Outlook for the Japanese and Overseas Economies

ECONOMIC RESEARCH OFFICE

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MUFG Bank, Ltd.
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Contents

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1-1. Overview of Economic Outlook – Global Economy

- We are now in the final phase of the rapid monetary tightening that has taken place since 2022 and has had a huge impact on the global economy and markets. After inflation slows due to the effects of this tightening, the global economy will start to expand again at a moderate rate. However, there are still many issues that need to be overcome for there to be a soft landing.
- For example, changes to things like policies will easily trigger “reactions” for a while as pent-up demand from the pandemic peters out and countries enter a period of transition where they look to return to normal after responding to the crisis. In addition, there is a rise in geopolitical risks exemplified by the tension between the US and China and the conflicts in Ukraine and Gaza. On top of this, structural changes geared towards decarbonisation and digitalisation have become the new normal. Against this backdrop, there is a possibility that trends independent of the business cycle and non-continuous changes will make economic forecasting difficult and will increase market volatility.

Economic Forecast	▪ Despite uncertainty about the geopolitical situation, the global economy will start to expand again at a moderate rate after a phase of further deceleration triggered by the cumulative effects of monetary tightening.
Assumptions	▪ The tension between the US and China will continue and the conflict in Ukraine will drag on, but extreme escalation is unlikely. The war in Gaza will remain confined to that area. ▪ After the US presidential and Congressional elections, there will not be any large changes to policy that will affect our outlook. ▪ Behaviour after the pandemic and trends such as decarbonisation, digitalisation and economic security have taken root as the new normal.
Uncertainties and Risk Factors	**Impact of rate hikes and reduced fiscal support** ✓ Rate hikes are having an effect on economies along with a paring back of government support, such as reduced fiscal support and an end to deferred loan repayments, and a depletion of excess savings. As central banks and governments take different stances on returning to normal, how and when will the impact of this appear in each country and region? *E.g. A downturn in US commercial real estate stability, a large rise in UK mortgage interest payments, US student loan repayments, repayment of “zero-zero” loans in Japan, a depletion of excess savings* **China’s real estate issues** ✓ How will the Chinese government deal with real estate development companies, who are currently facing problems? What stance will it take towards real estate and the problems it faces in the medium and long term, such as reduced demand due to a declining population? **Rise in geopolitical risks** ✓ What can we expect from Russia, which still has a strong presence in terms of commodities like natural gas, as well as food and its military? ✓ What will be the effects of the conflict in Gaza if it spreads to the wider region or internationally? ✓ What changes will there be to US policies in the run up to the election in autumn next year and what impact will they have on international relations (support for Ukraine and Israel and international economic frameworks) and the US economy (energy, infrastructure, climate change, investment in advanced technology)?

1-1. Overview of Economic Outlook – Economic Growth

Economic Growth Forecast (Real GDP Growth)

- The global economy will expand 3.2% YoY in 2023 and then slow to 2.9% YoY in 2024
- Among major economies, economic growth forecasts for 2023 and 2024 are 2.5% and 1.6% in the US, 0.5% and 0.7% in the euro area, 1.5% and 0.7% in Japan and 5.3% and 4.6% in China respectively.

Changes from the Outlook in August

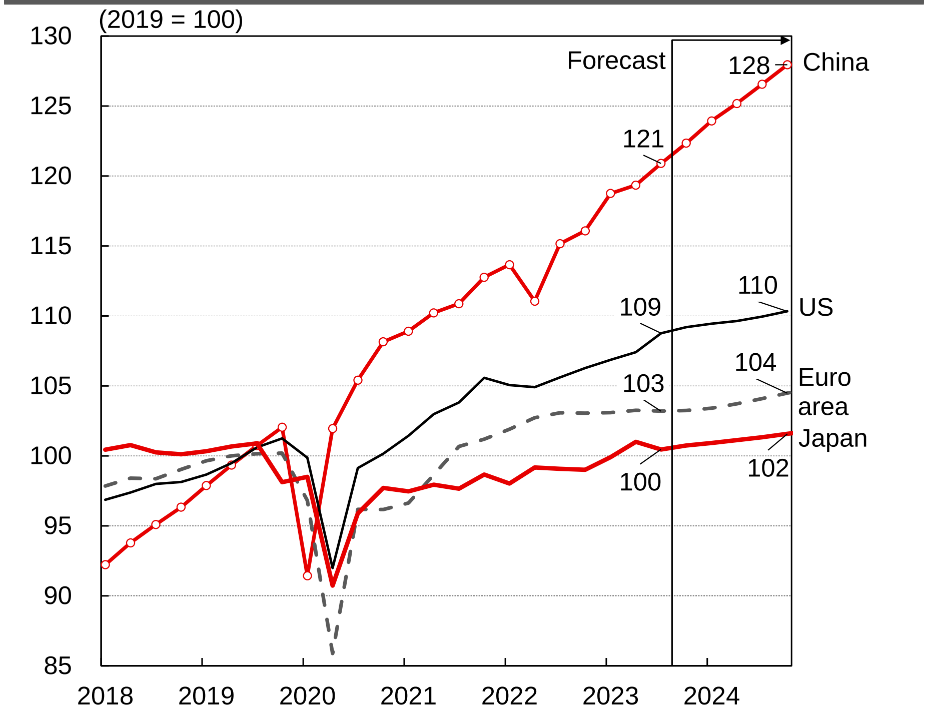
- The outlook for the global economy has been revised upwards (by 0.4% points in 2023 and 0.2% points in 2024).
  - ✓ Japan (↓): Economic growth remained moderate despite the lacklustre growth in the July-September quarter, particularly domestic demand (due to temporary factors)
  - ✓ US (↑): Even though the economic and labour market continued to slow due to the Fed's economically restrictive monetary policy, private consumption remained firm
  - ✓ China (↑): There are still large downward pressures on growth from the real estate sector, problems in the labour market and a deceleration in foreign demand, government and central bank policies continue to underpin the economy

Real GDP Outlook for Major Economies

(%)	2022	MUFG Forecast (November) 2023	MUFG Forecast (November) 2024	MUFG Forecast (August) 2023	MUFG Forecast (August) 2024
World	3.4	3.2	2.9	2.8	2.7
US	1.9	2.5 (1.7)	1.6 (0.6)	2.0	0.9
Euro area	3.4	0.5 (0.1)	0.7 (0.7)	0.6	0.9
UK	4.3	0.5 (0.4)	0.6 (0.5)	0.4	0.6
Japan (FY)	1.4	1.5 (0.9)	0.7 (0.6)	2.0	0.6
Japan (CY)	1.0	1.7 (1.5)	0.7 (0.5)	2.1	0.9
Asia (total 11 economies)	4.2	5.1	4.8	4.7	4.8
China	3.0	5.3 (3.5)	4.6 (3.2)	4.8	4.6
India (FY)	7.2	6.6 (4.1)	6.3 (4.5)	6.0	6.4
India (CY)	6.7	6.8 (4.1)	6.0 (4.2)	6.1	6.2
ASEAN	6.0	4.5	5.1	4.5	5.0
Indonesia	5.3	5.0 (3.0)	5.0 (3.3)	4.9	5.0
Thailand	2.6	2.5 (3.1)	4.0 (2.6)	3.0	3.7
Malaysia	8.7	4.2 (3.4)	4.4 (2.9)	4.1	4.4
Philippines	7.6	5.4 (2.3)	5.8 (2.9)	5.2	5.8
Vietnam	8.0	4.8	6.5	5.0	6.5

Note: 1. "World" is a composite of MUFG's forecasts for countries and regions. When IMF forecasts are used for those countries and regions not covered by MUFG, the real GDP growth rate forecast for 2023 is 3.1% and for 2024 is 3.0%.
2. Number in parentheses is growth rate when the carry-over effect is removed.
Source: Statistics from each country or region, MUFG Bank Economic Research Office

Real GDP Outlook for Select Major Economies



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

1-1. Overview of Economic Outlook – Interest Rates – Advanced Economies

- Monetary policy tightening is in its final phases in the US and Europe. The Fed and the ECB appear to be closely scrutinise prices, labour markets and economic trends while making policy decisions. We expect neither will raise rates again and will start to cut them around mid-2024 when economies slow and inflationary pressures decrease.
- We forecast the BoJ will end its negative interest rate policy in April next year after the (first reported) result of the spring wage negotiations and, although it will raise rates once in the latter half of 2024, it will not raise them higher while the inflation rate is below 2%.

Monetary Policies in Advanced Economies

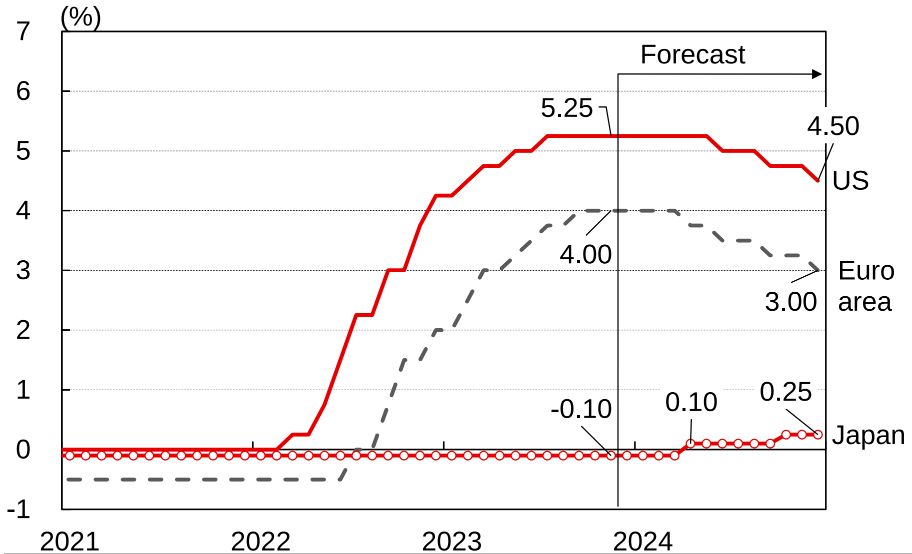
	Most Recent Monetary Policy Statements & Press Conferences
US	▪ The Fed postponed a rate hike at its November meeting. ▪ There is a possibility that the credit situation and continued tight financial conditions will weigh on the labour market and inflation owing to the current rise in long-term interest rates. ▪ While the possibility of additional policy firming remains, the continued rise in long-term interest rates may be reflected in future monetary policy.
Euro area	▪ The ECB kept rates unchanged in October for the first time in 11 meetings since June 2022. ▪ Its view that "inflation is still expected to stay too high for too long" was unchanged, yet it highlighted that "most measures of underlying inflation have continued to ease". ▪ Although the economy is expected to strengthen in the future, it "is likely to remain weak for the remainder of this year". ▪ The ECB maintained that its future decisions "will ensure that our policy rates will be set at sufficiently restrictive levels for as long as necessary".
Japan	▪ Although the BoJ maintained its negative interest rate policy at its October meeting, it further increased the flexibility of its yield curve control. ▪ Governor Ueda said there is "some distance to achieving our price target" but that the BoJ was "moving forward a little". He said "next year's wage negotiations are important" and "we assume next year's wage growth rate will be decent" in response to questions about when the BoJ will achieve its price target. ▪ He also stressed that "forecasting when the price target will be reached cannot be based on wages alone; the pass-through of wage rises to prices is also important. A comprehensive view is needed that takes this into account".

Source: Federal Reserve Board, European Central Bank, Bank of Japan,
MUFG Bank Economic Research Office

Policy Rates in Advanced Economies

Forecast Changes to Policy

US	-0.25% points in Jun･Sep･Dec 2024
Euro area	-0.25% points in Apr･Jun･Sep･Dec 2024
Japan	0.20% points in Apr 2024 (end of negative interest rate policy) and 0.15% points in Oct 2024

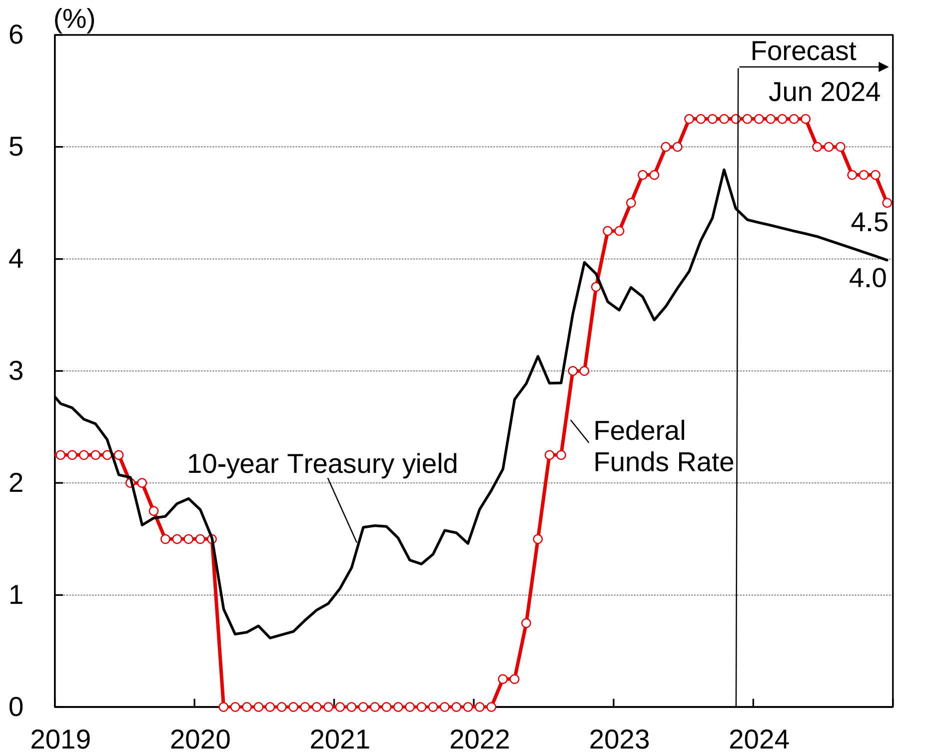


Note: Policy rates are: US – the lower bound of the FF target rate; euro area – Deposit Facility Rate; Japan – Policy Balance Rate (Uncollateralised Overnight call Rate after the negative interest rate policy is lifted).
Source: Statistics from each country,
MUFG Bank Economic Research Office

1-1. Overview of Economic Outlook – Interest Rates – US and Japan

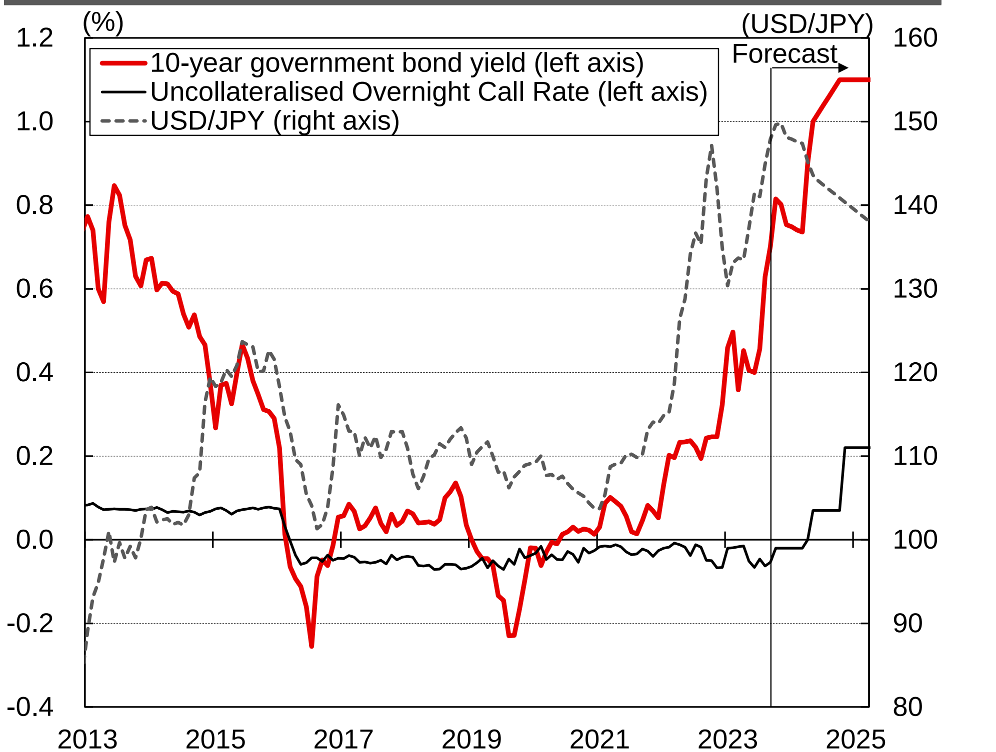
- The US 10-year Treasury yield is forecast to fall as the economic slowdown and rate cuts are priced in. However, 10-year Treasury yield will stay around 4% at the end of 2024, owing to upward pressure from the growing budget deficit, the decline in confidence in the government and Congress' fiscal governance and concerns about the supply and demand of government bonds.
- The BoJ is expected to end its negative interest rate policy as well as its 10-year government bond yield target of "around zero percent" in April 2024 before carrying out a rate hike which will cause the 10-year government bond yield to rise. However, we foresee the BoJ maintaining its upper bound on the long-term yield to prevent a sharp rise and there will still be stock effects from the BoJ's historical quantitative and qualitative monetary easing, which means bond yields are likely to remain just above 1% in the latter half of 2024.

Outlook for the US Federal Funds Rate and 10-Year Treasury Yield



Note: The Federal Funds Rate uses the lower bound of the target
Source: Bloomberg, MUFG Bank Economic Research Office

Outlook for Interest Rates in Japan and the USD/JPY Exchange Rate



Source: Bloomberg, MUFG Bank Economic Research Office

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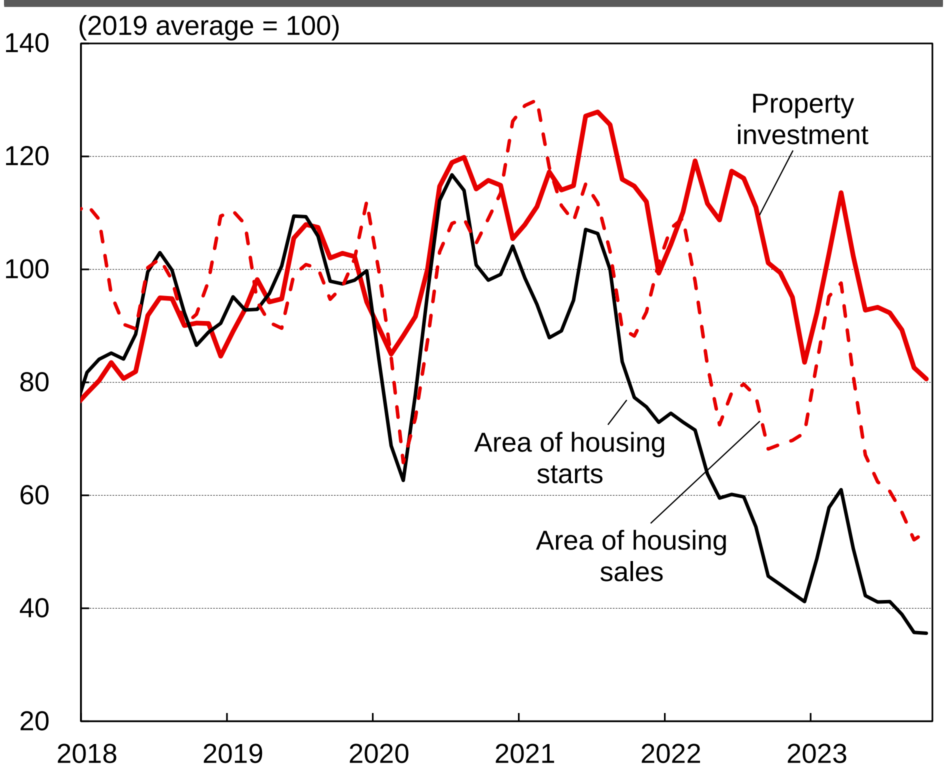
1-2. China's Real Estate Market – Current Situation

- China's real estate market remains sluggish since regulations were tightened in 2020. Many property developers, including China's largest developer, Country Garden, are facing a liquidity crisis. The impact of this has spread to local governments, which are heavily reliant on revenue from land sales, and has raised concerns about debt redemption.
- The Chinese government and the People's Bank of China have stepped up their support for struggling real estate developers and local governments. At the Central Economic Work Conference held at the end of October, leaders emphasised preventing and eliminating risks by enhancing management and supervision in the financial sector. The Conference also urged financial institutions to give sufficient support to real estate developers and local governments.
- However, taking into account the trend of China's real estate bubbles up until now, a certain degree of adjustment will have to be made. Although financial support for the real estate sector is likely to continue, the mythos of ever-rising prices in the sector among the Chinese people is breaking down, and we foresee prolonged downward pressure on the Chinese economy from the sector.

China's Property Market

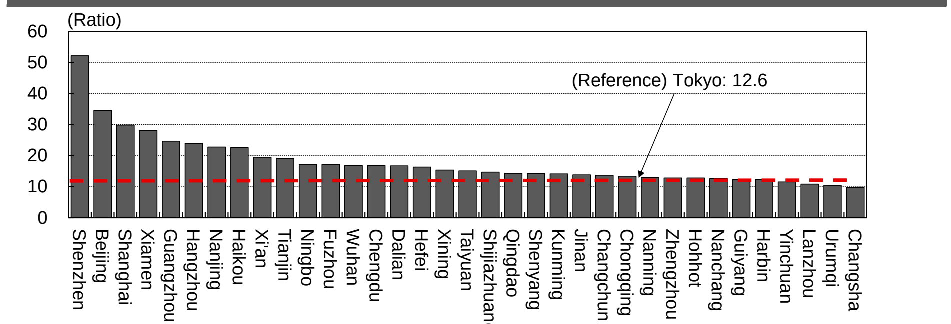


Note: 3-month moving average
Source: National Bureau of Statistics of China, MUFG Bank Economic Research Office

Support for the Real Estate Sector from the Chinese Government

Sixth Central Economic Work Conference (30-31 October)
Local government debt: Establish a long-term, effective mechanism to prevent and resolve local government debt risks, and optimise central and local government debt structures.
Real estate sector: Meet the reasonable financing needs of property developers of different types of ownership. Improve the macro-prudential management of real estate financing.
People's Bank of China meeting with financial regulators (17 Nov)
Local government debt: Lower debt risks by consultations with local government financing vehicles, extending repayment periods or swapping debt, give convenient and smooth financial support to local governments to end debt risks.
Real estate sector: Meet the reasonable financing needs of property developers, provide loans to developers operating normally, increase financial support to ensure the delivery of housing projects, support M&A and restructuring in the sector.

Property Affordability Ratio by City

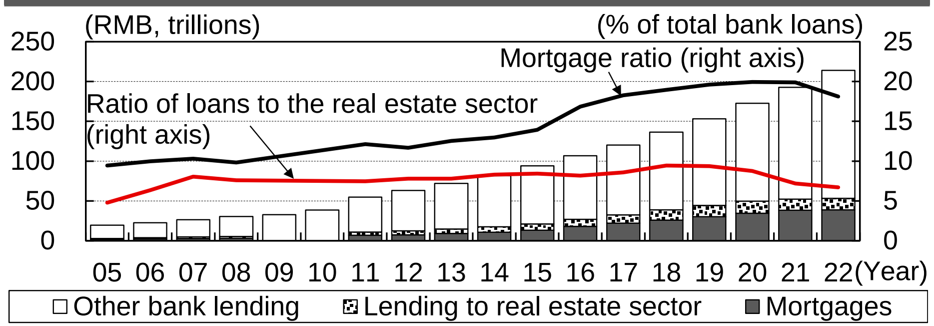


Note: As of 2021. Affordability index = property price (m²/RMB) x living area (90m ²) ÷household income (income of 1.5 people)
Source: (Upper) various media reports, (lower) National Bureau of Statistics of China, NUMBEO, MUFG Bank Economic Research Office

1-2. China's Real Estate Market – Financial Sector

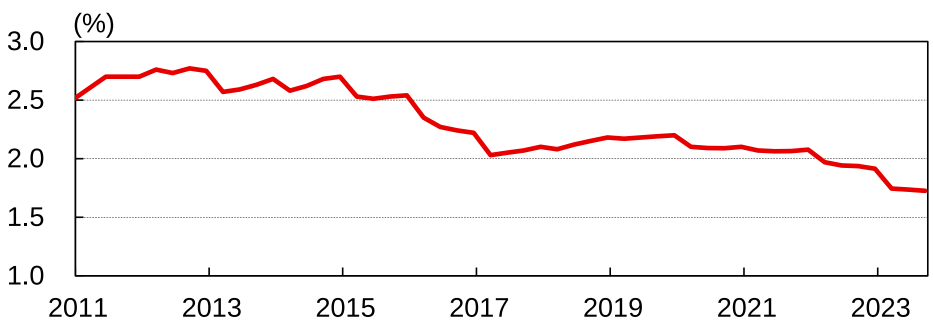
- Despite China's prolonged property slump, its financial sector has remained relatively calm. The real estate sector only accounts for around 6% of lending by Chinese banks, and financial institutions have been able to maintain a reasonable interest margin (approximately 1.7%) despite ongoing monetary easing. This means banks' revenue bases have remained stable. Looking ahead, while there is a possibility some small and medium-sized banks here and there will become insolvent, we expect China's financial system as a whole will remain stable for the time being.
- However, there is a risk that increased support for property developers and local governments led by the central government and the People's Bank of China will result in the deterioration of loan assets. While banks' non-performing-loan ratios are currently falling, interest-bearing debt among corporations is rising swiftly, where interest paid is greater than EBITDA (earnings before interest, taxes, depreciation, and amortisation), owing to the effects of the pandemic and the sluggish real estate sector. If excessive financial support continues for a prolonged period of time, there is a possibility that banks' capital will be damaged due to a rise in non-performing loans.

The Real Estate Sector as a Percentage of Chinese Bank Loans



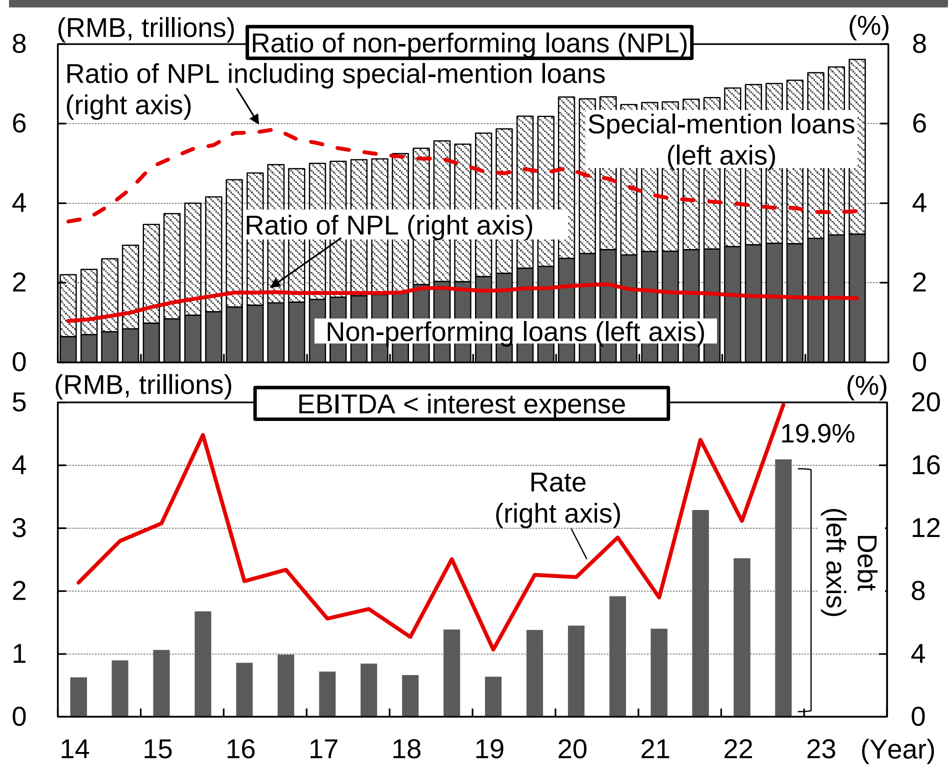
Source: People's Bank of China, MUFG Bank Economic Research Office

Interest Margins of Chinese Banks



Source: National Financial Regulatory Administration, MUFG Bank Economic Research Office

Chinese Banks' Non-Performing Loans and Corporate Debt



Note: 1. (Upper) "Special-mention loans" are not categorised as "non-performing loans", but they warrant caution.
2. (Lower) Data covers listed non-financial corporations in Beijing, Shenzhen and Shanghai
3. (Lower) "Rate" = percentage of corporate debt where interest expense is greater than the EBITDA as a share of listed corporations' total liabilities of listed companies

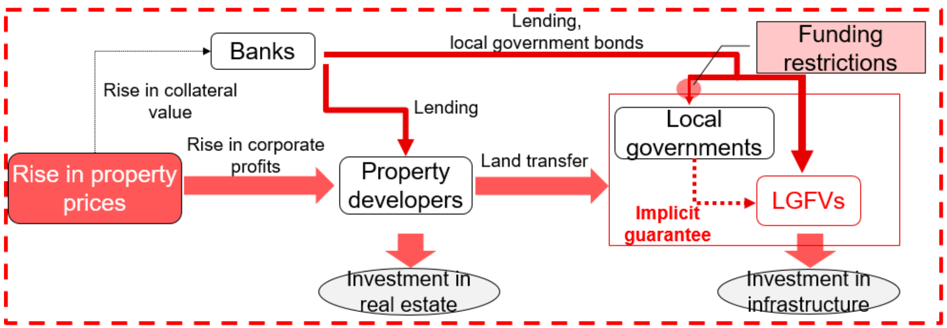
Source: People's Bank of China, Bloomberg, MUFG Bank Economic Research Office

1-2. China's Real Estate Market – Government

- Many local governments in China provide financing and infrastructure investment through LGFVs (local government financing vehicles*). As a result, government debt in a narrow sense remains low at 52% of GDP, but government debt in a broader sense has risen to 110% (IMF estimate) when LGFV-related debt is included.
- Local governments are heavily reliant on revenue from land sales, and the slump in the real estate sector has affected local governments' debt issues, including LGFV. The investment efficiency rate suggests the profitability of infrastructure investment is falling, raising concerns about repayments in regions with high debt ratios and weak economic foundations.
- The government is trying to avoid the breakdown of LGFVs and bankruptcy of local governments by extending the deadline for debt repayments and providing refinancing support. Given the situation in the financial sector mentioned earlier and the governments capacity to respond based on its net foreign assets, it is unlikely that large-scale systemic risks will materialise.

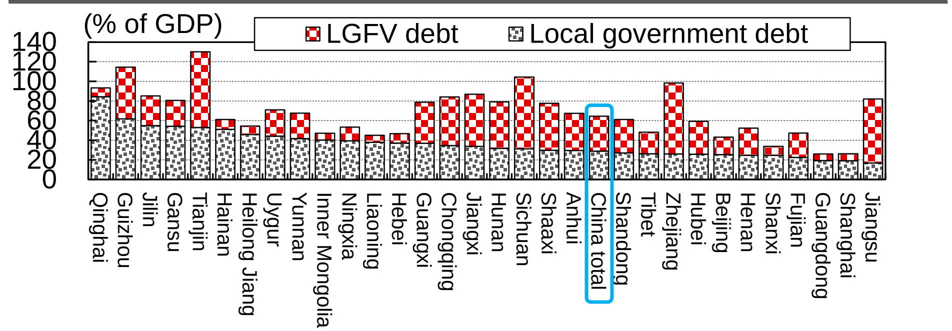
*Local governments have their own financing limits, so they make use of LGFV. Originally LGFV were single businesses, but they are considered to be practically the same as local governments due to the "implicit guarantee" by local governments.

Local Governments' Financing through LGFV



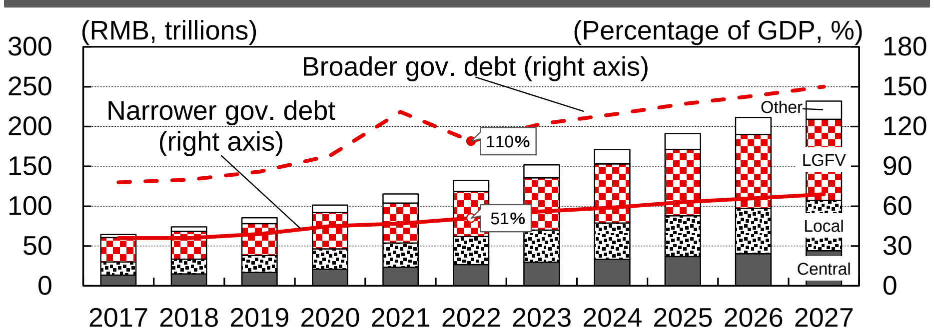
Source: Various media sources, MUFG Bank Economic Research Office

Local Government Debt



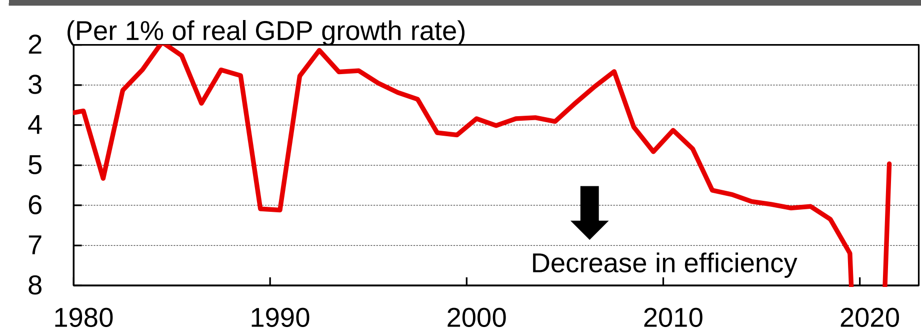
Source: Wind, MUFG Bank Economic Research Office

Balance of Chinese Government Debt (IMF Estimates)



Source: IMF, MUFG Bank Economic Research Office

Investment Efficiency (Gross Fixed Capital Formation per 1% of Growth)

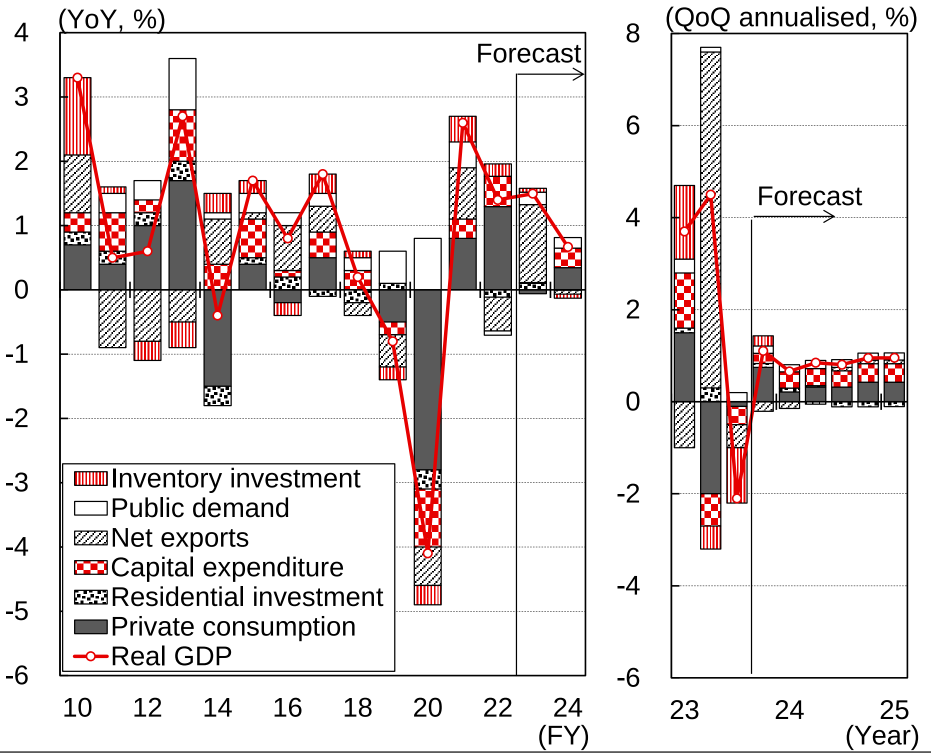


Source: National Bureau of Statistics of China, MUFG Bank Economic Research Office

2-1. The Japanese Economy – Overview

- Real GDP (preliminary estimate) contracted for the first time in three quarters to -2.1% QoQ annualised in the July-September quarter. Although there was some downward pressure from inventory investment, private consumption and capital expenditure fell for the second quarter and resulted in lacklustre domestic demand.
- Wage growth is likely to remain strong after next year's wage negotiations while inflation is expected to slow and appetite for business investment is high on the back of good business results. As a result, we forecast the economy will continue to recover, albeit at a gradual pace.
- We forecast strong real GDP growth of 1.5% YoY for FY2023. However, we expect this to slow to 0.7% YoY in FY2024.

Japan Real GDP and Outlook (Fiscal Year)



Source: Cabinet Office, MUFG Bank Economic Research Office

Japan Real GDP and Outlook (Fiscal Year)

(YoY, %)

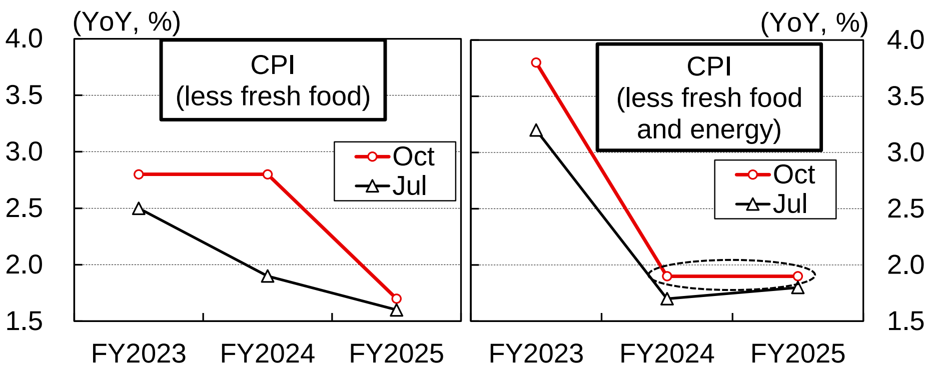
	FY2021 (Actual)	FY2022 (Actual)	FY2023 (Outlook)	FY2024 (Outlook)
Real GDP	2.6	1.4	1.5	0.7
Private consumption	1.5	2.4	-0.1	0.7
Residential investment	-1.1	-4.4	3.1	-0.2
Capital expenditure	2.1	3.1	0.1	1.9
Inventory investment (contribution)	0.4	0.2	-0.2	-0.0
Public demand	1.3	0.2	0.7	0.6
Net exports (contribution)	0.8	-0.6	1.2	-0.1
Exports	12.4	4.4	2.7	0.8
Imports	7.1	7.2	-3.3	1.1
Nominal GDP	2.4	2.0	5.3	2.2
GDP Deflator	-0.2	0.6	3.7	1.5

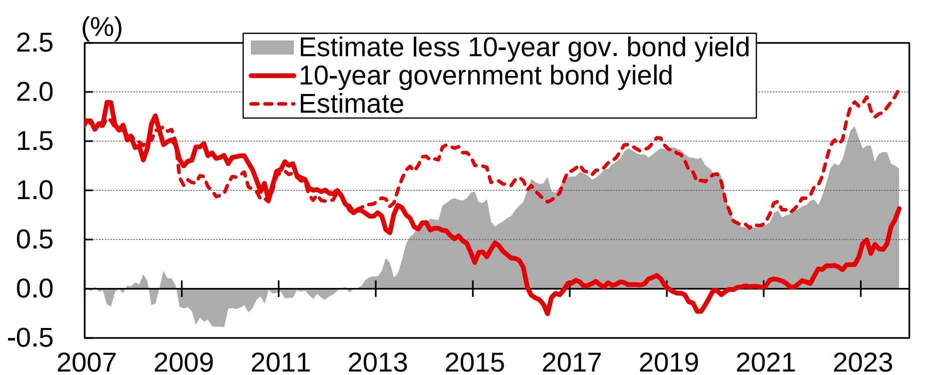
Source: Cabinet Office, MUFG Bank Economic Research Office

2-1. The Japanese Economy – Monetary Policy

- In its October Outlook for Economic Activity and Prices, the BoJ's policy board members forecast core CPI (all items less fresh food and energy) will almost hit their price target.
- Given that a rise in wages next year has already been factored in, we forecast the BoJ will end its negative interest policy in April next year after the (first reported) result of the spring wage negotiations and it will abolish its 10-year government bond yield target of "around zero percent". On the other hand, we foresee the BoJ maintaining its upper bound on the long-term yield to prevent a sharp rise and there will still be stock effects from the BoJ's historical quantitative and qualitative monetary easing, which means the 10-year government bond yield is likely to remain just above 1% in the latter half of 2024.
- Although we forecast one more rate hike by the BoJ in the latter half of FY2024, the BoJ is likely to stop raising rates when the inflation rate drops below 2% in the latter half of 2024. In the US, the Fed will carry out rate cuts and the gap between Japanese and US interest rates will grow smaller. As a result, the yen is expected to appreciate against the dollar.

The BoJ's Price Forecast and 10-Year Gov Bond Estimate & Result

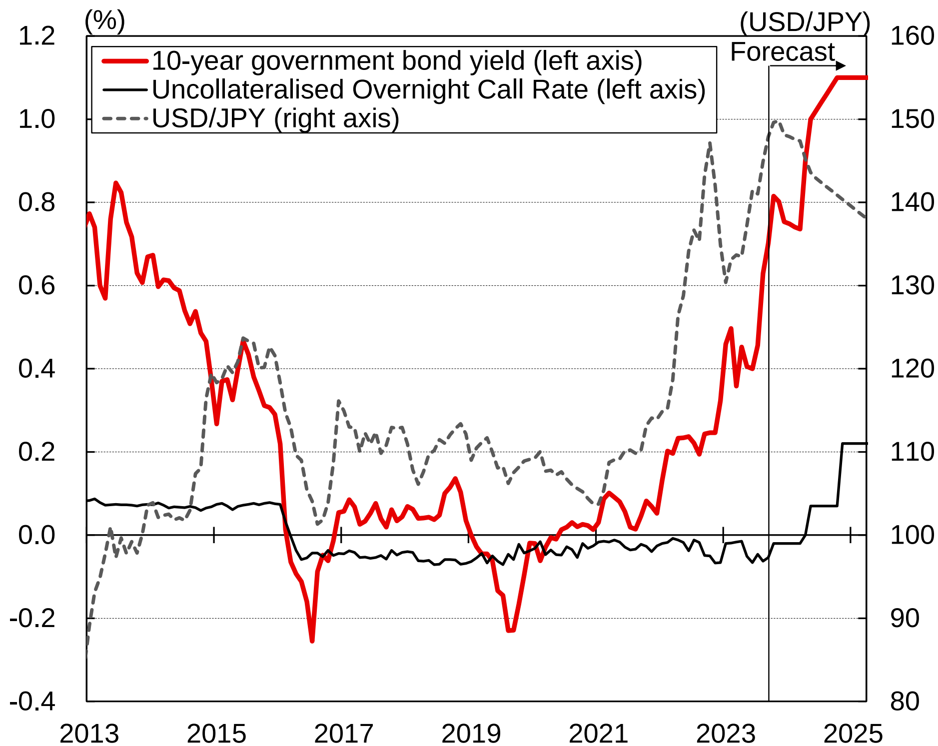




Note: "Estimate" = 0.22 + 0.26 x jobs-to-applicants ratio + 0.10 x core CPI + 0.25 x US Treasury yield. Jobs-to-applicants ratio and core CPI uses the previous month's data as a reference.

Source: Ministry of Health, Labour and Welfare, Ministry of Internal Affairs and Communications, Bank of Japan, MUFG Bank Economic Research Office

Outlook for Interest Rates in Japan and the USD/JPY Exchange Rate

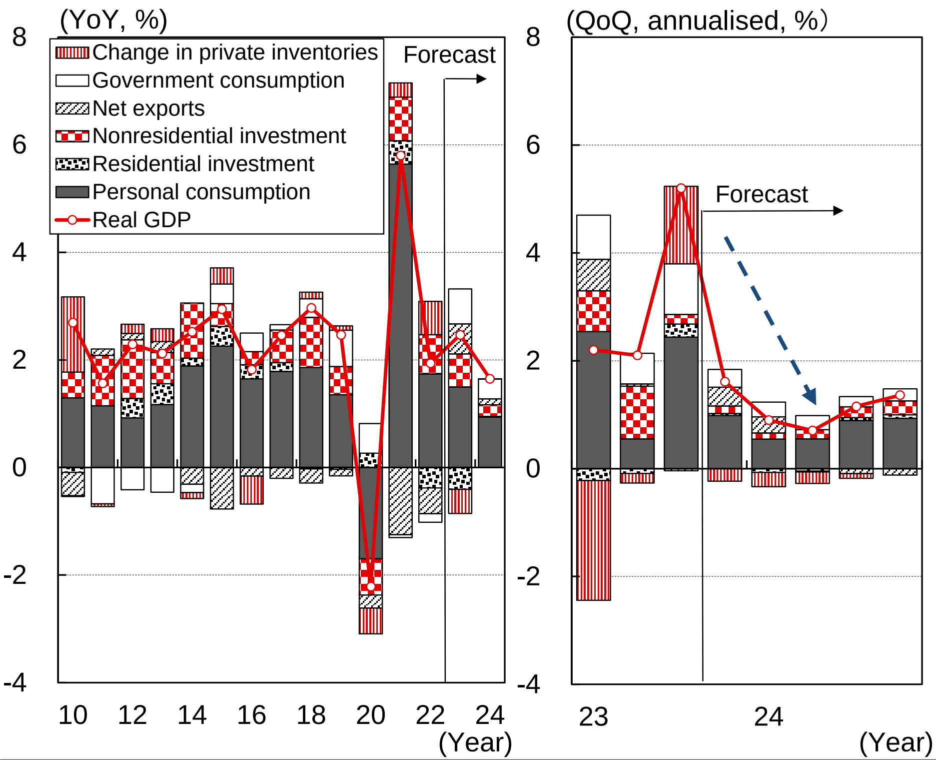


Source: Bloomberg, MUFG Bank Economic Research Office

2-2. The US Economy

- Real GDP growth (second estimate) accelerated in Q3, increasing at an annual rate of 5.2% and remaining above the potential growth rate. Personal consumption expenditures picked up in Q3, increasing at an annual rate of 3.6%, compared to 0.8% in Q2.
- The economy is expected to slow in the first half of 2024 as excess savings wear off, student loan forbearance ends, and the lagged effects of higher interest rates and stricter lending standards feed into the broader economy. We expect the first Fed rate cut to occur in mid-2024, but inflation will likely remain above the 2% target. The Fed is likely to maintain restrictive monetary policy.
- We forecast that real GDP will grow by 2.5% annually in 2023, and that growth will slow to 1.6% in 2024. We expect that the US will avoid a recession coming from a significant rise in unemployment or negative consumption growth.

US Real GDP and Outlook (Calendar Year, Quarterly)



Source: Department of Commerce, MUFG Bank Economic Research Office

Outlook for US Real GDP

(YoY, %)

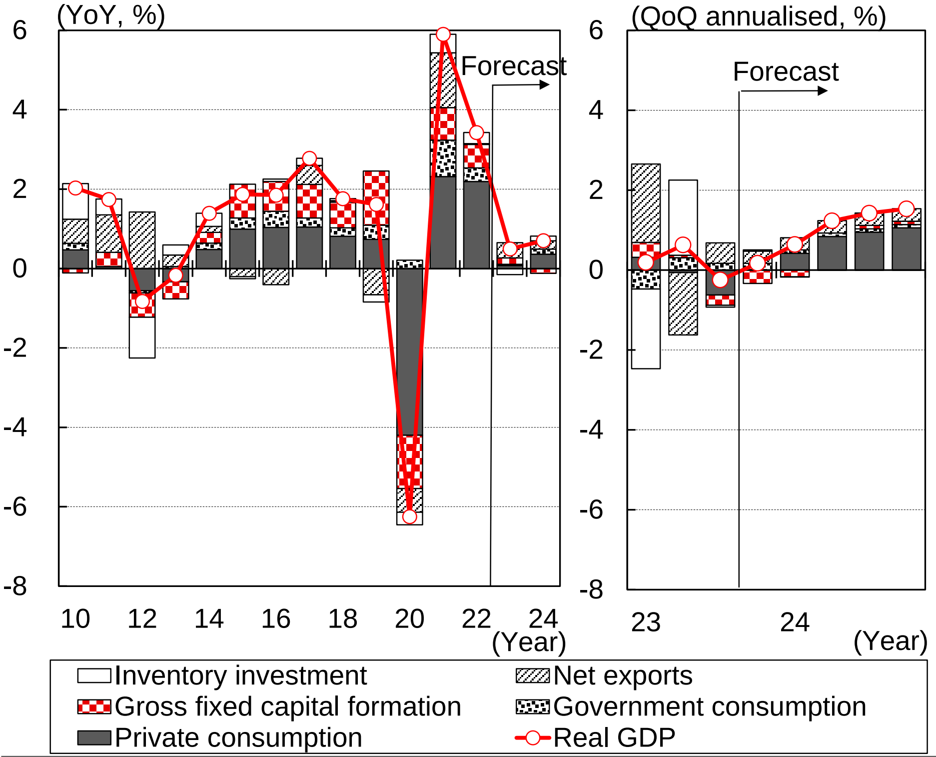
	2022 (Actual)	2023 (Forecast)	2024 (Forecast)
Real GDP	1.9	2.5	1.6
Personal consumption expenditures	2.5	2.2	1.4
Residential investment	-9.0	-10.8	0.3
Non-residential fixed investment	5.2	4.3	1.5
Change in private inventories (contribution)	0.6	-0.4	0.0
Government consumption expenditures	-0.9	3.9	2.2
Net exports (contribution)	-0.5	0.6	0.1
Exports	7.0	2.3	-0.0
Imports	8.6	-1.9	-0.7
Nominal GDP	9.1	6.2	4.0

Source: Department of Commerce, MUFG Bank Economic Research Office

2-3. European Economies: Euro Area

- Euro area GDP contracted by 0.2% QoQ annualised in Q3 as the economy remains stagnant. Domestic demand, especially private consumption and investment, looks weak as the effects of high inflation and ECB rate hikes weigh on the economy.
- Lower commodity prices have continued to pass through to food and core goods inflation with the headline rate falling to around 2.5% YoY. This bodes well for private consumption with a recovery in real incomes set to boost households' purchasing power in 2024.
- However, the lagged impact of monetary policy tightening will continue to weigh on growth. We also expect that the prolonged slump in German industrial production will continue with traditional industries, such as automobile production, facing increased competition and relatively higher energy costs. For this reason we expect that real GDP growth will average just 0.5% YoY in 2023 and improve only slightly to 0.7% in 2024.

Euro Area Real GDP and Outlook (Yearly and Quarterly)



Note: Breakdown of Q3 2023 uses MUFG's forecast
Source: Eurostat, MUFG Bank Economic Research Office

Real GDP Outlook for Major European Countries

(QoQ annualised, %) (YoY, %)

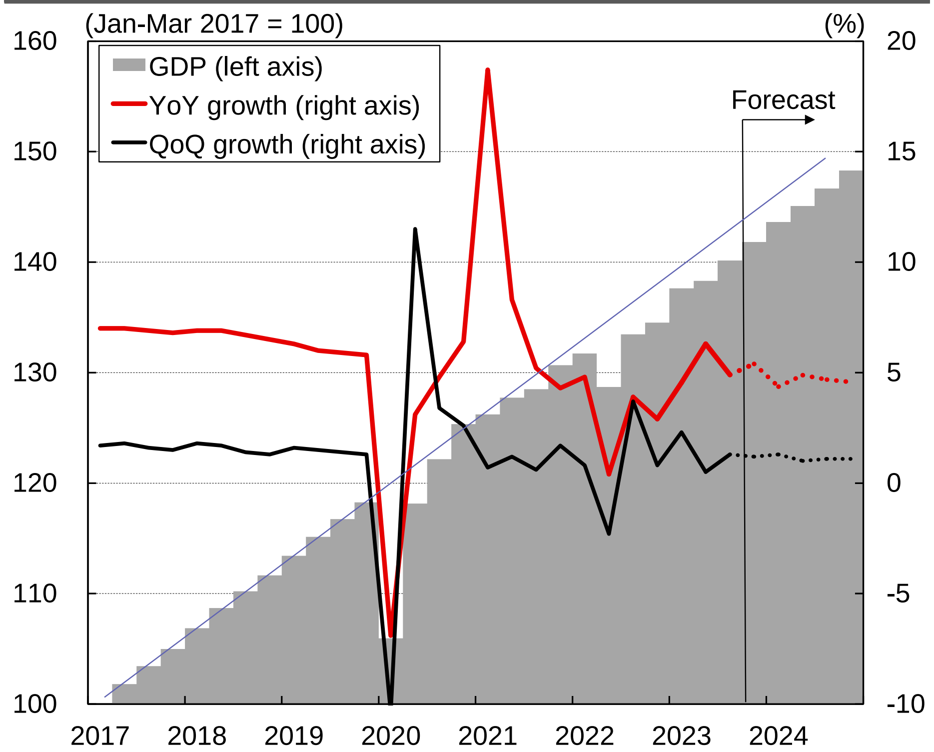
	2022		2023			2022	2023	2024
	Q3	Q4	Q1	Q2	Q3	Actual	Forecast	Forecast
Euro area	1.4	-0.1	0.2	0.6	-0.2	3.4	0.5	0.7
Germany	1.5	-1.6	-0.0	0.6	-0.5	1.8	-0.3	0.6
France	2.0	-0.0	0.2	2.5	-0.5	2.5	0.7	0.8
Italy	1.4	-0.7	2.3	-1.5	0.2	3.7	0.8	0.8
UK	-0.3	0.5	1.3	0.8	-0.1	4.3	0.5	0.6

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

2-4. Asian Economies: China

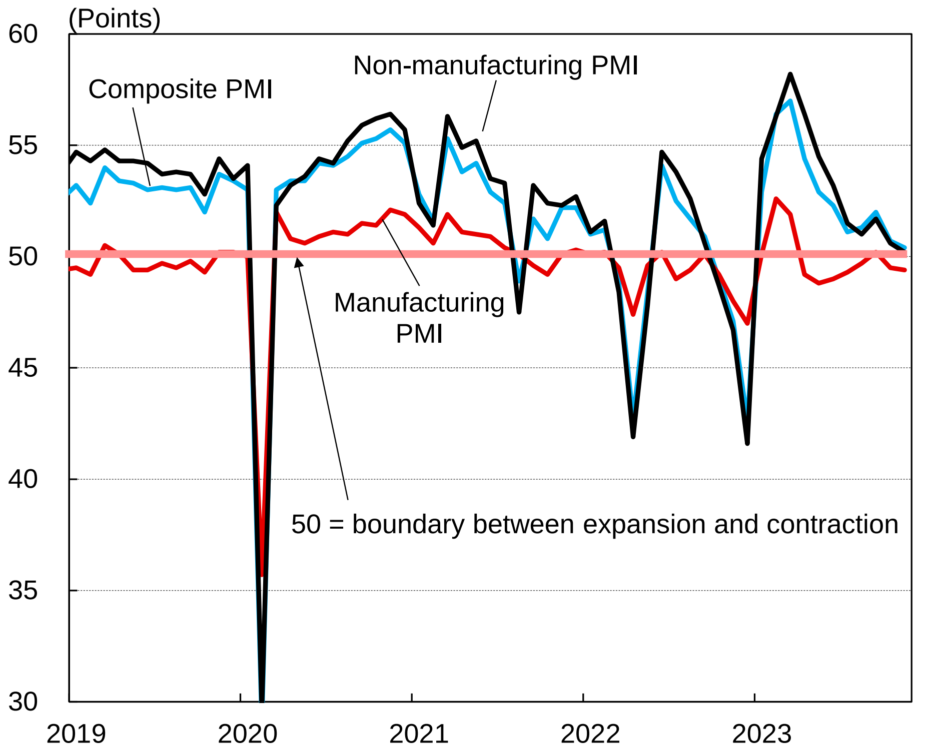
- Although the real GDP growth rate for the July-September quarter decelerated to 4.9% YoY from 6.3% YoY the previous quarter, on a quarterly basis growth picked up to 1.3% QoQ from 0.5% QoQ. However, manufacturing PMI fell below the 50 mark again in October and the recovery of China's economy remains slow.
- While government support is expected to underpin the economy, there will be continued downward pressure on the economy from the sluggish real estate sector, issues in the labour market – particularly among younger generations – and a deceleration in foreign demand. This year, we expect real GDP growth will be 5.3% YoY and will hit the government's target of around 5.0% YoY. However, growth is likely to slow next year to 4.6% YoY as the rebound caused by the end of the government's "zero COVID-19" policy fades.

China's Real GDP and Outlook



Note: The blue line indicates the trajectory of growth in 2017-2019 (pre-pandemic)
Source: National Bureau of Statistics of China, MUFG Bank Economic Research Office

China's PMI (by National Bureau of Statistics)

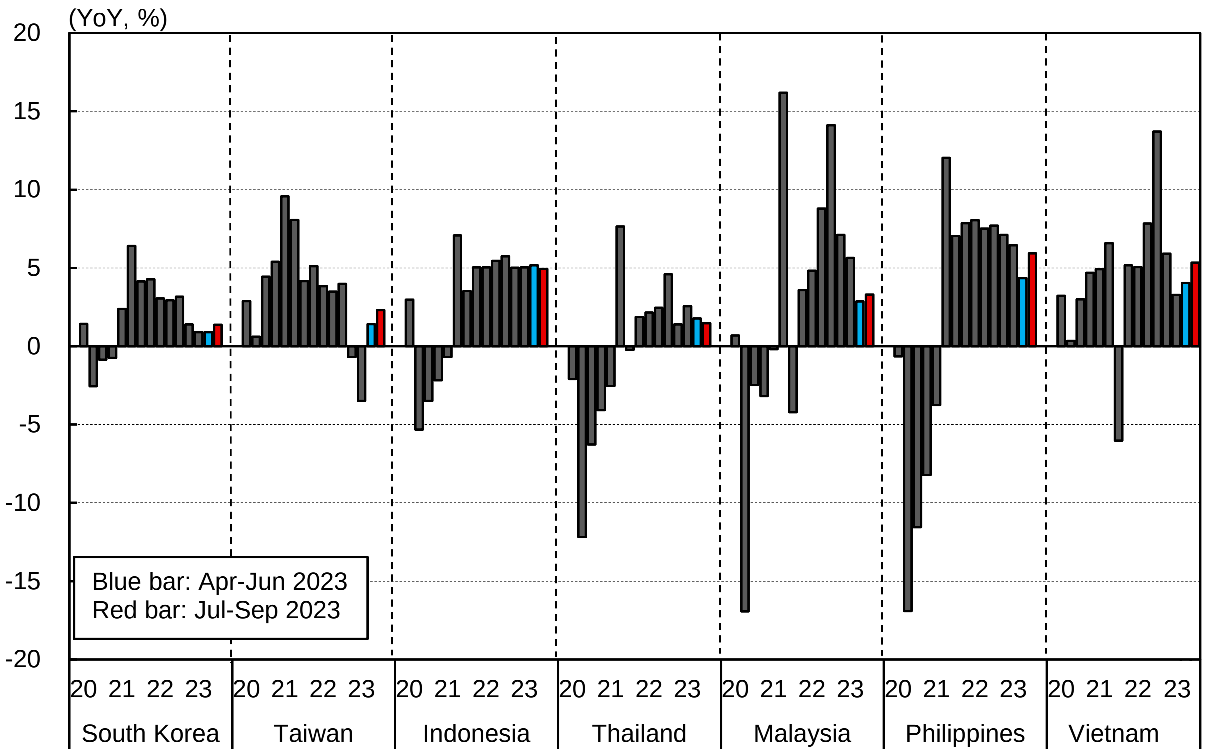


Source: National Bureau of Statistics of China, MUFG Bank Economic Research Office

2-4. Asian Economies: NIEs and ASEAN

- Real GDP growth in NIEs and ASEAN (5 major countries) accelerated in the July-September from the previous quarter to 1.8% YoY and 4.3% YoY respectively. Although goods exports remain weak, this was offset to a certain degree by the recovery in service exports (international tourism). Domestic demand, such as private consumption, remained firm.
- NIEs: Exports will slowly improve as the semiconductor market bottoms out and the recovery will gain momentum during the latter half of 2024 as advanced economies turn around. Given that NIEs are heavily reliant on foreign demand, we expect the real GDP growth rate to remain low at 1.3% YoY in 2023 and then to accelerate to 2.6% YoY in 2024.
- ASEAN: Consumption will continue to recover as inflation slows, and public investment and inward investment will increase, underpinning economies. The real GDP growth rate for 2023 is expected to slow to 4.5% YoY but then pick up to 5.1% YoY in 2024.

Real GDP of Major Asian Economies



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

Outlook for ASEAN

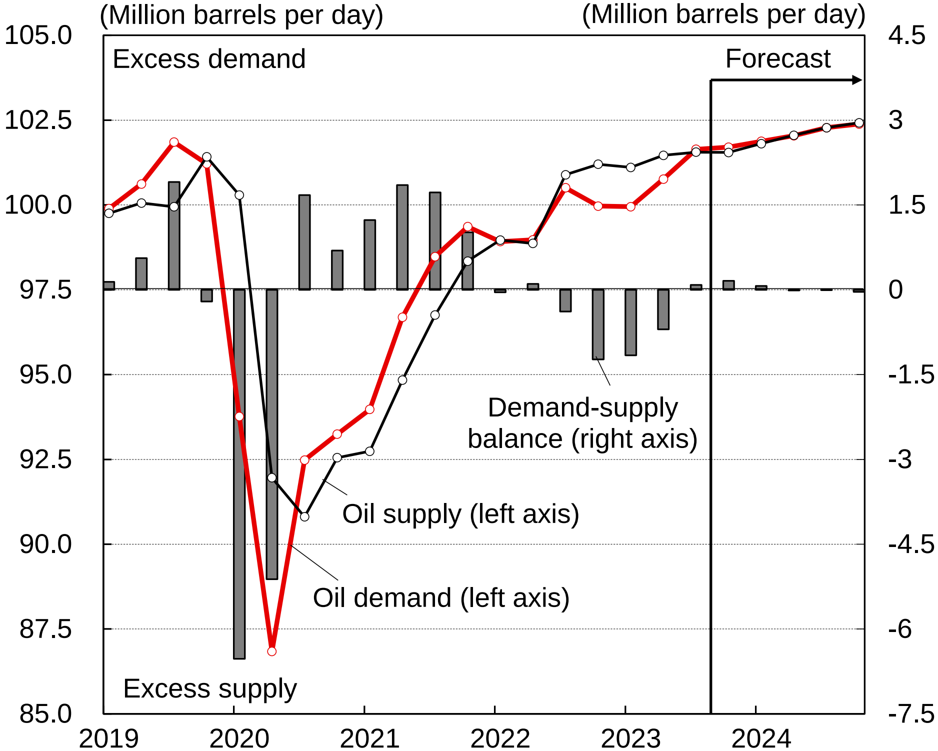
Indonesia
Public demand will increase due to construction of a new capital city and the presidential election. Inward investment will rise as de-risking trends and commodities are leveraged.
Thailand
Digital benefits from the new government will boost consumption. While the normalisation of tourism will contribute to growth, the return of Chinese tourists will be slow.
Malaysia
The labour market will continue to improve and consumption will continue to pick up. The semiconductor market will bottom out, which will underpin exports.
The Philippines
The inflation rate is still high and will put downward pressure on the economy. A rise in public investment will act as a tailwind after it was stagnant due to the pandemic.
Vietnam
Proactive fiscal and monetary policy will underpin the economy (tax cuts, rate cuts). The labour market and consumption will improve as international tourism gains momentum.

Source: Various sources, MUFG Bank Economic Research Office

2-5. Oil Prices

- Growth of oil demand is set to remain gradual for the time being. On the supply side, it is highly likely that OPEC+ will continue to adjust the volume of oil supply through flexible voluntary production cuts by some of its members. Therefore, we expect the supply-demand balance to continue at a rough equilibrium for the forecast period. Oil prices are likely to remain around USD 5 either side of their current level (approximately USD 80 per barrel).
- Upside risks to oil prices include a sudden decline in Russian oil production (a reaction to economic sanctions by G7 and others) and an escalation of the conflict in Gaza that encompasses the whole of the Middle East (in this case, there is a risk of disruption to the oil supply from the Middle East). On the other hand, downside risks include a weaker Chinese economy than expected and a large deceleration in the growth of oil demand.

Outlook for Global Oil Supply and Demand



Note: Forecast for 2023 and 2024 by MUFG Economic Research Office
Source: EIA, UK Energy Institute, MUFG Bank Economic Research Office

Outlook of Oil Prices

	WTI price (USD/barrel)	YoY (%)	Brent Price (USD/barrel)	YoY (%)
Q1 2022	95.0	63.4%	97.9	59.7%
Q2	108.5	64.2%	112.0	62.1%
Q3	91.4	29.7%	97.7	33.4%
Q4	82.6	7.2%	88.6	11.3%
Q1 2023	76.0	-20.0%	82.2	-16.1%
Q2	73.7	-32.1%	77.7	-30.6%
Q3	82.2	-10.1%	85.9	-12.1%
Q4	80.0	-3.2%	83.0	-6.4%
Q1 2024	80.0	5.3%	83.0	1.0%
Q2	80.0	8.6%	83.0	6.8%
Q3	80.0	-2.7%	83.0	-3.4%
Q4	80.0	0.0%	83.0	0.0%
2022	94.3	38.8%	99.0	39.8%
2023	78.0	-17.3%	82.2	-17.0%
2024	80.0	2.6%	83.0	1.0%

Forecast

Note: Prices shown are average for period
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		US	Central and South America (6 countries)			Eurozone (20 countries)				UK
								Brazil	Mexico		Germany	France	Italy	
Nominal GDP	USD trillions	123.6	62.1	61.5	6.1	25.5	10.2	3.8	3.1	19.6	5.4	3.7	3.1	3.7
(2022)	Japan = 100	2,012	1,011	1,000	100	414	166	62	50	319	87	60	50	60
Real GDP	2022 Actual	3.4	2.5	4.3	1.4	1.9	3.7	2.9	3.9	3.4	1.8	2.5	3.7	4.3
YoY, %	2023 Forecast	3.2	1.5	4.9	1.5	2.5	1.9	2.8	3.2	0.5	-0.3	0.7	0.8	0.5
	2024 Forecast	2.9	1.3	4.5	0.7	1.6	1.8	1.2	2.0	0.7	0.6	0.8	0.8	0.6
CPI	2022 Actual	6.4	7.2	5.5	3.0	8.0	15.6	9.3	7.9	8.4	8.6	5.9	8.7	9.1
(YoY, %)	2023 Forecast	4.7	4.6	4.8	2.7	4.1	18.0	4.7	5.5	5.4	5.9	4.9	6.0	7.2
	2024 Forecast	3.4	2.5	4.3	2.2	2.7	13.5	4.5	3.8	2.3	2.4	2.2	2.1	3.0

		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	56.9	30.2	11.9	5.6	2.8	1.6	0.5	0.7	9.1	4.0	1.5	1.1	1.2	1.3	1.6
(2022)	Japan = 100	926	492	194	91	45	26	8	12	149	66	24	19	19	22	27
Real GDP	2022 Actual	4.2	3.0	7.2	2.1	2.6	2.4	-3.5	3.6	6.0	5.3	2.6	8.7	7.6	8.0	3.7
(YoY, %)	2023 Forecast	5.1	5.3	6.6	1.3	1.2	1.0	3.4	0.8	4.5	5.0	2.5	4.2	5.4	4.8	1.7
	2024 Forecast	4.8	4.6	6.3	2.6	2.2	3.1	3.4	2.8	5.1	5.0	4.0	4.4	5.8	6.5	1.4
CPI	2022 Actual	3.6	2.0	6.7	4.3	5.1	2.9	1.9	6.1	4.5	4.2	6.1	3.4	5.8	3.2	6.6
(YoY, %)	2023 Forecast	2.3	0.4	5.3	3.3	3.7	2.5	2.0	4.8	3.5	3.7	1.6	2.7	6.1	3.2	5.7
	2024 Forecast	2.5	1.5	4.7	2.4	2.6	2.0	2.1	2.8	2.8	3.0	1.7	2.3	3.8	3.1	3.8

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", "advanced economies", "emerging economies", "Japan" are 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, Euro area (20 countries) and the UK. "Emerging economies" is a total of China, India, ASEAN (5 countries) and Latin America (6 countries)
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

MUFG

Appendix: Outlook for the Japanese Economy and Financial Markets

Outlook for the Japanese Economy (First Preliminary Estimate of GDP Statistics for July-September 2023)

								Forecast →							Forecast →	
	2022				2023				2024				2025	FY2022	FY2023	FY2024
	Q1	2Q	3Q	4Q	Q1	2Q	3Q	4Q	Q1	Q2	Q3	Q4	Q1			
1. The Real Economy (QoQ annualized change)																
Real GDP	-2.6	4.7	-0.4	-0.2	3.7	4.5	-2.1	1.1	0.7	0.8	0.8	1.0	1.0	1.4	1.5	0.7
Private Consumption	-4.7	7.1	0.7	0.8	2.6	-3.5	-0.2	1.4	0.4	0.6	0.6	0.8	0.8	2.4	- 0.1	0.7
Housing Investment	-5.3	-8.1	0.4	3.9	2.0	7.2	-0.3	2.6	2.6	1.0	-3.2	-3.2	-3.2	- 4.4	3.1	- 0.2
Private Business Fixed Investment	-0.2	7.2	7.7	-3.6	7.0	-4.0	-2.5	1.4	2.2	2.3	2.2	2.5	2.5	3.1	0.1	1.9
Business Inventory (Contribution)	0.6	-0.2	0.1	-0.4	0.4	-0.1	-0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.2	- 0.2	- 0.0
Government Expenditures	-1.2	1.7	0.0	1.5	1.2	0.4	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.2	0.7	0.6
Public Investment	-14.8	2.1	4.3	0.2	5.9	1.1	-2.0	1.0	1.0	1.5	1.2	1.0	1.0	- 3.0	1.4	1.0
Net Exports (Contribution)	-0.4	0.1	-0.6	0.3	-0.2	1.8	-0.1	-0.2	-0.1	-0.1	0.1	0.1	0.1	- 0.6	1.2	- 0.1
Exports	6.3	7.9	9.1	6.2	-13.4	16.7	2.1	-0.6	-1.4	1.0	1.9	1.9	1.9	4.4	2.7	0.8
Imports	15.9	4.9	22.0	0.8	-8.0	-14.5	4.2	0.3	-0.7	1.3	1.6	1.6	1.6	7.2	- 3.3	1.1
Nominal GDP	0.7	3.7	-3.1	5.4	9.4	10.5	-0.2	3.0	2.4	2.3	2.0	2.2	2.0	2.0	5.3	2.2
GDP Deflator (YoY)	0.4	-0.2	-0.3	1.2	2.0	3.5	5.1	3.8	2.8	1.7	1.6	1.4	1.2	0.6	3.7	1.5
Industrial Production Index (QoQ)	0.8	-1.4	3.1	-1.7	-1.8	1.4	-1.2	0.1	0.1	0.3	0.4	0.5	0.5	- 0.3	- 1.0	0.8
Domestic Corporate Goods Price Index (YoY)	9.4	9.8	9.9	10.1	8.4	5.0	3.0	0.5	0.3	1.4	0.8	-0.3	-0.5	9.5	2.2	0.4
Consumer Price Index (excl. fresh food, YoY)	0.6	2.2	2.7	3.8	3.5	3.2	3.0	2.5	2.0	2.3	2.5	1.9	1.7	3.0	2.7	2.1
2. Balance of Payments																
Trade Balance (JPY billions)	-1,751	-3,692	-5,573	-5,162	-3,725	-971	-681	-350	-279	-374	-398	-463	-509	-18,151	-2,281	-1,744
Current Balance (JPY billions)	4,126	2,946	754	2,182	2,416	5,867	6,156	6,632	6,770	6,657	6,662	6,630	6,615	8,298	25,425	26,564
3. Financial																
Uncollateralized overnight call rate	- 0.0	- 0.0	- 0.0	- 0.1	- 0.0	- 0.1	- 0.1	- 0.0	- 0.0	0.1	0.1	0.2	0.2	- 0.0	- 0.0	0.2
Euro-Yen TIBOR (3-month rate)	- 0.0	- 0.0	- 0.0	- 0.0	- 0.0	- 0.0	- 0.0	- 0.0	0.0	0.1	0.1	0.2	0.2	- 0.0	- 0.0	0.2
Newly Issued 10-Year Government Bonds Yield	0.2	0.2	0.2	0.3	0.4	0.4	0.6	0.8	0.7	1.0	1.1	1.1	1.1	0.3	0.6	1.1
Exchange Rate (USD/JPY)	116	130	138	141	132	138	145	150	149	144	142	140	139	135	145	141

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						Forecast	
	2022				2023				2024				2022	2023	2024
	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, %)	-2.0	-0.6	2.7	2.6	2.2	2.1	5.2	1.6	0.9	0.7	1.2	1.4	1.9	2.5	1.6
Personal Consumption Expenditures	0.0	2.0	1.6	1.2	3.8	0.8	3.6	1.4	0.8	0.8	1.3	1.4	2.5	2.2	1.4
Fixed Investment (Residential)	-1.8	-14.1	-26.4	-24.9	-5.3	-2.2	6.2	1.2	-2.1	-1.5	1.6	2.0	-9.0	-10.8	0.3
Fixed Investment (Nonresidential)	10.7	5.3	4.7	1.7	5.7	7.4	1.3	1.0	0.8	1.2	1.4	1.8	5.2	4.3	1.5
Changes in Business Inventories (Contribution)	-0.1	-2.1	-0.7	1.6	-2.2	-0.2	1.4	-0.2	-0.3	-0.2	-0.1	0.0	0.6	-0.4	0.0
Government Expenditures	-2.9	-1.9	2.9	5.3	4.8	3.3	5.5	1.9	1.6	1.5	1.1	1.3	-0.9	3.9	2.2
Net Exports (Contribution)	-2.6	0.6	2.6	0.3	0.6	0.0	0.0	0.3	0.3	0.0	-0.1	-0.1	-0.5	0.6	0.1
Exports	-4.6	10.6	16.2	-3.5	6.8	-9.3	6.0	-1.2	-1.5	0.9	1.7	1.9	7.0	2.3	0.0
Imports	14.7	4.1	-4.8	-4.3	1.3	-7.6	5.2	-3.1	-3.1	0.7	1.8	2.2	8.6	-1.9	-0.7
Domestic Private End User Demand	1.5	1.5	0.3	-0.2	3.6	1.7	3.3	4.1	0.4	0.5	1.2	1.4	2.3	2.0	1.7
Nominal GDP (QoQ annualized, %)	6.2	8.5	7.2	6.5	6.3	3.8	8.9	3.3	3.3	3.1	3.5	3.7	9.1	6.2	4.0
Industrial Production (QoQ annualized, %)	3.7	4.1	2.1	-2.5	-0.3	0.8	2.0	-0.9	-1.0	0.6	1.7	1.8	3.4	0.3	0.3
Unemployment Rate (%)	3.8	3.6	3.5	3.6	3.5	3.5	3.7	3.9	4.1	4.2	4.3	4.3	3.6	3.7	4.2
Producer Price Index (YoY, %)	10.7	11.2	9.0	7.3	4.4	1.2	1.8	1.5	1.7	2.5	1.7	1.8	9.5	2.2	1.9
Consumer Price Index (YoY, %)	8.0	8.6	8.3	7.1	5.8	4.0	3.5	3.1	2.9	2.8	2.6	2.5	8.0	4.1	2.7
2. Balance of Payments															
Trade Balance (hundred million dollars)	-3,328	-3,089	-2,672	-2,741	-2,633	-2,752	-2,608	-2,401	-2,329	-2,316	-2,378	-2,377	-11,830	-10,394	-9,401
Current Account (hundred million dollars)	-2,839	-2,488	-2,228	-2,162	-2,145	-2,329	-2,227	-2,129	-2,050	-2,035	-2,113	-2,110	-9,716	-8,830	-8,309
3. Financial Indicators															
FF Rate Target (%)	0.25-0.50	1.50-1.75	3.00-3.25	4.25-4.50	4.75-5.00	5.00-5.25	5.25-5.50	5.25-5.50	5.25-5.50	5.00-5.25	4.75-5.00	4.50-4.75	4.25-4.50	5.25-5.50	4.50-4.75
Euro Dollar (3M) (%)	0.3	1.3	2.8	4.2	4.8	5.1	5.4	5.3	5.3	5.2	4.9	4.7	2.2	5.2	5.0
10-year Treasury Note's Yield (%)	1.9	2.9	3.1	3.8	3.6	3.6	4.1	4.5	4.3	4.2	4.1	4.0	2.9	4.0	4.2

Note: FF Rate Target is for end of the period, and Euro Dollar (3M) and 10-year Note's Yields are period averages. Current account balance for Q3 2023 is a forecast.

Source: Compiled by MUFG Bank Economic Research Office from various reports and Bloomberg

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)		
	2022 (Actual)	2023 (Forecast)	2024 (Forecast)	2022 (Actual)	2023 (Forecast)	2024 (Forecast)	2022 (Actual)	2023 (Forecast)	2024 (Forecast)
Euro Area	3.4	0.5	0.7	8.4	5.4	2.3	- 1064	1860	2320
Germany	1.8	-0.3	0.6	8.6	5.9	2.4	1803	2330	2420
France	2.5	0.7	0.8	5.9	4.9	2.2	- 548	- 281	- 271
Italy	3.7	0.8	0.8	8.7	6.0	2.1	- 295	116	218
UK	4.3	0.5	0.6	9.1	7.2	3.0	- 1018	- 704	- 664

2. Forecast by Demand Component (YoY, %)

	Euro Area			UK		
	2022 (Actual)	2023 (Forecast)	2024 (Forecast)	2022 (Actual)	2023 (Forecast)	2024 (Forecast)
Nominal GDP	8.2	6.1	3.0	9.7	7.9	3.5
Real GDP	3.4	0.5	0.7	4.3	0.5	0.6
Contribution by domestic demand	3.4	0.1	0.5	6.0	0.2	0.9
Contribution by foreign demand	0.0	0.4	0.2	- 1.7	0.3	- 0.4
Private consumption	4.2	0.1	0.7	7.9	2.7	- 1.2
Government consumption	1.6	0.1	0.6	9.6	5.6	0.0
Gross fixed capital formation	2.8	0.7	- 0.6	0.7	7.2	0.0
Inventory investment (contribution)	0.8	0.3	0.1	9.5	- 6.7	0.0
Exports	7.4	0.6	2.1	0.9	- 1.1	- 0.1
Imports	8.0	- 0.1	1.8	6.0	0.2	0.9

Note: 1. “Euro area" is total of 20 countries - Germany, France, Italy, Ireland, Estonia, Austria, The Netherlands, Croatia, Cyprus, Greece, Spain, Slovakia, Slovenia, Finland, Belgium, Portugal, Malta, Luxembourg, Lithuania
2. "CPI" is the standardised inflation rate for the euro area, Germany, France and Italy (HICP)
Source: Eurostat, UK Office for National Statistics, MUFG Bank Economic Research Office

- **This report is intended for information purposes only and shall not be construed as solicitation to take any action. In taking any action, each reader is requested to do so on the basis of their own judgment.**
- **This report is based on information believed to be reliable, but we do not guarantee its accuracy. The contents of the report may be revised without advance notice.**
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