

Outlook for the Japanese and Overseas Economies - Summary

ECONOMIC RESEARCH OFFICE

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Contents

1-1. Overview.....	3
1-2. Overview: Supply Constraints.....	4
2-1. The Japanese Economy.....	5
2-2. The US Economy.....	6
2-3. European Economies	7
2-4. Asian and the Australian Economies	9
2-5. Financial Market Trends.....	12
2-6. Oil Prices.....	14
Appendix.....	15

1-1. Overview

- 2022 will mark the third year of the COVID-19 pandemic. With the recent emergence of new variants, uncertainty will likely linger. However, with advances in vaccines and drugs, the situation is expected to move in the direction of improvement and the global economy will likely continue its recovery.
- Developments over the past two years, such as the increase in remote working, supply-chain issues, climate change initiatives and a rise in US-China tension appear to have caused major structural changes as manifested in the ongoing supply-side constraints, for instance. Still, in many countries, relatively high rates of economic growth will continue with support of governments' economic relief measures, as is typically the case during a recovery period. The global real GDP is expected to grow 5.7% YoY in 2021 and 4.5% in 2022.

Assumptions

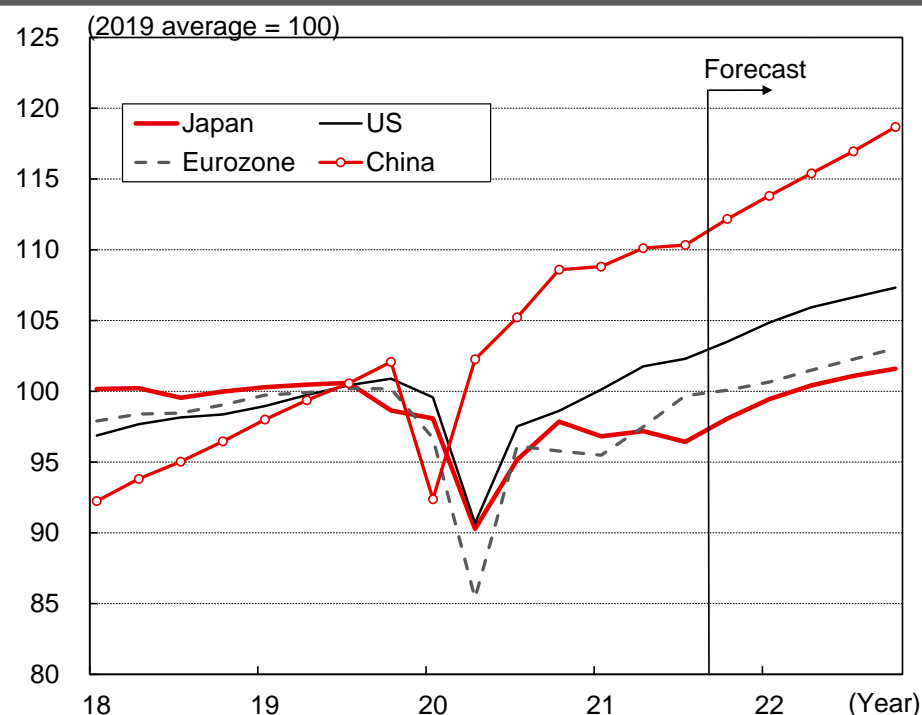
- Pandemic:** The pandemic will not be over and people will need to live with COVID-19. More waves of infection are expected, but in countries with high vaccine coverage, critical cases and deaths will be curbed. On the recently identified Omicron variant, only limited information is available about the virulence and transmissibility, yet no major economic impact from the variant is factored in the forecast.
- Effects of vaccines and drugs:** Although the situation can change with virus mutations, vaccines have proven effective in preventing infection, symptoms and serious illness. Since the protection offered by vaccines is known to wane over time, booster shots will be administered mainly in advanced economies. In addition, newly developed oral drugs will curb critical cases and deaths. However, herd immunity will not be achieved, and COVID-19 will continue to spur greater caution than influenza does.

Outlook for Major Economies

Real GDP growth rate	2020	MUFG outlook (Dec)		MUFG outlook (Aug)	
		2021	2022	2021	2022
World	- 3.1	5.7	4.5	5.7	4.6
US	- 3.4	5.5	4.2	6.0	4.1
Eurozone	- 6.5	5.0	3.7	4.6	4.3
UK	- 9.8	6.9	4.5	6.7	5.2
Japan (fiscal year)	- 4.4	2.8	3.6	3.1	2.7
Japan (calendar year)	- 4.6	1.8	3.6	2.1	2.9
Asia (11 countries)	- 0.8	6.9	5.5	7.2	5.6
China	2.3	7.9	5.3	8.3	5.5
ASEAN (5 countries)	- 3.4	3.2	5.5	3.8	5.6
Indonesia	- 2.1	3.7	5.2	3.7	5.2
Thailand	- 6.1	1.0	3.8	1.5	4.3
Malaysia	- 5.6	3.5	6.3	4.3	5.8
The Philippines	- 9.6	4.9	6.5	4.9	6.8
Vietnam	2.9	2.4	7.0	5.7	7.3

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

Real GDP Outlook for Select Major Economies

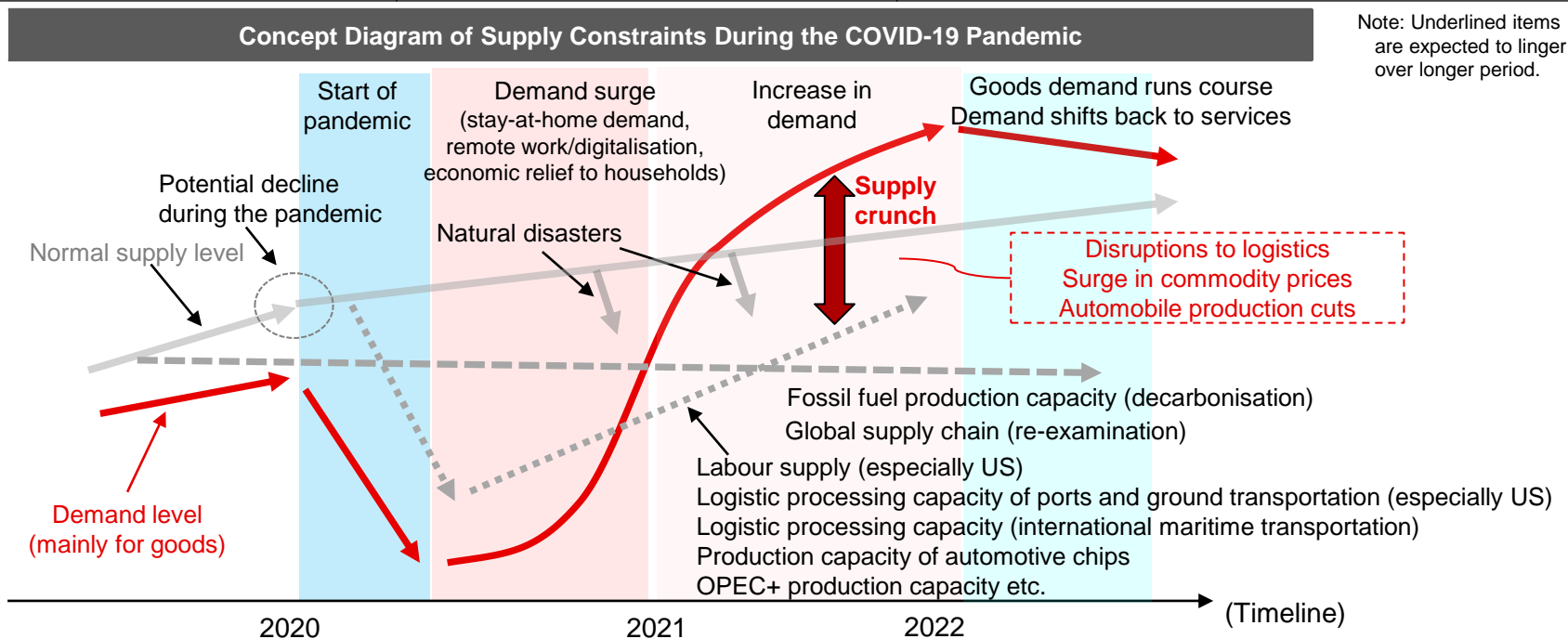


Source: Statistics from each country, MUFG Bank Economic Research Office

1-2. Overview: Supply Constraints

- The COVID-19 pandemic has resulted in supply constraints (supply-demand imbalance) affecting many facets of global and local economic activity, starting in the second half of 2020. The resulting inflationary pressure and negative impact on production and corporate earnings have spurred concerns (the table below shows the compounded factors contributing to shortages in capital, labour and other inter-related areas).
- Some of the factors are clear-cut and transitory, but the global trend characterised by the pursuit of free trade and efficient global supply chains (seen before the pandemic or prior to the 2010s) is unlikely to return, and it may take some time to establish a new world order. In 2022, supply issues will generally move in the direction of improvement as regulations and market mechanisms adapt to the situation. Still, structural supply constraints, incurred by decarbonisation and geopolitical changes, will likely remain over the long term.

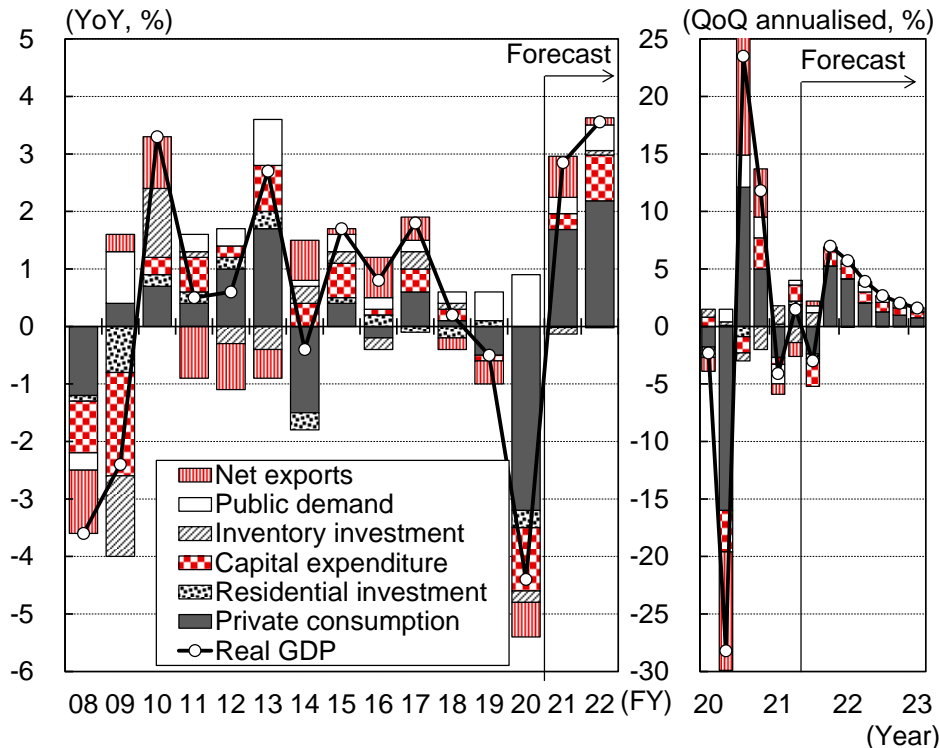
	Labour	Capital	Others
Systemic, Regulatory	<ul style="list-style-type: none"> ✓ Extension of unemployment benefits (expired in the US) ✓ Workplace vaccine requirements ✓ Mobility restrictions 	<ul style="list-style-type: none"> ✓ <u>Curbing fossil fuel investments in response to climate change</u> ✓ Restrictions on real estate investment (China) 	<ul style="list-style-type: none"> ✓ <u>Environmental regulations (i.e. energy related)</u> ✓ <u>Economic security issues amid increased US-China tension</u> ✓ <u>Trade restrictions due to trade friction</u>
Other	<ul style="list-style-type: none"> ✓ Pandemic (childcare, caution about infection, retirement of older workers, lockdown etc.) ⇒ suspended operations, disruption of logistics 	<ul style="list-style-type: none"> ✓ <u>Adjustments to boost the resilience of supply chains</u> ✓ <u>Supply constraints on semiconductors</u> (excessive ordering is one contributing factor) 	<ul style="list-style-type: none"> ✓ Coordinated production cuts by oil-producing countries ✓ Excess demand for goods in pandemic (i.e. digital demand) ✓ Excess demand for homes due to pandemic and monetary easing ✓ Supply disruptions due to natural disasters and accidents



2-1. Japanese Economy: Overview

- The real GDP growth rate for the July-September quarter (first preliminary estimate) was -3.0% QoQ annualised: the first negative growth in two quarters. This was due to a decrease in domestic and foreign demand as a result of the fifth wave of COVID-19 infections and a supply shortage of some goods. Private consumption was affected by the fourth state of emergency and a huge slump in the number of automobile sales due to the constrained supply of semiconductors and other components. Capital expenditure also appears to have been affected by supply restraints, particularly investment in transport equipment.
- From the October-December quarter onwards, the economy will probably start to follow a general trend of recovery on the premise that “vaccines retain their efficiency, social and economic policies to live with COVID-19 are successful and become well-established, the number of COVID-19 cases and pressure on medical resources is reduced to a certain extent and that various restrictions are eased in stages”. Large-scale economic policies from the Kishida administration are also forecast to give support to the economy.
- The economy will pick up and grow 2.8% YoY in FY2021, after which it will continue to recover at a gradual pace into FY2022 and record strong growth (3.6% YoY) due to rebounds from weak growth. Throughout FY2022, real GDP is forecast to be at the level it was at 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)

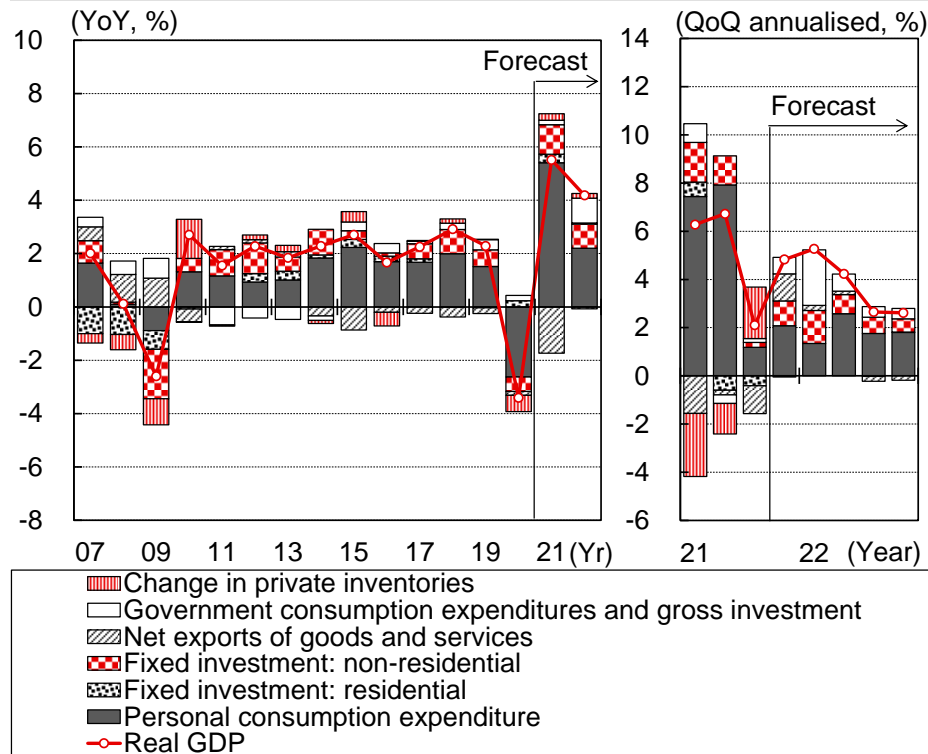
	FY2019 (Actual)	FY2020 (Actual)	FY2021 (Outlook)	FY2022 (Outlook)
Real GDP	-0.5	-4.4	2.8	3.6
Private consumption	-1.0	-5.8	3.1	4.1
Residential investment	2.5	-7.2	-0.6	-0.6
Capital expenditure	-0.6	-6.9	1.7	5.0
Inventory investment (contribution)	0.0	-0.2	-0.1	0.1
Public demand	1.9	3.5	1.0	1.7
Net exports (contribution)	-0.4	-0.6	0.7	0.1
Exports	-2.2	-10.4	11.9	3.0
Imports	0.2	-6.8	7.5	2.3
Nominal GDP	0.3	-3.9	2.4	3.9
GDP Deflator	0.9	0.6	-0.4	0.3

Source: Cabinet Office, MUFG Bank Economic Research Office

2-2. US Economy: Overview

- The US real GDP growth rate for the July-September quarter (second estimate) was 2.1% QoQ annualised, decelerating from 6.7% QoQ annualised the previous quarter. The boost to consumption of goods from the cash benefits received in March and April had worn off, and there was a rise in COVID-19 cases resulting in a large deceleration in the growth of personal consumption to 1.7% QoQ annualised from 12.0% QoQ annualised the previous quarter. Non-residential investment also slowed to 1.5% QoQ annualised from 9.2% QoQ annualised the previous quarter, and growth of investment in transport equipment turned negative due to a shortage of supplies.
- Various supply constraints, such as a shortage of workers (an aftereffect of the pandemic), the resulting disruption to logistics, a shortage of semiconductors, the rise in fossil fuel prices or a combination of a number of these factors, have pushed inflation rates higher, which in turn has put downward pressure on non-residential investment and personal consumption. Nevertheless, the pace of economic recovery is expected to start accelerating due to an increased consumption of services as people start to adapt to life with COVID-19 and pent-up demand for business investment. The real GDP growth rate is forecast to hit 5.5% YoY in 2021.
- On 15th November, the government passed the Infrastructure Investment and Jobs Act, which includes USD 550 billions' worth of new investment over the next five years. This is predicted to boost growth from next year, leading to continued strong growth and a real GDP growth rate of 4.2% YoY in 2022.

Real GDP and Breakdown of Demand Components



Source: Department of Commerce, MUFG Bank Economic Research Office

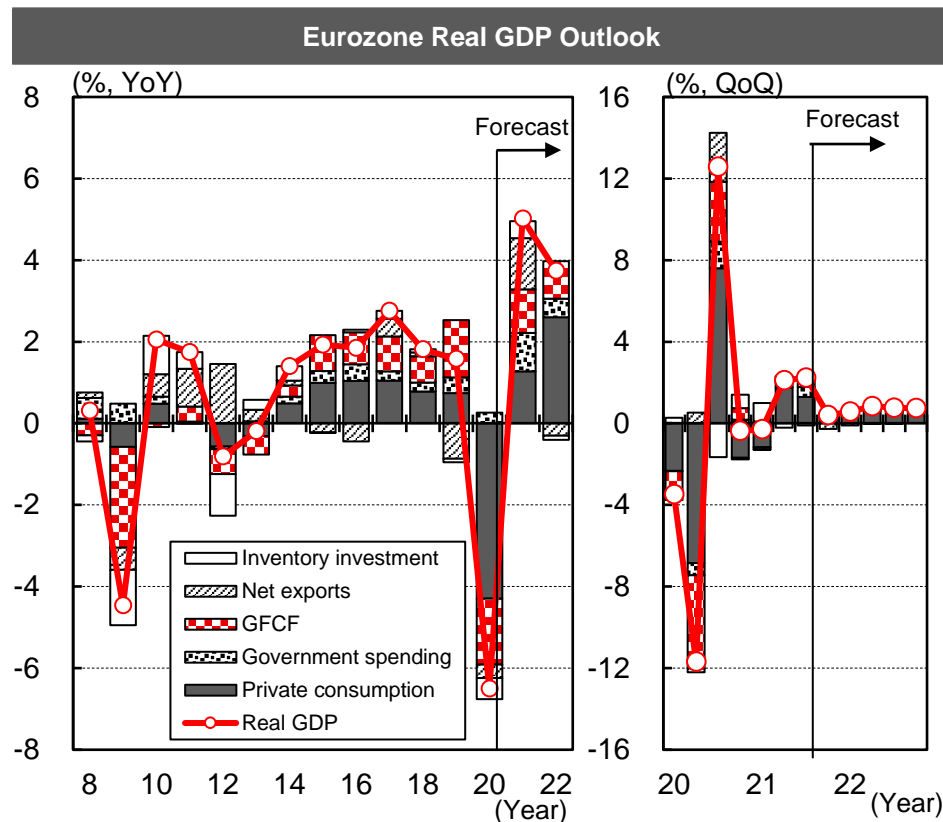
GDP Outlook by Calendar Year

	2020 (actual)	2021 (outlook)	2022 (outlook)
Real GDP	-3.4	5.5	4.2
Personal consumption	-3.8	7.9	3.1
Residential investment	6.8	9.0	-1.9
Non-residential investment	-5.3	7.6	6.1
Change in inventories (contribution)	-0.6	0.2	0.2
Government consumption expenditure	2.5	0.9	5.4
Net exports (contribution)	-0.1	-1.7	0.0
Exports	-13.6	4.4	5.8
Imports	-8.9	13.2	3.5
Nominal GDP	-2.2	9.7	7.5

Source: Department of Commerce, MUFG Bank Economic Research Office

2-3. European Economies: Eurozone

- Eurozone real GDP rose by 2.2% QoQ in Q3 (revised), a second consecutive quarter of expansion. This was driven by the increase in vaccination coverage and subsequent relaxation of restrictions, especially for the vaccinated.
- While there has been a recent increase in infections and uncertainty around the Omicron variant, major Eurozone countries will aim to maintain economic activity by using vaccinations as a main measure against COVID. We expect fiscal spending in each country to continue at a relatively high level, and the ECB to maintain its accommodative monetary policy. We forecast the economic recovery will continue but the pace of growth will slow.
- Real GDP is predicted to grow by 5.0% YoY in 2021, and 3.7% in 2022, as the recovery continues after the steep fall in activity in 2020. The level of real GDP is likely to return to pre-pandemic levels by early 2022.



Note: Q3 expenditure breakdown data is a MUFG Bank estimate.

Source: Eurostat, MUFG Bank Economic Research Office

7

Real GDP Outlook of Major European Countries

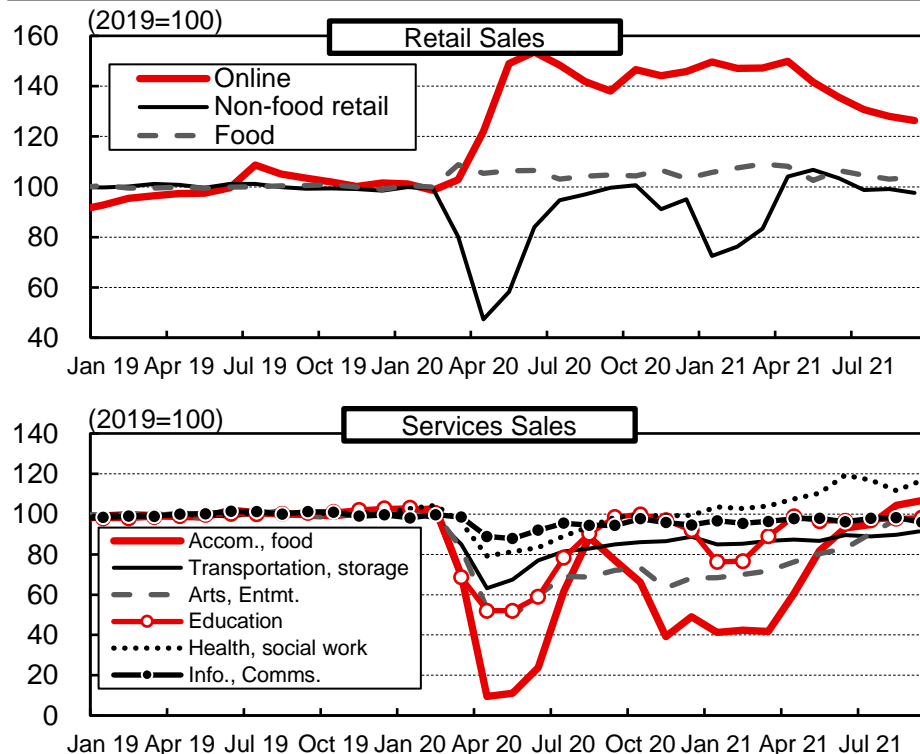
	(% QoQ)					(% YoY)		
	2020 Q3	2020 Q4	2021 Q1	2021 Q2	2021 Q3	2020 Actual	2021 Forecast	2022 Forecast
Eurozone	12.4	-0.6	-0.3	2.0	2.2	-6.5	5.0	3.7
Germany	9.0	0.7	-1.9	1.9	1.8	-4.8	2.6	4.0
France	18.5	-1.1	0.1	1.3	3.0	-8.0	6.4	3.4
Italy	15.6	-1.7	0.3	2.7	2.6	-8.9	6.1	3.9
UK	16.9	1.3	-1.6	4.8	1.3	-9.8	6.9	4.5

Source: Eurostat, ONS, MUFG Bank Economic Research Office

2-3. European Economies: UK Economy – Overview

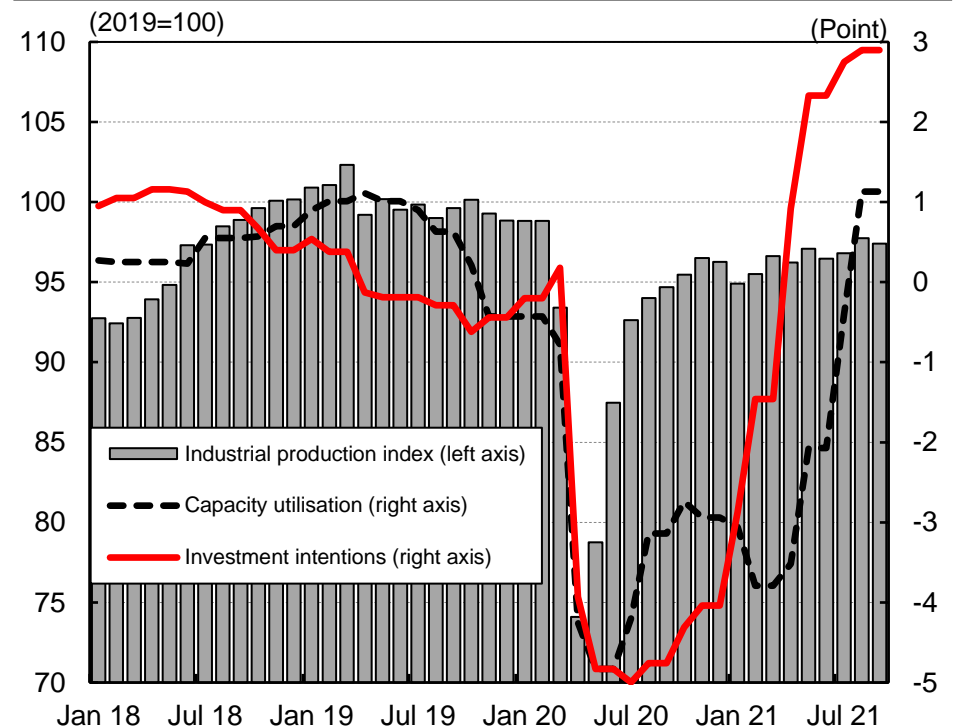
- UK retail sales currently appear to have slowed after reaching a peak, but sales in services have recovered since the relaxation of restrictions in March. In particular, food and accommodation, which were strongly affected by COVID, have now recovered to pre-pandemic levels in 2019. While industrial production remains below pre-pandemic levels in 2019, capacity utilisation and capital investment intentions are recovering substantially. This indicates production will be increasing.
- We expect that the economic recovery will continue based on private consumption from the end of restrictions despite concerns over infections. The British government and BoE have indicated their intentions to normalise fiscal and monetary policies, but both are likely to be cautious. We forecast UK real GDP will expand by 6.9% YoY in 2021 and 4.5% YoY in 2022. Real GDP is expected to return to pre-pandemic levels in H1 2022.

UK Retail and Services Sales (By Industry)



Source: ONS, MUFG Bank Economic Research Office

UK Industrial Production and Investment Intentions



Source: ONS, MUFG Bank Economic Research Office

2-4. Asian and the Australian Economies: Overview

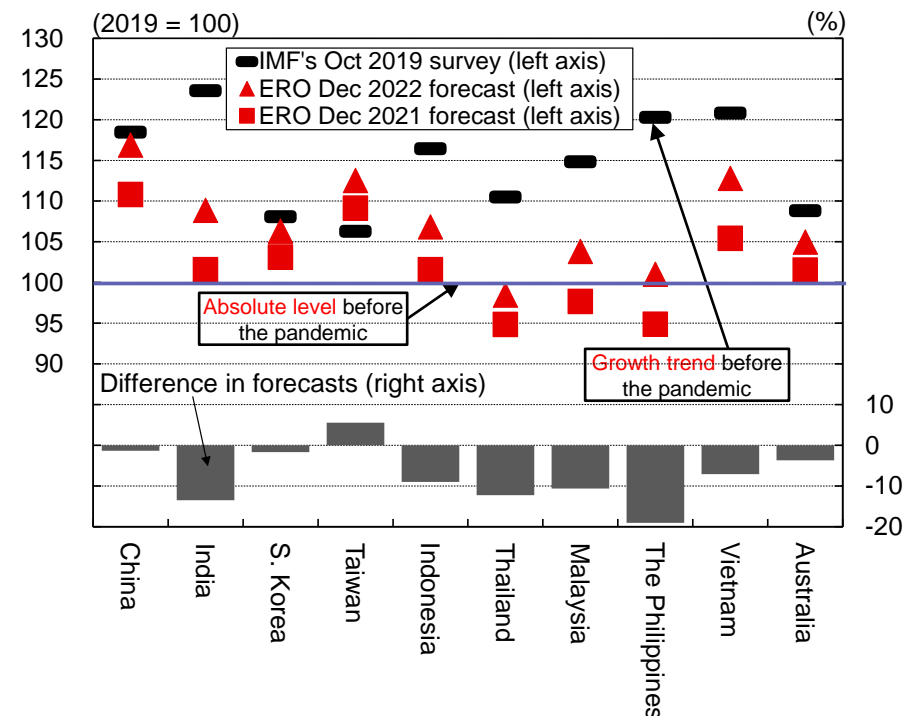
- China has curbed the spread of infection with its continued, strict “zero COVID” policies, but this has also put downward pressure on its economy. Slow growth of the real estate market, natural disasters and supply constraints have also been sources of downward pressure, and there are concerns of tightened control over the economy. Nevertheless, overall growth is expected to remain firm thanks the government introducing policies with economic stability in mind.
- NIEs have been relatively successful in both curbing the spread of infection and maintaining economic activities up until now, and, given the reasonable progress made with vaccinations already and the robust growth of exports due to increased global demand for semiconductors, the stable economic recoveries are forecast to continue. ASEAN economies had to suddenly apply the brakes when they tried to re-start economic activities in around May due to the spread of COVID-19 variants, and economic recoveries are expected to fall behind. That being said, ASEAN economies have finally overcome the worst period of the COVID-19 pandemic and are expected to follow a clear trend of recovery next year.
- The Australian economy's recovery turned negative in the third quarter due to the on-again, off-again introduction of stringent restrictions on movement in many states. However, restrictions are being eased and the economy is forecast to start to recover again at a gradual pace.

Outlook for Asian and the Australian Economies

	Real GDP growth rate (%)			Consumer Price Index (%)		
	2020 (Actual)	2021 (Forecast)	2022 (Forecast)	2020 (Actual)	2021 (Forecast)	2022 (Forecast)
Asia (11 countries/regions)	-0.8	6.9	5.5	2.9	2.2	2.7
China	2.3	7.9	5.3	2.5	1.0	2.2
India (FY basis)	-7.3	9.5	7.2	6.2	5.5	4.8
NIEs	-0.8	5.0	3.2	0.2	2.0	1.6
South Korea	-0.9	4.0	3.1	0.5	2.2	1.7
Taiwan	3.1	5.9	3.1	-0.2	1.7	1.4
Hong Kong	-6.1	6.3	3.0	0.3	1.7	2.0
Singapore	-5.4	6.3	4.0	-0.2	1.8	1.5
ASEAN 5	-3.4	3.2	5.5	1.4	2.2	2.6
Indonesia	-2.1	3.7	5.2	2.0	1.8	2.9
Thailand	-6.1	1.0	3.8	-0.8	1.1	1.2
Malaysia	-5.6	3.5	6.3	-1.1	2.5	1.8
The Philippines	-9.6	4.9	6.5	2.6	4.3	3.1
Vietnam	2.9	2.4	7.0	3.1	2.5	3.5
Australia	-2.4	4.0	3.4	0.8	2.5	2.1

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

Change in the Forecasts for Major Asian Economies (Comparison of IMF's Pre-Pandemic and ERO's August Outlooks)



Note: Forecast calculated using the IMF's forecast made in October 2019 and assumptions about the level of real GDP based on the trend of growth since the start of the COVID-19 pandemic

Source: IMF, MUFG Bank Economic Research Office

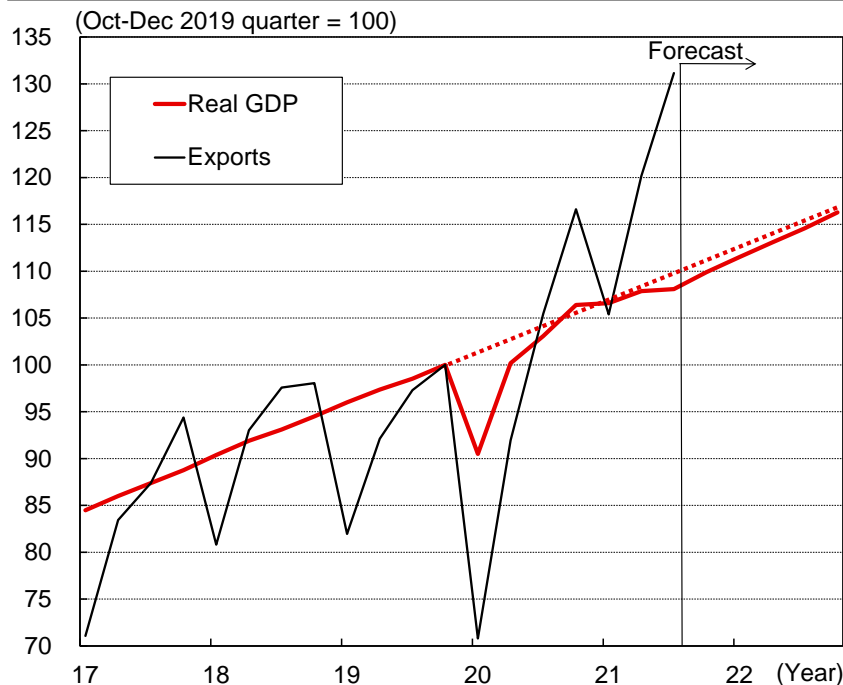
2-4. Asian and the Australian Economies: China – Overview

- China's real GDP growth rate slowed to 4.9% YoY in the July-September quarter and the level was below the average trend established before the pandemic (2017~2019). From around August, there has been some weakness, particularly in face-to-face services, owing to a tightening of the stringent restrictions on movement not seen in other countries in response to sporadic outbreaks of the Delta variant. In addition, a decrease in automobile production and sales due to the semiconductor shortage, along with natural disasters and an electricity shortage have also been sources of downward pressure on the economy.

While there have been some COVID-19 cases in some areas, the number remains low in general, reflecting the stringent restrictions on movement.

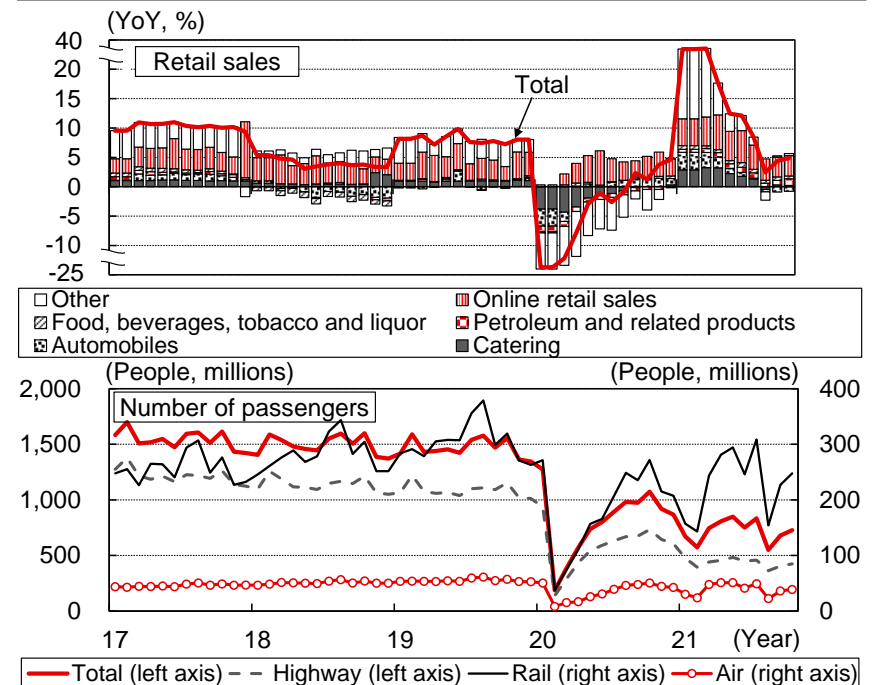
- The continued, strict zero-COVID policies are putting downward pressure on the economy and there are still concerns over the cooling real estate market and tighter economic controls. Although exports are strong and remain at a high level, they are likely to slow in the future as global demand for goods falls and demand shifts to services.
- It appears that supply constraints, such as the impact of the semiconductor shortage on automobile production and the electricity shortage, are starting to be resolved. The government has introduced policies that take into account economic stability, including "investment in new infrastructure". As a result, growth is forecast to remain on a trend of expansion, despite some deceleration. The real GDP growth rate is forecast at 7.9% YoY in 2021 and 5.3% YoY in 2022 – just lower than the growth rate established before the pandemic.

China's 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 Passengers

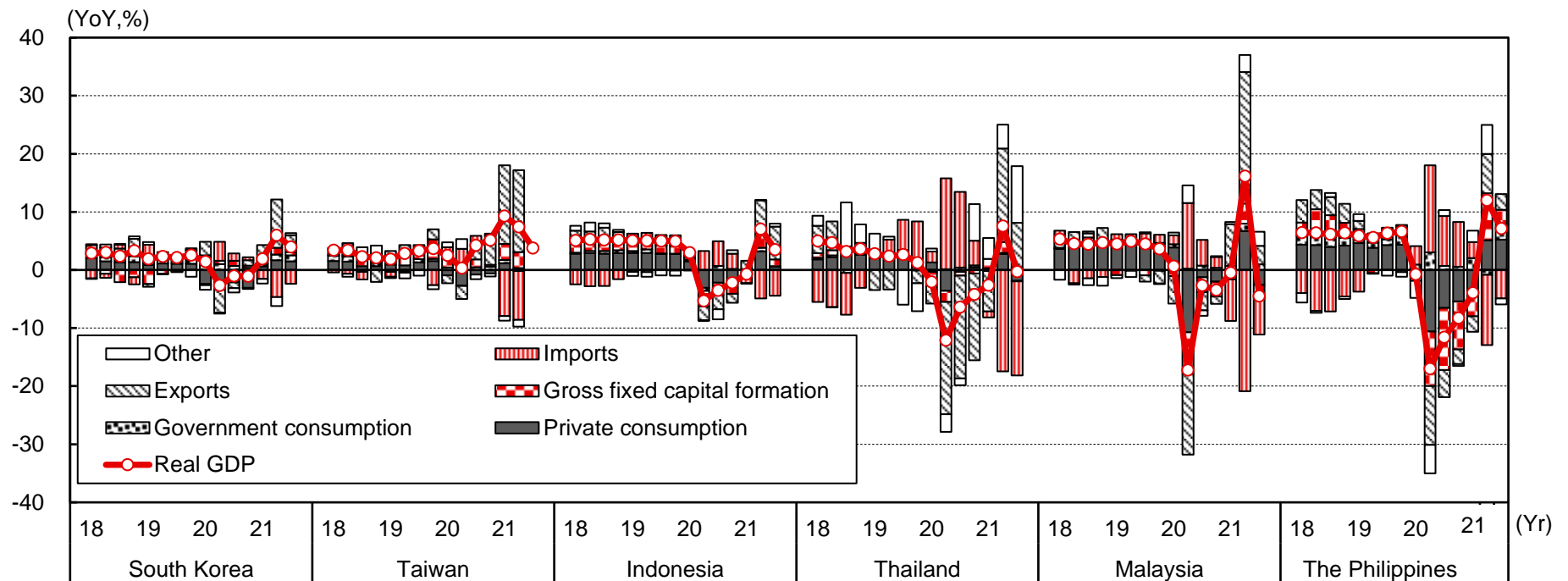


Note: "Retail sales" for January and February are the total of both months divided by two
Source: National Bureau of Statistics of China, MUFG Bank Economic Research Office

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

- The real GDP growth of NIEs and ASEAN (5 countries) for the July-September quarter was 4.4% YoY and 0.9% YoY respectively.
- Although growth in NIEs generally slowed from the April-June quarter as the rebound wore off, it remained firm. Growth continued to be led by exports, particularly exports of semiconductors, for which demand is still strong. However, a point to keep in mind is the number of COVID-19 cases in some regions, which remain at high levels.
- Meanwhile, growth in ASEAN economies slowed considerably and is lower than the level recorded last year owing to the increased severity of the COVID-19 situation caused by the spread of variants. Growth remained positive in the Philippines and Indonesia, where restrictions on economic activities were relatively limited. On the other hand, growth was negative in Malaysia and Vietnam – where stringent restrictions were imposed on corporate activities, such as a shutdown of factories – and also in Thailand, where the halt of tourism continues to weigh on the economy.
- The real GDP growth rates of NIEs and ASEAN economies are forecast to be 5.0% YoY and 3.2% YoY in 2021, and 3.2% YoY and 5.5% YoY in 2022, respectively. NIEs are forecast to record stable recoveries in the future as they strike a balance between controlling the spread of infection with economic activities. In ASEAN economies, where recovery has been slow up until now owing to the effects of COVID-19, the number of cases is forecast to peak and a clear recovery trend will be established in 2022.

Real GDP of Major Asian Economies

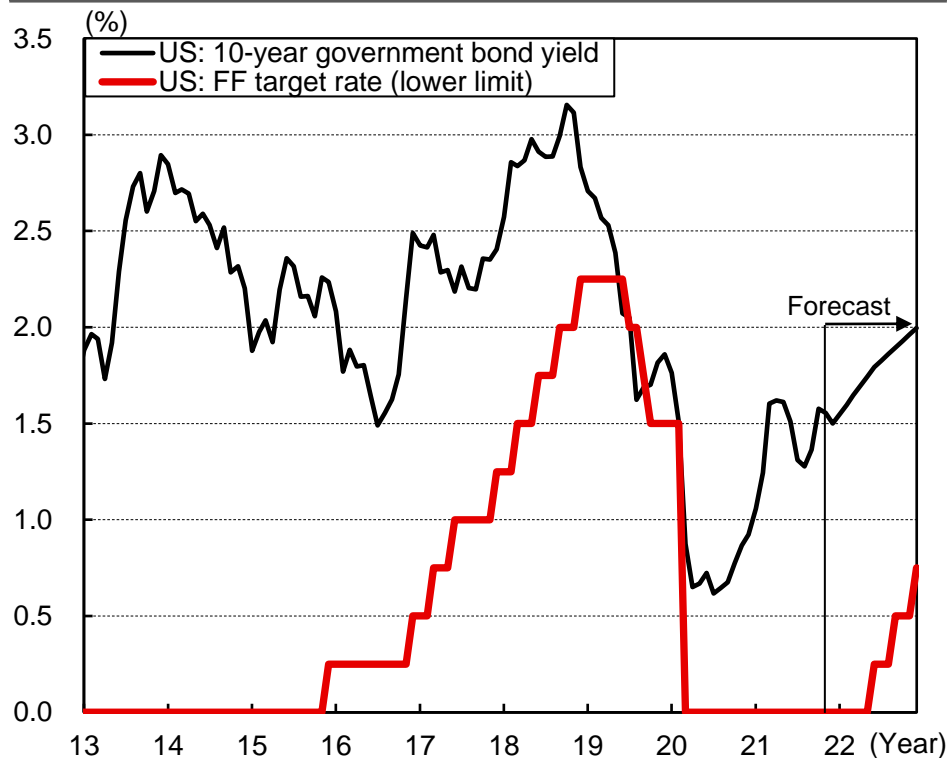


Source: National statistics of each country/region, MUFG Bank Economic Research Office

2-5. Financial Market Trends: Outlook for Interest Rates

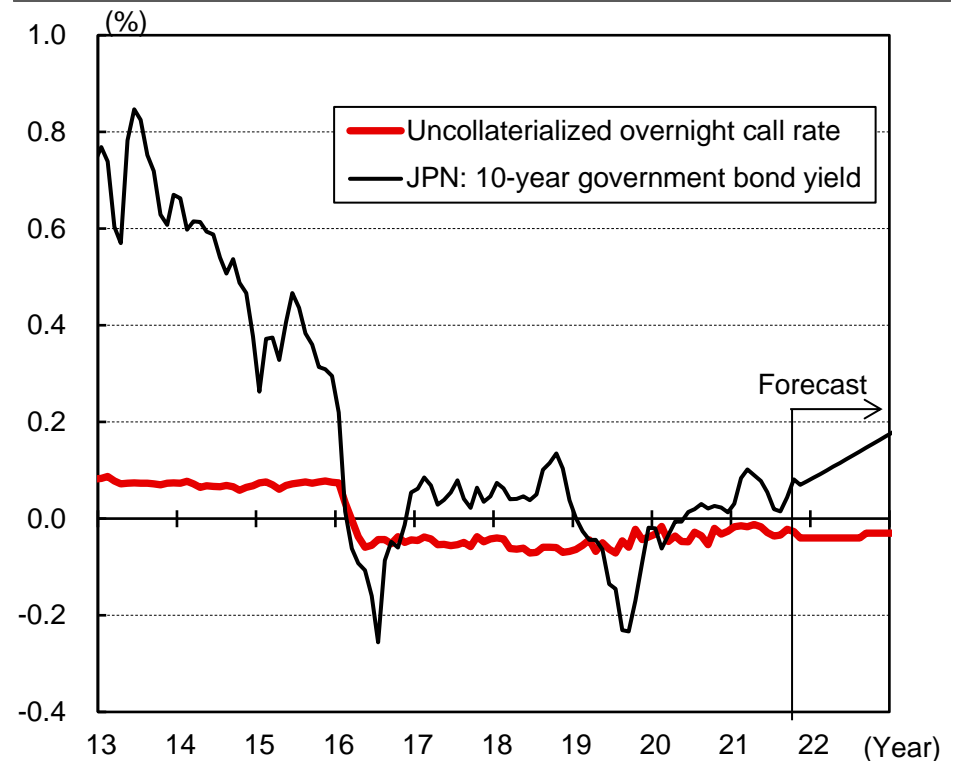
- Japan and the US have strengthened their accommodative monetary policies since the outbreak of the pandemic. The Bank of Japan made adjustments to its monetary policy in March to enhance the feasibility of the policy as it is unlikely the inflation target will be met in the near future.
- In the US, following prolonged supply constraints and high inflation, the expectation for rate hikes has increased and the long-term yields has been on a rising trend. While inflation is likely to slow down, we forecast that the FOMC will judge that maximum employment will be mostly met by June 2022, and will raise interest rates in June, September and December. As some rate hikes are already incorporated, long-term yields rise will remain at a gradual pace.
- Although Japan's long-term interest rates will remain at low levels owing to the Bank of Japan's current monetary policy framework, they are expected to rise gradually, led by US long-term interest rates.

US Policy Rates & Long-term Yields



Source: Bloomberg, MUFG Bank Economic Research Office

Japan Policy Rates & Long-term Yields

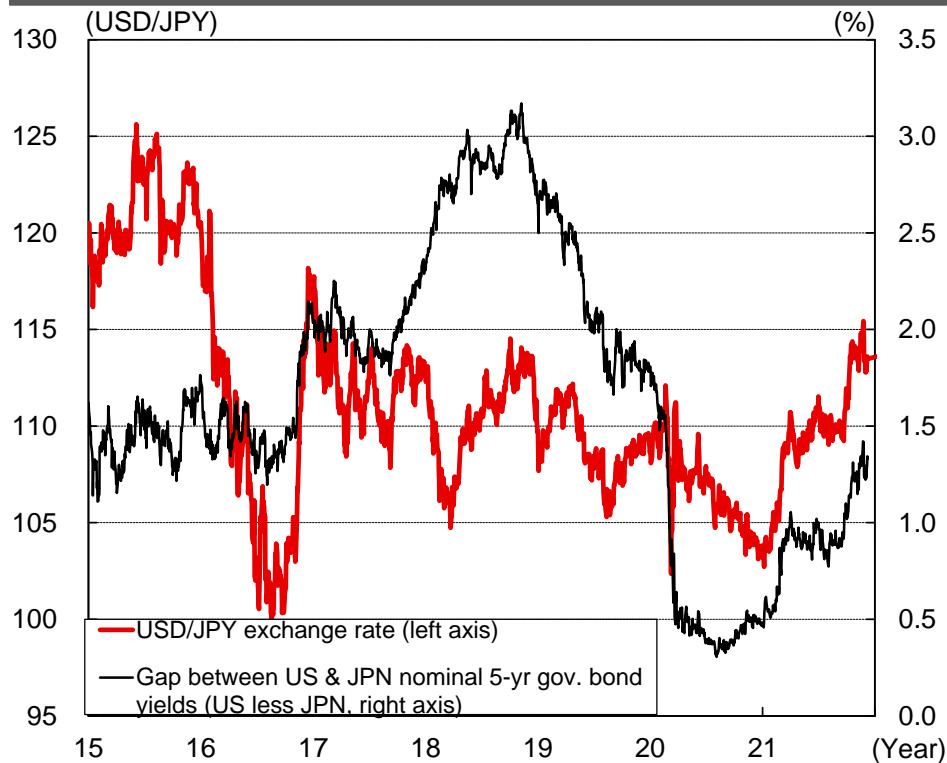


Source: Bloomberg, MUFG Bank Economic Research Office

2-5. Financial Market Trends: Outlook for the USD/JPY Exchange Rate

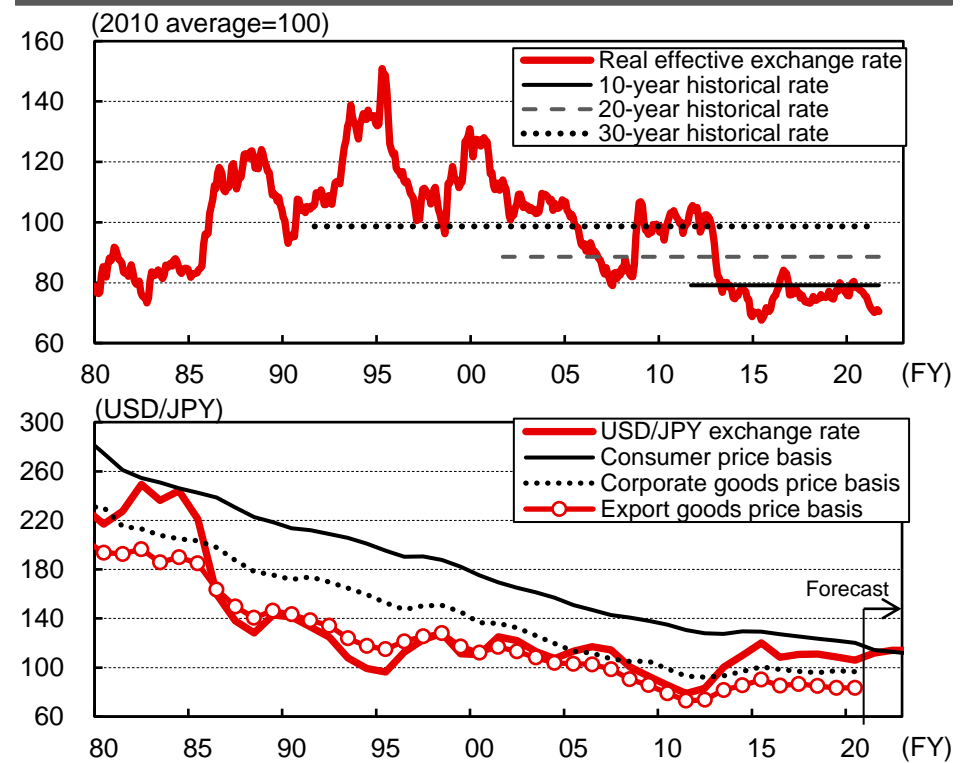
- The USD has appreciated against the JPY to JPY115 along with the expectation of US rate hikes, but is currently depreciated to JPY113 due to concerns over the Omicron variant. While US interest rates are expected to rise gradually based on the continued expectation of US rate hikes, Japan's interest rates are likely to remain at their current levels. Therefore, the JPY is expected to experience depreciatory pressure due to the difference in interest rates with the USD.
- Meanwhile, as the JPY is depreciated at a historical level in terms of its real effective exchange rate, it is expected to strengthen over the medium-to-long term. In terms of purchasing power parity, the appreciatory pressures to JPY are also likely to strengthen gradually as the gap in inflation rates between the US and Japan remains wide.
- In conclusion, although there is a possibility the JPY will start to strengthen due to risk aversion in the short term, it is expected to depreciate gradually into 2022 as both upward and downward pressures continue.

USD-JPY and Spread between US & JPN 5-Yr Nominal Gov. Bond Yields



Source: Bloomberg, MUFG Bank Economic Research Office

USD/JPY by Purchasing Power Parity



Note: "Purchasing power parity" is (Japan's price index divided by US price index) X standard rate.
Source: Bloomberg, BIS, other countries; statistical offices, MUFG Bank Economic Research Office

2-6. Oil Prices: Outlook

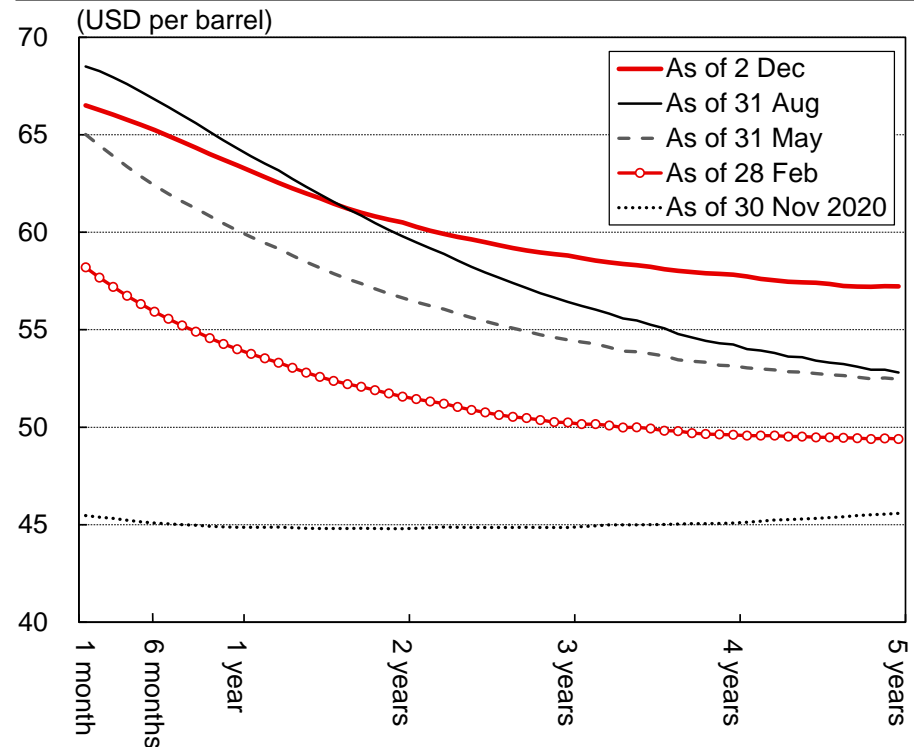
- Oil prices (WTI front month) fell sharply owing to concerns about downward pressure on demand from the spread of the omicron variant and are currently around USD 65 per barrel. In the future, the supply and demand balance is forecast to shift from excess demand to excess supply. As a result, oil prices are expected to remain around the USD 60-per-barrel mark until the end of 2022. However, oil prices may fall or rise depending on developments in the COVID-19 situation, an unexpected increase or decrease in oil production by OPEC+, a change in policies by many countries related to decarbonisation and the outcome of negotiations over the Iran nuclear agreement.
- The futures curve for WTI oil prices (1 month to 5 years) shows 2-year futures are around USD 60~65, whereas 5-year futures are around USD 55~59, which means the market has factored in a fall in prices.

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	70.6	72.5%	73.2	69.0%
Q4	74.0	73.3%	77.0	70.1%
2022 Q1	66.0	13.5%	69.0	12.5%
Q2	64.0	-3.2%	67.0	-3.0%
Q3	62.0	-12.1%	65.0	-11.2%
Q4	60.0	-18.9%	63.0	-18.2%
2020	39.3	-31.0%	42.3	-34.0%
2021	67.2	70.8%	70.2	65.7%
2022	63.0	-6.3%	66.0	-5.9%

Forecast

Oil Price Forecast



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

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 (2019)	USD trillions	142.0	51.1	52.8	38.1	5.3	20.9	8.1	3.2	2.4	0.9	15.9	4.5	3.0	2.5	3.0	4.1
	Japan = 100	2,673	961	995	717	100	393	153	59	46	18	300	85	57	46	56	77
Real GDP (YoY, %)	2020 Actual	-3.1	-4.6	-1.9	-3.0	-4.4	-3.4	-6.7	-4.1	-8.2	-9.9	-6.5	-4.8	-8.0	-8.9	-9.8	-3.0
	2021 Forecast	5.7	5.0	6.7	5.1	2.8	5.5	6.2	4.5	6.0	7.5	5.0	2.6	6.4	6.1	6.9	4.2
	2022 Forecast	4.5	3.9	5.0	4.7	3.6	4.2	2.6	2.0	3.0	2.5	3.7	4.0	3.4	3.9	4.5	2.2
CPI (YoY, %)	2020 Actual	3.2	0.7	3.8	5.6	-0.5	1.2	7.1	3.2	3.4	42.0	0.3	0.4	0.5	-0.1	0.9	3.4
	2021 Forecast	4.4	2.9	3.9	7.2	0.0	4.3	10.6	8.0	5.0	50.0	2.4	3.1	1.9	1.8	2.4	6.8
	2022 Forecast	3.7	2.1	3.8	5.8	0.5	2.5	8.2	5.5	4.0	40.0	2.1	2.1	2.0	2.0	3.1	4.4

		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 (2019)	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
	Japan = 100	852	455	169	87	44	25	8	11	140	62	24	17	17	20	25
Real GDP (YoY, %)	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
	2021 Forecast	6.9	7.9	9.5	5.0	4.0	5.9	6.3	6.3	3.2	3.7	1.0	3.5	4.9	2.4	4.0
	2022 Forecast	5.5	5.3	7.2	3.2	3.1	3.1	3.0	4.0	5.5	5.2	3.8	6.3	6.5	7.0	3.4
CPI (YoY, %)	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
	2021 Forecast	2.2	1.0	5.5	2.0	2.2	1.7	1.7	1.8	2.2	1.8	1.1	2.5	4.3	2.5	2.5
	2022 Forecast	2.7	2.2	4.8	1.6	1.7	1.4	2.0	1.5	2.6	2.9	1.2	1.8	3.1	3.5	2.1

Note: 1. "Nominal GDP" is based on purchasing power parity

2. For "CPI", Japan is composite figure excluding fresh food, Eurozone and the UK are the EU standardised inflation rate (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. "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

6. "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 July-September 2021)

	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	-2.3	-28.2	23.5	11.8	-4.1	1.5	-3.0	7.0	5.7	3.9	2.7	2.0	1.6	-4.4	2.8	3.6
Private Consumption	-3.2	-29.1	22.8	9.3	-5.0	3.7	-4.5	10.0	7.8	3.8	2.4	1.8	1.4	-5.8	3.1	4.1
Housing Investment	-14.1	2.3	-20.9	-0.1	4.3	8.3	-10.1	0.8	0.2	0.2	-0.4	-0.6	-0.6	-7.2	-0.6	-0.6
Private Business Fixed Investment	5.1	-22.1	-8.4	18.1	-4.1	9.1	-14.4	10.0	8.2	6.1	5.3	4.1	3.2	-6.9	1.7	5.0
Business Inventory (Contribution)	0.7	0.3	-0.7	-2.0	1.6	-1.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.1	0.1
Government Expenditures	-1.2	4.4	10.4	6.7	-6.3	1.7	2.4	0.2	1.3	2.2	1.9	1.6	1.3	3.5	1.0	1.7
Public Investment	-0.8	11.9	5.3	3.0	-5.5	-8.1	-5.8	0.0	1.6	2.8	3.2	3.2	3.2	4.2	-3.6	2.0
Net Exports (Contribution)	-1.2	-10.3	11.3	4.2	-0.9	-1.2	0.4	0.1	-0.1	0.3	0.1	0.0	0.0	-0.6	0.7	0.1
Exports	-17.6	-53.8	33.0	55.6	9.9	13.6	-8.3	5.7	5.3	4.1	2.4	2.0	1.6	-10.4	11.9	3.0
Imports	-11.7	-2.4	-29.1	20.7	16.9	22.8	-10.5	5.3	5.7	2.4	2.0	2.0	1.6	-6.8	7.5	2.3
Nominal GDP	-2.2	-27.2	23.9	9.7	-4.4	-1.0	-2.5	11.0	4.0	3.0	1.7	6.6	0.2	-3.9	2.4	3.9
GDP Deflator (YoY)	1.0	1.4	1.1	0.1	-0.2	-1.1	-1.1	0.3	-0.0	0.5	0.1	0.2	0.4	0.6	-0.4	0.3
Industrial Production Index (QoQ)	0.0	-16.8	9.0	5.7	2.9	1.1	-3.7	2.8	4.5	0.9	0.7	0.6	0.6	-9.5	7.8	5.8
Domestic Corporate Goods Price Index (YoY)	0.6	-2.2	-0.8	-2.2	-0.3	4.6	6.0	8.0	4.9	3.9	2.1	0.6	0.8	-1.4	6.0	1.8
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	0.4	0.4	0.5	0.5	-0.5	0.0	0.5
2. Balance of Payments																
Trade Balance (billion yen)	583	-1,472	1,229	2,436	1,437	998	-193	1,316	498	429	-671	959	87	3,902	2,619	804
Current Balance (billion yen)	4,410	1,697	3,623	5,922	4,626	4,719	2,894	4,454	3,674	3,649	2,586	4,254	3,420	16,302	15,741	13,910
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	0.1	0.1	0.1	0.2	0.2	0.0	0.1	0.2
Exchange Rate (USD/JPY)	109	108	106	104	106	109	110	114	114	114	114	114	114	106	112	114

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

	Forecast →												2020 (Actual)	2021 (Forecast)	2022 (Forecast)	
	2020				2021				2022							
	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	2.1	4.8	5.3	4.2	2.6	2.6	-3.4	5.5	4.2	
Personal Consumption Expenditures	-6.9	-33.4	41.4	3.4	11.4	12.0	1.7	2.9	1.9	3.7	2.5	2.6	-3.8	7.9	3.1	
Fixed Investment (Residential)	20.3	-30.8	60.0	34.4	13.3	-11.7	-8.3	0.0	0.0	0.0	-0.7	0.5	6.8	9.0	-1.9	
Fixed Investment (Nonresidential)	-8.1	-30.3	18.7	12.5	12.9	9.2	1.5	7.0	9.2	5.2	4.5	3.7	-5.3	7.6	6.1	
Changes in Business Inventories (Contribution)	-0.5	-4.0	6.8	1.1	-2.6	-1.3	2.1	0.0	0.0	0.0	0.0	0.0	-0.6	0.2	0.2	
Government Expenditures	3.7	3.9	-2.1	-0.5	4.2	-2.0	0.9	4.0	14.0	4.1	2.5	2.4	2.5	0.9	5.4	
Net Exports (Contribution)	-0.1	1.5	-3.3	-1.7	-1.6	-0.2	-1.2	1.1	0.2	0.1	-0.2	-0.2	-0.1	-1.7	0.0	
Exports	-16.3	-59.9	54.5	22.5	-2.9	7.6	-3.0	14.2	6.2	4.9	3.9	3.1	-13.6	4.4	5.8	
Imports	-13.1	-53.1	89.2	31.3	9.3	7.1	5.8	2.9	2.9	2.4	3.7	3.1	-8.9	13.2	3.5	
Domestic Private End User Demand	-6.2	-32.8	38.0	6.0	11.8	10.4	1.3	3.5	3.0	3.8	2.7	2.7	-3.7	7.9	3.4	
Nominal GDP (QoQ annualized, %)	-3.9	-32.4	38.7	6.6	10.9	13.2	8.3	9.5	8.0	5.8	4.2	4.3	-2.2	9.7	7.5	
Industrial Production (QoQ annualized, %)	-6.7	-42.4	44.5	8.2	4.0	6.4	3.9	3.4	2.3	1.3	0.9	0.6	-7.2	5.5	2.5	
Unemployment Rate (%)	3.8	13.0	8.8	6.7	6.2	5.9	5.1	4.3	4.0	3.8	3.8	3.8	8.1	5.4	3.8	
Producer Price Index (YoY, %)	1.1	-1.1	-0.1	0.8	2.9	7.1	8.3	8.7	6.8	4.0	2.1	1.2	0.2	6.7	3.5	
Consumer Price Index (YoY, %)	2.1	0.4	1.2	1.2	1.9	4.8	5.3	5.1	4.5	2.9	1.4	1.3	1.2	4.3	2.5	
2. Balance of Payments																
Trade Balance (hundred million dollars)	-2,003	-2,233	-2,454	-2,531	-2,689	-2,697	-2,752	-2,929	-2,846	-2,817	-2,814	-2,809	-9,220	-11,067	-11,286	
Current Account (hundred million dollars)	-1,148	-1,539	-1,724	-1,751	-1,894	-2,237	-2,347	-2,257	-2,105	-2,073	-2,067	-2,059	-6,161	-8,735	-8,303	
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	0.25-0.50	0.50-0.75	0.75-1.00	0.00-0.25	0.00-0.25	0.75-1.00	
Euro Dollar (3M) (%)	1.5	0.6	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.4	0.6	0.9	0.7	0.2	0.5	
10-year Treasury Note's Yield (%)	1.4	0.7	0.6	0.9	1.6	1.6	1.3	1.5	1.6	1.7	1.9	2.0	0.9	1.5	1.8	

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	2021F	2022F	2020	2021F	2022F	2020	2021F	2022F
Eurozone	-6.5	5.0	3.7	0.3	2.4	2.1	2,546	2,951	2,735
Germany	-4.8	2.6	4.0	0.4	3.1	2.1	2,647	2,919	2,675
France	-8.0	6.4	3.4	0.5	1.9	2.0	-501	-314	-879
Italy	-8.9	6.1	3.9	-0.1	1.8	2.0	669	647	892
UK	-9.8	6.9	4.5	0.9	2.4	3.1	-949	-953	-1,014
Russia	-3.0	4.2	2.2	3.4	6.8	4.4	339	594	558

2. Forecast by Demand Component

(YoY, %)

	Eurozone			UK		
	2020	2021F	2022F	2020	2021F	2022F
Nominal GDP	-5.0	6.2	4.8	-4.4	7.3	6.0
Real GDP	-6.5	5.0	3.7	-9.8	6.9	4.5
Domestic demand contribution	-6.0	3.8	4.0	-10.5	8.1	5.4
Foreign demand contribution	-0.5	1.2	-0.3	0.7	-1.2	-0.9
Private consumption	-8.0	2.4	5.0	-10.8	3.7	6.0
Government consumption	1.3	4.2	2.1	-6.3	15.8	4.2
Gross fixed capital formation	-7.3	4.9	4.2	-9.1	4.9	5.7
Inventory investment (contribution)	-0.6	0.3	-0.1	-0.7	1.3	0.1
Exports	-9.4	10.2	4.6	-14.7	-2.9	2.6
Imports	-9.3	8.1	5.6	-16.8	1.3	5.7

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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