



Global Economy and Monetary Policy at an Inflection Point

November 10, 2022

Hiroshi Nakaso
Chairman of the Institute
Daiwa Institute of Research Ltd.

Daiwa Institute of Research

World Economic Outlook(IMF)

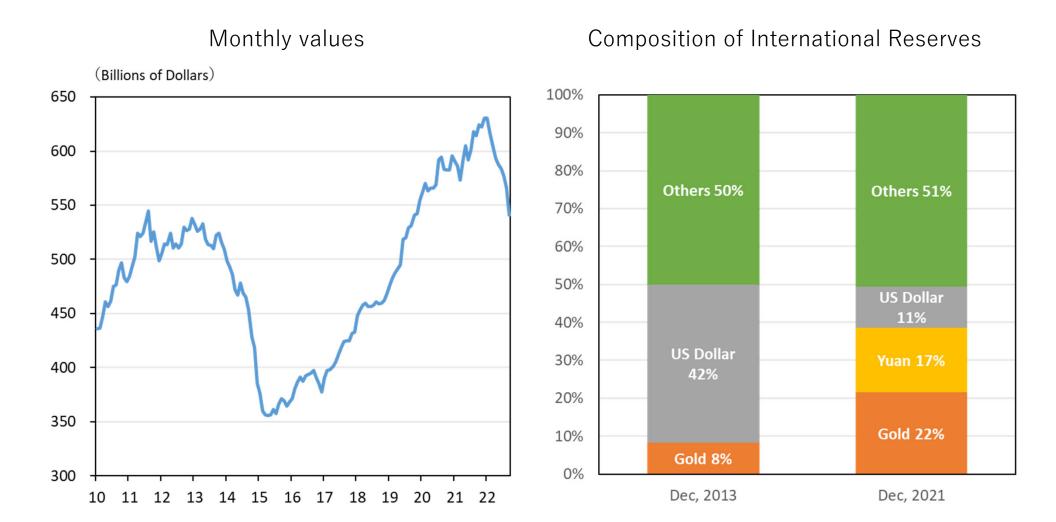
Outlook for Real GDP Growth Rate (y/y)

(%, %pt)

		Projection		Revision	
	Performance	as of Oct. 2022		Jul-Oct 2022	
	2021	2022	2023	2022	2023
World Output	6.0	3.2	2.7	0.0	-0.2
Advanced Economies	5.2	2.4	1.1	-0.1	-0.3
United States	5.7	1.6	1.0	-0.7	0.0
Euro Area	5.2	3.1	0.5	0.5	-0.7
Germany	2.6	1.5	-0.3	0.3	-1.1
United Kingdom	7.4	3.6	0.3	0.4	-0.2
Japan	1.7	1.7	1.6	0.0	-0.1
Emerging Market and Developing Economies	6.6	3.7	3.7	0.1	-0.2
Sub-Saharan Africa	4.7	3.6	3.7	-0.2	-0.3
Emerging and Developing Europe	6.8	0.0	0.6	1.4	-0.3
Russia	4.7	-3.4	-2.3	2.6	1.2
Emerging and Developing Asia	7.2	4.4	4.9	-0.2	-0.1
China	8.1	3.2	4.4	-0.1	-0.2
India	8.7	6.8	6.1	-0.6	0.0
ASEAN-5	3.4	5.3	4.9	0.0	-0.2
Middle East and Central Asia	4.5	5.0	3.6	0.2	0.1
Latin America and the Caribbean	6.9	3.5	1.7	0.5	-0.3
Brazil	4.6	2.8	1.0	1.1	-0.1

Source: IMF "World Economic Outlook (October 2022)"; compiled by DIR.

International Reserves of the Russian Federation



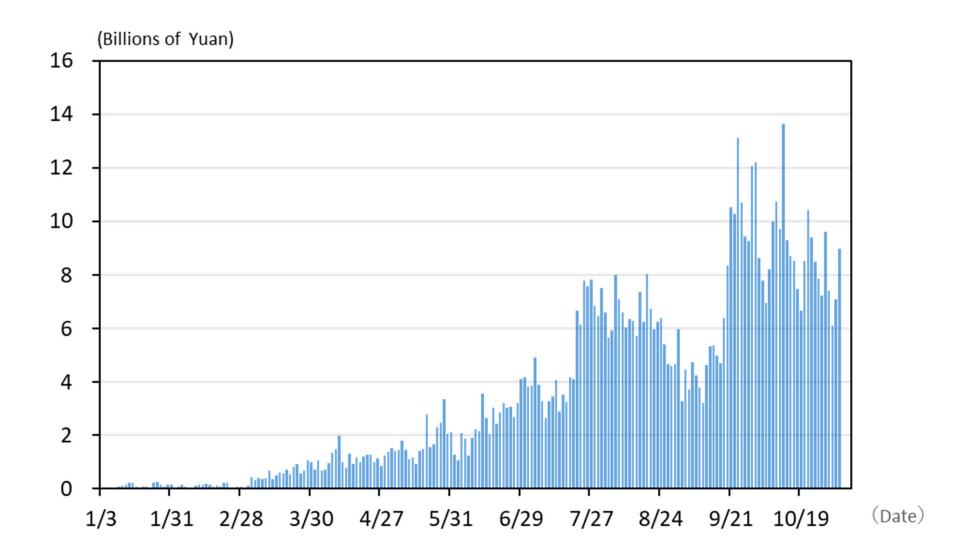
Source: Central Bank of Russia; compiled by DIR.

Comparison of Foreign Exchange Settlement Systems

	BOJ-NET (Foreign Exchange Yen Clearing System)	CHIPS	CIPS
Currency	Japanese Yen	US dollar	Chinese yuan
Operating group	Central Bank	Private entity	Private entity (Under the supervision of People's Bank of China)
Settlement mode	RTGS (Real-Time Gross Settlement)	DNS (Deferred Net Settlement)	RTGS · DNS
Other functions	-	-	DVP · PVP
Operation Hours	Weekdays、12.5hours	Weekdays、20hours	Weekdays、24hours + 4hours
Number of participants (Number of indirect participants)	27	43	76 (1,265)
Number of transactions (daily average, 2021)	27,899 cases	507,368 cases	18,000 cases
Settlement value (daily average, 2021)	18.3 trillion yen	1.8 trillion US dollar (approx 195.7 trillion yen)	353.5 billion yuan (approx 6.0 trillion yen)

Note: Each Yen equivalent for settlement value is calculated on the basis of a yearly average exchange rate in 2021. Source: Bank of Japan, Cross-Border Interbank Payment System, The Clearing House; compiled by DIR.

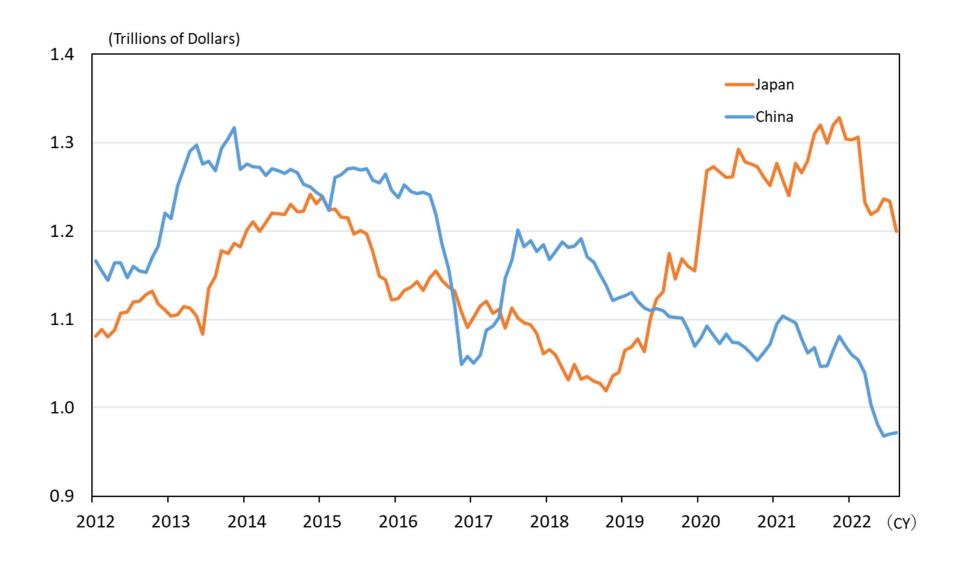
CNY/RUB Trading Volumes on the Moscow Exchange



Note: As of November 3

Source: Bloomberg; compiled by DIR

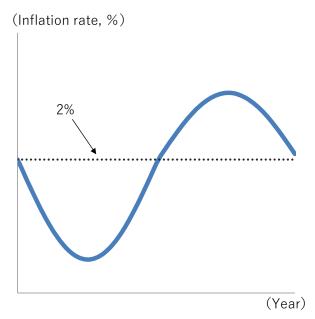
US Treasury Securities Held by Japan and China



Source: US Treasury; compiled by DIR.

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

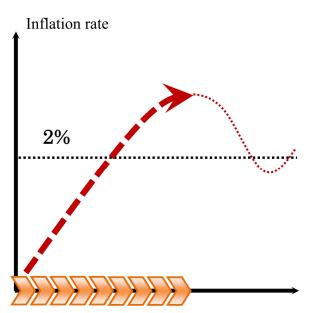
Average Inflation Targeting (Fed)



"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)

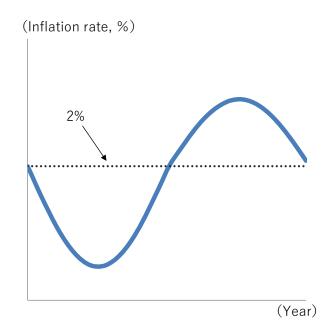


Expansion of monetary base continues

"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

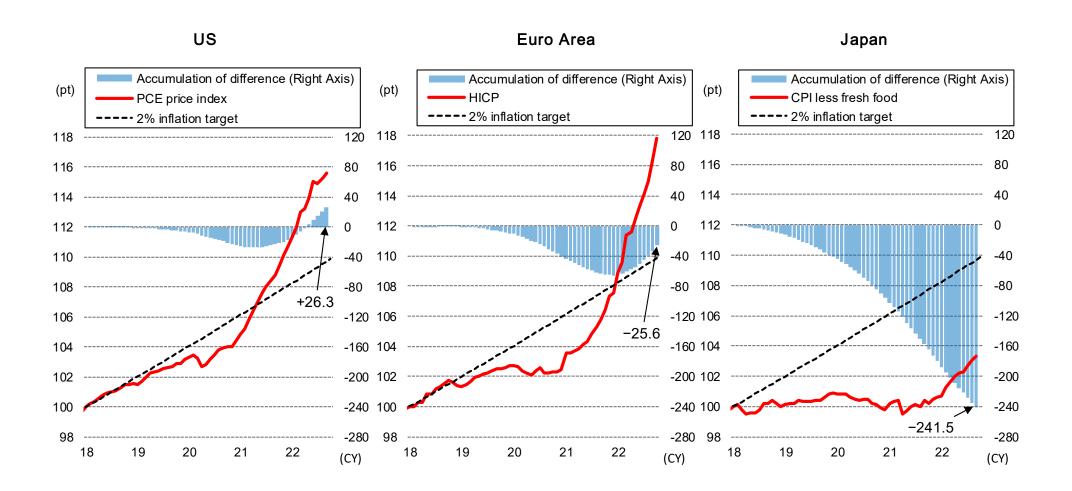
Symmetric Inflation Target (ECB)



"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.

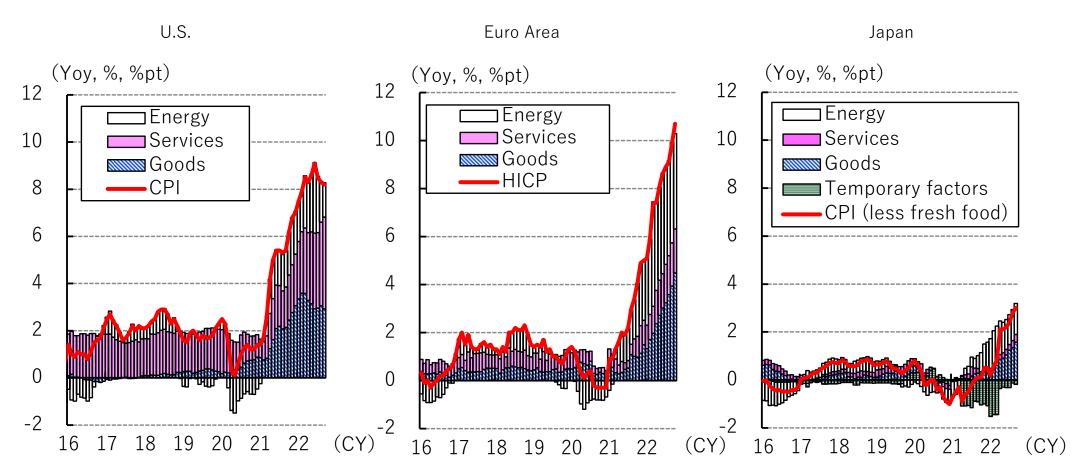
Inflation and 2% Target in US, Euro Area and Japan



Note: Seasonally adjusted.

Source: BLS, Eurostat, Ministry of Internal Affairs and Communications, Haver Anaytics; compiled by DIR.

Consumer Price in US, Euro Area and Japan



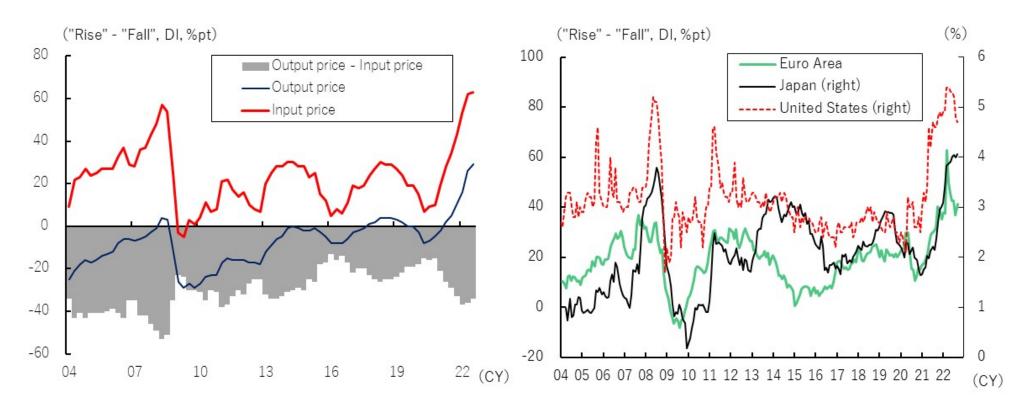
Note: Temporary factors in Japan consist of the effects of the consumption tax hike, policies concerning the provision of free education, "Go To Travel" campaign and mobile phone charges.

Source: Ministry of Internal Affairs and Communications, BLS, Eurostat, Haver Analytics; compiled by DIR.

Inflation Expectations in US, Euro Area and Japan

Output and Input prices in Japan (TANKAN September 2022)

Inflation expectations of consumers

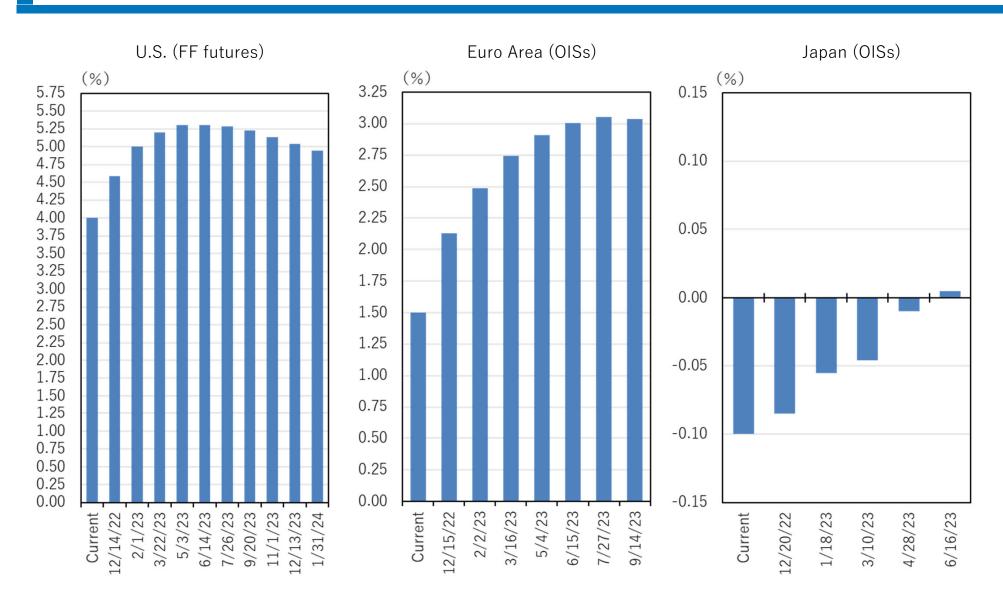


Source: BOJ; compiled by DIR.

Note: Inflation expectations in Japan are the weighted average of "price expectations a year ahead" by Consumer Confidence Survey.

Source: CAO, Reuters/University of Michigan, European Commission; compiled by DIR.

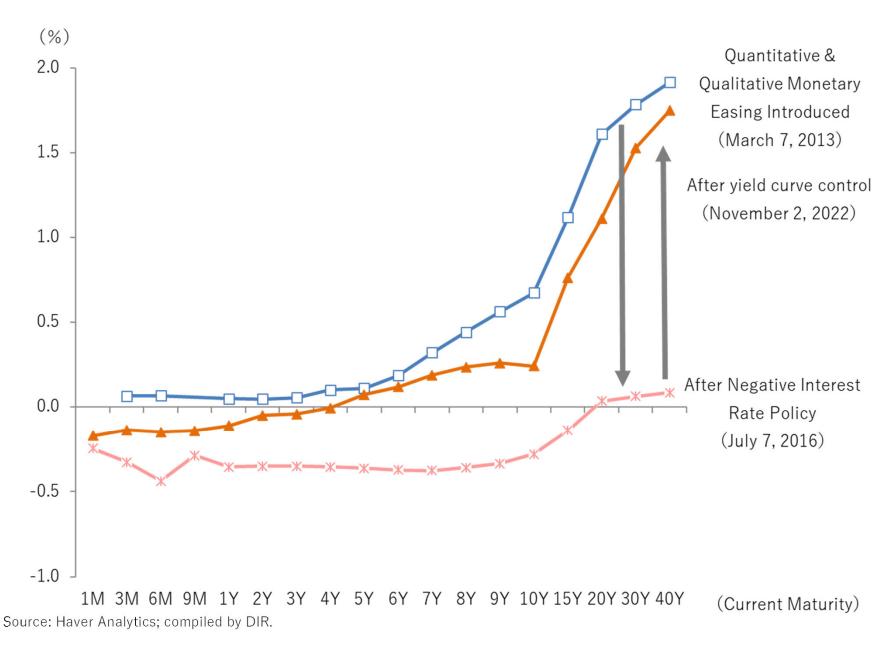
Rate Hikes in US, Euro Area, and Japan



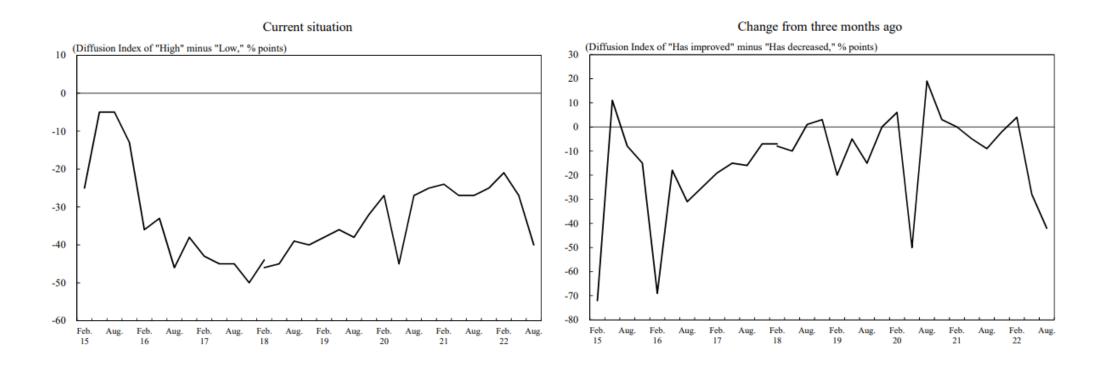
Note: As of November 3.

Source: Bloomberg; compiled by DIR

Shift of Yield Curve



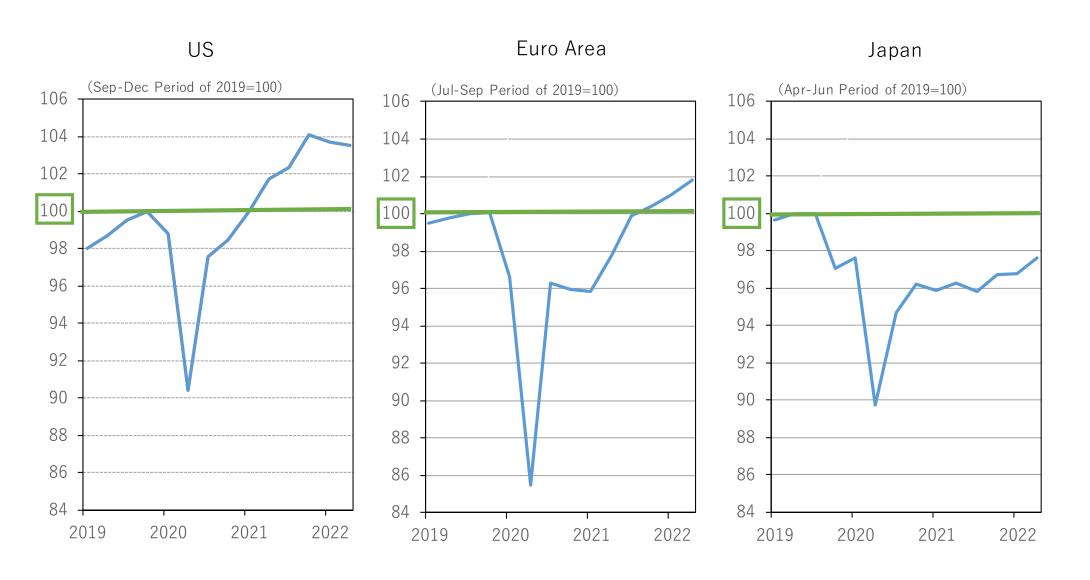
Degree of Bond Market Functioning



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.

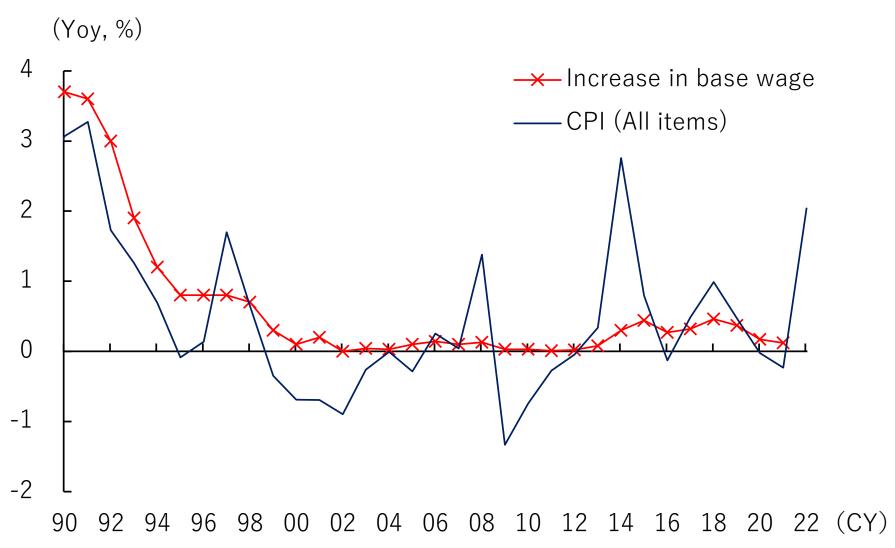
Source: BOJ; compiled by DIR.

Changes in Real GDP



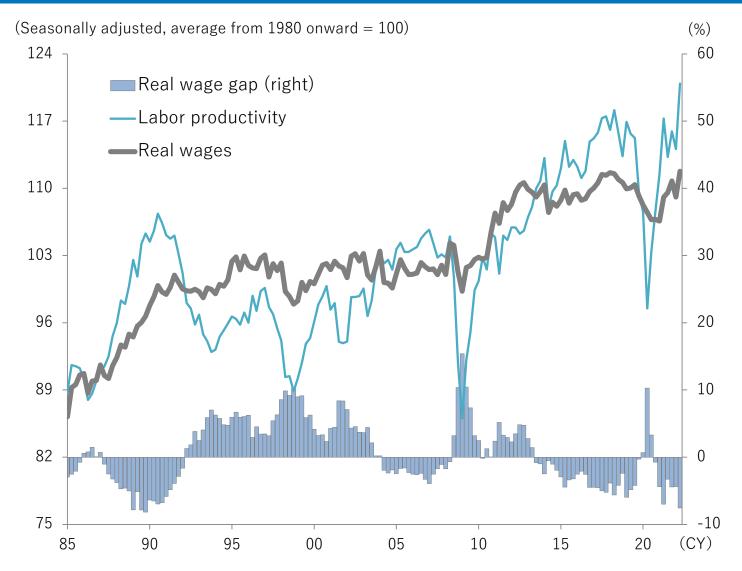
Source: Haver Analytics; compiled by DIR.

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



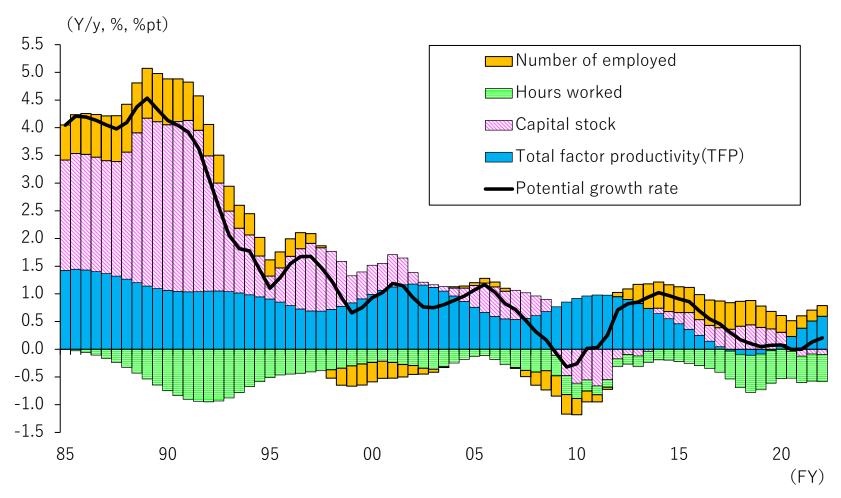
Note: 1 The real wage gap is defined as the deviation of real wages from labor productivity.

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

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

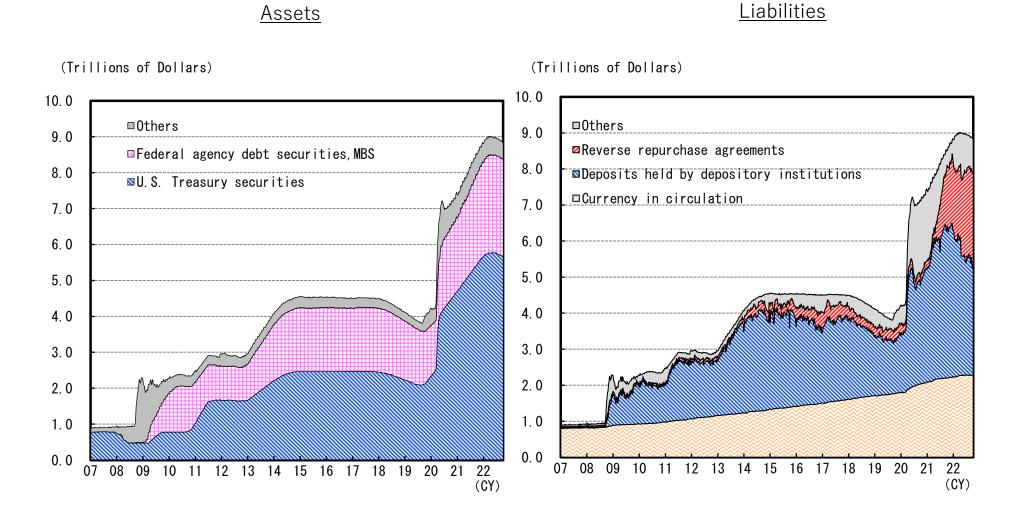
⁴ Variables such as personnel expenses are based on the "Financial Statements Statistics of Corporations by Industry, Quarterly" and exclude "finance and insurance."

Potential Growth Factors



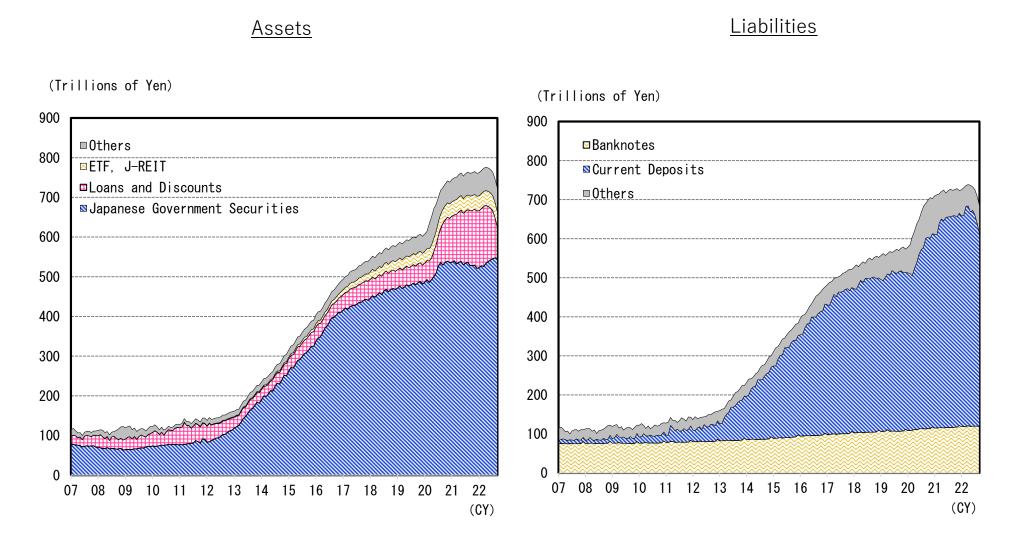
Source: Bank of Japan; compiled by DIR.

Federal Reserve Balance Sheet



Source: Federal Reserve System; compiled by DIR.

Bank of Japan Balance Sheet



Source: Bank of Japan; compiled by DIR.

Market Operations under the New Normal

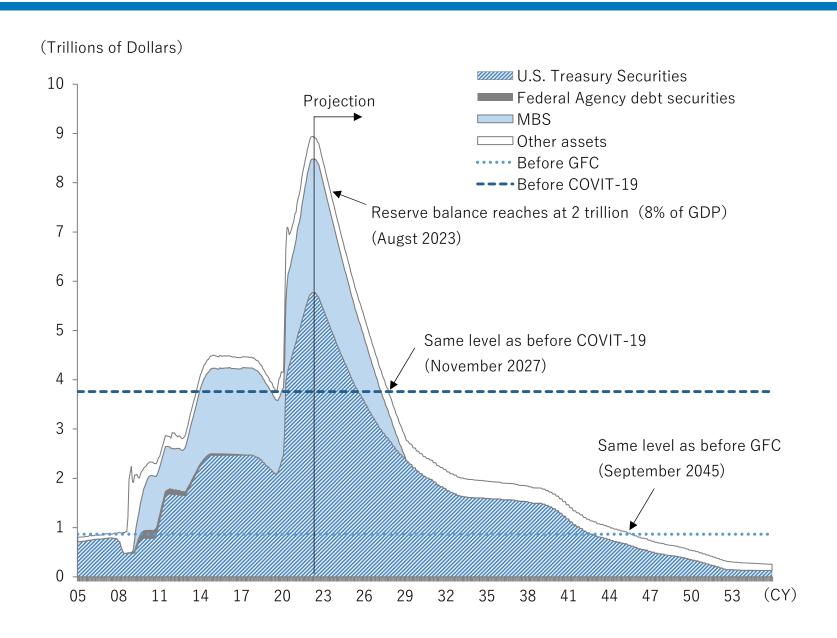
	Fed	BOJ	
Policy rate	Federal Funds rate	Uncollateralized Overnight Call rate	
Upper bound	Discount Window Primary Credit Rate (Standing Repo Facility minimum bid rate)	Interest rate on the Complementary Lending Facility	
Lower bound	Interest rate on Reserve Balances (Reverse Repurchase Agreement Operations offering rate)	Interest rate on the Complementary Deposit Facility (Sale of Bills, Sale of Japanese Government Securities with Repurchase Agreements)	
Tools	Open market operations Interest on Reserve Balances	Open market operations Interest on Reserve Balances	

Source: Federal Reserve System, Bank of Japan; compiled by DIR.

Implications for BOJ's Normalization Policy

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

Fed Reserve Balance Sheet (QT Simulation)



Source: Federal Reserve Bank of New York; compiled by DIR.

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- 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.
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