Outlook for the Japanese and Overseas Economies

ECONOMIC RESEARCH OFFICE
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MUFG Bank, Ltd.
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Contents

1-1. Overview of Economic Outlook

- In 2022, the third year of the pandemic, normalisation of economic activity will support countries' economic recoveries. In 2023, growth will likely continue at the pace of the potential growth rate, provided that the effects of the pandemic start to fade in China.
- Economic turmoil resulting from a protracted conflict in Ukraine (and sanctions against Russia) as well as China's zero-COVID policy will exacerbate inflationary pressures from supply constraints for a while. Nevertheless, a global economic downturn is likely to be avoided (see below for assumptions about the Ukraine conflict and China's "zero COVID-19" policy). Inflation rates will start to moderate in mid-2022, but the level at the end of the year will still far exceed the targets set by central banks.
- The steps taken by central banks to curb inflation with monetary policy normalisation may cause economic growth to slow in the US and elsewhere, but real GDP growth rates will likely remain in positive territory thanks to strong labour markets and solid business sentiment.

Assumptions

- ✓ **Ukraine situation**: Conflict will continue with risk of escalation. Western economies will maintain or strengthen harsh sanctions against Russia.
- ✓ **Pandemic**: Western economies and Japan will continue easing restrictions on movement. China will maintain its "zero COVID-19" policy but the extent of city lockdowns will be somewhat reduced as the situation improves.

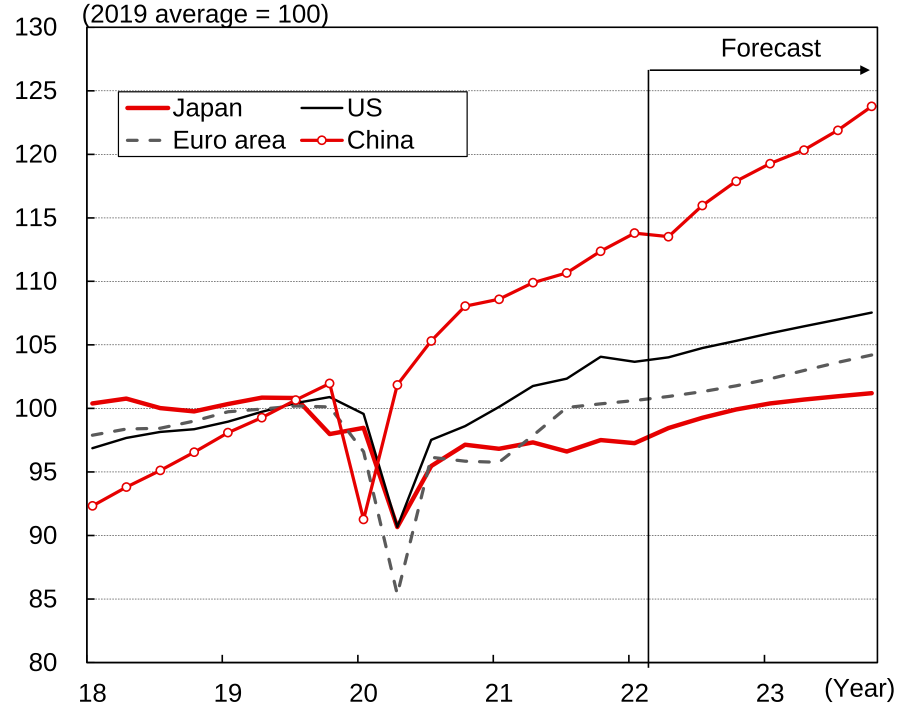
Outlook for Major Economies

(%)

Real GDP growth rate	2021	MUFG forecast (June) 2022	MUFG forecast (June) 2023	MUFG forecast (March) 2022	MUFG forecast (March) 2023
World	6.1	3.2	3.5	4.0	-
US	5.7	2.3	2.2	3.6	-
Euro area	5.4	2.7	2.1	3.5	-
UK	7.4	3.7	1.2	3.9	-
Japan (FY)	2.1	2.4	1.5	3.1	-
Japan (calendar year)	1.7	1.6	2.1	2.5	-
Asia (11 countries)	7.1	4.9	5.3	5.4	-
China	8.1	4.5	5.2	4.7	-
ASEAN (5 countries)	3.6	5.4	5.4	5.6	-
Indonesia	3.7	5.2	5.2	5.2	-
Thailand	1.5	3.3	4.4	3.8	-
Malaysia	3.1	6.3	5.2	6.3	-
Philippine	5.7	6.6	6.2	6.8	-
Vietnam	2.6	7.0	6.8	7.6	-

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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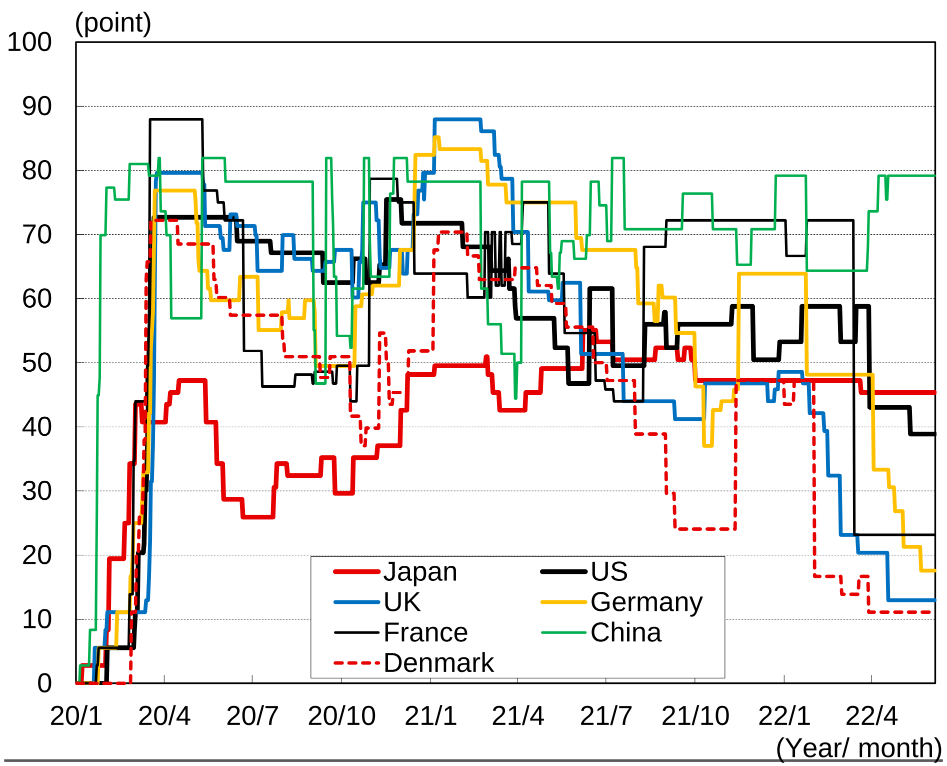
1-2. COVID-19 Pandemic Situation and Supply Constraints

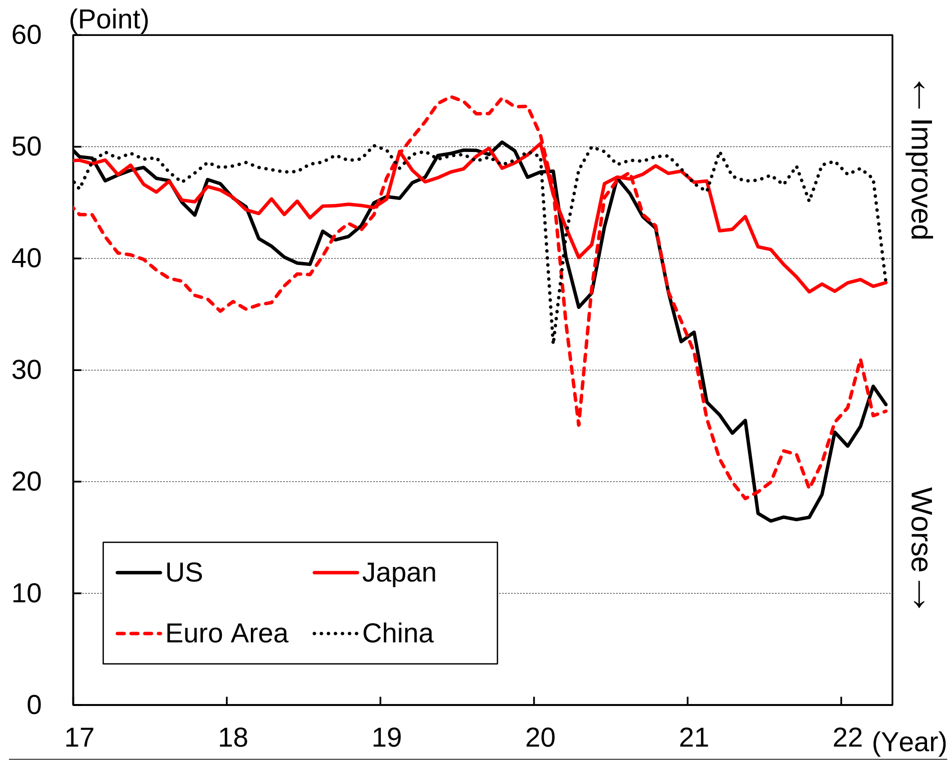
- Economic activity continues to return to normal around the world as people learn to live with COVID-19. Western economies have been easing restrictions; Japan, which has kept relatively strict COVID-19 restrictions in place, eased its rules for travellers' entry on 1 June. Meanwhile, China – the world's second largest economy – maintains its "zero COVID-19" policy, and is prepared to implement more large-scale city lockdowns if warranted by infection trends. While the turmoil in the global supply chain caused by the pandemic is on course to improve gradually, the situation may have worsened temporarily due to the Shanghai lockdown and other factors. The conflict in Ukraine, sanctions against Russia and withdrawal of foreign companies from Russia have also complicated supply constraints.
- The Shanghai lockdown ended at the start of June, and it is likely that pandemic-related restrictions on movement and supply constraints will be eased gradually. Nevertheless, China may still carry out city lockdowns sporadically as long as its "zero COVID-19" policy is in place. Therefore, downward pressure on the Chinese economy and worsening of supply chain issues could lead to stagnation in trade activity and higher prices around the world.

Stringency Indexes in Advanced Economies



Source: *Our World in Data* website run by the University of Oxford, MUFG Bank Economic Research Office

Supplier Delivery Indices in PMIs for Major Economies

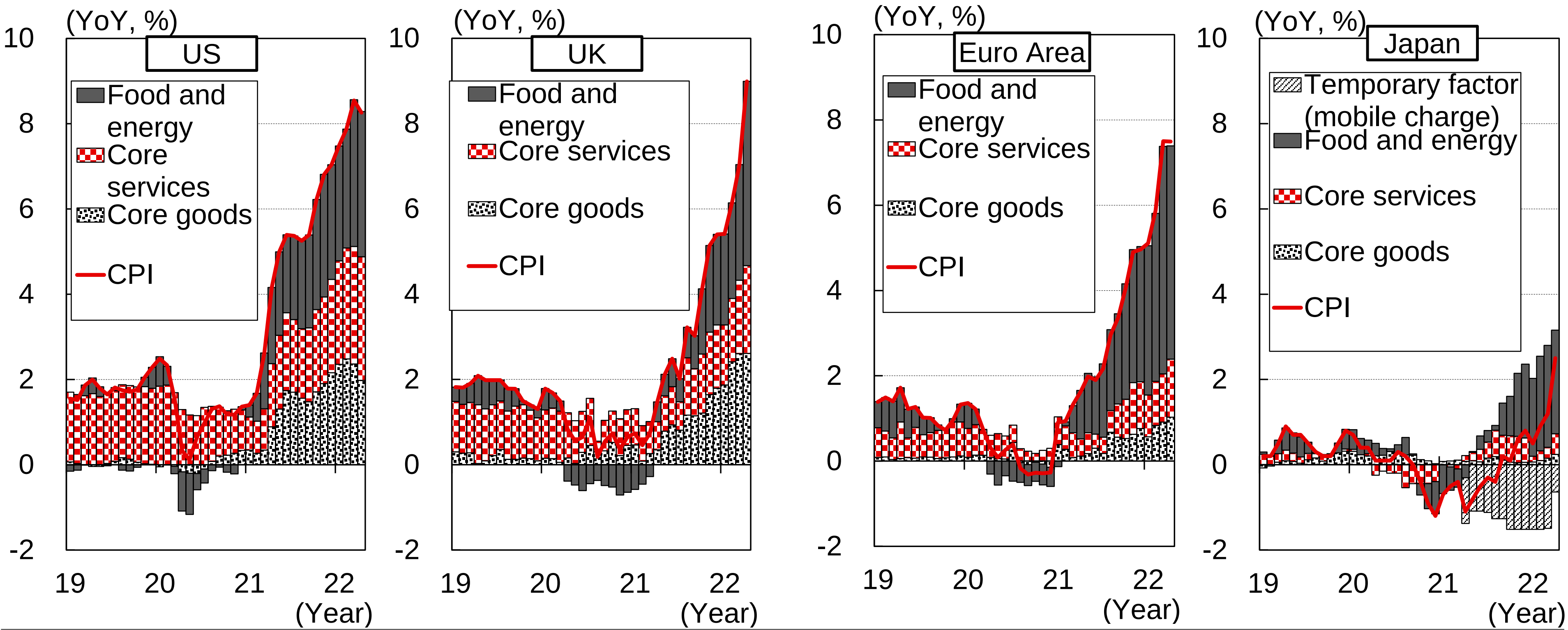


Source: IHS Markit, MUFG Bank Economic Research Office

1-3. Inflation Trends in Advanced Economies

- Inflationary pressures have surged around the world due to the rise in energy prices, supply chain disruptions caused by the pandemic and the conflict in Ukraine, and tight labour markets. There is some difference, however, in the items driving the overall inflation rates in each advanced economy.
- The US and UK have seen a considerable rise in the prices of core goods and core services in addition to food and energy prices. In the euro area, although the upward pressure is mostly from food and energy, there is currently a rise in the prices of core goods and core services. Meanwhile, the rise in prices experienced by Japan is being driven by just food and energy for the most part.
- The main reason for these differences is the varying paces of wage growth based on the degree of tightness in their labour markets. There is also variation in each economy's stance towards monetary policy normalisation, which reflects the different trends of prices and wages.

CPI Inflation in US, UK, Euro Area and Japan



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

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1-4. Monetary Policies of Major Economies

- Major advanced countries (except Japan) are normalising their monetary policies in response to high levels of inflation. In May, the Bank of England decided to raise its policy rate, marking the fourth rate hike in a row. In the US, the Fed raised the federal funds target rate by 0.5% points and put forward its plan to continue raising rates by 0.5% point increments at both its June and July meetings. The European Central Bank (ECB) is also working to normalise its policy, albeit on a later timeframe than the US and the UK. President Lagarde has hinted at a rate hike in July.
- On the other hand, the Bank of Japan is sticking with its current easy monetary policy on the basis that the rise in prices is not causing wages to increase, and that external factors such as higher oil prices and JPY depreciation are causing the current temporary inflation trend.

Monetary Policies of Major Developed Economies

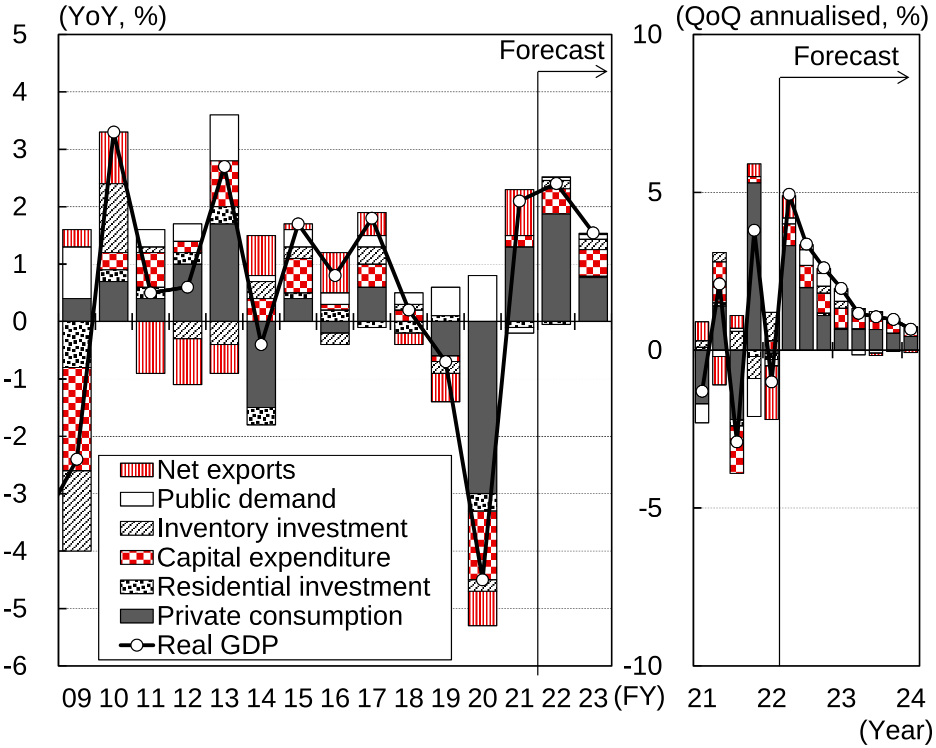
Country, area	Category	Current Framework and Outlook
US	Policy rate	▪ The Fed raised its policy rate by 0.25% points in March and by 0.5% points in May. ▪ Chair Powell indicated at the post-FOMC press conference that the policy rate will be raised by 0.5% points at both the coming meetings in June and July. In a later interview in May, he indicated that the policy rate will be raised swiftly to a neutral level in 2022.
	Asset purchase	▪ At its meeting in May, the FOMC decided to start balance sheet reductions in June (with a monthly maximum of USD 30 billion for Treasury securities and USD 17.5 billion for MBS initially, and USD 60 billion and USD 35 billion respectively after three months.)
UK	Policy rate	▪ The BoE raised its policy rate to 1.00% from 0.75% in May – the fourth rate hike in a row. ▪ The BoE said "some degree of further tightening in monetary policy may still be appropriate in the coming months."
	Asset purchase	▪ In addition to scaling back reinvestment of securities that have matured, the BoE is considering sale of government bonds.
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 realised progress in underlying inflation is sufficiently advanced to be consistent with inflation stabilising at 2 percent over the medium term." (recent inflation rates have far exceeded 2%) ▪ ECB President Lagarde said in an ECB blogpost that rates could be raised in July.
	Asset purchase	▪ Asset purchase programme: purchases of EUR 20 billion a month until just before a rate hike (EUR 30 billion a month in May, EUR 20 billion a month in June, and EUR 20 billion for July-Sept 2022.) ▪ Lagarde said in an ECB blogpost that the Asset Purchase Programme could be concluded early in the third quarter.
Japan	Policy rate	▪ The BoJ will likely maintain a negative interest rate of -0.1% to the policy rate balances in current accounts held by financial institutions at the Bank.
	Asset purchase	▪ The BoJ will purchase long-term JGBs so that the 10-year JGB yield stays around 0%. There is no upper limit to the size of purchases. ▪ The BoJ will purchase JGBs at the yield of 0.25% (with no upper limit) every business day (April). ▪ The status quo will be maintained in terms of ETF and J-REIT (the ETF holdings could be increased by up to JPY 12 trillion a year, and the J-REIT holdings by about JPY 18 billion a year) ▪ Commercial papers and corporate bonds: gradually lower the pace of purchase and asset holdings to pre-pandemic levels (commercial paper holdings JPY 2 trillion, and corporate bond holdings JPY 3 trillion)

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

2-1. Japanese Economy: Overview

- The real GDP growth rate for the January-March quarter (first preliminary estimate) was -1.0% QoQ annualised – the first contraction in two quarters. Although capital expenditure rose for the second consecutive quarter, growth of private consumption turned negative, albeit by a little, owing to the effects of COVID-19 and net exports put significant downward pressure on growth due to a rise in imports fuelled by vaccine imports.
- Looking ahead, there will be a certain amount of downward pressure on the economy from the current rise in prices and supply restraints caused by lockdowns in China among other factors. Nevertheless, the Japanese economy is forecast to gradually recover, particularly consumption of services, as the number of new COVID-19 cases falls and restrictions on movement are eased.
- The Japanese economy's gradual recovery is predicted to continue, with the GDP growth rate hitting 2.4% YoY in FY2022 and 1.5% YoY in FY2023. In FY2023, real GDP is forecast to return to the level it was at in 2019 (average of the year) 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)

(YoY, %)

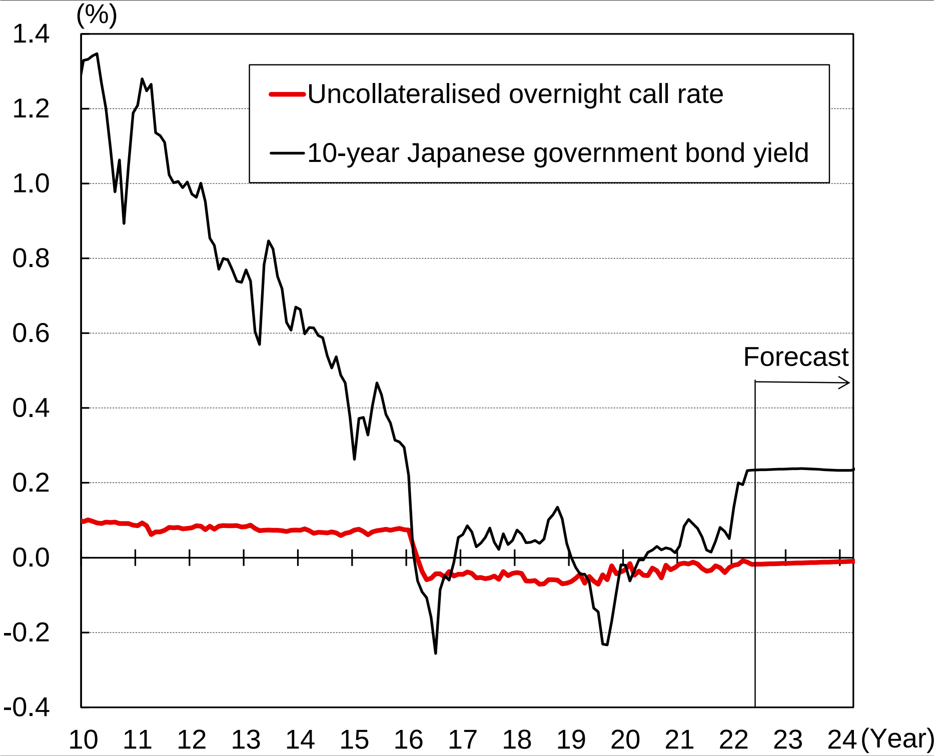
	FY2020 (Actual)	FY2021 (Actual)	FY2022 (Outlook)	FY2023 (Outlook)
Real GDP	-4.5	2.1	2.4	1.5
Private consumption	-5.4	2.6	3.5	1.4
Residential investment	-7.8	-1.6	-1.4	0.7
Capital expenditure	-7.5	1.3	2.8	2.9
Inventory investment (contribution)	-0.2	0.0	0.1	0.2
Public demand	3.0	-0.4	0.2	0.3
Net exports (contribution)	-0.6	0.8	0.0	0.0
Exports	-10.2	12.5	3.3	3.0
Imports	-6.5	7.2	3.3	2.9
Nominal GDP	-3.9	1.1	2.9	2.7
GDP Deflator	0.6	-1.0	0.5	1.1

Source: Cabinet Office, MUFG Bank Economic Research Office

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

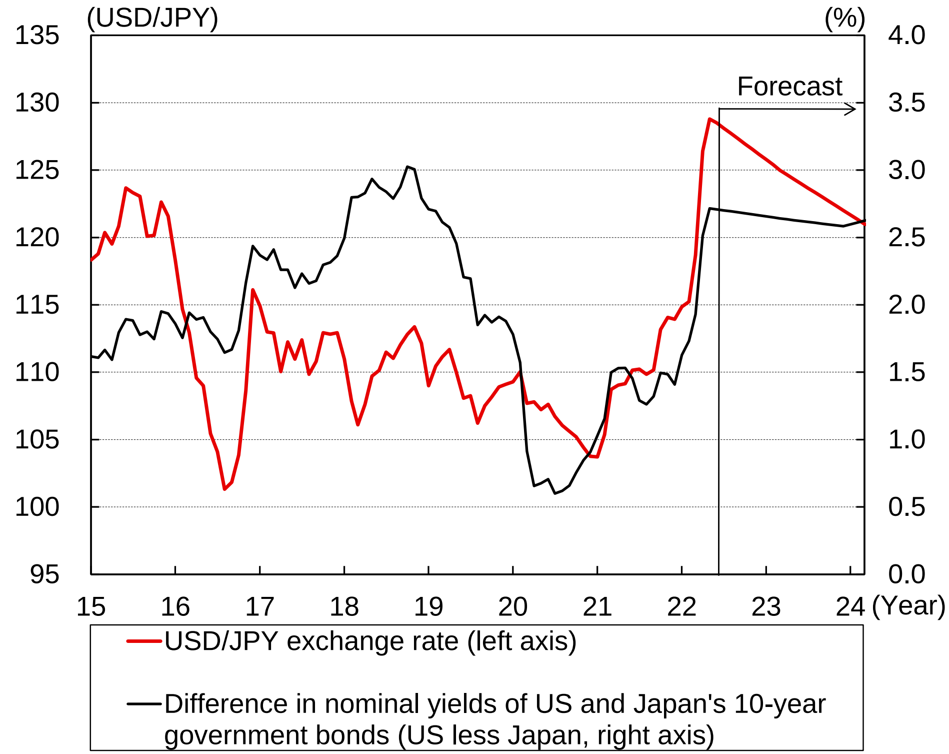
- The 10-year Japanese government bond yield hit 0.25% for a moment at the end of March due to rise in the US' long-term interest rates. Nevertheless, it has returned to just above 0.2% currently owing to the Bank of Japan's fixed-rate purchase operations. Looking ahead, the Bank of Japan is expected to maintain its monetary policy framework and Japan's benchmark long-term interest rate will probably remain flat with an upper bound of 0.25%.
- The JPY has depreciated against the USD owing to a widening gap between US and Japanese interest rates and recorded over JPY 130 per USD temporarily for the first time since April 2002. However, anticipated future rate hikes by the Federal Reserve have been fully priced in, which caused the 10-year US Treasury yield to peak and then fall to a little under 3% as markets started to predict a slowdown in the US economy and a peaking of the inflation rate. As a result, the JPY is trading at around JPY 130 per USD at present. As the Fed adjusts its hawkish stance towards monetary policy, the downward pressure on the JPY triggered by the gap between US and Japanese long-term interest rates will lessen and the JPY is predicted to appreciate a little against the USD.

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 10-yr Gov. Bond Nominal Yields



Source: Bloomberg, MUFG Bank Economic Research Office

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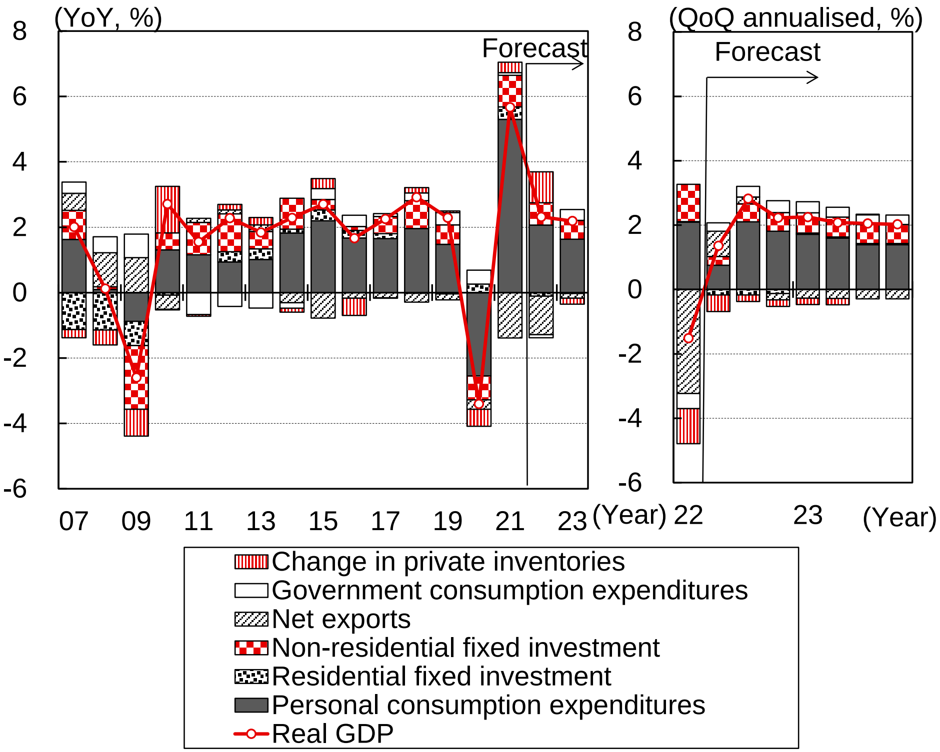
2-2. US Economy: Overview

- The US real GDP declined at an annual rate of 1.5% QoQ (2nd estimate) in the January-March quarter, the first contraction since the April-June quarter of 2020 during the first wave of COVID-19 infection. Contributions by demand component show that net exports (-3.2% points) and change in private inventories (-1.1% points) significantly weighed down the GDP growth rate, but positive contributions by personal consumption expenditures (+2.1% points) and non-residential fixed investment (+1.2% points) increased from the prior quarter, underscoring solid domestic demand.
- Following the Russian invasion of Ukraine, Fed Chair Powell has stepped up his rhetoric that the pace of upcoming rate hikes is faster than in the last tightening cycle. Financial conditions are now tighter as long-term interest rates are rising due to expectations for future rate hikes. As a result, domestic demand growth will likely slow for a period (market expectations about rate hikes have eased somewhat, and long-term interest rates have fallen from a recent peak).
- Given the tight labour market and households' healthy financial positions, the economy will likely remain resilient, especially as COVID-19 cases fall and appetite for service consumption recovers. We project that the US' real GDP will increase by 2.3% YoY in 2022 and by 2.2% in 2023 as the economy continues to grow at a slightly faster rate than its potential growth rate.

Real GDP by Demand Component



Source: Department of Commerce, MUFG Bank Economic Research Office

GDP Outlook (Calendar Year)

(YoY, %)

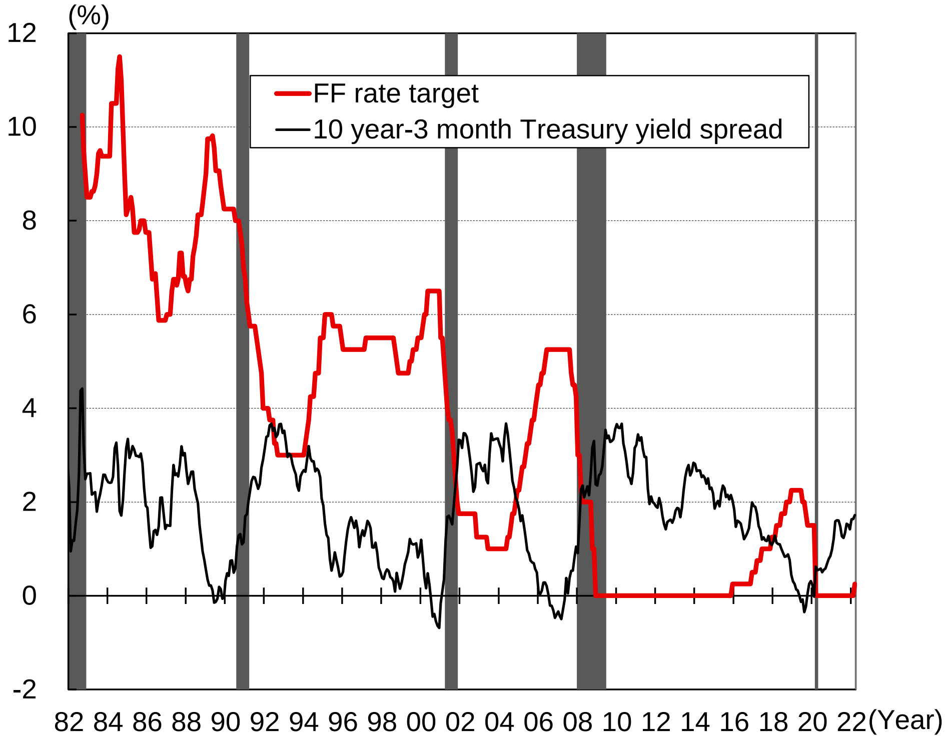
	2021 (Actual)	2022 (Forecast)	2023 (Forecast)
Real GDP	5.7	2.3	2.2
Personal consumption expenditures	7.9	2.9	2.3
Residential investment	9.2	-3.0	-0.9
Non-residential fixed investment	7.4	4.6	3.8
Change in private inventories (contribution)	0.3	0.9	-0.2
Government consumption expenditures	0.5	-0.5	2.0
Net exports (contribution)	-1.4	-1.2	-0.1
Exports	4.5	4.4	3.4
Imports	14.0	9.2	2.8
Nominal GDP	10.1	7.9	4.6

Source: Department of Commerce, MUFG Bank Economic Research Office

2-2. US Economy: Monetary Policy

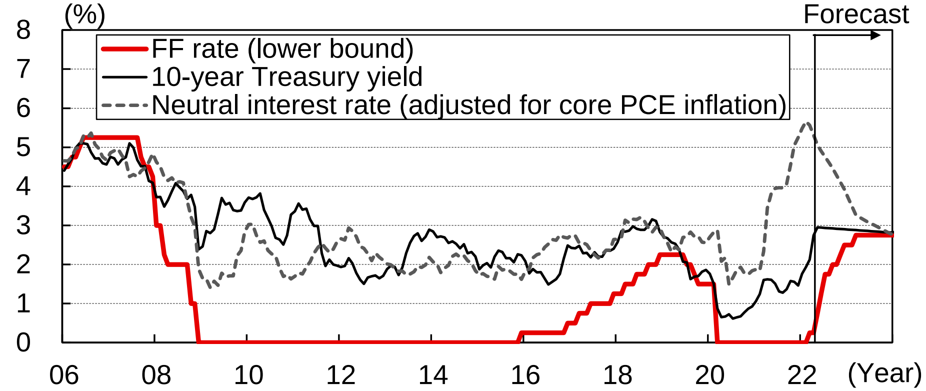
- In May, the Federal Open Market Committee (FOMC) decided unanimously to raise the policy rate by 0.5% points and to start the balance sheet reduction in June (maximum pace of reduction will be increased in September to USD 60 billion a month for Treasury securities and USD 35 billion a month for MBS). Chair Powell indicated at the post-FOMC press conference that the Fed will raise interest rates by 0.5% points at two more coming meetings. In a later interview, he also indicated that the policy rate would be raised to a neutral (neither accommodative nor restrictive) level by the end of 2022.
- FOMC members' median projection for the neutral interest rate is around 2.4%, reflecting views that the policy rate could be raised to high 2% levels without causing a recession. Therefore, the Fed will likely raise the policy rate by an additional 1.75% points by the year end and by another 0.25% points in March 2023. The Fed will then cease its rate hikes after the policy rate reaches the 2.75-3.00% range. As a basic trend, long-term interest rates will likely remain below the 3% mark until the end of 2023. Tighter financial conditions and declines in corporate earnings could weigh down business investment given the relatively high level of companies' interest-bearing debt as a percentage of nominal GDP.

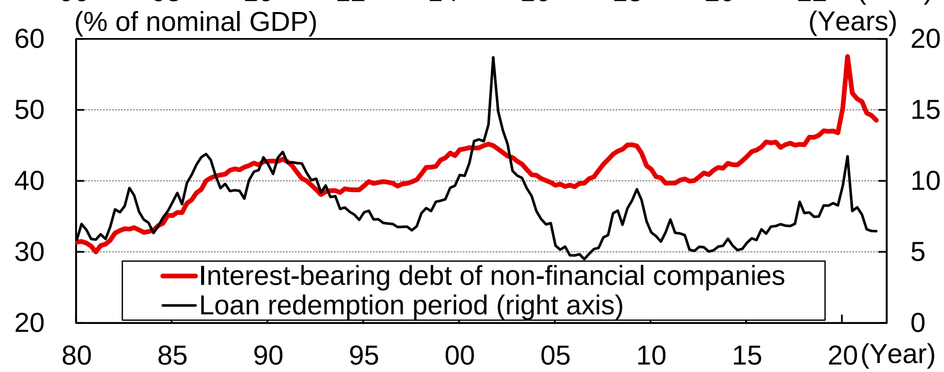
Federal Funds Rate Target, 10 Year-3 Month Treasury Yield Spread



Note: Shaded areas denote periods of recession.
Source: NBER, Bloomberg, MUFG Bank Economic Research Office

Interest Rates, Business Debt and Loan Redemption Period



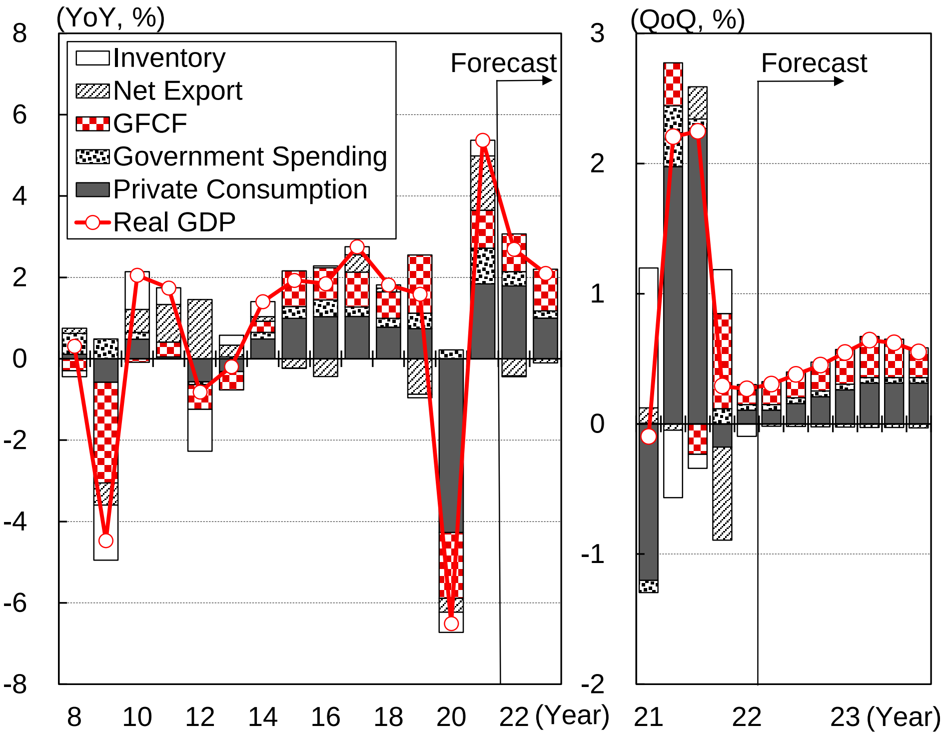


Note: Neutral interest rate is calculated using Fed New York estimate of natural interest rate, which is tentatively assumed to remain flat after April-June 2020.
Source: Fed New York, Department of Labor, Department of Commerce, FRB, Bloomberg, MUFG Bank Economic Research Office

2-3. European Economies: Euro Area - Overview

- The euro area's GDP growth rate for the January-March quarter was 0.3% QoQ (second estimate), marking the fourth consecutive quarter of growth. Inflationary pressure rose further, particularly energy prices, owing to the Russian invasion of Ukraine and a deterioration of household and business sentiment has put downward pressure on the economy. Despite this, the economy has maintained positive growth thanks to continued momentum of the recovery as countries make progress with both their COVID-19 policies and economic activities.
- Growth of the euro area's economy has still to return to its pre-COVID-19 trend. Looking ahead, the return of spending on services will drive consumption as countries ease their restrictions on movement. In addition, the ratio of manufacturers who cite production constraints as a reason for capital expenditure will rise sharply, which means there is scope for an expansion of capital expenditure. However, increased inflation resulting from the conflict between Russia and Ukraine and a worsening of business sentiment will be sources of downward pressure on the economy for the time being. While the pace of growth was sluggish in the first half of the year, annual real GDP is predicted to grow 2.7% YoY in 2022 and then 2.1% YoY in 2023 – both higher than the potential growth rate. Recently, the EU has decided to stop 90% of Russian oil imports this year, which means there will be downside risks to the economy from energy prices and pressure from the balance of energy supply and demand.

Euro Area Real GDP Forecast



Note: The breakdown for the January-March result has not yet been published. The chart above shows an estimate by the Economic Research Office

Source: Eurostat, MUFG Bank Economic Research Office

Real GDP Forecast of Major European Countries

	2021 Q1 (QoQ, %)	2021 Q2	2021 Q3	2021 Q4	2022 Q1	2021 Actual (YoY, %)	2022 Forecast	2023 Forecast
Euro area	-0.1	2.2	2.2	0.3	0.3	5.4	2.7	2.1
Germany	-1.7	2.2	1.7	-0.3	0.2	2.9	1.9	2.6
France	0.2	1.0	3.2	0.4	-0.2	7.0	3.0	1.8
Italy	0.3	2.7	2.5	0.7	-0.2	6.6	2.4	1.6
UK	-1.2	5.6	0.9	1.3	0.8	7.4	3.7	1.2

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

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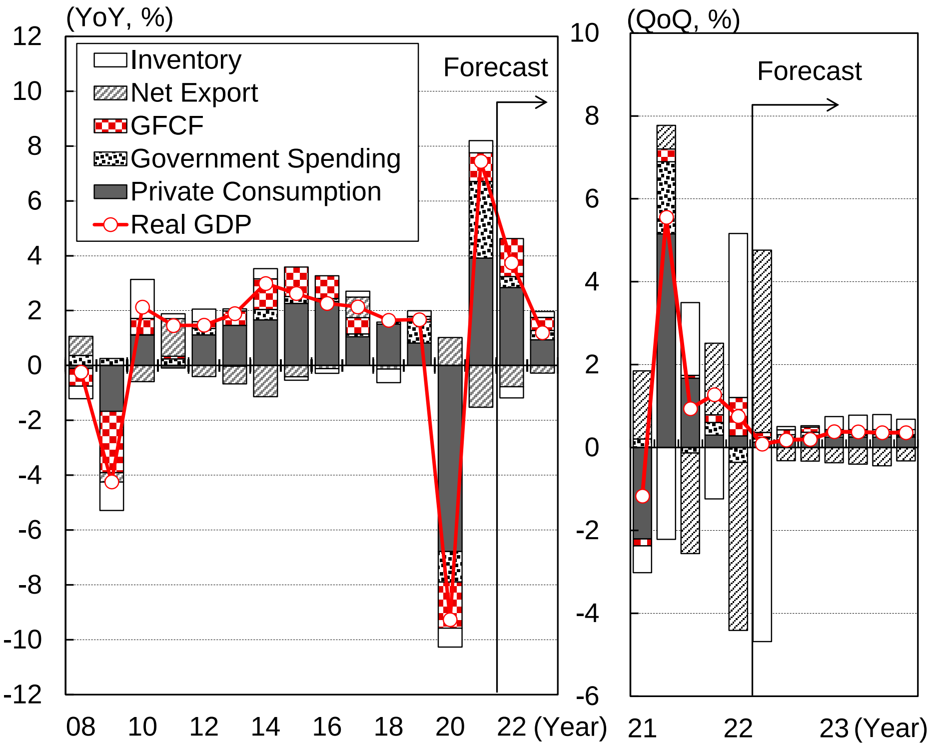
2-3. European Economies: UK

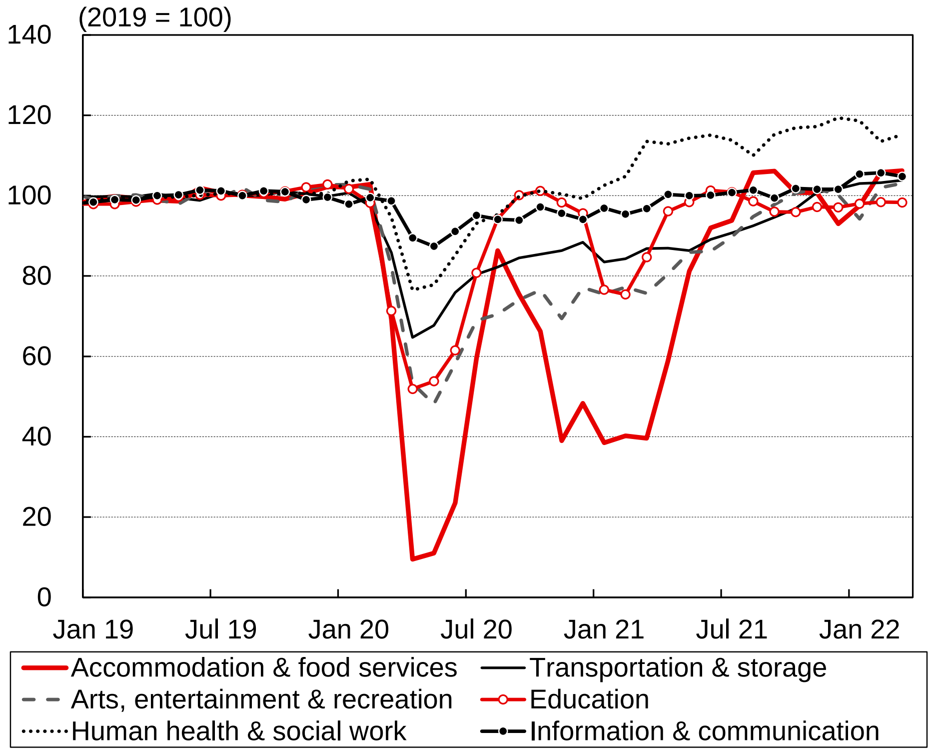
- The UK's real GDP growth rate (preliminary estimate) was 0.8% QoQ for the January-March quarter: the fourth consecutive quarter of positive growth. A further rise in commodity prices caused by the Russia-Ukraine conflict put downward pressure on the economy; however, the UK made progress with economic activities and COVID-19 policy, e.g. the legal restrictions on movement that were re-imposed at the end of last year in response to the spread of the Omicron variant were lifted in February. As a result, economic growth remained firm.
- Since last year, the UK has been easing restrictions on movement ahead of other major advanced economies, which means service sector sales have already recovered to their pre-COVID-19 levels and the scope for further recovery of spending on services is thought to be limited. In addition, high levels of inflation are expected to act as a weight on consumption. Although the recovery of private consumption will continue thanks to a strong labour market and savings accumulated during the pandemic, the pace of recovery will probably be gradual.
- The UK's real GDP growth rate for 2022 is forecast to be high at 3.7% YoY owing to the carry-over effect, but it will drop to 1.2% YoY in 2023 due to the impact of high levels of inflation and interest rate hikes.

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

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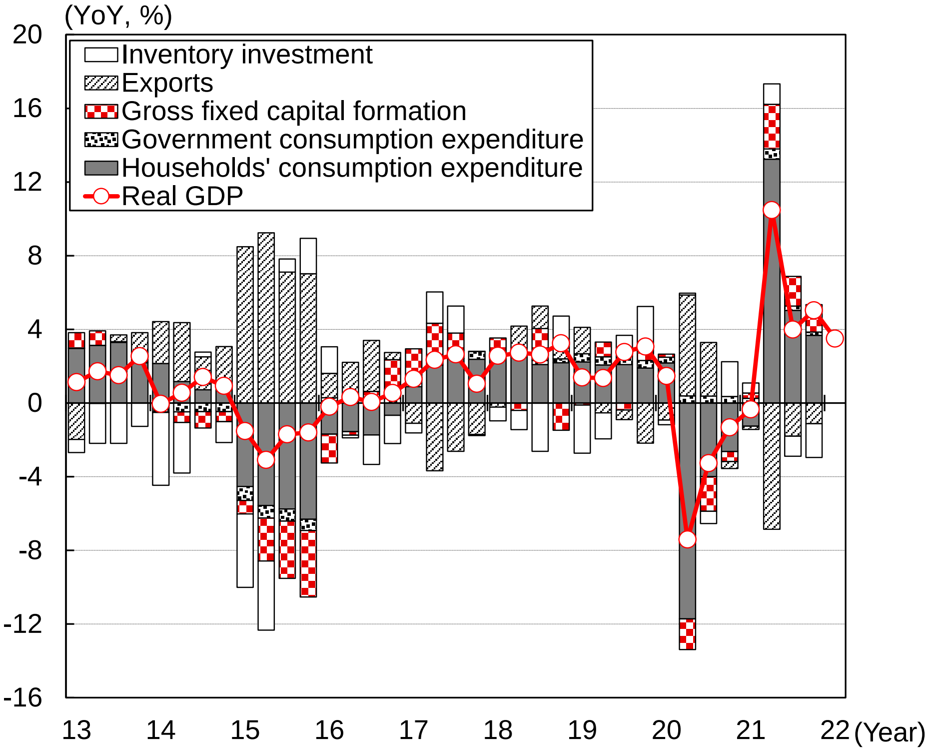
2-3. European Economies: Russia

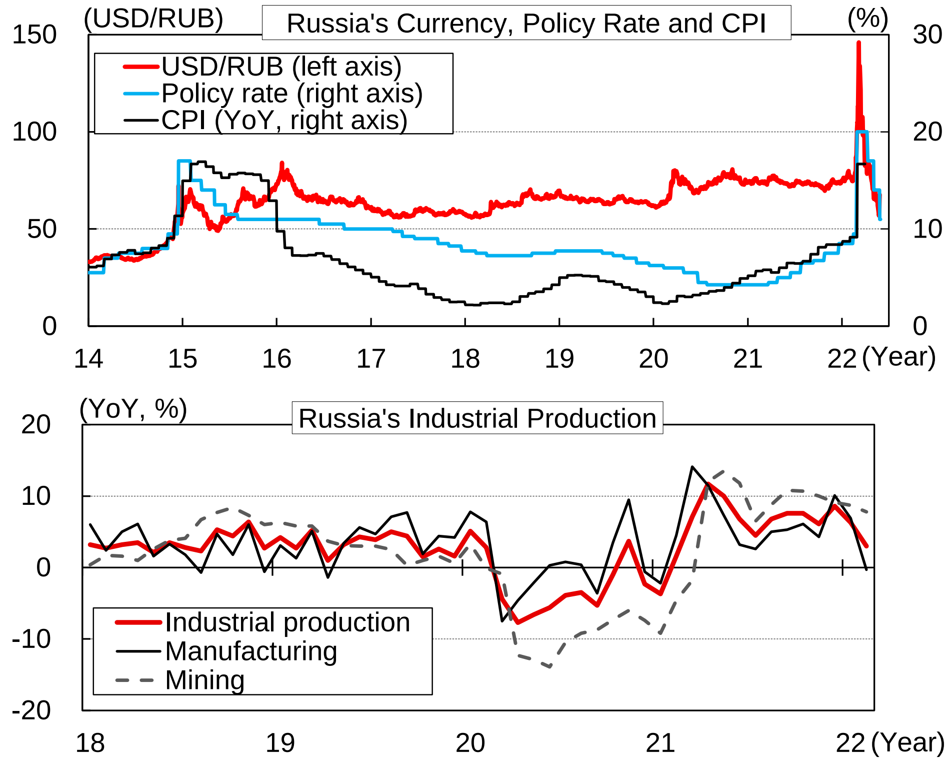
- Russia's real GDP growth was 3.5% YoY for the January-March quarter. Although growth remained positive thanks to a rebound from last year's slump, this was a deceleration from 5.0% YoY recorded in the October-December quarter last year. Inflation has sky-rocketed owing to large-scale economic sanctions imposed against Russia by Western countries, and year-on-year growth of manufacturing production has entered negative territory. Given that it is unlikely that economic sanctions will be lifted or eased soon, the strong downward pressure on the Russian economy is forecast to continue.
- The Russian government is taking measures to support its currency by necessitating RUB buying in the market (e.g. purchases of Russian gas must be paid in RUB) and foreign businesses that continue to operate in Russia need to make cash transfers to Russia in order to be able to secure financing locally. As a result, the RUB has recovered and the Central Bank of Russia has started to lower the policy rate. Nevertheless, it is likely the support for the economy from policies will be limited in the future. The real GDP growth rate is forecast to fall to -10.0% YoY in 2022 and will remain in negative territory in 2023 (-1.0% YoY).

Real GDP Outlook for Russia



Source: Federal State Statistics Service (Rosstat), MUFG Bank Economic Research Office

Russia's Currency, Policy Rate, CPI and Industrial Production

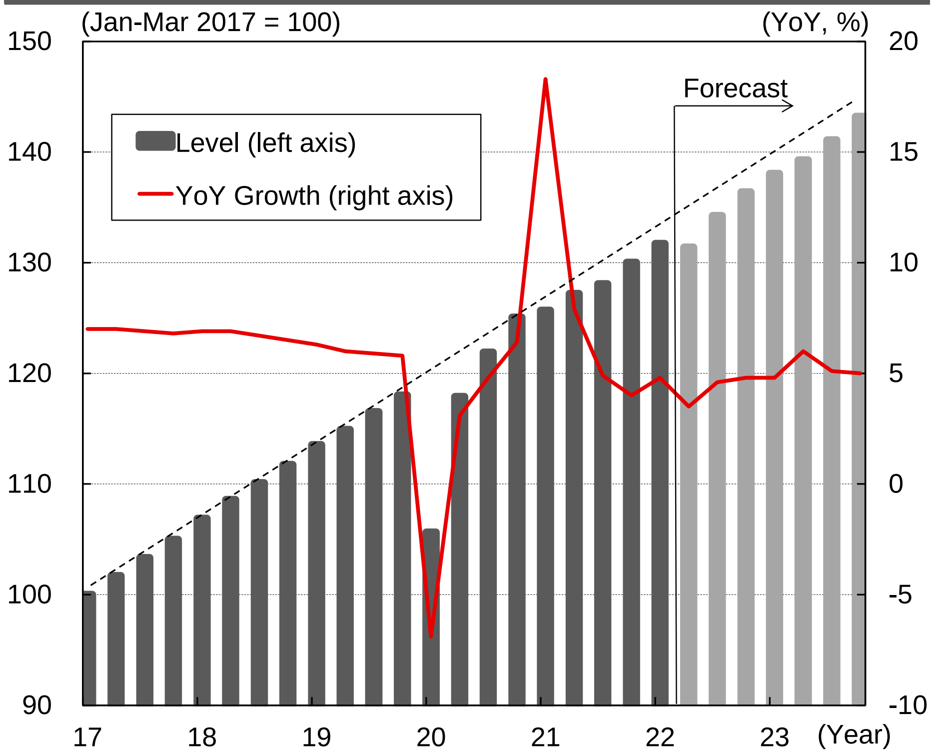


Source: Federal State Statistics Service (Rosstat), Central Bank of Russia, Macrobond, MUFG Bank Economic Research Office

2-4. Asian and the Australian Economies: China

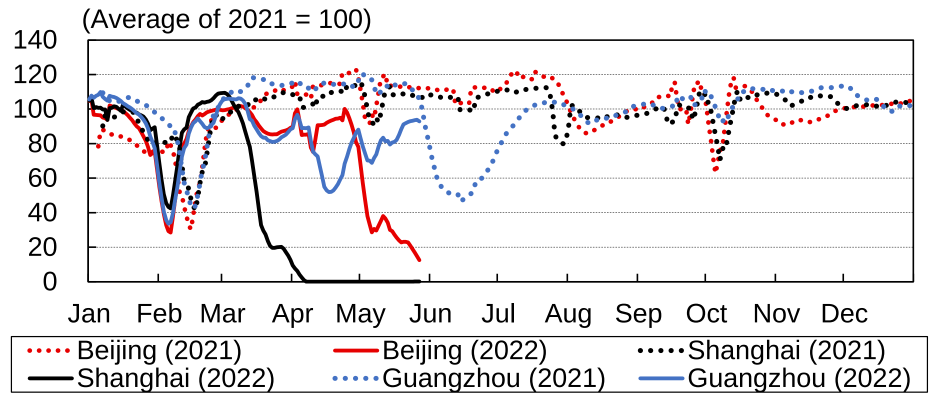
- China's real GDP growth rate for the January-March quarter was 4.8% YoY (1.3% QoQ). Since March, the spread of COVID-19 in major cities has acted as a weight on private consumption and production, due mainly to the "zero COVID-19" policy. However, the economy was able to maintain a certain level of growth thanks to the comparatively strong results in January and February (that being said, China will need to achieve average growth of 5.7% YoY in the three remaining quarters of this year if it is to achieve its target of 5.5% YoY in 2022).
- The disruption caused by a continued rise in cases that started in March may dissipate in the future given that the number of COVID-19 cases has fallen and the lockdown in Shanghai was lifted (start of June). In the April-June quarter, the economy is forecast to decelerate significantly. However, provided that the lull in the spread of COVID-19 continues in the latter half of the year, the economy is expected to record firm growth of 4.5% YoY for 2022 with support from the central government's fiscal and monetary policies (that being said, 4.5% YoY is considerably lower than the government's target of 5.5% YoY). After that, economic growth is predicted to accelerate again by 5.2% YoY in 2023, assuming that the impacts of the pandemic are controlled.
- Nevertheless, given that the government is sticking with its "zero COVID-19" policy, it will be important to keep in mind the remaining downside risks going forwards. For example, the government may be unable to elicit enough impact with its policies due to continued restrictions on people and goods and there is a possibility of downward pressure on the economy from sporadic lockdowns.

China's Real GDP



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

No. of Subway Passengers and Restrictions on Movement



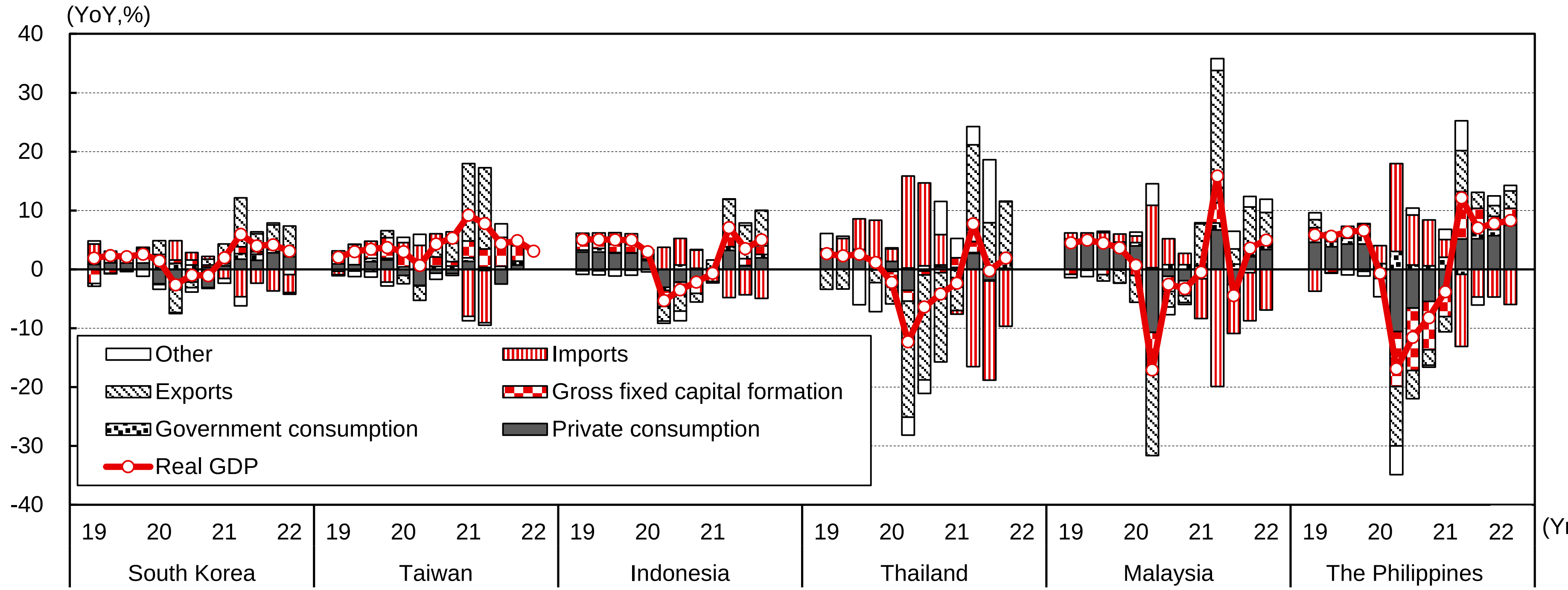
Shanghai	• Lockdown for over 2 months from 28 March with bridges and tunnels closed • Restrictions on movement eased by district as cases fell and business activities re-started in stages from mid-May • City authorities lifted the lockdown on 1 June
Beijing	• Restrictions on movement tightened from latter half of April in response to a rise in cases • Although the whole city was not locked down, residents' activities were very restricted • With the fall in cases, restrictions on movement were eased, e.g. some commercial spaces and public transport systems were re-opened

Source: Various statistics and news reports, MUFG Bank Economic Research Office

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

- The real GDP growth rates for NIEs and ASEAN (five major countries) was 2.5% YoY and 4.9% YoY respectively for the January-March quarter. Economic growth in NIEs slowed as they were quicker to recover from the pandemic than other economies in Asia, yet they remain firm on the whole. In ASEAN, private consumption had been slow to recover up until now, but it picked up thanks to an easing of restrictions on movement which, along with strong growth of exports, led to acceleration of economic growth.
- Looking ahead, exports will probably stay strong for the most part in both NIEs and ASEAN, particularly those related to machinery and commodities, on the back of the continued economic recovery worldwide. In addition, NIEs and ASEAN economies are forecast to maintain a trend of recovery owing to improved private consumption as face-to-face services resume.
- The two risk factors in the future are increased inflation and negative impacts from China's "zero COVID-19 policy". In terms of the first factor, there is a possibility inflation may rise higher than expected due to sources of uncertainty, such as the situation in Ukraine. Turning to the second factor, disruption caused by the current rise in COVID-19 cases is forecast to subside in mid-2022, but there is still a risk of large-scale city lockdowns due to the "zero COVID-19" policy. If that becomes a reality, there are concerns that supply chain disruption will put downward pressure on Asian economies' strong exports.

Real GDP of Major Asian Economies

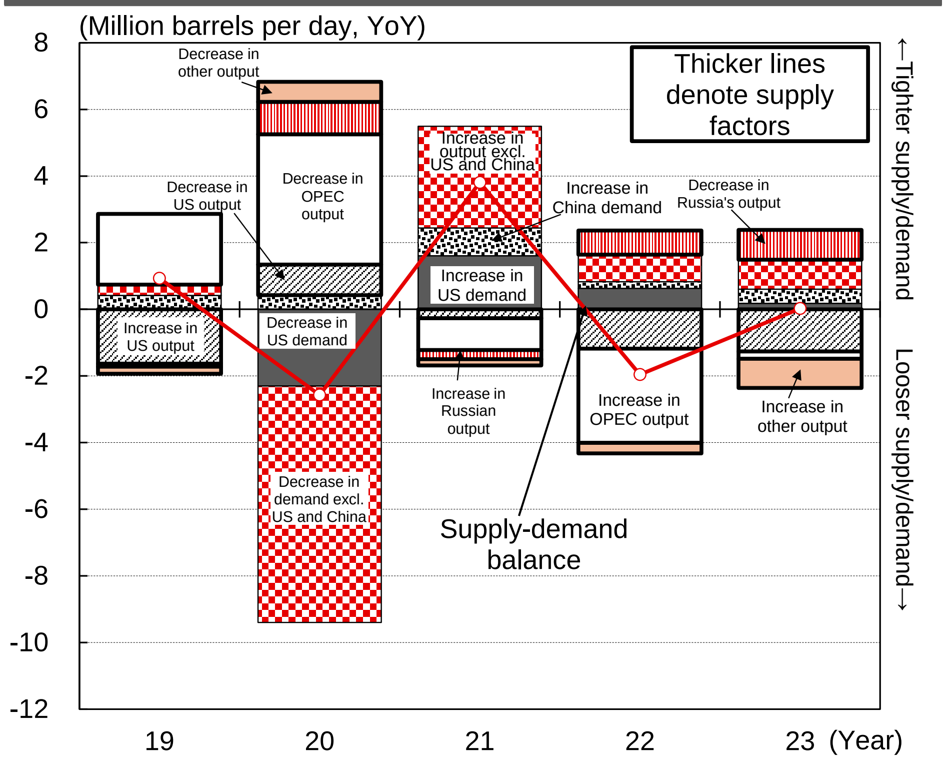


Source: National statistics of each country, MUFG Bank Economic Research Office

2-5. Oil Prices

- Despite the continued rise in demand for oil as the global economy recovers, the balance of oil supply and demand is expected to remain tipped towards excess supply this year owing to a rise in oil production by OPEC+ and a moderate increase US shale oil production. Next year, the US, Norway and other countries are expected to increase their oil output as demand continues to rise gradually. On the other hand, it seems OPEC will slow the pace of their oil production increases. As a result, the balance of oil supply and demand is not expected to change significantly from this year (an excess of supply will continue).
- OPEC+ have decided to increase their oil production at a faster pace, but it may be difficult to make up for the decrease in supply from Russia brought about by the EU ban on Russian oil, and the market will remain sensitive to concerns about supply. Therefore, oil prices are forecast to remain at a high level, yet they will gradually decline due to continued excess supply.
- Risk factors going forwards include a considerable strengthening of sanctions against Russia by the West (e.g. a complete ban on exports of Russia-produced energy including natural gas); a revived nuclear deal with Iran, which is in its final stages; changes in the COVID-19 situation; and countries' decarbonisation policies.

Forecast of the Supply-Demand Balance



Source: EIA, MUFG Bank Economic Research Office

Forecast of Oil Prices

	WTI Price (USD/barrel)	YoY (%)	Brent Price (USD/barrel)	YoY (%)
Q1 2021	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%
Q1 2022	95.0	63.4%	97.9	59.7%
Q2	110.0	66.4%	113.0	63.6%
Q3	110.0	56.0%	113.0	54.3%
Q4	105.0	36.2%	108.0	35.6%
Q1 2023	101.0	6.3%	104.0	6.2%
Q2	100.0	-9.1%	103.0	-8.8%
Q3	99.0	-10.0%	102.0	-9.7%
Q4	98.0	-6.7%	101.0	-6.5%
2021	68.0	72.8%	70.8	63.9%
2022	105.0	54.5%	108.0	52.5%
2023	99.5	-5.2%	102.5	-5.1%

Forecast

Source: EIA, MUFG Bank Economic Research Office

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Appendix: Global Economic Outlook

Forecast for the Global Economy

		World (weighted average of nominal GDP)				Japan (FY)	Americas					Europe					
			Advanced economies	Emerging economies	Other		US	Latin America (6 countries)				Euro area (19 countries)				UK	Russia
									Brazil	Mexico	Argentina		Germany	France	Italy		
Nominal GDP	USD trillions	146.1	56.1	59.0	31.1	5.6	23.0	9.0	3.4	2.7	1.1	17.5	4.9	3.4	2.7	3.4	4.5
(2021)	Japan = 100	2,602	998	1,050	554	100	410	161	61	47	19	312	86	60	49	61	80
Real GDP	2021 Actual	6.1	5.3	7.1	5.8	2.1	5.7	6.7	4.6	4.8	10.4	5.4	2.9	7.0	6.6	7.4	4.7
YoY, %	2022 Forecast	3.2	2.5	3.5	3.8	2.4	2.3	2.0	0.8	1.8	4.0	2.7	1.9	3.0	2.4	3.7	-10.0
	2023 Forecast	3.5	2.2	4.4	4.0	1.5	2.2	1.2	1.0	1.0	0.5	2.1	2.6	1.8	1.6	1.2	-1.0
CPI	2021 Actual	4.6	3.2	3.7	8.8	0.1	4.7	10.9	8.3	5.7	48.1	2.6	3.2	2.1	2.0	2.6	6.7
(YoY, %)	2022 Forecast	7.5	5.8	6.2	12.9	2.0	6.3	13.2	9.0	7.5	56.0	6.7	6.9	4.9	6.6	8.1	20.0
	2023 Forecast	4.7	2.3	4.6	9.4	1.1	2.1	10.8	5.0	5.5	60.0	2.5	3.0	2.5	2.3	4.0	8.0

		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	50.5	27.2	10.2	5.1	2.5	1.5	0.5	0.6	8.0	3.6	1.3	1.0	1.0	1.1	1.5
(2021)	Japan = 100	900	485	182	91	45	26	9	11	143	64	24	17	18	20	26
Real GDP	2021 Actual	7.1	8.1	8.7	5.9	4.0	6.4	6.3	7.6	3.6	3.7	1.5	3.1	5.7	2.6	4.7
(YoY, %)	2022 Forecast	4.9	4.5	7.5	2.9	2.8	3.3	1.0	3.9	5.4	5.2	3.3	6.3	6.6	7.0	4.0
	2023 Forecast	5.3	5.2	6.8	2.9	2.6	2.8	3.9	3.2	5.4	5.2	4.4	5.2	6.2	6.8	2.8
CPI	2021 Actual	2.1	0.9	5.5	2.2	2.5	2.0	1.6	2.3	2.0	1.6	1.2	2.5	4.4	1.8	2.9
(YoY, %)	2022 Forecast	3.5	2.3	6.3	3.8	4.4	2.8	2.3	4.8	3.8	3.5	4.7	2.7	4.7	3.5	5.0
	2023 Forecast	2.9	2.3	5.0	2.0	1.7	1.8	2.1	2.5	3.0	3.3	1.8	2.4	3.4	3.6	3.0

Note: 1. "Nominal GDP" is based on purchasing power parity
2. For "CPI", Japan is composite figure excluding fresh food. CPI refers to the HCIP for the euro area and member countries (HICP)
3. Figures for Japan and India based on their financial years (April to following March) except Japan's nominal GDP
4. "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
5. "Advanced economies" is a total of Japan, NIEs (4 countries and regions), Australia, US, Eurozone (19 countries) and the UK. "Emerging economies" is a total of China, India, ASEAN (5 countries), Central and South America (6 countries) and Russia
6. "Central and South America (6 countries)" is a total of Brazil, Mexico, Argentina, Colombia, Chile and Peru
7. "Other" uses the IMF forecast for April as a reference

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 January-March 2022)

Forecast →

	2021				2022				2023				2024	FY2021	FY2022	FY2023
	Q1	2Q	3Q	4Q	Q1	2Q	3Q	4Q	Q1	Q2	Q3	Q4	Q1			
1. The Real Economy (QoQ annualized change)																
Real GDP	-1.3	2.1	-2.9	3.8	-1.0	4.9	3.4	2.6	2.0	1.2	1.1	1.0	0.7	2.1	2.4	1.5
Private Consumption	-3.0	2.7	-4.0	10.2	-0.1	6.1	3.6	2.0	1.2	1.2	1.2	1.0	0.8	2.6	3.5	1.4
Housing Investment	3.9	4.1	-6.6	-4.5	-4.3	0.0	0.4	2.4	1.2	0.8	0.0	0.0	0.0	- 1.6	- 1.4	0.7
Private Business Fixed Investment	0.2	8.9	-9.1	1.5	1.9	4.5	4.5	4.1	4.1	2.6	2.2	2.0	1.8	1.3	2.8	2.9
Business Inventory (Contribution)	0.2	0.3	0.6	-0.7	0.9	0.0	0.0	0.2	0.2	0.2	0.2	0.1	0.0	0.0	0.1	0.2
Government Expenditures	-2.1	-0.6	0.2	-4.4	-0.9	0.7	1.9	1.6	1.2	-0.6	-0.4	0.0	0.1	- 0.4	0.2	0.3
Public Investment	-0.3	-14.0	-14.5	-17.4	-13.6	2.7	3.2	3.2	3.2	-3.2	-2.0	0.0	0.4	- 9.3	- 3.5	- 0.1
Net Exports (Contribution)	0.6	-0.9	0.4	0.4	-1.7	0.7	0.2	0.2	0.1	0.0	-0.1	-0.0	-0.1	0.8	0.0	0.0
Exports	10.9	11.6	-1.1	3.6	4.7	1.6	4.9	4.1	3.2	2.8	2.4	2.2	2.0	12.5	3.3	3.0
Imports	7.3	18.4	-3.3	1.4	14.1	-2.0	4.1	3.2	2.8	2.8	2.8	2.4	2.4	7.2	3.3	2.9
Nominal GDP	-2.4	1.3	-3.9	1.2	0.4	3.8	5.1	5.4	5.5	-1.8	2.4	3.5	4.6	1.1	2.9	2.7
GDP Deflator (YoY)	-0.1	-1.1	-1.2	-1.3	-0.4	-0.7	-0.1	1.1	1.7	1.1	1.1	1.0	1.2	-1.0	0.5	1.1
Industrial Production Index (QoQ)	2.6	0.2	-1.9	0.2	0.8	1.9	1.3	0.8	0.6	0.6	0.5	0.3	0.3	5.8	4.0	2.4
Domestic Corporate Goods Price Index (YoY)	-0.3	4.6	6.1	8.8	8.5	6.0	4.4	3.0	0.8	1.0	1.3	1.4	1.5	7.3	4.7	1.3
Consumer Price Index (excl. fresh food, YoY)	-0.5	-0.6	0.0	0.4	0.6	2.2	2.2	2.0	1.7	1.4	1.1	0.9	1.0	0.1	2.0	1.1
2. Balance of Payments																
Trade Balance (billion yen)	1,527	1,005	-230	-715	-1,722	-1,445	-1,042	-1,591	-1,476	-1,616	-1,259	-1,882	-1,801	-1,651	-5,554	-6,559
Current Balance (billion yen)	5,119	4,483	2,976	2,840	2,257	1,818	2,199	1,937	2,186	2,246	2,738	2,783	2,890	12,644	8,140	10,658
3. Financial																
Uncollateralized overnight call rate	- 0.0	-0.0	-0.0	- 0.0	- 0.0	- 0.0	- 0.0	- 0.0	- 0.0	- 0.0	- 0.0	- 0.0	- 0.0	- 0.0	- 0.0	-0.1
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	0.1	0.1	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2
Exchange Rate (USD/JPY)	106	109	110	114	116	128	128	127	125	124	123	122	121	112	127	123

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

Appendix: Outlook for the US Economy and Financial Markets

Outlook for the US Economy

	2021				2022	Forecast →			2023				2021	2022 Forecast →	2023
	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 (annualised QoQ, %)	6.3	6.7	2.3	6.9	- 1.5	1.4	2.8	2.2	2.3	2.1	2.0	2.0	5.7	2.3	2.2
Personal consumption expenditures	11.4	12.0	2.0	2.5	3.1	1.1	3.0	2.6	2.4	2.3	2.0	2.0	7.9	2.9	2.3
Residential fixed investment	13.3	- 11.7	- 7.7	2.1	0.4	- 4.8	- 4.8	- 3.6	1.2	1.2	1.2	1.2	9.2	- 3.0	- 0.9
Non-residential fixed investment	12.9	9.2	1.6	2.9	9.2	1.8	3.7	3.8	4.1	4.0	3.8	3.8	7.4	4.6	3.8
Inventory investment (contribution)	- 2.6	- 1.3	2.2	5.3	- 1.1	- 0.5	- 0.2	- 0.2	- 0.2	- 0.2	0.0	0.0	0.3	0.9	- 0.2
Government consumption	4.2	- 2.0	0.9	- 2.6	- 2.7	1.6	2.0	2.2	2.1	1.9	1.8	1.8	0.5	- 0.5	2.0
Net exports (contribution)	- 1.6	- 0.2	- 1.3	- 0.2	- 3.2	0.8	0.2	- 0.2	- 0.3	- 0.3	- 0.3	- 0.3	- 1.4	- 1.2	- 0.1
Exports	- 2.9	7.6	- 5.3	22.4	- 5.4	7.4	5.0	3.9	3.2	2.7	1.8	1.8	4.5	4.4	3.4
Imports	9.3	7.1	4.7	17.9	18.3	0.5	2.0	3.4	3.3	3.1	2.6	2.6	14.0	9.2	2.8
Domestic private end-user demand	11.8	10.4	1.5	2.6	4.0	1.0	2.8	2.5	2.7	2.5	2.3	2.3	7.8	3.0	2.4
Nominal GDP (annualised QoQ, %)	10.9	13.2	8.5	14.5	6.4	4.6	5.2	4.5	4.5	4.5	4.2	4.1	10.1	7.9	4.6
Industrial production (annualised QoQ, %)	4.0	6.5	3.4	3.8	7.6	0.1	1.3	1.0	1.1	0.9	0.6	0.6	5.5	3.6	0.9
Unemployment rate (%)	6.2	5.9	5.1	4.2	3.8	3.6	3.6	3.5	3.5	3.5	3.5	3.5	5.4	3.6	3.5
PPI (YoY, %)	2.9	7.0	8.5	9.6	10.7	8.9	6.9	5.6	3.0	2.4	2.4	2.4	7.0	8.0	2.6
CPI (YoY, %)	1.9	4.8	5.3	6.7	8.0	7.0	5.9	4.4	2.6	2.0	1.9	1.9	4.7	6.3	2.1
2. Balance of payments															
Trade balance (USD billion)	- 267	- 268	- 273	- 283	- 345	- 356	- 351	- 348	- 350	- 352	- 354	- 356	- 109	- 140	- 141
Current account balance (USD billion)	- 188	- 196	- 220	- 218	- 274	- 279	- 273	- 269	- 271	- 273	- 275	- 278	- 82	- 110	- 110
3. Financial Indicators															
FF target rate (%)	0.00-0.25	0.00-0.25	0.00-0.25	0.00-0.25	0.25-0.50	1.25-1.50	2.00-2.25	2.50-2.75	2.75-3.00	2.75-3.00	2.75-3.00	2.75-3.00	0.00-0.25	2.50-2.75	2.75-3.00
Euro Dollar (3M) (%)	0.2	0.2	0.1	0.2	0.5	1.4	2.1	2.6	2.9	3.0	3.0	3.0	0.2	1.7	2.9
10-year Treasury yield (%)	1.6	1.6	1.3	1.5	1.9	2.9	2.9	2.9	2.9	2.9	2.8	2.8	1.5	2.7	2.9

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)		
	2021 (Actual)	2022 (Forecast)	2023 (Forecast)	2021 (Actual)	2022 (Forecast)	2023 (Forecast)	2021 (Actual)	2022 (Forecast)	2023 (Forecast)
Euro area	5.4	2.7	2.1	2.6	6.7	2.5	3403	2130	2340
Germany	2.9	1.9	2.6	3.2	6.9	3.0	3191	2070	2270
France	7.0	3.0	1.8	2.1	4.9	2.5	- 230	- 454	- 411
Italy	6.6	2.4	1.6	2.0	6.6	2.3	516	240	318
UK	7.4	3.7	1.2	2.6	8.1	4.0	- 826	- 731	- 709
Russia	4.7	- 10.0	-1.0	6.7	20.0	8.0	1220	169	132

2. Forecast by Demand Component (YoY, %)

	Euro area			UK		
	2021 (Actual)	2022 (Forecast)	2023 (Forecast)	2021 (Actual)	2022 (Forecast)	2023 (Forecast)
Nominal GDP	7.3	4.8	3.5	7.5	6.5	2.5
Real GDP	5.4	2.7	2.1	7.4	3.7	1.2
Contribution by domestic demand	4.0	3.1	2.2	9.0	4.5	1.5
Contribution by foreign demand	1.4	- 0.4	- 0.1	- 1.5	- 0.8	- 0.3
Private consumption	3.5	3.5	1.9	6.2	4.5	1.5
Government consumption	3.9	1.6	0.8	14.3	1.9	1.7
Gross fixed capital formation	4.2	4.2	4.6	5.9	8.0	2.6
Inventory investment (contribution)	0.2	- 0.1	0.0	0.4	- 0.4	0.2
Exports	11.0	6.5	3.1	- 1.3	4.7	4.4
Imports	8.7	7.9	3.5	3.8	7.2	5.0

Note: 1. “Euro area" 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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