March 2, 2023
Bank of Japan

Economic Activity, Prices, and Monetary Policy in Japan

Speech at a Meeting with Local Leaders in Kanagawa

TAKATA Hajime
Member of the Policy Board

(English translation based on the Japanese original)

I. Economic Activity and Prices

A. Current Situation

I will begin my speech by talking about the current situation of economic activity and prices. The pace of recovery in overseas economies has slowed. Chart 1 shows developments in overseas economies in the January 2023 *World Economic Outlook* (WEO) *Update* released by the International Monetary Fund (IMF). Taking a detailed look by country and region, the U.S. economy has remained on a slowing trend, reflecting price rises and continued policy interest rate hikes, although firmness has been seen in private consumption. Since 2022, the Federal Reserve has continued to raise policy interest rates to address the highest level of inflation since the early 1980s. Although it has been gradually slowing the pace of rate hikes recently, the U.S. economy is expected to continue to slow as the significant rate increases are projected to have a cumulative impact over time.

In European economies, slowdowns have been observed, mainly with price rises pushing down private consumption, as these economies have continued to be affected by the situation in Ukraine. As for the outlook, European economies are likely to slow, reflecting the impact of policy interest rate hikes. The European Central Bank has also taken an aggressive tightening stance to address the highest level of inflation since the introduction of the euro currency in 1999.

With adjustments continuing to be made in its real estate market, the Chinese economy has slowed, reflecting the impact of COVID-19. China has experienced a surge in COVID-19 infections after reversing its zero-COVID policy in December 2022. While movement toward the normalization of economic activity has been seen recently, the pace of recovery in the Chinese economy is expected to be moderate, partly due to the impact of the pandemic on employment and income and to adjustment pressure remaining in the real estate market. However, if the impact of COVID-19 subsides and the normalization of economic activity progresses more rapidly than expected, the economy could grow faster. Thus, the outlook for the Chinese economy is highly uncertain as it entails both upside and downside risks. Meanwhile, emerging and commodity-exporting economies other than China have picked up on the whole, albeit with weakness seen in part.

Despite being affected by high commodity prices, Japan's economy has picked up as the resumption of economic activity has progressed while public health has been protected from COVID-19. Chart 2 shows developments in the real GDP growth rate and the contribution of GDP components such as private final demand, public demand, and external demand (net exports). Real GDP increased for the latest October-December quarter, registering 0.6 percent on an annualized basis, as private final demand, which includes business fixed investment and private consumption, increased moderately. However, as Chart 3 shows, Japan's real GDP has become only slightly higher than in the October-December quarter of 2019, just before the outbreak of COVID-19, and the pace of recovery from the downturn caused by the pandemic has been moderate compared with the United States and Europe.

Turning to prices in Japan, the year-on-year rate of change in the consumer price index (CPI) for all items less fresh food has been in the range of 4.0-4.5 percent due to rises in the price of such items as energy, food, and durable goods. Chart 4 compares inflation rates in Japan, the United States, and Europe. Japan's inflation rate has been relatively low, and unlike in the United States and Europe, where the rise in services prices has significantly pushed up overall inflation, Japan's inflation has been mainly led by higher goods prices due to cost-push factors stemming from a rise in import prices.

B. Outlook

I would like to explain the Bank of Japan Policy Board members' baseline scenario of the outlook for economic activity and prices in Japan. The economy is likely to recover toward the middle of the projection period, with the impact of COVID-19 and supply-side constraints waning and with support from accommodative financial conditions and the government's economic measures, although it is expected to be under downward pressure stemming from high commodity prices and slowdowns in overseas economies. Thereafter, as a virtuous cycle from income to spending gradually intensifies, Japan's economy is projected to continue growing at a pace above its potential growth rate. Chart 5 shows the forecasts for economic activity and prices presented in the January 2023 *Outlook for Economic Activity and Prices* (Outlook Report). In terms of the median of the members' forecasts, the real GDP growth rate is projected to be 1.9 percent for fiscal 2022, 1.7 percent for fiscal 2023, and 1.1 percent for fiscal 2024. Comparing the projections with those presented in the October 2022 Outlook

Report, the projected growth rates for fiscal 2023 and 2024 are somewhat lower. The lower projection for fiscal 2023 mainly reflects the downward deviation in overseas economies from the previous baseline scenario, although the government's economic measures are likely to make a positive contribution to the growth rate. The lower projection for fiscal 2024 reflects the waning effects of those economic measures.

The year-on-year rate of increase in the CPI for all items less fresh food is expected to decelerate toward the middle of fiscal 2023 due to the diminishing effects of a pass-through to consumer prices of cost increases led by a rise in import prices, as well as to the effects of the government's economic measures pushing down energy prices. Thereafter, it is projected to accelerate again moderately on the back of an improvement in the output gap, rises in medium- to long-term inflation expectations and in wage growth, and the waning effects of the economic measures that have been pushing down energy prices. In terms of the median of the Policy Board members' forecasts, the year-on-year rate of change in the CPI is expected to be 3.0 percent for fiscal 2022, 1.6 percent for fiscal 2023, and 1.8 percent for fiscal 2024. Comparing the projections with those presented in the October Outlook Report, the projected rate of increase in the CPI for fiscal 2023 is more or less unchanged, as the effects of such factors as the pass-through to consumer prices of cost increases led by a rise in import prices are likely to offset the pushing down of energy prices by the government's economic measures. The projected rate of increase in the CPI for fiscal 2024 is somewhat higher due to the waning effects of the economic measures that have been pushing down energy prices.

C. Risks to the Outlook

So far, I have explained the Policy Board members' baseline scenario of the outlook for economic activity and prices. I would now like to discuss a few points to which I am attentive with regard to risks to the outlook.

The first involves developments in overseas economic activity and prices. There has recently been significant difference between economic cycles in Japan and those abroad, partly reflecting diverging monetary policy responses. Following the shift to a floating exchange rate system in the 1970s, the monetary policy stances of advanced economies and their corresponding economic cycles were largely in sync. However, since 2022, the United States and Europe in particular have been compelled to pursue aggressive monetary tightening to address the rise in inflation. On this point, the situation in Japan, unlike in the United States and Europe, does not warrant a change in monetary policy stance, because the inflation rate in Japan has been comparatively low and the recent higher inflation is largely attributable to cost-push factors led by a rise in import prices. Therefore, as I mentioned earlier, Japan's economy is expected to continue recovering at a relatively moderate pace, partly owing to the effects of large-scale monetary easing. If overseas economies experience sharper slowdowns, there is a risk that Japan's economic activity and prices will be under stronger downward pressure.

The second point involves uncertainties regarding firms' wage-setting behavior. Wage hikes play a crucial role in achieving a virtuous cycle between economic activity and prices triggered by improvement in corporate profits. However, it has been difficult to predict the course of this spring's labor-management wage negotiations due to uncertainties about overseas economies. Firms may remain cautious about raising base pay, given that base pay hikes, which represent an across-the-board pay rise, could lead to a heavier burden on firms, including higher retirement benefits and pensions. As Chart 6 shows, wage growth in Japan has been at around only 2 percent for more than 20 years, even when including seniority- and performance-related wage increases. If firms remain cautious, there is a risk that future wage growth will be insufficient and that sustained inflation will not be achieved. On the other hand, wage hikes from this spring onward could be higher. The Japanese Trade Union Confederation, or Rengo, has set a 5 percent target for wage growth, including seniority- and performance-related wage increases, given that firms and society at large have become more aware than in recent years of the importance of base pay increases. For example, some firms have taken a more positive stance toward raising wages in light of inflation, amid tightening labor market conditions. In the early 1990s, I was heading up the employee union of the bank I was working at. The union was demanding an increase in base pay from management. My experience back then was that unions typically negotiated on the basis of a "living wage," or a wage level that is necessary to maintain living standards, asking for an increase in base pay that would offset the previous year's decrease in real income stemming from inflation. Although the idea of a "living wage" virtually disappeared after the collapse of the bubble economy, there has recently been a gradual return to wage increases that take into account the rise in prices, and I am paying attention to these wage developments.

The third point that I am attentive to is the possible effects of macroeconomic policies across countries and regions, especially how asset markets will be affected by global monetary tightening, particularly as conducted in the United States and Europe. Policy interest rate hikes in the United States will also affect emerging economies, which are still on their way to recovery from the pandemic, through capital flows in global financial markets. It is essential to note that the burden of U.S. dollar-denominated debt in emerging economies will grow as the dollar continues to appreciate. Furthermore, attention should be paid to whether hidden risks are building up outside the realm of conventional financial institutions, among so-called non-bank financial intermediaries.

In addition to these points, close attention is warranted over how the course of COVID-19 at home and abroad will affect private consumption and firms' export and production activities, and how geopolitical risks, such as the situation in Ukraine since 2022, will impact the world economy, global financial markets, and the price of commodities, including grain. Given that "once in a century" risk events such as the COVID-19 pandemic and the Ukraine crisis have occurred nearly every year, it is vital to be prepared for such low-probability but high-impact tail events.

II. Conduct of Monetary Policy

Based on the outlook for economic activity and prices that I have described, let me now turn to my views on the Bank's conduct of monetary policy.

A. Recent Conduct of Monetary Policy

The Bank currently conducts monetary policy under the framework of Quantitative and Qualitative Monetary Easing (QQE) with Yield Curve Control, aiming to achieve the price stability target of 2 percent. I consider it necessary for the Bank to continue with the current large-scale monetary easing for two reasons.

The first reason is that, although the CPI inflation rate has recently been above 2 percent, the level that the Bank sets for its price stability target, the target is not projected to be achieved in a stable manner during the projection period of the January 2023 Outlook Report. Firms have increasingly passed on cost increases to selling prices recently, reflecting a surge in the price of commodities and raw materials, but sustained inflation accompanied by wage increases has not yet been achieved. Following the collapse of the bubble economy, the experience of prolonged deflation weighed heavily on the mind of people in Japan, and this has resulted in the formation of a norm that wages and prices do not rise. As the norm has become deeply entrenched, changing this will take time. The challenge for Japan's economy today is to change this norm, and through sustained wage increases that reflect price rises, to achieve a virtuous cycle triggered by improvement in corporate profits.

The second reason is projected slowdowns in overseas economies. As mentioned earlier, due to policy interest rate hikes in the United States and Europe, there is a risk that overseas economies will experience significant slowdowns, and this will put stronger downward pressure on Japan's economy.

It is thus necessary for the Bank to persistently continue with monetary easing, thereby influencing the output gap. As shown in Chart 7, the output gap became significantly negative at the onset of the pandemic and has since narrowed to just below 0 percent recently. It is expected to return to positive territory by the end of fiscal 2022 and then continue to expand moderately. In addition, with the low interest rate environment being maintained, real interest rates have continued to decline due to a rise in inflation expectations, as shown in Chart 8, suggesting that the degree of monetary accommodation has strengthened. This could lead to a shift in the norm that has been considered hard to change. Now is the time to examine whether a virtuous cycle between economic activity and prices can be achieved in a sustainable manner, and for the Bank to continue in its steadfast commitment to large-scale monetary easing while taking into account its impact on market functioning.

In relation to the impact on market functioning, to enhance the sustainability of large-scale monetary easing under the current framework, the Bank decided in December 2022 to modify the conduct of yield curve control, in which it seeks a decline in real interest rates by controlling short- and long-term interest rates. The decision to modify the conduct, as shown in Chart 9, was made because volatility in overseas financial and capital markets had increased since early spring of 2022, and the functioning of bond markets in Japan had deteriorated, particularly in terms of relative relationships between bonds with different maturities and arbitrage relationships between spot and futures markets. On this point, real interest rates have been at extremely low levels by historical standards, and aggressive monetary easing has been maintained, as mentioned earlier. The Bank will continue to pay due attention to market functioning when conducting monetary policy. In addition, to secure bond market stability, it will maintain a detailed grasp of market conditions through careful monitoring.

Steadfast support is called for on the financial front because Japan has not entirely escaped from the "secular stagnation trap," i.e., a situation characterized by prolonged low growth and low inflation, which it fell into after the bursting of the bubble economy.

B. Considerations from a Historical Perspective

So far, I have explained the Bank's recent conduct of monetary policy and my thinking behind it. In what follows, I would like to express my opinion, from a historical perspective, on why Japan fell into a post-bubble secular stagnation trap and whether it is possible to escape it.

1. Why did Japan fall into a post-bubble secular stagnation trap?

Chart 10 shows developments in Japan's economic growth rate since the 1980s. Until the 1980s, Japan continued to grow at a high rate, partly buoyed by the aftereffects of its period of rapid economic growth. From the 1990s, however, following the bursting of the bubble economy, the country fell into prolonged low growth. The growth rate dropped further in the 2000s, mainly because the financial crisis in Japan and the Lehman crisis worsened. Although economic growth recovered again somewhat in the 2010s, it still lags behind past levels.

The 1980s was a time when "Japan as Number One" garnered worldwide attention. Chart 11 shows changes in total stock market capitalization since the 1980s. In the 1980s, Japan accounted for nearly half of global market capitalization at its peak. From the 1990s, however, while the United States and other economies continued to expand steadily, Japan's economy remained stagnant for many years, out of step with growth in the rest of the world. This has been described as Japan's "Lost Decades." This stagnation was set off by a drop in asset prices, particularly in stocks, as shown in Chart 11, and real estate, coupled with the shrinking equilibrium into which firms and households fell after the bubble economy burst. While the nature of the post-bubble crisis in Japan is often described as "deflation," a fall in the general price level, the more fundamental problem was a drop in asset prices, or asset deflation. Land prices in major cities in Japan plummeted by about 70 to 80 percent from their peak, causing serious damage to the financial system.

In the context of the significant asset deflation that began in the 1990s, an increasing number of firms pursued management with minimum assets by paring down assets on the balance sheet and reining in investment. They also reduced interest-bearing debt. As a result, as Chart 12 suggests, the capital adequacy ratios of Japanese firms continued to increase. In addition, Japanese firms became more inclined to hoard cash and deposits for precautionary motives.

At around the same time, after the fall of the Berlin Wall, the world economy became increasingly globalized. Until the end of the 1980s, Japan was characterized as an economic threat, given its growing economic presence. It saw mounting trade friction, particularly with the United States, and a rapid appreciation of the yen (Chart 13). In this situation, Japanese firms shifted their production sites overseas. Moreover, to maintain competitiveness in international markets, Japanese firms were under pressure to pursue restructuring in which they did not raise the wages of their employees in Japan. This became the accepted norm for business management. In fact, as Chart 14 shows, although wage increases remained higher than the inflation rate until the mid-1990s, in the immediate aftermath of the bursting of the bubble economy, they were kept in line with inflation for many years from the latter half of the 1990s. Firms curbed wage hikes and increases in selling prices probably on the understanding that they would lose competitiveness if they raised wages or passed on higher costs to selling prices. Once firms took for granted the fundamental practice of leaving selling prices and wages unchanged, they did not pass on higher costs to selling prices even if the price of raw materials increased, seeking instead to absorb such increases by cutting costs. This practice may have led firms to curb new capital investment, which, coupled with restraints on investment in human capital, could have brought down Japan's potential growth rate (Chart 15). In response to the changing business environment, it was rational for individual firms to pursue both management with minimum assets on their balance sheet and business restructuring to reduce costs in their income statements. From a macroeconomic perspective, however, this approach caused Japan to fall into a shrinking equilibrium in which the overall economy contracted. Meanwhile, in this deflationary environment, it continued to be rational for households to hold their assets in cash and deposits. Households exhibited a growing preference for cash and deposits in their portfolio selection and came to avoid holding risk assets. By way of asset deflation, this also led to a shrinking equilibrium on the macroeconomic level.

Economics refers to the impact of a major shock on the economy as a "scarring effect," where it is said to take far longer to return to a normal state of affairs than under usual circumstances.[1] For firms and households in Japan, the post-bubble experience of a shrinking equilibrium was painful and traumatic. Since then, the norm that wages and prices do not rise has become entrenched for nearly a quarter of a century. Empirical research has shown that the formation of inflation expectations among Japanese firms and households is strongly influenced by the course of past events and is highly adaptive. This can be largely attributed to the post-bubble experience of a shrinking equilibrium. There were several "false dawns" in post-bubble Japan, periods when the economy seemed to be headed for a sustained recovery that never actually materialized.[2] The challenge is how to overcome the past experience of a shrinking equilibrium and alter the norm regarding wages and prices.

2. Is it possible to escape the secular stagnation trap?

There has already been a significant shift in the factors that guided firms' behavior in post-bubble Japan. First, the asset deflation that led firms to pursue management with minimum assets has improved significantly over the past decade. Looking again at Chart 11, asset prices have risen steadily since the beginning of the 2010s, mainly in the stock and real estate

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[1] For example, see Aikman, D. et al., "The Scarring Effects of Deep Contractions," BIS Working Papers, no. 1043, 2022, https://www.bis.org/publ/work1043.htm.

[2] Shirakawa, M., "Way Out of Economic and Financial Crisis: Lessons and Policy Actions," speech at the Japan Society in New York, April 23, 2009, https://www2.boj.or.jp/archive/en/announcements/press/koen_2009/ko0904c.htm.

markets. As for the international competitive conditions that led to the business restructuring of Japanese firms, trade friction between Japan and the United States is now a thing of the past. The situation described as the six headwinds facing firms has also changed.[3] During this period, however, there has been no significant change to the norm. One reason why the Bank has persistently continued with monetary easing for many years is that it has been taking time to change the norm.

"False dawns" occurred repeatedly in Japan, partly because the norm did not change. Since the beginning of the 2010s, as the conditions that led to the post-bubble shrinking equilibrium improved, there were times when the economic recovery was expected to become full-fledged. In a speech he gave in 2017, Nakaso Hiroshi, then Deputy Governor of the Bank, expressed his hope for a "true dawn" after several "false dawns," citing a waka-poem by Kakinomotono Hitomaro from an ancient anthology called the *Man'yōshū*.[4] Unfortunately, the recovery was not sustained, due partly to the outbreak of COVID-19, and Japan has yet to achieve the price stability target in a sustainable and stable manner. While the path of the current economic recovery is highly uncertain, I would like to highlight three signs of change in the economic environment that may help predict the future course.

First, during the past 10 years of ongoing improvement in asset deflation and in international competitiveness, a younger generation has grown up who never experienced the post-bubble

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[3] It has been said that, following the Great East Japan Earthquake and to around 2012, firms faced six headwinds: the yen's appreciation; delayed negotiations on economic partnership agreements; high corporate tax rates; rigidity in the labor market; environmental regulations; and high electricity costs. This situation is judged to have improved on the whole, and could contribute to strengthening the attractiveness of Japan as a business location. For details, see Cabinet Office, *Annual Report on the Japanese Economy and Public Finance 2021 -- Towards a resilient Japanese economy: Accelerating innovation towards an economic society with strength and flexibility*, September 2021, https://www5.cao.go.jp/keizai3/2021/0924wp-keizai/setsumei_e2021.pdf; Cabinet Office, *Annual Report on the Japanese Economy and Public Finance 2017: New Growth Promoted by Technological Innovation and Work Style Reform*, July 2017, https://www5.cao.go.jp/keizai3/whitepaper-e/archives/wp2017-e.html. These reports are summaries of the Japanese originals.

[4] Nakaso, H., "Japan's Way toward Strong, Sustainable, and Balanced Growth: Assessment of the potential of the Japanese economy suggests the sun also rises," speech at a meeting hosted by the Japan Society and the City of London Corporation in London, October 5, 2017, https://www.boj.or.jp/en/about/press/koen_2017/ko171005a.htm.

shrinking equilibrium. This is significant because this is a generation that acts and thinks differently, unbound by past trauma, and their presence in Japan's economic activities has gradually increased over these 10 years.

The second sign is a possible change in the norm due to Japan's first major inflation shock in 40 years. Although this inflation shock has been brought about by cost-push pressures originating from overseas, it may act as a so-called big push. In development economics, a big push refers to a shift from one type of equilibrium to another triggered by a major shock. In the context of the current situation in Japan, the inflation shock could lead to a transition from the present position, in which wage hikes and a pass-through of cost increases are contained, to one in which prices rise accompanied by wage increases.[5] There have been more cases recently where firms have been able to raise prices by increasing the added value of their products and services, and there are also forward-looking moves, such as those to explore new business models. Because the formation of inflation expectations, which has a major influence on the behavior of firms and households, is largely adaptive, these changes in the business environment could trigger changes in the behavior of various economic agents. Looking back at history, the 1970s witnessed a surge in inflation followed by several years of continued high inflation.[6]

Third, there are signs of structural changes in Japanese society. There is a growing willingness to invest in the transition to a new society, including moves toward digital transformation and global efforts toward achieving carbon neutrality. Corporate initiatives that support these developments have been underpinned by the large-scale monetary easing the Bank has conducted for nearly a decade. The diffusion indexes (DIs) for financial institutions' lending attitudes and for firms' financial positions shown in Chart 16 indicate that financial conditions have been highly accommodative by historical standards, positively encouraging business

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[5] In May 2022, at the Bank's second workshop on "Issues Surrounding Price Developments during the COVID-19 Pandemic," entitled "The Phillips Curve and Cost Pass-Through in Japan," empirical research was presented showing that, during periods of a rapid increase in cost-push pressures, the degree of pass-through to prices also increases. For details, see https://www.boj.or.jp/en/research/brp/ron_2022/ron220831a.htm.

[6] In a column entitled "Keizai Kyōshitsu" in *Nikkei* (January 16, 2023), Professor Kitamura Yukinobu of Rissho University suggested that something similar might happen in the current phase.

activities. Moreover, various initiatives have been launched in the labor market, including the introduction of new working styles. These developments could boost Japan's potential growth rate by means of capital accumulation, higher labor market mobility, and productivity growth.

The wage hikes expected this spring will be a key test of the progress toward achieving the price stability target in a sustainable and stable manner, as they would mark the first step in starting a virtuous cycle triggered by firms. Attention is also warranted on whether adequate wage increases will continue into next year and beyond. Although it may take time, I would like to believe that Japan's economy will see a "true dawn," where sustainable growth is achieved with price stability.

Thank you.

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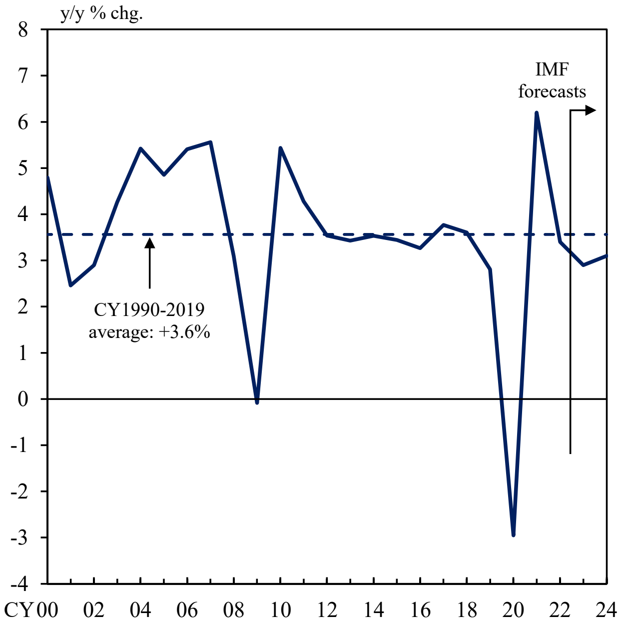
Chart 1

Developments in Overseas Economies (IMF's January 2023 WEO *Update*)

Global Growth Rate



Major Economies' Growth Rates

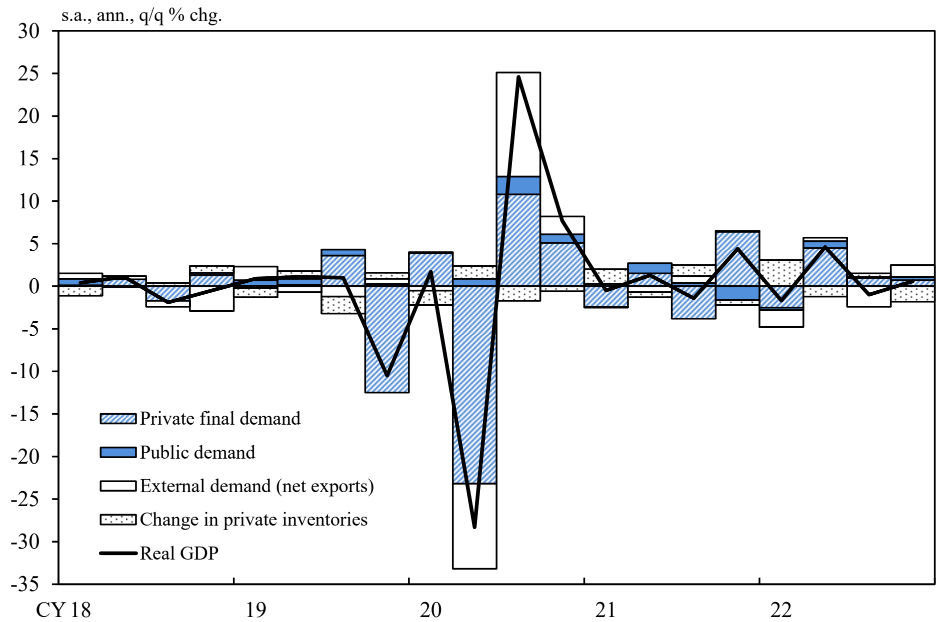
y/y % chg., % points

	CY 2021	CY 2022	CY 2023 [Forecast]	CY 2024 [Forecast]
World	6.2	3.4	2.9 (0.2)	3.1 (-0.1)
Advanced economies	5.4	2.7	1.2 (0.1)	1.4 (-0.2)
United States	5.9	2.0	1.4 (0.4)	1.0 (-0.2)
Euro area	5.3	3.5	0.7 (0.2)	1.6 (-0.2)
United Kingdom	7.6	4.1	-0.6 (-0.9)	0.9 (0.3)
Japan	2.1	1.4	1.8 (0.2)	0.9 (-0.4)
Emerging market and developing economies	6.7	3.9	4.0 (0.3)	4.2 (-0.1)
China	8.4	3.0	5.2 (0.8)	4.5 (0.0)
India	8.7	6.8	6.1 (0.0)	6.8 (0.0)
ASEAN-5	3.8	5.2	4.3 (-0.2)	4.7 (-0.2)

Note: In the table, figures in brackets are the differences from the forecasts in the October 2022 *World Economic Outlook* (WEO). ASEAN-5 comprises Indonesia, Malaysia, the Philippines, Singapore, and Thailand.
Source: IMF.

Chart 2

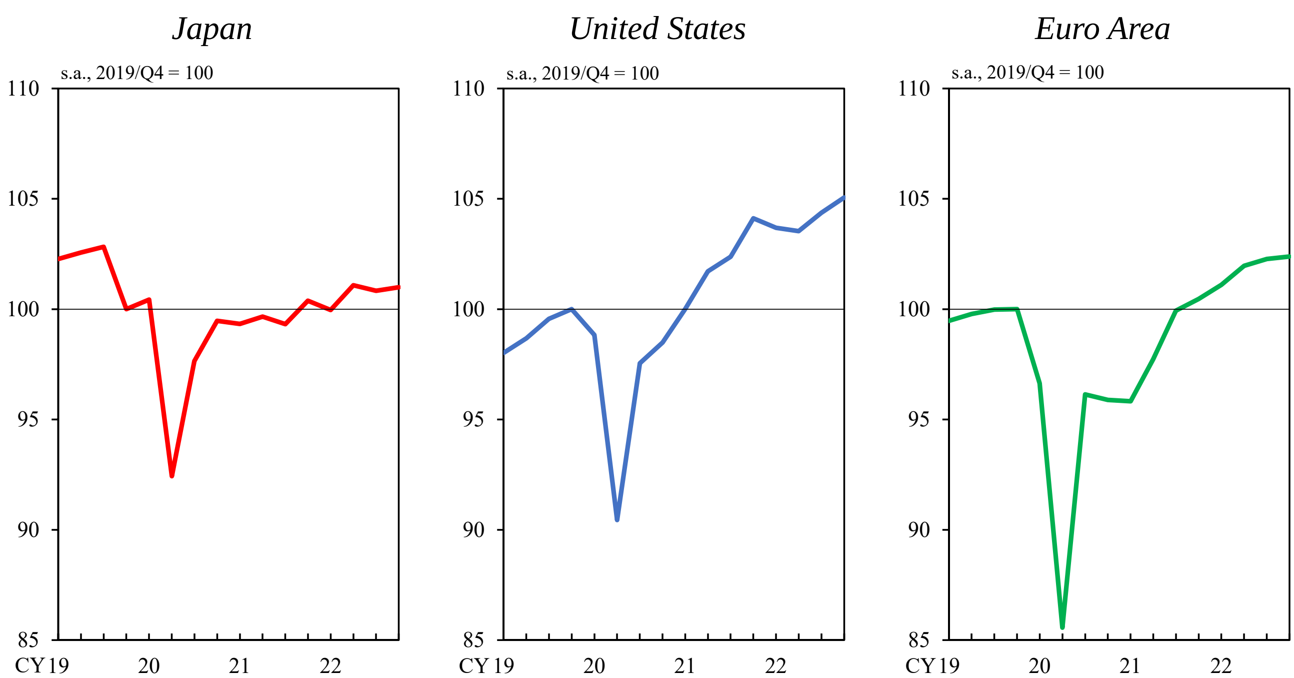
Real GDP Growth Rate



Note: Private final demand = Private demand - Change in private inventories
Source: Cabinet Office.

Chart 3

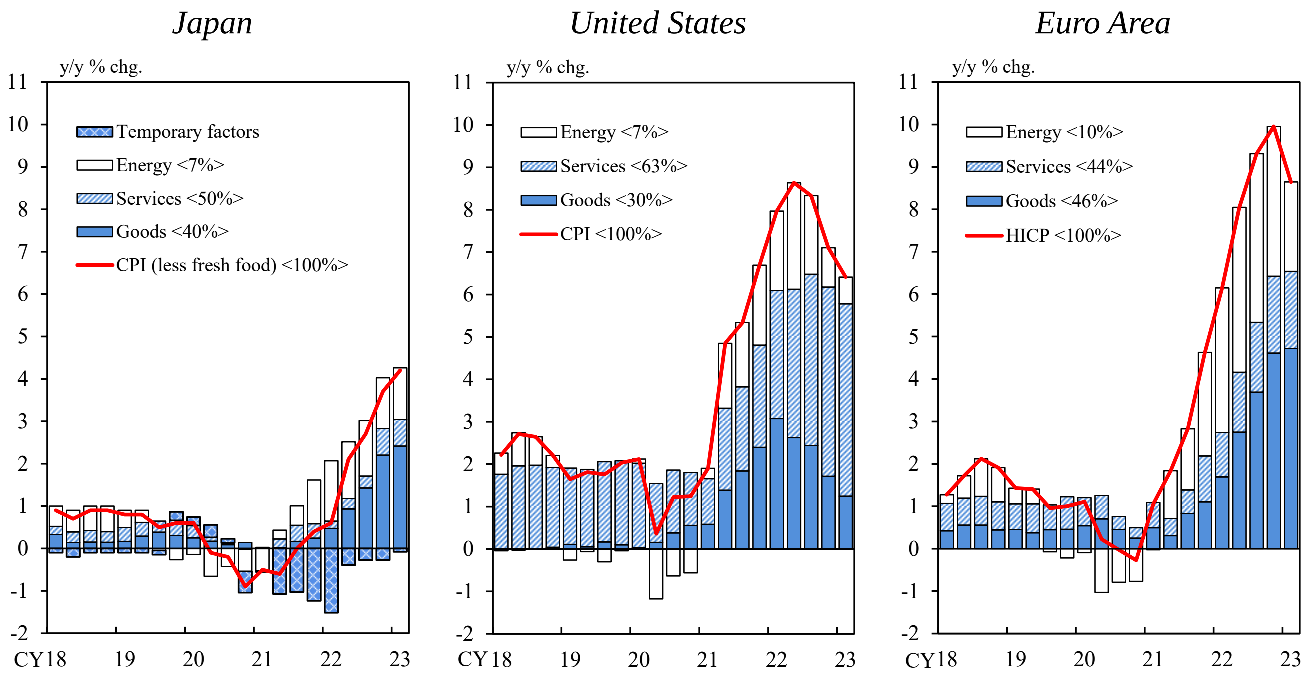
Real GDP



Sources: Cabinet Office; Eurostat; U.S. Bureau of Economic Analysis.

Chart 4

Consumer Prices



Notes: 1. Figures for temporary factors for Japan are Bank staff estimates and consist of the effects of the reduction in mobile phone charges, the consumption tax hike, free education policies, and travel subsidy programs.
2. Figures in angular brackets show the share of each component. Figures for 2023/Q1 are those for January.
Sources: Eurostat; Ministry of Internal Affairs and Communications; U.S. Bureau of Labor Statistics.

Chart 5

Forecasts of the Majority of the Policy Board Members (January 2023 Outlook Report)

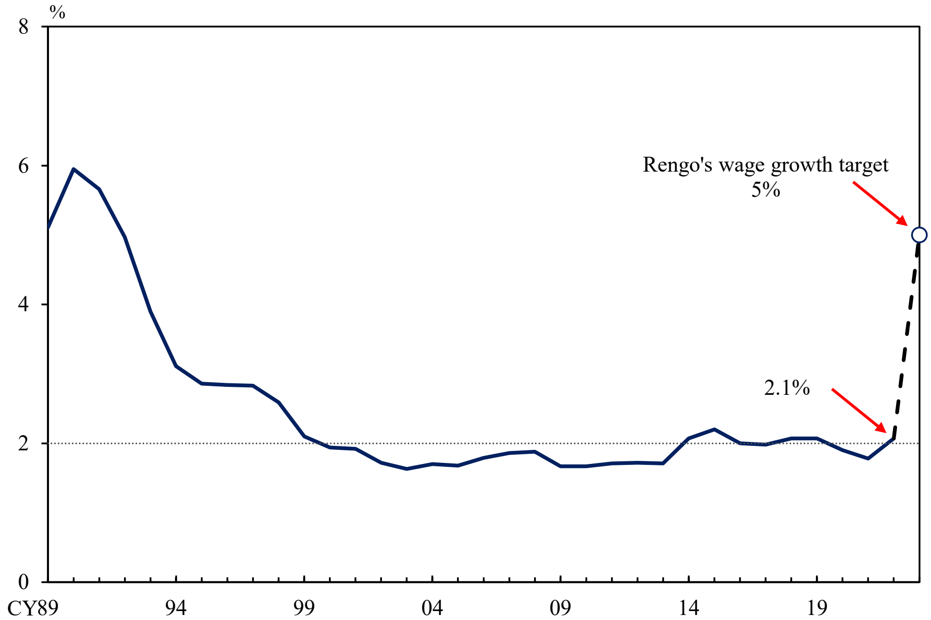
y/y % chg.

	Real GDP	CPI (all items less fresh food)	(Reference) CPI (all items less fresh food and energy)
Fiscal 2022	+1.9 to +2.0 [+1.9]	+3.0 to +3.0 [+3.0]	+2.1 to +2.1 [+2.1]
Forecasts made in October 2022	+1.8 to +2.1 [+2.0]	+2.8 to +2.9 [+2.9]	+1.8 to +1.9 [+1.8]
Fiscal 2023	+1.5 to +1.9 [+1.7]	+1.6 to +1.8 [+1.6]	+ 1.7 to +1.9 [+1.8]
Forecasts made in October 2022	+1.5 to +2.0 [+1.9]	+1.5 to +1.8 [+1.6]	+1.5 to +1.8 [+1.6]
Fiscal 2024	+0.9 to +1.3 [+1.1]	+1.8 to +1.9 [+1.8]	+1.5 to +1.8 [+1.6]
Forecasts made in October 2022	+1.3 to +1.6 [+1.5]	+1.5 to +1.9 [+1.6]	+1.5 to +1.8 [+1.6]

Notes: 1. Figures in brackets indicate the medians of the Policy Board members' forecasts (point estimates).
2. The forecasts of the majority of the Policy Board members are constructed as follows: each Policy Board member's forecast takes the form of a point estimate -- namely, the figure to which they attach the highest probability of realization. These forecasts are then shown as a range, with the highest figure and the lowest figure excluded. The range does not indicate the forecast errors.
3. Each Policy Board member makes their forecasts taking into account the effects of past policy decisions and with reference to views incorporated in financial markets regarding the future conduct of policy.
Source: Bank of Japan.

Chart 6

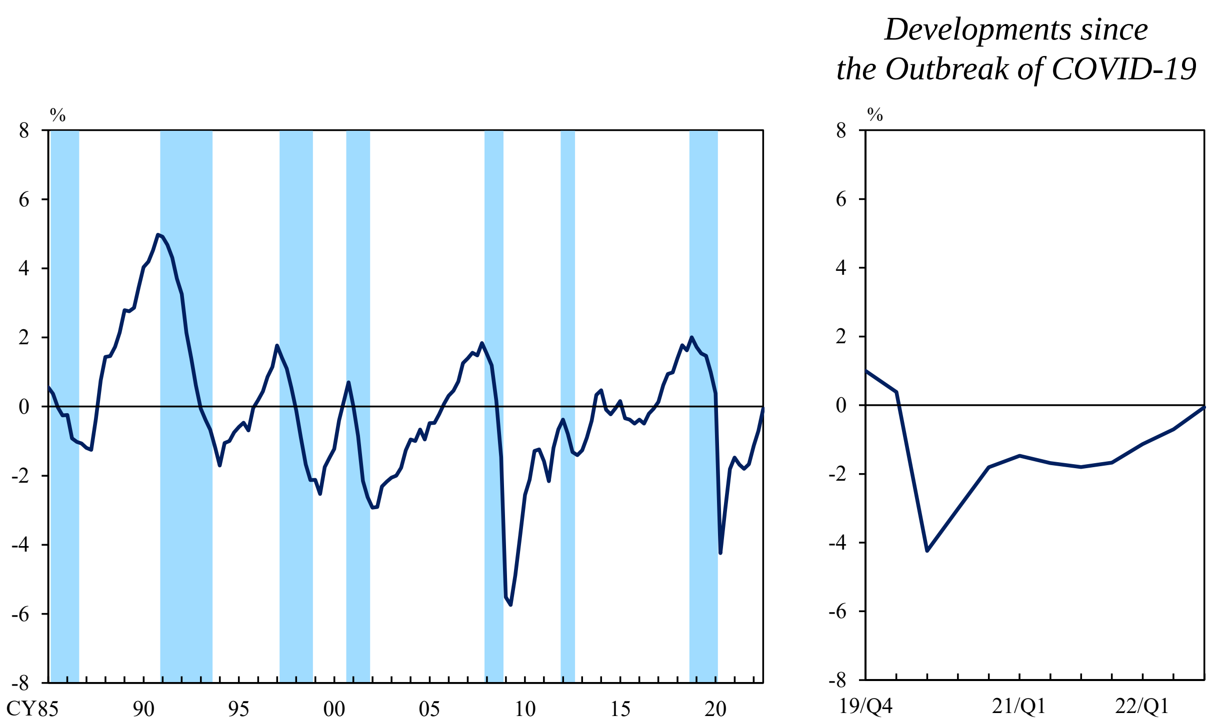
Wage Growth Rate



Note: The figure for 2023 is from Rengo's policy for the spring 2023 labor-management wage negotiations. All figures include seniority- and performance-related wage increases.
Source: Japanese Trade Union Confederation (Rengo).

Chart 7

Output Gap

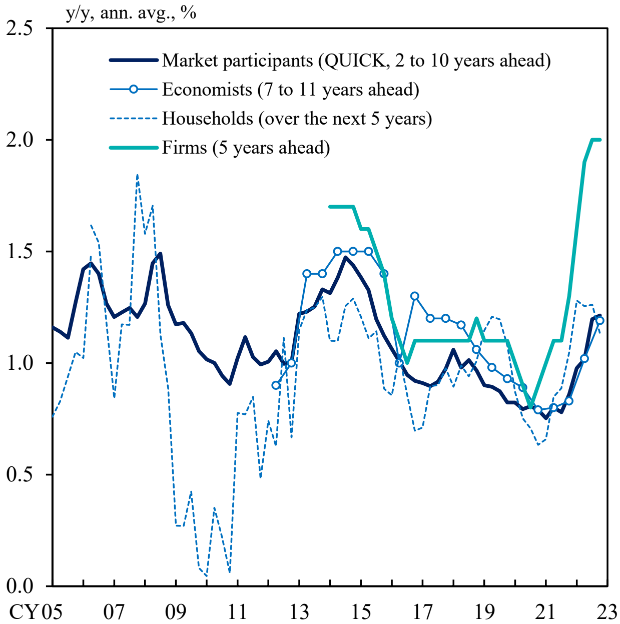


Notes: 1. Figures are Bank staff estimates.
2. Shaded areas denote recession periods.
Source: Bank of Japan.

Real Interest Rate

Nominal Interest Rate

Inflation Expectations



Note: In the right panel, figures for economists are the forecasts of forecasters surveyed for the *ESP Forecast*. Figures for households are from the *Opinion Survey on the General Public's Views and Behavior*, estimated using the modified Carlson-Parkin method for a 5-choice question. Figures for firms show the inflation outlook of enterprises for general prices (all industries and enterprises, average) in the *Tankan*.

Sources: Bloomberg; JCER, "ESP Forecast"; QUICK, "QUICK Monthly Market Survey <Bonds>"; Bank of Japan.

Modification of the Conduct of Yield Curve Control (YCC)

Impact of Increased Volatility in Overseas Markets

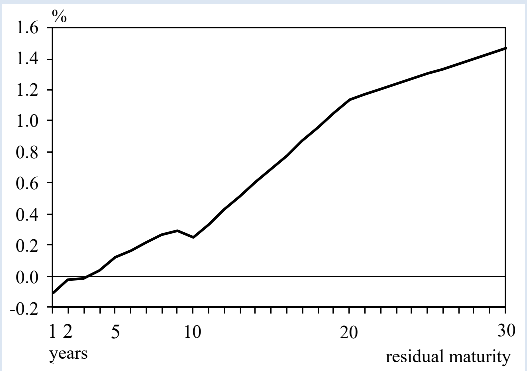
Deterioration in Japan's bond market functioning

- Relative relationships among interest rates of bonds with different maturities
- Arbitrage relationships between spot and futures markets

Possibility of a negative impact on financial conditions

Yields on Japanese government bonds (JGBs) are reference rates for corporate bond yields, bank lending rates, and other funding rates.

JGB Yield Curve (Before the December 2022 MPM)



Source: Bloomberg.

Measures Decided by the Bank of Japan

Conduct of YCC

Encourage a smoother formation of the entire yield curve

Significant increase in the amount of JGB purchases: from 7.3 trillion yen per month to about 9 trillion yen per month

Expansion of the range of 10-year JGB yield fluctuations from the target level: from between around ±0.25% pts to between around ±0.5% pts

Nimble responses for each maturity:

- Offer to purchase 10-year JGBs at 0.5% every business day through fixed-rate purchase operations
- Make nimble responses for each maturity by increasing the amount of JGB purchases even more and conducting fixed-rate purchase operations

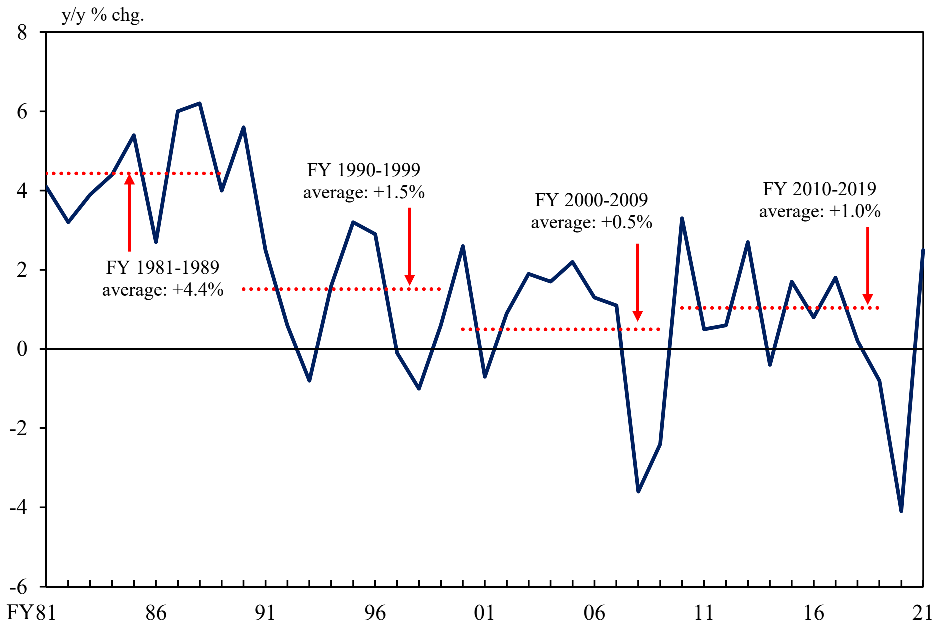
In adjusting the amount outstanding of corporate bonds, the Bank will give due consideration to their issuance conditions.

Facilitate the transmission of monetary easing effects generated under the framework of YCC, such as through corporate financing

The Bank will aim to achieve the price stability target by **enhancing the sustainability of monetary easing**.

Chart 10

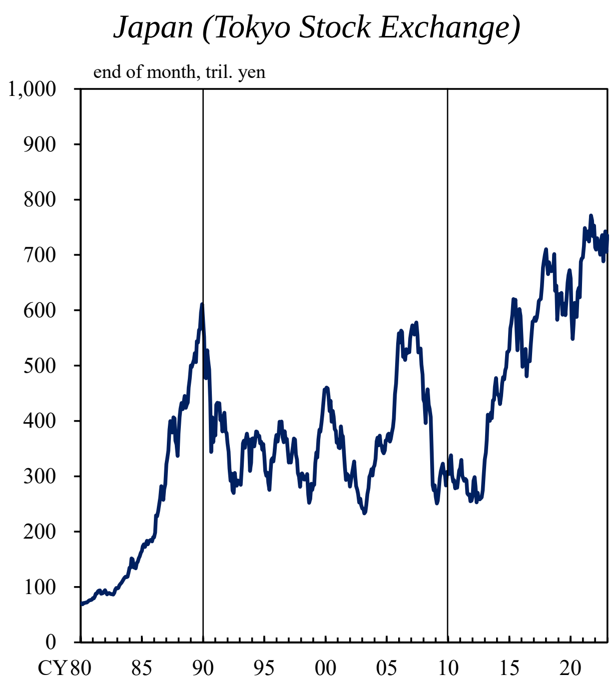
Long-Term Developments in Real GDP Growth Rate

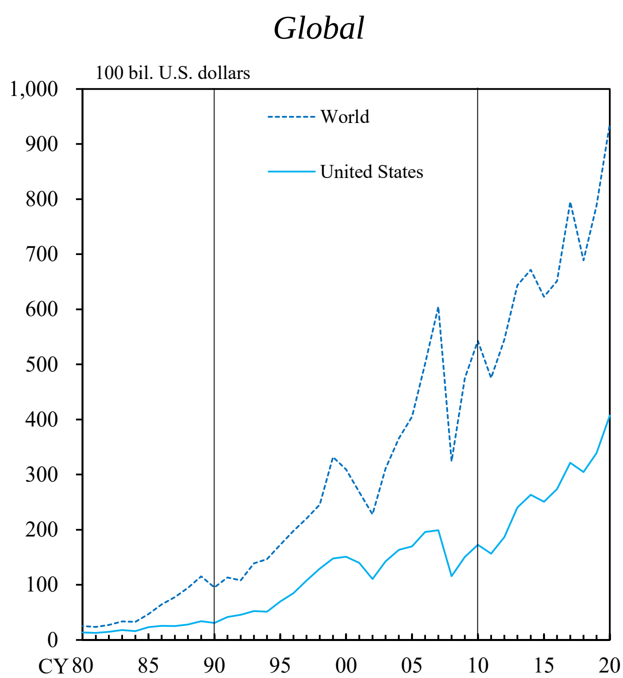


Note: Figures from fiscal 1981 to 1994 are based on simplified retroactive adjustments.
Source: Cabinet Office.

Chart 11

Stock Market Capitalization

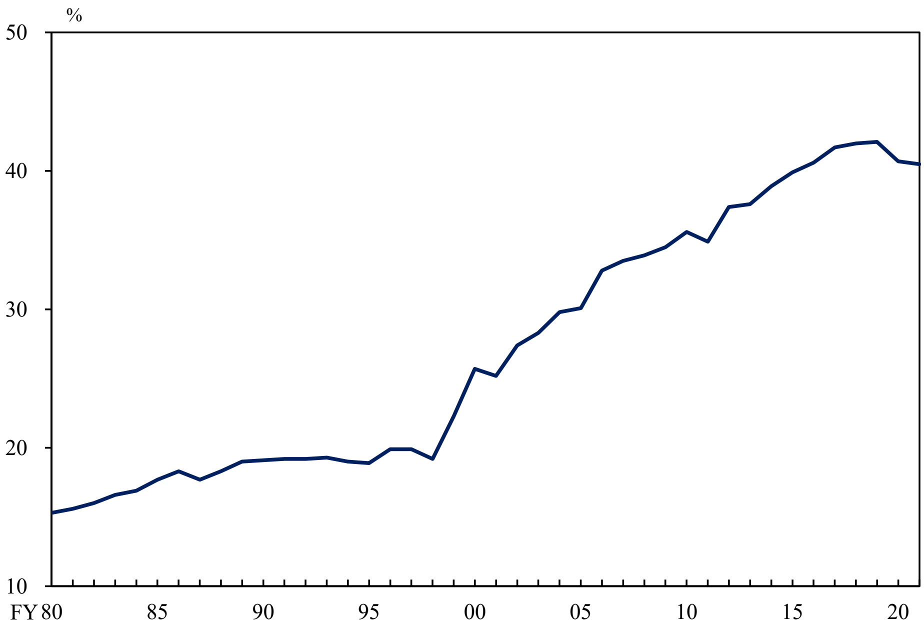




Note: In the right panel, figures are the market capitalization of listed domestic companies (current US$) from the World Development Indicators.
Sources: Japan Exchange Group; World Bank.

Chart 12

Capital Adequacy Ratio of Firms



Note: Based on the *Financial Statements Statistics of Corporations by Industry, Annually*. Excluding "finance and insurance."
Source: Ministry of Finance.

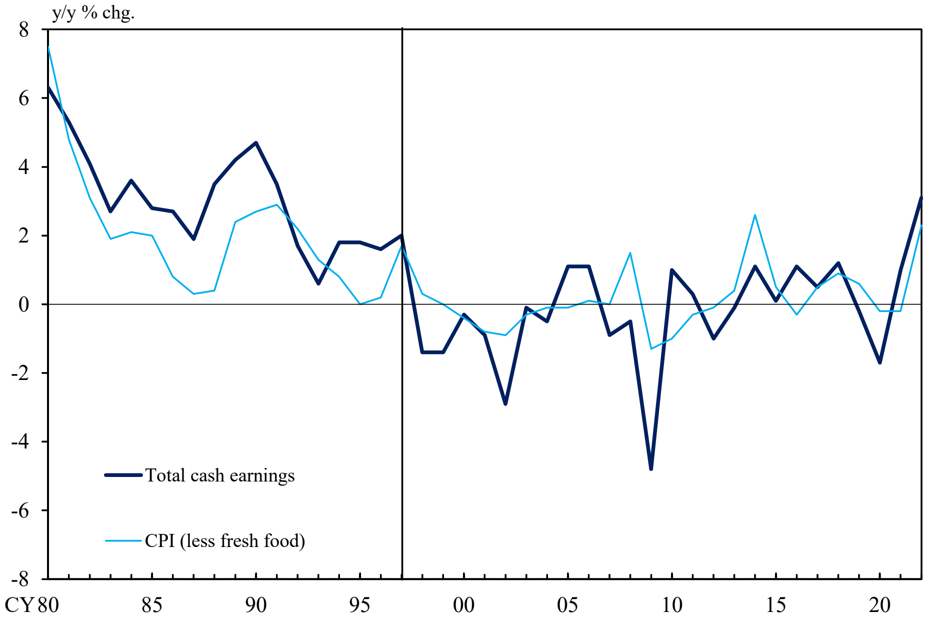
Chart 13

U.S. Dollar/Yen

Source: Bank of Japan.

Chart 14

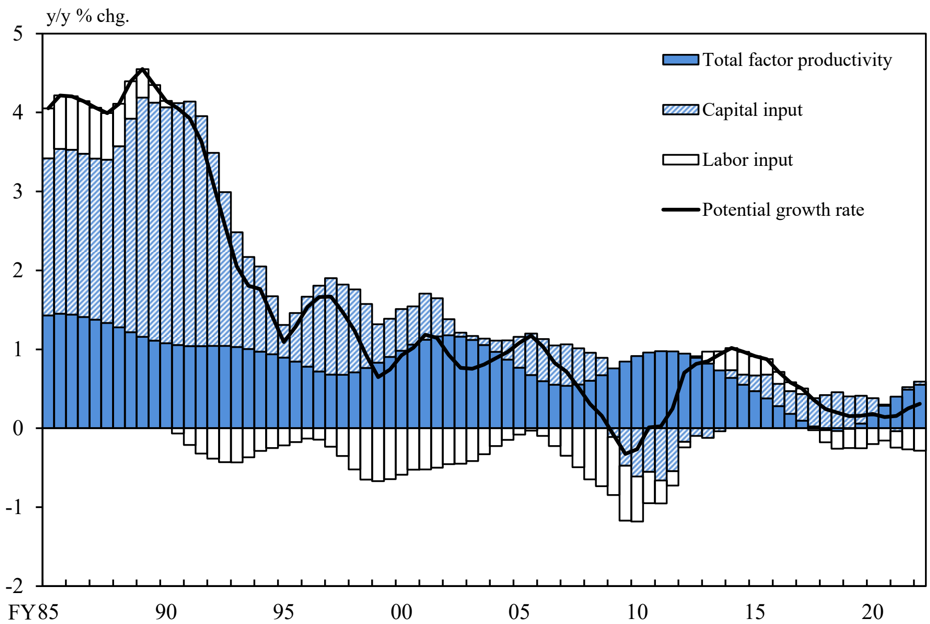
Prices and Wages



Note: Figures for the CPI (less fresh food) include the effects of the consumption tax hikes.
Sources: Ministry of Health, Labour and Welfare; Ministry of Internal Affairs and Communications.

Chart 15

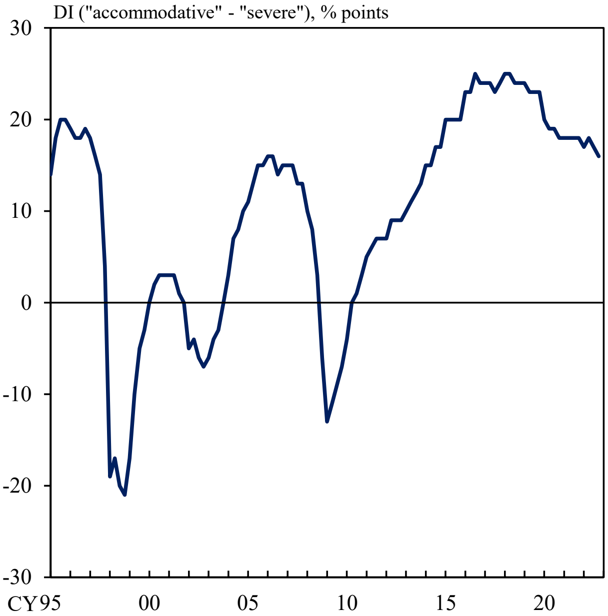
Potential Growth Rate



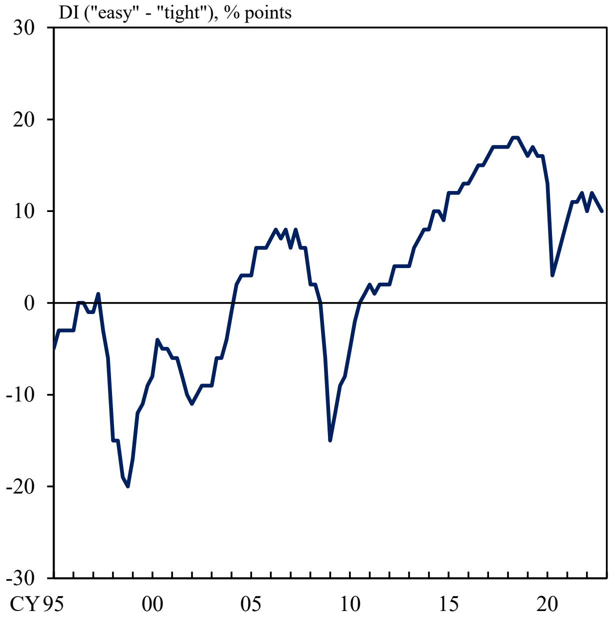
Note: Figures are Bank staff estimates.
Source: Bank of Japan.

Financial Conditions

Lending Attitude of Financial Institutions as Perceived by Firms



Firms' Financial Positions



Note: Based on the *Tankan*. All industries and enterprises.
Source: Bank of Japan.