Outlook for the Japanese and Overseas Economies - Summary

ECONOMIC RESEARCH OFFICE

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MUFG Bank, Ltd.
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Contents

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1-1. Overview

- 2022, the third year of the pandemic, started with the spread of a new variant of the COVID-19 virus. Outlook for the year has included continued economic recovery with further medical improvements such as vaccine coverage and access to treatment drugs, as well as normalization of economic activity mainly in developed economies as people adapt to “living with COVID-19”. With inflationary pressures elevated due to pandemic-related supply constraints and rise in energy prices, central banks’ moves toward policy normalization have been drawing focus.
- The latest Ukraine crisis has added new uncertainties to the global economic outlook, with Western economies imposing harsh economic sanctions against Russia. The outcome of this crisis is uncertain at this moment, but unless full-scale restrictions are imposed on energy trade with Russia, a global economic downturn will be avoided as economic activity normalizes. Based on this, we project global real GDP will grow 4.0% YoY in 2022.

Assumptions

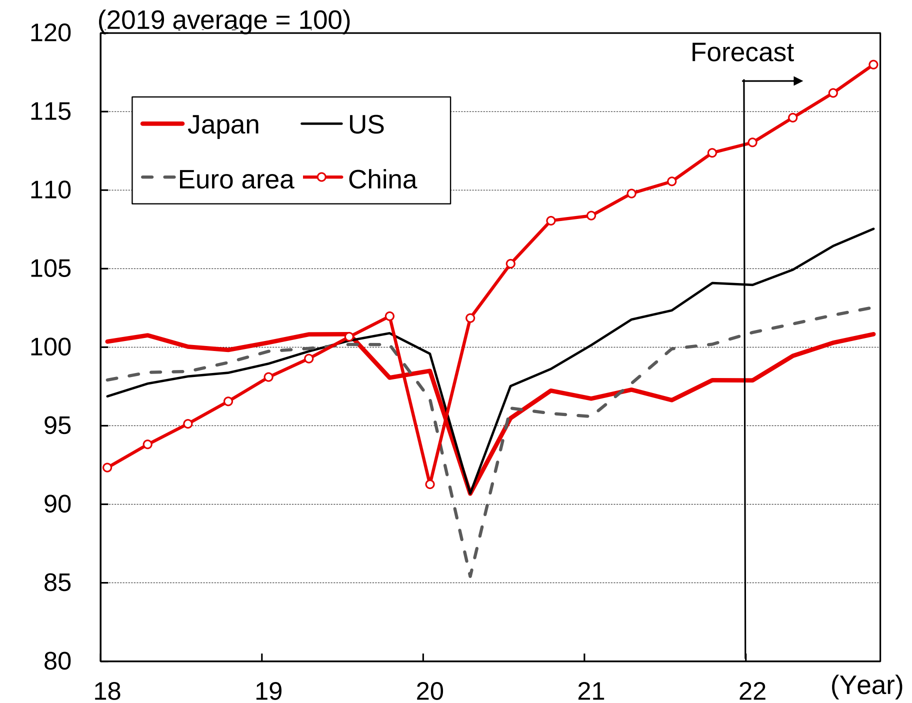
- ✓ **Ukraine situation**: Political and military tension remains between Russia and Ukraine (possibility of some cease-fire deal is factored in).
- ✓ **Western sanctions**: Harsh economic sanctions against Russia, including financial sanctions, will remain in place. Nevertheless, full-scale restrictions on energy trade will be carefully avoided.
- ✓ **Pandemic**: Situation will generally improve on the back of improvements in vaccine coverage and drug access. Restrictions on economic activity will be eased mainly in major economies, and negative economic impact will decrease.

Outlook for Major Economies

		MUFG outlook (Mar)		MUFG outlook (Dec)	
Real GDP growth rate	2020	2021	2022	2021	2022
World	- 3.1	5.9	4.0	5.7	4.5
US	- 3.4	5.7	3.6	5.5	4.2
Euro area	- 6.4	5.2	3.5	5.0	3.7
UK	- 9.4	7.5	3.9	6.9	4.5
Japan (fiscal year)	- 4.5	2.5	3.1	2.8	3.6
Japan (calendar year)	- 4.5	1.7	2.5	1.8	3.6
Asia (11 countries)	- 0.8	7.0	5.4	6.9	5.5
China	2.3	8.1	4.7	7.9	5.3
ASEAN (5 countries)	- 3.4	3.3	5.6	3.2	5.5
Indonesia	- 2.1	3.7	5.2	3.7	5.2
Thailand	- 6.1	1.6	3.8	1.0	3.8
Malaysia	- 5.6	3.1	6.3	3.5	6.3
The Philippines	- 9.6	5.6	6.8	4.9	6.5
Vietnam	2.9	2.6	7.6	2.4	7.0

Source: Statistics from each country, IMF, MUFG Bank Economic Research Office

Real GDP Outlook for Select Major Economies



Source: Statistics from each country, MUFG Bank Economic Research Office

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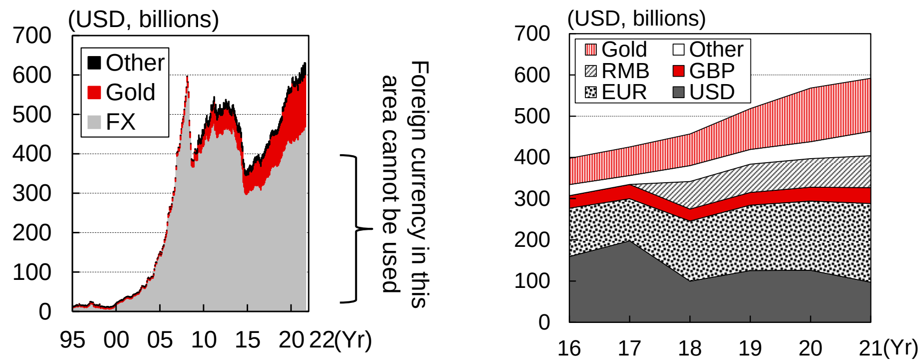
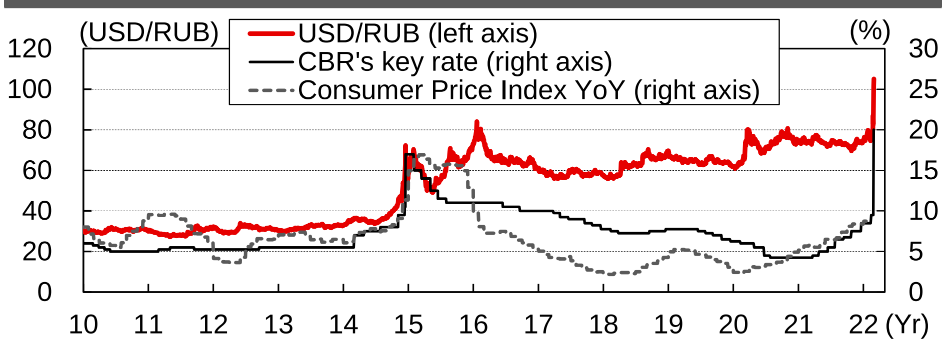
1-2. Ukraine Situation: Impact on the Russian Economy – Financial

- The expulsion of Russian banks from the international financial system and sanctions targeting the Central Bank of Russia’s foreign reserves have significantly weakened Russia’s financial system and deeply affected the Russian economy through restrictions on foreign exchange intervention as well as a drop in the RUB, a rise in inflation rates and high inflation.
- There have also been big hits to the economy from a slump in the volume of trade as Russia was expelled from the financial system and from a withdrawal of foreign capital from Russia.
- Restrictions on the trade of Russian government bonds has hampered the Russian government’s ability to raise capital, yet, compared with other emerging economies, Russia’s financial situation is sound and the rise in energy prices has boosted the Russian government’s revenue (there is a possibility that this rise in energy prices will offset lower trading volumes).
- In addition to downward pressure on the economy from economic sanctions, it is important to also bear in mind the human and economic costs of a prolonged war.

Russia’s Foreign Reserves and Breakdown

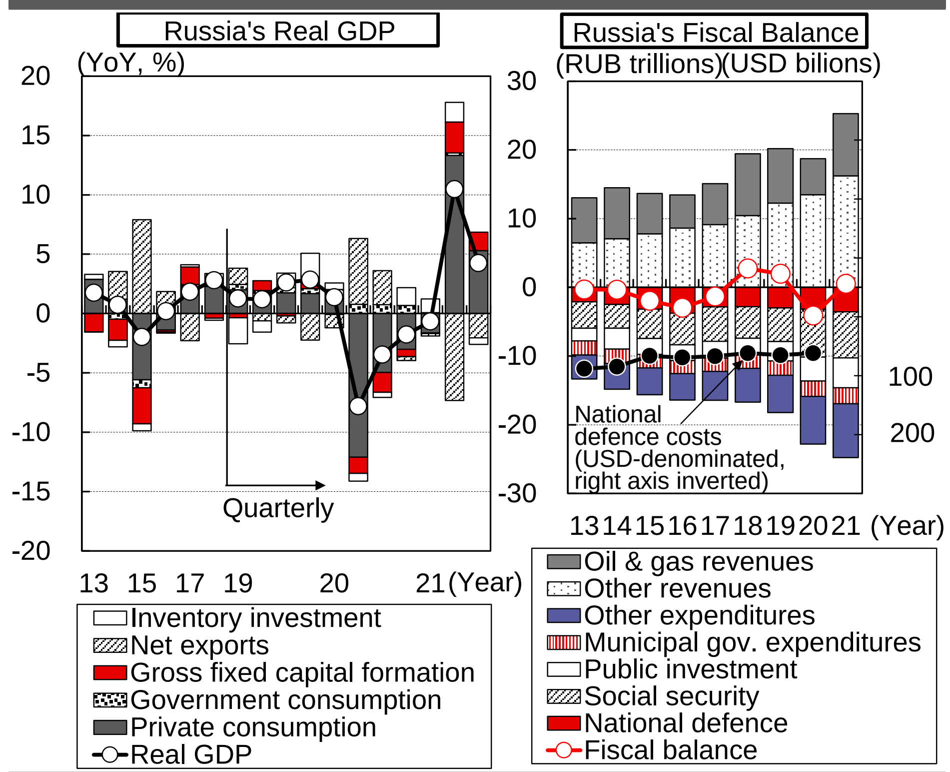


USD/RUB, Russia’s Inflation Rate & Central Bank of Russia’s Key Rate



Source: Macrobond, MUFG Economic Research Office

Russia’s Real GDP and Fiscal Balance



Source: Russia’s Federal State Statistics Service, World Bank, MUFG Bank Economic Research Office

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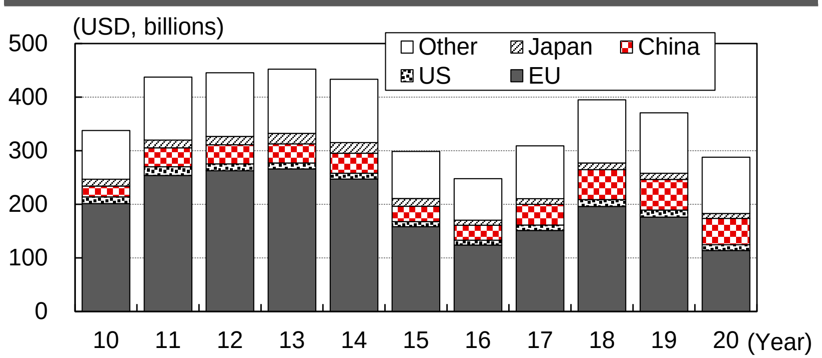
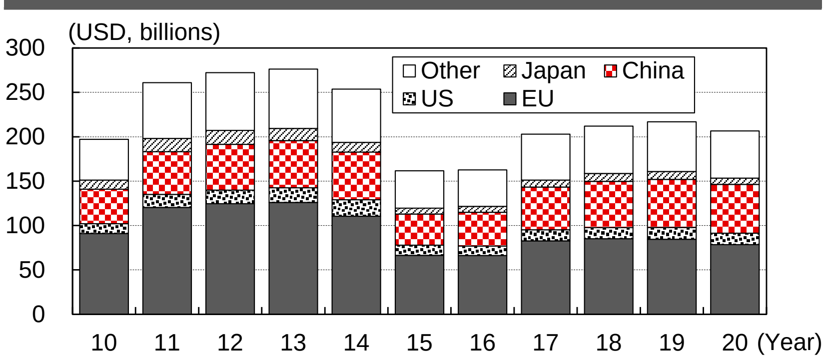
1-2. Ukraine Situation: Impact on the Russian Economy – Trade

- The volume of trade between Russia and its trading partners shows both exports and imports to and from the EU have halved.
- It appears that there has been a shift away from the USD to other currencies as a settlement currency for trade over the past few years, particularly to the EUR. This time, the EU has also enacted its own economic sanctions on Russia, which has limited trading in the EUR too. This will inevitably have a huge impact on Russia's trade settled in foreign currencies.
- It seems that Russia's share of trade with other emerging economies, such as China and India, that is settled in RUB is increasing, but the overall weight of these transactions is limited.

Amount of Exports from Russia by Country and Region

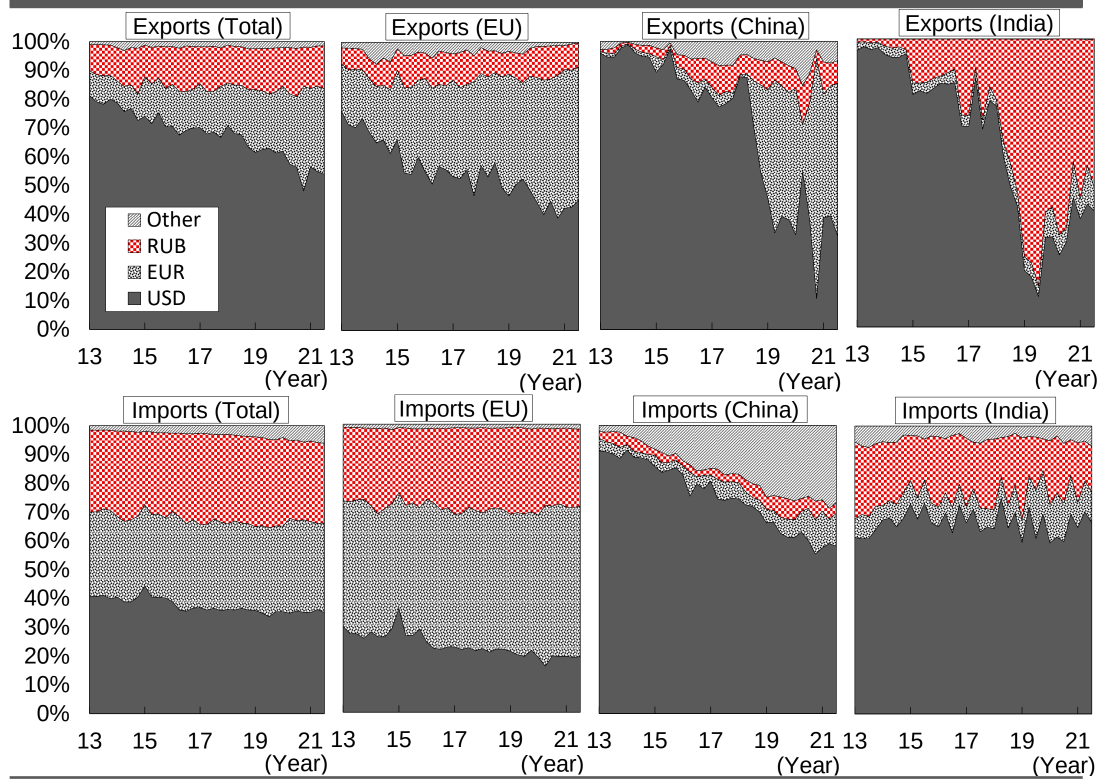


Amount of Imports from Russia by Country and Region



Source: Macrobond, MUFG Economic Research Office

Russia's Trading Currencies (by Export and Import)



Source: Central Bank of Russia, MUFG Bank Economic Research Office

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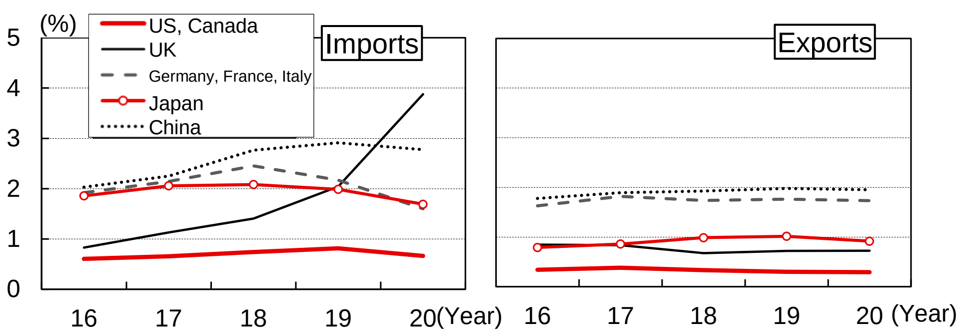
1-2. Ukraine Situation: Impact to Trade and Energy Prices

- Economic impact of the Ukraine crisis and western sanctions on Russia will manifest through 1) decline in economic activity, especially trade with Russia, due to restrictions on trade and capital market transactions; 2) rise in global commodity prices (especially energy prices) due to decline in Russian exports and resulting inflationary pressures; 3) damage from Russian exposure (financial, energy sectors etc.); and 4) other issues in supply chain (supply of certain goods may be cut off, major route changes in air, marine transportation, cyber risks etc.) On the other hand, the crisis could boost the defense industry.
- Russia's share in major economies' trade value is relatively limited even for European countries (exports to Russia account for less than 1% of nominal GDP for many countries). Thus, impact of reduced trade with Russia will likely be limited, though secondary and tertiary side effects are difficult to predict.
- Meanwhile, impact on energy prices from restricted Russian supply of crude oil and natural gas should be monitored carefully. If crude oil price remains at $150 a barrel through the year-end, that would raise CPI growth rate by about 1.3% points in the US, and by 0.8% point in Euro area. If European countries have to curb demand due to limited supply, then economic impact would be significant.

Russia's Share in Major Economies' Trade value



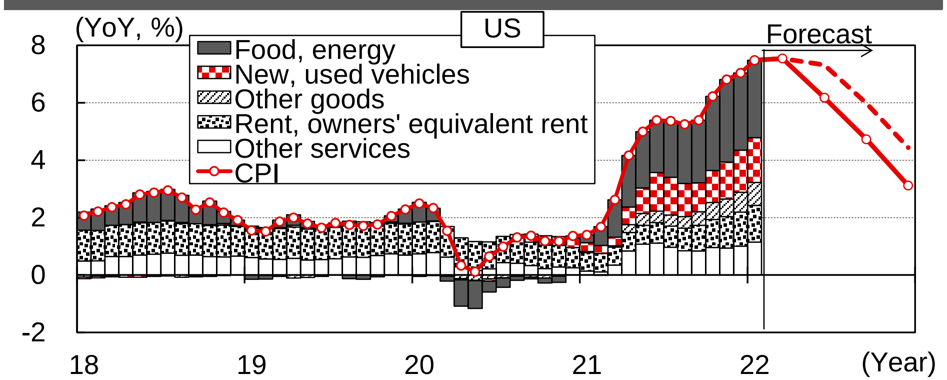
Source: UNCTAD, MUFG Bank Economic Research Office

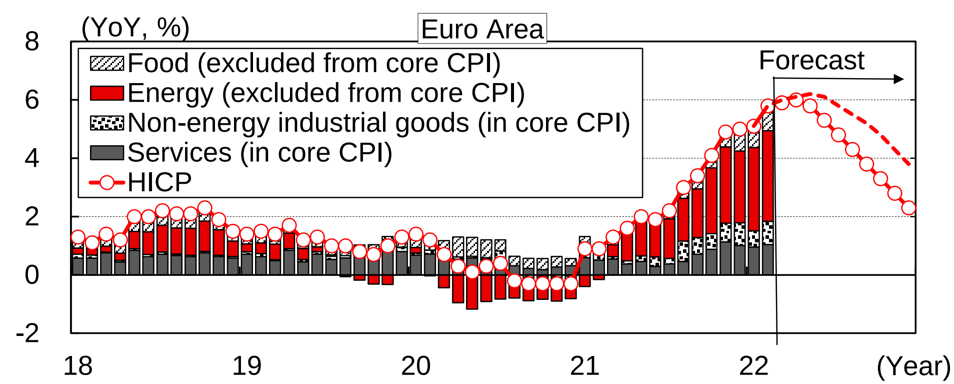
Commodities For Which Russia Ranks Among Top Producers

	Global output (2019)	1st	2nd	3rd
Crude oil	94.96 million barrels a day	US (18.0%)	Saudi Arabia (12.5%)	Russia (12.3%)
Natural gas	3.97 trillion cubic meters	US (23.4%)	Russia (17.1%)	Iran (6.1%)
Wheat	766 million tons	China (17.4%)	India (13.5%)	Russia (9.7%)
Palladium	227 tons	Russia (43.2%)	South Africa (35.6%)	Canada (8.8%)

Source: BP, FAO, US Geological Survey, MUFG Bank Economic Research Office

US and Euro Area Consumer Price Index, Crude Oil Price Outlook





Note: In Europe, electricity, heating prices for consumers are capped. Forecast line with a marker is based on crude oil price matching our forecast. Dotted line is based on oil price at $150 a barrel.
Source: US Department of Labor, Eurostat, MUFG Bank Economic Research Office

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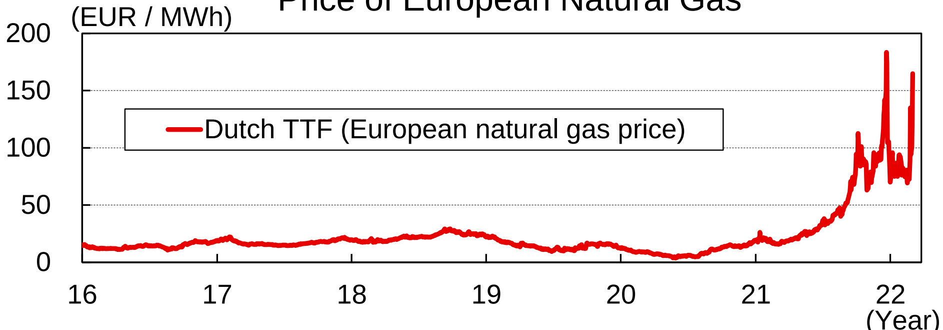
1-2. Ukraine Situation: Energy Situation in Europe

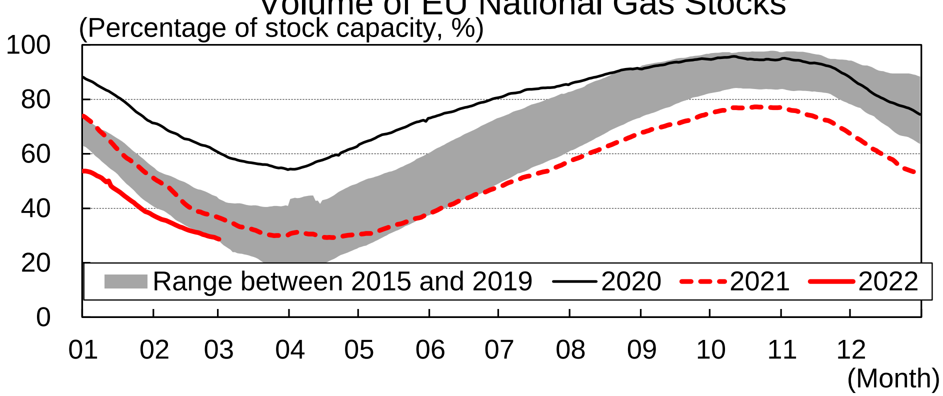
- There are concerns about stable energy procurement in Europe due to European economies' heavy reliance on Russia for oil and natural gas. Worries about the volume of the EU's natural gas stocks – which remain below their typical level – have also increased. The current price of European natural gas has risen to its highest level since last year. The rise in energy prices is predicted to spill over to household and business activities and cause a temporary deceleration in the growth of consumption and production.
- The EU's current sanctions reveal it is holding off imposing sanctions on some banks (and blocking them from SWIFT) and it appears to have avoided an all-out disruption to energy procurement. In addition, as far as Russia is concerned, imposing a trade embargo on oil and natural gas as a countermeasure would lead to a decrease in revenue and is not rational economically.
- Looking ahead, the possibility that a situation will be reached where there are large restrictions on the trade of energy cannot be denied, yet it appears unlikely. In the short term, it is important to bear in mind the risk of damage to the natural gas pipelines that run through Ukraine or other accidental disruptions to supply. In the medium-to-long term, it will be necessary to keep an eye out for a shift in Europe's energy policies (such as diversification and a balancing with decarbonisation).

European Natural Gas: Price and Volume of Stocks

Price of European Natural Gas



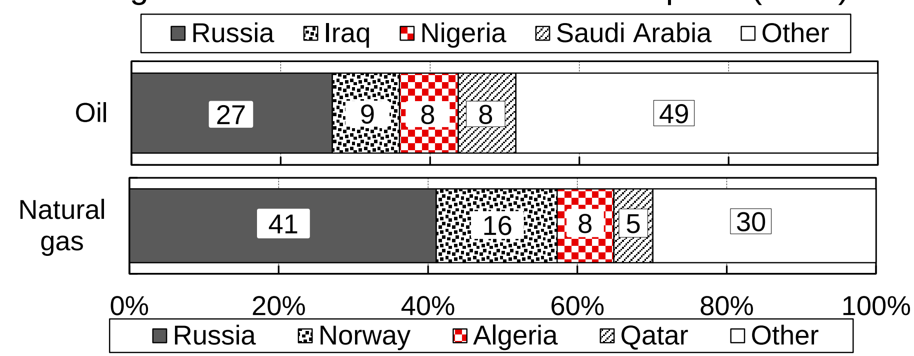
Volume of EU National Gas Stocks



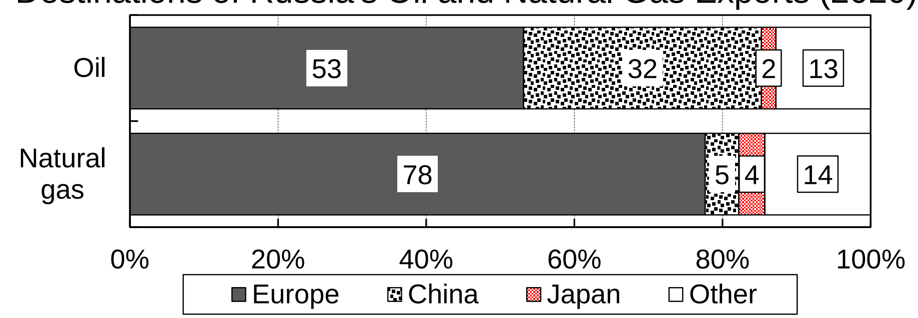
Source: Eurostat, ICE, MUFG Economic Research Office

Origins of EU's Energy Imports & Destinations of Russia's Energy Exports

Origins of EU's Oil and Natural Gas Imports (2019)



Destinations of Russia's Oil and Natural Gas Exports (2020)



Note: The upper chart is recreated from Eurostat report "From where do we import energy?"
Source: Eurostat, MUFG Bank Economic Research Office

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1-3. Monetary Policy of Major Economies

- Faced with high inflation and tight labor market, major developed economies (except Japan) are moving toward normalization of monetary policy. Bank of England has been the first among major central banks to raise interest rates. The US Federal Reserve has also sent clear signals about starting rate hikes in March. 。
- BOE has already stopped new asset purchases, resulting in a start of balance sheet reduction. FRB and ECB have been tapering, and the Fed is discussing balance sheet reduction.

Monetary Policy of Major Developed Economies

Country, area	Category	Current Framework and Outlook
US	Policy rate	▪ The Fed has signaled it will raise interest rates at March FOMC meeting (also mentioned the size of the rate hike, which is unusual) ▪ Median projections from December FOMC account for three rate hikes each in 2022 and 2023.
	Asset purchase	▪ Timing of balance sheet reduction should be discussed at March and May FOMC meetings.
UK	Policy rate	▪ BOE raised policy rate in February from 0.25% to 0.50%, a second rate hike in a row after the rate hike at the previous policy meeting. ▪ BOE deputy governor said the UK will likely need “modest” tightening going forward.
	Asset purchase	▪ Balance sheet to be reduced by scaling back reinvestment of securities that have matured.
Euro area	Policy rate	▪ The ECB expects its policy rates ““to remain at their present or lower levels until it sees inflation reaching 2 percent… that realized progress in underlying inflation is sufficiently advanced to be consistent with inflation stabilizing at 2 percent over the medium term.” ▪ ECB President Largarde did not rule out 2022 rate hikes at the post-policy meeting news conference in February.
	Asset purchase	▪ Asset purchase program: purchase of 20 billion euros until just before a rate hike (scale has been temporarily increased to $40 billion euros a month for April-June 2022 and 30 billion euros for July-Sept 2022.) ▪ Pandemic emergency purchase program of up to 1.85 trillion euros. Decision has been made to sunset the program as of March 2022 (this is effectively tapering).
Japan	Policy rate	▪ Bank of Japan will likely maintain a negative interest rate of -0.1% for policy rate balance of its current account deposits.
	Asset purchase	▪ On JGB purchase, status quo is to be maintained (BOJ will purchase long-term JGBs so that 10-year JGB yield stays around 0%. There is no upper limit to the size of purchase. ▪ Increased purchase of commercial paper and corporate bonds (total balance is capped around 20 trillion yen) ends in March 2022, shifting away from crisis response. ▪ BOJ Gov. Kuroda denied the possibility of near-term policy adjustments at the post-policy meeting news conference in January.

Source: Central banks of each country or area, MUFG Bank Economic Research Office

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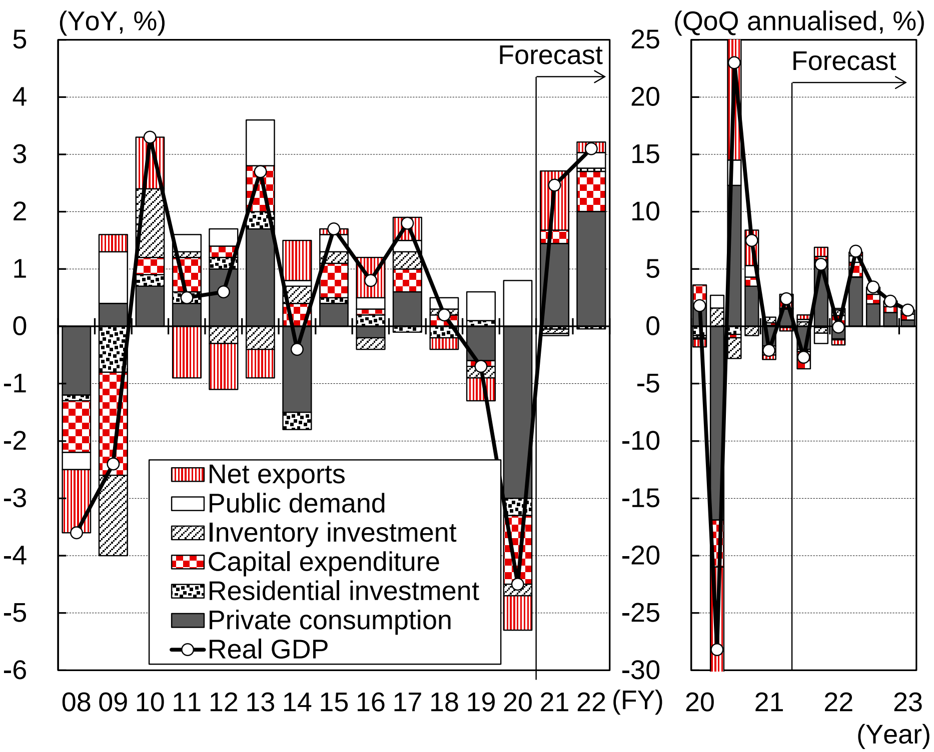
2-1. Japanese Economy: Overview

- The real GDP growth rate for the October-December quarter last year (first preliminary estimate) was 5.4% QoQ annualised. This marked the first positive result in two quarters as both domestic and foreign demand picked up thanks to an easing of restrictions after the spread of the delta variant calmed and some improvement in supply constraints. There was a huge increase in private consumption, particularly that of services, and growth of both exports and capital expenditure turned positive.
- In the January-March quarter, restrictions were tightened again in a response to the rise in omicron cases and the economy is predicted to slow for a while, especially consumption of face-to-face services. From the April-June quarter onwards, the economy is forecast to continue to recover, providing that the COVID-19 situation calms and restrictions are eased once again. However, a rise in commodity prices owing to the situation in Ukraine could weigh on the economy and slow its recovery a little.
- After rising 2.5% YoY in FY2021, the real GDP growth rate will continue to gradually recover in FY2022 and is expected to record strong growth of 3.1% YoY. Real GDP for FY2022 is forecast to reach the level it recorded in FY2019 before the pandemic.

Japan Real GDP and Outlook (Fiscal Year, Quarterly)



Source: Cabinet Office, MUFG Bank Economic Research Office

Japan Real GDP and Outlook (Fiscal Year, QoQ Annualised)

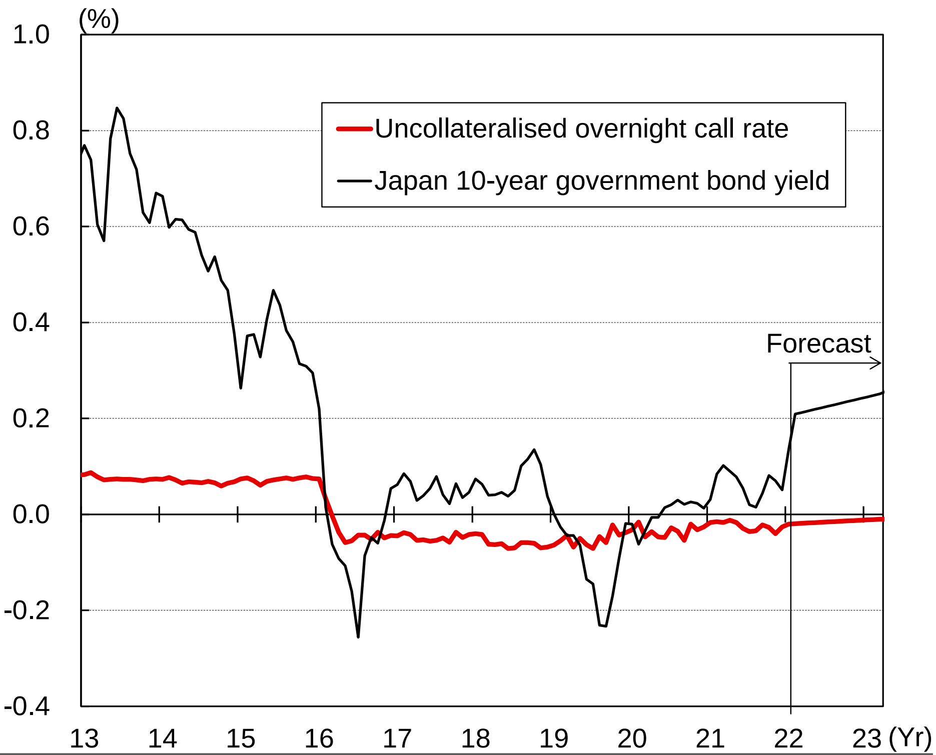
	FY2019 (Actual)	FY2020 (Actual)	FY2021 (Outlook)	FY2022 (Outlook)
Real GDP	-0.7	-4.5	2.5	3.1
Private consumption	-1.0	-5.4	2.7	3.7
Residential investment	2.6	-7.8	-1.4	-1.3
Capital expenditure	-0.6	-7.5	1.5	4.4
Inventory investment (contribution)	-0.2	-0.2	-0.1	0.1
Public demand	2.1	3.0	-0.1	1.0
Net exports (contribution)	-0.4	-0.6	1.0	0.2
Exports	-2.2	-10.5	12.5	3.1
Imports	0.2	-6.7	6.3	2.2
Nominal GDP	0.3	-3.9	1.3	3.6
GDP Deflator	0.8	0.6	-1.1	0.5

Source: Cabinet Office, MUFG Bank Economic Research Office

2-1. Japanese Economy: Interest Rates and Foreign Exchange

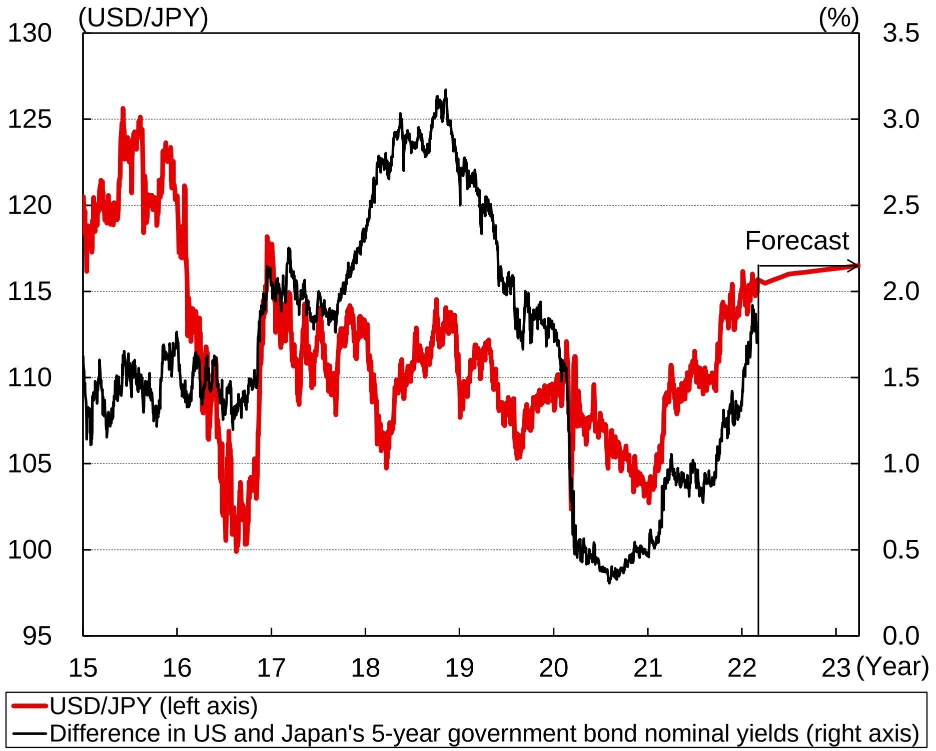
- While they will be affected by the overall trend of US long-term interest rates, Japan's long-term interest rates are predicted to remain within the upper bounds of 0.25% given that the Bank of Japan will not tolerate fluctuations of long-term interest rates greater than 0.25% under its current monetary policy framework.
- Both the JPY and USD are being bought due to the growing tension in Ukraine, and the JPY continues to trade at around JPY115 to the USD for the most part. It is unlikely there will be a resolution to the crisis in Ukraine soon, which may encourage JPY and USD buying in the future. However, while US interest rates continue to rise, Japanese interest rates will remain at current levels, which means the downward pressure on the JPY is expected to increase a little due to the gap in the interest rates.

Uncollateralised Overnight Call Rate and 10 Year Gov. Bond Yield



Source: Bloomberg, MUFG Bank Economic Research Office

USD/JPY and Difference in US & Japan's 5-yr Gov. Bond Nominal Yields



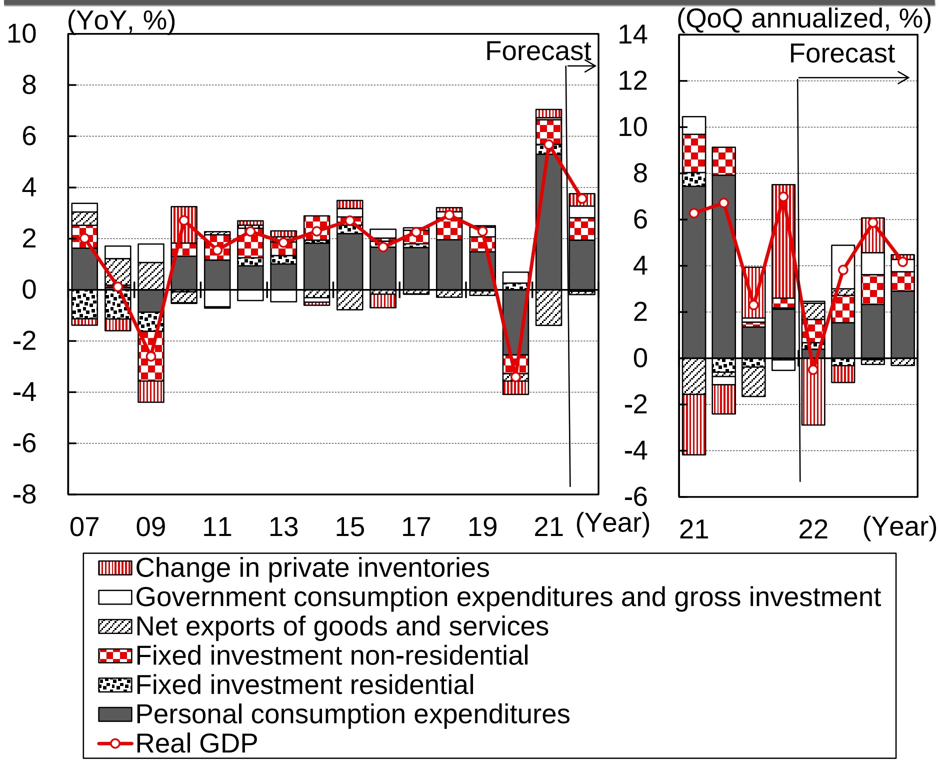
Note: Difference in 5-year government bond yields are US less Japan

Source: Bloomberg, MUFG Bank Economic Research Office

2-2. US Economy: Overview

- In the October-December 2021 quarter, the US real GDP grew 7.0% QoQ annualised (second estimate), accelerating from a 2.3% rise in the previous quarter. The increase in consumer spending was rather limited, but inventory investment (change in private inventories) drove the GDP growth with a 4.9% point positive contribution as the worst period of supply constraints has passed.
- Economic recovery has slowed as the increase in COVID-19 cases from the Omicron variant exacerbated labour shortages (or delayed the recovery of labour supply), thus weighing down service consumption and production activity. In addition, government spending linked to the Infrastructure Investment and Jobs Act (enacted in November 2021) has been delayed as Congress has yet to pass the fiscal 2022 federal budget, and temporary funding continues.
- Still, as people adapt further to living with COVID-19, consumer spending will likely continue to recover steadily. Furthermore, as supply constraints ease, capital investment and inventory recovery will likely accelerate. Thus, we project the US real GDP will increase at a relatively high rate of 3.6% YoY in 2022. The Ukraine crisis could put upward pressures on inflation but overall impact to the US economy will likely be limited.

Real GDP and Breakdown of Demand Components



Source: Department of Commerce, MUFG Bank Economic Research Office

GDP Outlook by Calendar Year

(YoY, %)

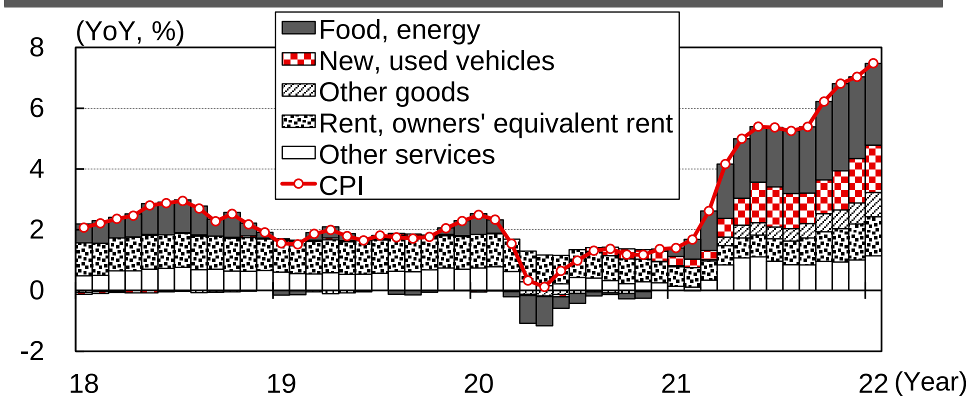
	2020 (actual)	2021 (outlook)	2022 (outlook)
Real GDP	-3.4	5.7	3.6
Personal consumption	-3.8	7.9	2.8
Residential investment	6.8	9.1	-1.6
Non-residential investment	-5.3	7.4	5.9
Change in inventories (contribution)	-0.6	0.3	0.5
Government consumption expenditure	2.5	0.5	2.6
Net exports (contribution)	-0.3	-1.4	-0.1
Exports	-13.6	4.6	8.9
Imports	-8.9	14.0	6.4
Nominal GDP	-2.2	10.1	8.4

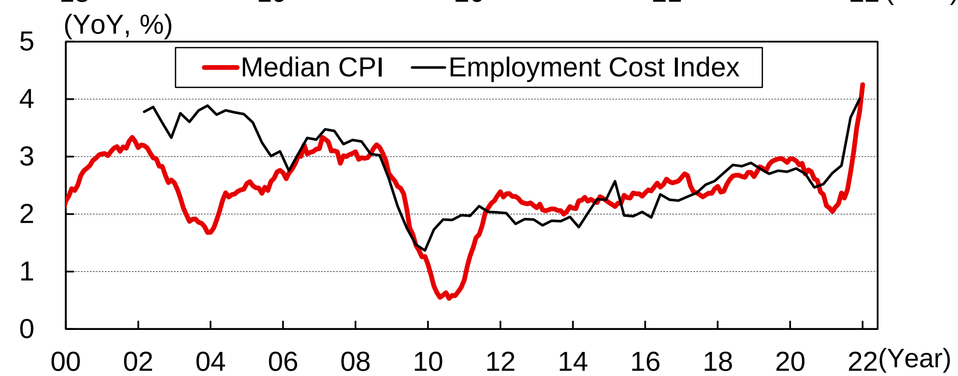
Source: Department of Commerce, MUFG Bank Economic Research Office

2-2. US Economy: Monetary Policy - Interest Rate Hikes

- CPI accelerated to 7.5% YoY in January from December's 7.0%. While the worst period of supply constraints has passed, goods CPI accelerated on price increases for used cars and trucks, and services CPI also accelerated due to a tight labour market. As increases in energy prices run their course and supply constraints ease, inflation rate is expected to moderate gradually. Still, the CPI will likely remain well above 2% YoY at the end of 2022.
- While worsening of the Ukraine situation adds uncertainties to the economic and inflation outlook, Fed Chair Powell has indicated to Congress that the Fed will raise its policy rate by 25 basis points at the March FOMC, noting: "we are attentive to the risks of potential further upward pressure on inflation…from a number of factors." We project 25 basis point rate hikes at three FOMC meetings in a row, in March, May and June, and every three months thereafter, in September and December.

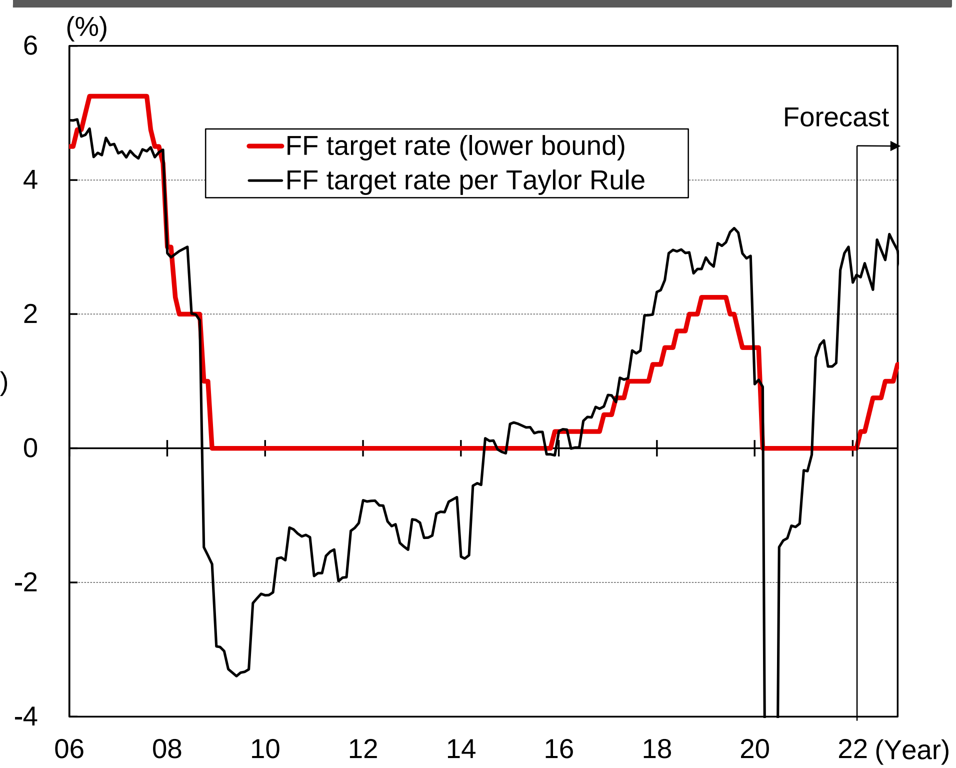
CPI, Median CPI, Employment Cost Index





Source: Department of Commerce, Department of Labor, MUFG Bank Economic Research Office

FF Target Rate

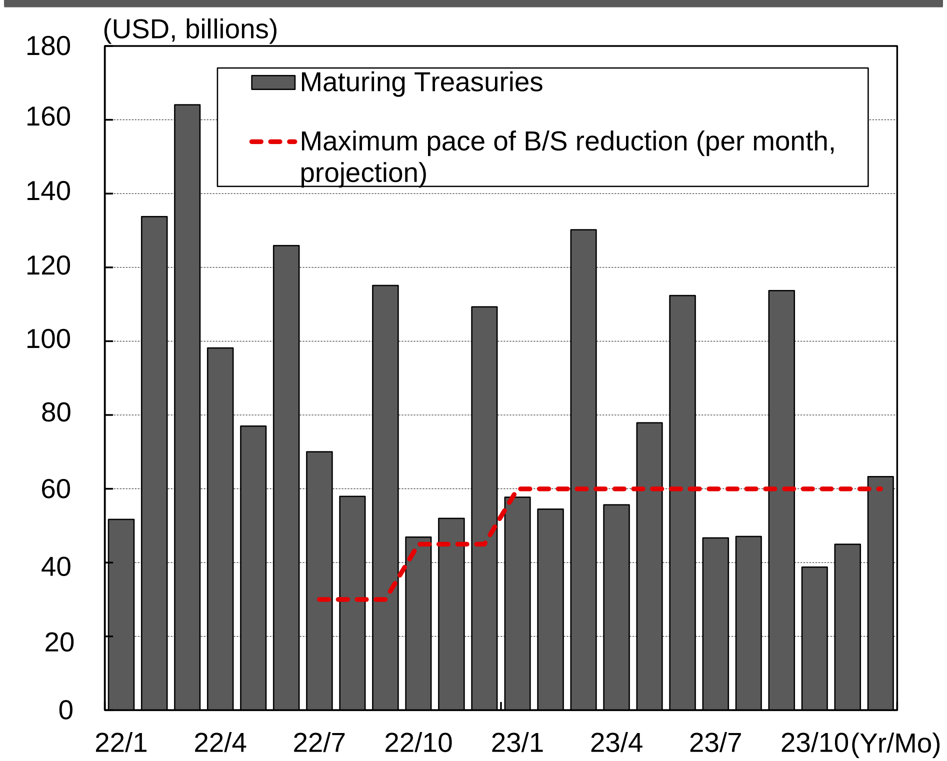


Source: Department of Commerce, Federal Reserve Bank of Richmond, Bloomberg, MUFG Bank Economic Research Office

2-2. US Economy: Monetary Policy - Balance Sheet Reduction

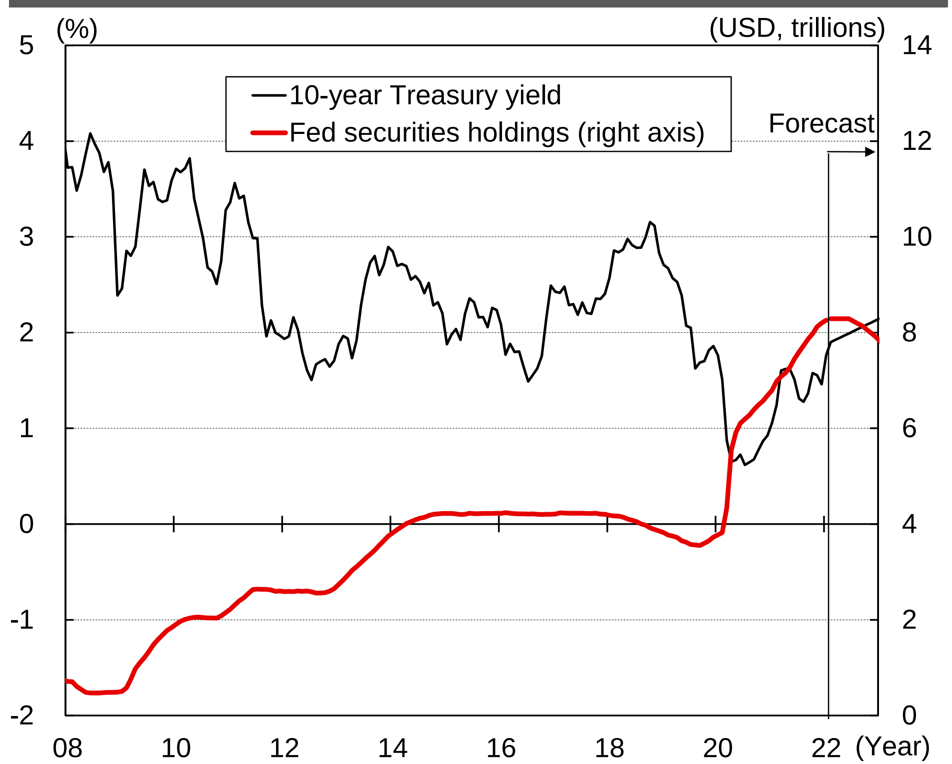
- In the Principles for Reducing the Size of the Federal Reserve's Balance Sheet publicised after the January FOMC, the committee indicated: 1) changes in the FF target rate is the primary means of adjusting the stance of monetary policy; 2) it will reduce the Fed's securities holdings by adjusting the amounts reinvested of principal payments received from securities held, 3) it will maintain securities holdings in amounts needed to implement monetary policy efficiently and effectively; and 4) it intends to hold primarily Treasury securities in the long run.
- Chair Powell said the pace of balance sheet reduction will likely be faster than in the last normalisation cycle, given the higher inflation, historically strong labour market, the larger size of the balance sheet, and the shorter maturity of securities held. The decisions on balance sheet reduction will likely be made in June (to be implemented in July), and the maximum pace of reduction will be gradually raised to USD 100 billion a month eventually (USD 60 billion Treasuries and USD 40 billion in agency mortgage-backed securities).
- Long-term interest rates have already priced in rate hikes to an extent, and the Fed's balance sheet assets will remain relatively large (the "stock effect"), so increases in the 10-year Treasury yield will likely be moderate.

Fed Treasury Holdings' Maturity Schedule, B/S Reduction Pace (Projection)



Source: Federal Reserve Bank of New York, Bloomberg, MUFG Bank Economic Research Office

Fed Securities Holdings, 10-Year Treasury Yield

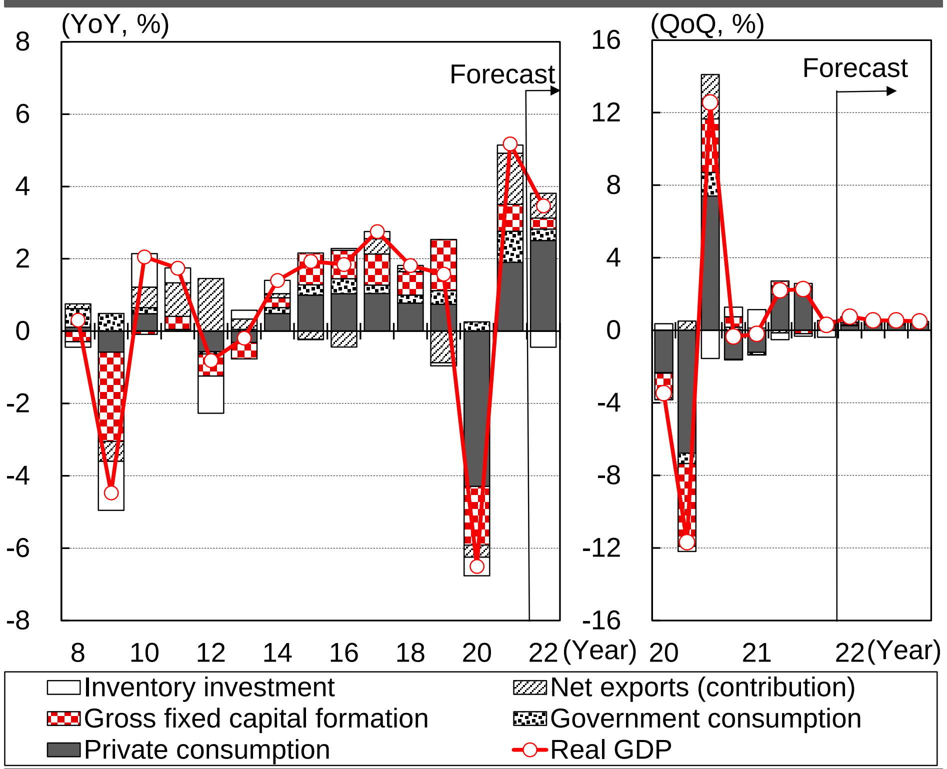


Source: Federal Reserve Board, Bloomberg, MUFG Bank Economic Research Office

2-3. European Economies: Eurozone

- Eurozone real GDP rose 0.3% QoQ (second estimate) in the October-December quarter last year – the third consecutive quarter of positive growth. Although COVID-19 has continued to spread and the economy has decelerated, the overall trend of recovery has been maintained thanks to a balance of COVID-19 policies and economic activities.
- Restrictions on movement are expected to be relaxed further in many countries and supply constraints will ease gradually. The rise in commodity prices like oil and natural gas caused by worsening of the situation in Ukraine has become a source of downward pressure, yet assumptions at this time are that the impact will not cause a downturn in the recovery of the economy. The Eurozone is catching up from the deep slump it experienced due to the COVID-19 pandemic and the real GDP growth rate for 2022 is forecast to hit 3.5% YoY – higher than the potential growth rate.

Eurozone Real GDP Forecast



Note: Expenditure breakdown for the October-December quarter has not yet been published. The figure shows an estimate by the Economic Research Office

Source: Eurostat, MUFG Bank Economic Research Office

Real GDP Forecast of Major European Countries

(QoQ, %) (YoY, %)

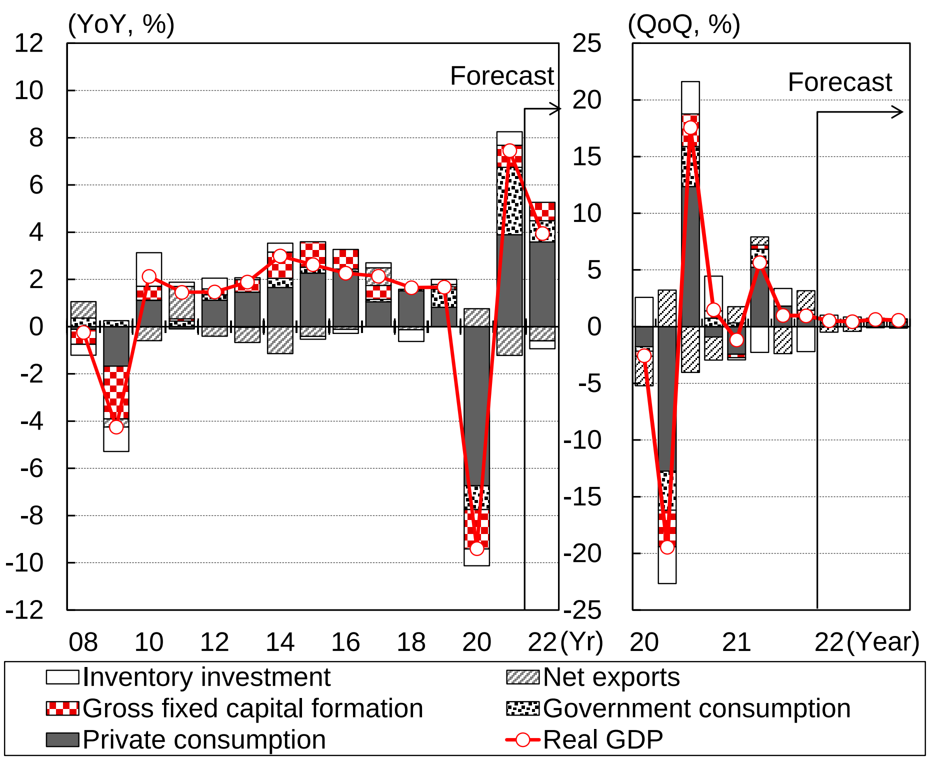
	2020	2021				2020	2021	2022
	Q4	Q1	Q2	Q3	Q4	Actual	Actual	Forecast
Eurozone	-0.3	-0.2	2.2	2.3	0.3	-6.4	5.2	3.5
Germany	0.7	-1.7	2.2	1.7	-0.7	-4.6	2.8	3.2
France	-1.1	0.1	1.3	3.1	0.7	-7.9	6.8	3.5
Italy	-1.7	0.3	2.7	2.6	0.6	-8.9	6.5	3.8
UK	1.5	-1.2	5.6	1.0	1.0	-9.4	7.5	3.9

Source: Eurostat, Office of National Statistics, MUFG Bank Economic Research Office

2-3. European Economies: UK

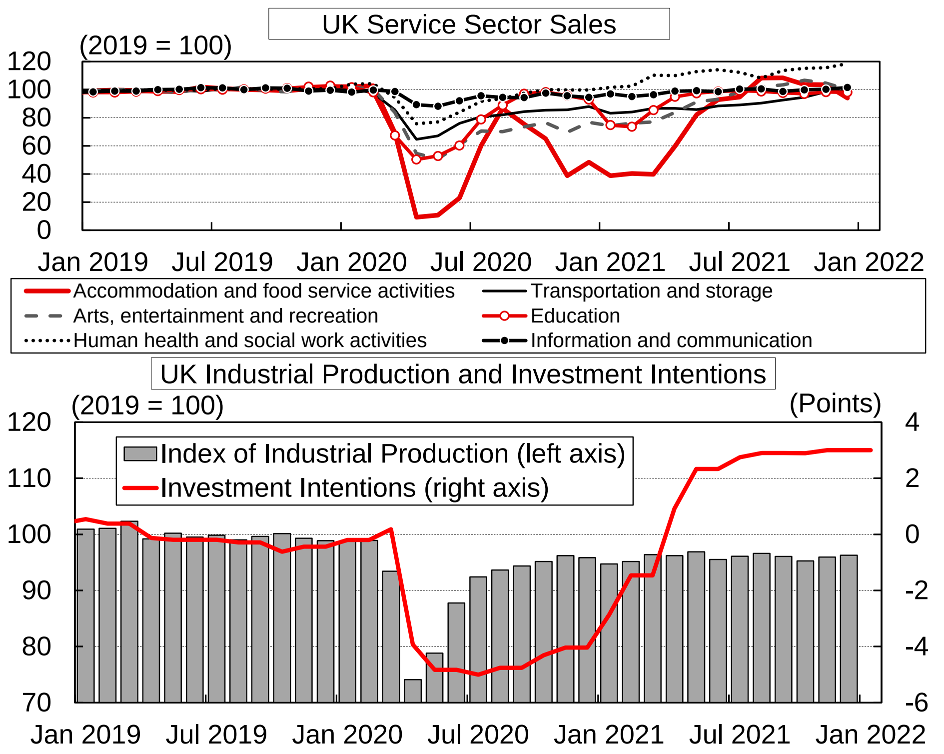
- The real GDP growth rate (preliminary estimate) for the UK increased 1.0% QoQ in the October-December quarter last year – the fourth consecutive quarter of growth. The background to this positive growth is the absence of stringent restrictions on movement, despite the rise in omicron cases, and maintenance of the balance between economic activities and COVID-19 policies.
- Although the rise in commodity prices caused by worsening of the situation in Ukraine will be a source of downward pressure, private consumption is forecast to maintain its upward trend thanks to further progress towards a state of living "with COVID-19" and a recovery of mobility. Industrial production is still below the level it was in 2019 before the pandemic, yet it continues to recover, and there are clear indications of an expansion of production, such as large improvements in investment intentions. The UK's real GDP growth rate is predicted to be 3.9% YoY in 2022.

Real GDP Outlook for the UK



Source: ONS, MUFG Bank Economic Research Office

UK Private Consumption and Industrial Production

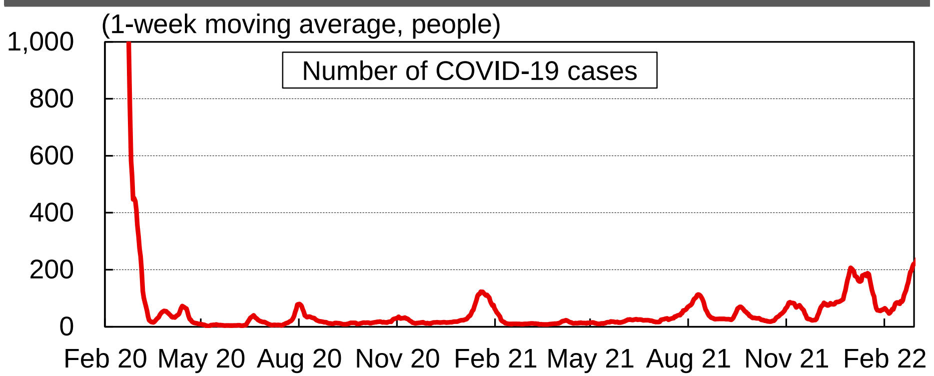


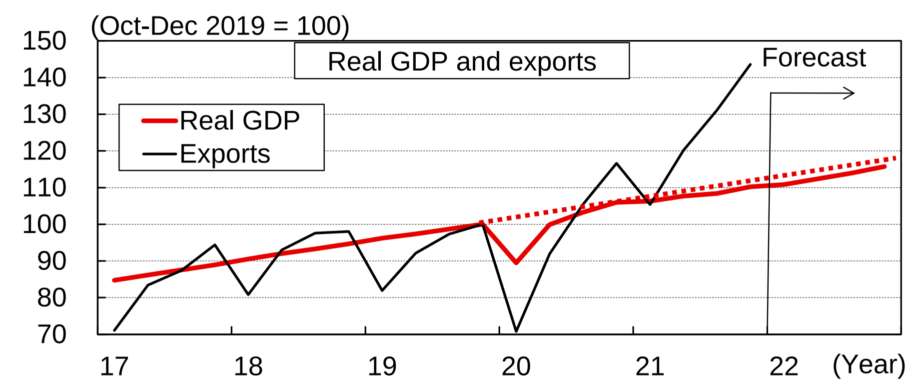
Source: ONS, MUFG Bank Economic Research Office

2-4. Asian and the Australian Economies: China

- China's real GDP growth rate for the October-December quarter last year was 4.0% YoY. While there remains some weakness, the economy maintained some level of growth. Weaknesses in the real estate market and face-to-face services put downward pressure on the overall economy, whereas sales of automobiles and production picked up. Data for the whole of 2021 shows the economy expanded 8.1% YoY from the previous year (the target set at the National People's Congress in March last year was 6.0% YoY or over) and achieved a relatively high level of growth owing to a rebound from the slump caused by the pandemic.
- Downward pressure on private consumption from the strict "zero COVID" policy continues. Growth of retail sales was low in December last year, reaching only 1.7% YoY, and it is still decelerating. In addition, the number of travellers is either plateauing at low levels or decrasing owing to the restrictions on movement that have been imposed on many areas.
- Downward pressure on private consumption from the continued, strict "zero COVID" policy will remain and it is unlikely there will be a large increase in exports as there was last year owing to the decrease in demand for goods from strong growth and the shift in demand towards services. However, the real GDP growth rate is forecast to hold firm at 4.7% YoY in 2022 thanks to support from government policies targeting economic stability.

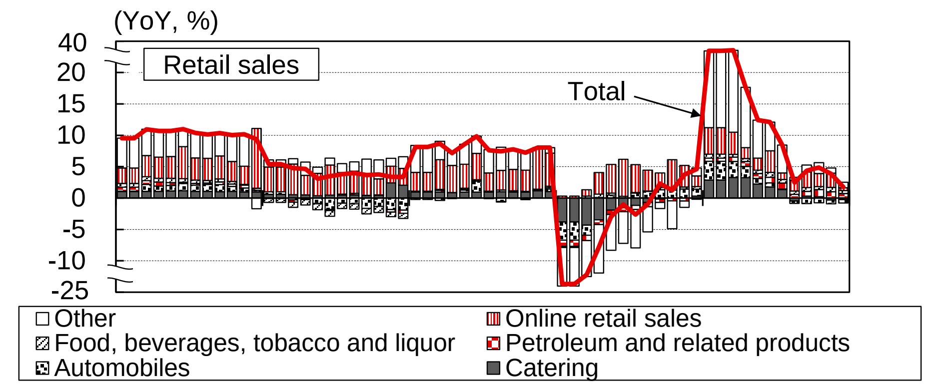
China's COVID-19 Cases, Real GDP and Exports

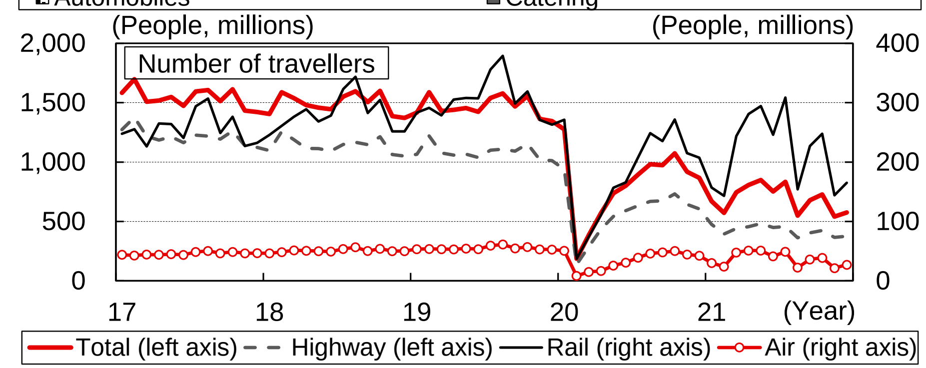




Note: The red line shows the trend of "Real GDP" from 2017 to 2019
Source: National Bureau of Statistics of China, MUFG Bank Economic Research Office

China's Retail Sales and Number of Travellers





Note: "Retail sales" for January and February are the total of both months divided by two
Source: National Bureau of Statistics of China, MUFG Bank Economic Research Office

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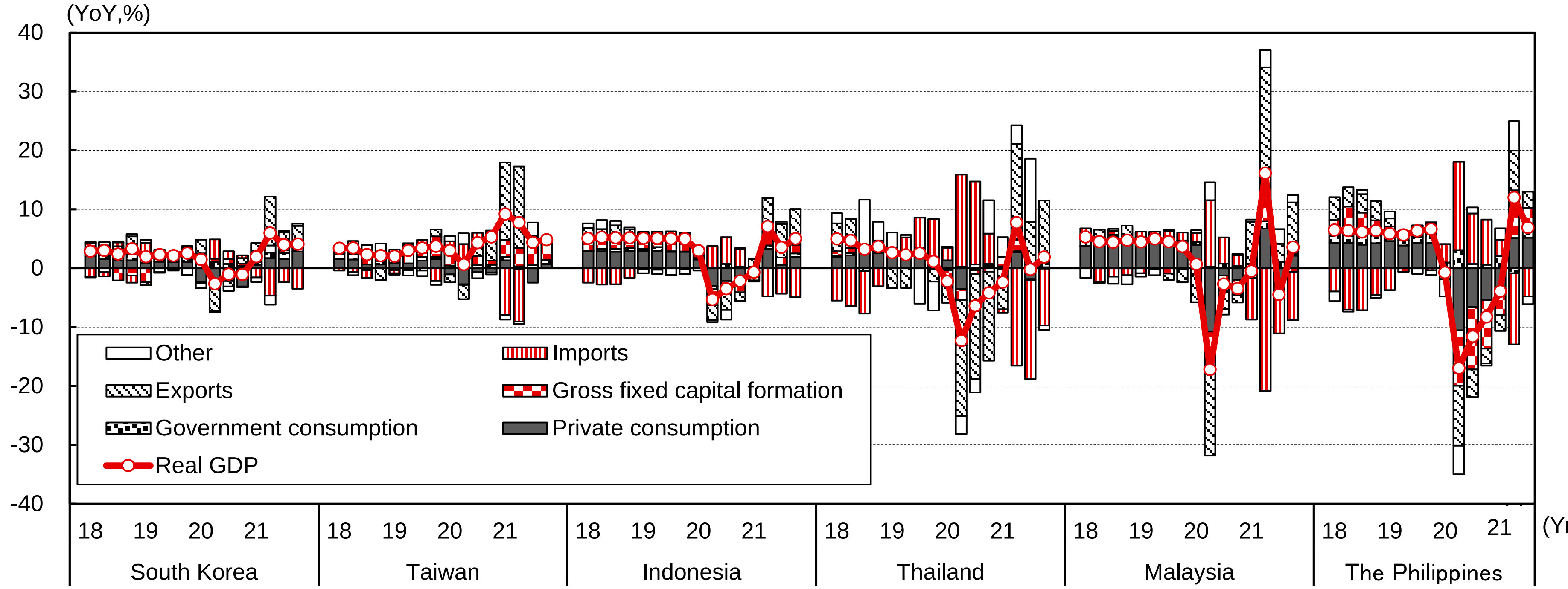
2-4. Asian and the Australian Economies: Other Asian Economies

- The real GDP growth rates for NIEs and ASEAN (total of five major countries) was 4.8% YoY and 4.7% YoY respectively for the October-December quarter last year. The spread of the delta variant calmed in NIEs and ASEAN and restrictions on movement were eased, resulting in a pick-up in growth, especially that of private consumption.
- The omicron variant is spreading in NIEs and ASEAN, but the decrease in mobility has been small and the impact on economies is limited. Economies are focused their policies on living "with COVID-19", and private consumption is expected to continue to recover owing to further easing of restrictions on movement in the future. In addition, exports are expected to remain firm thanks to an expansion of overseas economies.
- The current deterioration in the Ukraine situation will put downward pressure on economies through a rise in energy prices, but it is not expected to cause an economic downturn in Asian economies at this point in time. The real GDP growth rate in NIEs is forecast to continue at a robust pace of 3.3% YoY, even though the effects of the rebound to strong growth that occurred in 2021 from the slump caused by COVID-19 will have worn off. In ASEAN, however, recovery from the pandemic is slow. Nevertheless, the trend of recovery is finally expected to stabilise which, along with pent-up demand, is predicted to lead to a higher level of growth than last year at 5.6% YoY.

Real GDP of Major Asian Economies

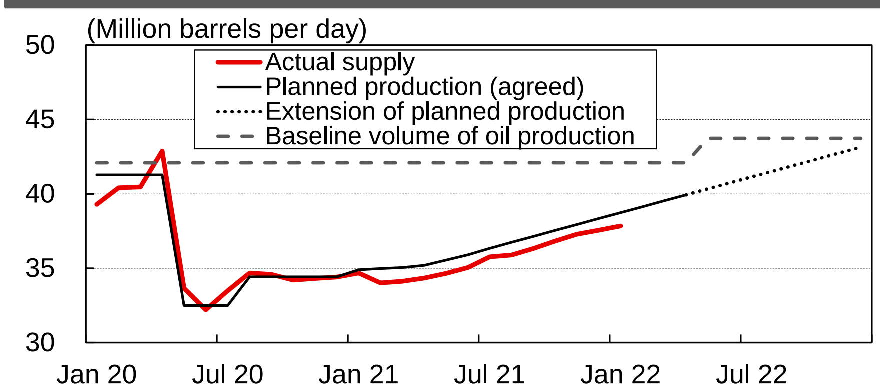


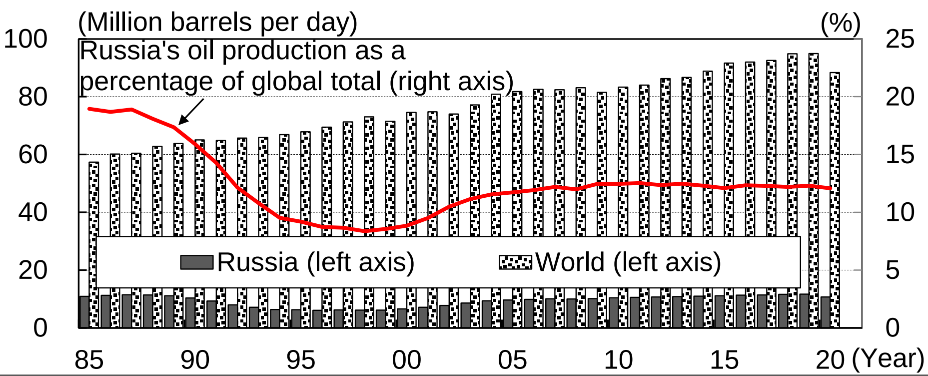
Source: National statistics of each country, MUFG Bank Economic Research Office

2-5. Oil Prices: Supply

- The crisis in Ukraine has caused a great deal of uncertainty about the supply of oil in the future. Nevertheless, the West has not placed a full ban on the trade of energy with Russia and it appears unlikely that Russian-produced oil will be immediately barred from the global market.
- At its ministerial meeting in March, OPEC+ – which includes Russia – decided to maintain its plan to increase its output by 400,000 barrels per day each month (of which approximately 100,000 barrels are produced by Russia) in April too. In its public statement, OPEC+ acknowledged that “the current volatility is caused by … current geopolitical developments”. It seems that OPEC+ considers its current planned production cuts to be appropriate for demand at present. However, trade with Russia has been constrained across the board by financial sections, which means this situation is unlikely to end without damage to the supply of Russian-produced oil. Another cause for concern is the apparent decrease in the production capacity of some oil-producing countries owing to insufficient investment in the past (the volume of oil output by OPEC+ is currently below its planned level).
- The number of working US oil rigs has recovered to around 70% of the level it was at before the pandemic. Nevertheless, shale oil companies are cautious about new investment owing to the trend towards decarbonisation, resulting in a fall in the number of DUC (drilled but uncompleted) and total rigs. The increase in US oil output is forecast to remain at a slow pace.

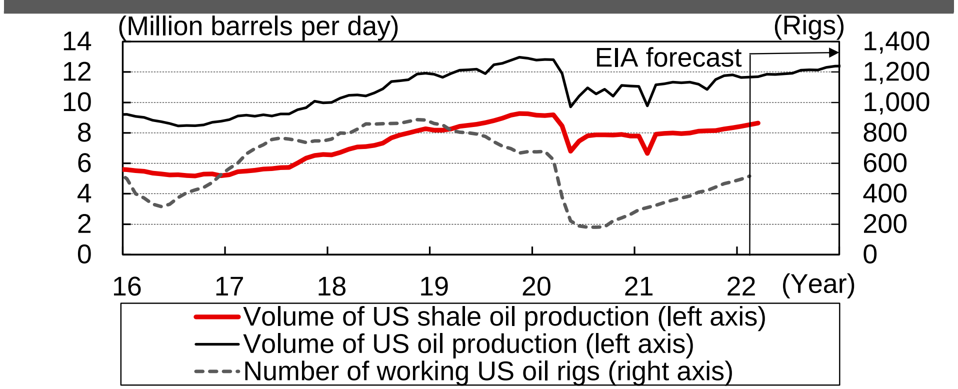
OPEC+ Planned & Actual Oil Output and Volume of Russian Oil Output

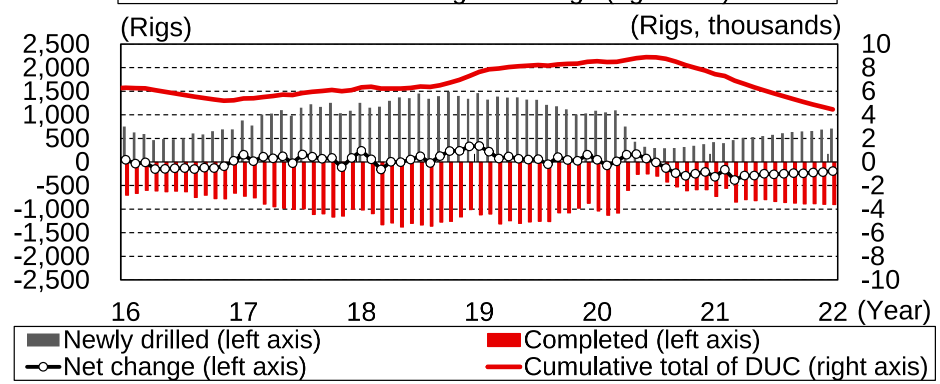




Source: IEA, BP, MUFG Bank Economic Research Office

Volume of US Oil & Shale Oil Production and No. of Working Rigs & DUC





Source: Baker Hughes, EIA, MUFG Bank Economic Research Office

2-5. Oil Prices: Price Forecast

- Oil prices (WTI front month) have risen dramatically due to the situation in Ukraine amid an ongoing tightening between the supply and demand for oil. It is thought that markets do not yet see the need to factor in the risk that Russian-produced oil will be completely barred from the global market for the time being. However, markets will remain very sensitive to concerns about the supply of oil from Russia due to the impact of current sanctions against the country, and oil prices are expected to continue to be elevated.
- Risk factors going forwards include a significant strengthening of sanctions against Russia by Europe and the US (such as a ban on energy imports), the direction of talks to revive the Iran nuclear agreement, developments in the COVID-19 pandemic and countries' decarbonisation policies.
- The futures curve for WTI oil prices (1 month to 5 years) shows 1-year futures have risen by around USD15 and 5-year futures by around USD10 as geopolitical risks such as the growing tension surrounding Ukraine since the start of the year are factored in.

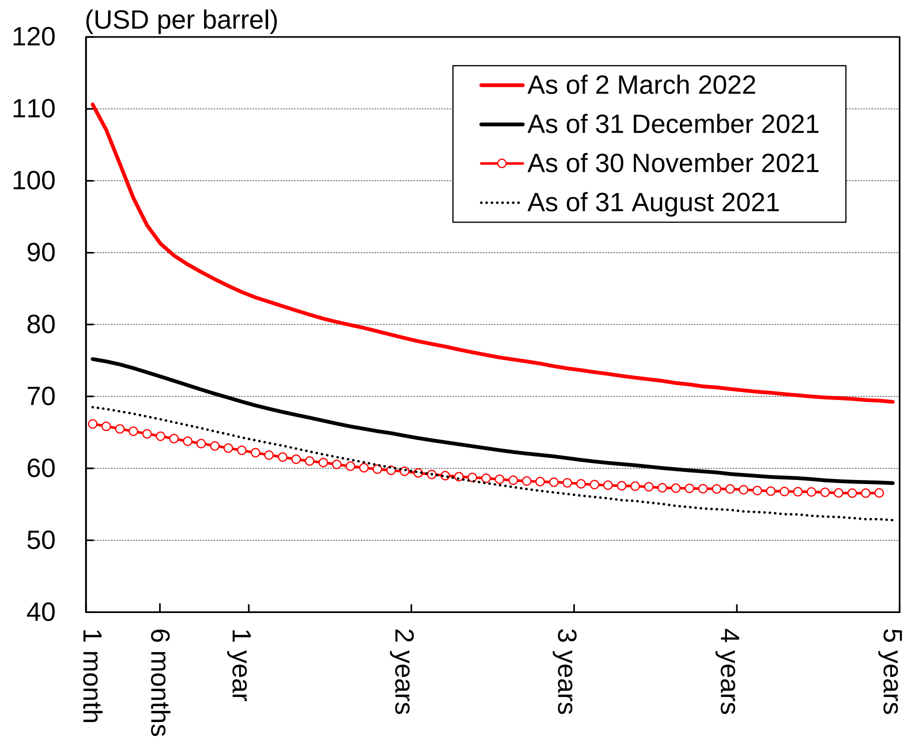
Oil Price Forecast

	WTI future (USD/barrel)	YoY (%)	Brent future (USD/barrel)	YoY (%)
2020 Q1	45.8	-16.6%	50.8	-20.4%
Q2	28.0	-53.3%	33.4	-51.2%
Q3	40.9	-27.5%	43.3	-30.1%
Q4	42.7	-24.9%	45.3	-27.5%
2021 Q1	58.1	27.0%	61.3	20.7%
Q2	66.1	136.1%	69.1	106.9%
Q3	70.5	72.3%	73.2	69.0%
Q4	77.1	80.6%	79.7	76.0%
2022 Q1	93.0	60.0%	96.0	56.6%
Q2	100.0	51.3%	103.0	49.1%
Q3	95.0	34.7%	98.0	33.8%
Q4	90.0	16.7%	93.0	16.7%
2020	39.3	-31.0%	43.2	-32.7%
2021	68.1	73.1%	71.0	64.2%
2022	94.5	38.8%	97.5	37.4%

Forecast

Note: Prices shown are average for period
Source: Bloomberg, MUFG Bank Economic Research Office

Oil Futures Curve



Source: Bloomberg, MUFG Bank Economic Research Office

Appendix: Global Economic Outlook

Forecast for the Global Economy

		World (weighted average of nominal GDP)				Japan (FY)	Americas					Europe					
			Developed countries	Emerging countries	Other		US	Central and South America (6 countries)				Eurozone (19 countries)				UK	Russia
									Brazil	Mexico	Argentina		Germany	France	Italy		
Nominal GDP	USD trillions	132.0	51.1	52.8	28.1	5.3	20.9	8.1	3.2	2.4	0.9	15.9	4.5	3.0	2.5	3.0	4.1
(2019)	Japan = 100	2,484	961	995	528	100	393	153	59	46	18	300	85	57	46	56	77
Real GDP	2020 Actual	-3.1	-4.5	-1.8	-3.0	-4.5	-3.4	-6.4	-3.9	-8.2	-9.9	-6.4	-4.6	-7.9	-8.9	-9.4	-3.0
YoY, %	2021 Actual	5.9	5.2	6.9	5.5	2.5	5.7	6.1	4.5	4.8	9.4	5.2	2.8	6.8	6.5	7.5	4.7
	2022 Forecast	4.0	3.5	4.4	4.2	3.1	3.6	1.4	0.8	1.5	0.0	3.5	3.2	3.5	3.8	3.9	-2.0
CPI	2020 Actual	3.2	0.7	3.8	6.5	-0.5	1.2	7.1	3.2	3.4	42.0	0.3	0.4	0.5	-0.1	0.9	3.4
(YoY, %)	2021 Actual	4.4	3.1	3.7	8.2	0.0	4.7	10.7	8.3	5.7	48.1	2.6	3.2	2.1	1.9	2.6	5.9
	2022 Forecast	4.8	4.1	4.6	6.6	1.4	4.6	8.7	6.0	5.0	40.0	4.6	4.8	3.8	4.7	6.3	12.0

		Asia and Oceania														
		Asia (11 countries and regions)														Australia
			China	India (FY)	NIEs (4 countries and regions)					ASEAN (5 countries)						
						S. Korea	Taiwan	Hong Kong	Singapore		Indonesia	Thailand	Malaysia	Philippines	Vietnam	
Nominal GDP	USD trillions	45.3	24.2	9.0	4.6	2.3	1.3	0.4	0.6	7.5	3.3	1.3	0.9	0.9	1.1	1.3
(2019)	Japan = 100	852	455	169	87	44	25	8	11	140	62	24	17	17	20	25
Real GDP	2020 Actual	-0.8	2.3	-7.3	-0.8	-0.9	3.1	-6.1	-5.4	-3.4	-2.1	-6.1	-5.6	-9.6	2.9	-2.4
(YoY, %)	2021 Actual	7.0	8.1	9.5	5.3	4.0	6.3	6.4	7.2	3.3	3.7	1.6	3.1	5.6	2.6	4.7
	2022 Forecast	5.4	4.7	8.1	3.3	3.1	3.4	3.2	4.2	5.6	5.2	3.8	6.3	6.8	7.6	4.0
CPI	2020 Actual	2.9	2.5	6.2	0.2	0.5	-0.2	0.3	-0.2	1.4	2.0	-0.8	-1.1	2.6	3.1	0.8
(YoY, %)	2021 Actual	2.1	0.9	5.1	2.2	2.5	2.0	1.5	2.3	2.0	1.6	1.2	2.5	4.4	1.8	2.9
	2022 Forecast	2.9	2.2	5.4	2.3	2.5	1.9	2.0	2.5	2.8	3.0	2.0	2.1	3.4	3.4	2.7

Note: 1. "Real GDP" for 2021 for Brazil and Argentina are forecasts
2. "Nominal GDP" is based on purchasing power parity
3. For "CPI", Japan is composite figure excluding fresh food, Eurozone and the UK are the EU standardised inflation rate (HICP)
4. Figures for Japan and India based on their financial years (April to following March) except Japan's nominal GDP
5. "World", "developed countries", "emerging countries" calculated using Japan data based on the calendar year, India data based on the fiscal year for nominal GDP only and other countries' data based on the calendar year
6. "Developed countries" is a total of Japan, NIEs (4 countries and regions), Australia, US, Eurozone (19 countries) and the UK. "Emerging countries" is a total of China, India, ASEAN (5 countries), Central and South America (6 countries) and Russia
7. "Central and South America (6 countries)" is a total of Brazil, Mexico, Argentina, Colombia, Chile and Peru

Source: National statistics of each country, MUFG Bank Economic Research Office

Appendix: Outlook for the Japanese Economy and Financial Markets

Outlook for the Japanese Economy (First Preliminary Estimate of GDP Statistics for October-December 2021)

Forecast (from 2022 Q1) →

	2020				2021				2022				2023	FY2020	FY2021	FY2022
	Q1	2Q	3Q	4Q	Q1	2Q	3Q	4Q	Q1	2Q	3Q	4Q	Q1			
1. The Real Economy (QoQ annualized change)																
Real GDP	1.8	-28.2	23.0	7.5	-2.1	2.4	-2.7	5.4	-0.1	6.6	3.4	2.2	1.4	- 4.5	2.5	3.1
Private Consumption	3.3	-30.3	23.1	6.4	-3.1	2.8	-3.7	11.2	-2.0	8.0	3.6	2.2	1.0	- 5.4	2.7	3.7
Housing Investment	-18.2	-0.2	-17.4	-0.3	3.5	4.2	-6.3	-3.7	-2.4	0.8	-0.4	-0.6	-0.6	- 7.8	- 1.4	- 1.3
Private Business Fixed Investment	11.3	-25.0	-1.6	4.9	1.6	8.2	-9.2	1.6	6.1	8.2	5.3	3.2	3.2	- 7.5	1.5	4.4
Business Inventory (Contribution)	-0.2	1.6	-1.8	-0.8	0.5	0.0	0.4	-0.5	0.5	0.0	0.0	0.0	0.0	- 0.2	- 0.1	0.1
Government Expenditures	-0.4	4.2	7.9	3.8	-3.1	-0.5	0.9	-3.4	0.5	2.2	1.9	1.6	1.3	3.0	- 0.1	1.0
Public Investment	-3.7	15.9	4.0	8.5	-6.4	-12.7	-11.4	-12.4	-7.8	2.8	3.2	3.2	3.2	5.2	- 7.9	- 1.6
Net Exports (Contribution)	-0.7	-9.8	11.2	3.1	-0.4	-0.3	0.4	0.8	-0.4	0.3	0.1	0.1	0.0	- 0.6	1.0	0.2
Exports	-17.3	-54.4	39.9	50.0	9.1	13.0	-1.1	3.9	2.0	6.1	2.4	2.0	1.6	- 10.5	12.5	3.1
Imports	-13.7	-6.4	-25.3	24.0	12.4	15.9	-3.7	-1.1	4.5	4.5	1.8	1.6	1.4	- 6.7	6.3	2.2
Nominal GDP	2.8	-26.6	22.2	5.2	-1.6	0.9	-4.1	2.0	3.3	5.8	6.4	-0.8	6.4	-3.9	1.3	3.6
GDP Deflator (YoY)	0.9	1.4	1.1	0.2	-0.1	-1.1	-1.2	-1.3	-0.8	-0.5	0.7	0.6	1.1	0.6	-1.1	0.5
Industrial Production Index (QoQ)	0.0	-16.8	9.0	5.7	2.9	1.1	-3.7	1.0	0.3	3.1	0.8	0.7	0.6	- 9.5	5.8	4.0
Domestic Corporate Goods Price Index (YoY)	0.6	-2.2	-0.8	-2.2	-0.3	4.6	6.1	8.8	8.5	6.0	4.4	2.9	0.8	- 1.4	7.0	3.5
Consumer Price Index (excl. fresh food, YoY)	0.7	-0.1	-0.3	-0.9	-0.5	-0.6	0.0	0.4	0.3	1.8	1.5	1.3	1.0	- 0.5	- 0.0	1.4
2. Balance of Payments																
Trade Balance (billion yen)	583	-1,472	1,229	2,436	1,437	998	-211	-544	-700	-1,857	-1,524	-2,119	-570	3,902	-457	-6,069
Current Balance (billion yen)	4,410	1,697	3,623	5,922	4,626	4,719	2,832	3,183	2,743	1,589	2,067	1,714	3,368	16,302	13,476	8,738
3. Financial																
Uncollateralized overnight call rate	0.0	0.0	-0.1	0.0	0.0	-0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Euro-Yen TIBOR (3-month rate)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Newly Issued 10-Year Government Bonds Yield	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.0	0.1	0.2
Exchange Rate (USD/JPY)	109	108	106	104	106	109	110	114	115	116	116	116	116	106	112	116

Note: Uncollateralized overnight call rate is the average rate during the last month of the period. Euro-Yen TIBOR (3-month rate), Newly Issued 10-Year Government Bonds Yield and Exchange Rate (USD/JPY) are averages during the period.
Source: Various statistics, Bloomberg, MUFG Bank Economic Research Office

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Appendix: Outlook for the US Economy and Financial Markets

Outlook for the US Economy

Forecast

	2020				2021				2022				2020 (Actual)	2021 (Forecast)	2022 (Forecast)
	1～3	4～6	7～9	10～12	1～3	4～6	7～9	10～12	1～3	4～6	7～9	10～12			
1. Main Economic Indicators															
Real GDP (QoQ annualized, %)	-5.1	-31.2	33.8	4.5	6.3	6.7	2.3	7.0	-0.5	3.8	5.9	4.2	-3.4	5.7	3.6
Personal Consumption Expenditures	-6.9	-33.4	41.4	3.4	11.4	12.0	2.0	3.1	0.6	2.2	3.3	4.2	-3.8	7.9	2.8
Fixed Investment (Residential)	20.3	-30.8	60.0	34.4	13.3	-11.7	-7.7	1.0	8.2	-9.0	-1.7	0.0	6.8	9.1	-1.6
Fixed Investment (Nonresidential)	-8.1	-30.3	18.7	12.5	12.9	9.2	1.6	3.1	6.8	7.9	8.5	5.5	-5.3	7.4	5.9
Changes in Business Inventories (Contribution)	-0.5	-4.0	6.8	1.1	-2.6	-1.3	2.2	4.9	-2.9	-0.7	1.5	0.2	-0.6	0.3	0.5
Government Expenditures	3.7	3.9	-2.1	-0.5	4.2	-2.0	0.9	-2.6	0.5	11.6	5.7	3.1	2.5	0.5	2.6
Net Exports (Contribution)	-0.1	1.5	-3.3	-1.7	-1.6	-0.2	-1.3	-0.1	0.7	0.3	-0.2	-0.3	-0.3	-1.4	-0.1
Exports	-16.3	-59.9	54.5	22.5	-2.9	7.6	-5.3	23.6	10.3	8.0	5.4	4.1	-13.6	4.6	8.9
Imports	-13.1	-53.1	89.2	31.3	9.3	7.1	4.7	17.6	2.9	3.7	4.6	4.3	-8.9	14.0	6.4
Domestic Private End User Demand	-6.2	-32.8	38.0	6.0	11.8	10.4	1.5	3.0	1.9	2.7	4.0	4.3	-3.7	7.9	3.1
Nominal GDP (QoQ annualized, %)	-3.9	-32.4	38.7	6.6	10.9	13.2	8.5	14.6	6.2	5.9	6.8	5.9	-2.2	10.1	8.4
Industrial Production (QoQ annualized, %)	-6.7	-42.4	44.5	8.2	4.0	6.5	3.3	4.4	0.8	1.6	2.2	1.0	-7.2	5.5	2.5
Unemployment Rate (%)	3.8	13.0	8.8	6.8	6.2	5.9	5.1	4.2	4.0	3.9	3.9	3.9	8.1	5.4	3.9
Producer Price Index (YoY, %)	1.1	-1.1	-0.1	0.8	2.9	7.0	8.5	9.5	9.5	7.1	4.6	3.1	0.2	7.0	6.1
Consumer Price Index (YoY, %)	2.1	0.4	1.2	1.2	1.9	4.8	5.3	6.7	7.5	6.2	4.7	3.1	1.2	4.7	5.4
2. Balance of Payments															
Trade Balance (hundred million dollars)	-2,003	-2,233	-2,454	-2,531	-2,670	-2,678	-2,730	-2,829	-3,149	-3,173	-3,158	-3,148	-9,220	-10,907	-12,628
Current Account (hundred million dollars)	-1,148	-1,539	-1,724	-1,751	-1,894	-1,983	-2,148	-2,421	-2,481	-2,524	-2,499	-2,480	-6,161	-8,446	-9,984
3. Financial Indicators															
FF Rate Target (%)	0.00-0.25	0.00-0.25	0.00-0.25	0.00-0.25	0.00-0.25	0.00-0.25	0.00-0.25	0.00-0.25	0.00-0.25	0.50-0.75	0.75-1.00	1.00-1.25	0.00-0.25	0.00-0.25	1.00-1.25
Euro Dollar (3M) (%)	1.5	0.6	0.3	0.2	0.2	0.2	0.1	0.2	0.4	0.8	1.1	1.4	0.7	0.2	0.9
10-year Treasury Note's Yield (%)	1.4	0.7	0.7	0.9	1.6	1.6	1.3	1.5	1.9	2.0	2.0	2.1	0.9	1.5	2.0

Note: FF Rate Targets is end-of-period figures, Euro Dollar (3M) and 10-year Note's Yield are averages for periods
Source: Various reports, Bloomberg, MUFG Bank Economic Research Office

Appendix: Outlook for the European Economies and Financial Markets

Outlook for European Economies

1. Overview

	Real GDP growth rate (YoY, %)			CPI (YoY, %)			Current Account (USD billions)		
	2020 (Actual)	2021 (Actual)	2022 (Forecast)	2020 (Actual)	2021 (Actual)	2022 (Forecast)	2020 (Actual)	2021 (Actual)	2022 (Forecast)
Eurozone	- 6.4	5.2	3.5	0.3	2.6	4.6	2546	2951	2735
Germany	- 4.6	2.8	3.2	0.4	3.2	4.8	2647	2919	2675
France	- 7.9	6.8	3.5	0.5	2.1	3.8	- 501	- 314	- 879
Italy	- 8.9	6.5	3.8	- 0.1	1.9	4.7	669	647	892
UK	- 9.4	7.5	3.9	0.9	2.6	6.3	- 949	- 953	- 1014
Russia	- 3.0	4.7	-2.0	3.4	5.9	12.0	339	594	558

2. Forecast by Demand Component (YoY, %)

	Eurozone			UK		
	2020 (Actual)	2021 (Actual)	2022 (Forecast)	2020 (Actual)	2021 (Actual)	2022 (Forecast)
Nominal GDP	- 4.9	6.9	5.5	- 3.8	7.4	5.9
Real GDP	- 6.4	5.2	3.5	- 9.4	7.5	3.9
Contribution by domestic demand	- 6.2	3.8	2.8	- 10.2	8.7	4.5
Contribution by foreign demand	- 0.2	1.4	0.7	0.8	- 1.2	- 0.6
Private consumption	- 8.0	3.6	4.8	- 10.5	6.1	5.7
Government consumption	1.2	3.8	1.4	- 5.4	14.5	4.3
Gross fixed capital formation	- 7.3	3.5	1.4	- 9.4	5.3	4.5
Inventory investment (contribution)	- 0.6	0.1	- 0.4	- 0.7	0.6	-0.3
Exports	- 9.4	9.8	4.8	- 13.9	- 1.1	4.9
Imports	- 9.3	7.3	3.8	- 15.9	3.0	6.8

Note: 1. "Eurozone" is total of 19 countries - Germany, France, Italy, Ireland, Estonia, Austria, The Netherlands, Cyprus, Greece, Spain, Slovakia, Slovenia, Finland, Belgium, Portugal, Malta, Luxembourg, Lithuania
2. "CPI" is the standardised inflation rate for the EU (HICP)
Source: Eurostat, UK Office for National Statistics, MUFG Bank Economic Research Office

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