

Economic Activity, Prices, and Monetary Policy in Japan

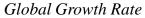
Speech at a Meeting with Local Leaders in Ishikawa

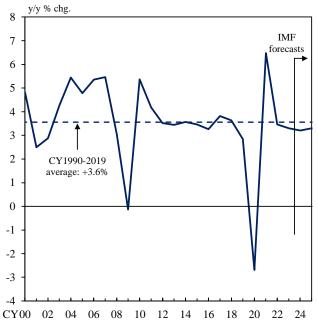
September 5, 2024

TAKATA Hajime Member of the Policy Board Bank of Japan

Chart 1

Developments in Overseas Economies (IMF's July 2024 WEO *Update*)

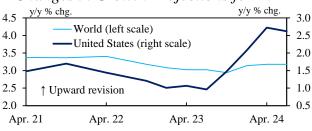




Major Economies' Growth Rates

| | | y/y % cng., % por | | | | | |
|-------|---------------------|---------------------|----------|------------|------------|--|--|
| | | | CY 2023 | CY 2024 | CY 2025 | | |
| | | | C 1 2023 | [Forecast] | [Forecast] | | |
| World | | rld | 3.3 | 3.2 | 3.3 | | |
| | | | | (0.0) | (0.1) | | |
| | Advanced economies | | 1.7 | 1.7 | 1.8 | | |
| | | a vancea comonnes | | (0.0) | (0.0) | | |
| | | United States | 2.5 | 2.6 | 1.9 | | |
| | | | | (-0.1) | (0.0) | | |
| | | Euro area | 0.5 | 0.9 | 1.5 | | |
| | | | | (0.1) | (0.0) | | |
| | Emerging market and | | 4.4 | 4.3 | 4.3 | | |
| | d | eveloping economies | | (0.1) | (0.1) | | |
| | | China | 5.2 | 5.0 | 4.5 | | |
| | | | | (0.4) | (0.4) | | |

Changes in Growth Projections for 2024



Note: In the table, figures in brackets are the differences from the forecasts in the April 2024 World Economic Outlook (WEO). Source: IMF.

Private Consumption

Real Private Consumption Wages 110 Special cash earnings (bounses, etc.) Non-scheduled cash earnings 105 Scheduled cash earnings Nominal wages 100 ---- Real wages 3 95 2 90 1 85 0 Real private consumption 80 -1 Durable goods <8.9%> 75 Nondurable goods <40.5%> -2 Services <50.7%> 70 CY19 24 20/Q1 19/Q1 21/Q1 22/Q1 23/Q1 24/Q1

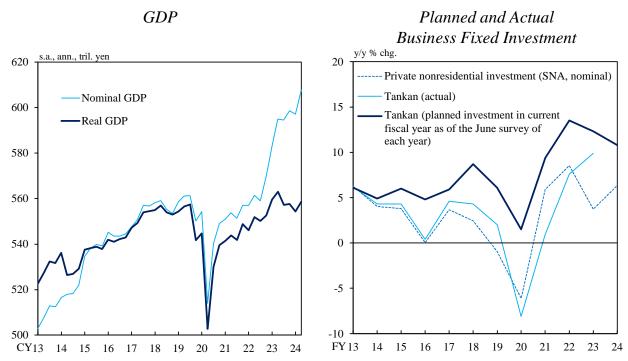
Notes: 1. In the left panel, figures for real private consumption are the real Consumption Activity Index (travel balance adjusted) based on Bank staff calculations, which exclude inbound tourism consumption and include outbound tourism consumption. Figures in angle brackets show the weights in the index.

In the right panel, figures are based on continuing observations following the sample revisions. Q1 = March-May, Q2 = June-August, Q3 = September-November, Q4 = December-February. Figures for 2024/Q2 are those for June.

Sources: Ministry of Health, Labour and Welfare; Ministry of Internal Affairs and Communications; Bank of Japan.

Chart 3

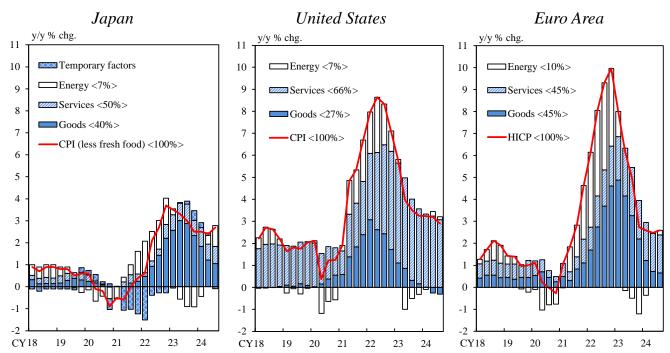
GDP and Business Fixed Investment Plans



Note: In the right panel, the *Tankan* figures are for all industries including financial institutions. The figures include software and R&D investments and exclude land purchasing expenses. R&D investment is not included before the March 2017 survey. The figure for private nonresidential investment for fiscal 2024 is that for 2024/Q2.

Sources: Cabinet Office; Bank of Japan.

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 angle brackets show the share of each component. Figures for 2024/Q3 are those for July.

Sources: Haver; Ministry of Internal Affairs and Communications.

Chart 5

Forecasts of the Majority of the Policy Board Members (July 2024 Outlook Report)

y/y % chg.

| | Real GDP | CPI (all items less fresh food) | (Reference) CPI (all items less fresh food and energy) | |
|------------------------------|------------------------|---------------------------------|--|--|
| Fiscal 2024 | +0.5 to +0.7 | +2.5 to +2.6 | +1.8 to +2.0 | |
| | [+0.6] | [+2.5] | [+1.9] | |
| Forecasts made in April 2024 | +0.7 to +1.0 [+0.8] | +2.6 to +3.0 [+2.8] | +1.7 to +2.1 [+1.9] | |
| Fiscal 2025 | +0.9 to +1.1 | +2.0 to +2.3 | +1.8 to +2.0 | |
| | [+1.0] | [+2.1] | [+1.9] | |
| Forecasts made in April 2024 | +0.8 to +1.1 [+1.0] | +1.7 to +2.1 [+1.9] | +1.8 to +2.0 [+1.9] | |
| Fiscal 2026 | +0.8 to +1.0 | +1.8 to +2.0 | +1.9 to +2.2 | |
| | [+1.0] | [+1.9] | [+2.1] | |
| Forecasts made in April 2024 | +0.8 to +1.0 | +1.6 to +2.0 | +1.9 to +2.1 | |
| | [+1.0] | [+1.9] | [+2.1] | |

Notes: 1. Figures in brackets indicate the medians of the Policy Board members' forecasts (point estimates).

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.

^{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.

Correlation between Wages and Prices (Three Phases toward Achieving the 2% Price Stability Target)

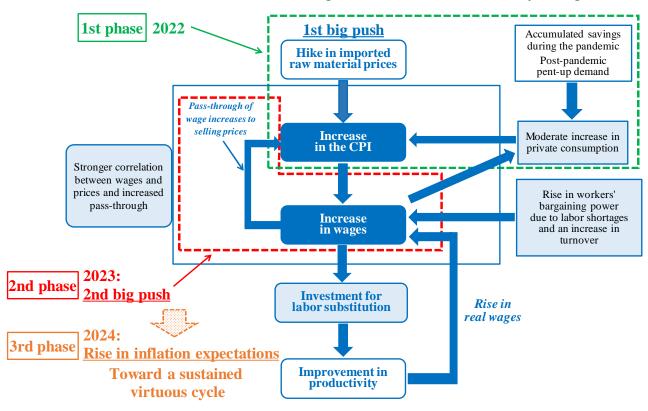
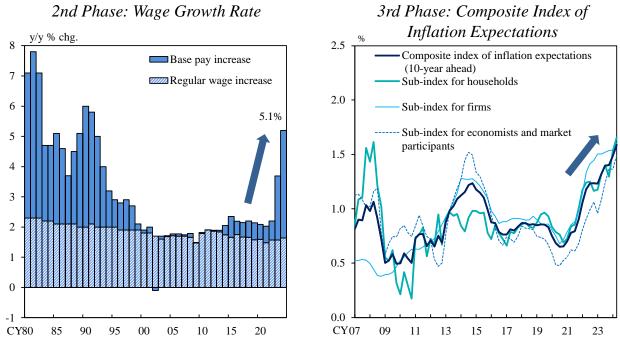


Chart 7

Recent Developments in the Second and Third Phases



Notes: 1. In the left panel, figures from 1980 to 2014 are those published by the Central Labour Relations Commission, while those from 2015 to 2024 are figures released by Rengo.

2. In the right panel, the composite index is calculated by extracting the common components, based on the first principal component, of the inflation expectations of firms, households, and economists and market participants. For details on the calculation method, see Box 4 in the April 2024 Outlook Report.

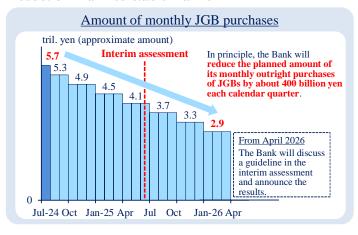
Sources: Bloomberg; Central Labour Relations Commission; Consensus Economics Inc., Consensus Forecasts; Japanese Trade Union Confederation (Rengo); QUICK, QUICK Monthly Market Survey < Bonds>; Bank of Japan.

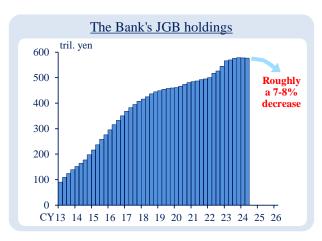
Plan for the Reduction of the Purchase Amount of JGBs

The concept of the plan for the reduction until March 2026

- 1. Long-term interest rates: to be formed in financial markets in principle
- 2. JGB purchases: appropriate for the Bank to reduce its purchase amount of JGBs in a predictable manner, while allowing enough flexibility to support stability in the JGB markets

Reduction in a Predictable Manner





Allowing Enough Flexibility

- 1. The Bank will conduct an interim assessment of the plan at the June 2025 MPM.
- 2. In the case of a rapid rise in long-term interest rates, the Bank will make nimble responses by, for example, increasing the amount of JGB purchases.
- 3. The Bank is prepared to amend the plan at the MPMs, if deemed necessary.

Chart 9

Change in the Guideline for Money Market Operations

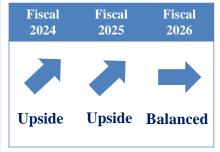
- Japan's economic activity and prices have been **developing generally in line with the Bank's outlook**. Moves to raise wages have been spreading.
- The year-on-year rate of change in import prices has turned positive again, and upside risks to prices require attention.

Medians of the Policy Board members' forecasts (y/y % chg.)

| | Fiscal 2024 | | Fiscal 2025 | | Fiscal 2026 | |
|--|-------------|--------|-------------|--------|-------------|-----|
| Real GDP | 0.6 | (-0.2) | 1.0 | (-) | 1.0 | (-) |
| CPI (all items less fresh food) | 2.5 | (-0.3) | 2.1 | (+0.2) | 1.9 | (-) |
| CPI (all items less fresh food and energy) | 1.9 | (-) | 1.9 | (-) | 2.1 | (-) |

Note: Figures in parentheses indicate changes from the April Outlook Report.

Risk balance assessments on prices



Adjusting the degree of monetary accommodation from the perspective of sustainable and stable achievement of the price stability target of 2 percent

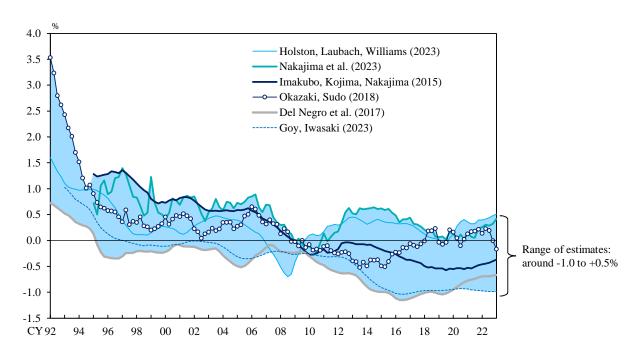
Short-term interest rate: raised to "around 0.25%"

(uncollateralized overnight call rate)

(previously "around 0 to 0.1%")

- Real interest rates are expected to remain significantly negative, and accommodative financial conditions will continue to **firmly support economic activity**.
- If the outlook presented in the July Outlook Report will be realized, the Bank will accordingly continue to raise the policy interest rate and adjust the degree of monetary accommodation.

Natural Rate of Interest



Note: The estimates are based on Bank staff calculations using the models proposed in the respective papers. The shaded area indicates the range of natural interest rate estimates between the lowest and the highest values.

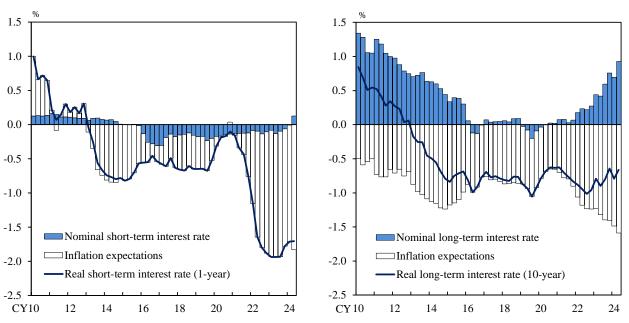
Sources: Bloomberg; Cabinet Office; Consensus Economics Inc., *Consensus Forecasts*; Ministry of Finance; Ministry of Health, Labour and Welfare; Ministry of Internal Affairs and Communications; Bank of Japan.

Chart 11

Real Interest Rate



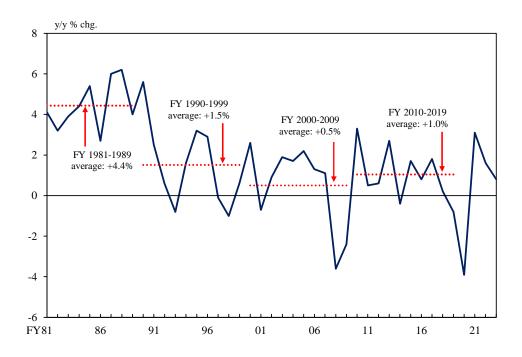
Real Long-Term Interest Rate (10-Year)



Note: Figures for real interest rates are calculated by deducting inflation expectations from JGB yields for each maturity. Figures for inflation expectations are based on Bank staff calculations using the expectations of various economic entities (firms, households, and experts) at different horizons. Specifically, the data used in the calculations are as follows: for firms, the *Tankan*; for households, the *Opinion Survey on the General Public's Views and Behavior*; for experts, the *QUICK Survey*, the *Consensus Forecasts*, and inflation swap rates.

Sources: Bloomberg; Consensus Economics Inc., Consensus Forecasts; QUICK, QUICK Monthly Market Survey < Bonds>; Bank of Japan.

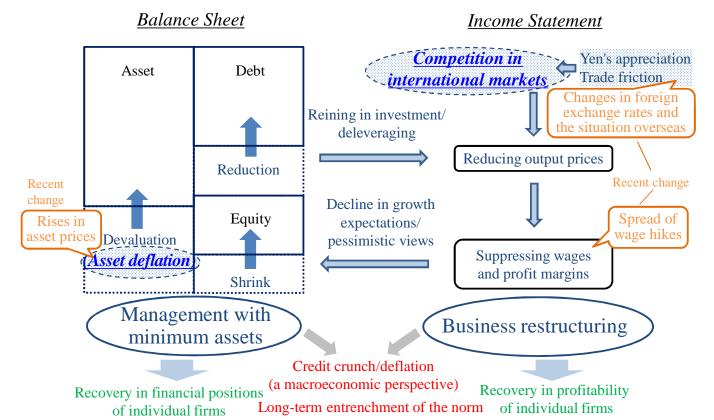
Long-Term Developments in Real GDP Growth Rate



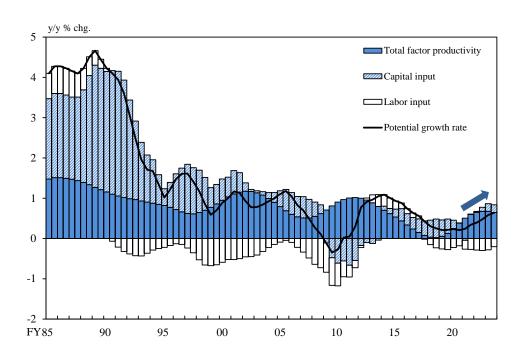
Note: Figures from fiscal 1981 to 1994 are based on simplified retroactive adjustments. Source: Cabinet Office.

Chart 13

My View on Corporate Behavior in the Post-Bubble Period



Potential Growth Rate

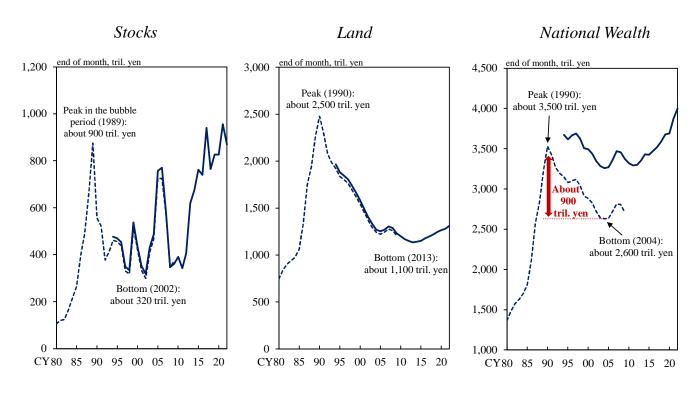


Note: Figures are Bank staff estimates.

Source: Bank of Japan.

Chart 15

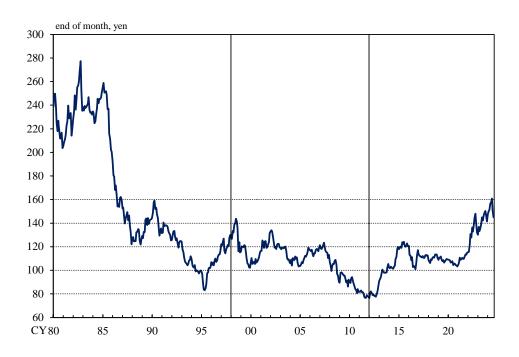
Asset Prices and National Wealth



Note: Figures are based on the SNA. Dotted lines are based on the 1993SNA (benchmark year: 2000).

Source: Cabinet Office.

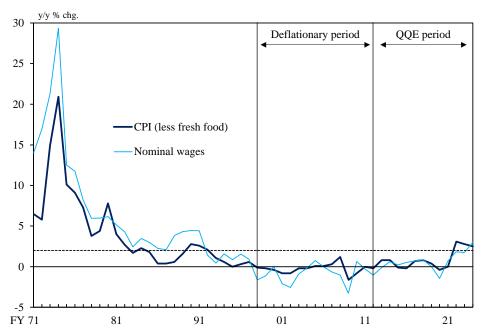
U.S. Dollar/Yen



Source: Bank of Japan.

Chart 17

Prices and Wages

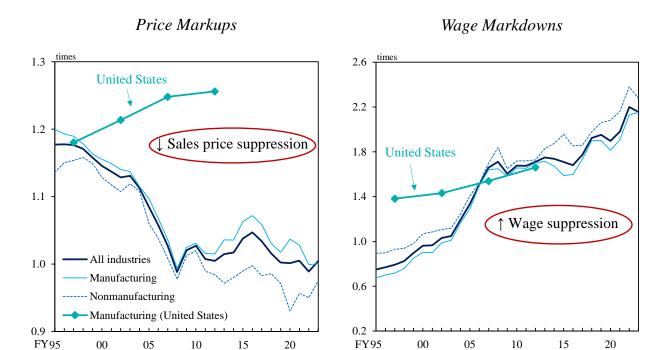


Notes: 1. The CPI figures are Bank staff estimates and exclude temporary factors, which consist of the effects of the reduction in mobile phone charges, consumption tax hikes, free education policies, and travel subsidy programs. The figure for fiscal 2024 is the April-July average.

2. Figures for nominal wages are for establishments with 30 or more employees up through fiscal 1990, and with 5 or more employees from fiscal 1991 onward. The figure for fiscal 2024 is the April-June average.

Sources: Ministry of Health, Labour and Welfare; Ministry of Internal Affairs and Communications.

Price Markups and Wage Markdowns



Note: Price markups and wage markdowns are estimated based on the method of Aoki, Hogen, and Takatomi (2023) using individual firm data from the Development Bank of Japan's "Corporate Financial Databank." Calculations for the U.S. manufacturing sector are based on the results of Yeh et al. (2022). Figures for fiscal 2023 are the April-December averages.

Sources: Cabinet Office; Development Bank of Japan; Ministry of Finance; Research Institute of Economy, Trade and Industry; Yeh et al. (2022).

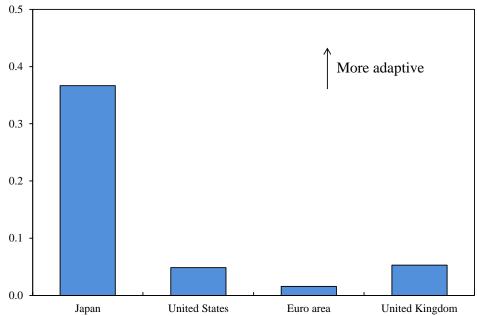
Cumulative Returns from Investment in

Chart 19

Note: Cumulative returns are estimated as of the end of 2023 by age of investors based on the assumption that a fixed amount of the Nikkei 225 Stock Average is purchased every month since the beginning of the year. Red shows positive returns and blue shows negative returns. Darker shadows show larger positive or negative returns. Percentages for the period with negative cumulative returns are calculated by dividing "years with negative cumulative returns as of the year end" by "total years of investment."

Source: Bloomberg.

Degree of Adaptiveness in Inflation Expectations



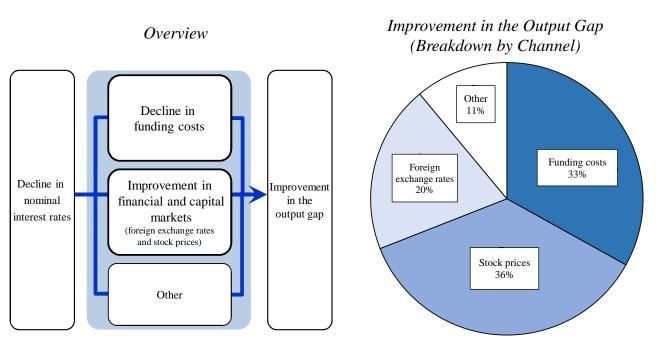
Notes: 1. Figures show the contribution of observed inflation to inflation expectations 6-10 years ahead using the following equation: Inflation expectations 6-10 years ahead (%) = $\theta \times$ observed headline inflation rate (lagged 1 quarter, %) + $(1 - \theta) \times$ central bank price stability target (2%).

2. The estimation periods are as follows: 2000/Q1-2024/Q1 for Japan and the United States; 2003/Q2-2024/Q1 for the euro area; and 2005/Q1-2024/Q1 for the United Kingdom.

Sources: Bureau of Labor Statistics; Consensus Economics Inc., Consensus Forecasts; Eurostat; Ministry of Internal Affairs and Communications; Office for National Statistics.

Chart 21

Transmission Channels of Lower Interest Rates



Notes: 1. Figures are based on a VAR model with coefficient restrictions using eight variables: output gap, interest rates (3-month), interest rate spreads (2-year minus 3-month, 5-year minus 2-year, 10-year minus 5-year), aggregate funding costs, nominal effective exchange rates of the yen, and stock prices.

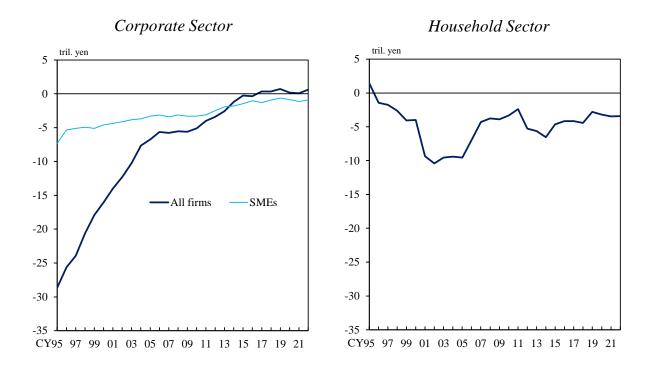
2. Aggregate funding costs are the weighted average of bank lending rates and issuance yields for CP and corporate bonds.

3. In the right panel, figures show the 5-year cumulative effects.

4. For details, see Bank of Japan, "Assessment for Further Effective and Sustainable Monetary Easing," 2021.

Sources: Bloomberg; Bank of Japan; etc.

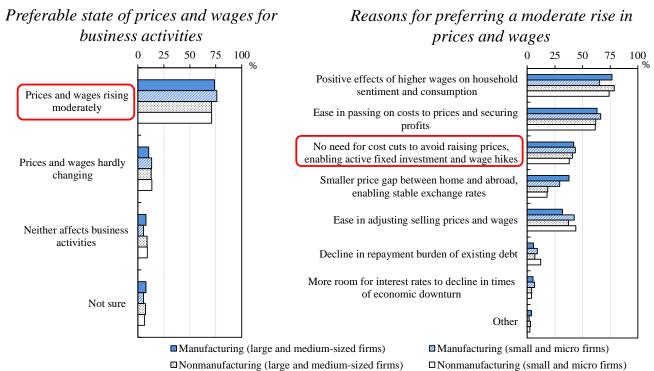
Interest Balance



Note: Interest balance for small and medium-sized enterprises (SMEs) in the left panel includes dividend income. Sources: Cabinet Office; Ministry of Finance.

Chart 23

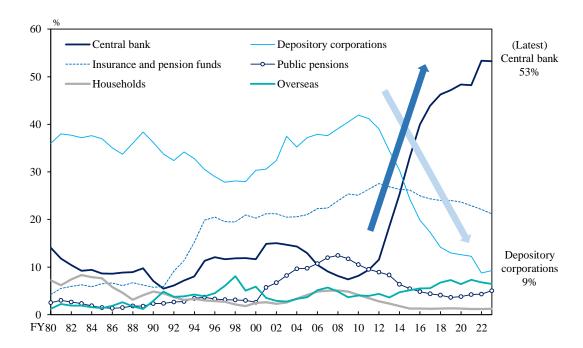
Large-Scale Survey on the Corporate Sector



Note: In the right panel, figures are the ratios among firms that responded "prices and wages rising moderately" as a preferable state in the left panel.

Source: Bank of Japan.

Share of JGB Holdings by Sector



Note: Figures are based on the *Flow of Funds Accounts*. In the *Flow of Funds Accounts*, treasury discount bills are not included in government bonds. Prior to the issuance of treasury discount bills, which integrated financing bills and treasury bills, starting in February 2009, treasury bills were included in government bonds.

Source: Bank of Japan.