# Economist Letter

# Economic Outlook for Fiscal Years 2023 and 2024 (May 2023)

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### <Real growth rate: 0.9% in FY2023 and 1.6% in FY2024>

- 1. Real GDP in the January–March quarter of 2023 grew at an annualized rate of 1.6%, the first positive growth in three quarters, as private consumption, housing investment, and capital investment increased together, despite a decline in exports due to the slowdown in overseas economies.
- 2. Exports are not expected to be the driving force of the economy in the foreseeable future, and the Japanese economy is likely to continue to grow primarily as a result of domestic demand. Real GDP growth is forecast to be 0.9% in FY2023 and 1.6% in FY2024—a lower growth rate is predicted in FY2023 due to deteriorating external demand, and a higher growth rate is predicted in FY2024 because overseas economies are expected to recover and therefore exports are expected to increase.
- 3. With the COVID-19 infection shifting to category 5, a sharp recovery in face-to-face service consumption and inbound tourist demand is expected. Thus, the government's goal of increasing inbound travel consumption to 5 trillion yen is likely to be achieved in 2023.
- 4. The consumer price inflation rate (composite, excluding fresh food) will slow from the current 3% level to the upper 2% level by the summer but is not expected to fall below the price target of 2% until after 2024. While a lull in the rise in crude oil prices and the depreciation of the yen will weaken the trend of passing on raw material costs to prices, the rate of increase in service prices will increase as the rate of wage hikes rises. The pace of service price hikes could be very fast, as no price hikes have been implemented for a long period of time. The consumer price inflation rate (excluding fresh food) is projected to be 2.4% in FY2023 and 1.3% in FY2024.

# 1. 1.6% annualized positive growth in Jan–Mar quarter of 2023 compared to the previous quarter

Real GDP grew by 0.4% (1.6% annualized) in the January–March quarter of 2023.

Exports fell by 4.2% due to the slowdown in overseas economies, pushing down the growth rate of external demand (contribution to growth rate: -0.3%, annualized: -1.3%), but private consumption (0.6%), capital investment (0.9%), and housing investment (0.2%) all increased, leading to positive growth led by domestic demand.

The real GDP growth rate for the October–December quarter of 2022 was revised downward from an annualized positive growth rate of 0.1% to a negative growth rate of 0.1%. The growth rate for the January— March quarter of 2023 was higher than previously expected. Although growth exceeded expectations, this was the first positive growth in three quarters, meaning it can scarcely be said that the Japanese economy has returned to a stable growth trajectory.

In addition, real GDP in the January–March quarter of 2023 was 1.3% above the pre-COVID-19 (October– December 2019) level, but 1.5% below the peak before the consumption tax rate hike was implemented (July-September 2019). Hence, there is still some distance to go before the economy normalizes.

Real GDP growth in FY2022 was 1.2% (2.6% in FY2021) and nominal GDP growth was 1.9% (2.4% in FY2021), both positive for the second consecutive year. GDP levels exceeded FY 2019 in nominal terms but did not reach FY 2019 in real terms.

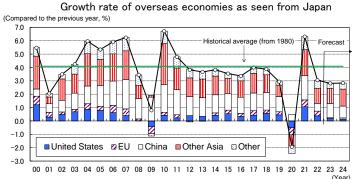
(Exports are not expected to be the driving force of the economy)

Real GDP for the January-March quarter of 2023 was 1.1% in the U.S. and 0.3% in the euro area. Looking ahead, we expect the U.S. to fall into a mild recession in the second half of 2023 due to cumulative monetary tightening. Meanwhile, in the euro area, a recession will be avoided due to lower energy prices, a resilient employment environment, and excess savings, but growth will continue to be low, staying within the range of zero percent per annum during 2023. Meanwhile, China's real GDP growth rate, which fell sharply to 3.0% in 2022 from 8.4% in 2021 due to the zero-COVID-19 policy and the associated lockdown, is likely to rise to the 5% range in 2023 following the end of the zero-COVID-19 policy.

The growth rate of the overseas economy, weighted by Japan's export weights, will decelerate

significantly from approximately 6% in 2021 to around 3% in 2022, before further declining to the upper 2% range in 2023 and 2024, remaining below the average growth rate of around 4% since 1980.

Japan's exports, after growing a high 12.4% in FY2021, slowed to 4.4% in FY2022, and are expected to decline for the first time in three years, by 1.4%, in FY2023.



Note: Weighted average of real GDP growth in each country and region by weight of Japan's exports.

The forecasts for the United States, the EU, and China are taken from the NLI Research Institute; those for other region taken from IMF data, as of January 2023.

Sources: "World Economic Outlook," IMF; "Trade Statistics," Ministry of Finance.

(Face-to-face service consumption and inbound tourist demand expected to recover rapidly)

On May 8th, COVID-19 infections were moved from the status of "new influenza and other infectious diseases (so-called category 2 equivalent)" to "category 5 infectious diseases" under the Infectious Diseases Control Law of Japan. As a result, infection control measures were changed from "a system of various requests and involvement by the government based on the law" to "one based on voluntary efforts by the public, respecting individual choices."

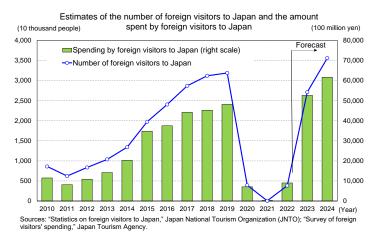
An expected consequence of the shift to category 5 is a recovery in face-to-face service consumption, such as eating out and lodging, and inbound tourist demand.

Face-to-face service consumption, which fell rapidly due to the social restrictions imposed by the COVID-19 crisis, continued to pick up in FY2022 because no state-of-emergency declarations or priority measures to prevent the spread of the disease were issued. However, the level of face-to-face service consumption at the end of FY2022 was only around 80% of the pre-COVID-19 level (2019 average), leaving significant room for future growth.

Inbound tourist demand continued to diminish after the COVID-19 crisis, but it has been recovering rapidly since October 2022, following the gradual easing of border measures. Indeed, there were 1,949,100 inbound visitors in April 2023 (down 33.4% from the same month in 2019), but this figure then recovered to a level just under 70% of the pre-COVID-19 level (2019 average). By visitors' origin country, the U.S., Singapore, and Indonesia have already surpassed their pre-COVID-19 levels. The number of visitors to Japan from China, accounting for roughly 30% of the total number of visitors before the COVID-19 pandemic, remains at 15% (much lower than in the same month in 2019) due to Japan's mandatory testing for new strains of coronavirus for visitors from China and the fact that China has not lifted its ban on group travel to Japan. However, Japan's border measures have already been lifted, and once China lifts its ban on group travel to Japan, the number of Chinese visitors to Japan will rebound rapidly.

Even more pronounced than the recovery in the number of foreign visitors to Japan is the amount of travel spending by foreign visitors to Japan. According to the Japan Tourism Agency's "Survey of Trends in Foreign Traveler Spending in Japan," the value of travel spending by foreigners visiting Japan during the January—March quarter of 2023 was 1.146 trillion yen (down 11.9% from the same quarter in 2019). The reason why

the decline is smaller than the 37.8% decline in the number of foreign visitors to Japan during the same quarter is that per capita spending was 212,000 yen, a significant increase of 43.8% over the same quarter in 2019. This is a trend that has continued since the October—December quarter of 2021, when the Survey of Spending Trends by Foreign Visitors to Japan, which had been temporarily suspended due to COVID-19, was permitted to resume.



Reasons for the expansion in per capita consumption include the yen's depreciation relative to its pre-COVID-19 level and the sharp decline in the number of tourists with relatively short stays, which has resulted in an increase in the percentage of business and other visitors undertaking longer stays. Of these, the average length of stay will be expected to shorten due to the rapid increase in the number of tourists, but the effect of the weaker yen will continue to boost consumption in the future.

With the lifting of the border measures, the number of inbound foreign visitors will continue to recover in the future and is likely to surpass the pre-COVID-19 level (31.88 million in 2019) in terms of monthly annualized base by the end of 2023. Although the number of inbound travelers is not expected to reach a new annual record high until 2024, the government's goal of increasing inbound travel spending to 5 trillion yen by 2023 will be achieved as the weak yen continues to push up per capita spending.

(Spring Wage Hike Rate to Highest Level in 30 Years)

According to the "Results of the Fifth Round of Responses to the Spring 2023 Labor Offensive" released by RENGO on May 10, the average wage increase for 2023 was 3.67%, and the "portion of wage increase" corresponding to base increase was 2.14%.

The spring labor offensive wage increase rate, which is usually announced by the Ministry of Health, Labor, and Welfare around August each year, is almost certain to rise significantly from 2.20% in 2022 to reach the 3% level for the first time since 1994 (3.13%). The largest year-on-year improvement since 1980 was 0.94% in 1981 (1980: 6.74% → 1981: 7.68%), but the improvement in 2023 is likely to be greater than 1%.



Sources: "Status of Demands for and Agreements on Spring Wage Raises by Major Private Corporations," Ministry of Health, Labor and Welfare; "Results of Responses on Spring Labor Offensive," The Japanese Trade Union Confederation. or RENGO.

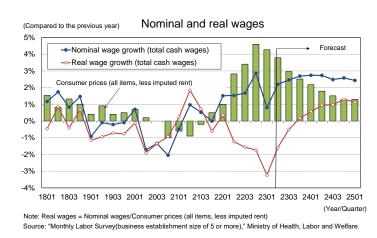
Wage growth will clearly increase after the beginning of FY2023, as the rate of spring wage increases in 2023 has been the highest in 30 years. The growth of scheduled earnings is expected to increase from the current level of around 1% to the 2% level, the same as the base increase. Meanwhile, non-scheduled earnings are expected to continue to increase as the economy normalizes. However, special earnings, which grew at a high 4.6% y/y in 2022 (including 2.4% y/y in summer 2022 and 3.2% y/y at the end of 2022 for salaries paid as bonuses), will slow down in 2023, reflecting the recent stall in the improvement of corporate earnings.

Total cash earnings are expected to increase from approximately 1% y/y at present to the 2% level after entering FY2023 and to then continue to grow in the mid-to-late 2% range through FY2024.

Real wages have been negative year-on-year since April 2022, primarily as a result of the accelerating pace of consumer price inflation. Although nominal wage growth will increase in the future, the decline in real wages is likely to continue even after the start of FY2023, as the rate of consumer price inflation will

remain high. Moreover, the real wage growth rate is expected to turn positive in the second half of FY2023, when the consumer price inflation rate is expected to slow down.

The current outlook assumes that the spring wage hike rate will reach 3.6% in 2023, the highest level since 1993 (3.89%), and then remain at the 3% level in 2024, although growth will slow slightly to 3.3%. Although corporate earnings growth will decline, especially in the manufacturing sector, due to sluggish exports, the consumer price inflation rate will remain high, which will help to boost the wage growth rate.



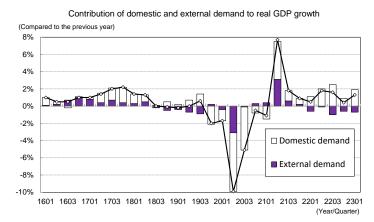
## 2. Real growth rate is forecast to be 0.9% in FY2023 and 1.6% in FY2024.

(Growth will continue to be supported by domestic demand)

The reason why the Japanese economy as a whole has avoided a backslide even as exports and production have remained weak against the backdrop of the slowdown in overseas economies is that domestic demand has remained resilient. Considering the contribution that domestic and external demand have made to real GDP growth (y/y), it can be seen that external demand has been pushing down the growth rate since the January–March quarter of 2022, while domestic demand has continued to make a positive contribution since the April–June quarter of 2021.

Indeed, while external demand is deteriorating, domestic demand remains resilient, as evidenced by the

business sentiment of firms. The DI for the manufacturing sector (all sizes), which is strongly influenced by exports, peaked at +6 in the December 2021 survey and then declined, turning negative at -4 in the March 2023 survey, while the DI for the non-manufacturing sector (all sizes), which is more closely linked to domestic demand, turned positive in the June 2022 survey and has since risen to +12 in the March 2023 survey.



Source: "Quarterly Estimates of GDP," Cabinet Office.

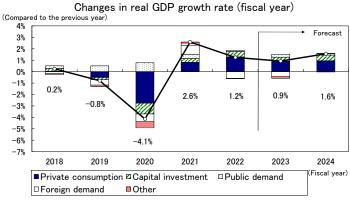
The Japanese economy is expected to continue to grow primarily as a result of domestic demand, as exports are not expected to be the driving force of the economy in the foreseeable future due to sluggish overseas economies. In the April–June quarter of 2023, exports of goods and services are expected to grow at an annualized rate of 1.5%, roughly the same as that seen in the January–March quarter, as domestic demand, mainly private consumption, will remain firm.

The growth rate will decelerate once to the zero percent level in the second half of 2023 when exports begin to decline due to the U.S. recession, but, after 2024, when the overseas economy is expected to recover, the growth rate will increase mainly due to a surge in exports.

Real GDP growth is projected to be 0.9% in FY2023 and 1.6% in FY2024. At present, our main scenario is that the U.S. recession will remain mild and Japan will maintain its recovery trend. However, if the U.S. recession becomes severe, Japan's exports will suffer a significant downturn thanks to the deterioration of the

global economy, and a recession will become inevitable for Japan as well.

Real GDP in the January–March quarter of 2023 is 1.3% above the pre-COVID-19 level (October–December 2019) but 1.5% below the most recent peak (July–September 2019). We expect real GDP to recover to the level of the most recent peak in the April–June 2024 quarter. It took more than five years (22 quarters) for the level of real GDP to recover



Source: "Quarterly Estimates of GDP," Economic and Social Research Institute, Cabinet Office.

from its most recent peak at the time of the global financial crisis, and it is increasingly likely that it will take a comparable amount of time for the economy to recover from the current COVID-19 pandemic.

#### (Outlook for inflation)

Consumer prices (total, excluding fresh food; hereinafter core CPI) rose by 4.2% y/y in January 2023, the highest growth in 41 years and 4 months since September 1981, primarily as a consequence of higher energy and food prices, before falling sharply to 3.1% y/y in February, mainly due to government measures designed to ease the burden of electricity and city gas bills. However, the underlying upward pressure on prices has further increased, as the pace of increase in the CPI (excluding fresh food and energy) has accelerated significantly.

Core CPI growth will likely increase in April due to the fiscal year's price increases across a wide range of items, before slowing to around 3% in May, mainly due to an accelerating decline in electricity prices as a result of the reduction in the levy for promoting renewable energy generation.

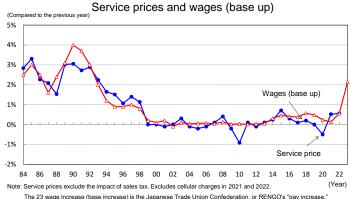
The implementation of electricity rate hikes applied for by electric power companies and the reduction of the government's burden mitigation measures in October will push up electricity prices, but energy prices are likely to remain negative year-on-year due to the compression of price hikes compared to the original application and the decline in fuel prices, including crude oil and LNG, which are likely to remain negative year-on-year.

On the other hand, food (excluding fresh food) is increasingly shifting higher raw material costs to prices, with the rate of increase in March 2023 at 8.2%, exceeding the growth of food and beverage in the domestic corporate goods price (7.0% y/y in April 2023), which is upstream of the consumer price index. Based on the already-published results for Tokyo wards in April, it is highly probable that the inflation rate of food (excluding fresh food) will accelerate to the 9% level in April.

However, the rise in import prices, which had been the main cause of high prices, has since halted due to a lull in the rise in crude oil prices and the depreciation of the yen. As a result, the rate of increase in goods prices is expected to slow down in the future as the trend of passing on raw material costs to prices gradually weakens.

Meanwhile, service prices, which had continued to fall, began to rise in August 2022 before reaching 1.5% y/y in March 2023. Service prices are highly linked to wages, but, at present, the main cause of the rise in service prices is the dramatic increase in general food service (7.6% y/y in March 2023), which accounts for

a high proportion of raw material costs among services. However, it is expected that there will be a further increase in the shift of increased labor costs to prices as a result of wage hikes; taking into account that base increases in 2023 are expected to be around 2%, the rate of service price increases is likely to rise to the 2% level after the start of the fiscal year 2023. The pace of future service price increases is likely to be very fast given the absence of price increases for an extended period of time.

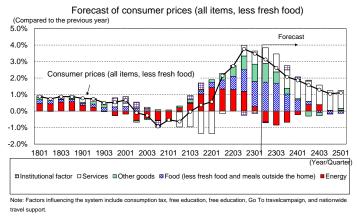


Sources: "Consumer Price Index," Statistics Bureau, Ministry of Internal Affairs and Communications; "Comprehensive Survey of Wage Situation," Central Labor Relations Commission.

The core CPI growth rate will slow from the current 3% level to the upper 2% level over the summer but will remain high at the 2% level until around the end of 2023. We expect the core CPI growth rate to fall

below the BOJ's price target of 2% after the beginning of 2024, when the pace of increase in food and other goods prices will surely slow as the impact of falling import prices spreads amid the continued decline in energy prices.

Most of the price increases in FY2022 were caused by rises in goods prices, primarily energy and food (excluding fresh food and eating out), but in FY2023 goods prices and



ource: "Consumer Price Index," Statistics Bureau, Ministry of Internal Affairs and Communications

services prices will contribute roughly the same amount, followed by a shift to service-centered price increases in FY2024.

Core CPI growth is projected to be 3.0% y/y in FY2022, followed by 2.4% y/y in FY2023 and 1.3% y/y in FY2024.

#### Outlook for the Japanese economy

Previous (Units,%) Y 2021 FY 2022 Y 2023 FY 2024 22/4-6 22/7-9 22/10-12 23/1-3 23/4-6 23/7-9 23/10-12 24/1-3 24/4-6 24/7-9 24/10-12 25/1-3 Y 2022 Y 2023 Y 2024 Actual Actual Actual Real GDP 2.6 0.9 0.2 - 0.0 0.4 0.2 0.4 0.4 0.5 1.6 4.7 - 1.0 - 0.1 1.5 0.9 1.8 1.6 2.0 1.6 0.4 1.3 0.5 0.9 1.0 1.3 1.3 1.6 1.5 1.8 1.9 Contribution to domestic (1.8)(1.8)(1.4)(1.5)(1.1)(0.4)(-0.4)(0.7)(0.4)(0.4)(0.4)(0.3)(0.4)(0.4)(0.4)(0.4)(1.7)(1.3)(1.6)demand Private demand (1.4)(1.7)(1.1)(1.4)(0.9)(0.4)(-0.5)(0.6)(0.3)(0.3)(0.4)(0.3)(0.4)(0.4)(0.4)(0.4)(1.7)(1.4)Public demand (0.4)(0.1)(0.2)(0.1)(0.2)(0.0)(0.1)(0.1)(0.1)(0.0)(0.0)(0.0)(0.0)(0.0)(0.1)(0.0)(0.0)(0.2)(0.2)Contribution to external (8.0)(-0.6)(-0.4)(0.0)(0.1)(-0.6)(0.4)(-0.3)(-0.0)(-0.1)(-0.2)(0.1)(0.1)(0.0)(-0.0)(0.1)(-0.5)(-0.3)(0.0)demand Private final consumption 1.5 2.4 1.7 1.8 1.7 0.0 0.2 0.6 0.5 0.5 0.5 0.3 0.5 0.4 0.5 0.4 2.4 1.8 expenditure Private residential - 1.1 - 4.4 0.2 0.6 - 1.8 - 0.5 0.1 0.2 0.0 - 0.0 - 0.2 0.6 0.3 - 0.1 0.1 - 0. - 4.4 0.0 - 0.3 investment Private nonresidential 2 1 3.0 2 1 3.0 2 1 1.5 - 0.7 0.9 0.5 0.5 0.6 0.8 0.7 0.7 1.0 0.9 29 27 3.1 investment Government final 3.4 1.1 0.4 0.4 0.7 0.0 0.2 - 0.0 0.1 0.2 0.0 0.0 0.1 0.1 0.2 0.0 1.2 0.6 0.5 consumption expenditure Public investment - 6.4 - 26 2.8 0.7 0.6 1.1 0.2 24 0.3 0.0 0.3 0.7 - 0.3 0.1 0.2 0.7 - 3.7 0.8 1.0 Exports of goods & 12.4 4.4 - 1.4 2.5 1.5 2.5 2.0 - 4.2 0.4 - 0.3 - 0.5 1.0 0.8 0.8 0.8 0.9 4.6 - 0.7 3.2 Import of goods & 7.1 7.1 0.8 2.3 1.0 5.6 - 0.0 - 23 0.6 0.4 0.5 0.7 0.4 0.6 0.9 0.5 7.3 0.8 2.9 services Nominal GDP 2.4 1.9 3.9 2.6 1.1 - 0.8 1.1 1.7 1.5 0.6 0.5 0.4 0.8 0.8 0.5 0.8 1.9 3.4 3.0

Note: The upper column of real GDP is compared with the previous period, the middle column is annual growth over the previous period and the lower column is compared with the previous year. All other demand items are compared with the previous period.

#### < Key economic indicators >

(Units,%)

	FY 2021	FY 2022	FY 2023	FY 2024	22/4-6	22/7-9	22/10-12	23/1-3	23/4-6	23/7-9	23/10-12	24/1-3	24/4-6	24/7-9	24/10-12	25/1-3	FY 2022	FY 2023	FY 2024
Industrial production (QoQ)	5.8	- 0.2	- 0.2	2.3	- 2.7	5.8	- 3.0	- 1.8	0.8	0.3	0.2	0.8	0.7	0.6	0.4	0.6	- 0.1	0.7	2.9
Domestic Corporate Goods Prices (YoY)	7.1	9.4	2.0	0.2	9.7	9.6	10.0	8.4	5.3	3.0	0.1	- 0.4	- 0.1	0.3	0.3	0.2	9.5	2.4	0.1
Consumer Prices (YoY)	0.1	3.2	2.5	1.3	2.4	2.9	3.9	3.6	3.3	2.6	2.2	1.9	1.6	1.3	1.1	1.1	3.2	2.3	1.1
Consumer Prices (excluding fresh food)	0.1	3.0	2.4	1.3	2.1	2.7	3.7	3.5	3.1	2.6	2.1	1.9	1.6	1.3	1.1	1.1	3.0	2.3	1.1
Current account balance (¥trillion)	20.2	9.2	10.3	7.8	12.8	4.1	9.9	10.2	11.1	11.0	10.4	8.8	5.5	7.9	8.5	9.2	10.4	11.5	11.9
(Ratio to nominal GDP)	(3.7)	(1.6)	(1.8)	(1.3)	(2.3)	(0.7)	(1.8)	(1.8)	(1.9)	(1.9)	(1.8)	(1.5)	(0.9)	(1.3)	(1.4)	(1.5)	(1.8)	(2.0)	(2.0)
Unemployment rate (%)	2.8	2.6	2.5	2.4	2.6	2.6	2.5	2.6	2.6	2.6	2.5	2.5	2.4	2.4	2.3	2.3	2.5	2.3	2.2
Housing starts (10 thousand)	86.6	86.1	86.0	86.4	85.3	86.3	85.1	87.6	85.9	85.9	85.7	86.3	86.5	86.3	86.4	86.3	85.5	85.4	85.1
10-year government bond rate (over-the-counter quotation)	0.1	0.3	0.6	0.6	0.2	0.2	0.3	0.4	0.4	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.3	0.7	0.7
USD/JPY	112	135	131	123	130	138	141	132	135	132	129	127	125	123	122	121	135.8	130.8	122.8
Crude oil price (CIF, Dollar/Barrel)	77	102	87	93	109	112	101	87	82	82	89	93	93	93	93	93	102.4	93.5	97.0
Ordinary profit (YoY)	36.8	6.9	4.8	8.7	17.6	18.3	- 2.8	- 3.0	- 1.9	5.1	7.8	9.8	9.9	7.1	8.0	9.2	7.5	6.1	8.5

Note: 10-year government bond rate, Foreign exchange rates and Crude oil prices are average data of the period. Oridinary profit of 23/1-3 is forecast.

Sources: "Quarterly Estimates of GDP," Economic and Social Research Institute, Cabinet Office; "Indices of Industrial Production," Ministry of Economy, Trade and Industry;

"Consumer Price Index," Ministry of Internal Affairs and Communications; "Financial Statements Statistics of Corporations by Industry, Quarterly," Ministry of Finance and others.

Outlook for the U.S. economy

		2021	2022	2023	2024		20	22			20	23			20	24	
						1-3	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3	4-6	7-9	10-12
		Actual	Actual	Forecast	Forecast	Actual	Actual	Actual	Actual	Actual	Forecast						
Real GDP	Annual rate,% QoQ	5.9	2.1	1.0	0.7	- 1.6	- 0.6	3.2	2.6	1.1	0.1	- 0.9	- 0.4	1.1	1.6	1.6	2.0
FF rate target	End of period, Upper,%	0.25	4.50	5.25	4.00	0.50	1.75	3.25	4.50	5.00	5.25	5.25	5.25	5.00	4.50	4.25	4.00
10-year government bond rate	Average,%	1.4	3.0	3.5	3.0	2.0	2.9	3.2	3.9	3.6	3.5	3.4	3.4	3.2	3.0	2.9	2.9

# Outlook for the European (Euro area) economy

		2021	2022	2023	2024
		Actual	Actual	Forecast	Forecast
Real GDP	Annual rate,% QoQ	5.4	3.5	0.6	1.1
ECB Refinancing rate	End of period,%	0.00	2.50	4.25	2.75
10-year German govt. bond rate	Average,%	- 0.4	1.1	2.4	2.2
EUR/USD	Average, Dollars	1.18	1.05	1.08	1.11

2022									
1-3	4-6	10-12							
Actual	Actual	Actual	Actual						
2.4	3.7	1.5	- 0.2						
0.00	0.00	1.25	2.50						
0.1	1.1	1.3	2.1						
1.12	1.06	1.01	1.02						

2023									
1-3	4-6	7-9	10-12						
Revision	Forecast	Forecast	Forecast						
0.3	0.8	0.6	0.5						
3.50	4.00	4.25	4.25						
2.3	2.4	2.5	2.5						
1.07	1.09	1.11	1.11						

2024								
1-3	4-6	7-9	10-12					
Forecast	Forecast	Forecast	Forecast					
0.9	1.4	2.2	2.1					
4.25	3.75	3.25	2.75					
2.5	2.2	2.0	2.0					
1.12	1.12	1.12	1.13					