Economist Letter

Medium-Term Economic Outlook (FY2021 to FY2031)

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1. Global real GDP is projected to grow by 5.7% in 2021 due to the economic recovery from COVID-19 against the backdrop of the development of vaccination, but will fall to around 2.5% by the end of the forecast period.

2. Assuming that severe restrictions on activities will not be imposed again due to the intensification of COVID-19, Japan's real GDP is expected to return to its pre-COVID-19 level in fiscal 2022.

3. From the medium-term perspective, Japan's real GDP is expected to grow by 1.1% on average for the next 10 years (from FY2022 to FY2031). The potential growth rate is expected to recover to around 1% by the mid-2020s through further promotion of labor participation and increases in equipment and human resources investments for productivity improvements such as digitization. Although CPI inflation (all items less fresh foods) will gradually increase, it will be difficult to achieve the Bank of Japan's (BOJ) price stability target of 2%. The average CPI inflation rate for the next 10 years will be 1.2%.

4. We assume that BOJ will normalize its monetary easing in fiscal 2028. Although the 2% price stability target will not be achieved, the inflation rate will be close to 2% around fiscal 2028. BOJ will also have more concerns that the prolonged monetary easing might have led to an accumulation of side effects, such as the risk of instability in the financial system. Therefore, BOJ will start moving toward an exit strategy by stating that the objective of overcoming deflation has been substantially achieved, while leaving the 2% target as a long-term goal.

1. Global Economic Recovery from COVID-19

In 2020, the global economy was forced to shut down suddenly due to the spread of COVID-19. Many countries and regions were forced to introduce strict restrictions on going outside and conducting business activities due to the heightened risk of a collapse in public health systems. Economic support was provided through large-scale fiscal stimuli and monetary easing policies. Subsequently, public health capacities have strengthened and restrictions have eased to the extent that health care systems are not overwhelmed. In addition, the rapid development and dissemination of vaccines have decreased the number of deaths and seriously ill patients, contributing to the economic recovery.

Source: IMF; NLI Research Institute staff calculations.
Note: Weighted average with purchasing power parity (PPP) weights.

This medium-term economic outlook assumes that living with COVID-19 will continue. Although vaccines have contributed greatly to the prevention of the spread of the disease, they will not lead to a complete end of the risk of infection. However, severe restrictions on economic activities will not be reintroduced even if the resurgence happened due, for example, to the emergence of the variants that significantly reduce the efficacy of the existing vaccines or the virulence of the virus. The dissemination of vaccines and therapeutic drugs will facilitate the adaptation of our lives with COVID-19, and people will gradually be able to live without being overly aware of the risk of the infection. However, it will take some time to recover the movement of people to the pre-COVID-19 pandemic level, and face-to-face service consumption will pick up slowly. In addition, the normalization of monetary and fiscal policies may drag on economic growth through the reduction of economic support.

The global economy experienced a sharp decline of 3.3% in 2020 due to the COVID-19 pandemic but is expected to see a high growth rate of 5.7% in 2021 due to the recovery of global economic activity against the backdrop of advances in vaccination. After that, the growth rate is projected to be slightly higher than ordinary for a while due to the continued recoveries from COVID-19, but it will slow down over the forecast period and fall to around 2.5% in fiscal 2031.

2. Japan's Medium-Term Economic Outlook

(Real GDP returns to the pre-pandemic level in FY2022)

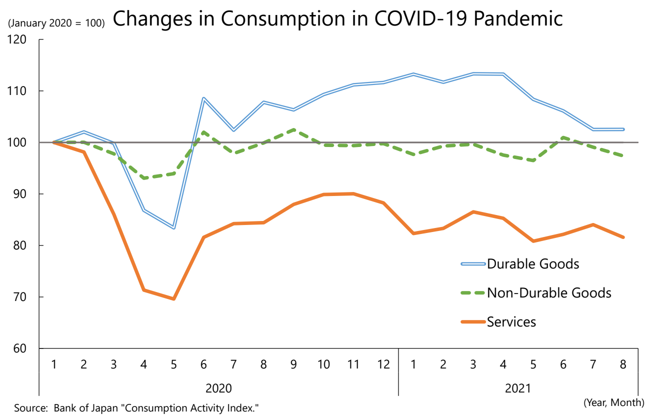
The impact of the COVID-19 became apparent at the end of fiscal 2019 in Japan, and a state of emergency was repeatedly implemented thereafter, having significant negative impacts on the economy. In fiscal 2020, real GDP's growth rate declined by 4.4%, marking a record negative growth rate. Despite the ongoing COVID-19, the economy has been recovering due to the gradual accommodation of our lifestyle to an environment with the risk of infection and other factors. There remains the risk of a resurgence of infections to a certain extent in the future, *but this outlook projects that real GDP be restored to the pre-pandemic level in fiscal 2022.*

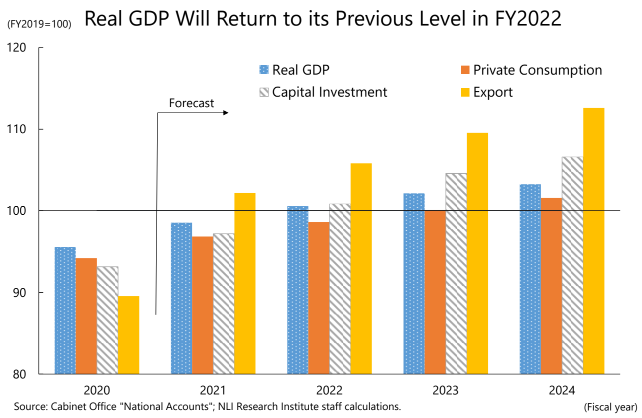
Regarding the demand outlook, goods exports, which account for about 80%[1] of total exports, are expected

[1] In fiscal 2020

to firmly increase, supported by the recovery of overseas economies, and total exports will exceed the pre-pandemic level in fiscal 2021. On the one hand, capital investment is projected to recover to pre-pandemic levels in fiscal 2022, reflected by strong corporate earnings and strong software investment.

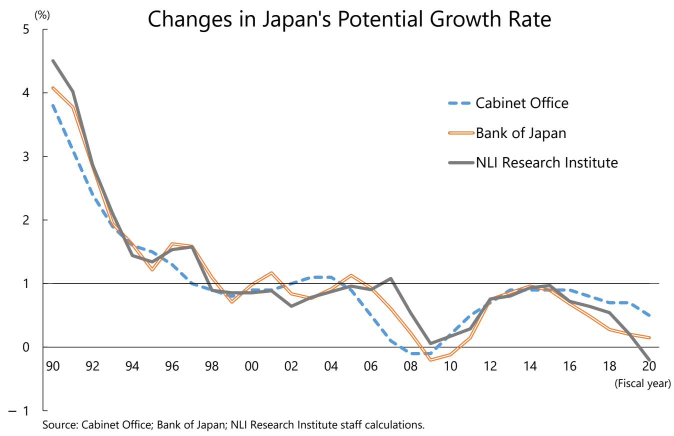
On the other hand, regarding private consumption, goods consumption has already exceeded the pre-pandemic level, driven by durable goods. However, services consumption has been strongly affected by restrictions on economic activities such as requests for self-restraint. Even when the state of emergency was lifted in 2020, services consumption recovered only to around 90% of the pre-pandemic level. The recovery in services consumption is likely to remain moderate, and the recovery of private consumption to the pre-pandemic level is expected to be delayed until fiscal 2023. Note that a consumption tax hike was implemented in fiscal 2019, which decreased private consumption. The recovery of private consumption to the fiscal 2018 level is projected to be achieved in fiscal 2024.





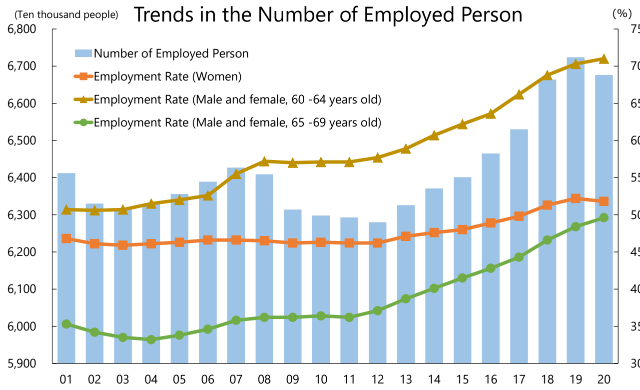
(Real GDP will grow by 1.1% on average over the next 10 years.)

Potential growth rates can serve as a guideline for considering medium- to long-term growth rates. The potential growth rate is the growth rate of the amount of production (potential GDP) that is considered to be producible at the average utilization rate of labor and capital, and it can be said to be the supply capacity of the economy. Assuming a medium- to long-term situation that excludes the effects of economic fluctuations, it will be difficult to continue production beyond the feasible supply capacity. The actual observed real GDP will approach the potential GDP, and as a result, the real GDP growth rate will approach the potential growth rate.

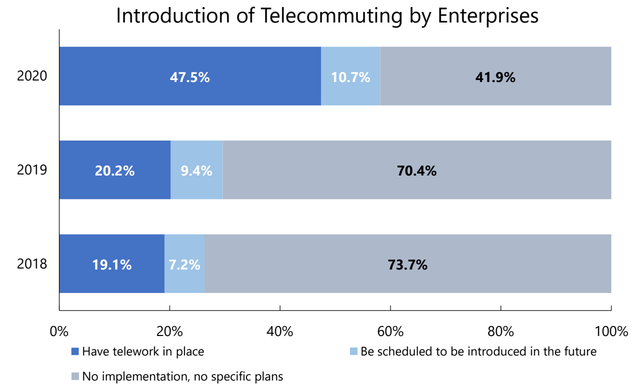


As the potential growth rate is a figure obtained by estimation and depends largely on the estimation method, it is necessary to capture it with a range. However, the potential growth rate of Japan has been below 1% from even before the COVID-19 pandemic. In the recovery process, the real GDP growth rate is expected to continue to relatively high levels as a rebound from the downturn.

To increase the growth potential, further promotion of labor participation and investment in equipment and human resources to improve productivity are required. The potential growth rate began to rise in fiscal 2012. This increase was due to a rise in the number of women and elderly in the labor force, which contributed to a rise in the number of workers despite a population decline. Given the expected acceleration of the population decrease due to the declining birthrate and aging population, it would be inevitable that a reduction in the number of employed people will lower the potential growth rate. However, the diversification of working styles, including the use of telework, which has become widespread due to the COVID-19 pandemic, is expected to have the effect of suppressing the decrease in employment.



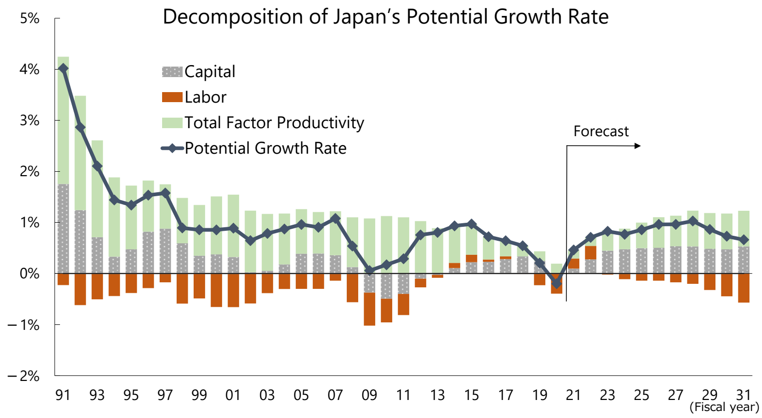
Source: Ministry of Internal Affairs and Communications "Labor Force Survey."



Source: Ministry of Internal Affairs and Communications "Communications Usage Trend Survey 2020."

Moreover, efforts would be required to bolster the added value per worker amid a decline in the number of employed persons. In particular, the delay in digitization compared with other advanced countries was highlighted by the COVID-19 pandemic and is expected to accelerate Japan's future digital investment. The ability to respond quickly to technological innovations, including digitization, and make novel technologies more widely available in economic activity will increase economic productivity.

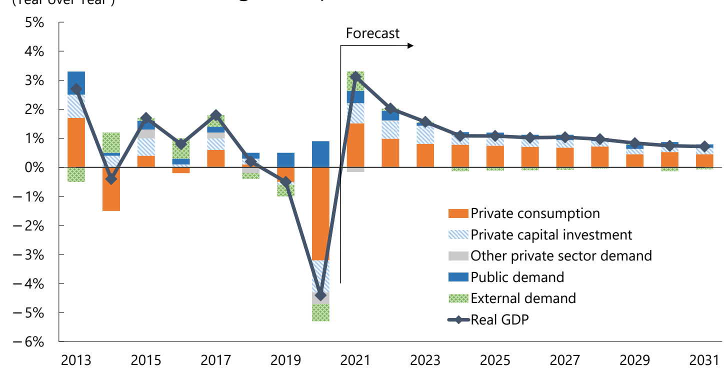
Looking ahead, the potential growth rate will recover to around 1% by the mid-2020s due to the further promotion of labor participation and investments in equipment and human resources to improve productivity, including the use of new technologies. However, the potential growth rate will dip slightly in the latter half of the 2020s due to an accelerating population decrease from the declining birthrate and aging population.



Source: Cabinet Office: "Annual Report of National Accounts," "Quarterly Estimates of Net Capital Stocks of Fixed Assets." Ministry of Internal Affairs and Communications: "Labor Force Survey," and others; NLI Research Institute staff calculations.

As a result, the real GDP growth rate is projected to be 1.1% on average over the forecast period (FY2022–FY2031).

Change in Japan's Real GDP Growth

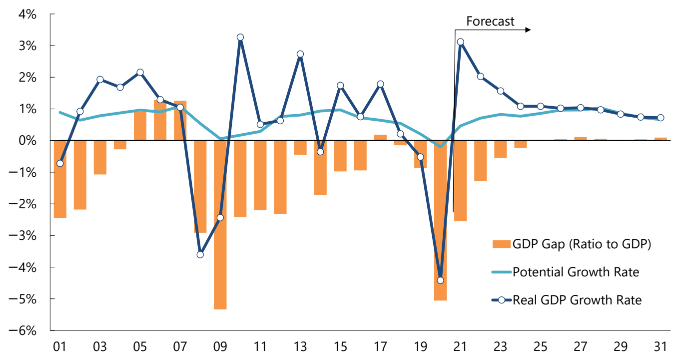


Source: Cabinet Office "National Accounts"; NLI Research Institute staff calculations.
Note: Bar chart shows contribution to real GDP growth rate.

(Consumer prices are expected to rise an average of 1.2% in 10 years.)

The year-on-year rate of change in the CPI (all items less fresh food) was negative in fiscal 2020 for the first time in four years, but at least prices did not fall continuously as the underlying trend. The decline in fiscal 2020 was largely due to temporary factors such as a large drop in accommodation charges caused by the "Go to Travel" campaign, a domestic tourism-boosting subsidy program, and a sharp drop in energy prices due to a steep decline in crude oil prices triggered by the rapid fall in demand caused by the spread of COVID-19. Crude oil prices have since started to rise, but consumer prices in fiscal 2021 are being affected by a reduction in mobile phone charges.

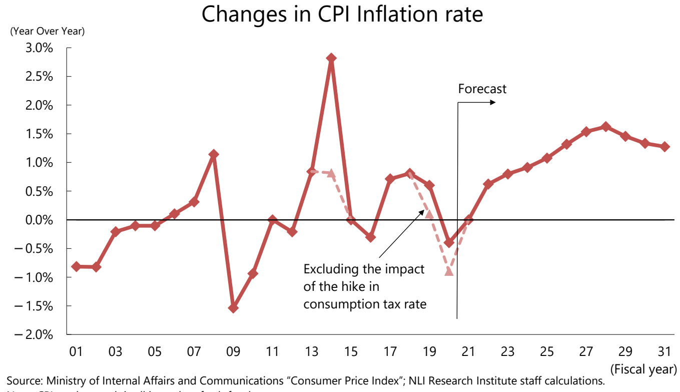
Changes in Japan's Potential Growth Rate and GDP



Source: Cabinet Office "National Accounts"; NLI Research Institute staff calculations.

In general, the underlying trend of prices is affected by the supply-demand balance. The GDP gap has been substantially negative recently, and downward pressure has been strong from a deterioration of the supply-demand balance. However, as the economy recovers and the GDP gap shrinks, there will be moderate upward pressure on prices. In addition, a decline in the labor force population in the medium to long term will make it more likely for wages to rise to address labor shortages, and wage increases will lead to higher prices. This outlook assumes that the yen will continue to depreciate due to the widening interest rate gap between Japan and the United States and that crude oil prices will continue to rise.

Changes in CPI Inflation rate



Source: Ministry of Internal Affairs and Communications "Consumer Price Index"; NLI Research Institute staff calculations.
Note: CPI on the graph is all items less fresh food.

As a result, the year-on-year rate of change in the CPI (all items less fresh food) is expected to continue to grow positively from fiscal 2022 and increase to 1.6% by fiscal 2028, supported by the continued accommodative stance on monetary policy. In that the inflation expectations of companies and households will increase due to the continued price increases, consumer prices will continue to rise stably by around 1%.

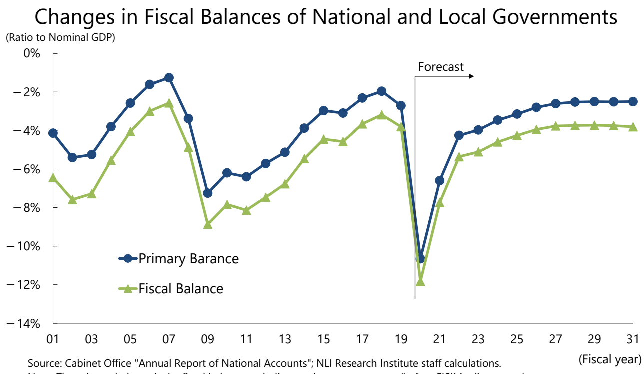
The average CPI inflation (all items less fresh foods, excluding the effects of the consumption tax) over the next 10 years is expected to be 1.2%, compared with 0.2% in the past 10 years.

(The primary fiscal surplus will not be achieved even in FY2031)

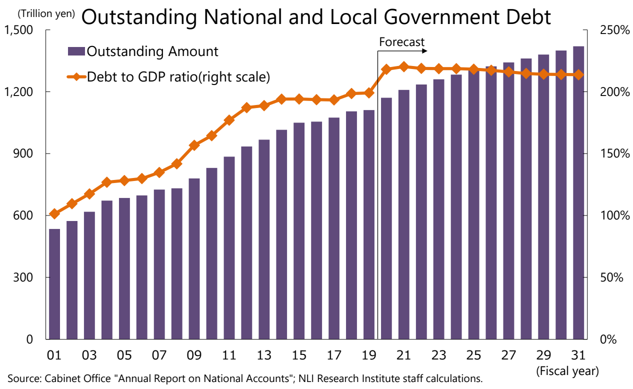
In response to COVID-19, the Japanese government implemented emergency economic measures, resulting in the primary fiscal deficits widening sharply.

This fiscal expansion is itself temporary. *However, the primary balance is projected to remain at a deficit level of 2.5% of nominal GDP even in fiscal 2031 mainly because the population aging that Japan faces will continue to increase the social security expenditures.* The improvement in the fiscal balance will be more limited compared with the primary balance since the interest payments will increase due to the interest rates hike toward the end of the forecast period. As a result, the outstanding amount of debt of the central and local governments will exceed 1,400 trillion yen in fiscal 2031.

During the forecast period, the debt-to-GDP ratio is projected to decline moderately, but it will remain higher compared to the pre-COVID-19 level. Further efforts will be necessary on both the revenue and expenditure sides to ensure fiscal soundness.



Source: Cabinet Office "Annual Report of National Accounts"; NLI Research Institute staff calculations.
Note: The primary balance is the fiscal balance excluding net interest payments (before FISIM adjustments).



Source: Cabinet Office "Annual Report on National Accounts"; NLI Research Institute staff calculations.

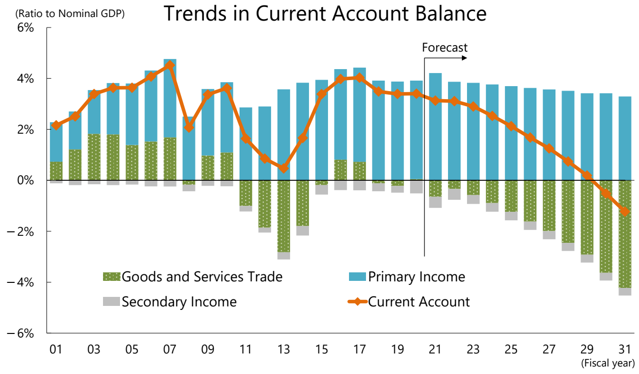
(Current account balance will go into deficit in the 2030s.)

Japan's current account balance has maintained a surplus of 3% of GDP. The trade balance of goods and services has remained around 0% of GDP, and the current account surplus has been supported by a surplus of the primary income balance. Against the backdrop of a buildup of net foreign assets, primary income will continue to be in surplus for the time being. *However, the goods and services trade balance is projected to become constantly in deficit, and the current account balance will also be in deficit in the 2030s.* Imports are likely to increase due to rising crude oil prices and supply constraints stemming from a shrinking labor force.

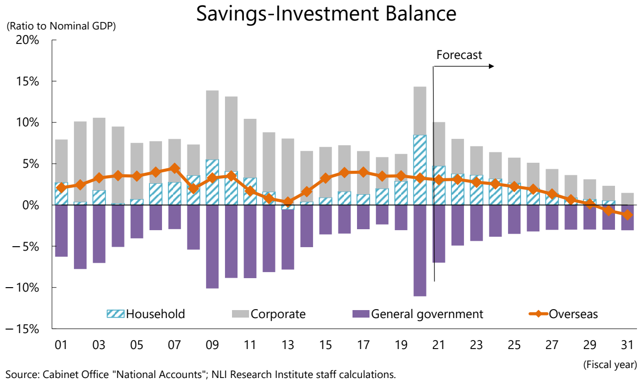
Conceptually, the current account balance is the difference between domestic savings and investment, so it is also possible to consider the future direction of the current account balance from the viewpoint of a savings-investment balance.

As for the savings-investment balance by economic sector, the private sector has been in a surplus, that is, an excess of savings. In addition, and the private sector surplus has been large enough to compensate for the deficit, that is, the excess of investment in the general government sector. As a result, domestic savings have exceeded domestic investment, and the current account surplus has been maintained. In the COVID-19 crisis, while the general government deficit expanded rapidly due to the government's economic measures, the surplus in the private sector expanded even more. The current account surplus was maintained against the backdrop of an increase in savings in the household sector through the provision of special cash payments.

Looking forward, the deficit in the general government sector will shrink from the current level, but it will remain below 3% of GDP in fiscal 2031. However, the surplus in the private sector is likely to shrink. In the household sector, savings will decline in the long run due to factors such as the population aging in addition to the realization of consumption restrained by the COVID-19 pandemic. In the corporate sector, excess savings will shrink due to an increase in capital investments to achieve digitalization and an increase in interest payments in line with rising interest rates. The contraction of the surplus in the private sector will exceed the reduction of deficits in the government sector. As a result, the current account balance will turn into deficits.



Source: Ministry of Finance "Balance of payments," Cabinet Office "National Accounts"; NLI Research Institute staff calculations.



Source: Cabinet Office "National Accounts"; NLI Research Institute staff calculations.

3. Financial Markets Outlook

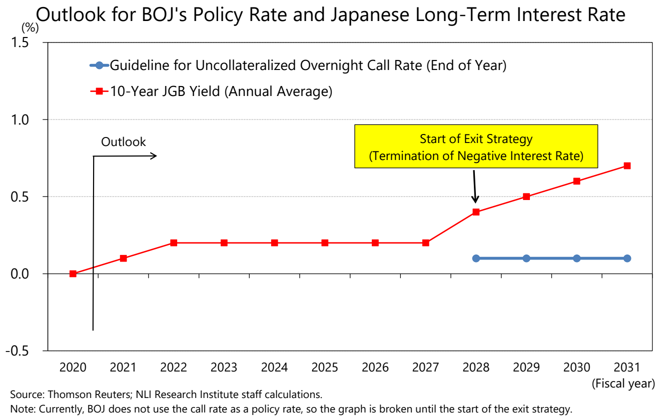
Central banks in Japan, the United States, and Europe have continued to implement large-scale monetary easing in response to the economic downturn caused by the COVID-19 pandemic. At present, however, their monetary policy stance is going to diverge: while the Bank of Japan (BOJ) and the European Central Bank have maintained their monetary easing, the Federal Reserve is seeking to begin tapering.

(Japan's monetary policy and interest rates)

The BOJ has stated that it would continue “Quantitative and Qualitative Monetary Easing (QQE) with Yield Curve Control” as long as necessary to stably maintain the 2% inflation target. Therefore, ultra-low interest rates are likely to continue for a long time.

This outlook assumes that the BOJ will normalize its monetary easing and embark on an exit strategy in fiscal 2028. Although the inflation rate is not expected to remain stable at 2%, it will be close to about 2% around this time. *BOJ will start moving toward an exit strategy for the reason that the objective of overcoming deflation has been substantially achieved, while the bank will maintain the 2% price stability target as a long-term target*.

As for specific policy changes, *BOJ will end its negative-interest-rate policy in fiscal 2028* and reintroduce the guideline for the uncollateralized overnight call rate (up to 0.10 %) as a policy rate and put down the banner of quantitative easing. However, the guideline for long-term interest rates will remain, and a spike in long-term interest rates in the exit will be avoided. *BOJ will continue to purchase JGBs necessary to meet the long-term interest rate target.*

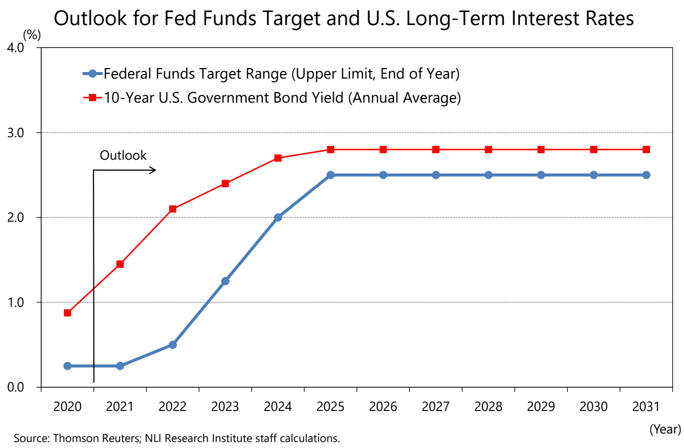


The guideline for the uncollateralized overnight call rate will remain at the same level after fiscal 2028. It will not be possible to maintain the inflation rate at around 2%, and the rate will fall below 1.5% again from fiscal 2030.

In comparison, long-term interest rates will remain at around zero percent toward the middle of the forecast period since BOJ will continue to leave its guideline unchanged at around zero percent through the yield curve control. Meanwhile, the rebound in U.S. long-term interest rates will have a ripple effect, resulting in *a slight upswing from the current level but a limited rise due to the BOJ's limit on the range of around 0.25%. An upward trend will begin after the start of the exit strategy in fiscal 2028 with an increase in the guideline long-term interest rates. Spikes in the long-term interest rates will be averted by a moderate pace of the increase in the guideline for long-term interest rates*. As the inflation rate remains below 2%, the BOJ is expected to maintain an accommodative financial environment by keeping the real interest rate (the nominal interest rate minus the expected inflation rate) in a negative range. *As a result, long-term interest rates will not reach 1% even at fiscal 2031.*

(U.S. monetary policy and interest rates)

In the United States, which is leading the economic recovery and has seen a rapid increase in inflation, the Fed has indicated at its September meeting that it will start tapering its quantitative easing policy at an early date. *The Fed will begin to phase out quantitative easing toward the end of the year and end it by the middle of 2022.*



The Fed is expected to begin raising the federal funds target rate at the end of next year as the U.S. economy remains strong and inflation remains above 2%.[2] *The target for the federal funds rate will be raised to 2.50% through 2025 and will remain at the same level until the end of the forecast period.*

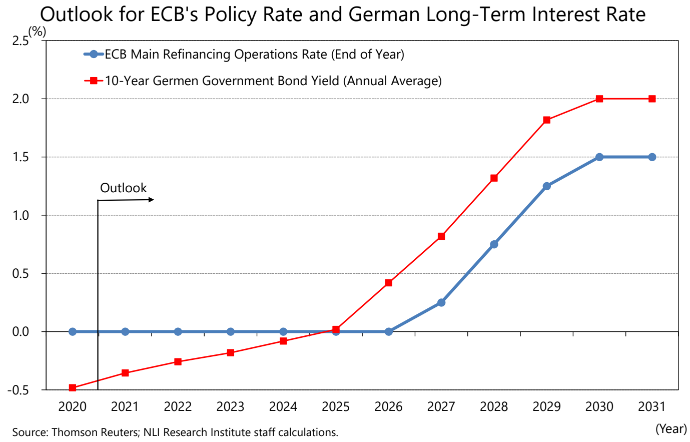
[2] Based on the personal consumption expenditure price index, which the Fed emphasizes as an inflation indicator. The growth of personal consumption expenditure tends to be slightly lower than that of the CPI.

U.S. long-term interest rates have risen slightly since late last year but remain at very low levels relative to the past. *In the future, they are expected to move further upward in line with the tapering of quantitative easing and the hike of federal funds target rate, reaching 2.8% in 2025 when the rate hike is suspended, and then to remain flat.*

(Eurozone monetary policy and interest rates)

In July, the ECB raised its inflation target slightly and revised its forward guidance to clearly express the ECB's cautious stance towards raising the policy rate.

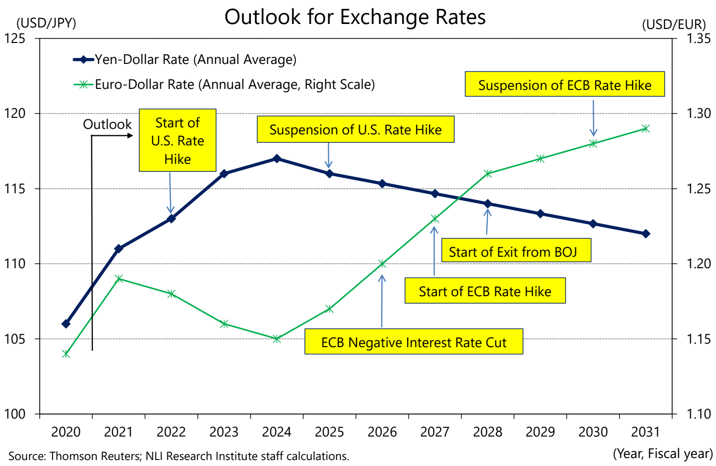
The ECB will continue its quantitative easing and ultra-low interest rate policies for several years, as the current inflation rate is above 2% but will not last long. *The ECB will end its quantitative easing and begin reducing negative interest rates in 2026 when it is expected to achieve a stable 2% inflation target. In 2027, the ECB market intervention interest rate (policy rate), which has remained unchanged at zero percent, will start to increase, and by 2030 it will be raised to 1.50%.*



Germany's long-term interest rate, the representative long-term interest rate in the euro area, is expected to remain negative in the first half of the forecast period as monetary easing continues. Afterward, the pace of increase in the interest rate will pick up after 2026, when the normalization begins and will plateau at 2.0% toward the end of the forecast period.

(Exchange Rates)

The U.S. dollar exchange rate against the yen has been rising since the beginning of this year due to a rise in U.S. interest rates triggered by speculation that the United States will ease its quantitative easing policy. The yen is expected to weaken moderately as long-term interest rates in the United States rise in line with the implementation of U.S. monetary easing and interest rate hikes, and the yen is expected to reach 117 yen to the dollar in fiscal 2024.



After that, the yen is expected to continue to appreciate against the dollar toward the end of the forecast period as the direction of monetary policy will be reversed between Japan and the United States: BOJ will adopt an exit strategy while Fed will halt interest rate increases. Even if Japan's inflation rate continues to fall below that of the United States during the forecast period, the yen will continue to appreciate in terms of purchasing power parity in that a relatively low-inflation currency is likely to rise.

However, the BOJ's exit strategy will be very gradual, and long-term interest rates will be kept low. In addition, Japan's current account balance, which has been under strong pressure from the yen, will shrink its surplus and turn into a deficit at the end of the forecast period. This shift will prevent the yen from appreciating further. *Consequently, the exchange rate is expected to remain at 112 yen to the dollar at the end of the forecast period, which is not much different from the current level.*

The Eurodollar rate is expected to remain sluggish through 2024 due to pressure from the U.S. quantitative easing and a rise in U.S. interest rates as a result of the interest rate hike. After that, however, the U.S. interest rate hike will be suspended, and the ECB will normalize its monetary policy. Also, the Eurozone's inflation rate, which is expected to continue to fall below that of the United States during the forecast period, is likely to be strong in terms of purchasing power parity. *The exchange rate at the end of the forecast period is 1 euro to 1.29 dollars.*

The euro-yen exchange rate has been on a downward trend as a result of the risk appetite for selling the yen to buy euros in line with the global economic recovery and the ECB's exit strategy, and it will reach 1 euro to 144 yen by fiscal 2028. At the end of the forecast period, although the Bank of Japan's exit strategy will be phased in and the ECB's interest rate hike will be halted, the yen will be put under strong pressure. However, as Japan's current account deficits will restrain the yen's appreciation, the euro-yen exchange rate is expected to remain flat.

Medium-Term Outlook for the Japanese Economy

(YoY percentage changes, unless otherwise stated)

		FY2020 (Actual)	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	Annual average 12-21	Annual average 22-31
Nominal GDP		−3.9	2.3	2.8	2.2	1.8	1.8	1.9	2.0	2.0	1.7	1.5	1.5	0.9	1.9
(Trillion yen)		(536.6)	(548.9)	(564.3)	(576.4)	(586.8)	(597.5)	(608.9)	(621.3)	(633.7)	(644.5)	(654.4)	(664.4)		
Real GDP		−4.4	3.1	2.0	1.6	1.1	1.1	1.0	1.0	1.0	0.8	0.7	0.7	0.6	1.1
Domestic demand (%contribution)		<−3.8>	<2.5>	<1.9>	<1.5>	<1.2>	<1.2>	<1.1>	<1.1>	<1.0>	<0.8>	<0.9>	<0.8>	<0.6>	<1.2>
Private demand (%contribution)		<−4.7>	<2.1>	<1.6>	<1.4>	<1.1>	<1.1>	<1.0>	<0.9>	<0.9>	<0.6>	<0.7>	<0.7>	<0.2>	<1.0>
Private final consumption expenditure		−5.8	2.8	1.8	1.5	1.5	1.4	1.3	1.3	1.3	0.8	1.0	0.8	−0.1	1.3
Private residential investment		−7.2	2.3	−0.6	−0.0	0.1	0.2	0.4	0.4	−0.1	0.1	0.0	−0.2	0.2	0.0
Private non-residential investment		−6.8	4.3	3.8	3.7	1.9	1.8	1.5	1.5	1.1	1.0	1.3	1.3	1.4	1.9
Public demand (%contribution)		<0.9>	<0.4>	<0.3>	<0.1>	<0.1>	<0.1>	<0.1>	<0.2>	<0.1>	<0.1>	<0.1>	<0.1>	<0.4>	<0.1>
Government final consumption expenditure		3.4	2.2	1.1	0.3	0.3	0.5	0.5	0.7	0.4	0.5	0.5	0.4	1.6	0.5
Public investment		4.2	−0.9	1.9	0.7	0.7	0.8	0.8	0.8	0.6	0.6	0.5	0.5	1.2	0.8
Net exports of goods and services (%contribution)		<−0.6>	<0.7>	<0.1>	<0.0>	<−0.1>	<−0.1>	<−0.1>	<−0.1>	<−0.0>	<0.1>	<−0.1>	<−0.1>	<0.0>	<−0.1>
Export of goods and services		−10.4	14.1	3.6	3.5	2.8	2.6	2.5	2.5	2.4	2.5	2.6	2.8	2.4	2.8
Import of goods and services		−6.8	9.8	3.2	3.4	3.4	3.1	3.0	2.9	2.5	2.2	3.1	3.0	2.4	3.0
Industrial production		−9.5	9.9	3.0	1.7	1.6	1.6	1.2	1.3	1.0	0.9	0.9	0.8	−0.1	1.4
Domestic corporate goods price index		−1.4	5.1	1.2	1.0	1.2	1.2	1.5	1.5	1.8	1.7	1.7	1.8	0.6	1.5
Consumer price index (all items)		−0.2	−0.1	0.6	0.8	0.9	1.1	1.3	1.5	1.6	1.4	1.3	1.3	0.5	1.2
Consumer prices index (all items excluding fresh food)		−0.4	0.0	0.6	0.8	0.9	1.1	1.3	1.5	1.6	1.5	1.3	1.3	0.5	1.2
Excluding the effects of consumption tax hike		−0.9	0.0	0.6	0.8	0.9	1.1	1.3	1.5	1.6	1.5	1.3	1.3	0.2	1.2
Unemployment rate (%)		2.9	3.0	2.9	2.8	2.8	2.8	2.8	2.9	2.8	2.8	2.7	2.6	3.1	2.8
Current account balance (trillion yen)		18.3	17.2	17.5	16.7	14.8	12.7	10.2	7.8	4.7	1.2	−3.4	−8.2	15.1	7.4
(% of nominal GDP)		(3.4)	(3.1)	(3.1)	(2.9)	(2.5)	(2.1)	(1.7)	(1.3)	(0.7)	(0.2)	(−0.5)	(−1.2)	(2.8)	(1.3)
Consumption tax rate (%)	End of fiscal year	10	10	10	10	10	10	10	10	10	10	10	10	-	-
Yen/dollar exchange rate	Annual average	106	111	113	116	117	116	115	115	114	113	113	112	107	114
Call rate (Target,%)	End of fiscal year	-	-	-	-	-	-	-	-	0.10	0.10	0.10	0.10	-	-
10-year government bond yield (%)	Annual average	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.5	0.6	0.7	0.2	0.3
Crude oil prices (CIF, Dollar/Barrel)	Annual average	43	73	76	77	78	79	80	81	82	83	84	85	72	81

Source: Cabinet Office "Annual Report on National Accounts", Ministry of Economy, Trade and Industry "Indices of Industrial Production", Ministry of Internal Affairs and Communications "Consumer Price Index", "Labour Force Survey", Bank of Japan "Corporate Goods Price Index (CGPI)" and others; NLI Research Institute staff calculations.

Medium-Term Outlook for the U.S. Economy

(YoY percentage changes, unless otherwise stated)

	2020 (Actual)	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Annual average 12-21	Annual average 22-31
Nominal GDP	−2.2	9.8	7.0	4.2	4.4	4.4	4.0	4.0	4.1	4.1	4.4	4.0	4.0	4.5
Real GDP	−3.4	5.8	4.3	2.3	2.1	2.0	1.5	1.5	1.6	1.7	1.7	1.7	2.1	2.0
Domestic demand (%contribution)	2.5	−3.2	7.3	4.0	2.4	2.2	2.1	1.6	1.6	1.7	1.8	1.8	2.4	2.6
Private final consumption expenditure	2.2	−3.8	8.1	4.4	2.8	2.4	2.3	2.0	1.9	1.9	1.9	1.9	2.3	3.0
Fixed capital formation	3.2	−2.7	8.1	3.9	2.4	2.4	2.3	2.0	1.8	1.8	1.8	1.8	4.5	2.8
External demand (%contribution)	−0.2	−0.2	−1.5	0.4	−0.1	−0.1	−0.1	−0.1	−0.1	−0.1	−0.1	−0.1	−0.4	−0.2
Consumer prices	1.2	4.2	2.6	2.5	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	1.8	2.4
Current account balance (% of nominal GDP)	−2.9	−3.5	−2.9	−2.8	−2.7	−2.6	−2.6	−2.6	−2.5	−2.4	−2.4	−2.3	−2.4	−2.6
Federal funds target range - upper limit (%), End of year	0.25	0.25	0.50	1.25	2.00	2.50	2.50	2.50	2.50	2.50	2.50	2.50	0.8	2.1
10-year government bond yield (%), Annual average	0.9	1.5	2.1	2.4	2.7	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.0	2.7

Medium-Term Outlook for the Euro Area Economy

(YoY percentage changes, unless otherwise stated)

	2020 (Actual)	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Annual average 12-21	Annual average 22-31
Nominal GDP	−4.9	6.2	5.7	4.2	3.7	3.4	3.2	3.3	3.3	3.3	3.3	3.3	2.1	3.7
Real GDP	−6.3	4.6	4.0	2.6	2.1	1.8	1.6	1.5	1.4	1.4	1.4	1.4	0.8	1.9
Domestic demand (%contribution)	−6.0	3.6	4.5	2.8	2.2	1.8	1.6	1.4	1.4	1.3	1.3	1.3	0.7	2.1
Private final consumption expenditure	−7.9	3.2	5.7	2.5	2.1	1.8	1.6	1.5	1.4	1.3	1.3	1.3	0.3	2.1
Fixed capital formation	−7.2	5.0	7.3	5.9	3.7	2.6	2.1	1.8	1.6	1.5	1.5	1.5	1.5	2.9
External demand (%contribution)	−0.3	1.0	−0.5	−0.2	−0.1	−0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	−0.0
Consumer prices	0.2	2.1	1.7	1.6	1.6	1.6	1.6	1.8	1.8	1.9	1.9	1.9	1.2	1.7
Current account balance (% of nominal GDP)	2.1	2.7	2.3	2.1	1.7	1.5	1.3	1.2	1.1	1.1	1.1	1.0	2.5	1.5
Euro/dollar exchange rate, Annual average	1.14	1.19	1.18	1.16	1.15	1.17	1.20	1.23	1.26	1.27	1.28	1.29	1.19	1.22
Yen/Euro echange rate, Annual average	122	130	133	135	135	136	138	141	144	144	144	144	126	139
ECB Main Refinancing Operations Rate (%), End of year	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.75	1.25	1.50	1.50	0.11	0.53
10-year German government bond yield (%), Annual average	−0.5	−0.4	−0.3	−0.2	−0.1	0.0	0.4	0.8	1.3	1.8	2.0	2.0	0.5	0.8

Medium-Term Outlook for the Chinese Economy

(YoY percentage changes, unless otherwise stated)

	2020 (Actual)	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Average 12-21	average 22-31
Nominal GDP	3.0	9.0	7.2	7.1	7.0	7.0	6.6	5.8	5.3	4.8	4.3	3.8	8.5	5.9
Real GDP	2.3	8.0	5.3	5.1	5.0	5.0	4.6	3.8	3.3	2.8	2.3	1.8	6.7	3.9
Consumer prices	2.5	1.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0
One-year term interest rate (%), End of year	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.9	1.5
USD/CNY exchange rate (reference value), Annual average	6.9	6.4	6.3	6.2	6.1	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.5	6.1

Medium-Term Outlook for the Emerging Economies

(YoY percentage changes, unless otherwise stated)

	2020 (Actual)	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Average 12-21	average 22-31
Real GDP	−2.3	6.1	4.7	4.5	4.4	4.4	4.2	3.9	3.7	3.6	3.4	3.2	3.7	4.0
China	2.3	8.0	5.3	5.1	5.0	5.0	4.6	3.8	3.3	2.8	2.3	1.8	6.7	3.9
India	−7.0	8.3	7.1	6.7	6.3	6.3	6.2	6.1	6.1	6.0	6.0	5.9	5.5	6.3
Brazil	−4.1	4.8	3.0	2.7	2.5	2.3	2.2	2.1	2.1	2.0	2.0	1.9	0.5	2.3
Russia	−3.0	3.5	2.7	2.5	2.0	1.7	1.5	1.4	1.3	1.3	1.2	1.2	1.2	1.7
ASEAN4	−4.4	3.4	5.2	5.2	4.7	4.6	4.5	4.4	4.3	4.3	4.2	4.2	3.9	4.5

Note: Classification of emerging countries is based on the IMF standards. ASEAN4 are Malaysia, Thailand, Indonesia and the Philippines.