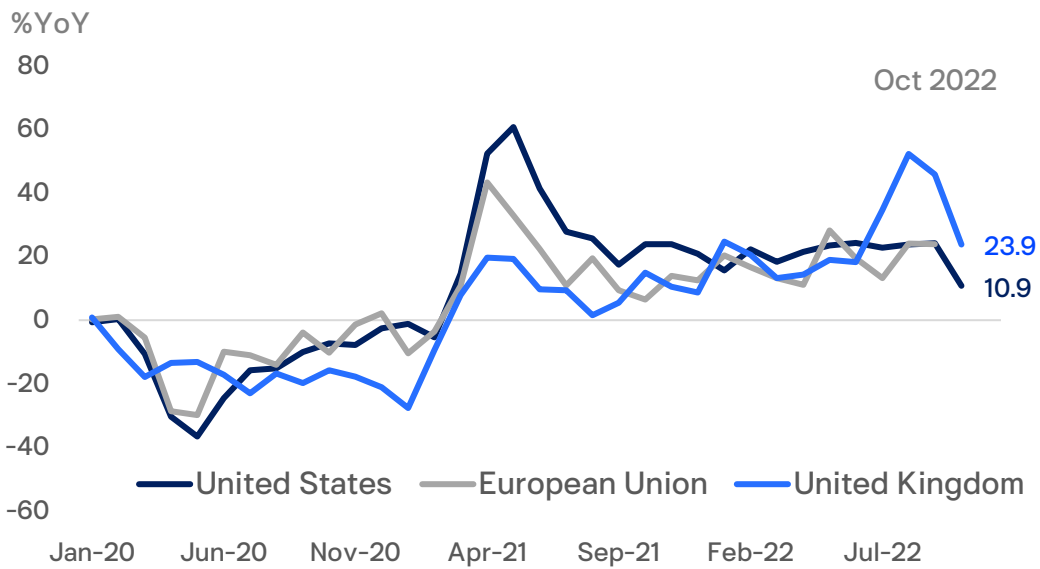
Global trade started to decline in Q3 with recent export slowdowns of G3 and key Asian nations

WTO Global Trade Barometer Index



- Global trade has declined since Q3/2022 as represented by WTO Global trade index.
- The latest export data of G3 and Key Asian nations in Q4/2022 registered weakening path. They pointed out that the weakness in global demands would continue into the year end 2022 amid rising living costs and interest rates, and therefore pronounced a greater risk of recession for next year.

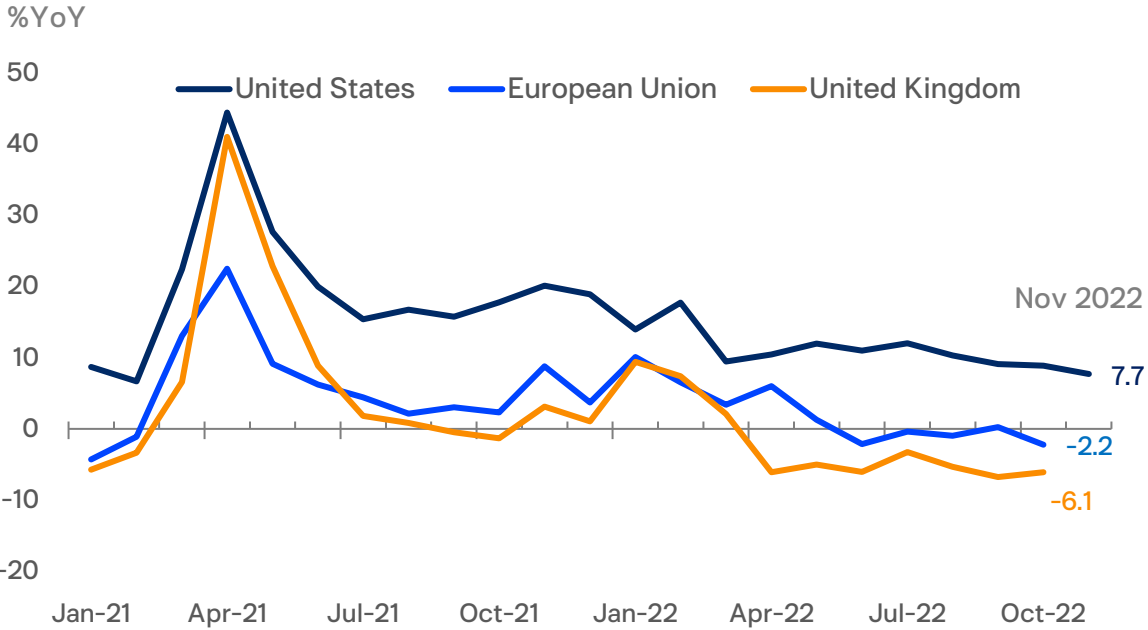
Export Growth by key nations



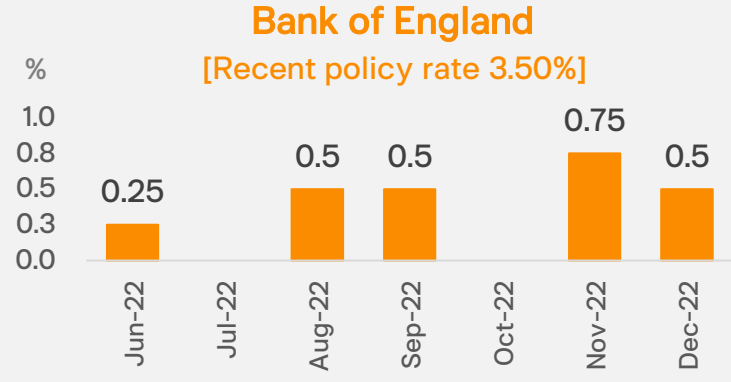
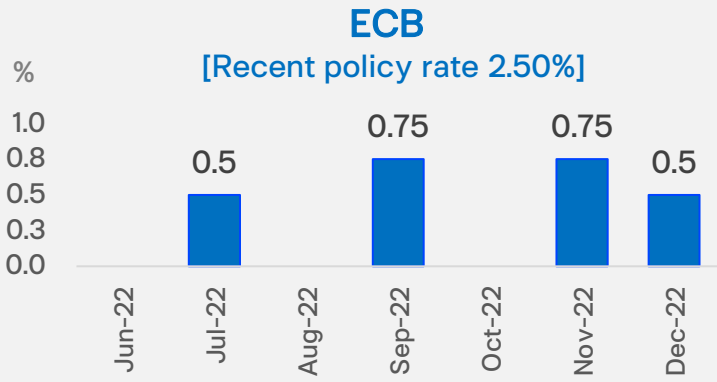
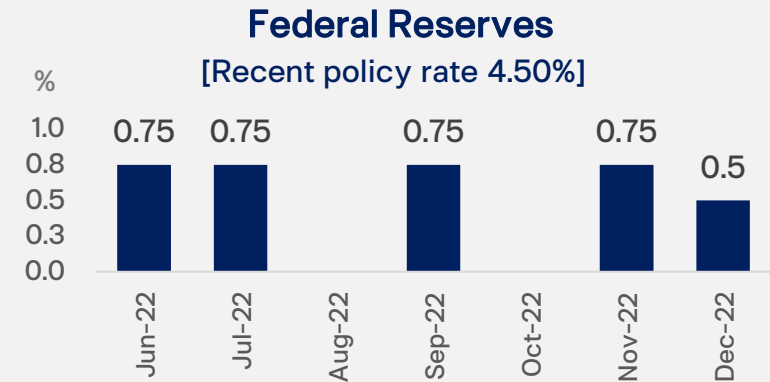
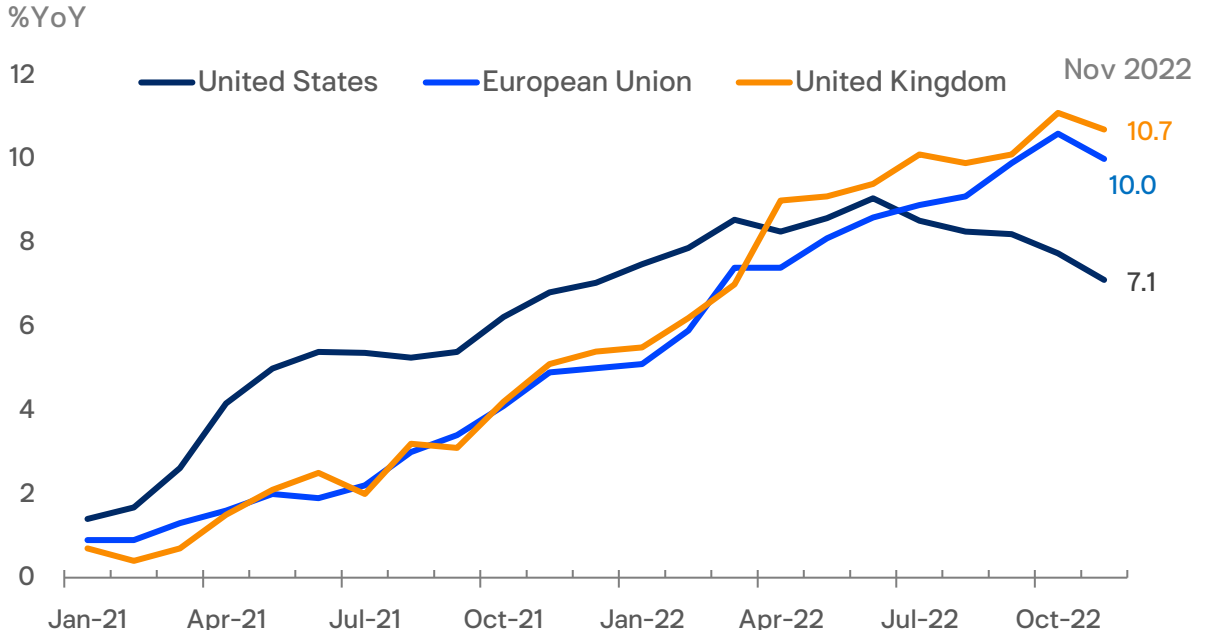
Domestic demands of G3 softened while inflation elevated, triggering smaller hiking size



G3 Retail Sales

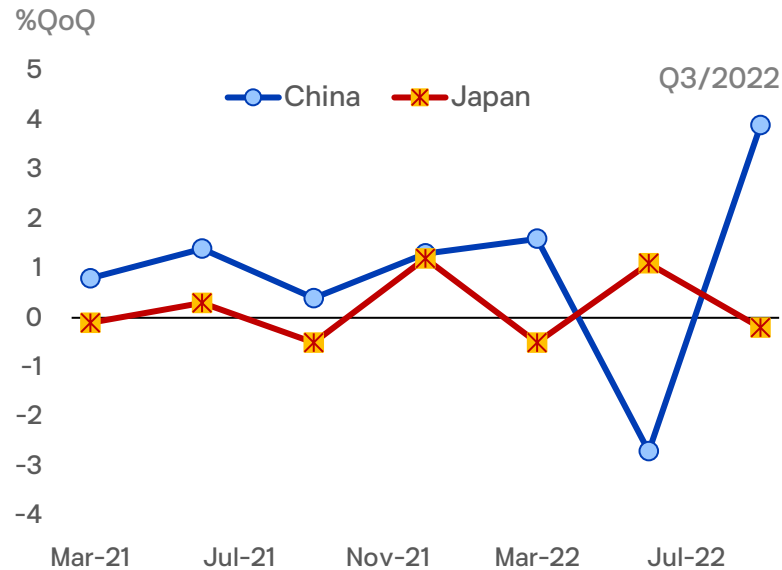


G3 Inflation

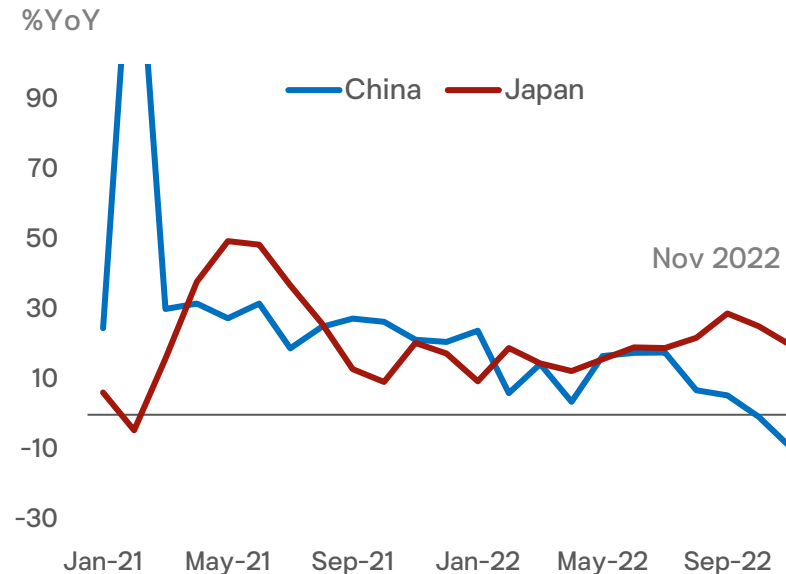


The economy of China and Japan have recently lost more momentum

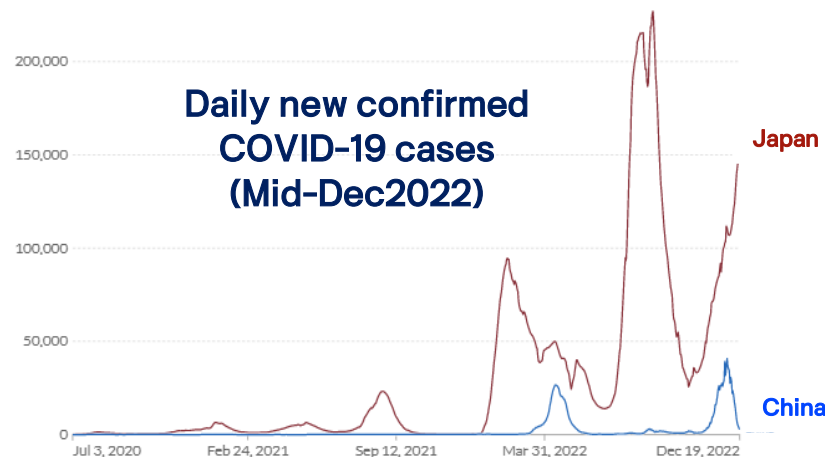
GDP Q3/2022



Export growth



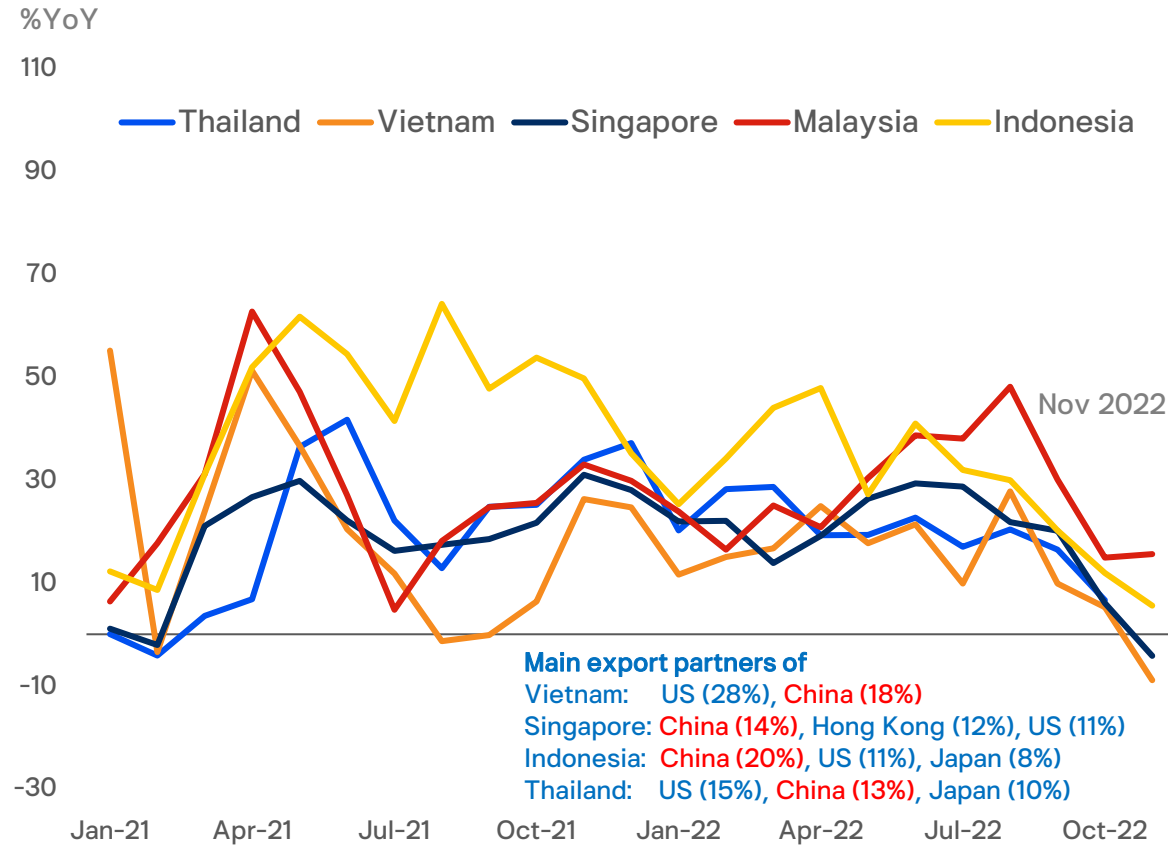
Retail sales



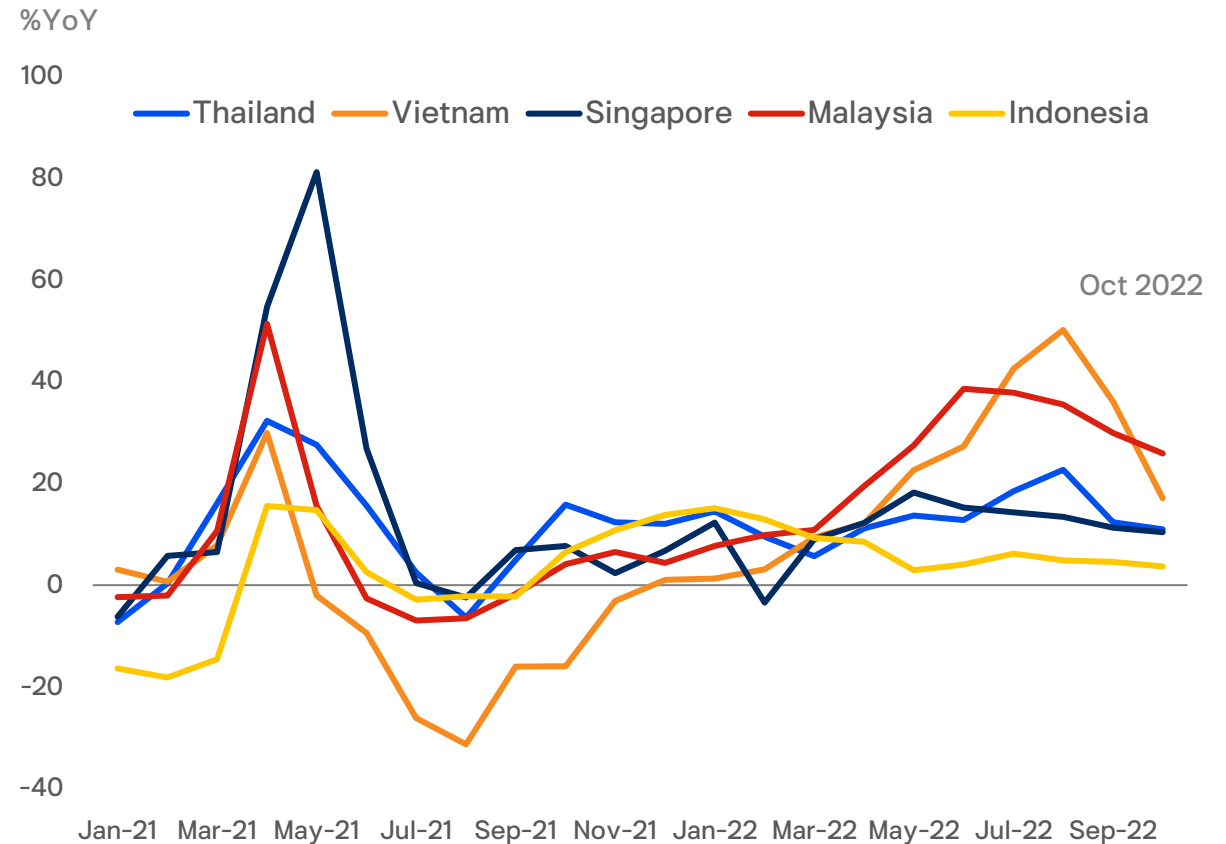
- **Chinese economy has faced multiple headwinds.** COVID infections are presently surging after an abrupt relaxation of harsh COVID-19 restrictions, hitting businesses and consumers. A weak global economy also hurts Chinese exports and productions. For policy perspective in 2023, apart from proactive fiscal policy and prudent monetary policy, they will coordinate between pandemic control and economic & social development.
- **Japanese economy lost momentum in Q3 and is about to weaken further** as export declines, an increase in COVID-19 infection and a decline in real-term purchasing power. While household spending rose 1.1%mom in October, easing from 1.8%mom in previous month, the figure of retail sales expanded only 0.2%mom in October, down from 1.5%mom in September.

The growths of ASEAN exports became mute, while retail sales softened but remained resilient

Export Growth of ASEAN Nations



ASEAN Retail Sales



- **ASEAN nations saw foreign trade soften in November 2022.** Together with weakness in manufacturing activities, external trade outlook could expand with a softer pace amid slower global growth and tighter monetary policy conditions.
- Even with the weakness in external front, **economic growths are generally expected to remain robust amid continued support from domestic economic activities, as shown by softer but resilient retail sales.**

PART 2

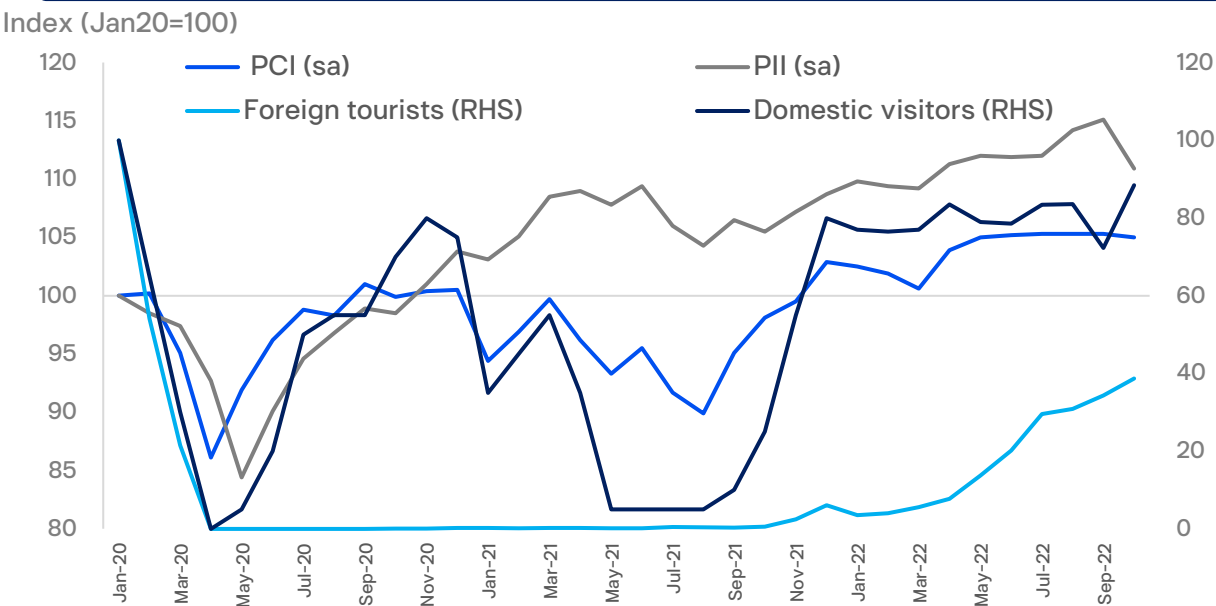
Thai Economy



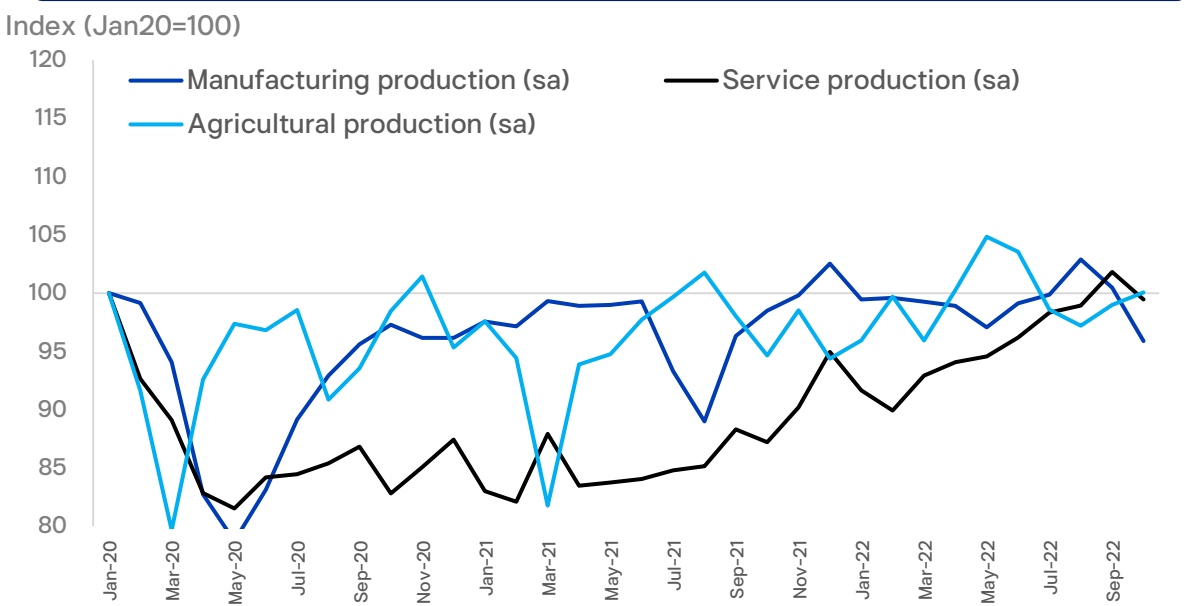
Oct 22: Thai economic recovery remained on track amid weaker external demand



Demand-side indicators



Supply-side indicators



Coincident Economic Index (sa)

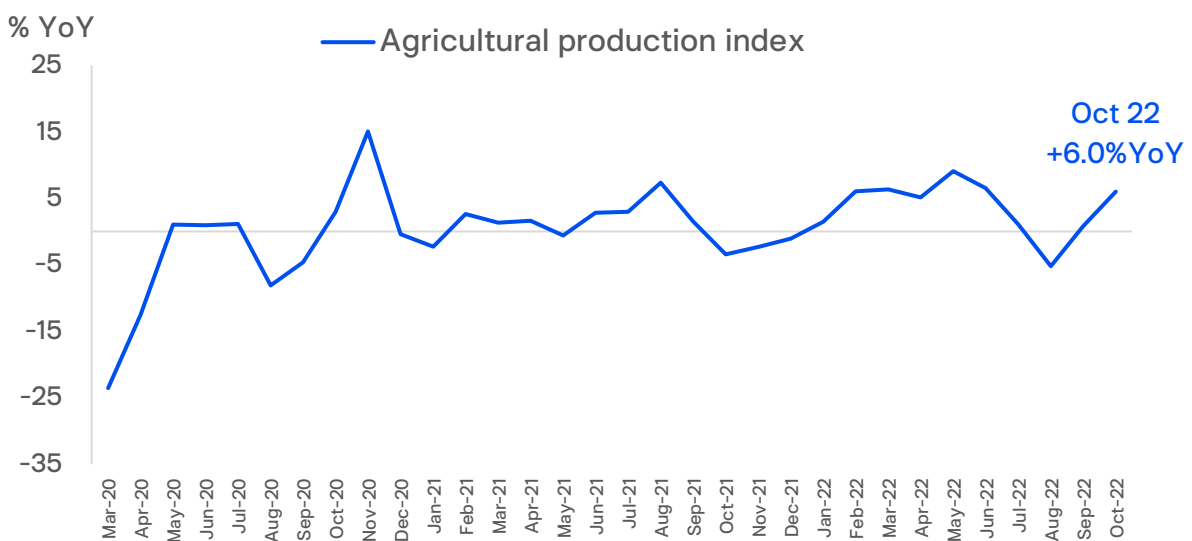
		Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22
Production	Coincident Economic Index (sa)	99.9	100.5	100.8	100.7	100.9	100.9	100.5	100.3	100.6	100.5	101.1	96.7	96.0
	Import Volume index (exclude Gold)	104.3	99.8	115.9	104.9	107.9	112.5	109.6	109.2	109.4	110.5	110.0	112.7	105.3
	Manufacturing Production Index	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
	Gross Value Added Tax at 2000 price (Million baht)	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
C	Sales Benzene, Gasohol & Diesel Index	86.6	91.8	102.8	98.4	95.7	89.2	96.9	97.8	92.8	94.6	93.0	96.1	93.0
	VAT Hotel & Restaurant Index	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
I	Imports of Capital Goods at 2010 price (Million USD)	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
	Domestic Machinery Sales at 2010 price (Million THB)	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

Source: Bank of Thailand, ttb analytics.

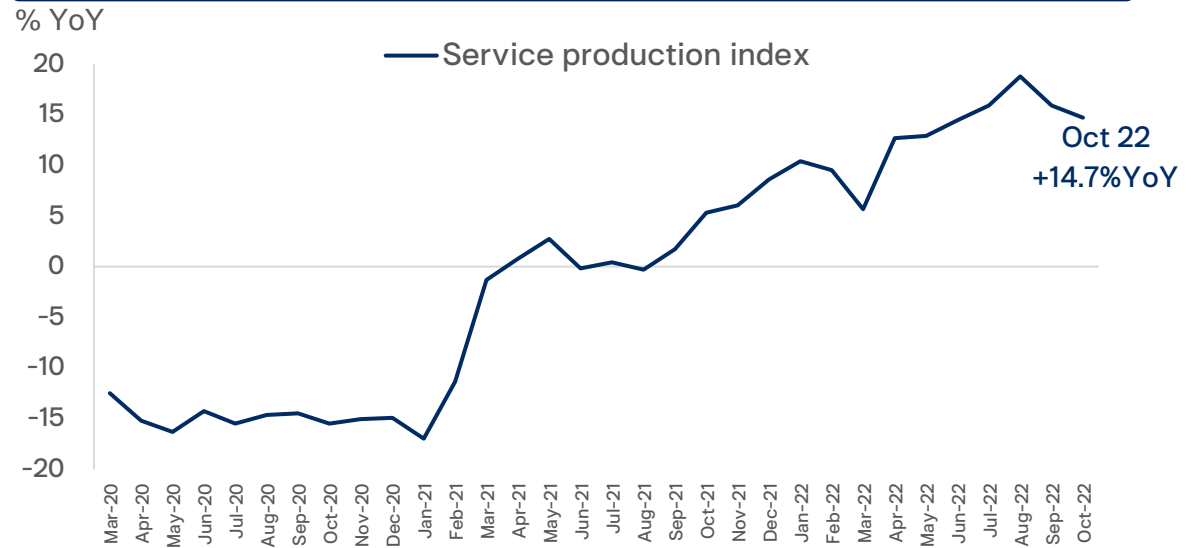
Agricultural production rebounded, while services activities continued to improve but slower pace



Agriculture



Services



Service Production Index (Base Jan 2020=100)

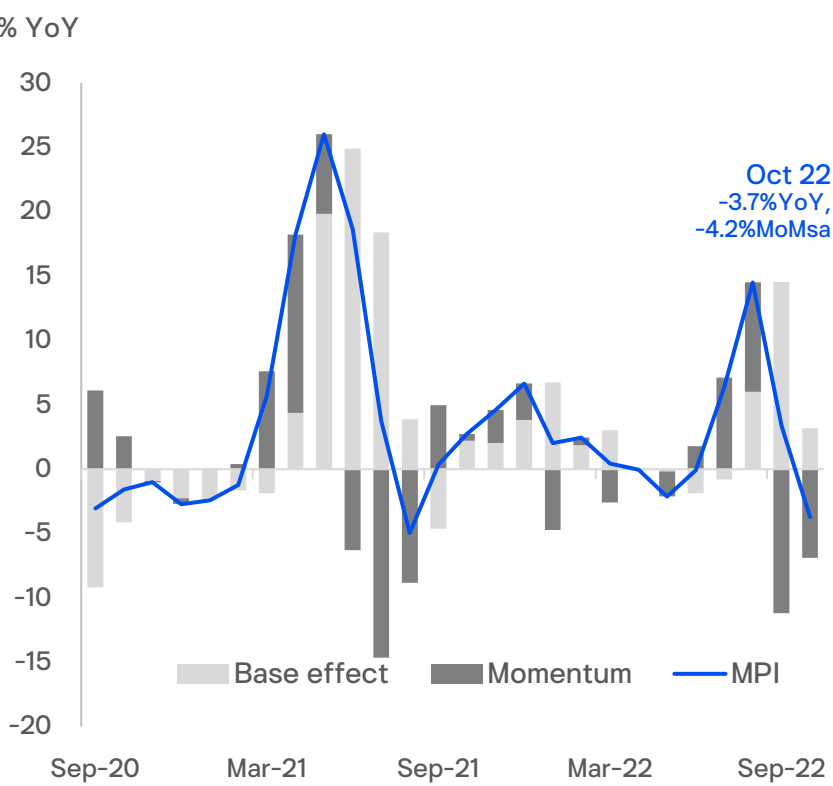
	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22
Wholesale and retail trade; repair of motor vehicles and motor vehicles	97.7	99.5	100.6	102.0	103.3	105.3	104.0	103.0	103.6	104.2	107.4	108.2	107.0
Transportation and storage	63.4	65.3	70.3	67.9	66.9	72.2	70.4	74.5	77.9	81.4	84.6	81.9	82.3
Accommodation and food service activities	8.0	20.2	30.4	27.9	28.0	29.1	32.7	35.4	39.5	47.4	48.3	50.9	55.2
Information and communication	98.8	108.7	121.4	112.8	99.8	116.9	103.0	115.2	117.3	109.7	124.8	125.6	121.2
Financial and insurance activities	111.5	113.1	115.5	102.2	101.5	102.2	118.8	120.3	111.3	108.3	108.9	109.5	106.9
Real estate activities	121.1	128.1	133.9	123.3	122.3	128.7	120.6	122.0	123.8	124.2	118.5	132.5	125.0
Professional, scientific and technical activities	111.4	113.0	125.1	120.1	107.4	126.1	120.1	118.4	129.2	143.6	112.5	135.6	135.4
Administrative and support service activities	73.6	81.1	85.1	82.0	76.7	89.3	79.2	77.3	85.7	90.6	79.8	98.8	87.1
Public administration and defence; compulsory social security	105.8	101.0	106.5	102.1	97.6	92.1	116.1	105.1	104.4	108.3	110.8	113.7	102.6
Service Production Index	88.1	91.1	95.9	92.3	90.5	93.5	97.0	96.3	97.1	99.3	99.9	103.4	100.4

Source: Bank of Thailand and ttb analytics.

MPI dropped further in October mainly due to weaker external demand



Manufacturing



Manufacturing Production Index (Base Jan 2020=100)

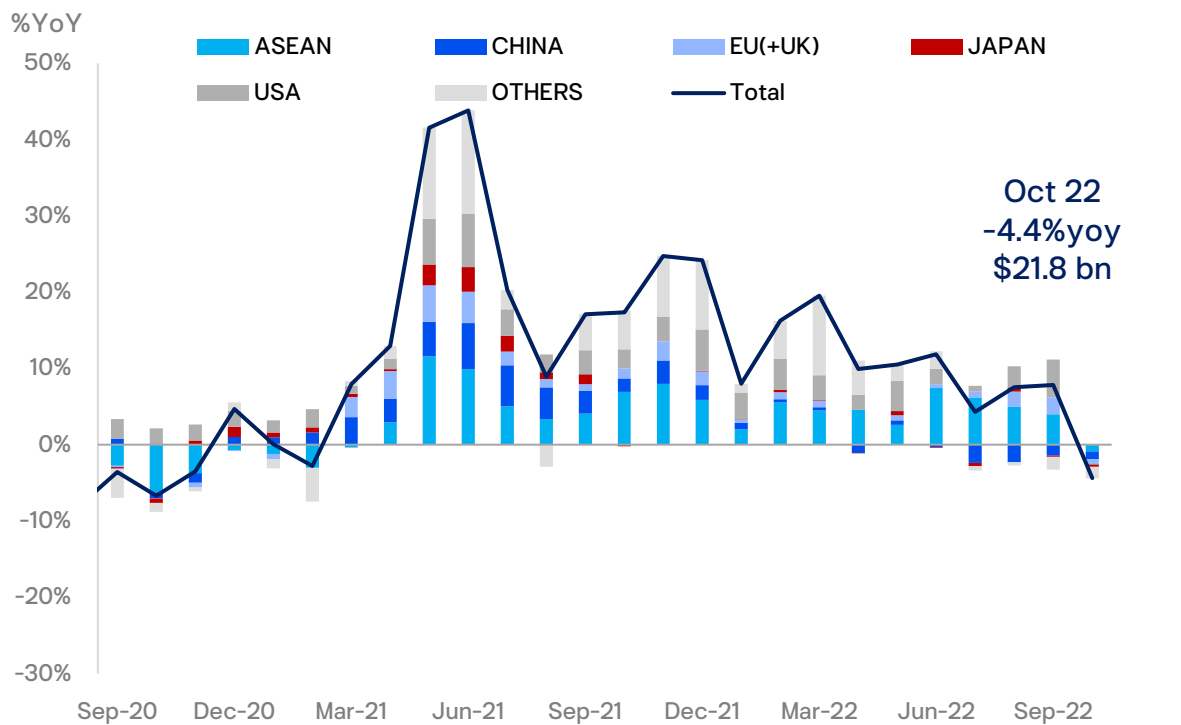
Contribution	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22
Food products (16.2%)													
Beverages (3.8%)													
Tobacco products (0.5%)													
Textiles (1.6%)													
Wearing apparel (1.9%)													
Leather products (0.9%)													
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	4.6	6.7	2.0	2.5	0.4	0.0	-2.1	-0.1	6.4	14.5	3.4	-3.7

- As of Oct22, Manufacturing Production Index (MPI) was down at 3.7%YoY. The worsen momentum were mainly from 1) the temporary shutdown of oil refineries for maintenance 2) declined demand in HHD and electrical appliance and 3) decline demand in chemical products. However, the production of motor vehicles showing a sign of recovery.

Export in October suddenly fell at 4.4%yoy in almost 2 years, highlights global slowdown

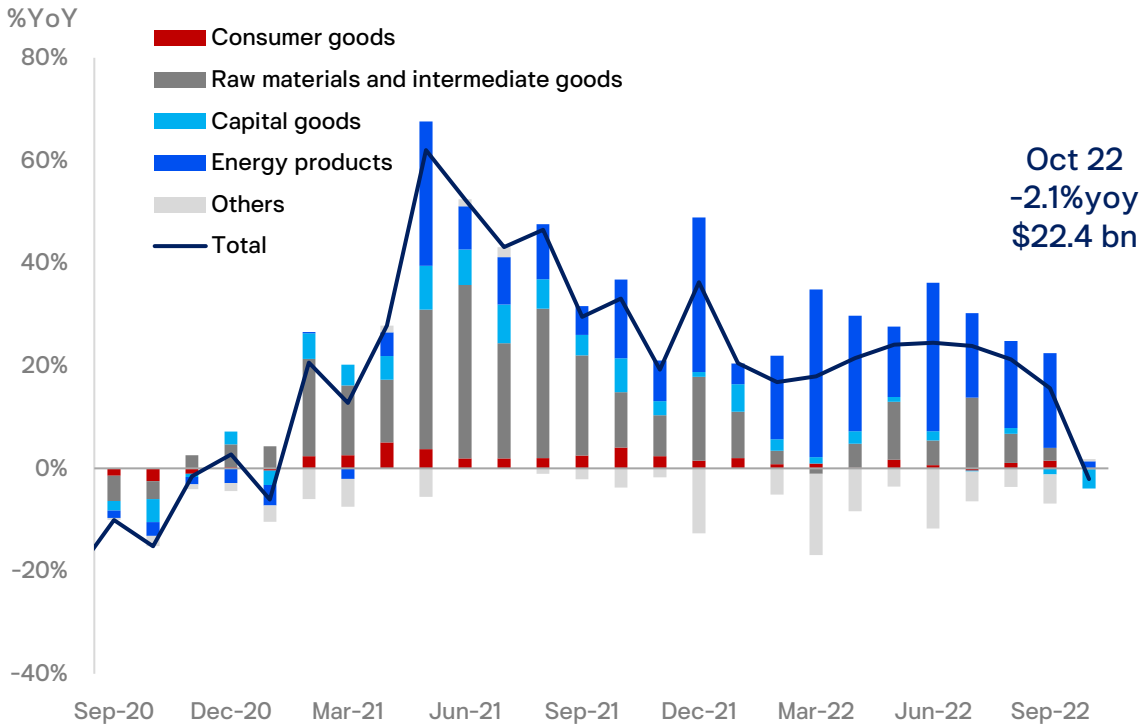
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Exports value by destination*



Total export growth	2019	2020	2021	10M2022	2022F	2023F
	-2.6%	-5.9%	17.1%	9.1%	7.9%	2.8%
	\$246 bn	\$232 bn	\$272 bn	\$243 bn	\$293 bn	\$302 bn

Imports value by groups*



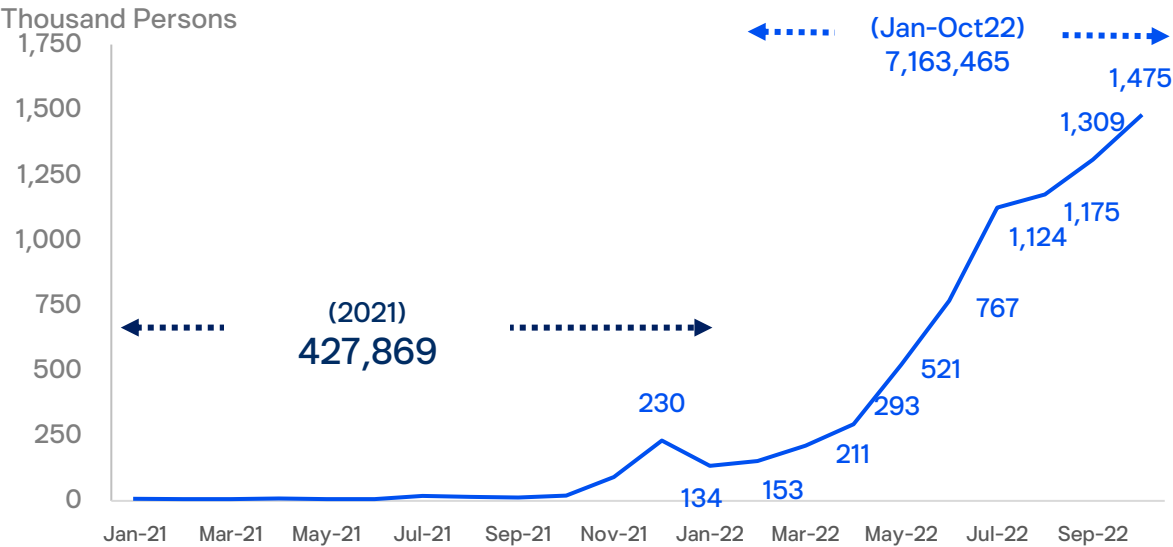
Total import growth	2019	2020	2021	10M2022	2022F	2023F
	-4.8%	-12.7%	29.8%	18.3%	16.5%	2.0%
	\$236 bn	\$206 bn	\$267 bn	\$259 bn	\$311 bn	\$317 bn

- As of Oct 22, total exports dropped 4.4%YoY, for first time in 20 months and further below market expectation. This was due to the decrease of all export categories, particularly in major products; such as computer and parts (-22.5%), plastic pallet (-26.8%) and chemical products (-15.2%). The agricultural products also dropped this month in accordance with export of rubber and fruits.

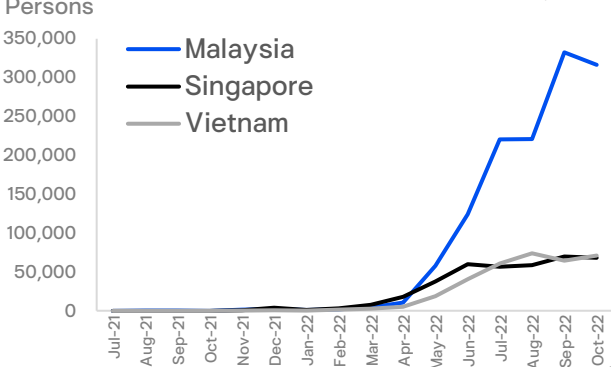
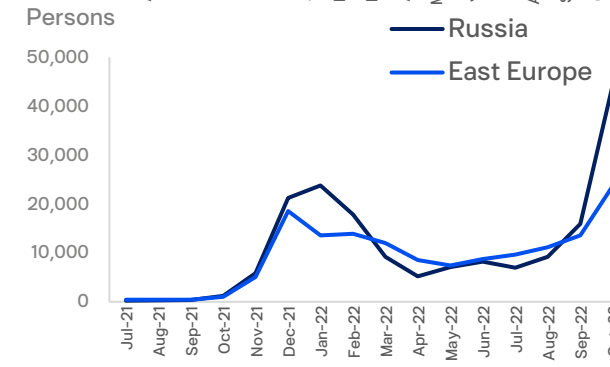
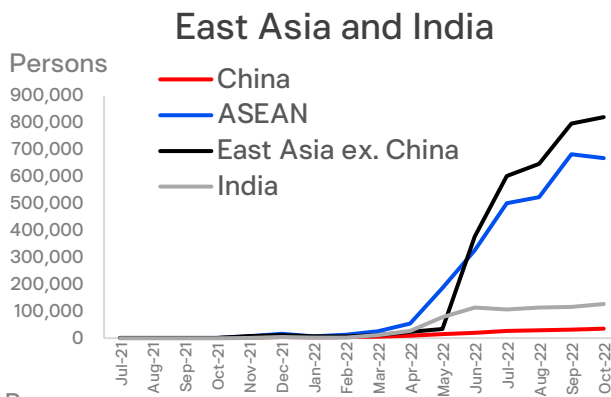
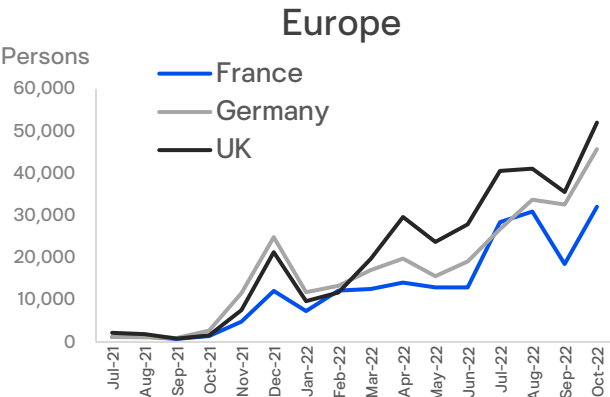
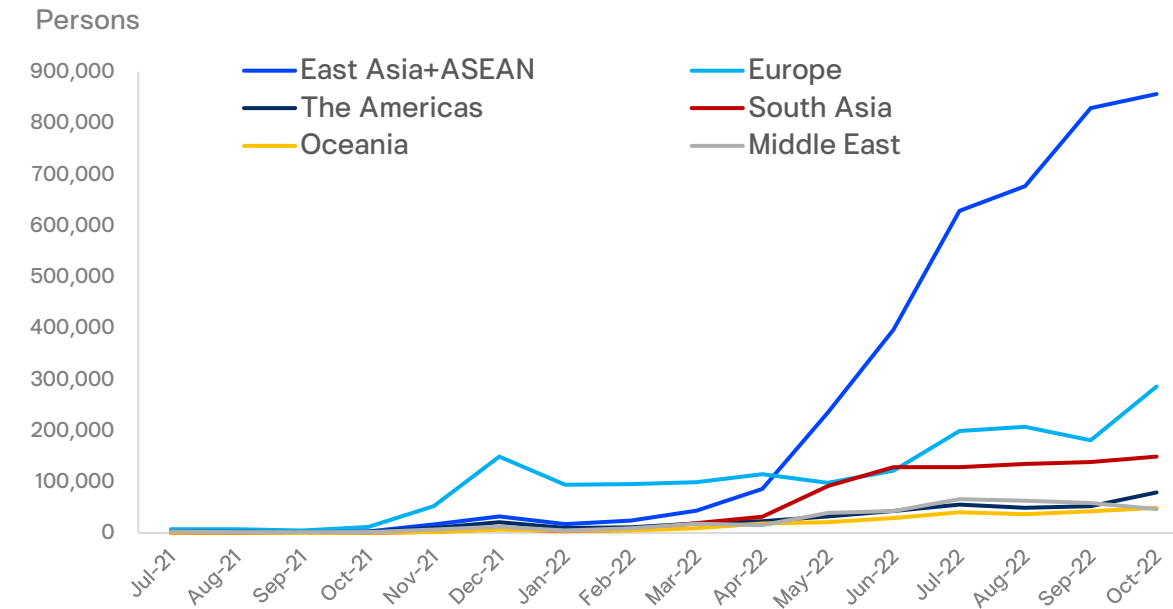
During Jan-Oct22, foreign arrivals reached over 7 million, led by Malaysia and India



Total Foreign Tourist Inbounds



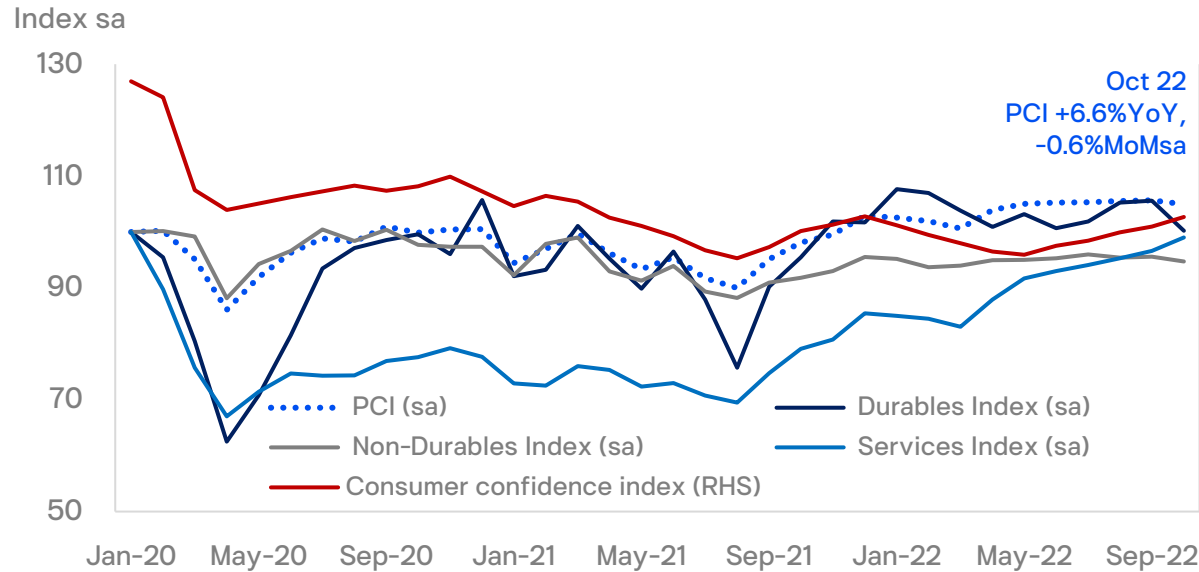
As of Oct22, foreign tourist increased consecutively from last month after both Thailand and several foreign nations have eased travelling restrictions. The major groups still came from East Asia, led by Malaysia. Particularly, Russia and Europe tourists showed significantly improved momentum compared to previous month due to the winter season in Europe region.



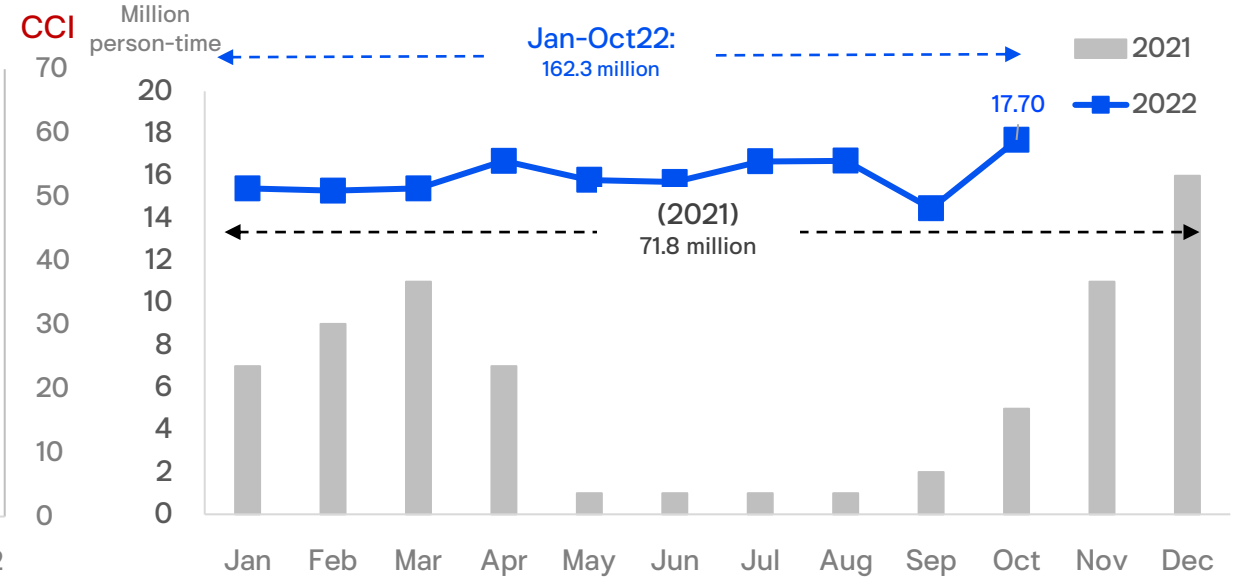
Source: CEIC, TAT Intelligence Center and ttb analytics

Private consumption slightly declined from previous month, while domestic tourism recovered

Private Consumption (SA)



Thai domestic tourism visitors

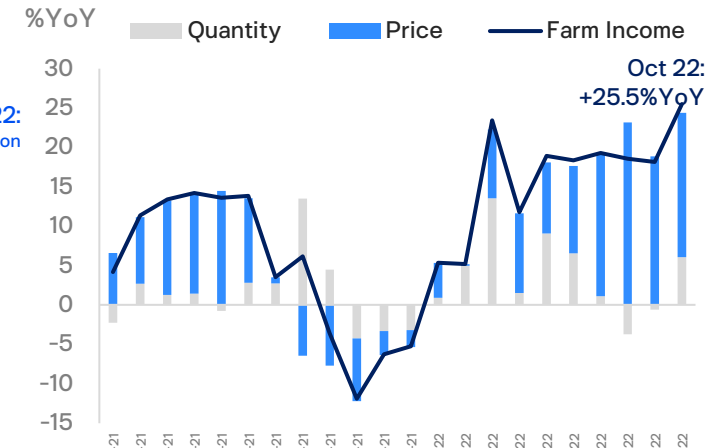


- Private consumption indicators slightly declined from the previous month. At the same time, private investment indicators also declined mainly due to lower investment in machinery and equipment.
- Several fundamental factors supporting household consumption gradually improved especially employment and consumer confidence. However, the elevated living costs still weighed down on consumption.

Employment M33



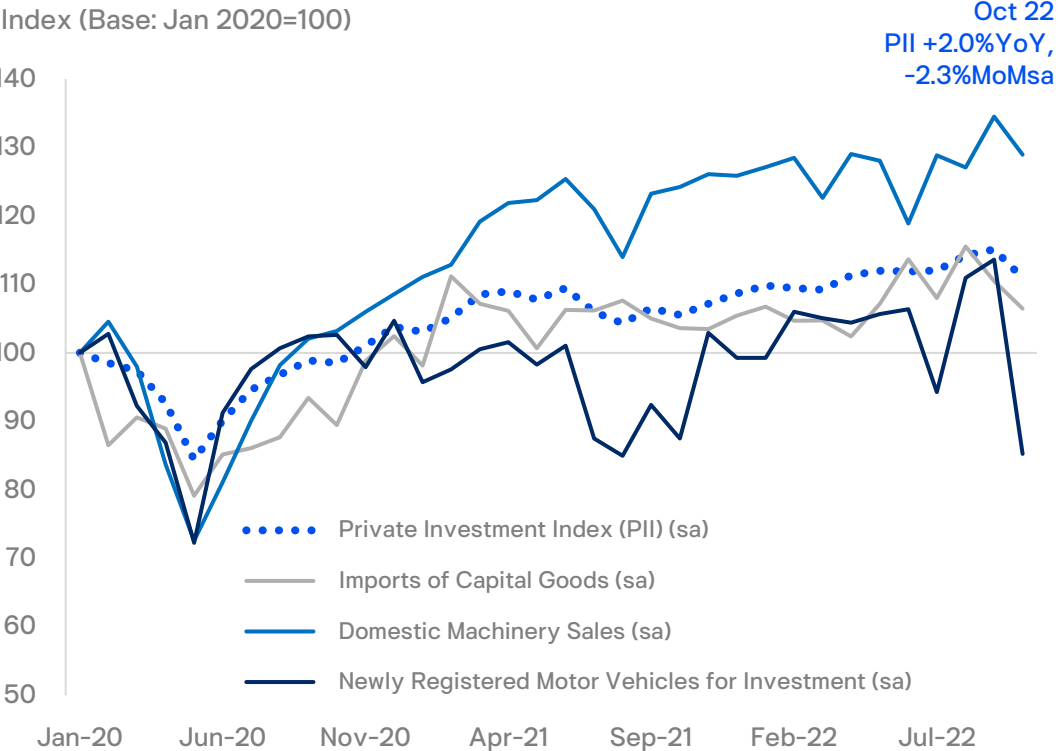
Farm Incomes



Private investment dropped suddenly in October, led by machinery and equipment, and newly registered commercial vehicle

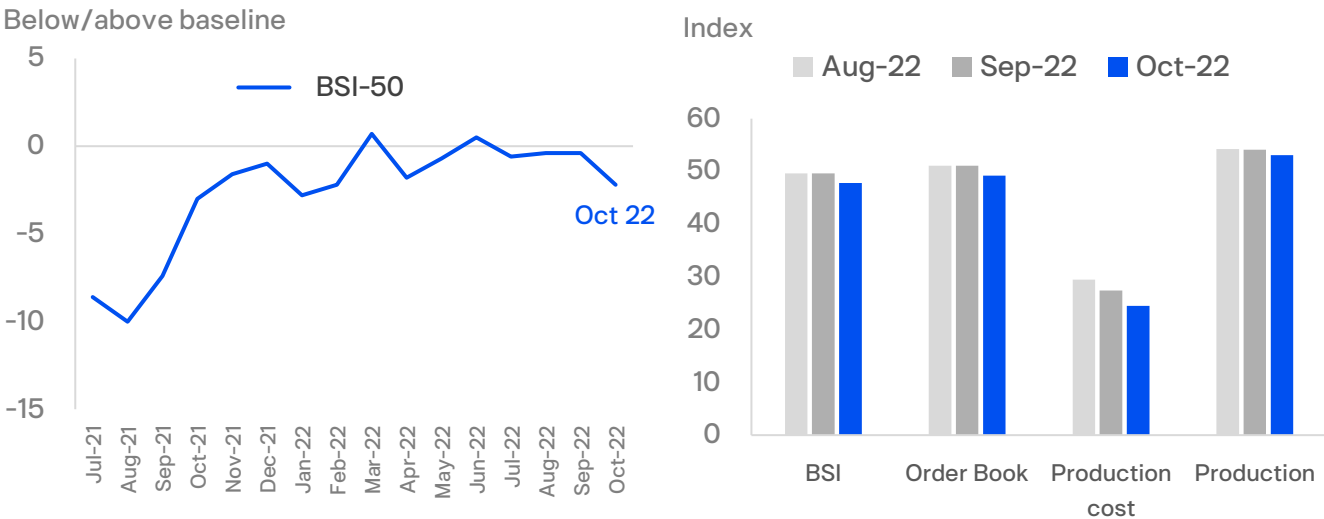


Private Investment (SA)



- Private investment indicators declined in this month, mainly from the machinery and equipment category corresponding with overall industrial production.
- Investment in construction gradually decrease following construction material sales, meanwhile, construction permitted areas improved.

Business Sentiment Index



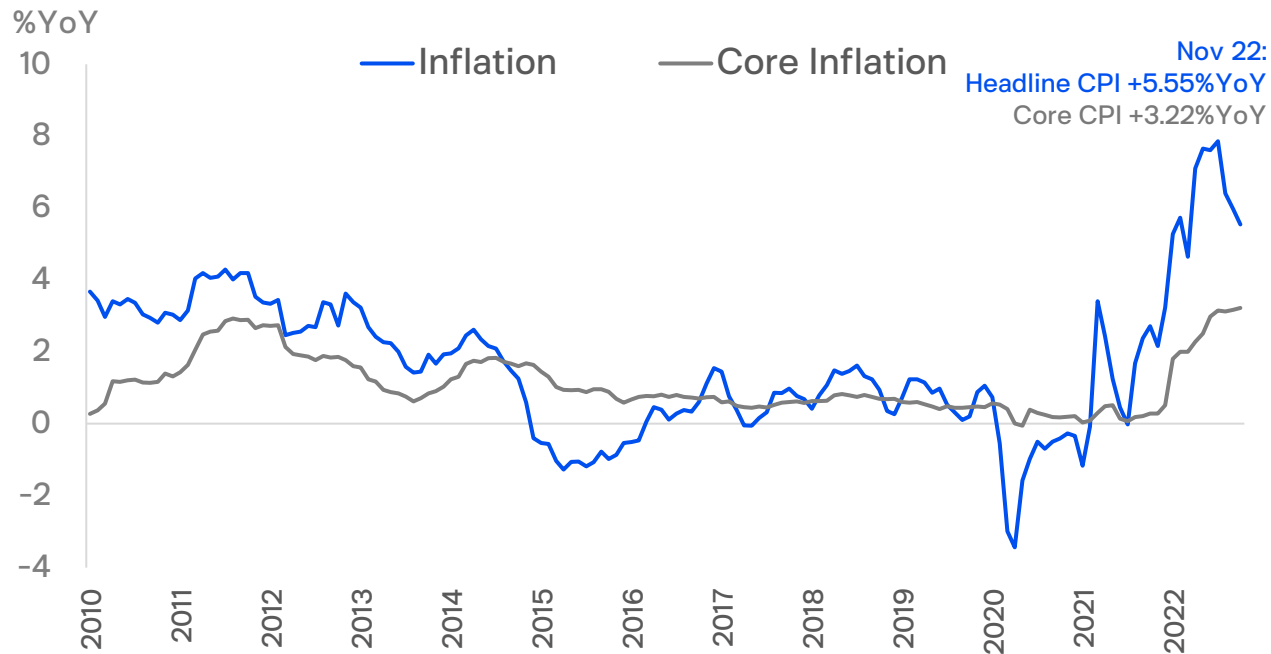
Construction sector (SA)



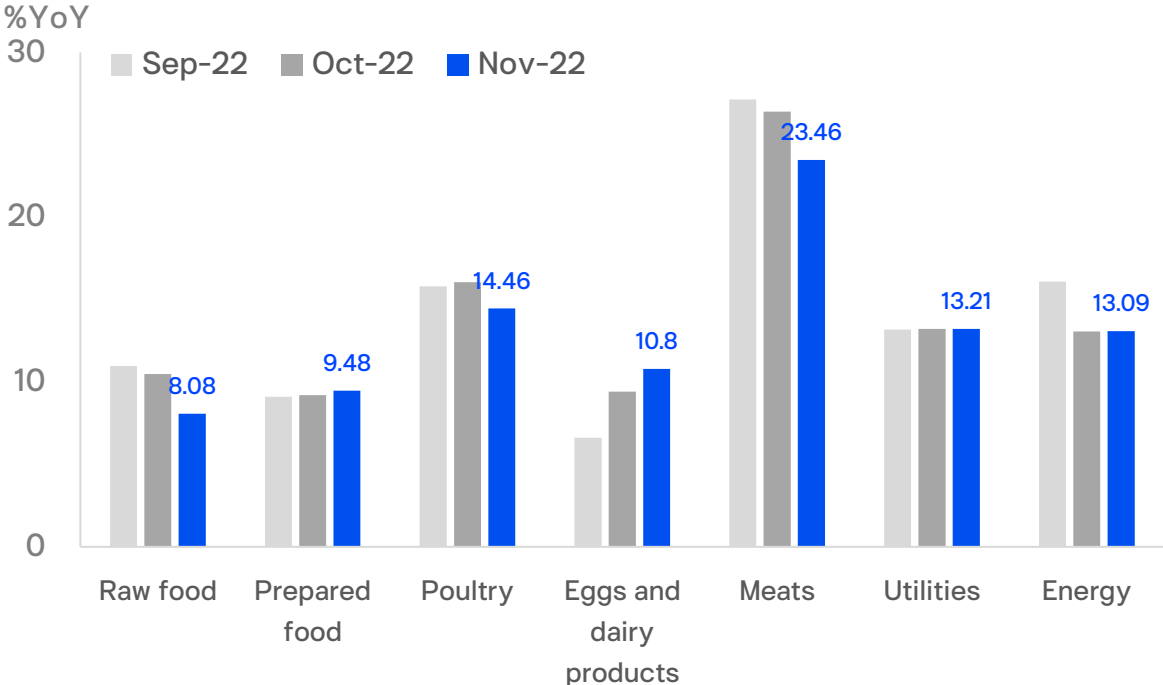
Headline inflation in November slows for 3rd consecutive month, as food price dropped and energy price stabilized



Headline vs core inflation



Price change in top categories



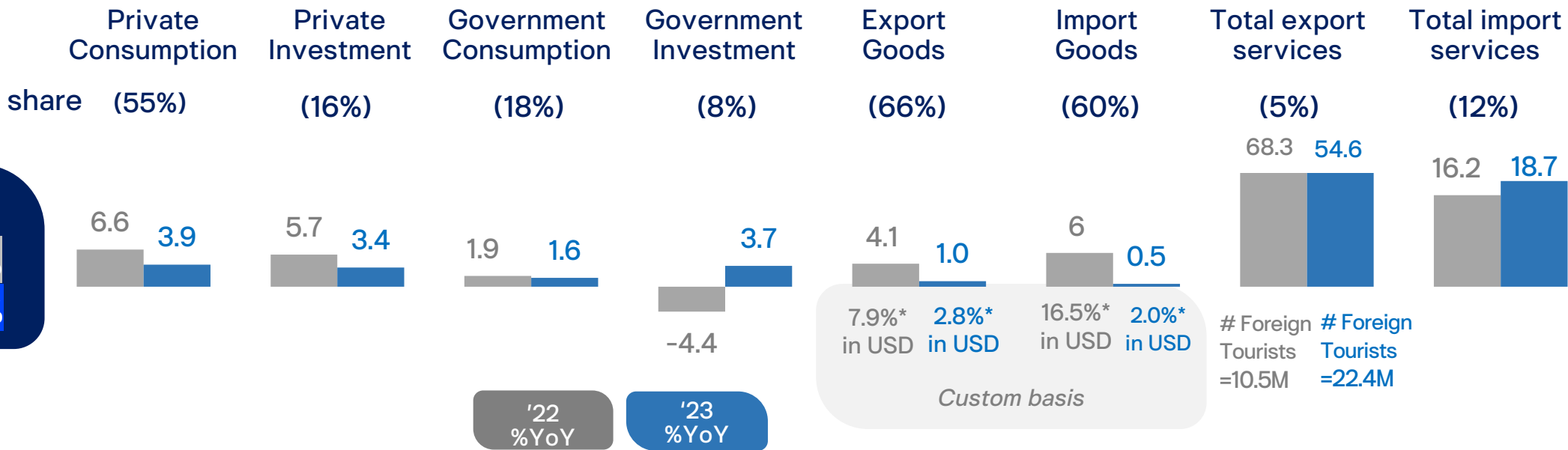
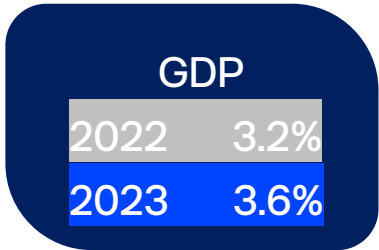
Historical Thai Inflation (%yoy)

%YoY	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
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	6.10
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	6.74
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	4.86
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	9.38
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	2.44

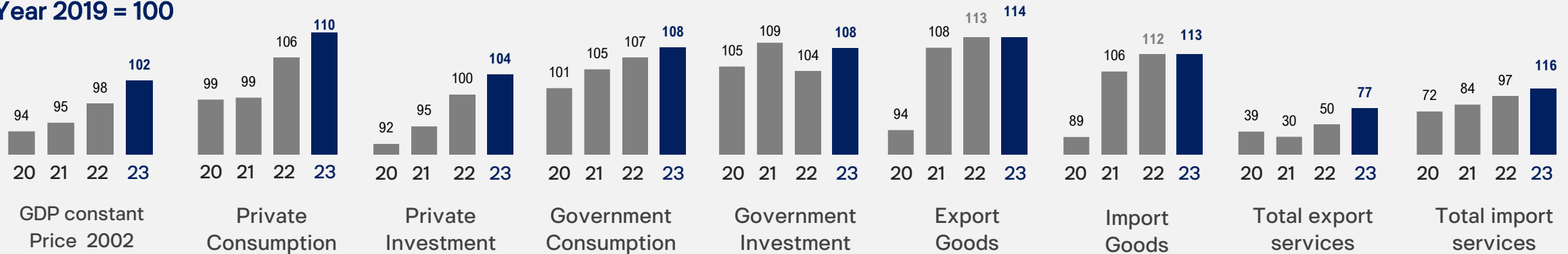
Source: Ministry of Commerce and ttb analytics.

*Jan-Nov22 18

GDP 2022-2023: Forecast and Contribution (Dec 2022)



Comparison to Year 2019 = 100



PART 3

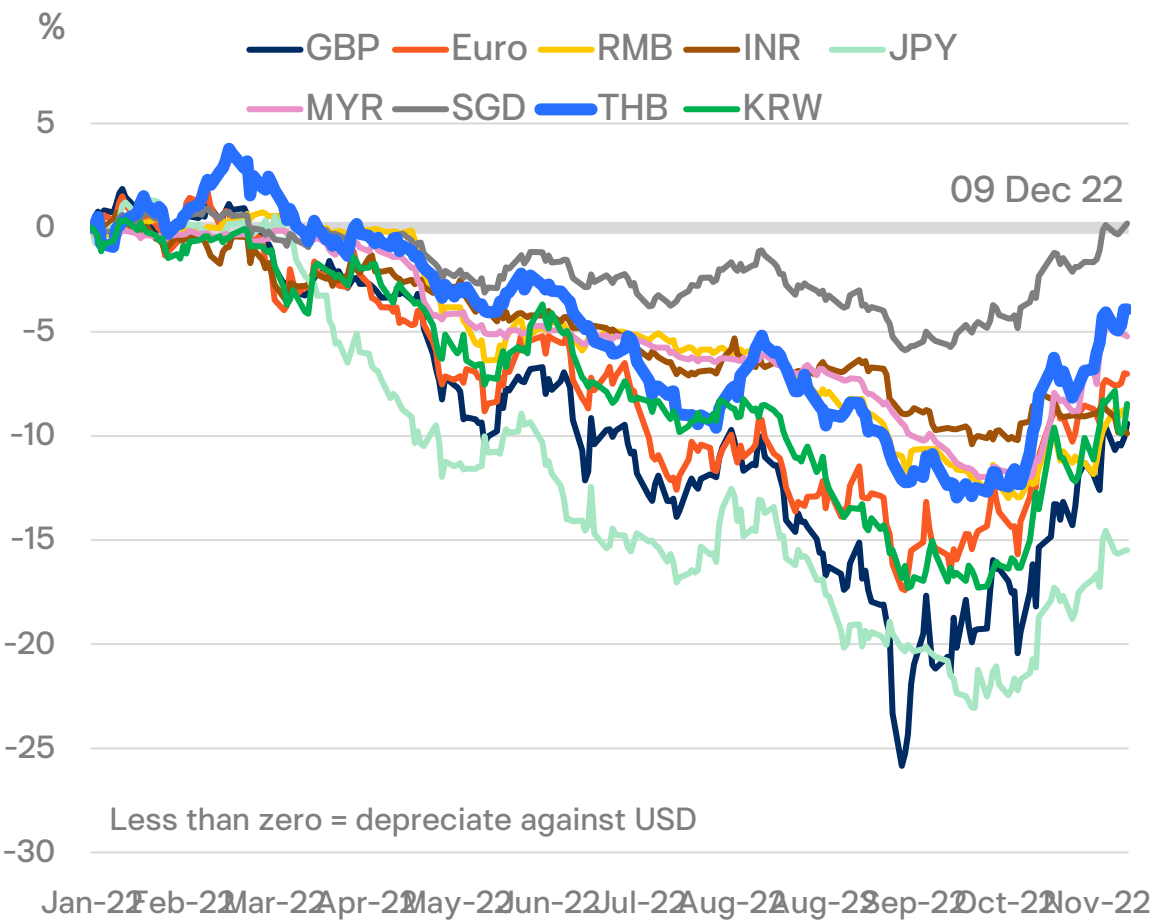
Financial Market



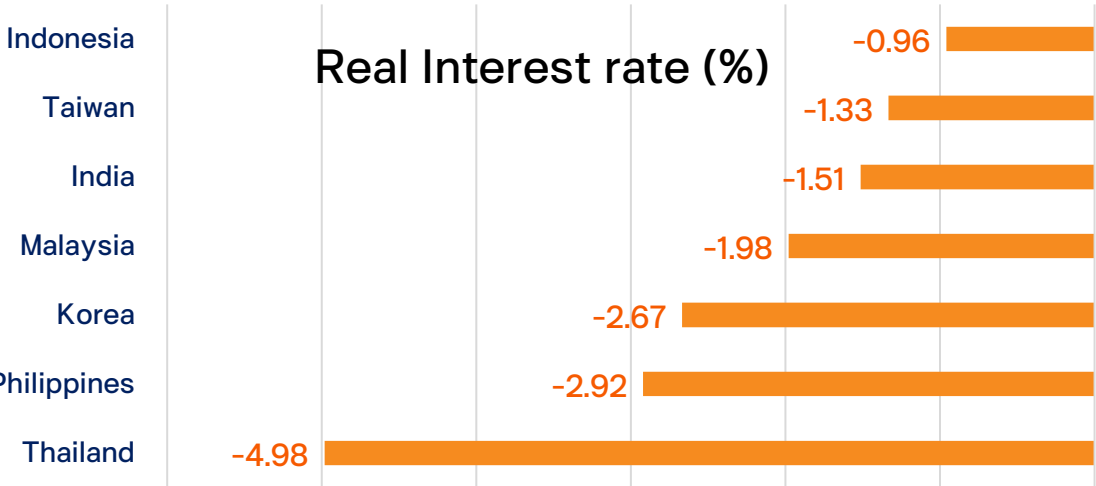
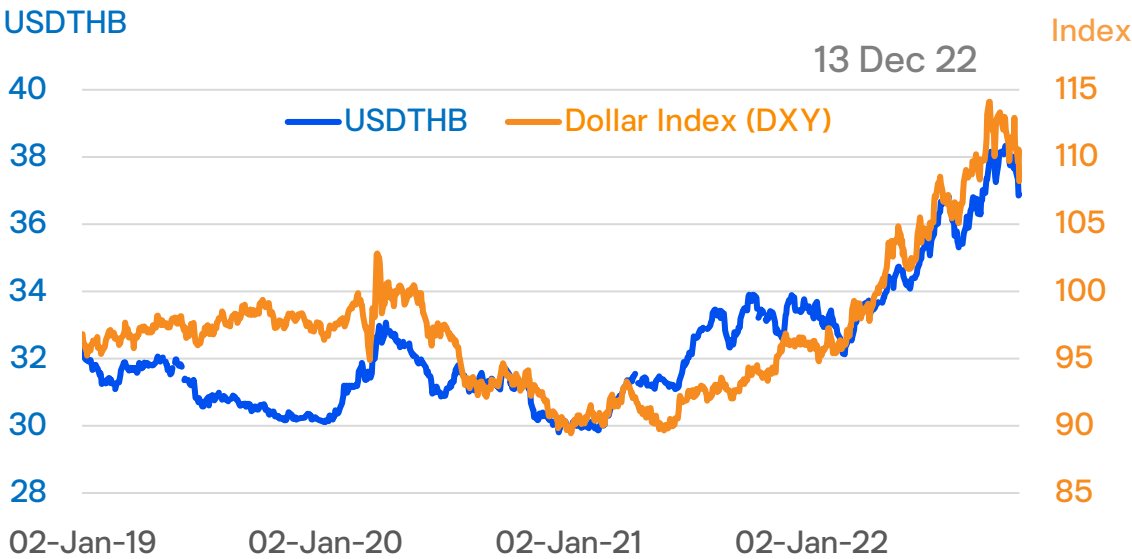
Recently US dollar has sharply depreciated due to recession concerns in US economy



Major Asian currencies against USD

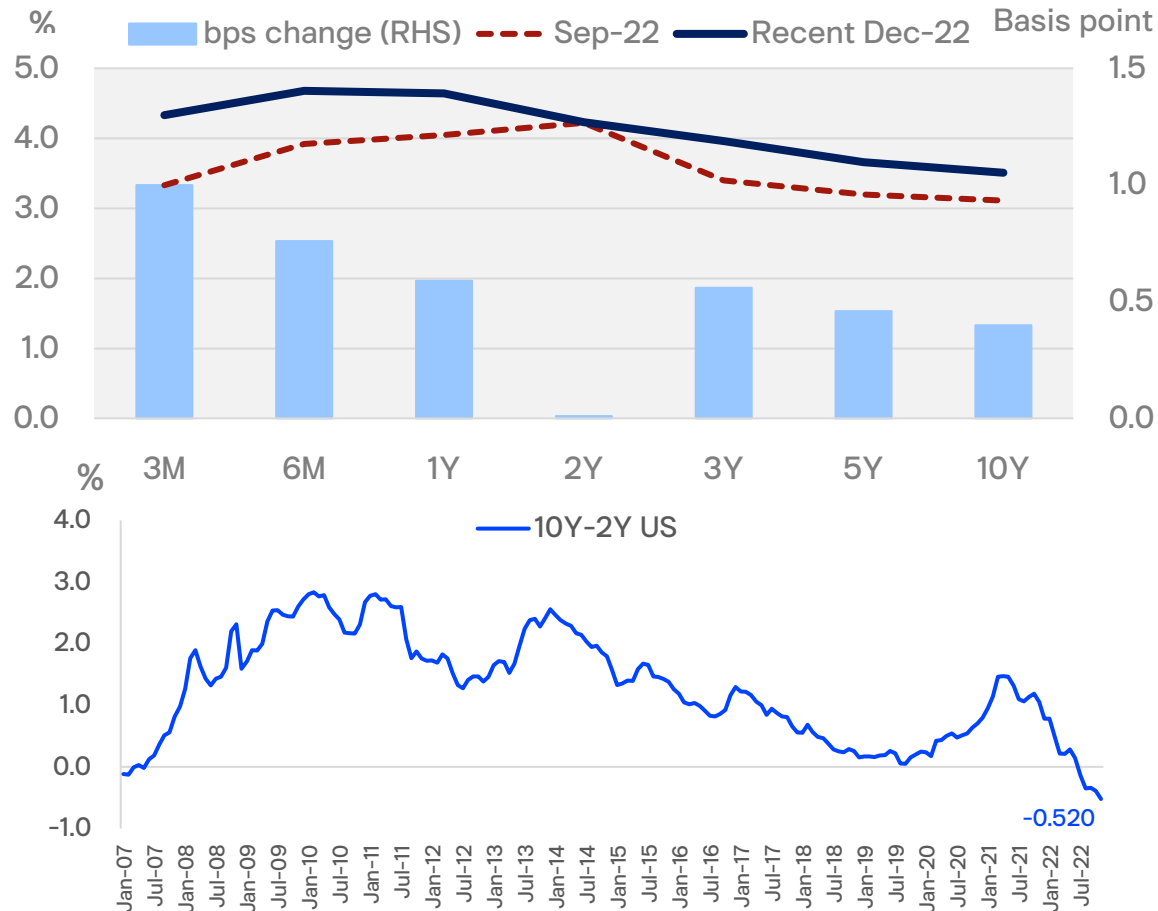


Dollar Index / USDTHB

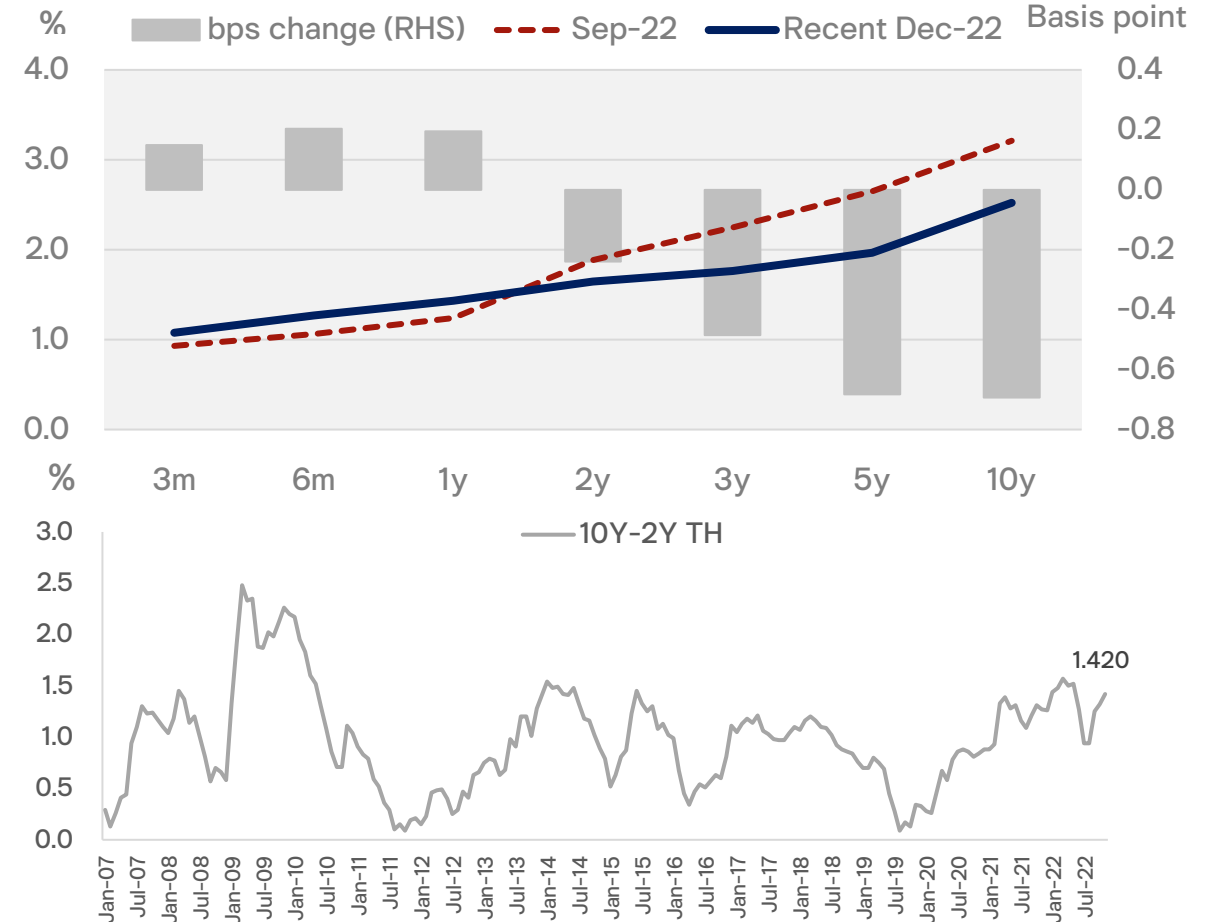


Investors enter long-term tenors due to global recession fear

US government yields



Thai government yield curve

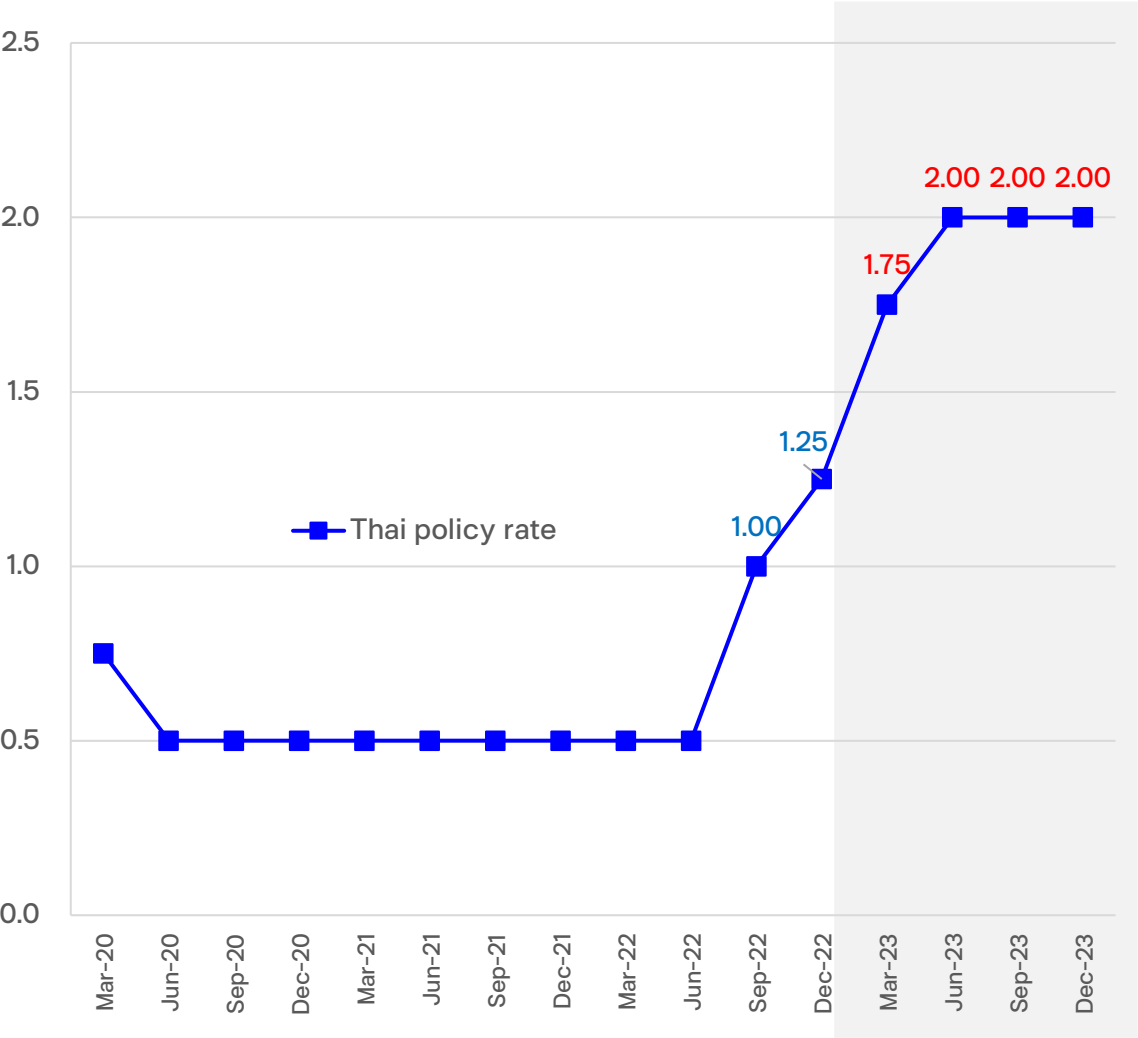


- For both US and TH government bond, Investors went into long term tenor due to recession concerns. Moreover, 10y/2y yield spread for US government bond dropped below zero, signaling approaching recession in US. Meantime, 10y/2y yield spread for Thai government bond increased above zero.

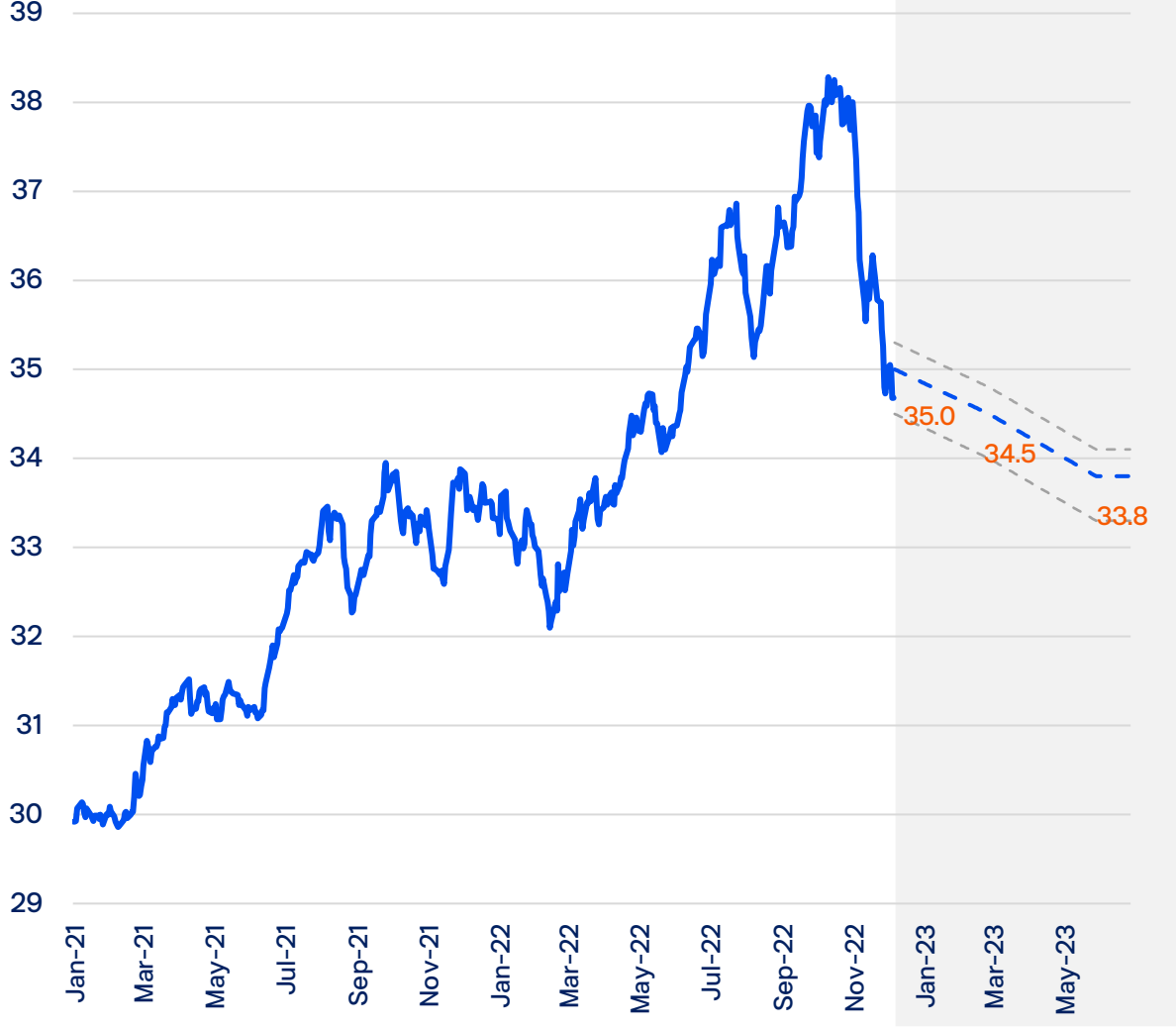
Headline inflation in October slows for 2nd consecutive month as energy price dropped.
Thailand's MPC voted unanimously to raise the policy rate by 0.25% to 1.25% as expected.



BOT policy rate and 2023 forecast



USDTHB Projection



Source: Ministry of Commerce and ttb analytics.

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