Economist Letter

Medium-Term Economic Outlook (FY2022 to FY2032)

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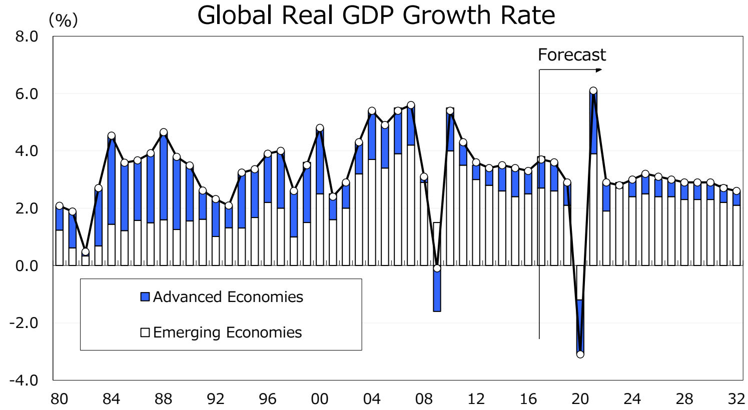
1. Global real GDP growth rate is projected to slow down to 2.8% in 2023 due to higher inflation and monetary tightening despite progress in the recovery from the COVID-19 pandemic. Thereafter, it is expected to decline to around 2.5% by the end of the forecast period due to slower growth in emerging economies against a backdrop of falling birthrates and aging populations.

2. Japan's real GDP is expected to grow by 1.0% on average over the 10 years to fiscal 2032. We assume that the potential growth rate will recover to around 1% by the mid 2020s through further promotion of labor participation and investment in both physical and human capital to improve productivity, such as through digitization. The CPI (all items less fresh food) inflation rate is projected to decline from 2.5% in fiscal 2022 to 1.1% in fiscal 2023, and then to gradually increase thereafter. However, it will be difficult to achieve the price stability target of 2%. The average CPI inflation rate for the next 10 years will be 1.2%.

3. We assume that the BOJ will begin normalizing monetary easing in fiscal 2028. Although the price stability target will not be achieved, the inflation rate will temporarily be close to 2% by this time. Moreover, 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. The Global Economic Outlook

In 2020, the global economy was forced to come to an abrupt halt due to the impact of the spread of COVID-19. Waves of infection repeated intermittently. Since 2021, the spread of vaccines and the mutation of the virus have reduced the rate of severe illnesses and fatalities. From the beginning of 2022, many countries have abolished restrictions on social and economic activities aimed at preventing infections. The international movement of people is recovering, which had been halted since the onset of the COVID-19 pandemic, and the economic impact of the pandemic is steadily being resolved. China, however, is an exception. The country has shown a willingness to restrict economic activities, including the urban blockade of Shanghai, where the outbreak of the disease has spread rapidly since the beginning of 2022.



Note: Weighted average with PPP (purchasing power parity) weights. Actual figures are from the IMF and forecasts are from the NLI Research Institute.

The main scenario in this Medium-Term Economic Outlook assumes on the one hand that living with COVID-19 will continue and that the impact of the COVID-19 pandemic on global economic activities, including in China, will be resolved.

On the other hand, cost-push inflation due to rising commodity prices and tighter monetary policy is leading to a slowdown in the global economic recovery. Global inflationary pressures have been increasing due to rising demand for goods and supply constraints during the COVID-19 pandemic, and demand for energy and labor also rose during the recovery from the pandemic. The Russian invasion of Ukraine in February 2022 has exacerbated uncertainty about the supply of Russian and Ukrainian commodities such as energy, grains and metals. Western countries led by the G7 have cooperated in imposing severe economic and financial sanctions on Russia.

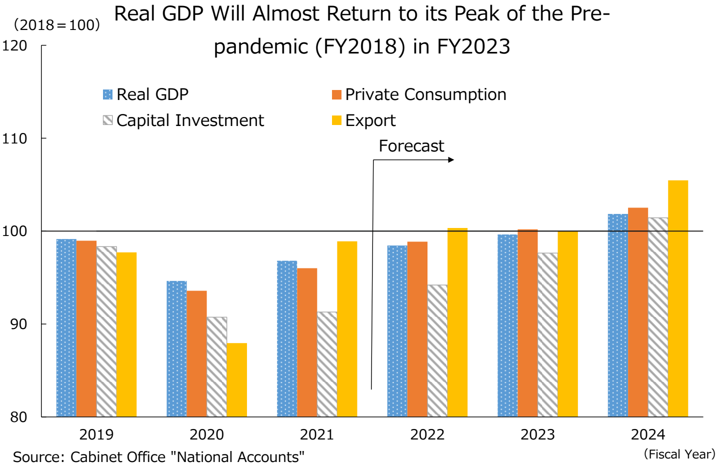
In response to high inflation, there has also been a shift away from the large-scale monetary easing and fiscal stimulus measures taken in the wake of the pandemic. In particular, on the monetary policy front, central banks, whose primary mandate is to maintain price stability, are accelerating monetary tightening and aggressively raising interest rates.

The global economy grew at a high rate of 6.1% in 2021, but is projected to slow down to 2.8% in 2023 due to high inflation and monetary tightening, while the recovery from the pandemic will progress from 2022 onwards. Thereafter, the growth rate of the global economy will remain at a slightly higher level for some time as inflation calms down, but it is expected to fall over the forecast period to the around 2.5% by the end of the forecast period,

2. Japan's Medium-Term Economic Outlook

Real GDP almost returns to the pre-pandemic high in FY2023

The spread of the novel coronavirus infections that began at the end of fiscal 2019 caused significant damage to the Japanese economy, with real GDP marking a record negative growth rate in fiscal 2020. However, the spread of vaccines and other factors reduced the risk of severe infection, making it less necessary to restrict economic activities despite the increase in the number of newly infected people. The government did not take any additional measures such as a state of emergency to restrict economic activities.



Source: Cabinet Office "National Accounts"

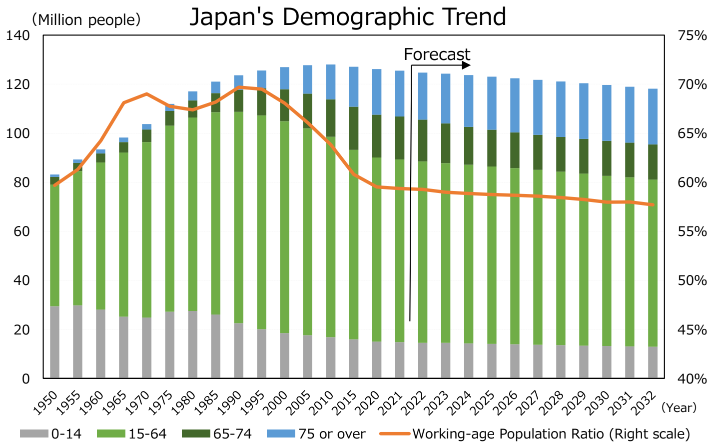
Although there were continued moves toward self-restraint, a recovery trend in consumption has been maintained, particularly in face-to-face services such as food and beverage and travel, which had fallen sharply in the past. Unless the virus becomes more virulent and restrictive measures on economic activities are required, the age of living with COVID-19—the new normal—will continue to develop and the economic impact of the new coronavirus infection will become even smaller.

The short-term outlook through fiscal 2023 is for a continued recovery led by private consumption, backed by an elevated level of accumulated household savings. In addition, capital investment is expected to increase on the back of strong corporate earnings. However, exports will likely remain sluggish due to projected weak overseas economies, including an increased risk of negative growth in the United States. In fiscal 2023, Japan's real GDP will largely recover to the peak of the pre-pandemic, fiscal 2018 levels.

The ongoing decline in the working-age population and the outlook for the labor force

The end of the COVID-19 pandemic is in sight. However, Japan's structural issues that have persisted since before the pandemic will continue to linger even after the outbreak. The demographic trends caused by Japan's declining birthrate and aging population are at the forefront of these problems.

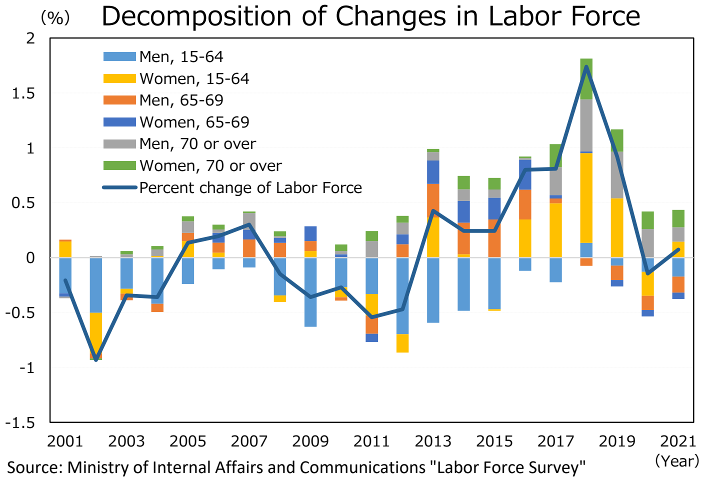
Japan's working-age population (ages 15–64), peaked at 87.26 million in 1995 and has continued to decline ever since. Over the 10-year period from 2012 to 2021, the working-age population decreased by about 5.6 million, which is equivalent to about 7% of the 2012 working-age population. Moreover, the working-age population is expected to continue to decline, falling below 70 million within the forecast period.



Source: Ministry of Internal Affairs and Communications "Population Estimates"
Note: Forecasts are from the NLI Research Institute

More important for production activities is the labor force, indicating the number of people participating in the labor market and the number of employed persons. The decline in Japan's working-age population is a consequence of the declining birthrate, contributing to the decline in the labor force. On the one hand, the population aged 15 and over, which adds those aged 65 and over to the working-age population, continued to increase until 2011. On the other hand, the labor force peaked at 67.93 million in 1998 and began to decline. Nevertheless, the labor force started to increase from 2013, when Abenomics began, to 2019 pre-pandemic levels. The labor force increased by 3.42 million over the last 10 years from 2012 to 2021, which is equivalent to about 5% of the labor force in 2012.

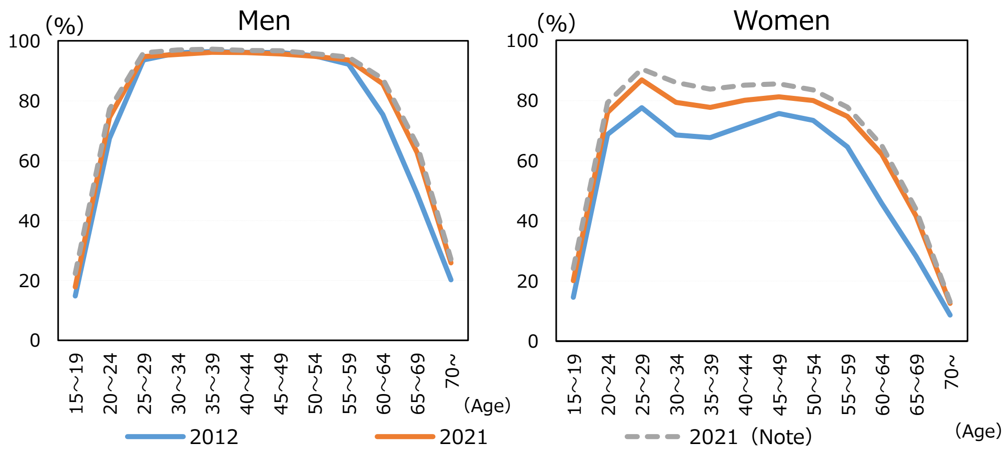
Decomposition of Changes in Labor Force



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

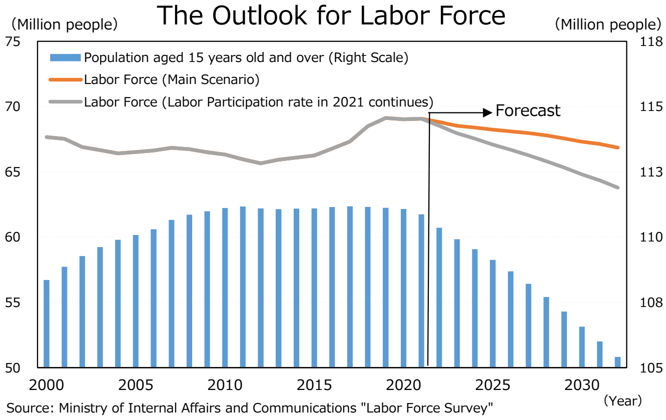
The increase in the labor force has been due to the increased participation of women and the elderly in the labor market. The number of women in the labor force increased by 3.11 million over the 10 years from 2012 to 2021, and the labor force participation rate for women rose from 48.2% to 53.5%. Examining the labor force participation rates for each age group of women, the once prominent "M-shaped curve" is approaching a trapezoidal shape. The number of men and women in the labor force aged 65 and over increased by 3.16 million over the same 10-year period, and the labor force participation rate rose from 19.9% to 25.6%. By breakdown, the labor force participation rate for those aged 65 to 69 rose from 38.2% in 2012 to 51.7% in 2021.

Developments of Labor Force Participation by Age



Source: Ministry of Internal Affairs and Communications "Labor Force Survey"
Note: Labor Participation Rate + Population Ratio of Those Who Wish to Work

The labor force participation rates of women and the elderly will continue to rise. According to the labor force survey, of the non-labor force population in 2021, 1.71 million people were women who wanted to work while 0.82 million people were men—twice the number of men. In addition, 0.41 million men and women aged 65 or older wanted to work. Given the growing sense of a labor shortage, there is a strong possibility that those who wish to work will participate in the labor force. Moreover, it is likely that of those who do not wish to work and are currently classified as the non-labor force population, increasingly might decide to participate in the labor market. In addition, diversified and flexible work styles, including teleworking, which has spread in the wake of the pandemic, will increase opportunities for people who are faced with childcare or nursing care to continue working.



Source: Ministry of Internal Affairs and Communications "Labor Force Survey"
Note: Forecasts are from the NLI Research Institute

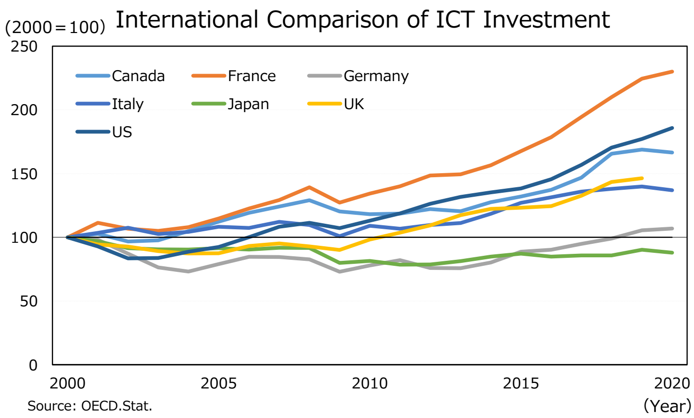
Considering these factors, this outlook assumes that the labor force participation rate will increase for each age group. However, even assuming an increase in the labor force participation rate, a decline in the labor force is likely to be inevitable. Nevertheless, the pace of the decline will be slower than assuming that the labor force participation rate does not increase.

Real GDP will grow by 1.0% on average over the next 10 years

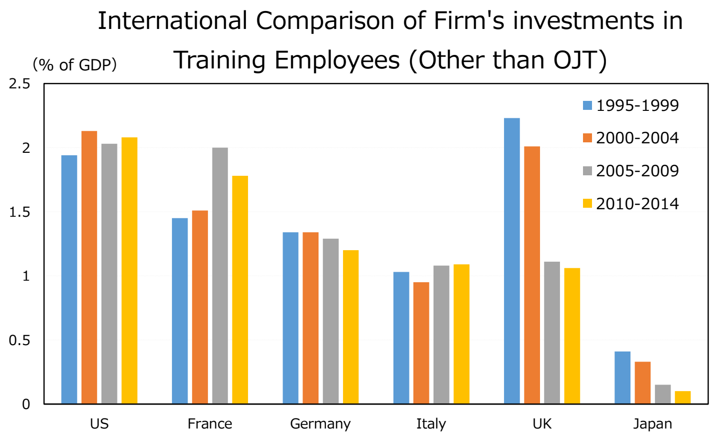
From a supply-side perspective, a decline in the labor force population exerts downward pressure on potential GDP, namely real GDP that the economy can produce. Intuitively speaking, since real GDP is the sum of the value added generated by each worker, even if the value added generated per worker is the same, a decline in the number of workers will lead to a decline in the producible real GDP.

Potential GDP is the amount of output that can be considered producible at the average utilization rate of labor and capital. Potential GDP's growth rate is a guideline in considering the medium- to long-term growth rate. It is difficult to sustain production in excess of the feasible supply capacity over the medium to long term. Observed real GDP will approach potential GDP, and the real GDP growth rate will be close to the potential growth rate.

As noted above, this outlook assumes a further increase in the labor force participation rate but also assumes that investment in physical and human capital will be implemented to improve productivity within the forecast period.

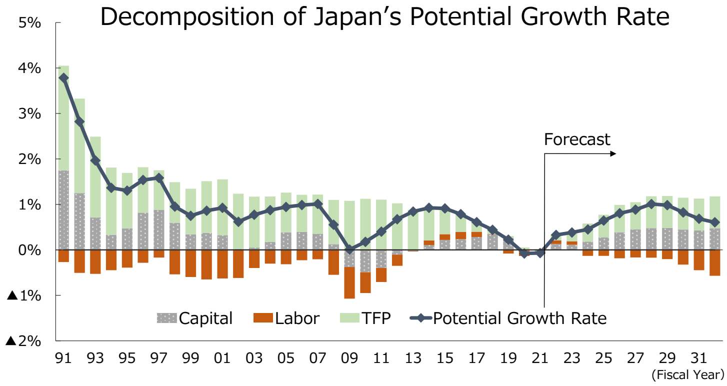


Source: OECD.Stat.
Note:Sum of "ICT equipment" and "computer software and database". Nominal Values.

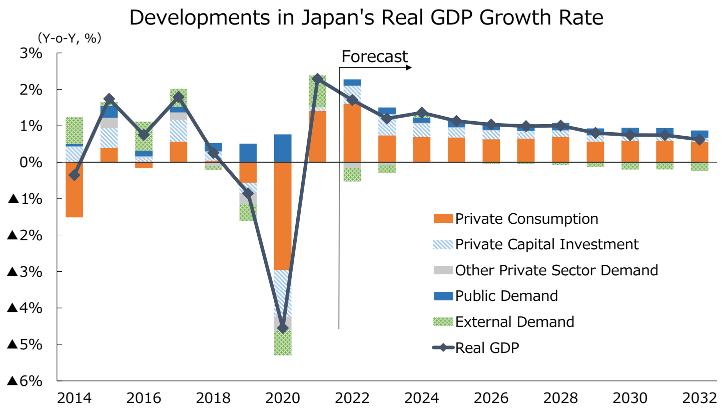


Source: Ministry of Health, Labor and Welfare "Analysis of the Labour Economy 2018"

An issue highlighted by the pandemic is the delay in digitalization. Japan has invested less in IT than many other countries. However, as firms face a labor shortage due to a shrinking labor force, they will be forced to become more aggressive in investing in digitalization and other labor-saving measures as well as human resources. Japan's investment in digital technology and human resources will accelerate in the years ahead. This effort will be supported by government policy initiatives such as the Suga administration's creation of the Digital Agency and the Kishida administration's promotion of digital transformation (DX) investment and "investment in people" as part of the "Grand Design and Action Plan for a New Capitalism." A rapid response to technological innovation, including digitization, and the wider use of novel technologies in economic activities will help raise the productivity of the economy.



Note: Figures up to FY2021 are estimates based on actual data. Figures from FY2022 onwards are estimates based on projected values.
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 the others.



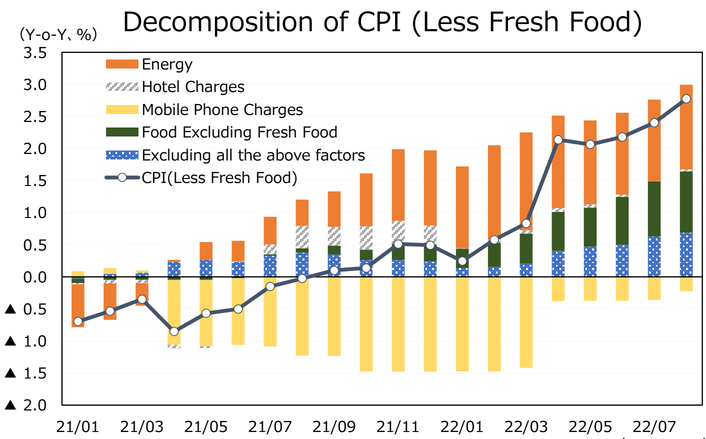
Source: Cabinet Office "National Accounts"
Note: Bar chart shows contributions to Real GDP Growth rate

Looking ahead, the potential growth rate is expected to recover to around 1% in the mid-2020s due to the further promotion of labor participation mentioned above and the implementation of investments in both physical and human capital to improve productivity. However, from the latter half of the 2020s onwards, the potential growth rate will probably decline slightly due to a greater decline in the labor force.

As a result, real GDP is projected to grow 1.0% on average over the forecast period.

Consumer prices are expected to rise 1.4% on average over the next decade

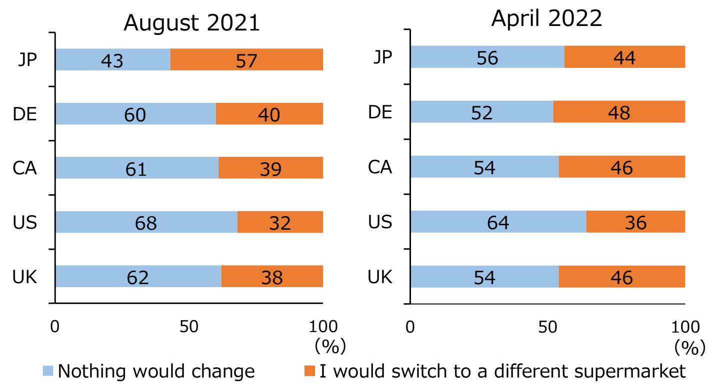
Since the start of fiscal 2022, the CPI (all items less fresh food) has continued to rise by more than 2% year-on-year. This is due to the sharp rise in prices of crude oil and other commodities since 2021 and the yen's recent depreciation. In addition, there has been a recent move to pass on the increased production costs caused by the sharp rise in raw material prices to selling prices, particularly in food products.



Source: Ministry of Internal Affairs and Communications"Consumer Price Index"

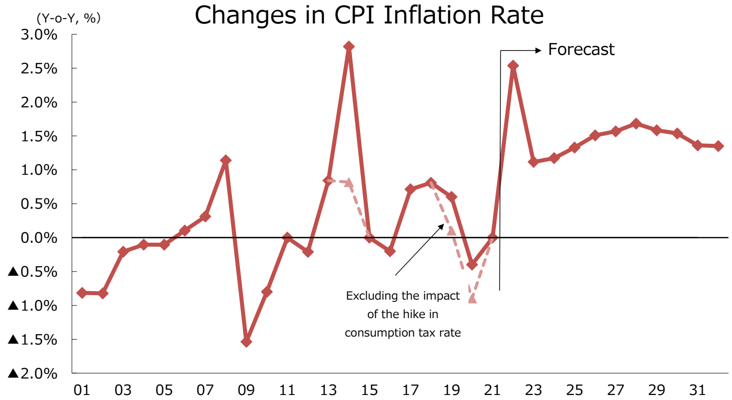
Compared with other countries, the stronger reluctance of consumers to accept price hikes is believed to have made it difficult for producers to raise selling prices. However, some surveys indicate that an increasing number of consumers consider price hikes to be unavoidable in the current phase of price increases. In addition, of 522 items in the CPI, the percentage of items with price increases is rising. In that price hikes increasingly occur, an upward trend in consumer prices is expected to continue, particularly for food products.

Suppose that the price of a product that you always buy in your supermarket goes up by 10%. What would you do?



Source: Watanabe, T., "'5-kakoku no kakei o taishō to shita infure yosō chōsa' (2022-nen 5-gatsu jisshi bun) no kekka," May 30, 2022

In the future, the pace of crude oil price hikes is expected to slow and the yen is expected to appreciate moderately; thus, consumer price inflation will gradually slow from fiscal 2023 onward.



Source: Ministry of International Affairs and Communications "Consumer Price Index"
Note: CPI on the graph is all items less fresh food

However, considering the impact of the supply-demand balance, namely the GDP gap, is still negative at present as a result of being supported by the recovery trend of the economy that fell due to the pandemic. The GDP gap is likely to narrow, contributing to a rise in consumer prices. In addition, the growing sense of labor shortages caused by the decline in the working population and the government's measures to raise wages to realize "new capitalism" by the Kishida administration will support an environment in which wages will rise more easily than at present, and wage growth will lead to higher prices.

As a result, the rate of increase in the CPI is projected to rise to 1.7% in fiscal 2028, supported by the maintenance of an accommodative stance in terms of monetary policy. The stable rise in prices is expected to continue thereafter, as firms and households become accustomed to rising prices through the continued price hikes.

The CPI is expected to rise 1.4% on average over the next 10 years.

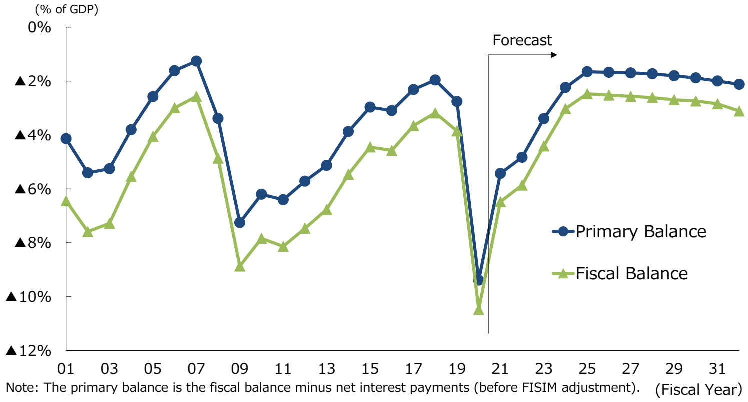
The primary balance will not achieve surplus by FY2032

The national and local government primary balance deficits grew sharply due to the expansion of fiscal expenditures resulting from the government's emergency economic measures in response to the COVID-19 pandemic.

The expansion of fiscal expenditure in the pandemic will be temporary, and the deficit in the primary balance will begin to decline, supported by higher tax revenues from rising prices. However, social security-related spending is expected to continue to increase as the population ages. The deficit is projected to be 2.1% of nominal GDP in fiscal 2032, and a primary balance surplus will not be achieved in the forecasting period. As long-term interest rates are expected to rise during the projection period, interest expenses on government debt will increase accordingly, further limiting the scope for improvement in the fiscal balance. As a result, the outstanding national and local government debt will exceed 1,350 trillion yen in fiscal 2032.

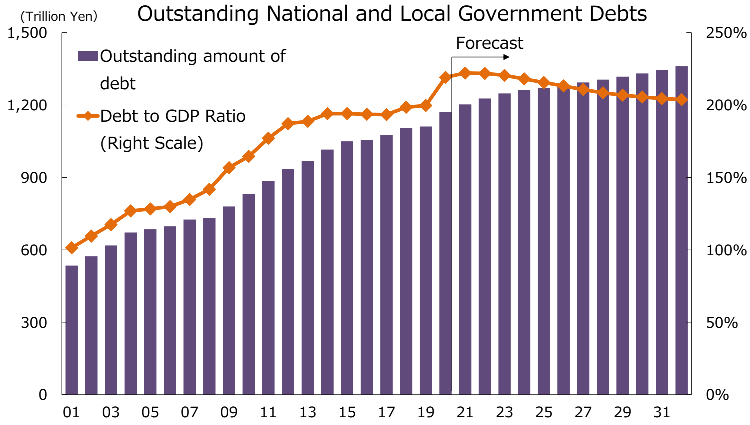
Over the projection period, the debt-to-GDP ratio of nominal GDP will decline moderately but will remain higher than in the pre-pandemic period. Further efforts in both revenues and expenditures will be necessary to restore fiscal soundness.

Changes in Fiscal Balances of National and Local Governments



Note: The primary balance is the fiscal balance minus net interest payments (before FISIM adjustment).
Source: Cabinet Office "Annual Report of National Accounts"

Outstanding National and Local Government Debts

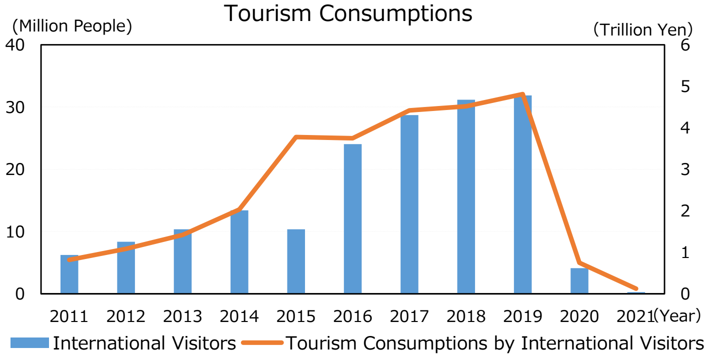


Source: Cabinet Office "Annual Report on National Accounts"

Demand from inbound tourists will recover

The number of foreign visitors to Japan increased for eight consecutive years from 2012 to 2019 before the pandemic and exceeded 30 million people in 2018. However, due to the pandemic and the resulting strengthening of border control measures, foreign visitors declined to 4.12 million in 2020 and 0.25 million in 2021. In addition, the amount of inbound travel spending increased from 813.5 billion yen in 2011 to 4.8 trillion yen in 2019, but decreased to 744.6 billion yen in 2022 and 120.8 billion yen in 2021, according to estimates by the Japan Tourism Agency due to the decline in the number of inbound foreign travelers.

Trends in International Visitors to Japan and Their Tourism Consumptions



Source: Japan Tourism Agency

As the need to restrict economic activity due to the pandemic diminishes, the government is relaxing its border control measures. From October 2022, the government raised the cap on the number of people allowed into Japan, lifted the ban on individual travel, and waived visa requirements for short-term stays. It is expected that the relaxation of border control measures will continue in the future, and the number of foreign visitors to Japan will recover, driven also by the depreciation of the yen. Some surveys rate Japan highly as a tourist destination.

The increase in the number of foreign visitors to Japan will support domestic consumption and the balance of services in international trade. However, given capacity constraints, such as a string of closures in the accommodation industry due to the disappearance of inbound tourism during the pandemic, and the reduced need for overseas business trips due to the spread of remote meetings during the pandemic, it is not expected to be easy to achieve the target of 60 million foreign visitors to Japan in 2030, which was set by the government before the pandemic.

Travel & Tourism Development Index 2021

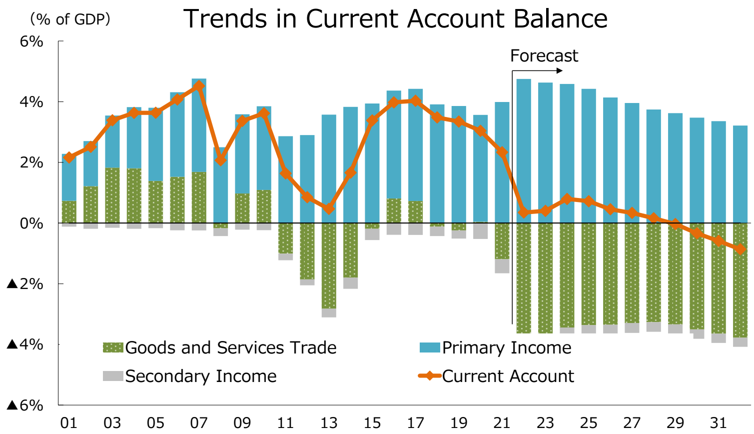
Ranking	Country	Score
1	Japan	5.2
2	US	5.2
3	Spain	5.2
4	France	5.1
5	Germany	5.1
6	Swiztherland	5
7	Australia	5
8	UK	5
9	Singapore	5
10	Italy	4.9
	World average	4

Source: World Economic Forum "Travel & Tourism Development Index 2021"

The current account balance will be in deficit by the end of the 2020s

The current account balance has maintained a stable surplus since fiscal 2014, recording a surplus of 2.3% of nominal GDP in fiscal 2021. However, the current account surplus will narrow significantly in fiscal 2022 as the deficit in the trade and services balance widens, mainly because of an increase in the value of imports due to soaring prices of crude oil and other commodities.

To date, the current account surplus has been supported by the primary income account backed by an increase in net external assets. This structure is unlikely to change in the future. If the number of foreign visitors to Japan increases as a result of the relaxation and elimination of border controls, this will also lead to a narrowing of the deficit in the services balance. However, imports are likely to increase due to a moderate rise in crude oil prices and supply constraints caused by a shrinking labor force. Consequently, the trade and services balance deficit will widen, resulting in a current account deficit by the end of the 2020s.

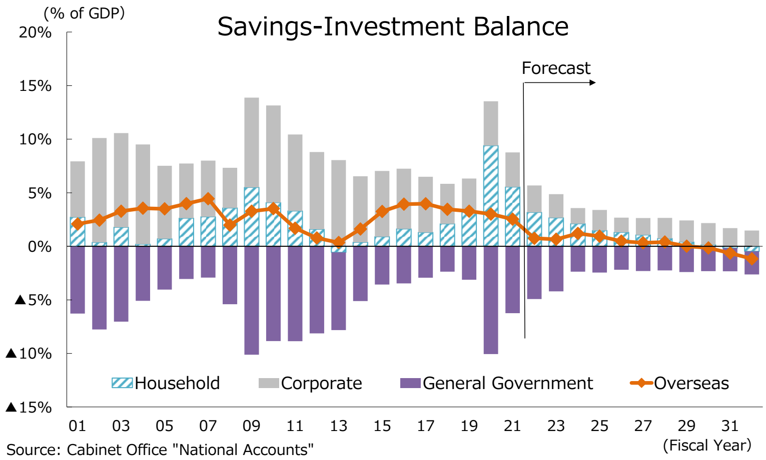


Source: Ministry of Finance "Balance of Payments", Cabinet Office "National Accounts"

In addition, the future outlook for the current account balance can also be considered from the savings-investment balance since the current account balance conceptually always corresponds to the difference between domestic savings and investment, namely the savings-investment balance,

In the past, domestic savings exceeded domestic investment, and the current account surplus was maintained as a result of the private sector surplus, namely excess savings, exceeding the deficit, namely excess investment, in the general government sector. In the pandemic, while the deficit in the general government sector increased sharply as a result of the government's economic stimulus measures, the private sector surplus expanded more than that, backed by an increase in savings in the household sector due to factors such as the provision of special fixed benefits and self-restraint in service consumption, and the current account surplus was maintained. The current account surplus is now shrinking, which is linked to the narrowing of the surplus in the private sector.

Looking ahead, the general government sector is likely to remain in deficit even in fiscal 2032, although its deficit will be smaller than it is now. On the other hand, the surplus in the private sector is likely to shrink. In the household sector, consumption, which was restrained by the pandemic, will continue to recover, and savings will decline over the long term due to the aging of the population and other factors. In the corporate sector, excess savings will narrow as a result of an increase in capital investment in response to digitalization and other factors. The current account balance is likely to move toward a deficit due to a shrinking surplus in the private sector that exceeds the shrinking deficit in the general government sector.



Source: Cabinet Office "National Accounts"

3. Financial Markets Outlook

In 2022, central banks in Europe and the United States ended quantitative easing and immediately started tightening monetary policy in response to high inflation. These central banks have continued to rapidly do so through to the present. On the other hand, the Bank of Japan (BOJ) has maintained its massive monetary easing program, differentiating its monetary policy stance from that of the United States and Europe.

Monetary policy and interest rates in Japan

Japan's recent inflation rate has clearly exceeded the BOJ's price stability target of 2%t, but the BOJ considers this inflation rate to be unsustainable, as price hikes are mainly driven by cost pressures from higher commodities prices and a weaker yen.

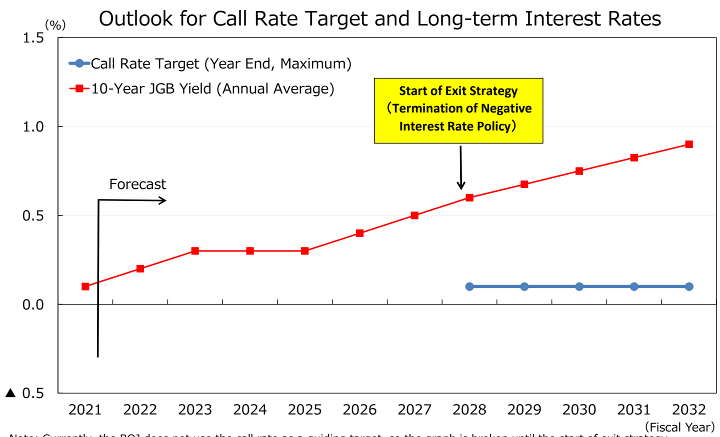
The BOJ has indicated that it intends to continue the current "Quantitative and Qualitative Monetary Easing with Yield Curve Control" to achieve the 2% price target stably, accompanied by a virtuous economic cycle of rising wages and demand growth.

As in the BOJ's outlook, the inflation rate is expected to fall well below 2% from the next fiscal year onward, but since it will be difficult to stably achieve the 2% target, the current monetary easing will have to be continued for a long period. To continue easing, it will be necessary to deal with side effects from time to time. Therefore, we expect the BOJ to allow long-term interest rates, namely 10-year JGB yield, to rise slightly in fiscal 2023 when a new governor takes office, in the name of reducing side effects such as a decline in bond market functioning, by modifying the framework, namely changing the guidance target from the 10-year JGB yield to the 5-year JGB yield at around zero percent. In doing so, the BOJ is likely to emphasize that this is a measure to improve the sustainability of easing by reducing side effects and not a reduction in easing.

We assume that the BOJ will normalize monetary easing, or embark on its exit strategy, in fiscal 2028. Although the inflation rate is not expected to remain stable at 2%, it will temporarily be close to 2% around this time. Moreover, the 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.

In terms of specific policy changes, we expect the BOJ to end its negative interest rate policy in fiscal 2028, reintroduce the guideline for the uncollateralized overnight call rate, namely up to 0.10 %, as a policy rate and put down the banner of quantitative easing. However, the guideline for long-term interest rates, especially the 5-year JGB will remain, and a spike in long-term interest rates in the exit will be avoided. The 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 BOJ will not implement further rate hike.



Note: Currently, the BOJ does not use the call rate as a guiding target, so the graph is broken until the start of exit strategy
Source: Thomson Reuters and NLI Research Institute

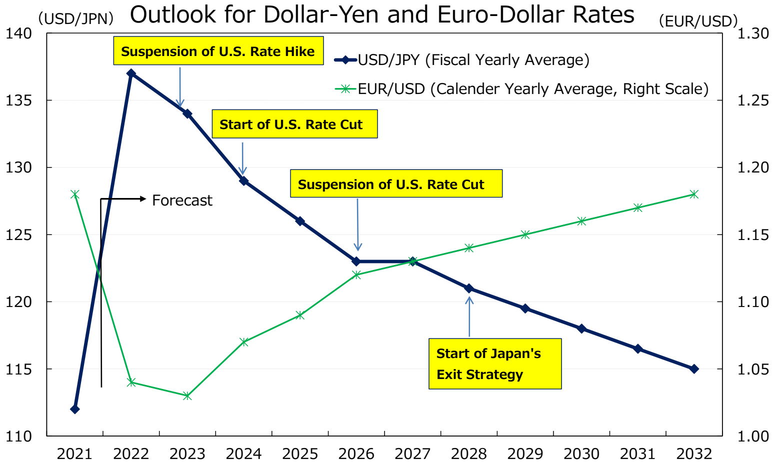
In comparison, long-term interest rates, 10-year JGB yield, are expected to remain around 0.2% or so for the time being, as the BOJ will not allow a rise above 0.25%, the upper limit of the permitted range, which is 0%±0.25%. The 10-year JGB yield is expected to remain in the 0.3%-0.5% range through the middle of our forecasting period. After the start of the exit strategy in fiscal 2028, the yield will enter an upward trend due to an increase in the yield on the 5-year JGB, but a sharp rise will be avoided as the increase in the target will be kept at a moderate pace. As the inflation rate remains below 2%, the BOJ is likely to maintain an accommodative monetary environment by keeping the real interest rate (nominal interest rate - expected inflation rate) in negative territory. As a result, long-term interest rates are not expected to reach 1% at the end of the forecast period.

Exchange rate

Since the beginning of 2022, yen has weakened sharply against U.S. dollar, mainly due to the widening Japan-U.S. interest rate differential reflecting the difference in the direction of Japan–U.S. monetary policy. In addition, the yen's depreciation has also been supported by real demand selling the yen in response to Japan's large trade deficit.

For the time being, there is still room for the yen to weaken as the Fed is expected to continue to raise interest rates significantly. However, from next year onward, we expect the yen to gradually appreciate against the dollar. The Fed will stop raising interest rates in the first half of next year and start cutting rates the year after, which will narrow the Japan-U.S. interest rate differential and put pressure on the yen to appreciate. The yen will continue to appreciate against the dollar toward the end of our forecast period. The fact that Japan's inflation rate will remain below that of the U.S. during our forecast period will also work against the yen from the perspective of purchasing power parity.

However, the BOJ's exit strategy will be very gradual and the rise in Japan's long-term interest rates will be controlled. In addition, Japan's current account deficit will turn into a deficit by the end of the forecast period, which will work to curb the yen's appreciation. As a result, we expect the dollar-yen rate to remain at 115 yen per dollar at the end of our forecast period, about the same level as at the beginning of 2022.



Source: Thomson Reuters and NLI Research Institute

Euro has weakened against U.S. dollar since the start of 2022, as the Fed has taken the lead in raising interest rates. Fears of a recession in the eurozone have increased due to gas shortages and price hikes and the rate is now slightly below parity, namely 1 euro = 1 U.S. dollar. The ECB will continue to raise interest rates significantly for the time being, but so will the Fed, which will reduce the pressure on the euro. The ECB and the Fed are both expected to cut interest rates from 2024 onwards, but the ECB's relatively modest rate cuts will contribute to a recovery in the Eurodollar.

In addition, the euro is likely to be strengthened because the eurozone's current account balance will turn into a surplus after 2024 and the eurozone's price growth rate will be lower than that of the United States—a factor that will strengthen the euro from the perspective of purchasing power parity. We, therefore, expect the level to reach 1.18 U.S. dollars per euro at the end of our forecast period.

Incidentally, yen has weakened against euro this year, reflecting the different monetary policy directions of the Bank of Japan and the ECB. The euro is expected to remain strong for the time being. In the medium term, as mentioned, the current account balance of the euro area is expected to turn into a surplus in 2024, while Japan's current account balance is expected to turn into a deficit toward the end of the forecast period, which will cause the yen to depreciate against the euro. However, the yen will be pressured to appreciate against the euro by the ECB's interest rate cuts in 2024–2025 and the BOJ's exit strategy from fiscal 2028. We expect the latter to slightly outweigh the former, and thus the euro-yen rate is expected to moderately weaken.

Medium-Term Outlook for the Japanese Economy

(YoY percentage changes, unless otherwise stated)

		FY2021 (Actual)	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	Annual average 13-22	Annual average 23-32
Nominal GDP		1.3	2.2	2.3	2.2	2.0	2.0	2.0	2.0	1.7	1.6	1.6	1.5	1.0	1.9
(Trillion yen)		(541.6)	(553.2)	(566.1)	(578.3)	(589.7)	(601.3)	(613.7)	(626.0)	(636.9)	(647.3)	(657.5)	(667.4)		
Real GDP		2.3	1.7	1.2	1.4	1.1	1.0	1.0	1.0	0.8	0.7	0.7	0.6	0.5	1.0
Domestic demand (%contribution)		<1.5>	<2.1>	<1.4>	<1.2>	<1.1>	<1.1>	<1.0>	<1.1>	<0.9>	<0.9>	<0.9>	<0.9>	<0.5>	<1.1>
Private demand (%contribution)		<1.5>	<1.9>	<1.2>	<1.1>	<1.0>	<0.9>	<0.9>	<0.9>	<0.7>	<0.7>	<0.7>	<0.7>	<0.2>	<0.9>
Private final consumption expenditure		2.6	3.0	1.3	1.3	1.2	1.2	1.2	1.3	1.0	1.1	1.1	1.0	0.1	1.2
Private residential investment		−1.6	−4.3	0.1	0.7	0.7	0.1	0.1	0.0	0.1	−0.1	0.1	−0.0	−1.1	0.2
Private non-residential investment		0.6	3.2	3.7	2.2	1.6	1.5	1.3	1.1	1.0	1.0	0.8	0.7	1.1	1.5
Public demand (%contribution)		<-0.0>	<0.2>	<0.2>	<0.1>	<0.2>	<0.2>	<0.2>	<0.2>	<0.2>	<0.2>	<0.2>	<0.2>	<0.3>	<0.2>
Government final consumption expenditure		2.0	1.2	0.4	0.4	0.7	0.7	0.7	0.8	0.7	0.7	0.8	0.7	1.5	0.7
Public investment		−7.5	−1.7	1.9	1.0	0.9	0.9	0.8	0.9	0.9	0.9	1.0	1.2	0.4	1.1
Net exports of goods and services (%contribution)		<0.9>	<−0.4>	<−0.2>	<0.1>	<−0.0>	<−0.0>	<−0.1>	<−0.1>	<−0.1>	<−0.2>	<−0.2>	<−0.2>	<0.1>	<−0.1>
Export of goods and services		12.5	1.5	−0.3	3.1	2.5	2.5	2.5	2.4	2.4	2.3	2.3	2.1	2.6	2.2
Import of goods and services		7.2	3.4	0.9	2.3	2.5	2.6	2.7	2.7	2.9	3.2	3.1	3.1	2.2	2.6
Industrial production		5.8	0.7	3.2	1.3	0.7	0.6	0.6	0.6	0.5	0.4	0.4	0.4	−0.2	0.9
Domestic corporate goods price index		7.1	7.0	1.5	1.3	1.0	1.4	1.6	1.8	1.5	1.6	1.5	1.3	1.6	1.5
Consumer price index (all items)		0.1	2.5	1.1	1.3	1.3	1.5	1.5	1.7	1.6	1.5	1.3	1.3	0.8	1.4
Consumer prices index (all items excluding fresh food)		0.0	2.5	1.1	1.2	1.3	1.5	1.6	1.7	1.6	1.5	1.4	1.4	0.8	1.4
Excluding the effects of consumption tax hike		0.0	2.5	1.1	1.2	1.3	1.5	1.6	1.7	1.6	1.5	1.4	1.4	0.5	1.4
Unemployment rate (%)		2.8	2.5	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.3	2.2	2.9	2.4
Current account balance (trillion yen)		12.7	1.9	2.3	4.5	4.2	2.7	2.0	0.9	-0.3	-2.2	−3.9	−5.8	14.2	0.5
(% of nominal GDP)		(2.3)	(0.3)	(0.4)	(0.8)	(0.7)	(0.4)	(0.3)	(0.1)	(-0.0)	(-0.3)	(−0.6)	(−0.9)	(2.6)	(0.1)
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	112	137	134	129	126	123	123	121	120	118	117	115	112	123
Call rate (Target,%)	End of fiscal year	-	-	-	-	-	-	-	0.10	0.10	0.10	0.10	0.10	-	-
10-year government bond yield (%)	Annual average	0.1	0.2	0.3	0.3	0.3	0.4	0.5	0.6	0.7	0.8	0.8	0.9	0.2	0.6
Crude oil prices (CIF, Dollar/Barrel)	Annual average	77	103	99	99	99	100	100	100	100	100	101	101	72	100

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)

	2021 (Actual)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Annual average 13-22	Annual average 23-32
Nominal GDP	10.7	8.7	3.9	3.4	4.1	4.1	4.1	4.1	4.1	4.1	4.0	4.1	4.6	4.0
Real GDP	5.9	1.5	−0.2	1.2	2.0	1.8	1.8	1.8	1.8	1.8	1.7	1.7	2.1	1.5
Domestic demand (%contribution)	7.6	2.4	−0.5	1.1	2.1	1.9	1.9	1.9	1.9	1.9	1.8	1.8	2.5	1.6
Private final consumption expenditure	8.3	2.5	0.1	1.0	2.3	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.5	1.7
Fixed capital formation	7.4	0.5	−1.9	1.0	2.3	2.0	1.8	1.8	1.8	1.8	1.8	1.8	4.5	1.4
External demand (%contribution)	−1.7	−0.9	0.3	0.1	−0.1	−0.1	−0.1	−0.1	−0.1	−0.1	−0.1	−0.1	−0.5	−0.0
Consumer prices	4.7	8.0	3.8	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.5	2.5
Current account balance (% of nominal GDP)	−3.6	−3.7	−3.4	−3.2	−3.1	−3.0	−3.0	−2.9	−2.8	−2.7	−2.7	−2.7	−2.4	−3.0
Federal funds target range - upper limit (%), End of year	0.25	4.50	4.75	3.75	2.75	2.50	2.50	2.50	2.50	2.50	2.50	2.50	1.3	2.9
10-year government bond yield (%), Annual average	1.4	2.9	3.4	3.0	2.9	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.2	2.9

Medium-Term Outlook for the Euro Area Economy

(YoY percentage changes, unless otherwise stated)

	2021 (Actual)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Annual average 13-22	Annual average 23-32
Nominal GDP	7.5	7.6	2.9	3.6	3.2	3.2	3.3	3.3	3.3	3.3	3.3	3.3	3.0	3.3
Real GDP	5.2	2.9	−0.2	1.3	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.1
Domestic demand (%contribution)	4.8	3.1	−0.0	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.8	1.5
Private final consumption expenditure	3.7	4.0	0.1	1.4	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.2	0.8	1.2
Fixed capital formation	4.1	3.3	2.0	2.0	1.8	1.6	1.5	1.5	1.5	1.5	1.5	1.5	2.2	1.6
External demand (%contribution)	1.3	−0.2	−0.1	−0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	−0.0
Consumer prices	2.6	8.0	5.1	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.7	2.3
Current account balance (% of nominal GDP)	2.4	- 0.2	- 0.2	0.2	0.5	0.7	0.8	0.9	1.0	1.0	1.0	1.1	2.4	0.7
Euro/dollar exchange rate, Annual average	1.18	1.04	1.03	1.07	1.09	1.12	1.13	1.14	1.15	1.16	1.17	1.18	1.17	1.12
Yen/Euro echange rate, Annual average	130	136	140	138	137	138	139	138	137	137	136	136	129	138
ECB Main Refinancing Operations Rate (%), End of year	0.00	2.75	3.50	2.00	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	0.31	1.95
10-year German government bond yield (%), Annual average	−0.3	1.3	2.8	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.5	2.1

Medium-Term Outlook for the Chinese Economy

(YoY percentage changes, unless otherwise stated)

	2021 (Actual)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Average 13-22	average 23-32
Nominal GDP	12.8	5.6	8.6	6.1	6.5	5.9	5.7	5.1	5.0	5.0	4.5	4.6	8.4	5.7
Real GDP	8.1	3.4	6.1	4.1	4.5	3.9	3.7	3.1	3.0	3.0	2.5	2.6	6.2	3.6
Consumer prices	0.9	2.2	2.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
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	1.8	1.5
USD/CNY exchange rate (reference value), Annual average	6.5	6.7	6.8	6.7	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.6

Medium-Term Outlook for the Emerging Economies

(YoY percentage changes, unless otherwise stated)

		2021 (Actual)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Average 13-22	average 23-32
Real GDP		6.6	3.3	4.5	4.1	4.2	4.0	3.9	3.7	3.6	3.6	3.4	3.4	3.9	3.8
	China	8.1	3.4	6.1	4.1	4.5	3.9	3.7	3.1	3.0	3.0	2.5	2.6	6.2	3.6
	India	8.3	7.8	5.8	6.5	6.5	6.3	6.2	6.1	6.1	6.0	5.9	5.8	5.7	6.1
	Brazil	4.6	2.5	0.4	1.7	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	0.4	1.7
	Russia	4.7	- 4.0	- 2.8	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.5	0.4
	ASEAN4	3.5	5.3	4.7	4.6	4.5	4.4	4.3	4.3	4.2	4.2	4.1	4.1	3.8	4.3

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