

Economic Activity, Prices, and Monetary Policy in Japan

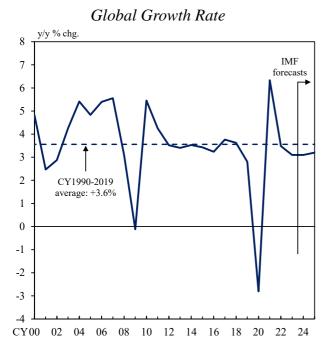
Speech at a Meeting with Local Leaders in Shiga

February 29, 2024

TAKATA Hajime Member of the Policy Board Bank of Japan

Chart 1

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

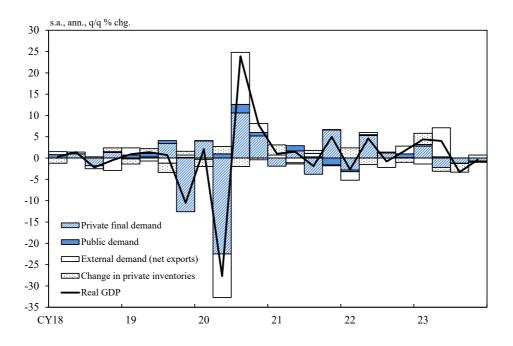


Major Economies Growth Rates						
				y/y % ch	g., % points	
		CY 2022	CY 2023	CY 2024	CY 2025	
		C I 2022	CT 2023	[Forecast]	[Forecast]	
World		3.5	3.1	3.1	3.2	
				(0.2)	(0.0)	
	Advanced economies	2.6	1.6	1.5	1.8	
				(0.1)	(0.0)	
	United States	1.9	2.5	2.1	1.7	
				(0.6)	(-0.1)	
	Euro area	3.4	0.5	0.9	1.7	
				(-0.3)	(-0.1)	
	United Kingdom	4.3	0.5	0.6	1.6	
				(0.0)	(-0.4)	
	Japan	1.0	1.9	0.9	0.8	
				(-0.1)	(0.2)	
	Emerging market and leveloping economies	4.1	4.1	4.1	4.2	
•				(0.1)	(0.1)	
	China	3.0	5.2	4.6	4.1	
				(0.4)	(0.0)	
	India	7.2	6.7	6.5	6.5	
				(0.2)	(0.2)	
	ASEAN-5	5.5	4.2	4.7	4.4	
				(0.2)	(-0.1)	

Major Economies' Growth Rates

Note: In the table, figures in brackets are the differences from the forecasts in the October 2023 *World Economic Outlook* (WEO). ASEAN-5 comprises Indonesia, Malaysia, the Philippines, Singapore, and Thailand.

Source: IMF.

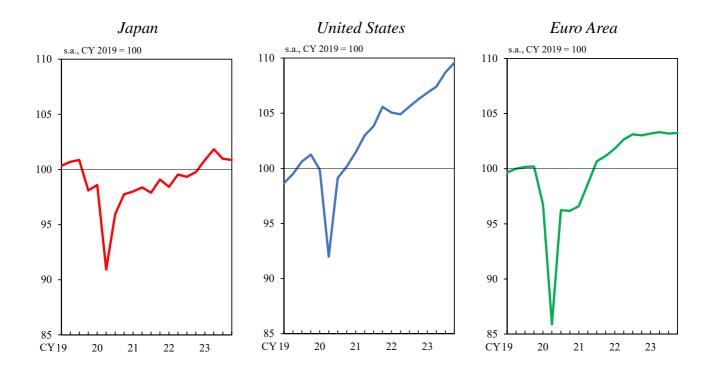


Real GDP Growth Rate

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.

Output Gap

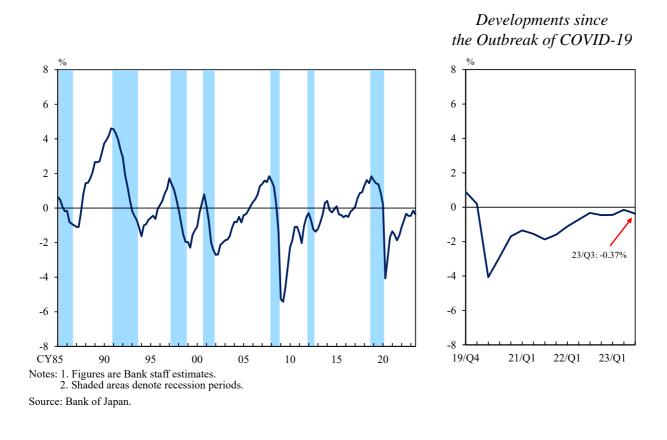
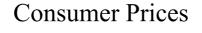
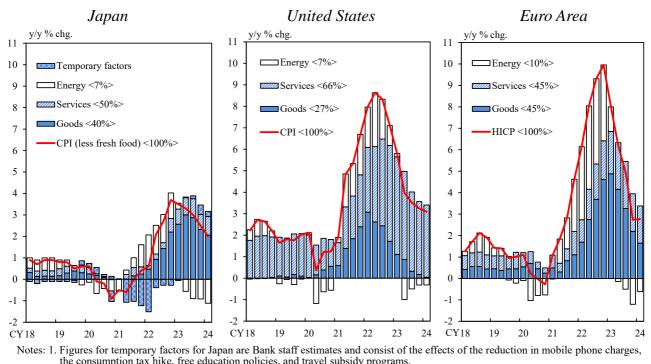
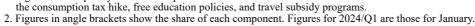


Chart 5







Sources: Haver; Ministry of Internal Affairs and Communications.

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

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	Real GDP	CPI (all items less fresh food)	(Reference) CPI (all items less fresh food and energy)
Fiscal 2023	+1.6 to +1.9	+2.8 to +2.9	+3.7 to +3.9
	[+1.8]	[+2.8]	[+3.8]
Forecasts made in October 2023	+1.8 to +2.0	+2.7 to +3.0	+3.5 to +3.9
	[+2.0]	[+2.8]	[+3.8]
Fiscal 2024	+1.0 to +1.2	+2.2 to +2.5	+ 1.6 to +2.1
	[+1.2]	[+2.4]	[+1.9]
Forecasts made in October 2023	+0.9 to +1.4	+2.7 to +3.1	+1.6 to +2.1
	[+1.0]	[+2.8]	[+1.9]
Fiscal 2025	+1.0 to +1.2	+1.6 to +1.9	+1.8 to +2.0
	[+1.0]	[+1.8]	[+1.9]
Forecasts made in October 2023	+0.8 to +1.2	+1.6 to +2.0	+1.8 to +2.2
	[+1.0]	[+1.7]	[+1.9]

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.

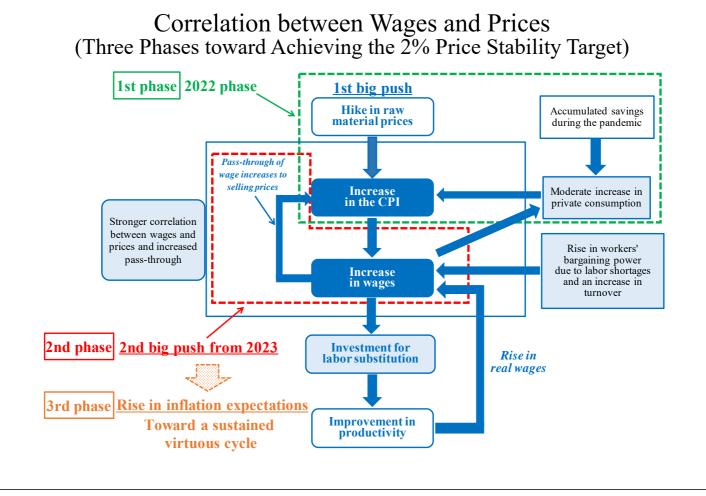
Source: Bank of Japan.

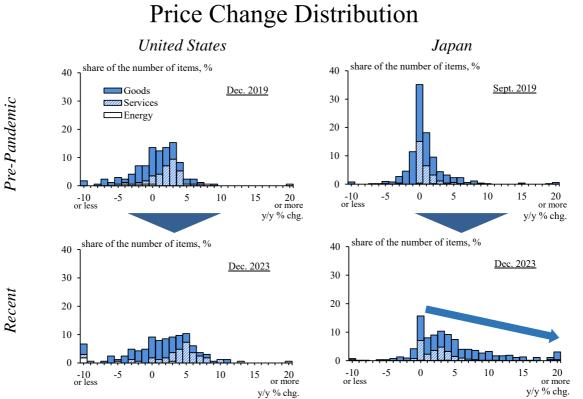
Short-Term Real Interest Rate (1-Year) Long-Term Real Interest Rate (10-Year) 1.5 1.5 1.0 1.00.5 0.5 0.0 0.0 -0.5 -0.5 -1.0 -1.0 -1.5 -1.5 Short-term nominal interest rate Long-term nominal interest rate Inflation expectations □Inflation expectations -2.0 -2.0 Short-term real interest rate (1-year) -Long-term real interest rate (10-year) -2.5 -2.5 22 CY10 12 14 16 18 20 CY10 12 14 16 18 20 22

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.

Chart 7

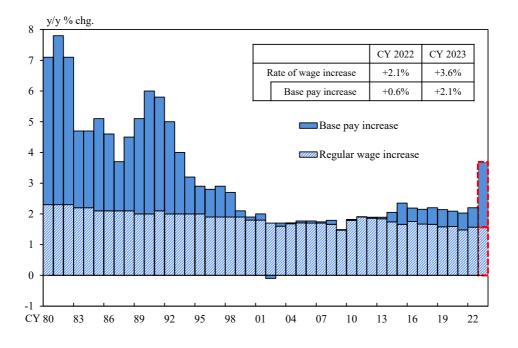
Real Interest Rates





Note: Figures for the United States are for the CPI for all items, while those for Japan are for the CPI for all items excluding fresh food. The pre-pandemic distribution for Japan is based on data for September 2019, which was before CPI developments were affected by the consumption tax hike.

Sources: Ministry of Internal Affairs and Communications; U.S. Bureau of Labor Statistics.



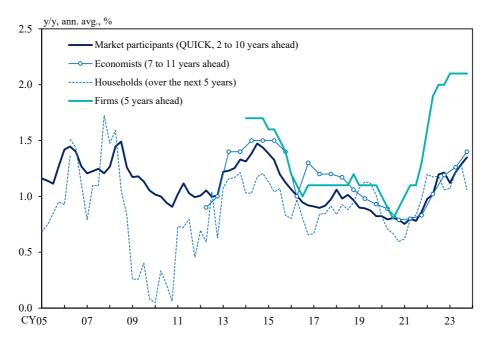
Wage Growth Rate

Note: Figures from 1980 to 2014 are those published by the Central Labour Relations Commission, while those from 2015 to 2023 are figures released by Rengo.

Sources: Central Labour Relations Commission; Japanese Trade Union Confederation (Rengo).

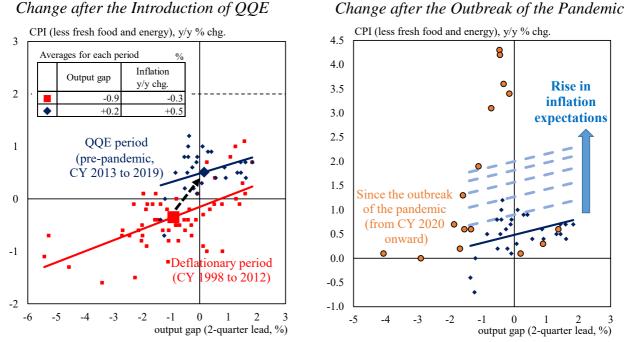
Chart 11

Inflation Expectations



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



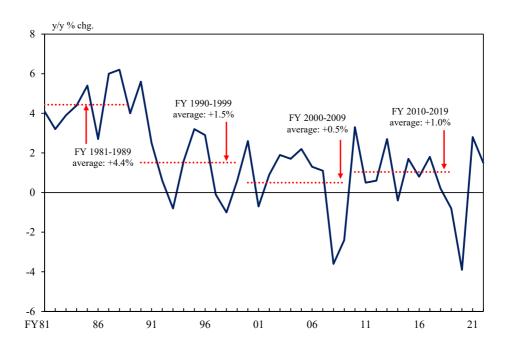
Phillips Curve

Note: The CPI figures exclude fresh food and energy, for which prices are volatile. They also 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. These Phillips curves are based on statistical estimates and should be interpreted with some latitude.

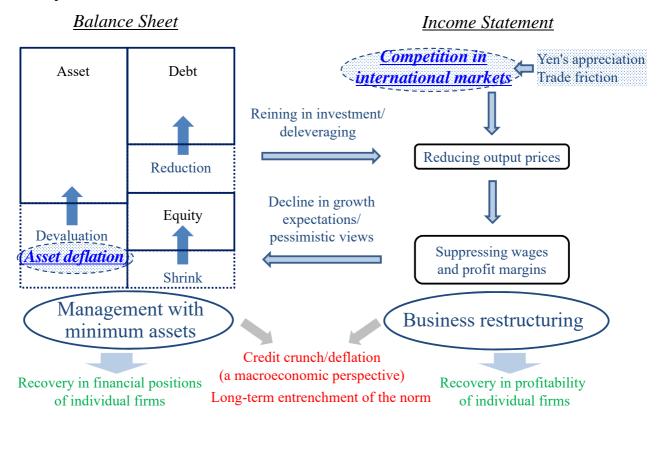
Sources: Ministry of Internal Affairs and Communications; Bank of Japan.

Chart 13

Long-Term Developments in Real GDP Growth Rate



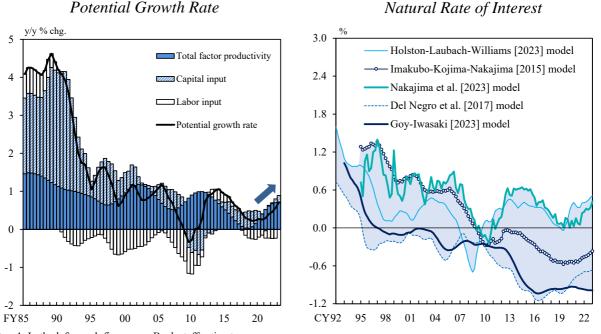
Note: Figures from fiscal 1981 to 1994 are based on simplified retroactive adjustments. Source: Cabinet Office.



My View on Firms' Behavior in the Post-Bubble Period

Chart 15

Potential Growth Rate and Natural Rate of Interest

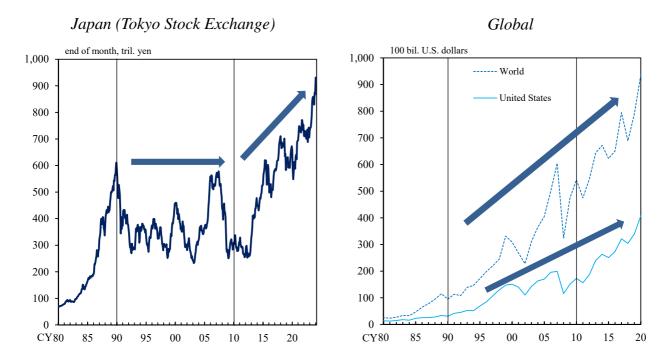


Natural Data of Latoroat

Notes: 1. In the left panel, figures are Bank staff estimates.

In the right panel, shaded areas show the range between the lowest and the highest estimated values at each point in time, using the models indicated.

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

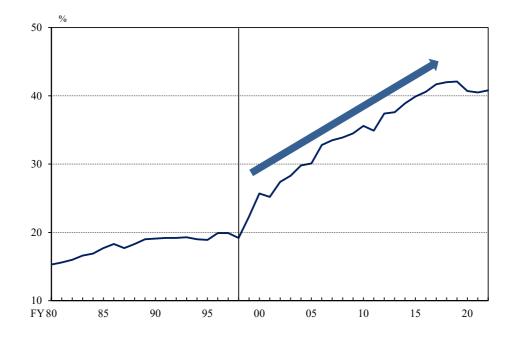


Stock Market Capitalization

Note: In the right panel, figures are the market capitalization of listed domestic companies (current US\$) from the World Development Indicators.

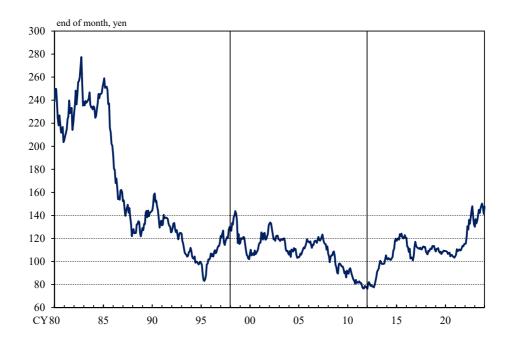
Sources: Japan Exchange Group; World Bank.

Chart 17



Capital Adequacy Ratio of Firms

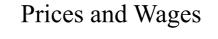
Note: Figures are based on the *Financial Statements Statistics of Corporations by Industry, Annually*, and exclude the finance and insurance industries.
 Source: Ministry of Finance.

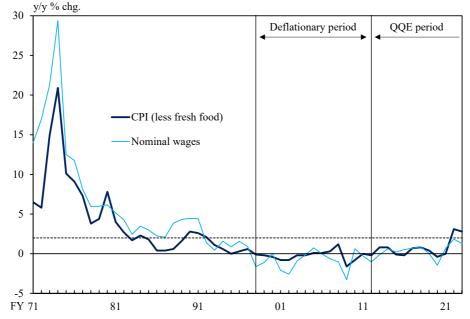


U.S. Dollar/Yen

Source: Bank of Japan.

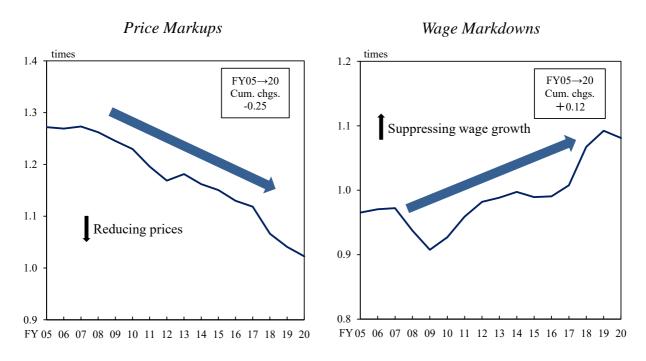
Chart 19





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 2023 is the April 2023-January 2024 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 2023 is the April-December average.

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

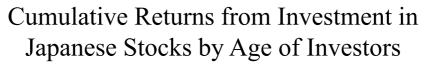


Price Markups and Wage Markdowns

Note: Figures are based on all firm sizes and all industries. See Aoki, K., Hogen, Y., and Takatomi, K., "Price Markups and Wage Setting Behavior of Japanese Firms," *Bank of Japan Working Paper Series*, no. 23-E-5.

Sources: Cabinet Office; CRD Association; Development Bank of Japan; Ministry of Economy, Trade and Industry; Ministry of Health, Labour and Welfare.

Chart 21

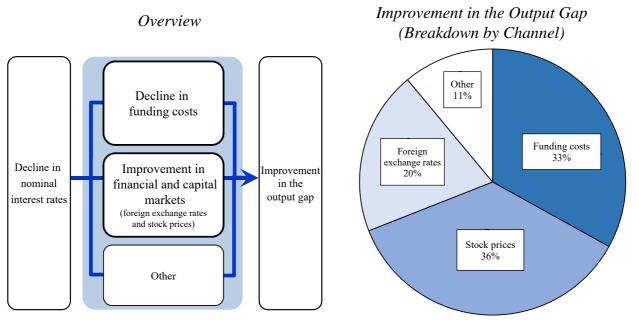


An Estimate of the Period with Negative Cumulative Returns share of the investing years, % 50s average: 53% 40s average: 35% 20s average 11% 30s average: 13%

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 when an individual turns 22. They are calculated by dividing "years with negative cumulative returns as of the year end" by "total years of investment."

Source: Bloomberg.

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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.

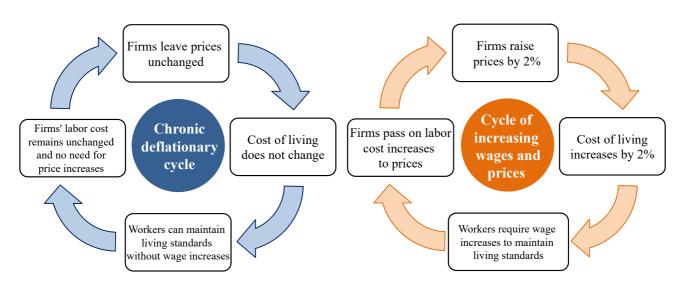
Sources: Bloomberg; Bank of Japan; etc.

Chart 23

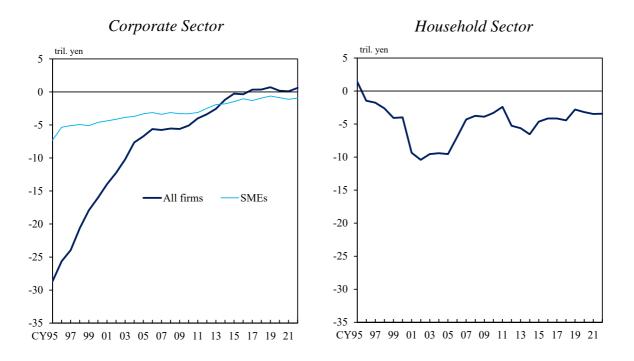
Virtuous Cycle of Wages and Prices

Chronic Deflationary Cycle

Cycle of Increasing Wages and Prices



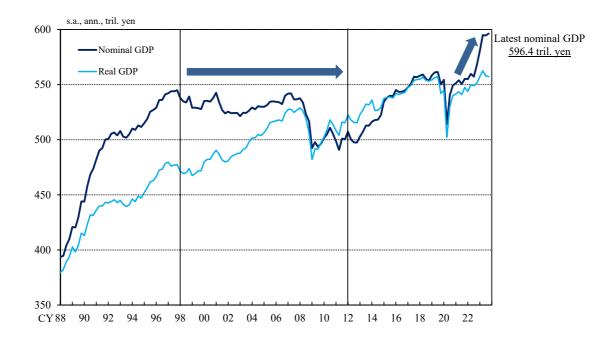
Note: This chart is based on Watanabe Tsutomu, Sekai infure no nazo [Mystery of global inflation] (2022).



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 25



Nominal and Real GDP

Note: Figures before 1995 are based on simplified retroactive adjustments. Source: Cabinet Office.