

krungsri Research

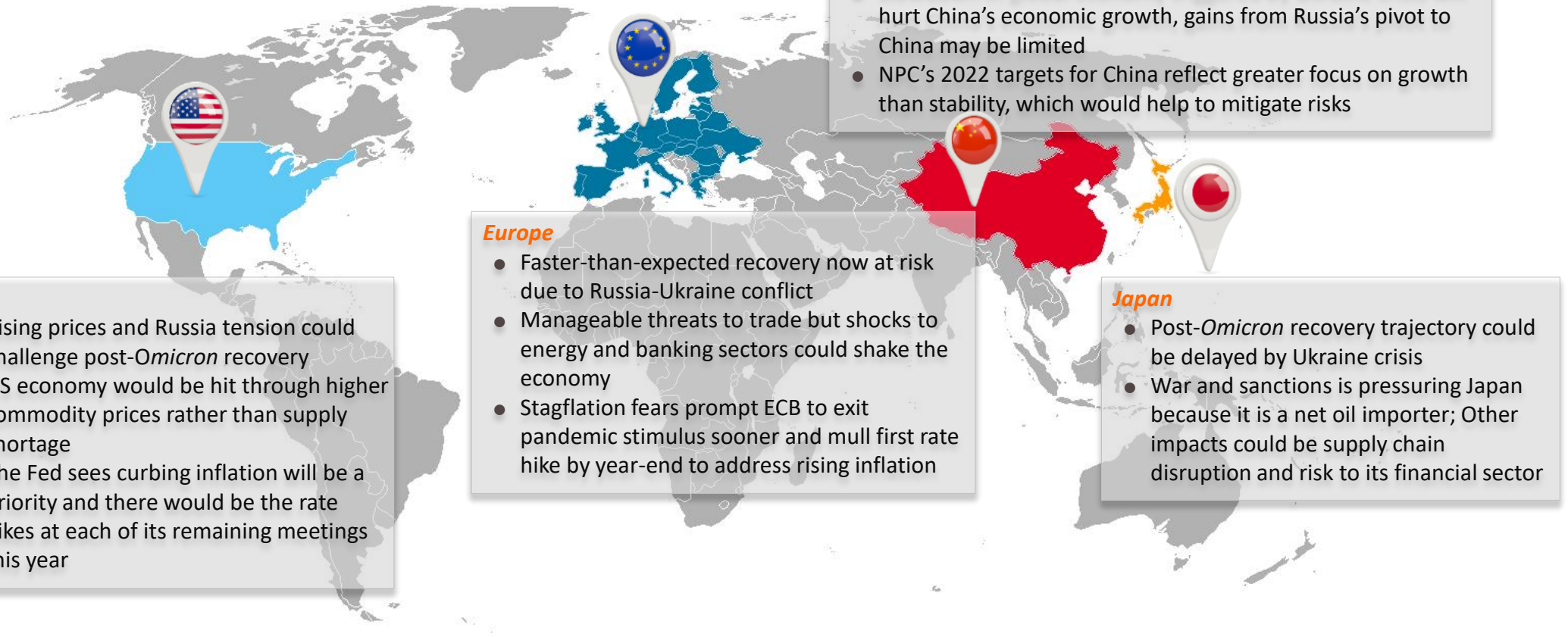
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MONTHLY ECONOMIC BULLETIN

March 2022

Krungsri Research

Global: Uncertainty and war risk have cast a shadow over reopening



China

- Economic activity picked up but headwinds could hinder further growth
- Slowdown in global economy triggered by Ukraine crisis will hurt China's economic growth, gains from Russia's pivot to China may be limited
- NPC's 2022 targets for China reflect greater focus on growth than stability, which would help to mitigate risks

US

- Rising prices and Russia tension could challenge post-O*micron* recovery
- US economy would be hit through higher commodity prices rather than supply shortage
- The Fed sees curbing inflation will be a priority and there would be the rate hikes at each of its remaining meetings this year

Europe

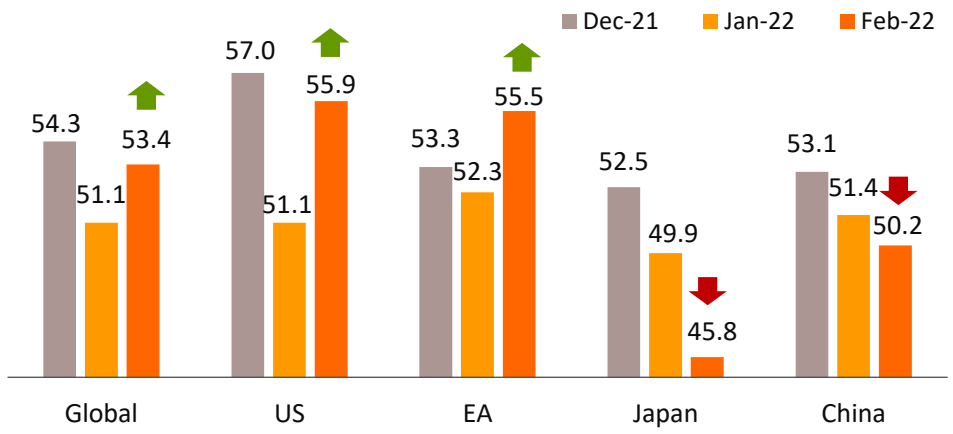
- Faster-than-expected recovery now at risk due to Russia-Ukraine conflict
- Manageable threats to trade but shocks to energy and banking sectors could shake the economy
- Stagflation fears prompt ECB to exit pandemic stimulus sooner and mull first rate hike by year-end to address rising inflation

Japan

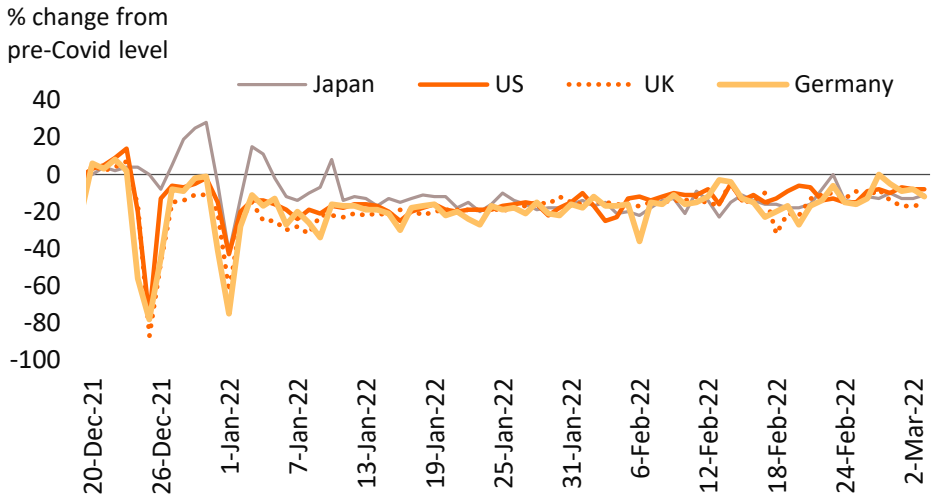
- Post-*Omicron* recovery trajectory could be delayed by Ukraine crisis
- War and sanctions is pressuring Japan because it is a net oil importer; Other impacts could be supply chain disruption and risk to its financial sector

Global PMI and Mobility Index reflect recovery from *Omicron* but Ukraine crisis has pushed up commodity prices, disrupted supply chains, shaken sentiment, and slowed down recovery

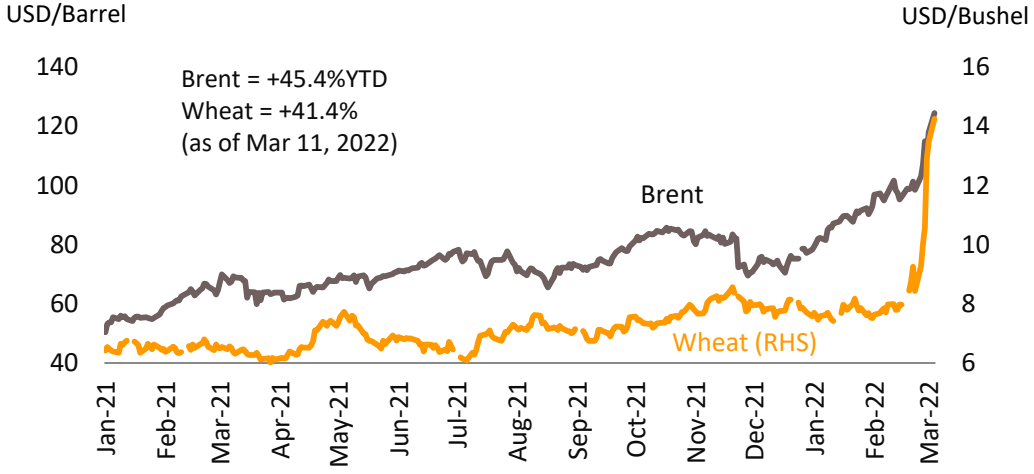
Global Composite PMI



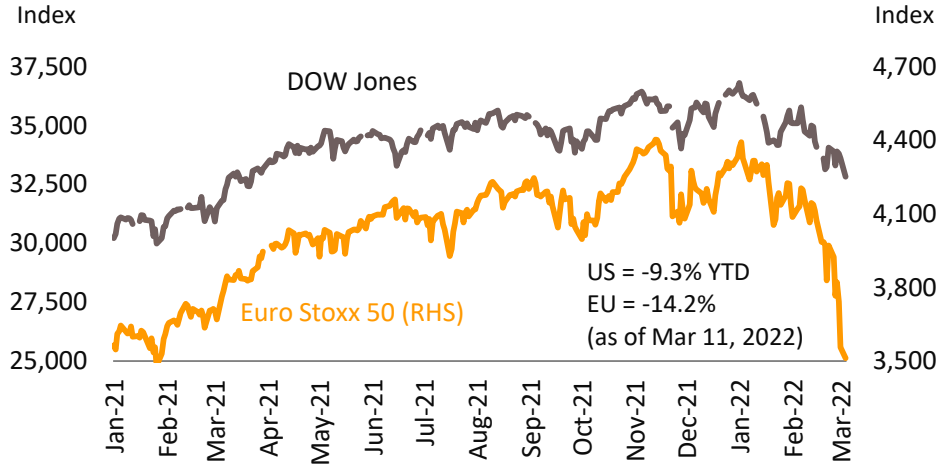
Google Mobility Index (Retail & Recreation)



Commodity prices



Stock Index



Source: IHS Markit, CEIC, Google Mobility, Krungsri Research

War in Ukraine, tougher sanctions, and more retaliatory measures increase concerns over inflation and economic growth, raised risk of global stagflation

The US and EU have targeted Russia's financial system and have started to ban its energy exports

Area	Sanctions
Financial measures	• The US and EU blocked **the Russian central bank** from selling dollars, euros and other foreign currencies in its reserves, constraining its ability to stabilize the ruble and fight inflation. • Selected **Russian banks will also be removed from the international financial messaging system SWIFT**, which will delay payments Russia gets for its oil and gas exports. • Sanctions on **a sovereign-wealth fund** limit Russia's ability to raise money abroad. • The US actions target **80% of all banking assets** in Russia and limit the country's access to the global financial system. • The EU plans sanctions that will cut off **70% of Russia's banking system** from international financial markets.
Oil and gas	• **The US bans all imports of Russian oil and gas.** • **The EU** has promised to cut its import of Russian natural gas by two-thirds by year-end**. The UK will phase out Russian oil imports by end-2022.** • Germany has shelved approval for the **Nord Stream 2** gas pipeline from Russia.
Trade with Russia and travel	• The US is working with other G7 nations and the EU **to rescind Russia's "most favored nation" (MFN) status**, which will allow for large tariffs on Russian exports. • The US, its allies in Europe and elsewhere have restricted **exports of certain technologies** to Russia. • The US has joined the UK, EU and Canada in banning **all Russian flights** from its airspace.
Other economic activities	• A rising number of **international companies** including McDonald's, Coca-Cola and Starbucks have suspended operations in Russia.

Conflict between Russia and Ukraine



- Russia's GDP is only the 12th largest in the world, about 25% smaller than Italy.
- **However, Russian energy exports are important as it is the world's second largest exporter of natural gas and one of the largest exporters of oil.**
- Russia produces 10% of global oil and supplies 40% of Europe's gas.
- **It is the world's largest grains and fertiliser exporter, top palladium and nickel producer, third-largest exporter of coal and of steel, and fifth-largest wood exporter.** Cutting off those exports could drive up energy and other commodity prices.

THE WORLD BANK

The war in Ukraine is "a catastrophe" for the world which will cut global economic growth, said the World Bank.

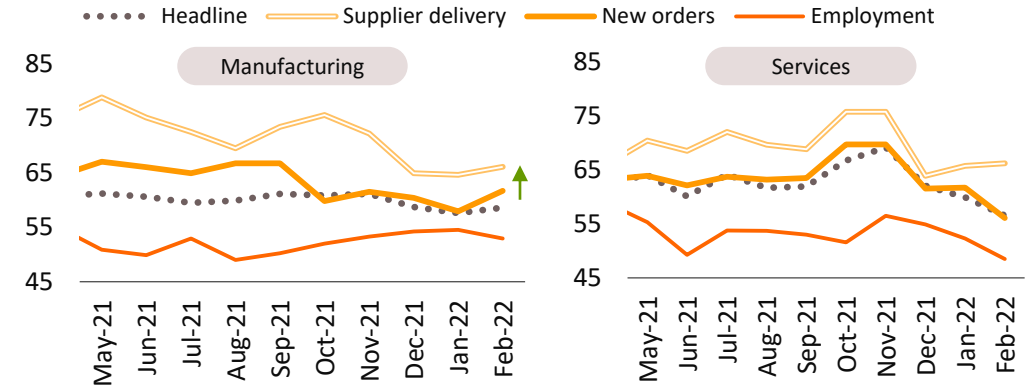
- ***The ongoing war and associated sanctions will also have "a severe impact" on the global economy, said the IMF.***
- *We think that we would be downgrading our growth projections as a result of the crisis.*
- *The most significant threat to the world economy was greater inflation…*
- *Worsening financial conditions and business confidence also have the potential to weigh on growth.*

Source: BBC, WSJ, Institute for the Study of War (March 2, 2022), Bloomberg, Reuters, Krungsri Research

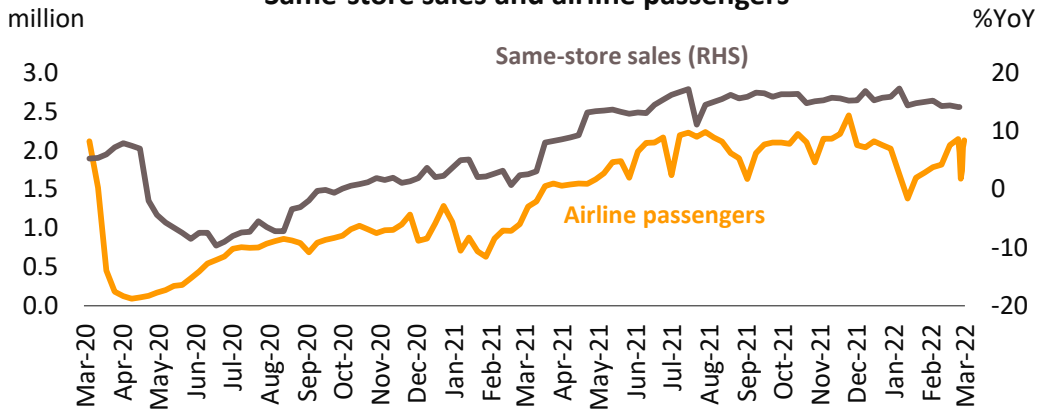
US: Rising prices and Russia tension could challenge post-*omicron* recovery

US economy has improved since the first *omicron* outbreak. Manufacturing PMI inched up in February, led by new orders. Economic activity in the services sector expanded for the 21st month in a row. Firms continue to be hurt by supply chain disruptions, logistical jams, and inflation, which have affected their ability to meet demand. **Restaurant and travel industries were key recovery drivers as *omicron* cases declined.** Same-store sales remained above pre-pandemic levels and improved 14.1% YoY in early-March driven by the online channel, reflecting strong consumer spending despite *omicron*. Travelling activity also improved significantly. **For businesses, new orders for durable goods rose** 15.6% YoY in January, **reflecting a strong start to investment spending. And, businesses continued to hire more workers, particularly in the services sector as non-farm payrolls increased** by 678k in February and unemployment rate fell. **Although the economy is recovering, there is new risk to inflation and economic growth from the Russia-Ukraine tension. Further price rises would push up cost of living and soften consumer demand ahead.** Both the wealthiest and poorest households reported lower confidence about future financial prospects because of inflationary pressure.

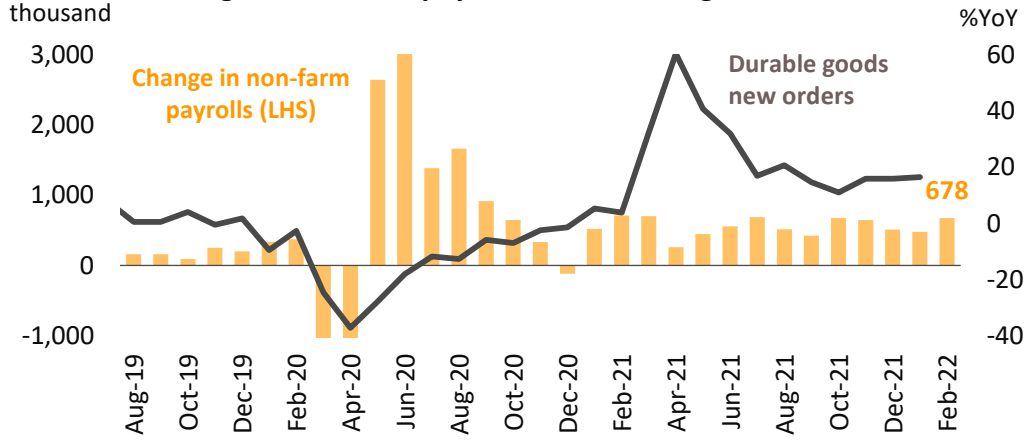
ISM PMI Surveys (DI)



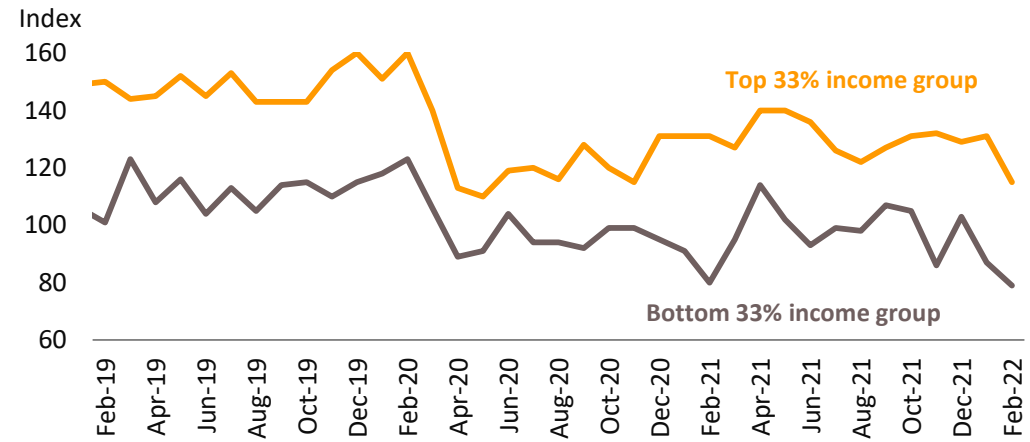
Same-store sales and airline passengers



Change in non-farm payrolls and durable goods new orders



Current household financial conditions



Source: ISM, Johnson Redbook Service, Conference Board, BLS, TSA, Krungsri Research

US economy would be hit through higher commodity prices rather than supply shortages

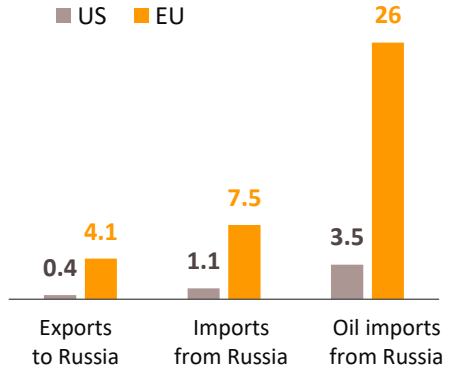
The Russian invasion in late-February triggered widespread volatility in financial markets and economies worldwide. The impact on the US economy will differ from that in European countries because the US has smaller trade and investment exposure to Russia. Some domestic producers could also gain from rising commodity prices because they are able to produce more. The invasion has pushed up global food prices to record highs because Russia and Ukraine are major producers of agricultural products. Current data show American farmers plan to reduce soybean planting in favor of corn to benefit from higher corn prices despite surging fertilizer costs. **The ban on Russian oil imports will affect the US through rising prices rather than supply shortages. Higher US oil production could mitigate some of the shortages but businesses will face a spike in production costs and households will experience higher cost of living. In addition, barring some of Russia's banks from the SWIFT system could slow liquidity flows to the economy especially through energy trade,** as most transactions are conducted in USD. **This would intensify upward inflationary pressure which could prompt the Fed to curb inflation**. Looking ahead, preventing Russia's central bank from conducting USD transactions would not diminish the dollar's reserve currency status but could reduce Russia's dependence on the USD.

US sanctions on Russia

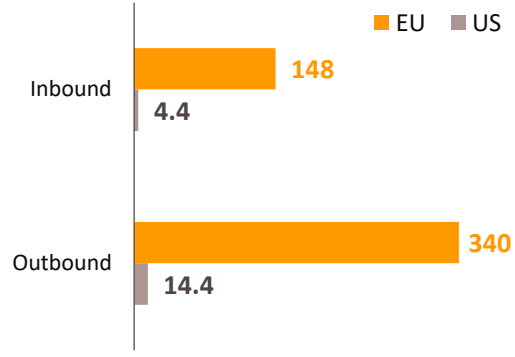
Area	Sanctions
Financing	• Restrict US organizations from taking on new Russian sovereign debt or new debt with more than 14 days maturity • Preventing Russia's 13 state-owned companies from raising funds in the US
Commercial banks	• Sanctions on major Russian banks such as VTB, Sberbank • Prohibit US companies or national from conducting USD transactions with Russia • Freezing Russian financial institutions' assets • Barring Russian banks from SWIFT system for international payments
Trade	• Ban export of sensitive US technology products, software and semiconductors • Ban import of Russian oil • Plan to revoke Russia's Most Favored Nation (MFN) trade status

Data as of 15 March 2022

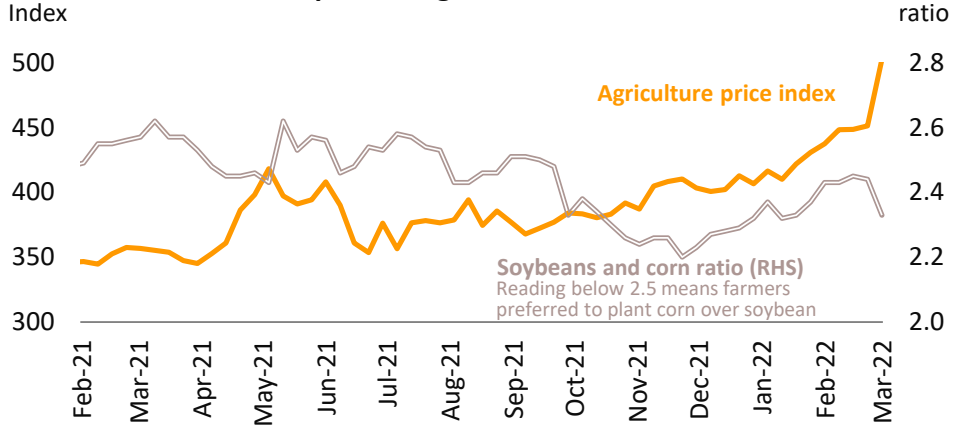
% share of total trade



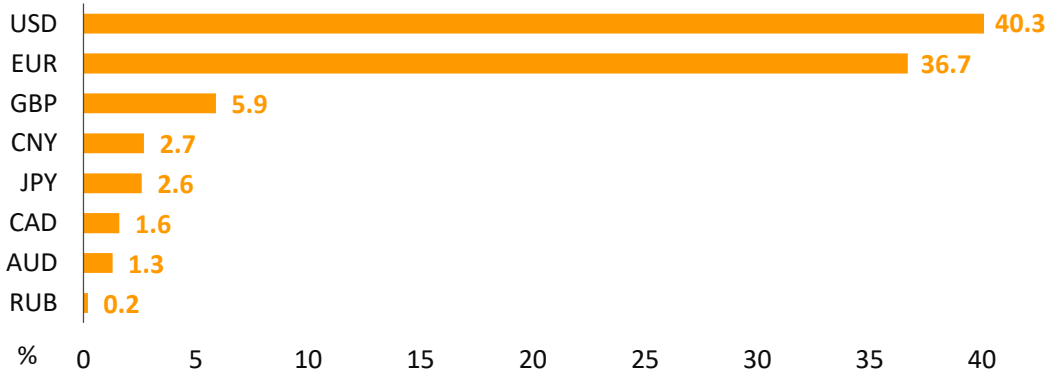
2019 FDI stocks (USD bn)



Impact on agricultural sector



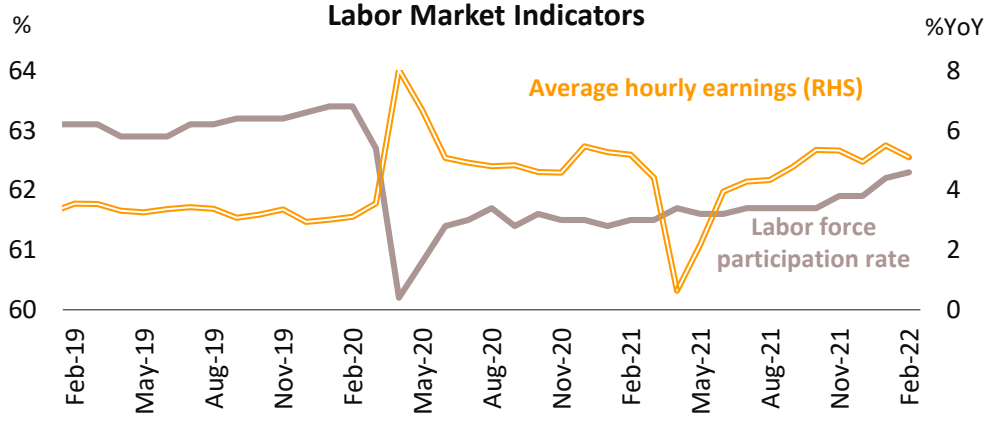
Share of global payments processed on SWIFT (%)

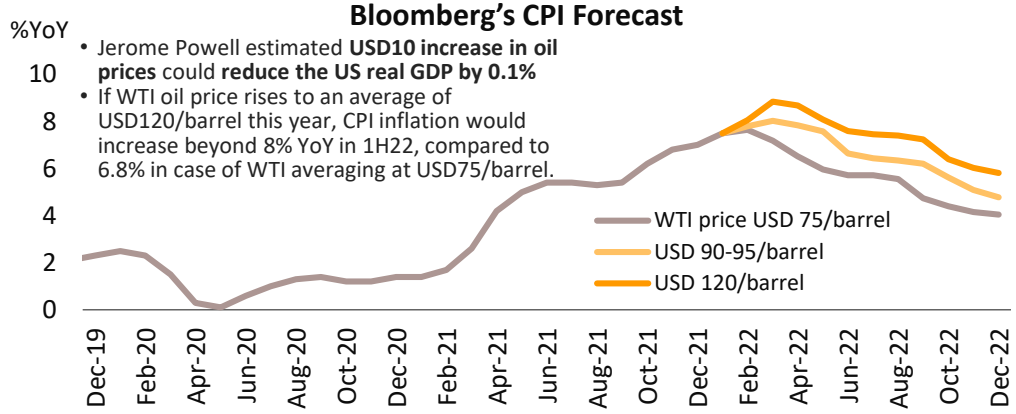


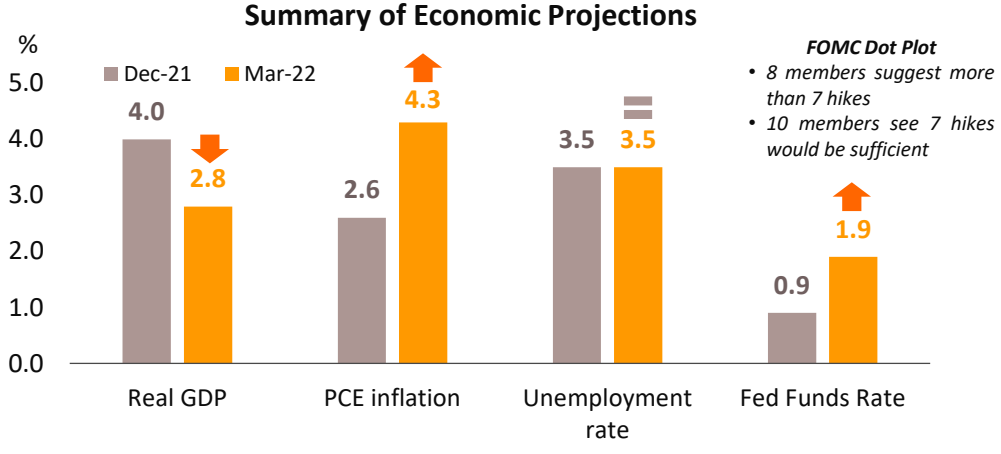
Source: CME Watch, CNBC, Reuters, Statista, SWIFT, Bloomberg, Krungsri Research

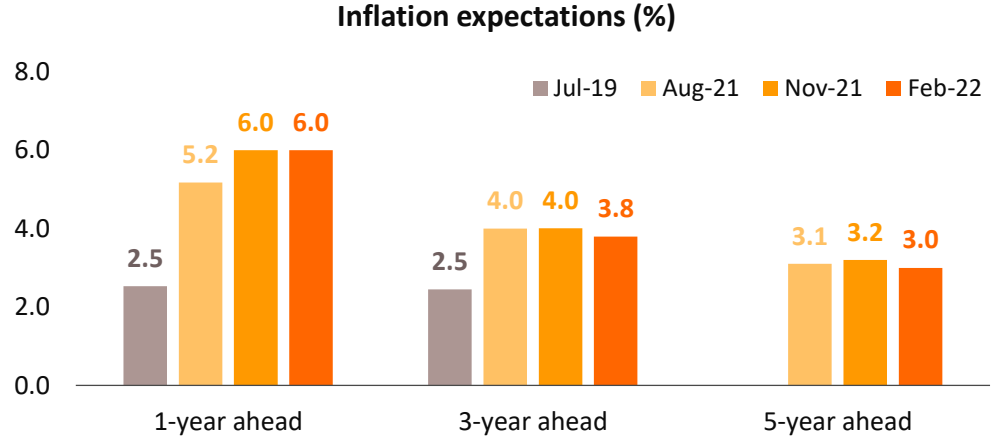
The Fed sees curbing inflation will be a priority and there would be the rate hikes at each of its remaining meetings this year

Slow wage growth and rising prices after the Russian invasion could lessen consumer purchasing power. Softer consumer demand caused the Fed to deliver a 25-bps hike in March but they signaled 6 more hikes this year because of higher inflation risks. Despite a possible slowdown, inflation would remain high at above 4% in 2H22. The Fed revised up PCE inflation forecast to 4.3% in this year from 2.6%. **Although the central bank downgraded GDP forecast to 2.8% in 2022, they stated the economy remains strong and *"probability of recession is not particularly elevated"*. They also see *"the risks of further upward pressure on inflation and inflation expectations"*.** Latest surveys on inflation expectations show household expectations are still anchored but remain high. **Latest Dot Plot suggests more hawkish views on raising rates** which 8 members expect more than 7 hikes this year. **In our view, this hawkish turn, coupled with the resilient economic rebound and robust labor market would push the Fed to prioritize curbing inflation over growth. Then, the Fed is expected to hike rate 7 times in 2022, by 25-bps each; the magnitude could change in some months depending on inflationary pressure**. The rate would hit around 1.75-2.0% by year-end. However, in the extreme case of a full-blown war, we expect a large impact on energy and commodity prices, risk-off sentiment in global markets, negative income effect, financial turmoil, and possibly a global recession. These could push the Fed to be more dovish and shift their focus back to economic growth.







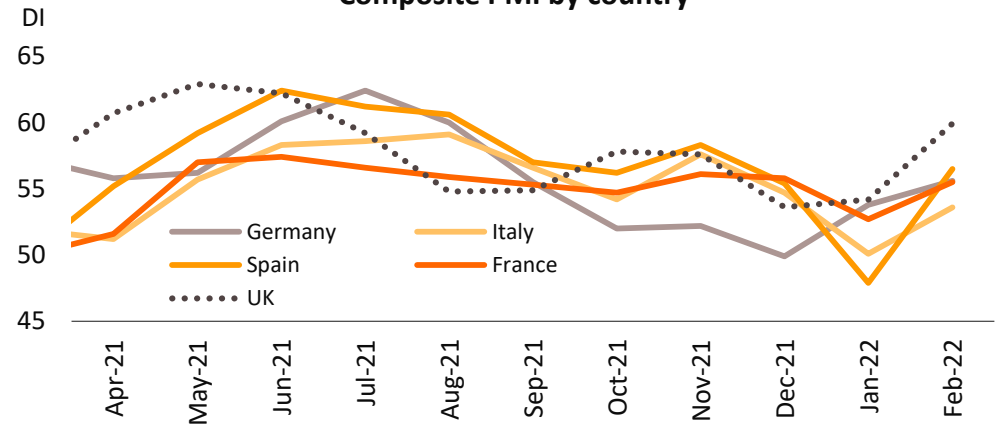


Source: BLS, Federal Reserve, New York Fed, Bloomberg, Krungsri Research

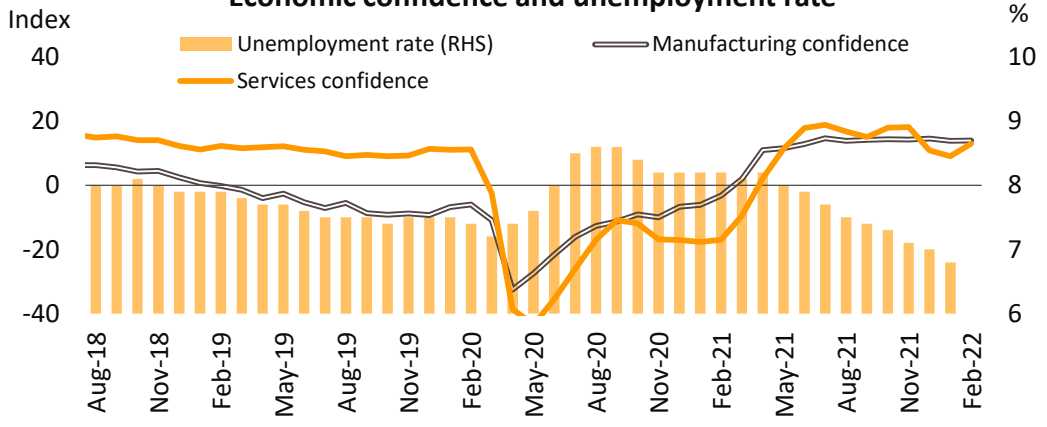
Europe: Faster-than-expected recovery now at risk due to Russia-Ukraine conflict

Latest economic data confirm the Eurozone economy is handling the *omicron* wave better. Business activity accelerated in February as Composite PMI surged led by the UK and Spain. Firms reported soaring consumer demand and strong demand for employment, particularly in the leisure and hospitality sectors, suggesting omicron had a short-lived impact. **Confidence improved in both manufacturing and services sectors** while unemployment rate has dropped to a record-low following easing Covid-19 restrictions. **These surveys were conducted before Russia invaded Ukraine, so the anticipated economic recovery could be hampered by worsening sentiment.** The number of passenger flights picked up in early-March especially in Spain and France. **We do not expect the number of flights between EU countries to drop despite the geopolitical tension. However, air travel activity between regions could drop due to security concerns. Apart from the conflict, rising inflation would also be a major issue this year.** Higher production costs are being passed through to consumers, resulting in declining Household Saving Confidence to tackle high prices relative to pre-pandemic levels. **Risks to inflation arising from the conflict could dent the consumption recovery trend and pressure policymakers to adopt a gradual tightening of monetary policy to prevent further impacts on the overall economy.**

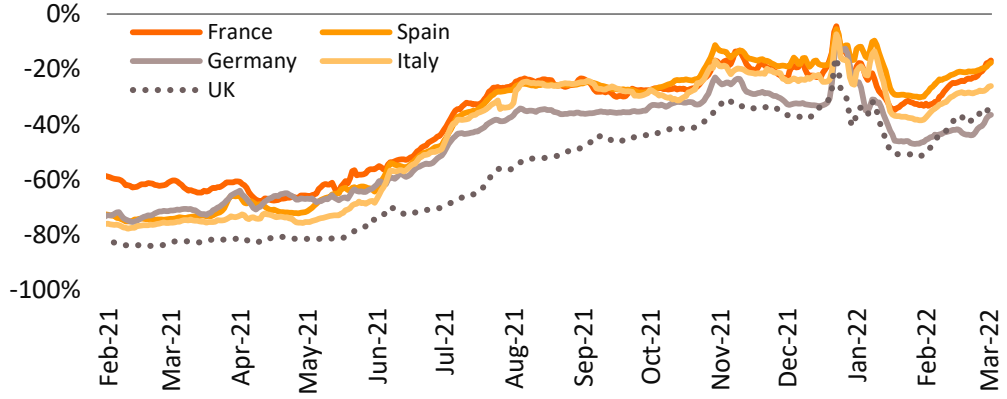
Composite PMI by country



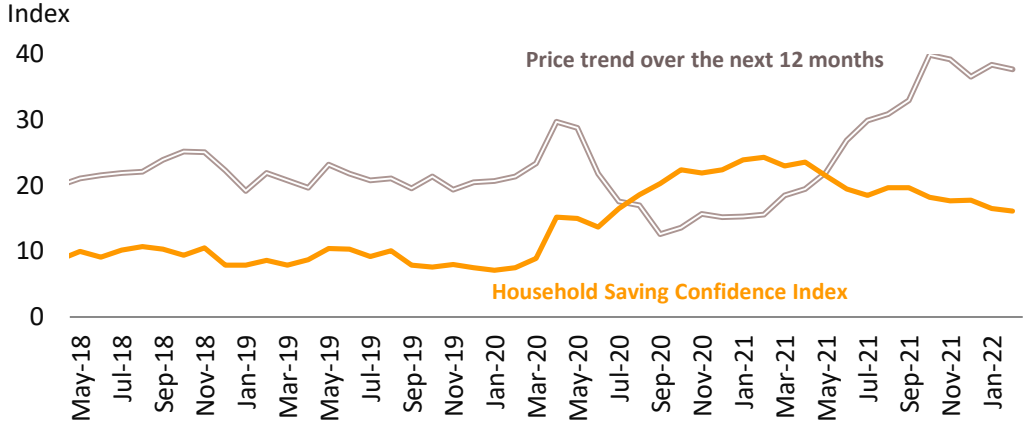
Economic confidence and unemployment rate



Flights compared to 2019-level (%, 7-day moving average)



Household Saving Confidence and Price Trend Index

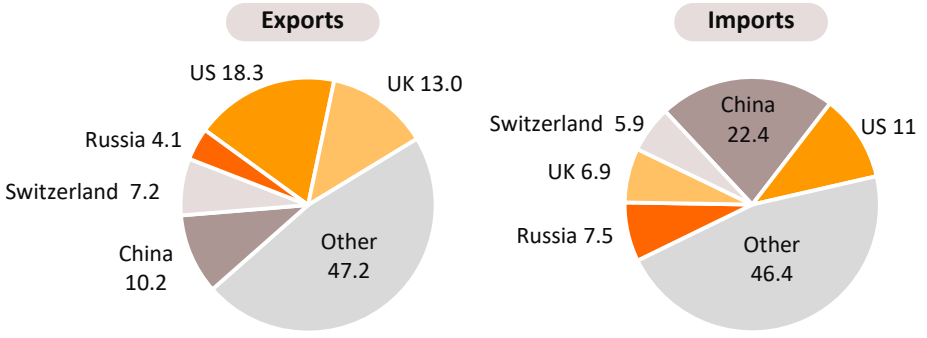


Source: IHS Markit, Eurostat, Eurocontrol, European Commission, Krungsri Research

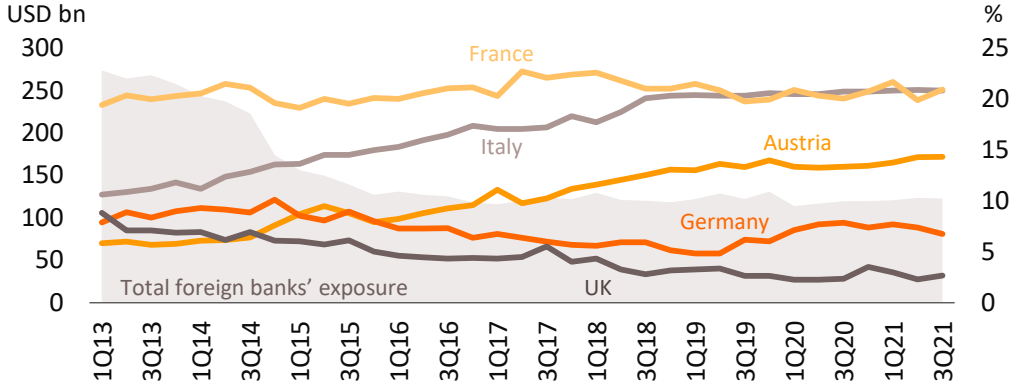
Manageable threats to trade but shocks to energy and banking sectors could shake the economy

The Ukraine-Russia conflict has raised concerns over European economies because they have had long-standing relations with Russia. Russia is one of the EU's largest trade partners, especially in energy, machinery and vehicles. Due to the large trade exposure, we expect the conflict to disrupt supply chains but it would be manageable because Russian input accounts for only 0.5% of the EU's output and they could increase trade with other countries such as the US, UK and China. For banks, **EU exposure to Russia has been trending down since the annexation of Crimea but barring Russian banks from the SWIFT platform could make it harder for EU banks to collect loans. Plus, the sharp depreciation of the ruble might increase risk of a run on Russian banks overseas and government default. In addition, rising tension would also harm the energy sector through higher utility prices and supply concerns although there are solutions.** Europe's seasonal gas output is below 2017-2021 average. **At current levels, Europe could survive at least until 1Q23 without additional energy imports but they need to ramp up measures to avoid shortages,** including (i) filling up gas to 90% of total capacity by 1 October; (ii) increasing natural gas imports from Azerbaijan and Norway, (iii) keeping nuclear reactors open, and (iv) accelerate use of renewable energy. **If they comply with the plan to increase gas supplies, they will also overcome energy shortages in the following years. Risk from halting Russian gas exports to the region would remain and could push up prices substantially.** Then, rising prices would be a major concern as it could lead to the second-round effects to the real economy.

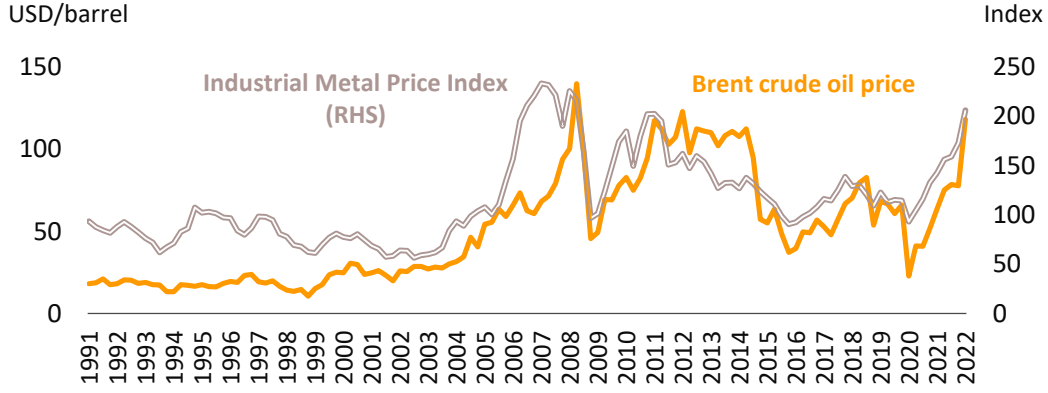
Share of Russian trade to EU total trade (%)



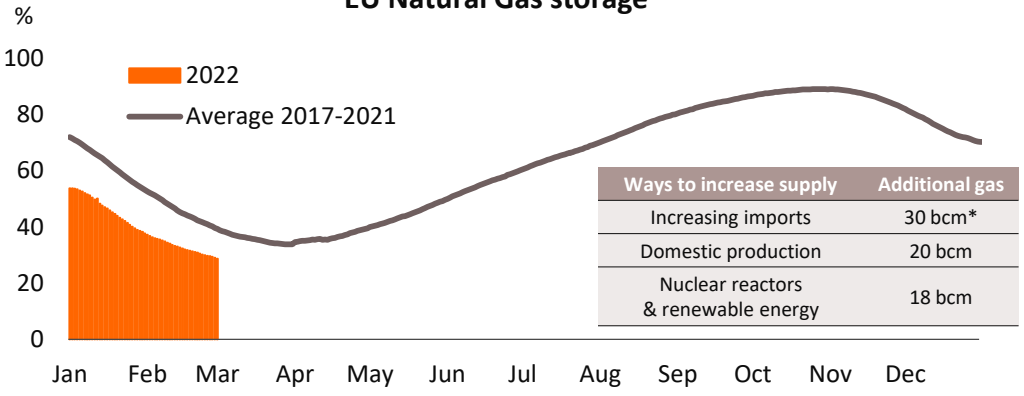
Foreign banks' exposure to Russia and share of total counterparty claims



Oil and industrial metals price



EU Natural Gas storage



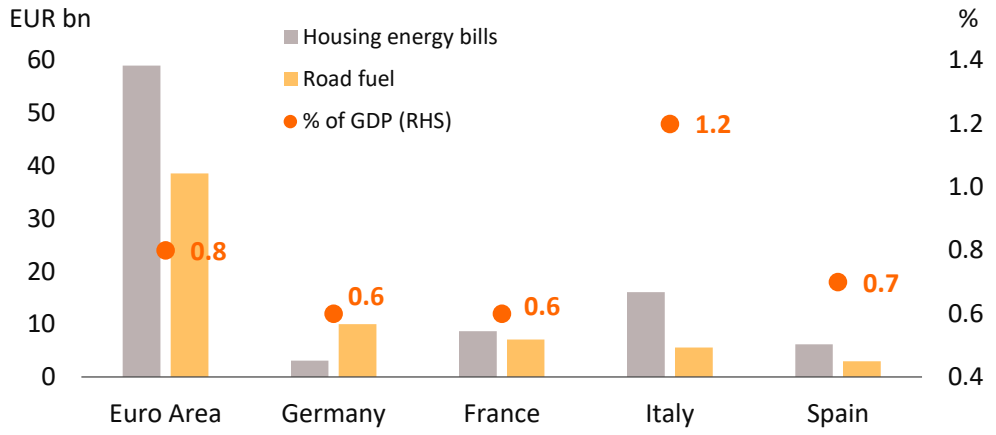
Ways to increase supply	Additional gas
Increasing imports	30 bcm*
Domestic production	20 bcm
Nuclear reactors & renewable energy	18 bcm

*bcm is billion cubic meters

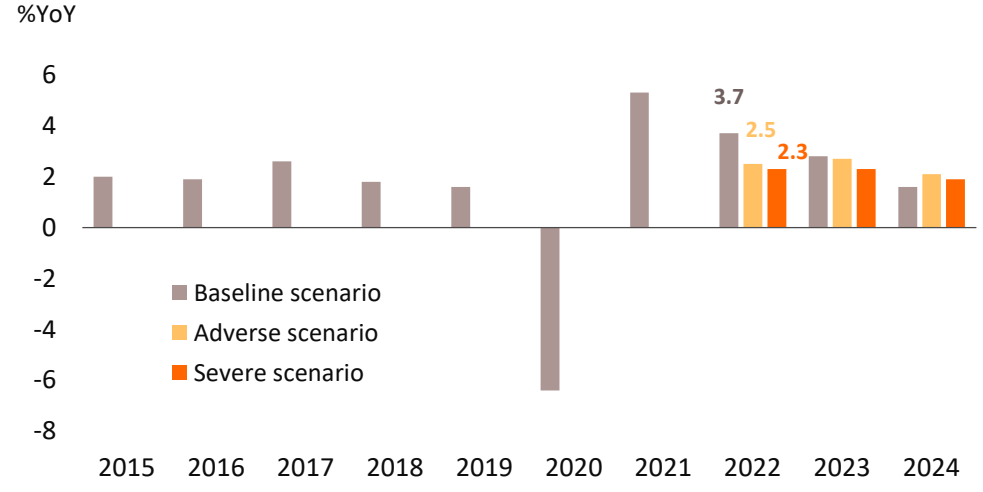
Source: BIS, Gas Infrastructure Europe, European Commission, Bloomberg, Krungsri Research

Stagflation fears prompt ECB to exit pandemic stimulus sooner and mull first rate hike by year-end to address rising inflation

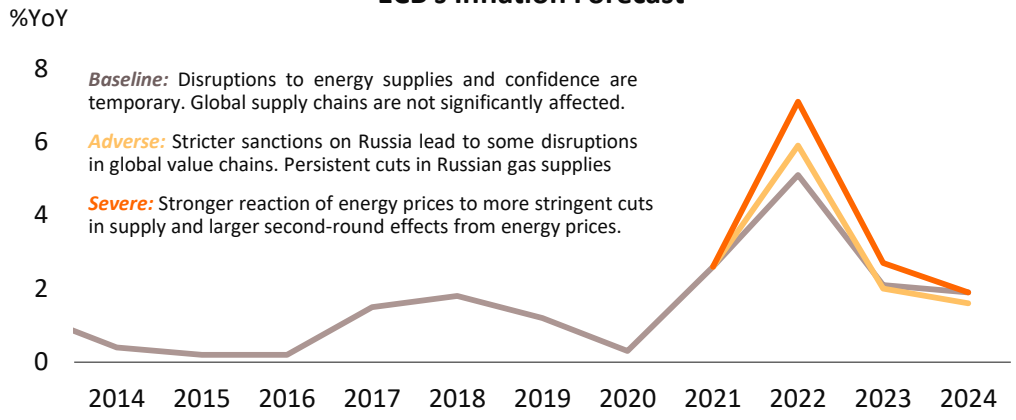
Additional cost from rising energy prices



ECB's forecast for real GDP growth



ECB's Inflation Forecast



Krungsri Research's view

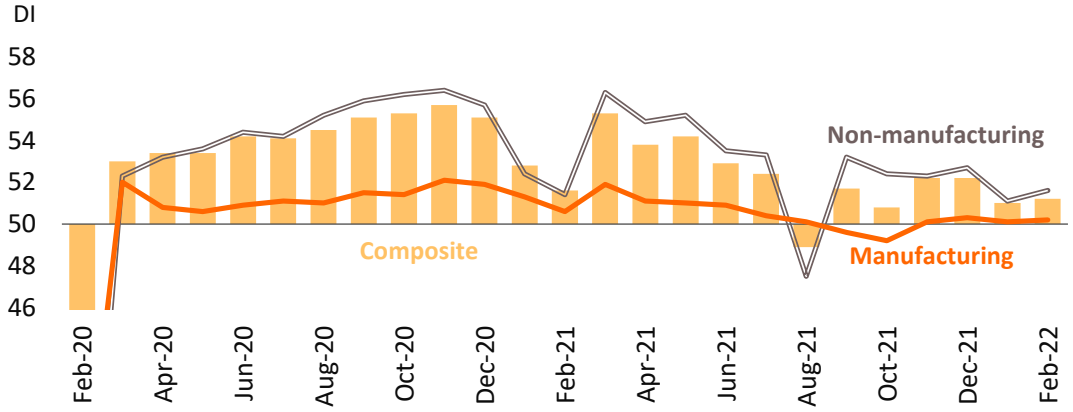
- Rising inflation is the only certainty in the current environment. Additional energy bills account for about 0.8% of Euro area GDP, with Italy likely the worst affected. **Rising energy prices could add inflationary pressure, increase costs of living and reduce spending power for consumers.**
- **Russia-Ukraine tension has triggered stagflation fears.** Eurozone inflation hit a record high of 5.8% in February **but this could be attributed to pre-war jitters and is yet to peak.** At its March meeting, **the ECB revised up baseline inflation forecast** to 5.1% from 3.2%; it could exceed 7% in a severe scenario. **The bank also downgraded 2022 GDP growth forecast to 3.7%** from 4.2%, citing the tension is substantial downside risk to economic growth.
- **The ECB was surprisingly more hawkish on monetary policy normalization, pushing to exit sooner stimulus to curb inflation.** The bank agreed to accelerate the Asset Purchase Program to EUR40bn a month in April but will **ramp up reduction to EUR20bn per month by June rather than October, and terminate the program by 3Q22.**
- **The ECB said interest rates would take *"some time"* to rise after the Asset Purchase Program ends**, instead of *"shortly after"*. **Hence, we see smaller risk of a total 50-bps hike this year and now expect only one 25-bps hike in December. The bank will likely continue to manage higher-than-expected inflation by raising rates up to twice in 1H23.**

Source: ECB, Eurostat, Bloomberg, Krungsri Research

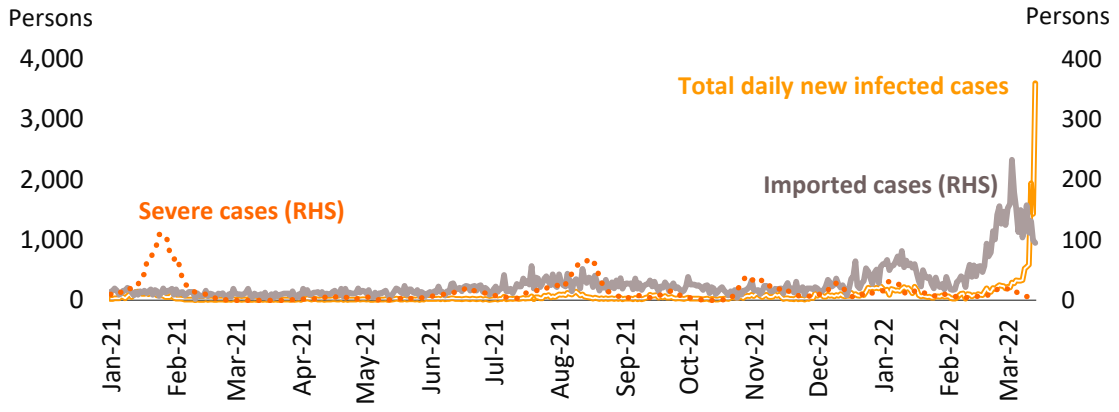
China: Economic activity picked up but headwinds could hinder further growth

China's economic growth improved following less stringent containment measures in some areas and the positive effects of monetary and fiscal policy. February's Composite PMI inched up to 51.2 from 51.0, led by an improvement in Non-Manufacturing PMI to 51.6 from 51.1. It reflected better performance of both services and construction activities driven by spending during the Lunar New Year and ramping-up of infrastructure investment together with policy supports. **However, further growth could be hindered by lingering uncertainties:** (i) recent outbreak and following lockdown in Shenzhen and Guangdong, the tech hub and global marine gateway which account for 11% of GDP, could disrupt supply chains; (ii) weaker labor market since the recent outbreak, especially in the 15-24 age group where there is stronger competition for jobs, which would decelerate spending; and (iii) decelerating export growth because of the Ukraine crisis.

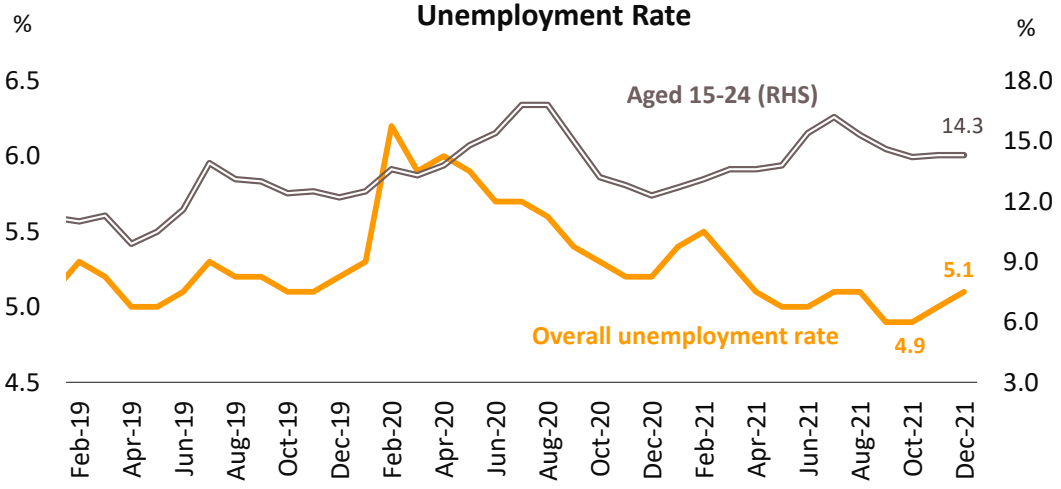
Official PMI



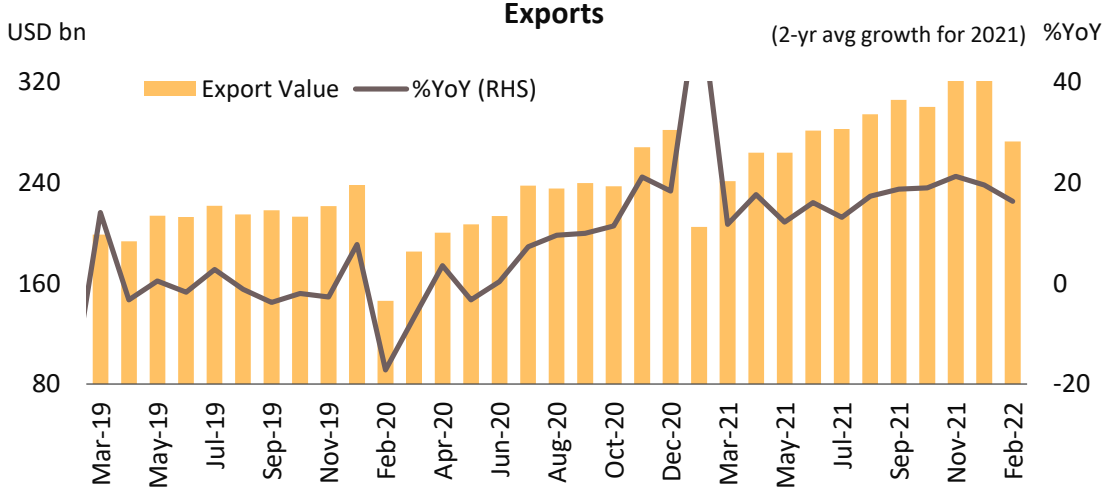
Daily COVID-19 new cases



Unemployment Rate



Exports



Source: National Health Commission, National Bureau of Statistics, CEIC, Bloomberg, Capital Economics, Krungsri Research

Slowdown in global economy triggered by Ukraine crisis will hurt China's economic growth, gains from Russia's pivot to China may be limited

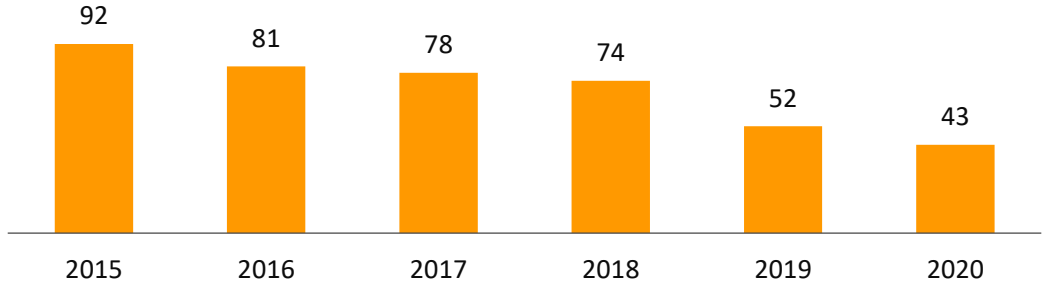
The Ukraine war could affect China through the trade, finance and price channels, albeit the impact will differ. In trade, Russia and Ukraine contributed only 1.95% and 0.27% of China's total exports, respectively. However, China's exports could encounter indirect impact from the Ukraine war and sanctions which would hurt global economic growth and trade. In addition, the impact on economic growth and transportation could disrupt trade with Europe which accounts for 20.6% of China's total exports. Looking at financial risk, current US dollar transactions between Russia and China are still high at 40% of total trade, but it has dropped. On the inflation front, surging global commodity prices would be a threat to China but it could be manageable due to (i) weak demand-pull inflationary pressure, and (ii) strong government measures to mitigate the impact by releasing commodity reserves and cracking down on speculation, as well as stabilizing supply and prices with more coordination between upstream and downstream companies. Based on Oxford Economics estimates (as of 4 March), China's inflation is projected at 2.3% in 2022, far below forecast global inflation of 6.1%, implying limited inflationary risk. **With regards to strengthening economic ties with Russia, gains from trade diversion and substitution effect are likely to be modest** since (i) only 17% of bilateral trade is conducted in Chinese Yuan (CNY); (ii) China's exports to Russia would be affected by weaker Russian demand due to the economic fallout and a weaker Russian ruble; and (iii) there are concerns over the US's warning against providing assistance to Russia, which has caused China to be more cautious of its next moves. **Overall, the Ukraine crisis would mainly threaten European economic recovery and cause the global economy to slow down, which could be risks for China's exports and economic growth.**

China's trade with Russia and Ukraine

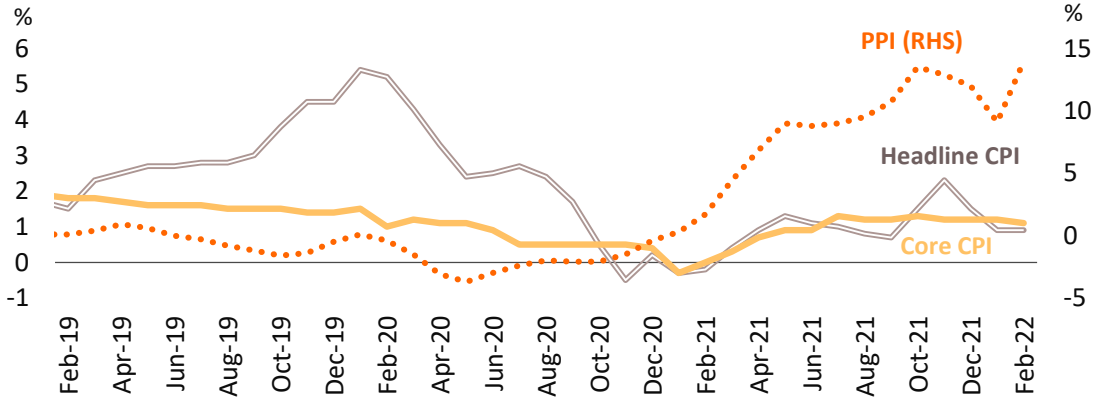
Russia	Value (mn USD)	% Share
China's imports	57,181	2.78
Fuel	33,385	58.39
Wood	3,710	6.49
Ores	3,428	5.99
Copper	2,799	4.89
Iron & steel	2,172	3.80
China's exports	50,585	1.95
Electrical appliance	10,748	21.25
Machinery	10,188	20.14
Vehicle	2,133	4.22
Furskin products	1,915	3.79
Plastics	1,826	3.61

Ukraine	Value (mn USD)	% Share
China's imports	7,791	0.38
Ores	3,006	38.56
Cereals	1,869	23.99
Vegetable fats	1,080	13.86
Iron & steel	698	8.96
Prepared animal food	575	7.38
China's Exports	6,878	0.27
Electrical appliance	1,270	18.47
Machinery	1,159	16.85
Toys	333	4.84
Vehicles	328	4.77
Plastics	304	4.43

Share of US dollar transactions in China-Russia trade (%)



Consumer & Producer Price Indices



Source: Trademap, National Bureau of Statistics, CEIC, Capital Economics, Bloomberg, Reuters, Financial Times, Krungsri Research

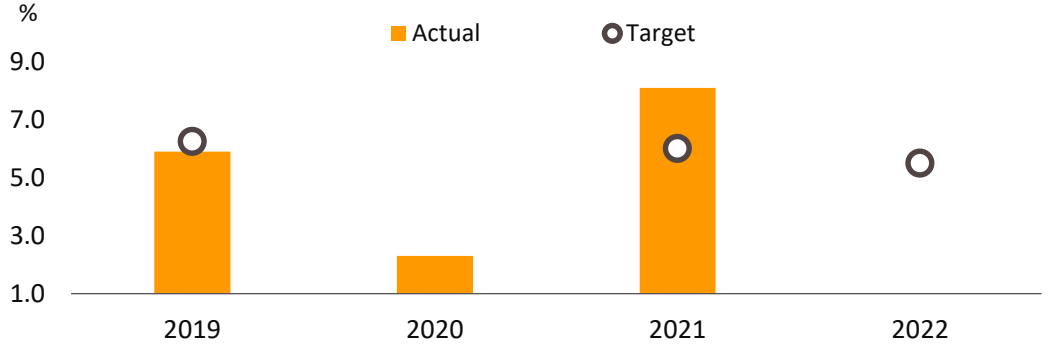
NPC's 2022 targets for China reflect greater focus on growth than stability, which would help to mitigate risks

2022 economic targets and previous targets

Indicator	2019 Target	2020 Target	2020 Actual	2021 Target	2021 Actual	2022 Target	Implications
GDP growth (% YoY)	6.0-6.5%	-	2.3	> 6%	8.1	▼ About 5.5%	The growth target is below last year's, it is higher than expected (the IMF predicted 4.8%), indicating an ambition to avert a sharp slowdown
CPI (% YoY)	3.0%	3.5%	2.5%	3.0%	0.9%	= 3.0%	Inflation target is kept steady, above consensus forecast of 2.5%, leaving room for policy easing to boost inflation
M2 (% YoY)	9.0-9.5%	> 9.0%	10.1%	>9.0%	9.0%	▼ 8.5%	M2 growth target is slightly below 2021 level, reflecting a moderate degree of prudence
Fiscal deficit (% of GDP)	2.8%	≥ 3.6%	3.7%	3.2%	3.1%	▼ 2.8%	If transfer from revenue funds are included (worth CNY 2.23trn, doubling from CNY 1.17trn in 2021), the deficit would rise from 3.8% in 2021 to 4.7% in 2022.
Quota for special bond issuance (CNY trn)	2.15	3.75	3.60	3.65	3.42	= 3.65	Quota for special bond issuance remains at the highest in 15 years and is larger than 2021 actual figure
Urban job creation (mn)	11.0	9.0	11.8	11.0	12.7	= 11.0	Job creation target remains the same as previous year despite the economic slowdown, implying the government would support the labor market
Unemployment rate (%)	5%	6%	5.6%	5.5%	5.1%	= 5.5%	Keeping unemployment rate stable suggests prompt policy support if labor demand weakens and push unemployment past above target

Note: Change in 2022 target, compared to 2021 target

Target and Actual GDP growth



Source: The National People's Congress (NPC), Bloomberg, Capital Economics, Reuters, Krungsri Research

Krungsri Research's view

At two-session meeting of the National People's Congress (NPC) in 2022, authorities targeted 5.5% GDP growth for 2022. The economic targets indicate greater policy focus on growth than stability, reflected by the following:

(i) setting growth and inflation targets that are higher than consensus at 5.3% and 2.5%, respectively, implies China is not prioritizing price stability

(ii) allowing true government deficit to be higher than last year's, and

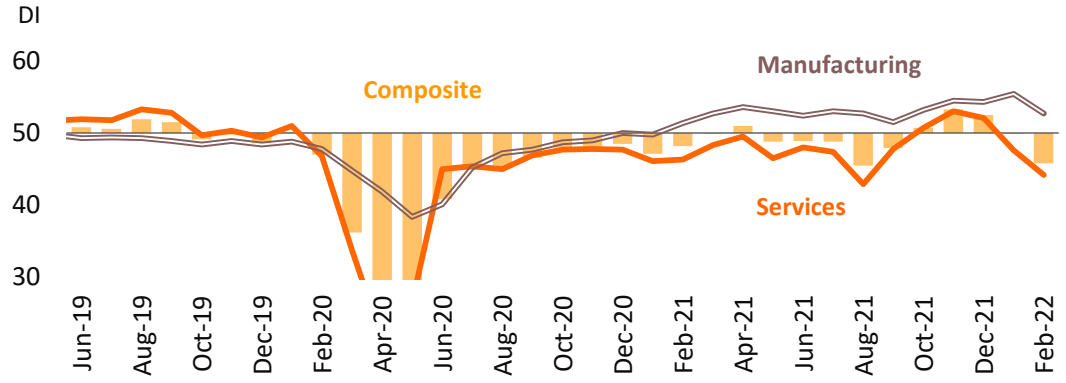
(iii) plans to speed up infrastructure investment, reflected in bond issuance quotas.

In addition, China has introduced the *"dynamic zero-COVID approach"*, which is a targeted, scientific approach rather than imposing blanket controls. This suggests there will be smaller disruption to the economy and society than the strict "zero-COVID policy".

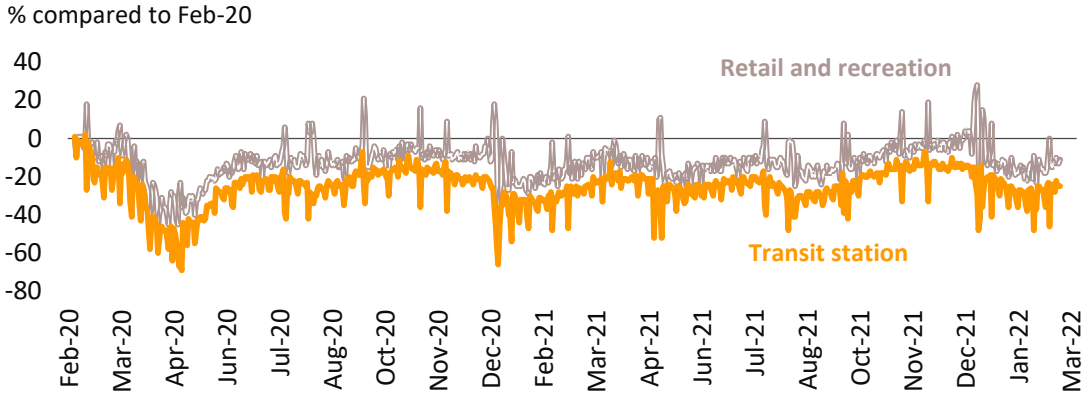
Japan: Post-*Omicron* recovery trajectory could be delayed by Ukraine crisis

February PMI data suggested the 6th wave of infections has slowed the pace of economic recovery but domestic activity has shown signs of improvement since March supported by the following: (i) improving Covid-19 situation as daily cases have started to drop following progress in booster shots; (ii) a rebound in economic activities reflected in high-frequency data for retail sales and traffic in early March; (iii) gradual easing of restrictions with the lifting of nationwide quasi-state of emergency by 21 March, and (iv) an improving labor market, reflected by rising average cash earnings to an 8-month high, which would support purchasing power. Nonetheless, recovery is still in the the early stages and could be derailed by an extended Russia-Ukraine war and related sanctions. **Looking ahead, the war could extend to 2Q22, implying the West and its allies, including Japan, are likely to impose more severe sanctions. This would raise risks of global stagflation and threaten gains from the post-Omicron recovery.**

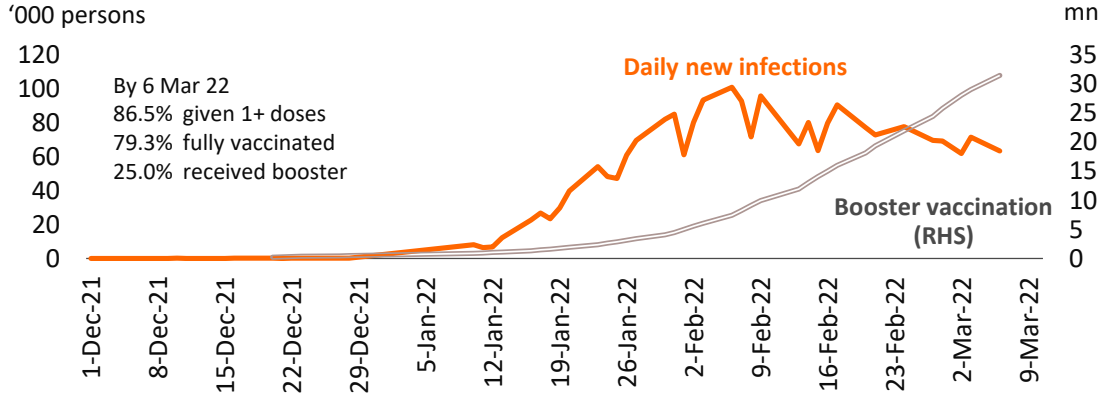
Jibun PMI



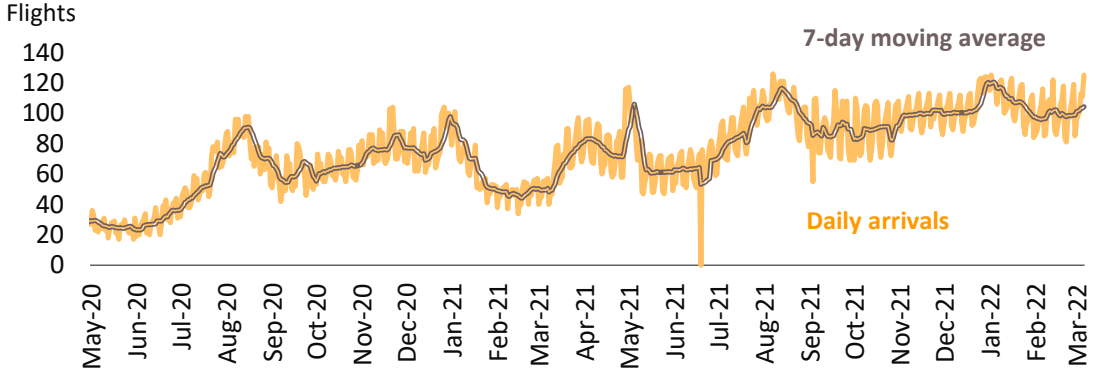
Google Mobility Index



Daily new COVID-19 cases & Booster vaccine rollout



Number of International Flight Arrivals



Source: Jibun Markit, Google Mobility, Ministry of Health Labour and Welfare, Ministry of Land, Infrastructure, Transport and Tourism, CEIC, Krungsri Research

War and sanctions is pressuring Japan because it is a net oil importer; Other impacts could be supply chain disruption and risk to its financial sector

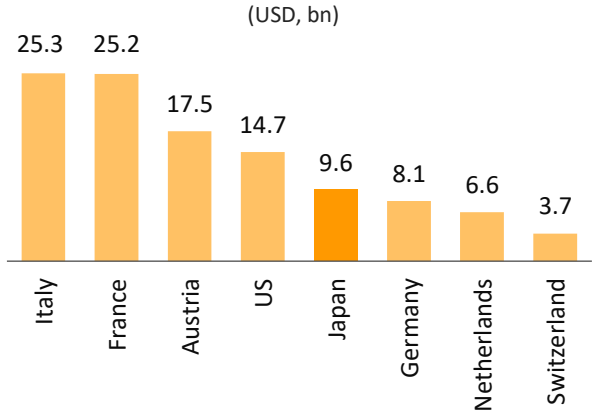
The Ukraine crisis would mainly affect trade, supply chains, financial stability and inflation. There should be limited impact through the trade channel because Japanese exports to Russia and Ukraine were only 0.92% and 0.08% of Japan's total exports respectively, while only 1.69 and 0.08% of Japan's goods imports come from Russia and Ukraine. However, supply chain disruptions could lead to severe shortage of semiconductors and disrupt automakers because Russia is a major exporter of key raw materials such as platinum and palladium. Looking at financial risk, Japan is the fifth largest creditor to Russia among 25 countries the BIS collects data on; the consequences of unpaid dues from Russia remains unclear. Looking at price effect, escalating energy prices could hurt Japan because of its dependence on imported fuel, the top dependent among OECD countries. Japan's imports of crude oil and petroleum & gas accounted for 31% of Japan's total imports in 2020. However, there would be limited upside to inflation because the government subsidizes oil distributors to control wholesale prices. **The extended conflict would hurt global trade, exacerbate supply chain disruption, raise inflation and undermine purchasing power. Despite higher-than-expected inflation, the BOJ is unlikely to raise policy interest rates this year given still-low demand-pull inflationary pressure and a weak economic recovery.**

Japan's trade with Russia and Ukraine

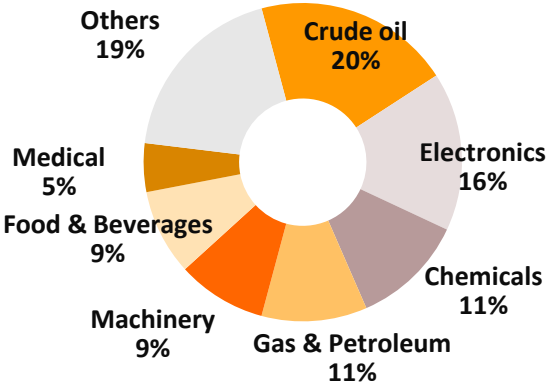
Russia	Value (mn USD)	% Share
Japan's imports	10.737	1.69
Crude oil	6.404	59.65
Precious stone	1.568	14.61
Fish & aquatics	0.960	8.95
Aluminum	0.682	6.36
Wood	0.419	3.91
Japan's exports	5.882	0.92
Vehicles	3.159	53.70
Machinery	1.088	18.51
Rubber & tire	0.322	5.48
Home appliance	0.296	5.04
Photography	0.236	4.02

Ukraine	Value (mn USD)	% Share
Japan's imports	0.533	0.08
Tobacco	0.422	79.24
Ores	0.047	8.86
Aluminum	0.012	2.38
Electronic machinery	0.007	1.33
Vegetable fats	0.005	1.08
Japan's exports	0.507	0.08
Vehicles	0.422	83.28
Rubber & tire	0.021	4.19
Mechanical appliance	0.014	2.92
Photography	0.009	1.94
Steel	0.004	0.87

Outstanding debts of Russia's residents by country of foreign bank



Structure of Japan's imports



Economic outlook in response to Ukraine crisis (As of 4 Mar 2022)

	Real GDP growth			Inflation		
	2021	2022	2023	2021	2022	2023
US	5.7	3.3	2.1	4.7	6.4	2.1
Eurozone	5.2	3.1	2.7	2.6	4.8	1.0
Japan	**1.7**	**2.7**	**2.0**	**-0.2**	**1.6**	**-0.4**
China	8.1	4.9	5.4	0.9	2.3	2.5
World	5.9	3.7	3.3	4.3	6.1	2.9

Source: Trademap, BIS, Forbes, CEIC, Bloomberg, Reuters, Capital Economics, Krungsri Research

Thailand: Russia-Ukraine crisis dims hopes of stronger recovery

- Before the Ukraine war, the Thai economy had been slowly recovering from the Covid-19 pandemic impact, reporting upbeat 4Q21 GDP data and improving domestic activity early this year, backed by rising vaccination rate, easing lockdown restrictions, reopening effect, and supportive fiscal and monetary policies.

- However, given emerging risks from the Russia-Ukraine crisis, economic prospects could worsen moderately or markedly depending on the severity and duration of both war and sanctions. To assess the impact, Krungsri Research has identified three main scenarios: **Scenario 1** - war ends in March, with sanctions on some of Russia's trade and finance activities continuing until end-2022. **Scenario 2** – war extended into 2Q22, provoking stricter sanctions against Russia. **Scenario 3** – war continues into mid-2022, provoking stricter sanctions against Russia which would prompt Russia to block energy exports to Europe, triggering an energy crisis across the continent. The impact would be transmitted through four main channels: trade & transport, energy security, price stability, and income effect & capital markets.

- We applied a dynamic stochastic general equilibrium (DSGE) model to quantify the impact of these 3 scenarios on the global and Thai economies. The conclusion is the Russa-Ukraine crisis would reduce baseline 2022 global GDP growth by 0.5, 1.3 and 2.9 percentage points (ppt), raise inflation rate by 1.3, 2.0 and 3.6 ppt, and reduce global export volume growth by 1.1, 3.4 and 3.9 ppt, respectively. For Thailand, the crisis would reduce baseline 2022 GDP growth by 0.4, 1.1, and 2.4 ppt, push up inflation by 1.4, 2.3, and 3.5 ppt, and reduce export volume growth by 1.1, 3.0 and 4.7 ppt, respectively.

- **Our base case (most likely to happen) is Scenario 2. Based on our assessment of the impact of the Ukraine crisis and government measures to ease the negative impact, we revised down 2022 GDP growth forecast to +2.8% from +3.7% previously, and raised inflation forecast to 4.8% from 2.7%.**

- We revised down 2022 export value growth to +2.6% from +5.0% in the previous forecast. Weaker exports, surging import prices, and smaller tourism income, could lead to a current account deficit this year. Surging inflation would reduce purchasing power and cause a more uneven recovery in consumption among the different income classes. We reduced 2022 forecast for private consumption growth to 3.0% from 3.8%, although spending could be supported by rising farm income, reopening effect, and supportive policies.

- **The spike in inflation to above the BOT's target would make it increasingly difficult for policymakers to strike a balance between managing risk to economic growth and risk to price stability. The MPC is likely to give priority to support still-fragile economic recovery, which means they would keep policy rate at a record low this year.**

Krungsri Research Forecasts for 2022

Krungsri Research Forecast		2020	2021	2022F	
				Previous	Latest
GDP growth	YoY (%)	-6.2	1.6	3.7	2.8 ▼
Private Consumption Expenditure	YoY (%)	-1.0	0.3	3.8	3.0 ▼
Government Consumption Expenditure	YoY (%)	1.4	3.2	-0.2	-0.5 ▼
Private Investment	YoY (%)	-8.2	3.2	4.3	3.3 ▼
Public Investment	YoY (%)	5.1	3.8	4.0	3.5 ▼
Nominal Exports in USD (f.o.b.)*	YoY (%)	-6.5	18.8	5.0	2.6 ▼
Nominal Imports in USD (f.o.b.)	YoY (%)	-13.8	23.4	6.0	8.5 ▲
Current Account Balance	USD, bn	20.3	-10.9	5.8	-4.6 ▼
Tourist Arrivals	Mn, persons	6.7	0.4	7.5	5.5 ▼
Headline Inflation	YoY (%)	-0.8	1.2	2.7	4.8 ▲
Policy Interest rate (end of period)	(%)	0.50	0.50	0.50	0.50 =
Dubai crude price - period average	USD/bbl	42	69	80	98 ▲

* Customs-based export growth forecast: +2.1% in 2022

Source: NESDC, BOT, MOC, MOTS, Bloomberg, Krungsri Research

Russia-Ukraine conflict: Economic prospects could worsen moderately or markedly depending on the severity and duration of sanctions and war

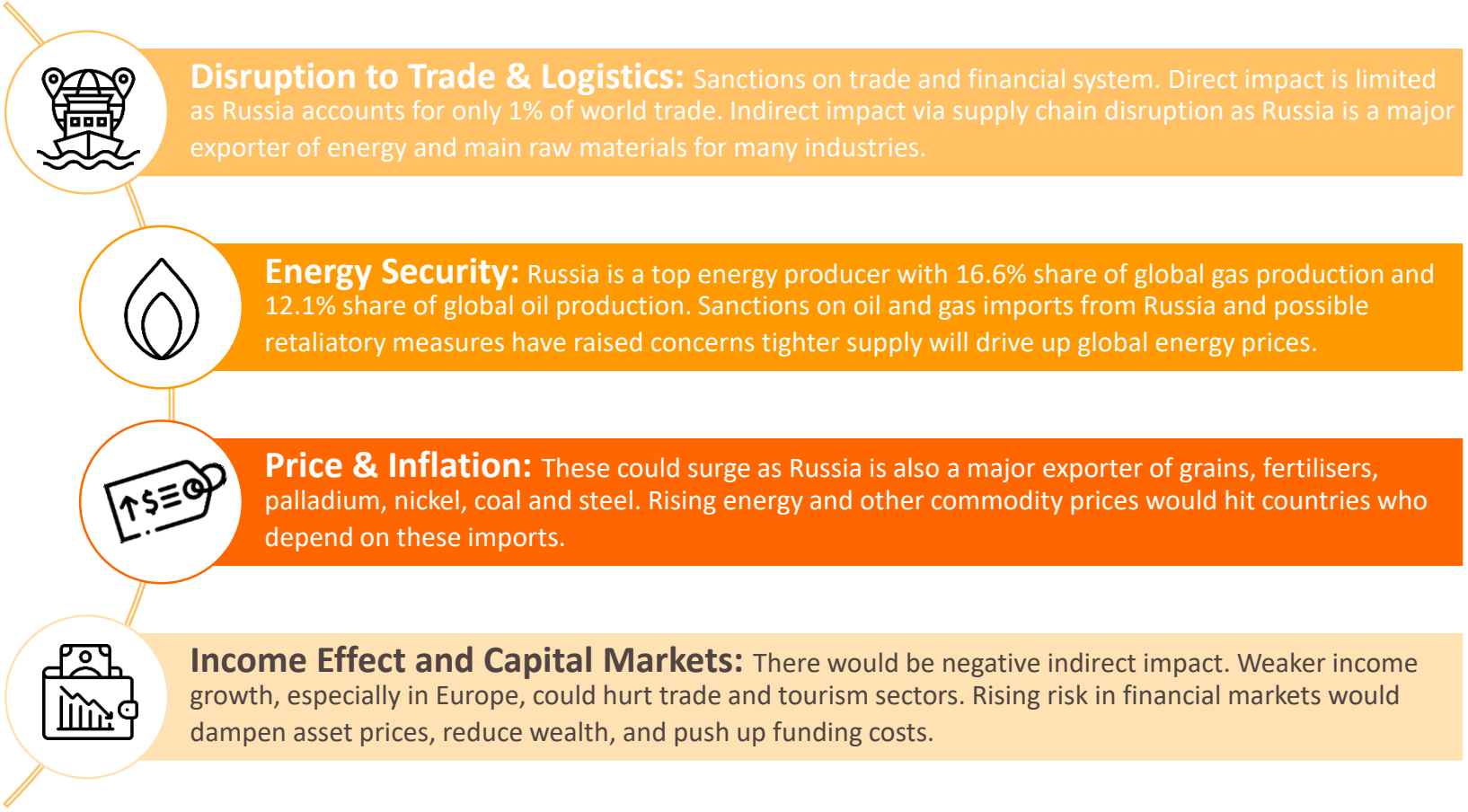
Several scenarios for Russia-Ukraine conflict

Severity of war \ Severity of sanctions	Current sanctions remain until end-2022	Tougher sanctions until mid-2023	Tougher sanction until mid-2023; No energy trade between Russia and EU
War between Russia and Ukraine ends in 1Q22	**S1. Highly likely and mild impact** The war ends in March, sanctions remain up to end-2022 but will not intensify	**Likely and mild impact** The West increase sanctions, force Russia to withdraw its troop. Sanctions remain until end-2022	**Less likely but severe impact** Russia withdraws its troop from Ukraine but halts energy exports to Europe
War between Russia and Ukraine extends to 2Q22	**Less likely and mild impact** War continues in 2Q22 but the West do not add sanctions	**S2. Most likely and moderate impact** Russia continues to invade Ukraine, pushing the West to apply stricter sanctions	**S3. Highly likely and severe impact** Russia continue to invade Ukraine, pushing the West to impose more sanctions. Russia retaliates by halting energy exports
War intensifies and is extended indefinitely	**Less likely and moderate impact** Other countries join the war between Russia and Ukraine. But sanctions remain the same until end-2022	**Less likely but severe impact** Both military and economic measures are used to stop Russia's invasion	**Likely and doomsday impact** Both military and economic measures are used to stop Russia. Russia retaliates by halting energy exports

Source: Krungsri Research

Russia-Ukraine crisis could hurt economies worldwide via *four main channels:* trade & logistics, energy security, prices & inflation, and income effect & capital markets

Four main transmission channels



Disruption to Trade & Logistics: Sanctions on trade and financial system. Direct impact is limited as Russia accounts for only 1% of world trade. Indirect impact via supply chain disruption as Russia is a major exporter of energy and main raw materials for many industries.

Energy Security: Russia is a top energy producer with 16.6% share of global gas production and 12.1% share of global oil production. Sanctions on oil and gas imports from Russia and possible retaliatory measures have raised concerns tighter supply will drive up global energy prices.

Price & Inflation: These could surge as Russia is also a major exporter of grains, fertilisers, palladium, nickel, coal and steel. Rising energy and other commodity prices would hit countries who depend on these imports.

Income Effect and Capital Markets: There would be negative indirect impact. Weaker income growth, especially in Europe, could hurt trade and tourism sectors. Rising risk in financial markets would dampen asset prices, reduce wealth, and push up funding costs.

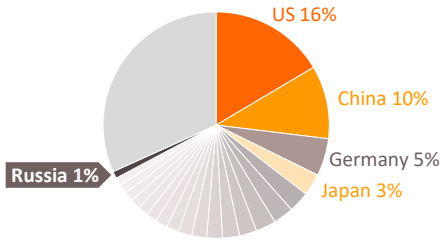
Source: Krungsri Research

Limited direct impact via *trade channel* but indirect impact could be significant; war in Ukraine is pressuring global *energy security*

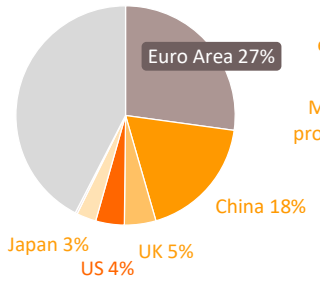
Indirect impact via trade channel could be significant if Russia is stopped from exporting raw materials and energy; this would push up oil prices and logistics cost.

Russia is one of the world's largest exporters of oil and natural gas. Russia supplies 40% of Europe's gas. Cutting off those exports could raise concerns over global energy security.

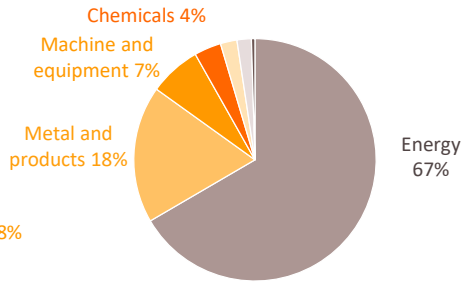
Global trade by country



Trade exposure to Russia by country

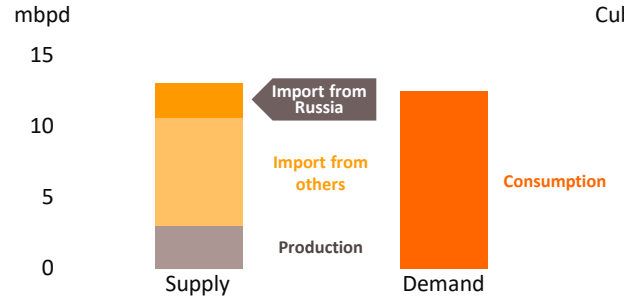


Russia export value by product

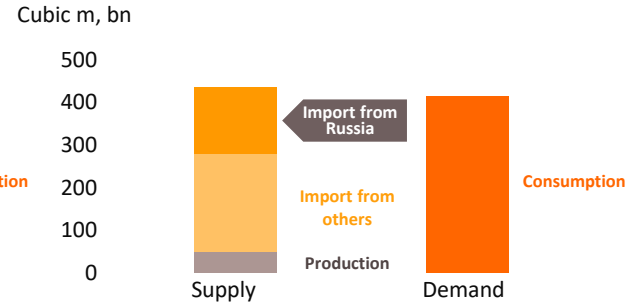


Russia is the world's largest grains and fertilisers exporter, top palladium and nickel producer, third-largest exporter of coal and of steel, and fifth-largest wood exporter

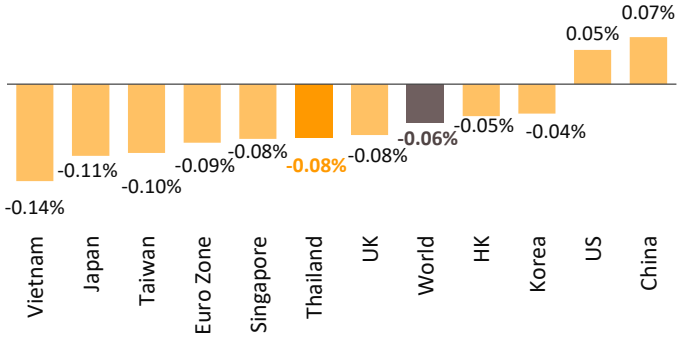
Europe crude oil market



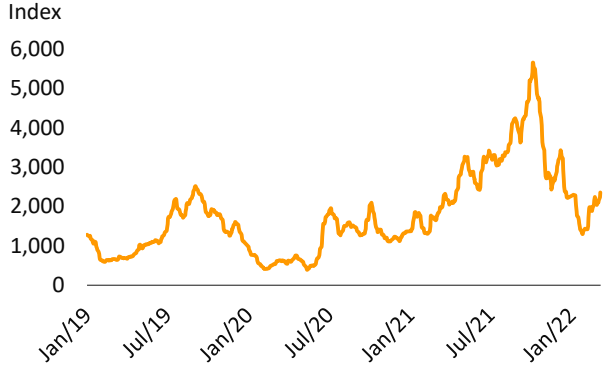
Europe natural gas market



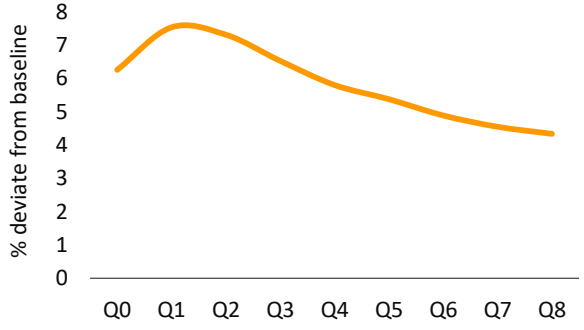
Exports impacts from -1% of Russia trade shock (%)



Baltic Exchange Dry Index



Impacts of -1% oil supply shock on oil price



Krungsri Research estimates a 1% (or 1m bpd) drop in global oil supply would push up oil price by 7.5% in the first 2 quarters and by 4% in the long run.

Note: calculate by Krungsri Research

Note: Estimated by Krungsri Research

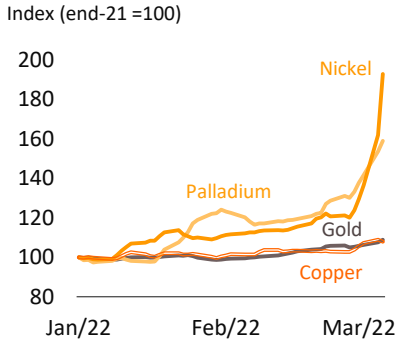
Source: IMF, Russia's Federal Customs Service, OECD, Bloomberg, OPEC, EU, Krungsri Research

Rising *inflation* would hurt purchasing power and slow consumption recovery; *negative income effect* and high market volatility would also hurt trade and tourism

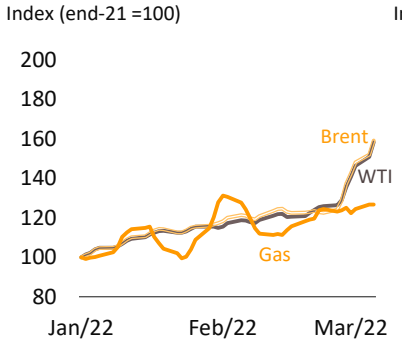
A surge in oil and other commodity prices would raise inflation pressure, hit countries with high weighting of food and energy in their inflation basket

The Ukraine crisis could hurt income growth in many countries, especially in Europe, and falling asset prices could hit household wealth. There could be indirect impact on trade and tourism.

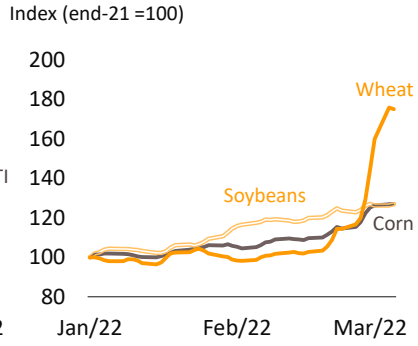
Metal prices



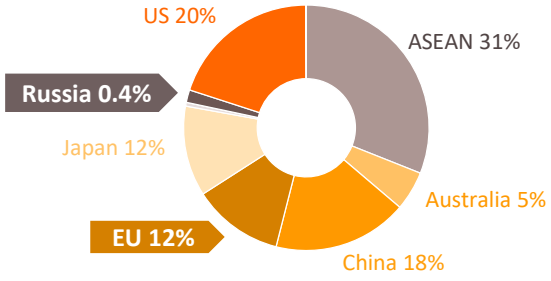
Energy



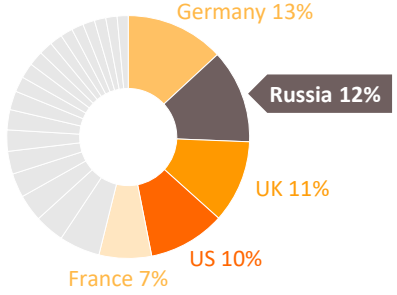
Agriculture



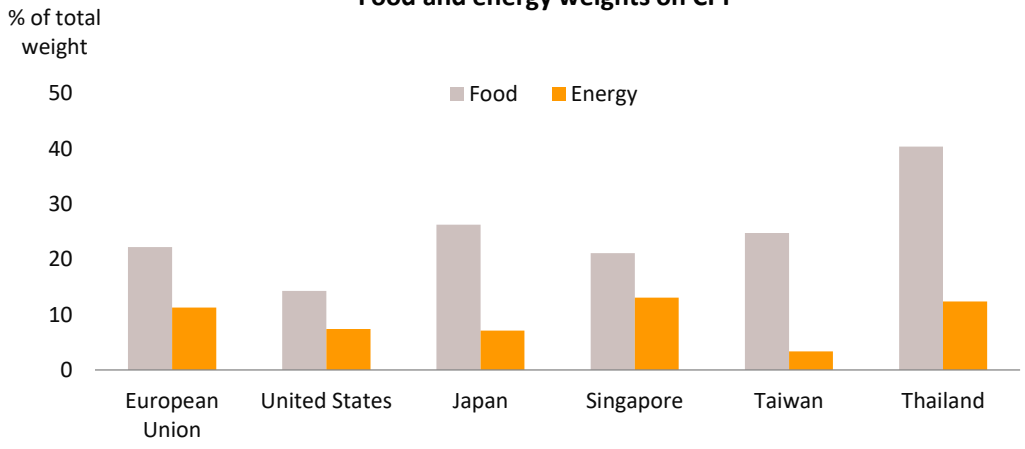
Thai exports by country



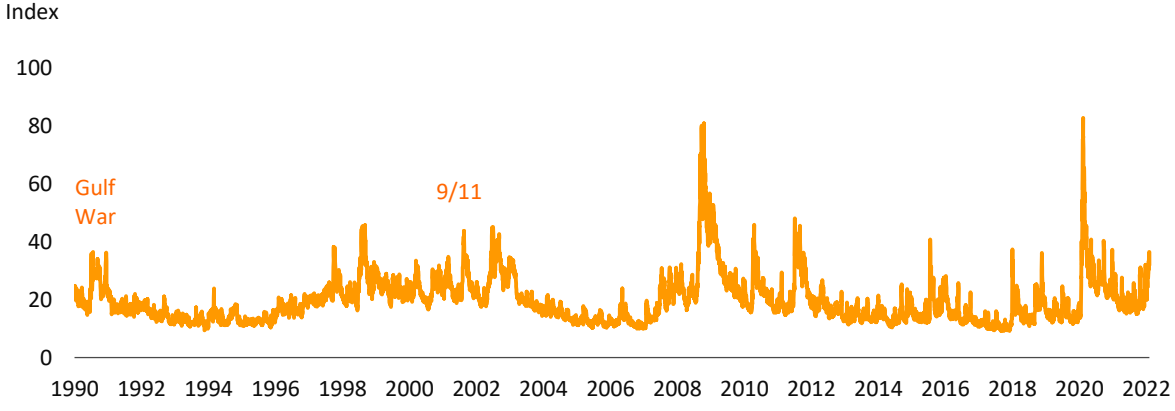
Visitor arrivals by nationality
(during previous 12 months)



Food and energy weights on CPI



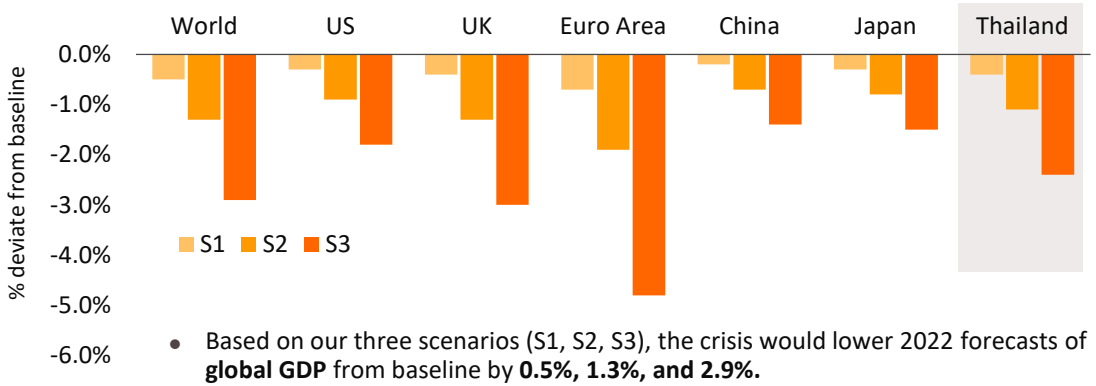
CBOE Volatility Index (VIX)



Source: Bloomberg, BOT, MOTS, Krungsri Research

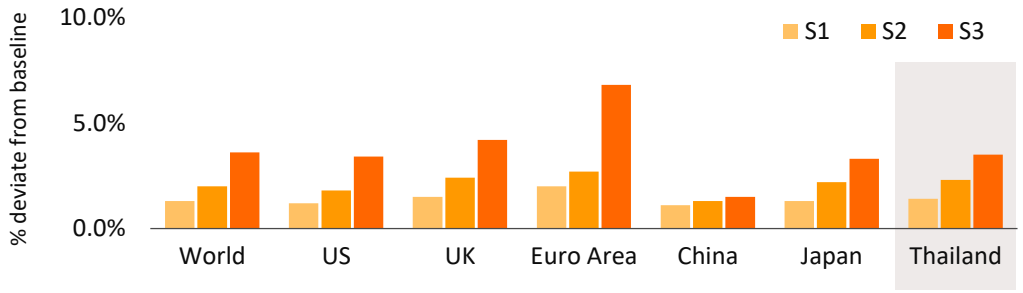
Russia-Ukraine crisis would not only harm global trade and economic growth but also push up inflation, increasing *risk of stagflation*

Impacts on economic growth in selected countries



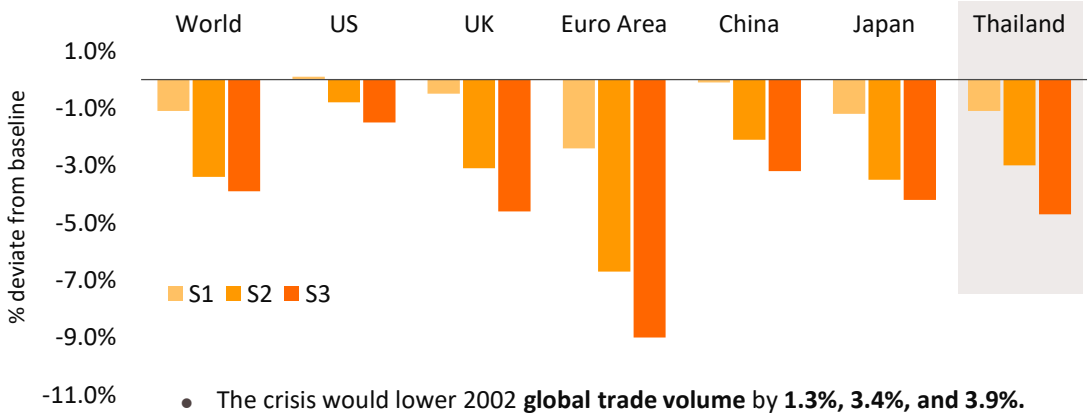
- Based on our three scenarios (S1, S2, S3), the crisis would lower 2022 forecasts of **global GDP** from baseline by **0.5%, 1.3%, and 2.9%.**
- 2022 **Thai GDP** will be lowered by **0.4%, 1.1%, and 2.4%.**

Impacts on inflation in selected countries



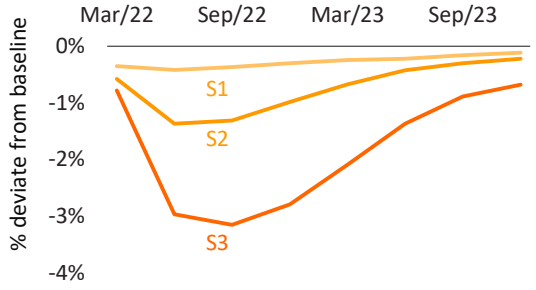
- The crisis would raise 2002 **global inflation** by **1.3%, 2.0%, and 3.6%.**
- 2022 **Thai inflation** will be raised by **1.4%, 2.3%, and 3.5%.**

Impacts on export volumes in selected countries

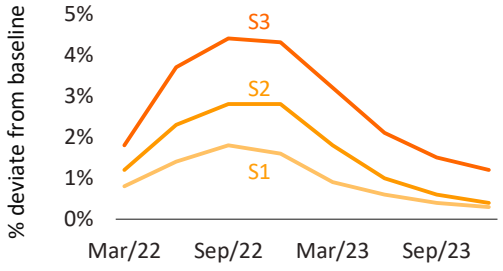


- The crisis would lower 2002 **global trade volume** by **1.3%, 3.4%, and 3.9%.**
- 2022 **Thai export volume** will be lowered by **1.1%, 3.0%, and 4.7%.**

Impacts on Thai economic growth by quarters



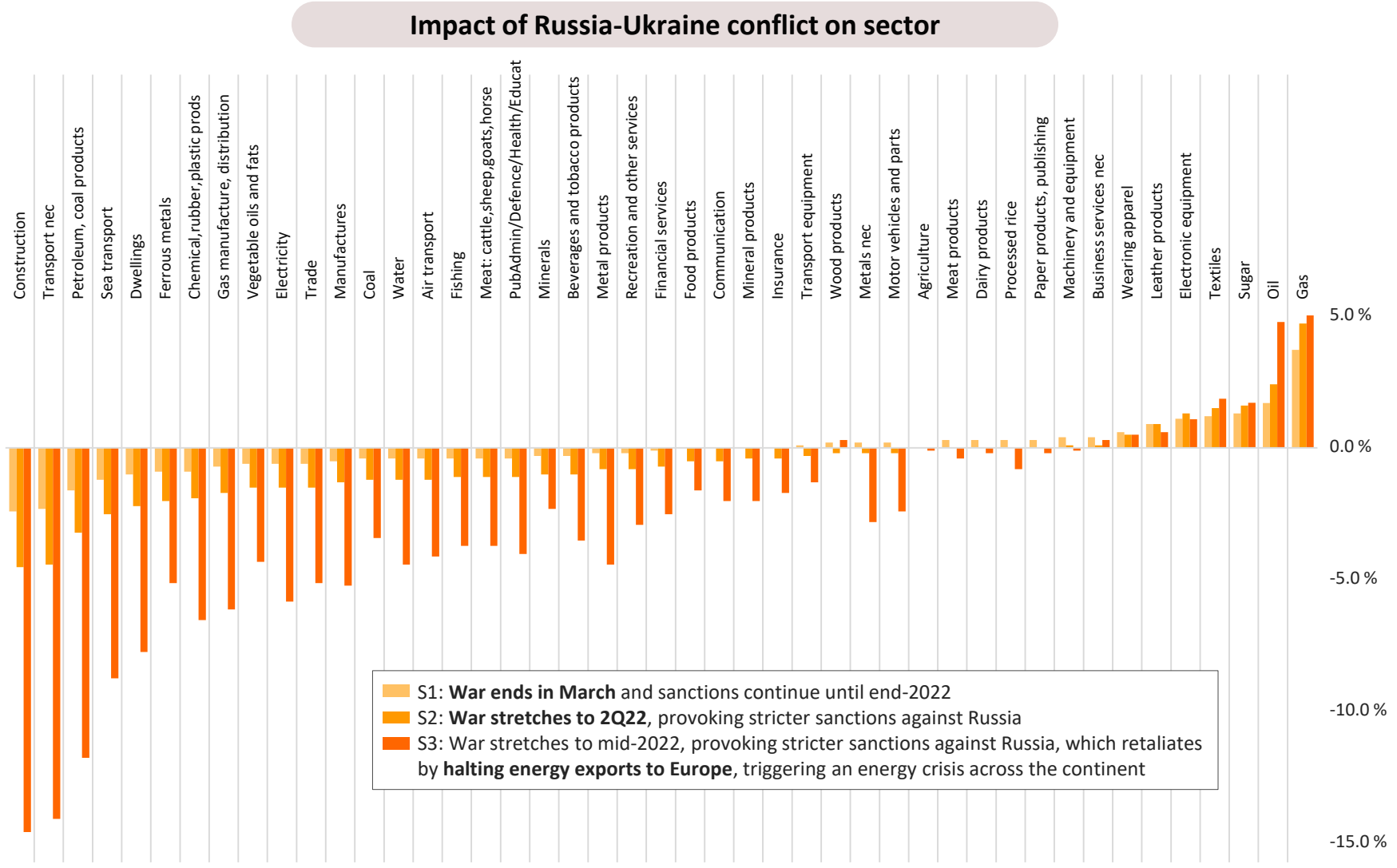
Impacts on Thai inflation by quarters



S1: **War ends in March** and sanctions continue until end-2022
S2: **War stretches 2Q22**, provoking stricter sanctions against Russia
S3: **War stretches to mid-2022**, provoking stricter sanctions against Russia, which retaliates by **halting energy exports to Europe**, triggering an energy crisis across the continent

Source: estimate by Krungsri Research

By sector, top gainers are oil & gas, sugar and textiles due to price hikes and trade diversion; construction is the top loser, followed by transportation due to higher costs



Source: GTAP, estimate by Krungsri Research

We trimmed *2022 GDP growth forecast* to +2.8% from +3.7%

Our base case is Scenario 2, where Russia-Ukraine war continues into 2Q22 and there are stricter sanctions against Russia. We expect the government to implement supportive policies and subsidies to alleviate the negative impacts but they would only help marginally. Hence, we revised down 2022 GDP growth forecast to +2.8% from +3.7% previously. However, if Scenario 1 pans out (war ends in March and sanctions continue until end-2022), our projection for 2022 Thai GDP growth would be reduced to +3.3%. If Scenario 3 pans out (war continues into mid-2022 and Russia to block energy exports to Europe), we project the Thai economy would grow by only 1.3% this year.

Scenarios of Russia-Ukraine conflict

Krungsri Research Forecast		2022F			
		Previous	Upper case	Base case	Lower case
GDP growth	YoY (%)	3.7	3.3	2.8	1.3
Private Consumption Expenditure	YoY (%)	3.8	3.5	3.0	1.6
Government Consumption Expenditure	YoY (%)	-0.2	-0.3	-0.5	-0.8
Private Investment	YoY (%)	4.3	3.9	3.3	2.0
Public Investment	YoY (%)	4.0	3.8	3.5	2.7
Nominal Exports in USD (f.o.b.)	YoY (%)	5.0	4.0	2.6	1.2
Nominal Imports in USD (f.o.b.)	YoY (%)	6.0	10.0	8.5	7.3
Tourist Arrivals	Mn, persons	7.5	7.0	5.5	3.0
Headline Inflation	YoY (%)	2.7	4.0	4.8	6.0
Dubai crude price - period average	USD/bbl	80	90	98	135

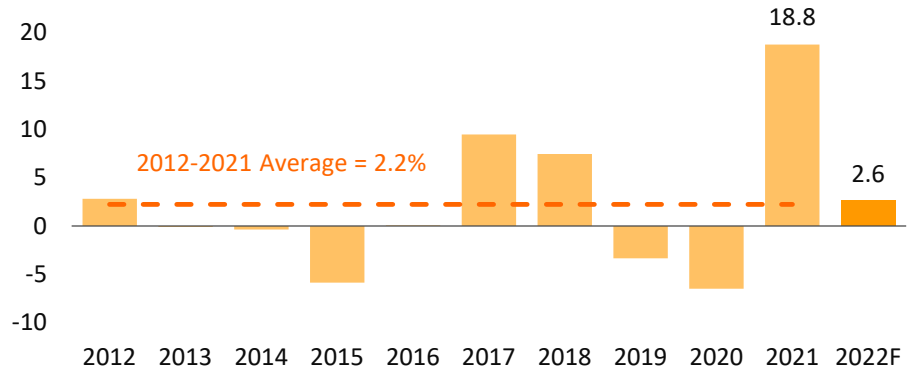
S1	**Upper case:** Russia-Ukraine **fighting ends in March** and sanctions continue until the end of 2022
S2	**Base case:** Fighting continues into 2Q22, provoking **a tightening of sanctions** against Russia
S3	**Lower case:** Fighting continues into mid-2022, provoking a tightening of sanctions against Russia which in turn causes **Russia to block exports of energy to Europe**, triggering an energy crisis across the continent

Source: Forecast by Krungsri Research

Ukraine crisis will hurt *Thai exports*; despite rising prices, we trimmed 2022 forecast export value growth to +2.6% from +5.0%

The Ukraine crisis should have limited direct impact on Thailand's exports because exports to Russia and Ukraine accounted for only 0.38% and 0.05% of total Thai exports in 2021, respectively. However, there will be more substantial indirect impact from (i) higher cost of production and transportation following a spike in global energy and commodity prices; (ii) sanctions on Russia, which could disrupt supply chains in several industries as Russia is a major exporter of key raw materials; and (iii) negative income effect would hurt global economic growth, especially in Europe. In our base case scenario, the war would reduce baseline Thai export volume by 3.0%. And given rising commodity prices, we reduced 2022 forecast export value (in USD) growth to +2.6% from +5.0% in the previous forecast.

Projected export value in USD (% growth)



Thailand's trade with EU

Product	Value (mn USD)	% growth	% share
Total exports to EU	24,811	21.0	9.1
- Automatic data processing machines and parts thereof	3,214	15.9	13.0
- Precious stones and jewellery	1,629	31.6	6.6
- Rubber products	1,556	25.2	6.3
- Motor cars, parts and accessories	1,445	32.1	5.8
- Air conditioning machine and parts thereof	1,364	31.2	5.5
Total imports from EU	20,019	17.5	7.5
- Machinery and parts	3,070	2.0	15.3
- Medicinal and pharmaceutical products	1,809	27.0	9.0
- Chemicals	1,761	21.6	8.8
- Electrical machinery and parts	1,394	10.1	7.0
- Parts and accessories of vehicles	1,152	26.8	5.8

Thailand's trade with Russia

Product	Value (mn USD)	% growth	% share
Total exports to Russia	1,028	41.7	0.38
- Motor cars, parts and accessories	321	58.2	31.3
- Rubber products	107	26.8	10.4
- Machinery and parts thereof	54	30.7	5.3
- Prepared or preserved fruits	46	4.7	4.5
- Polymers of ethylene, propylene, etc in primary forms	43	138.4	4.2
Total imports from Russia	1,752	0.8	0.65
- Crude oil	816	-11.8	46.6
- Fertilizer and pesticide	177	7.5	10.1
- Iron, steel and products	177	5.8	10.1
- Other metal ores, metal waste scrap, and products	165	131.0	9.4
- Aeroplanes, gliders, instruments and parts	109	3796.7	6.2

Thailand's trade with Ukraine

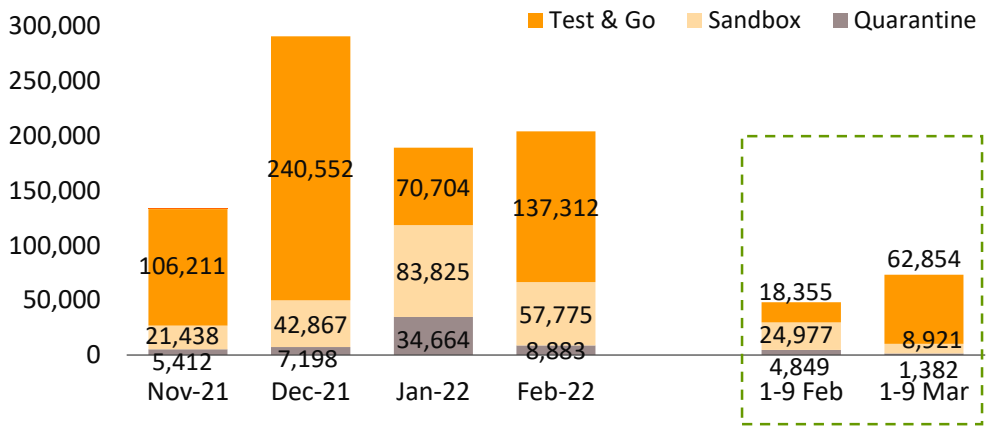
Product	Value (mn USD)	% growth	% share
Total exports to Ukraine	135	35.7	0.05
- Motor cars, parts and accessories	33	165.3	24.5
- Rubber products	22	27.5	16.0
- Prepared or preserved fruits	17	26.2	12.8
- Prepared or preserved fish, crustaceans, molluscs in	9	-1.4	6.7
- Polymers of ethylene, propylene, etc in primary forms	8	103.3	6.2
Total imports from Ukraine	252	20.7	0.09
- Vegetables and vegetable products	134	-20.1	53.2
- Iron, steel and products	94	711.6	37.3
- Wood in rough, sawn or chipped wood and products	4	136.0	1.6
- Mineral and mineral products	4	-2.6	1.4
- Other metal ores, metal waste scrap, and products	4	17.7	1.4

Source: BOT, MOC, Krungsri Research

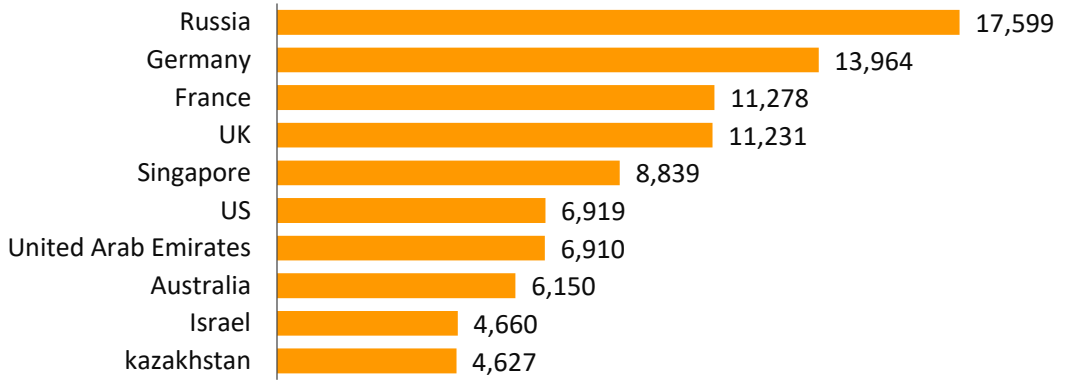
Russia-Ukraine conflict is expected to reduce foreign *tourist arrivals* to 5.5 mn in 2022 from previous forecast of 7.5 mn

Thailand resumed the Test and Go program on February 1. That attracted 203,970 inbound foreign visitors through Thailand's airports in February, up from 189,193 in January. Foreign arrivals under the Test and Go program accounted for more than 65% of total arrivals, led by arrivals from Russia, followed by Germany, France and the UK. Hence, the conflict between Russia and Ukraine will reduce Russian tourist arrivals in the rest of 2022. The energy price crisis would also have negative income effect and discourage travel activity. However, Thailand's tourism sector will be supported by the travel bubble program with India which allows flights to resume after being suspended since March 2020. In addition, the Thai government has relaxed restrictions under the Test and Go program by simplifying the process and Covid-19 test requirements for tourists, effective 1 March. The gradual easing of border controls and restrictions in many countries should also encourage more foreign tourist arrivals, especially in the second half of this year.

Throughput at Thailand Airports (persons)



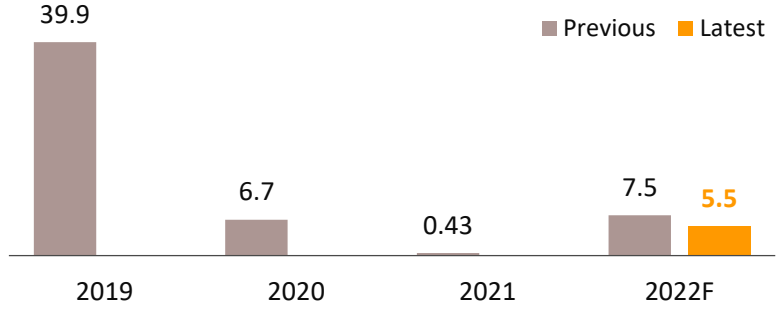
Top 10 Foreign Arrivals in February 2022 (persons)



Foreign Tourist Arrivals in Thailand

Million persons	2019	2020	2021	Jan-22
Total	**39.87**	**6.70**	**0.43**	**0.13**
India	2.00	0.26	0.01	0.002
Russia	1.48	0.59	0.03	0.0237
Europe	6.72	2.08	0.25	0.094

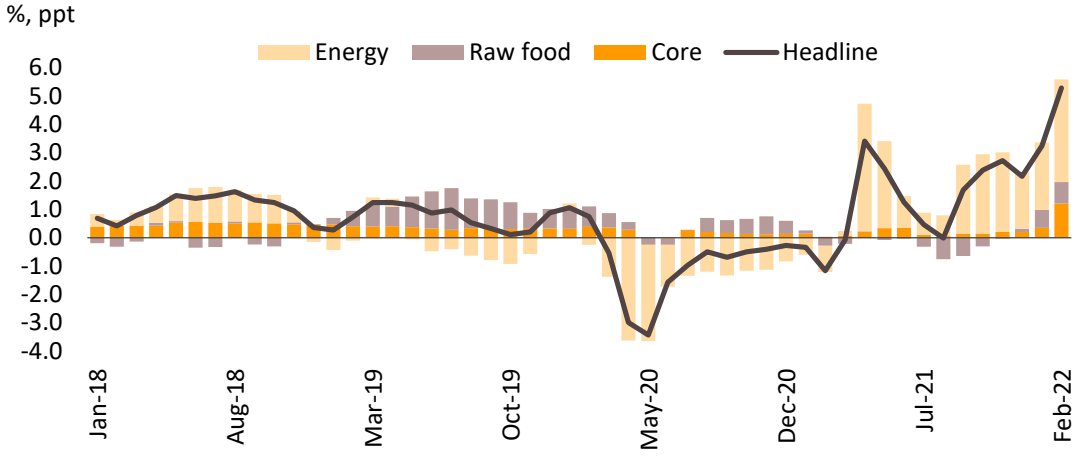
Forecast for Foreign Tourist Arrivals (mn persons)



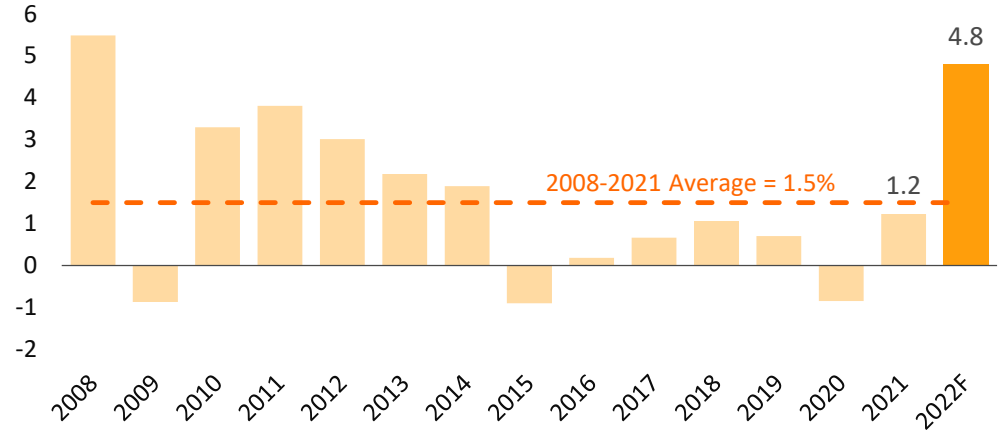
Source: MOTS, MOICOVID, Krungsri Research

2022 inflation is expected to hit a 14-year high of 4.8% driven by a surge in global oil and commodity prices; domestic policy could ease some of the impact

Inflation



Inflation forecast (%)



Consumer Price Index: Major categories

Consumer Price Index (% YoY)*	Weight	2020 J	F	M	A	M	J	J	A	S	O	N	D	2021 J	F	M	A	M	J	J	A	S	O	N	D	2022 J	F
Headline CPI	**100.00%**																										
Food & beverages	40.74%																										
Apparel & footwears	2.14%																										
Housing & furnishing	22.35%																										
Medical & personal care	5.49%																										
Transportation & communication	23.62%																										
Recreation & education	4.29%																										
Tobacco & alcoholic beverages	1.36%																										
Raw food	20.40%																										
Energy	13.81%																										
Core CPI	**65.80%**																										

** Green > 0%, Red < 0% / Darker green (red) indicates stronger (weaker) momentum*

Source: MOC, Krungsri Research

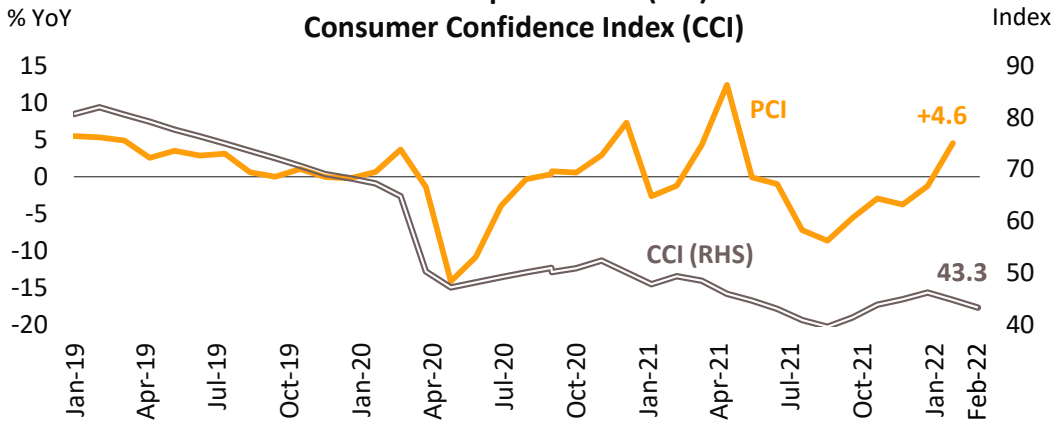
Krungsri Research's view

- **In February, headline inflation jumped to a 13-year high of 5.28% YoY** from 3.23% in January, driven by rising food and energy prices, especially electricity and retail oil prices which have been pushed up by the steep rise in global oil prices. **Core inflation** (excluding Raw Food and Energy components) rose to a 7- year high of 1.80% YoY in February vs 0.52% in January.
- Thailand is a net oil importer, which at 2.7% of GDP is the highest among emerging economies (larger than South Korea, India, and South Africa). Hence, soaring global oil and commodity prices caused by the Ukraine crisis will push up inflation. **Krungsri Research has revised up 2022 Dubai crude price to an average of USD98 from USD80 a barrel in the previous forecast.**
- **We expect the Ukraine crisis to push up baseline inflation by 2.3 ppt. However, with policy support and oil price subsidies, we raised 2022 headline inflation from 2.7% in the previous forecast to 4.8%, the highest since 2009 and above the BOT's inflation target range of 1-3%.**

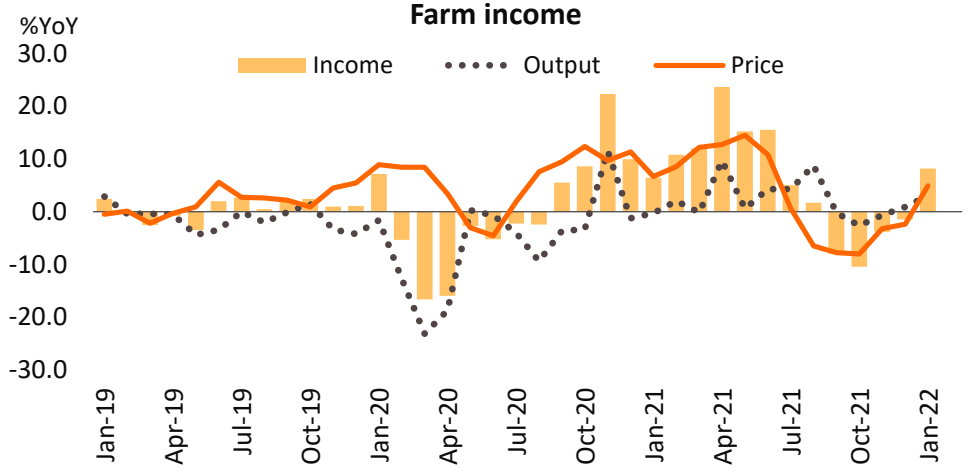
Accelerating inflationary pressure will undermine *private consumption* recovery

Private Consumption Index (PCI) reversed to contraction for the first time in 5 months (-0.3% MoM sa) in January since Omicron fears dampened domestic economic activity. However, on a YoY basis, PCI improved for the first time in 9 months (+4.6%). Looking ahead, although private consumption could be supported by several factors including (i) stimulus measures worth THB53bn, (ii) higher farm income following rising global commodity prices, and (iii) improving nominal wages in some sectors, we expect escalating inflationary pressure triggered by the Russia-Ukraine crisis could undermine purchasing power and consumer confidence. Therefore, we trimmed 2022 forecast for private consumption growth to +3.0% from +3.8% in the previous forecast.

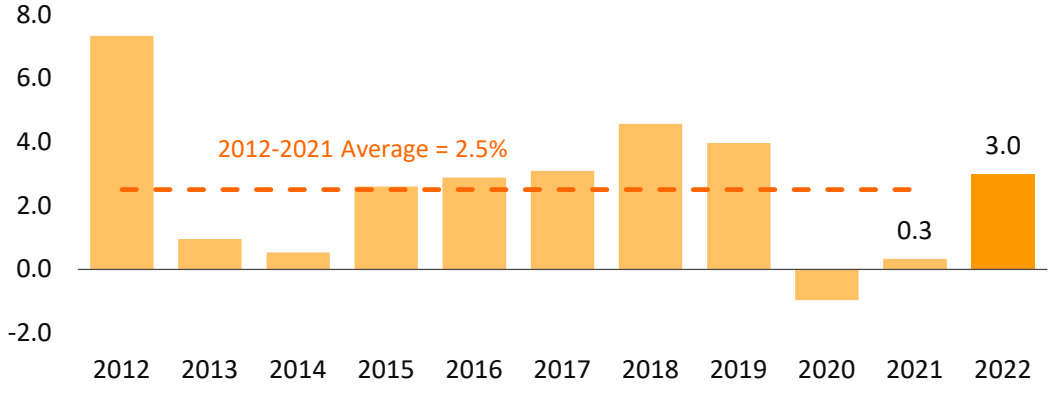
Private Consumption Index (PCI) and Consumer Confidence Index (CCI)



Farm income



Private consumption growth projection (%)



Nominal wage growth (% YoY)

	Share of total employment in 2021	2019 Q1	2019 Q2	2019 Q3	2019 Q4	2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2	2021 Q3	2021 Q4
Total													
TRADE	**17%**												
MANU	**16%**												
ACCO	**8%**												
CONS	**6%**												
TRANS	**4%**												
HEALTH	**2%**												

Lowest — Highest

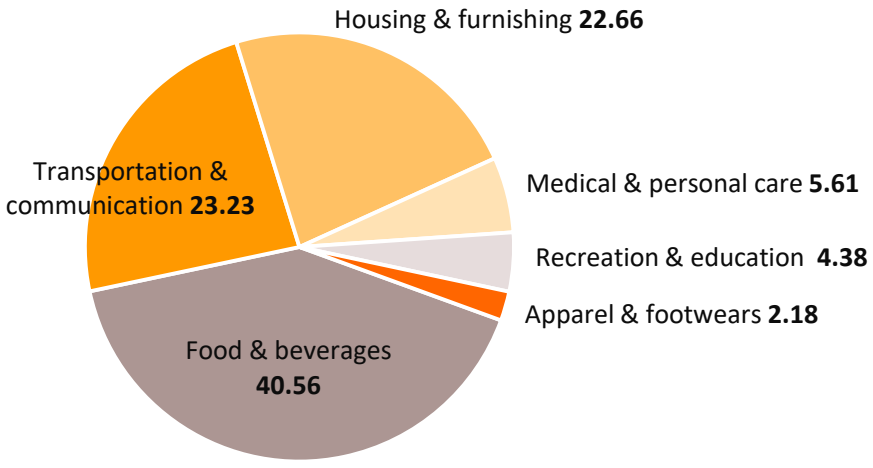
Source: BOT, University of the Thai Chamber of Commerce (UTCC), OAE, Krungsri Research

Note: Sectoral code: TRADE = Wholesale and retail trade, MANU = Manufacturing, ACCO = Accommodation and food service activities, CONS = Construction, TRANS = Transportation and HEALTH = Human health

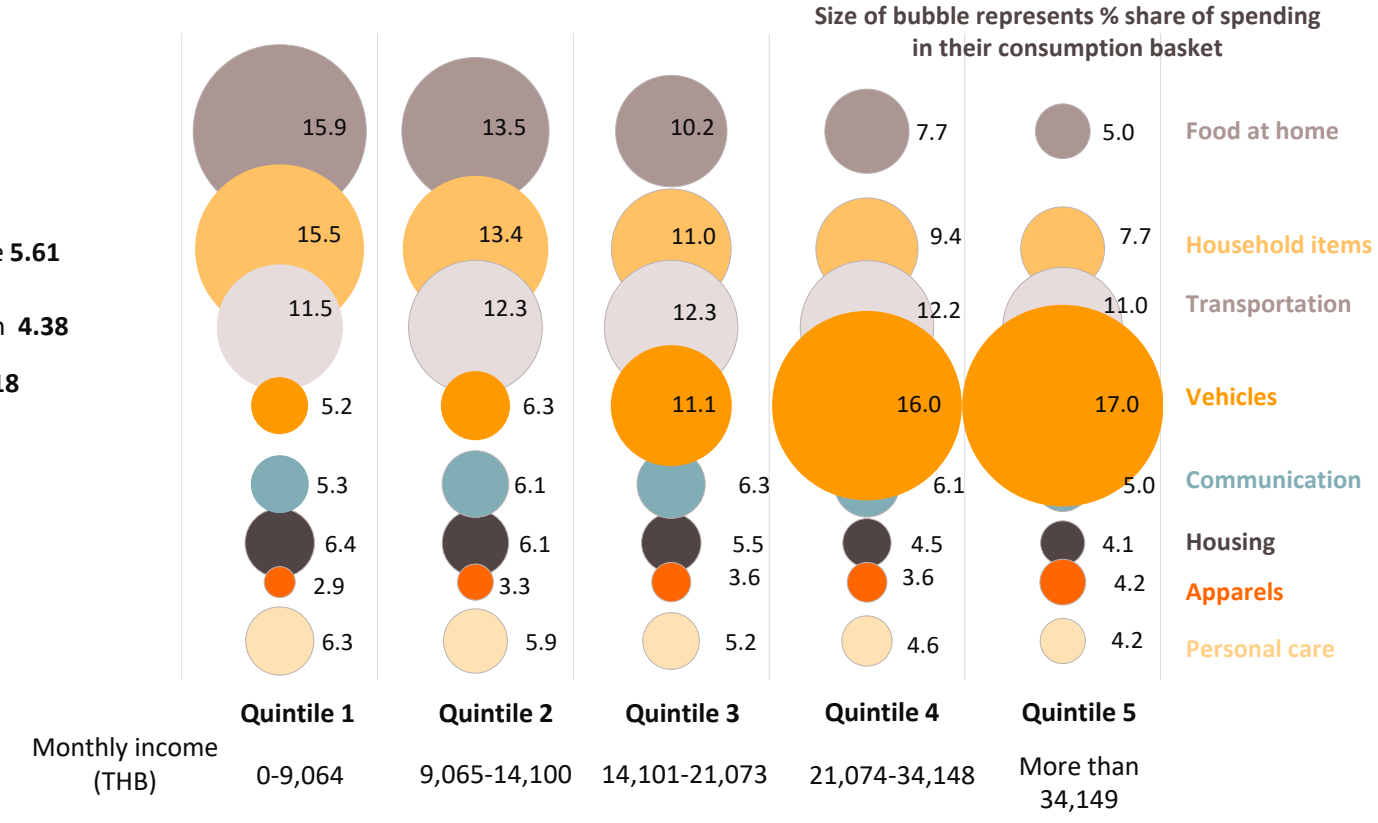
Different consumption baskets indicate uneven inflation burden across households; low-income group would be worst-hit by rising prices of food and transportation

As inflation accelerate, households in different income brackets would experience an uneven rise in cost of living because of different weightings in their consumption baskets. To analyze consumption expenditure by category, we classified households into 5 quintiles based on income. We found **the largest expenditure category for the lowest-income group was food-at-home (15.9% of their total spending), followed by household items (15.5%) and transportation (11.5%). In contrast, the highest-income group's spending was led by vehicles (17.0%) while spending on food-at-home was only 5.0% in their consumption basket. This suggests the low- to medium-income groups would be worst-hit by rising inflation this year because of soaring prices of food and transportation.**

Weight in Headline CPI calculation



Consumption basket by income quintile

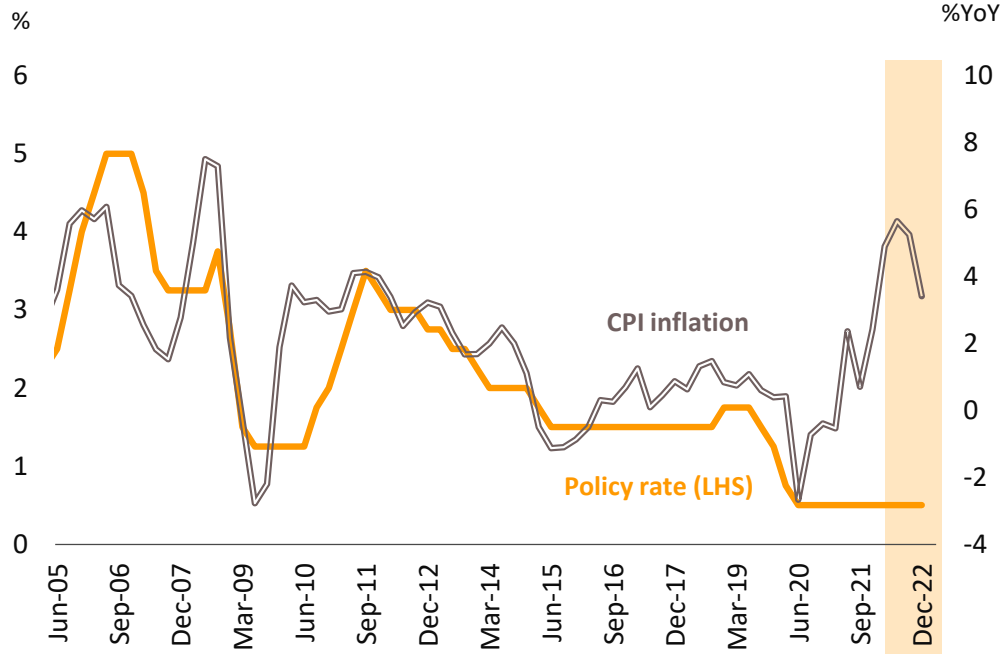


Source: MOC, Household Socio-Economic Survey, CEIC, Krungsri Research

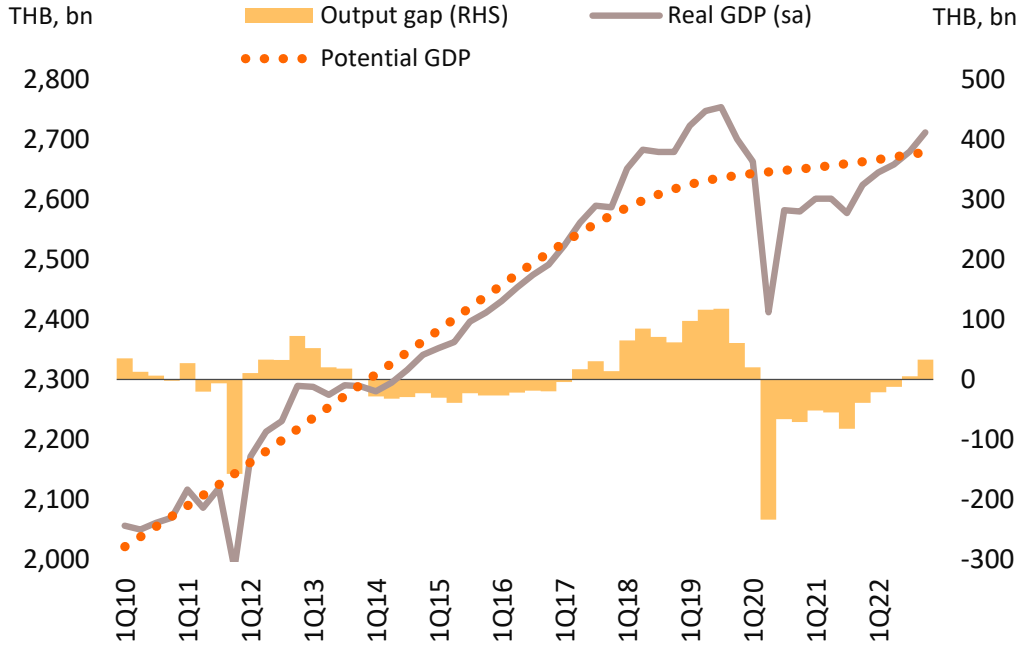
MPC is likely to hold *policy interest rate* this year, giving priority to support still-fragile economic recovery instead of price stability

Headline inflation is likely to exceed the BOT's target range this year mainly due to skyrocketing oil and commodity prices triggered by the Ukraine crisis. This also poses downside risks to the Thai economy which depends on oil imports. In addition, the recent rebound in domestic activity could be disrupted by rising Covid-19 cases. As a result, the economic recovery is more vulnerable and Thailand's GDP could remain below pre-covid level this year. The current situation makes it increasingly difficult for policymakers to strike a balance between managing risks to economic growth and to price stability. We expect the MPC to give priority to support the still-fragile economic recovery, implying they would keep policy rate at a historical low of 0.50% this year.

Policy Rate and CPI Inflation



Real GDP and Potential GDP



Source: MOC, BOT, NESDC, Krungsri Research

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