

Japan's Monetary Policy at an Inflection Point

February 28, 2023

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World Economic Outlook(IMF, Jan.2023)

Outlook for Real GDP Growth Rate (y/y)

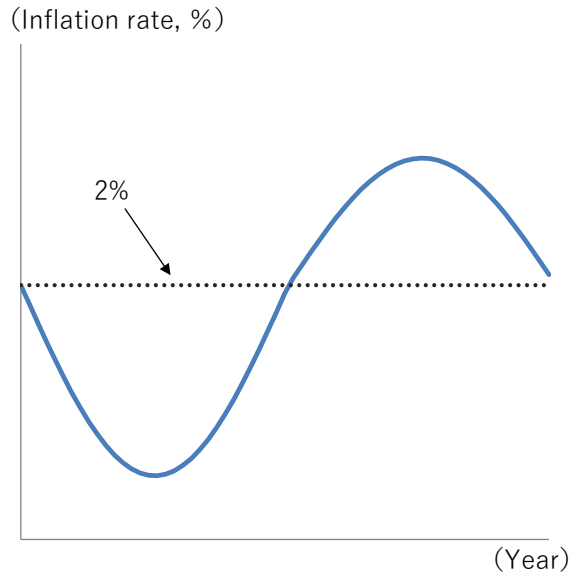
(%、%pt)

	Performance	Projection		Revision	
		as of Jan. 2023		Oct 2022→Jan 2023	
		2022	2023	2024	2023
World Output	3.4	2.9	3.1	0.2	-0.1
Advanced Economies	2.7	1.2	1.4	0.1	-0.2
United States	2.0	1.4	1.0	0.4	-0.2
Euro Area	3.5	0.7	1.6	0.2	-0.2
Germany	1.9	0.1	1.4	0.4	-0.1
United Kingdom	4.1	-0.6	0.9	-0.9	0.3
Japan	1.4	1.8	0.9	0.2	-0.4
Emerging Market and Developing Economies	3.9	4.0	4.2	0.3	-0.1
Sub-Saharan Africa	3.8	3.8	4.1	0.1	0.0
Emerging and Developing Europe	0.7	1.5	2.6	0.9	0.1
Russia	-2.2	0.3	2.1	2.6	0.6
Emerging and Developing Asia	4.3	5.3	5.2	0.4	0.0
China	3.0	5.2	4.5	0.8	0.0
India	6.8	6.1	6.8	0.0	0.0
Middle East and Central Asia	5.3	3.2	3.7	-0.4	0.2
Latin America and the Caribbean	3.9	1.8	2.1	0.1	-0.3
Brazil	3.1	1.2	1.5	0.2	-0.4

Source: IMF "World Economic Outlook (January 2023)"; Compiled by DIR.

Average Inflation Targeting (Fed), Inflation-overshooting Commitment (BOJ) and Symmetric Inflation Target (ECB)

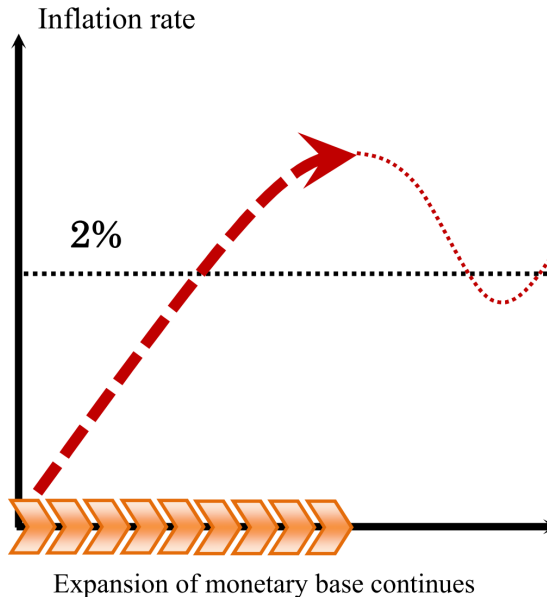
Average Inflation Targeting (Fed)



“Following periods when inflation has been running persistently below 2 percent, appropriate monetary policy will likely aim to achieve inflation moderately above 2 percent for some time.”

Source: Fed (2020) “Review of Monetary Policy Strategy, Tools, and Communications”; compiled by DIR.

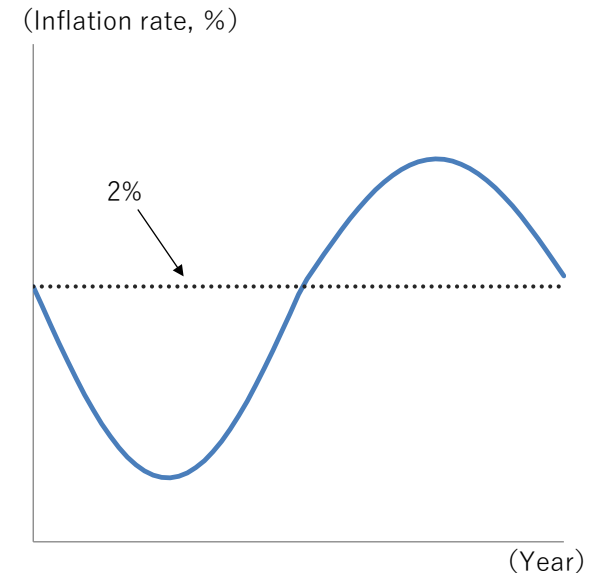
Inflation-overshooting Commitment (BOJ)



“The Bank continues expanding the monetary base until the year-on-year rate of increase in the observed CPI (all items less fresh food) exceeds the price stability target of 2 percent and stays above the target in a stable manner.”

Source: Kuroda, Haruhiko(2017) “The Role of Expectations in Monetary Policy: Evolution of Theories and the Bank of Japan's Experience”, Speech at the University of Oxford; compiled by DIR

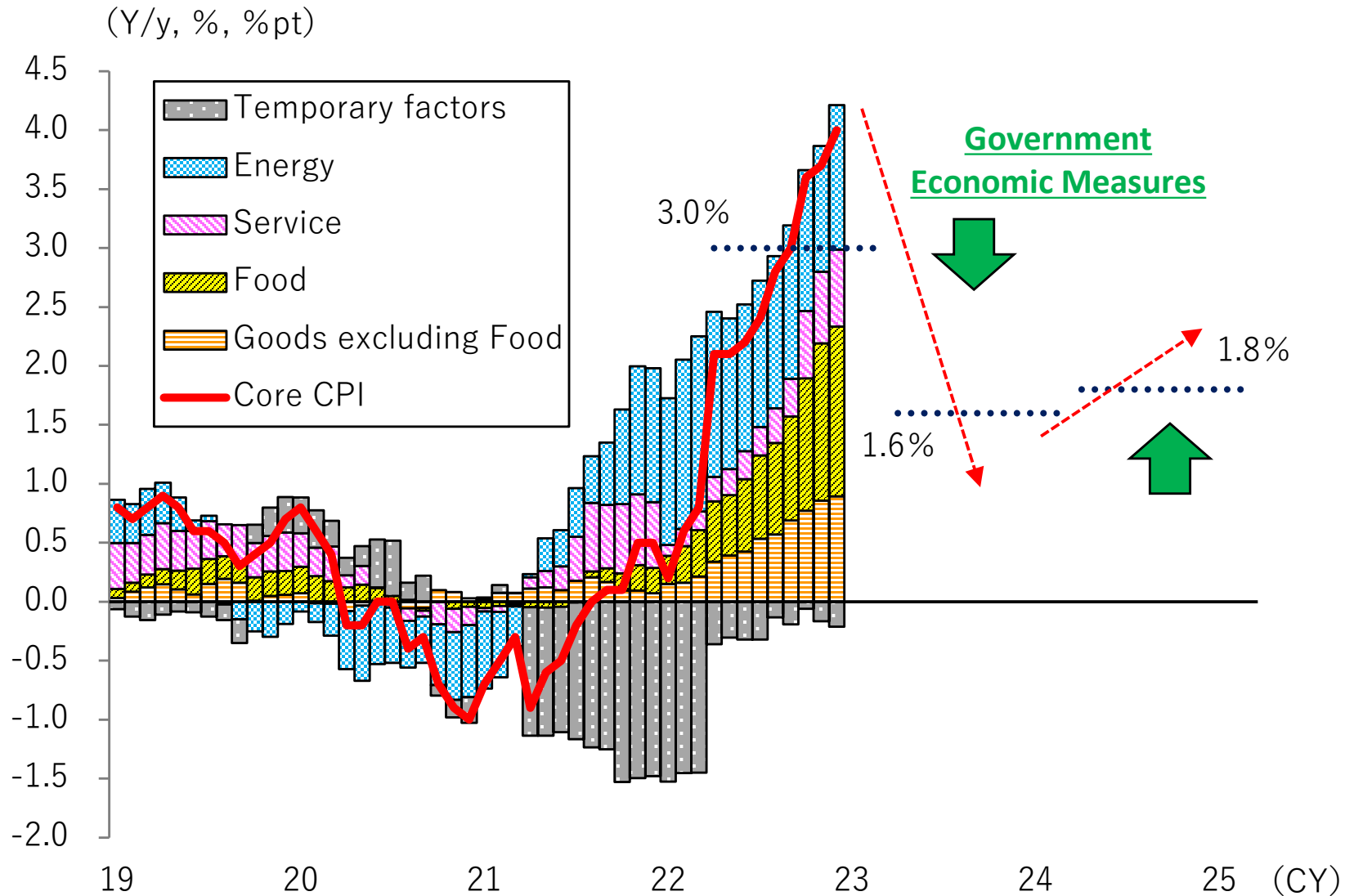
Symmetric Inflation Target (ECB)



“We are committed to target 2%, and we are defining very clearly what symmetry is to us; equally undesirable deviation on both sides of the target, positive or negative.”
 “There might be some moderate temporary deviation in either direction of that 2% – and that is okay.”

Source: Christine Lagarde, Press Conference on the ECB's new monetary policy strategy (July 8 2021); compiled by DIR.

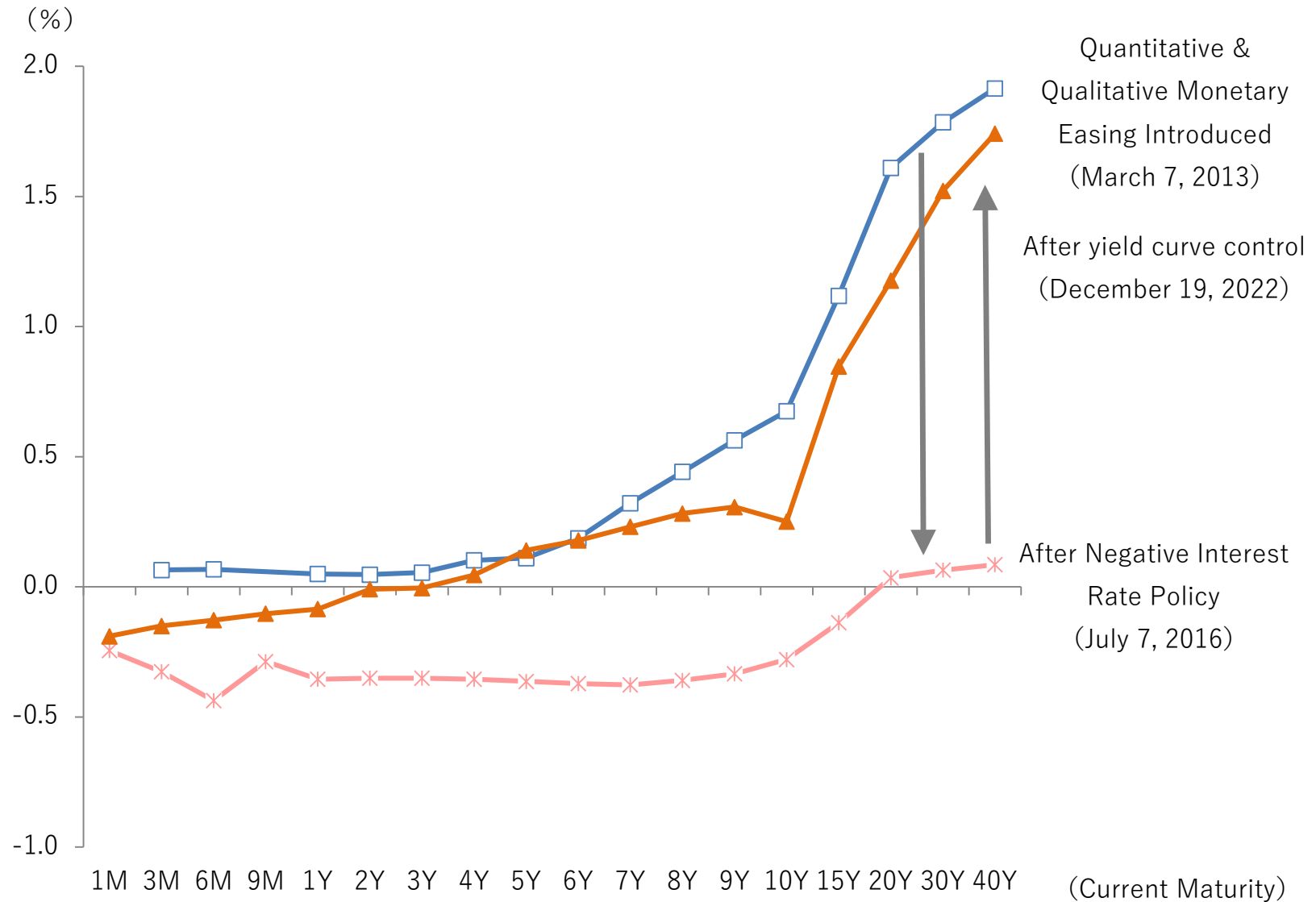
Core CPI Factors and BOJ's Outlook



Note: Temporary factors include the effects of the increase in consumption tax, free education, travel support measures, and the decrease in mobile phone fees.

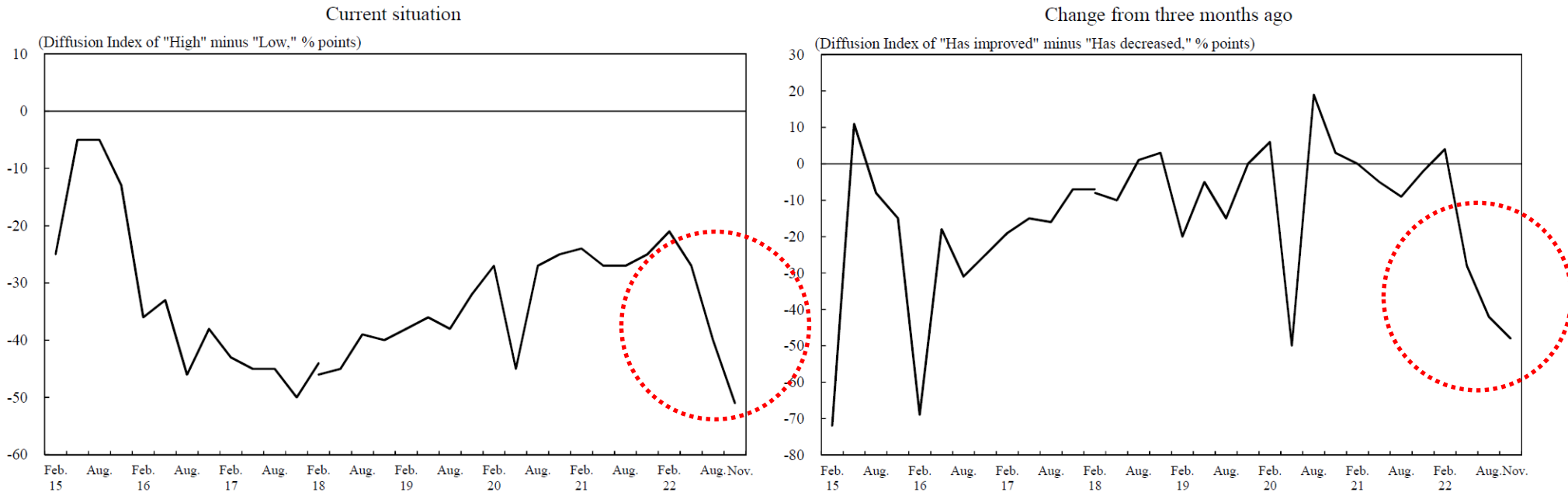
Source: Ministry of Internal Affairs and Communications, Bank of Japan

Shift in Yield Curve



Source: Haver Analytics; compiled by DIR.

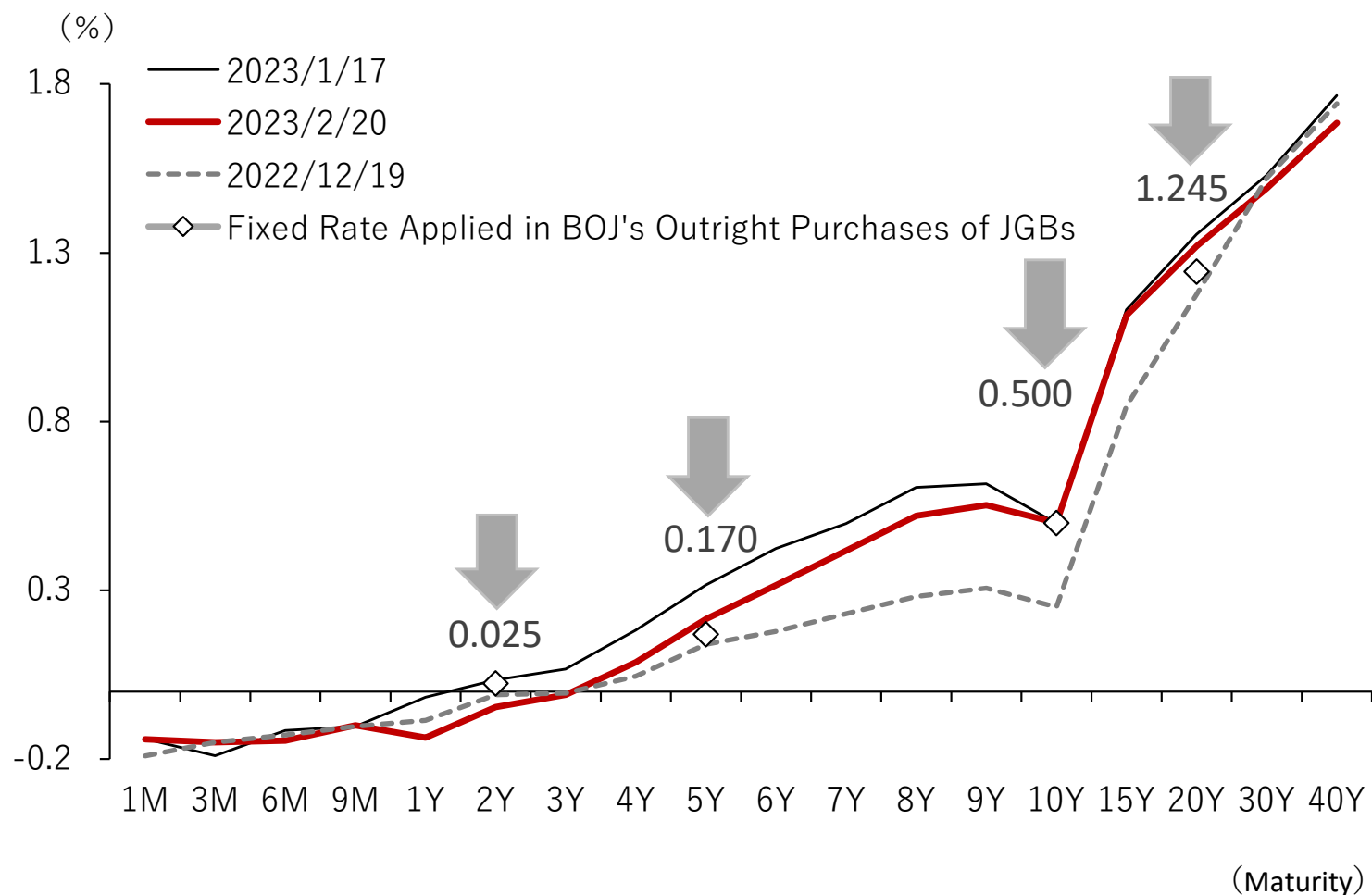
Degree of Bond Market Functioning



Note: The survey from February 2018 onward includes responses from major insurance companies, asset management companies, etc., in addition to those from eligible institutions for the Bank's outright purchases and sales of JGBs. Regarding the figures for February 2018, the reference data, which are based on responses only from eligible institutions for the Bank's outright purchases and sales of JGBs, are also indicated. The survey is conducted in February, May, August, and November each year.

Source: BOJ; compiled by DIR.

Shift in Yield Curve before and after MPM

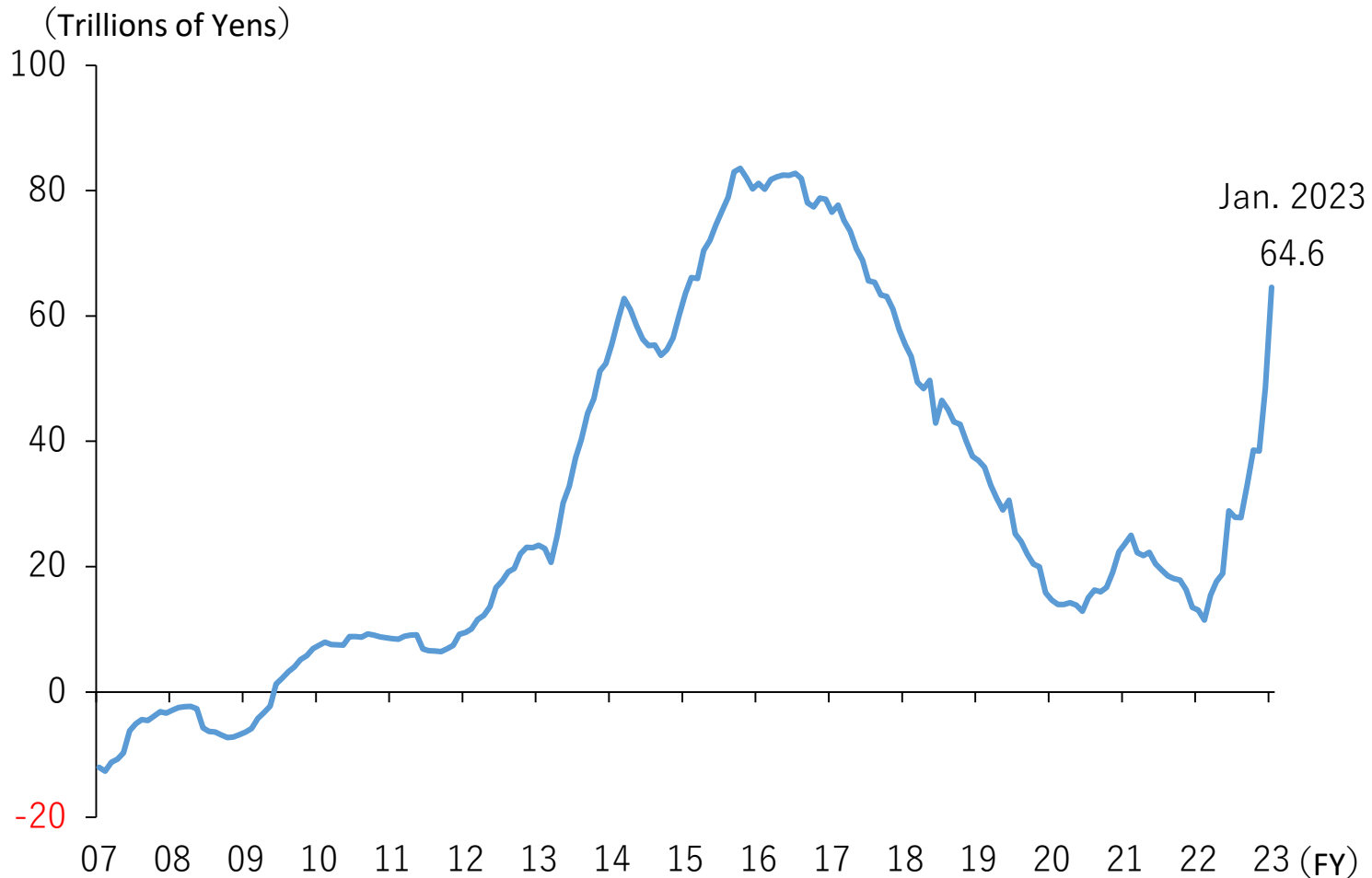


Note 1 ; The fixed rate applied in BOJ's outright purchases of JGBs as of the latest operation.

Note 2 ; The fixed rate as of December 20, 2022(the December MPM); 1-3Y : 0.02%, 3-5Y : 0.17%, 10-25Y : 1.245%.

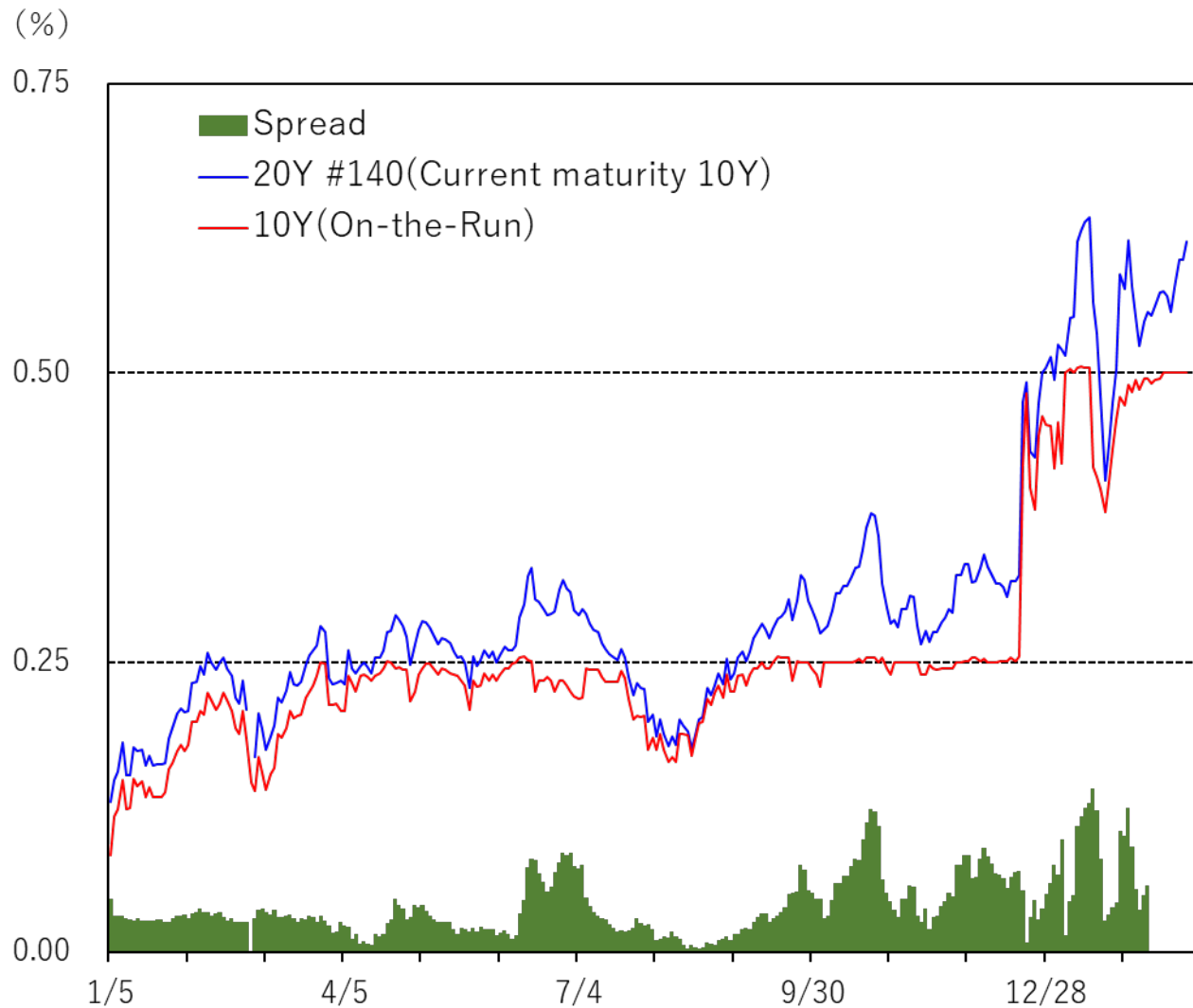
Source: Bank of Japan; compiled by DIR.

Japanese Government Bonds Purchased by the Bank of Japan



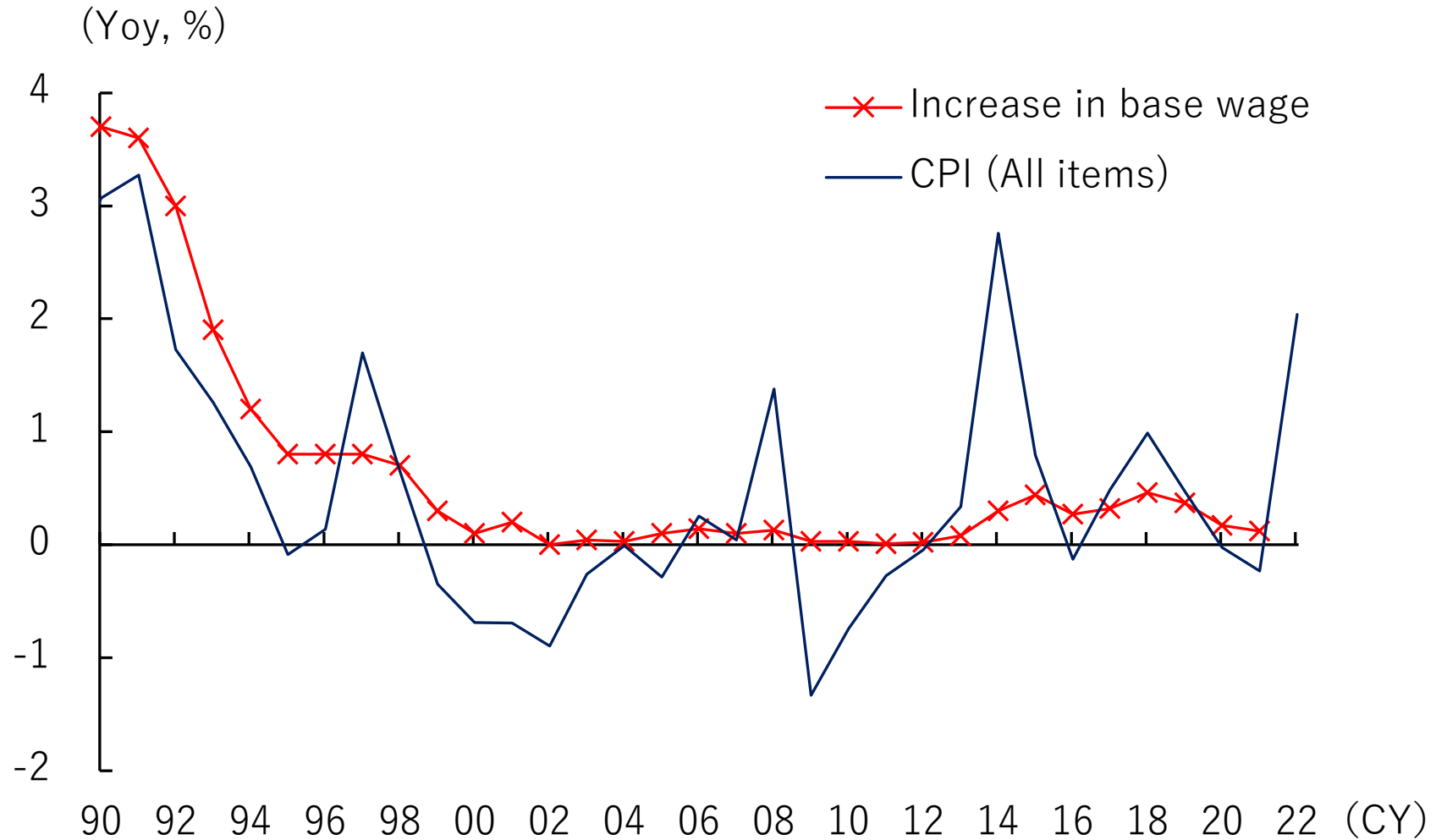
Source: Bank of Japan; compiled by DIR.

Spread Between 10-Year JGB (On-the-Run) and 20-Year JGB (Current Maturity 10Y)



Source: Refinitiv; compiled by DIR.

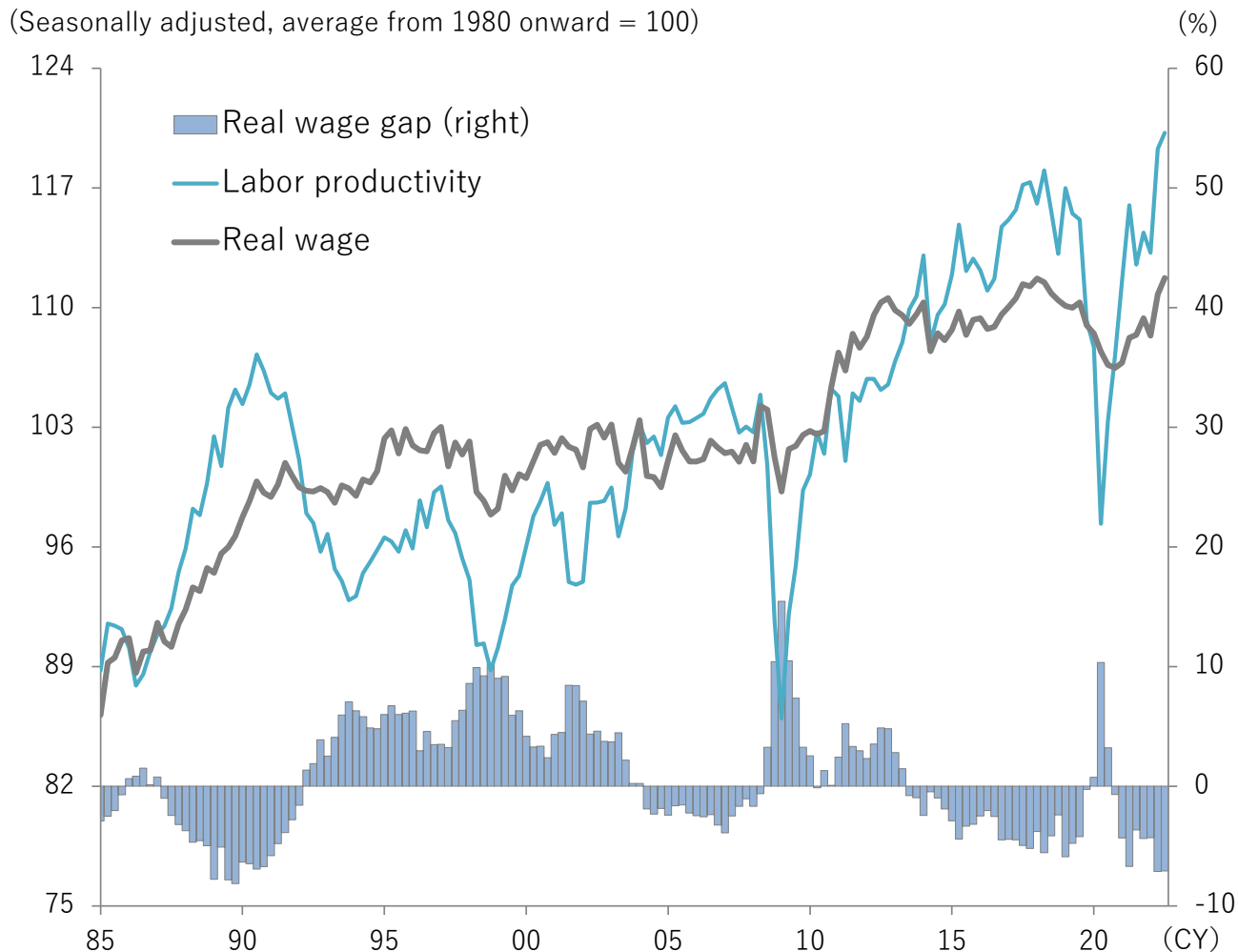
Wage Increase and CPI Inflation



Note: CPI data in 2022 is average of January to September.

Source: Keidanren, Ministry of Internal Affairs and Communication; compiled by DIR

Real Wage Gap



Note: 1 The real wage gap is defined as the deviation of real wages from labor productivity.

2 Real wage = personnel expenses / number of workers / GDP deflator

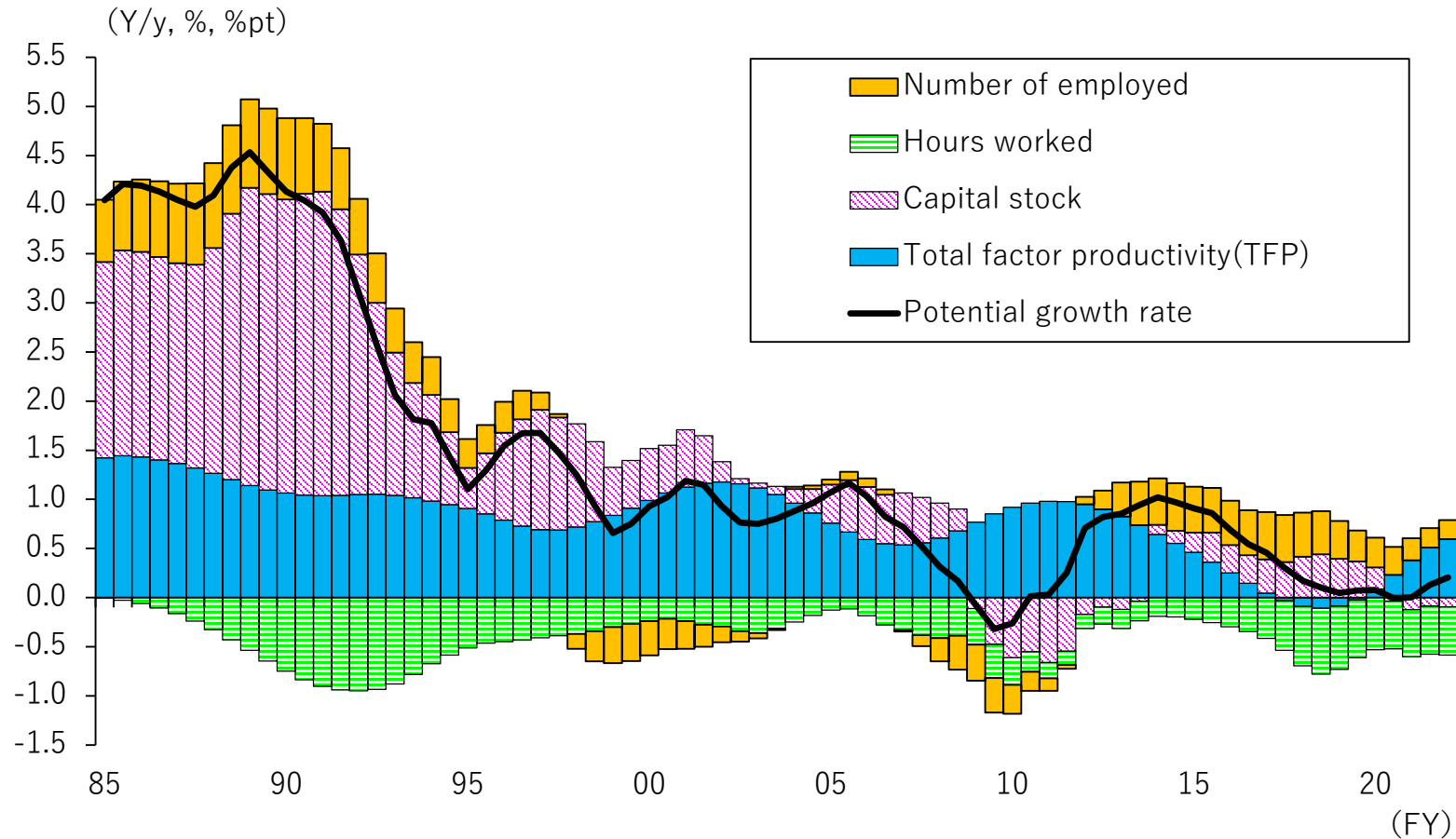
3 Labor productivity = (operating profits + personnel expenses + depreciation expenses) / number of workers / GDP deflator

4 Variables such as personnel expenses are based on the "Financial Statements Statistics of Corporations by Industry, Quarterly" and exclude "finance and insurance."

5 When the figures of Q1 2009 are defined as 100, Labor productivity is 140 and Real wage is 113 in latest quarter (Q3 2022) .

Source: Ministry of Finance, Cabinet office, Bank of Japan; compiled by DIR.

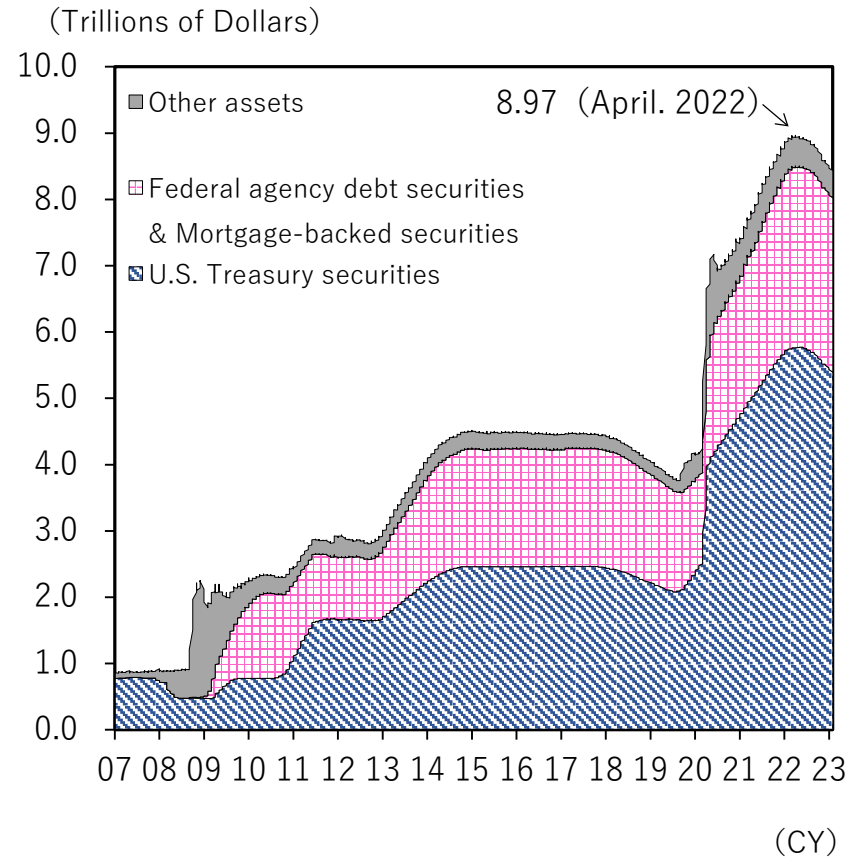
Potential Growth Factors



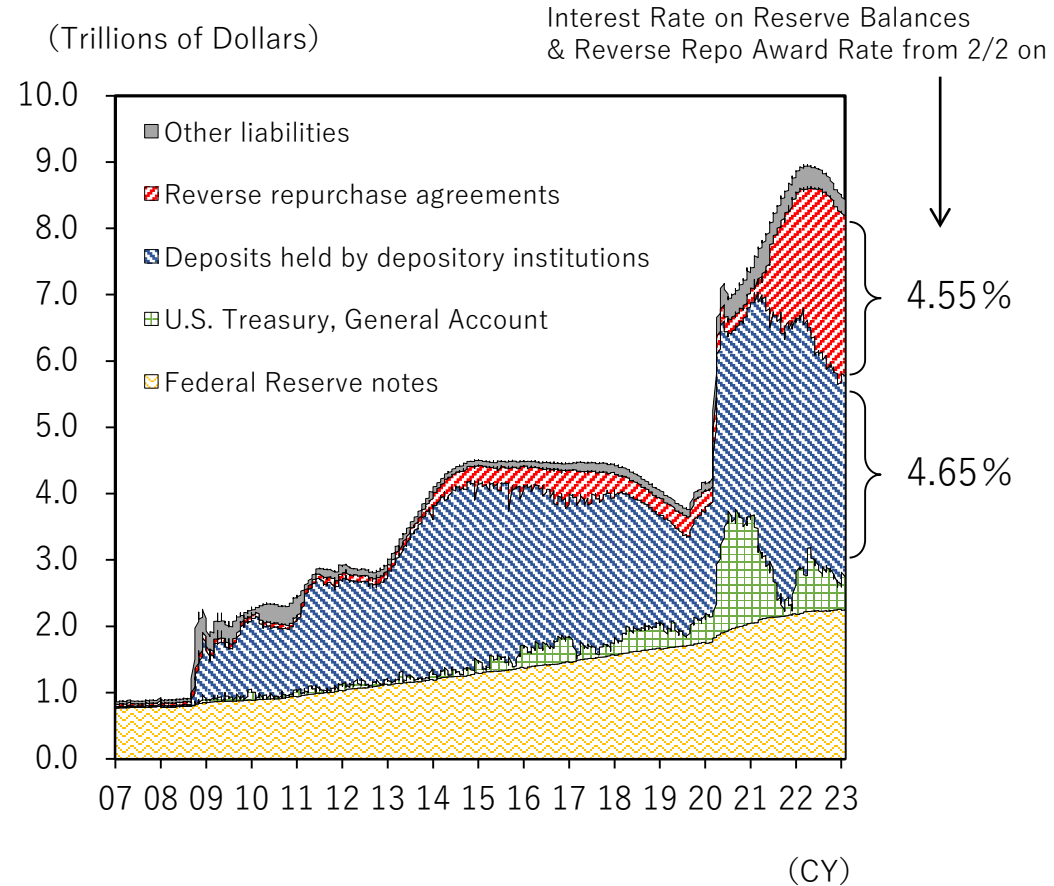
Source: Bank of Japan; compiled by DIR.

Federal Reserve Balance Sheet

Assets



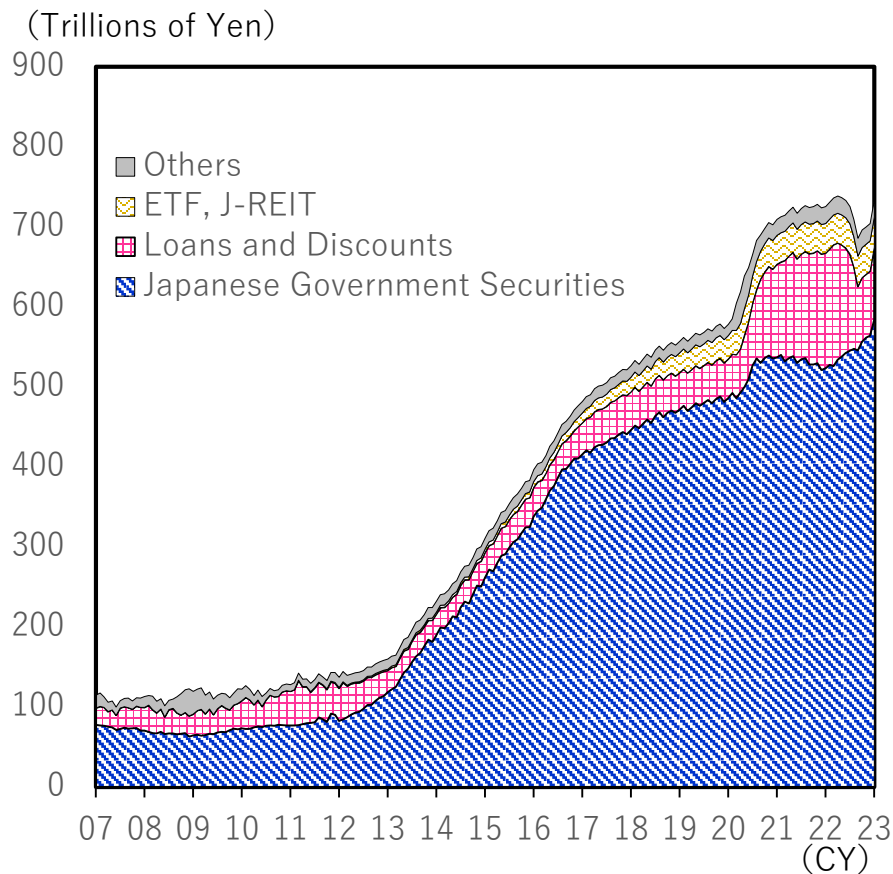
Liabilities



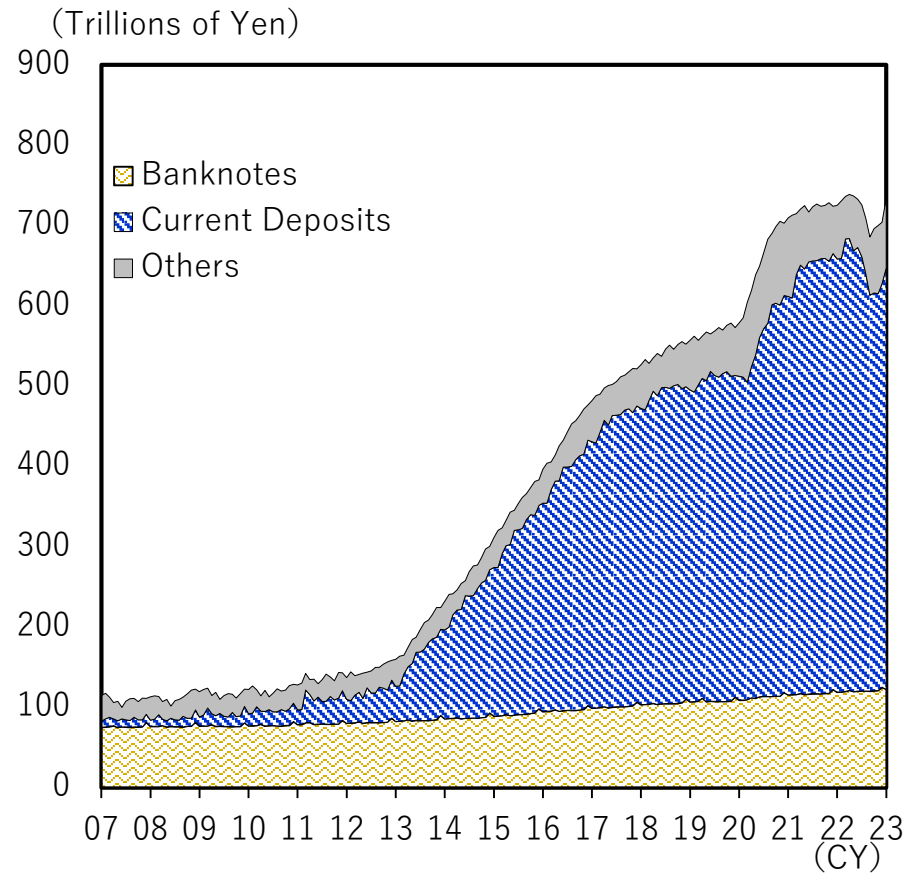
Source: Federal Reserve System; compiled by DIR.

Bank of Japan Balance Sheet

Assets



Liabilities

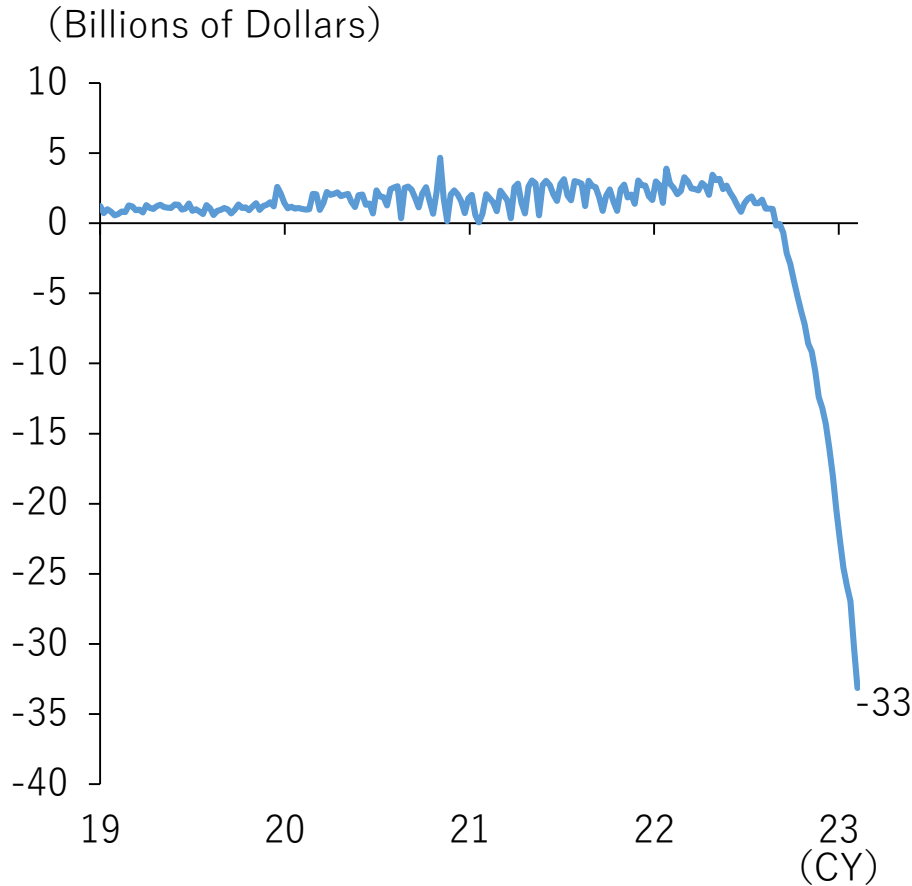


Source: Bank of Japan; compiled by DIR.

Implications for BOJ's Normalization Policy

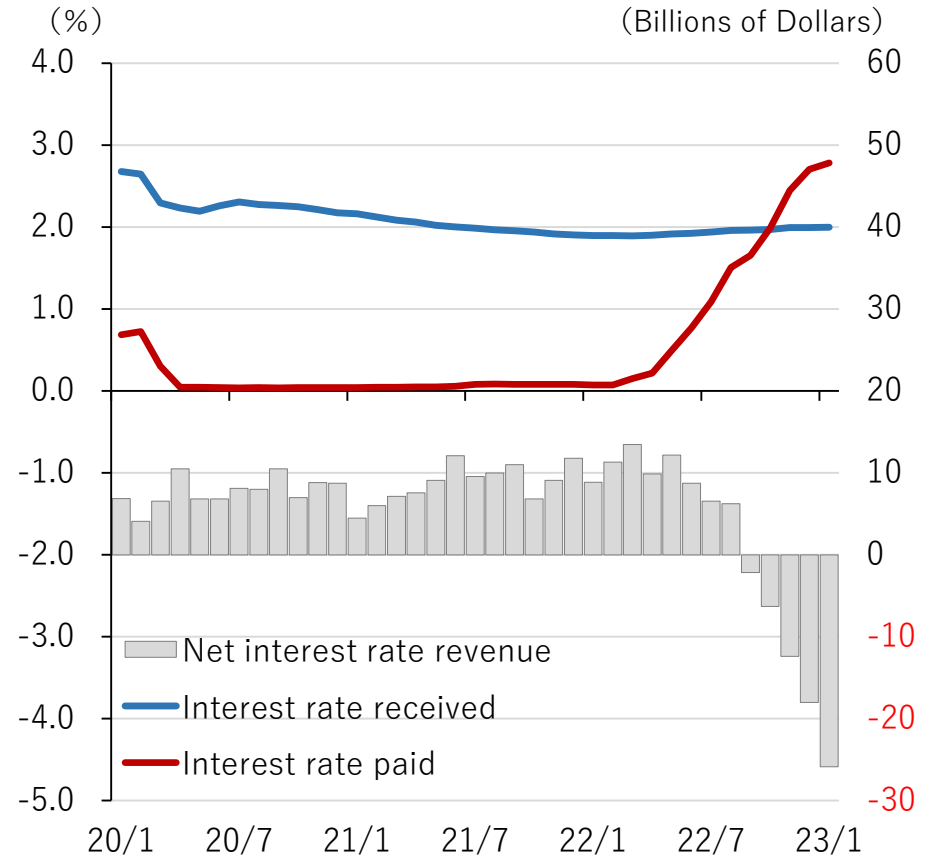
- 10Y target to be raised in a controlled manner
- Higher interest payment on reserves to raise ON target
- QT through running down JGB portfolio with partial reinvestments
- Possible profit squeeze during normalization

Fed's Interest Rate Margin and Profitability



Note: The positive values indicate weekly earnings which are transferred from the Fed to the Treasury. The negative values indicate accrued debt. Returning to the break-even point, the Fed will restart remittance.

Source: Fed; compiled by DIR.



Note; Interest rate received= (Interest rate on Treasury securities, Federal agency debt securities, and MBS) ÷ total assets.
Interest rate paid=(Interest rate on deposits held by depository institutions, reverse repurchase agreements) ÷ total liabilities & total capital.

Source: Fed; compiled by DIR.

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- For derivative and margin transactions etc., our company may require collateral or margin requirements in accordance with an agreement made beforehand with you. Ordinarily in such cases, the amount of the transaction will be in excess of the required collateral or margin requirements**.
- There is a risk that you will incur losses on your transactions due to changes in the market price of financial instruments based on fluctuations in interest rates, exchange rates, stock prices, real estate prices, commodity prices, and others. In addition, depending on the content of the transaction, the loss could exceed the amount of the collateral or margin requirements.
- There may be a difference between bid price etc. and ask price etc. of OTC derivatives handled by our company.
- Before engaging in any trading, please thoroughly confirm accounting and tax treatments regarding your trading in financial instruments with such experts as certified public accountants.

* The amount of the trading commission cannot be stated here in advance because it will be determined between our company and you based on current market conditions and the content of each transaction etc.

** The ratio of margin requirements etc. to the amount of the transaction cannot be stated here in advance because it will be determined between our company and you based on current market conditions and the content of each transaction etc.

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