

Evolving Monetary Policy: The Bank of Japan's Experience

*Speech at the Central Banking Seminar
Hosted by the Federal Reserve Bank of New York*

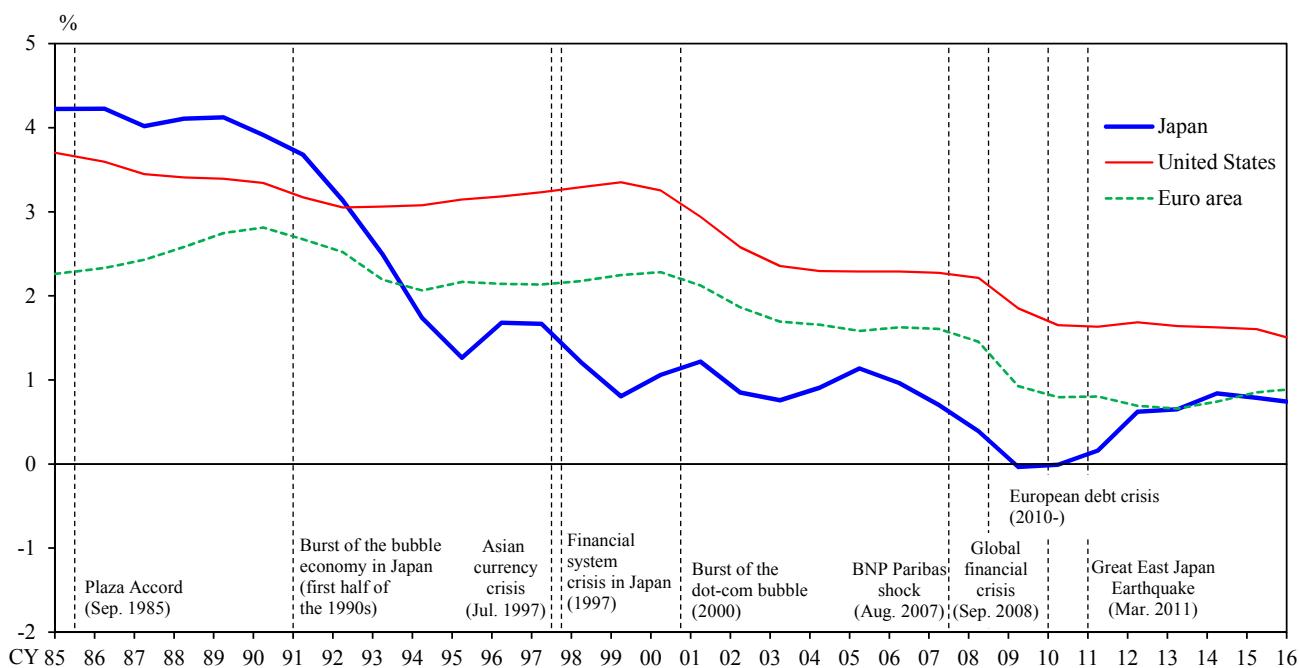
October 18, 2017

Hiroshi Nakaso

Deputy Governor of the Bank of Japan

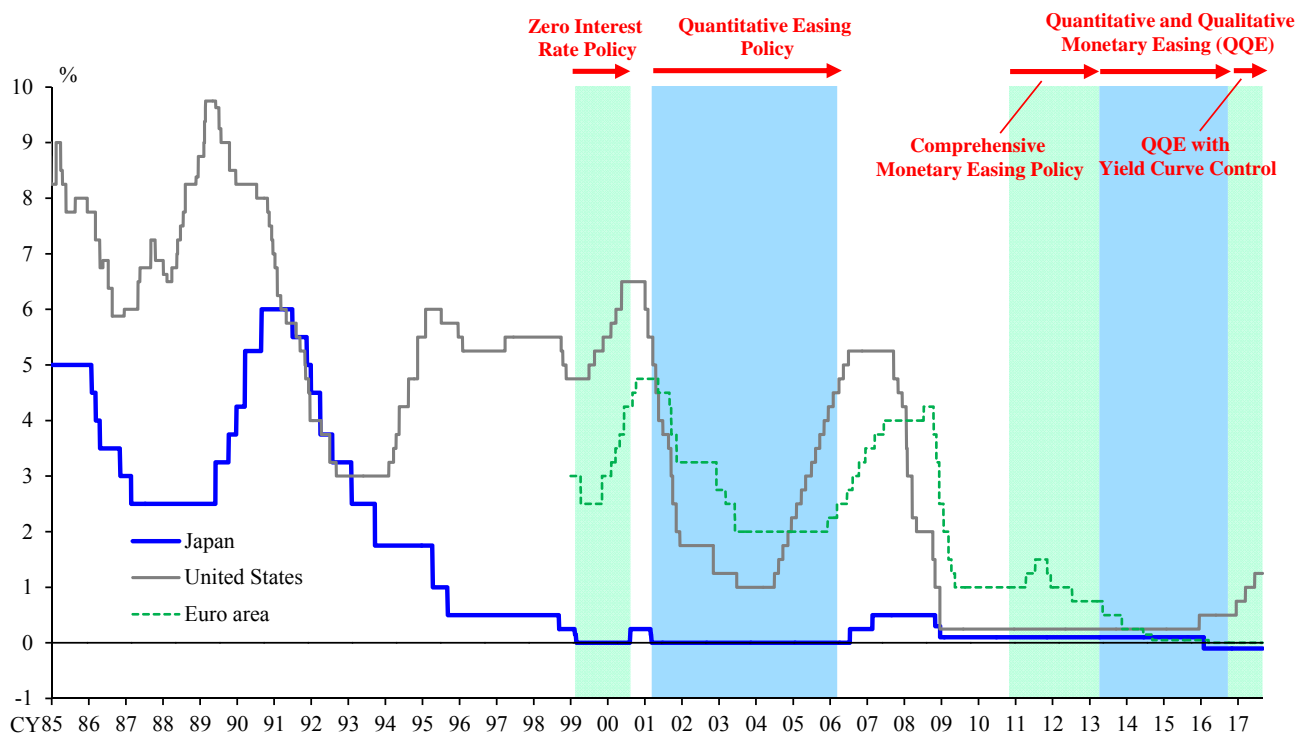
Chart 1

Potential Growth Rate



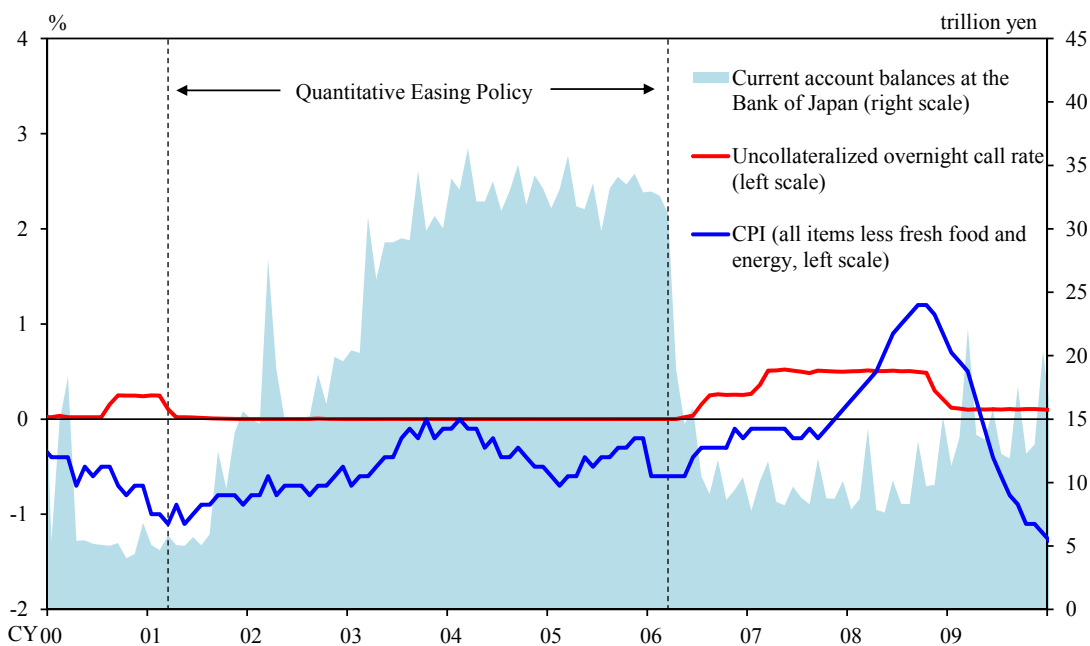
Note: The figure for Japan is based on BOJ staff estimations (fiscal year based). Figures for the United States and the euro area are based on the OECD estimations.
Sources: Bank of Japan; OECD.

Policy Interest Rates



Note: For Japan, for the period when no target interest rate was adopted, figures for the policy rate are the interest rate applied on excess reserves.
Sources: Bank of Japan; Federal Reserve; European Central Bank; Haver; Bloomberg.

Quantitative Easing Policy (2001-2006)



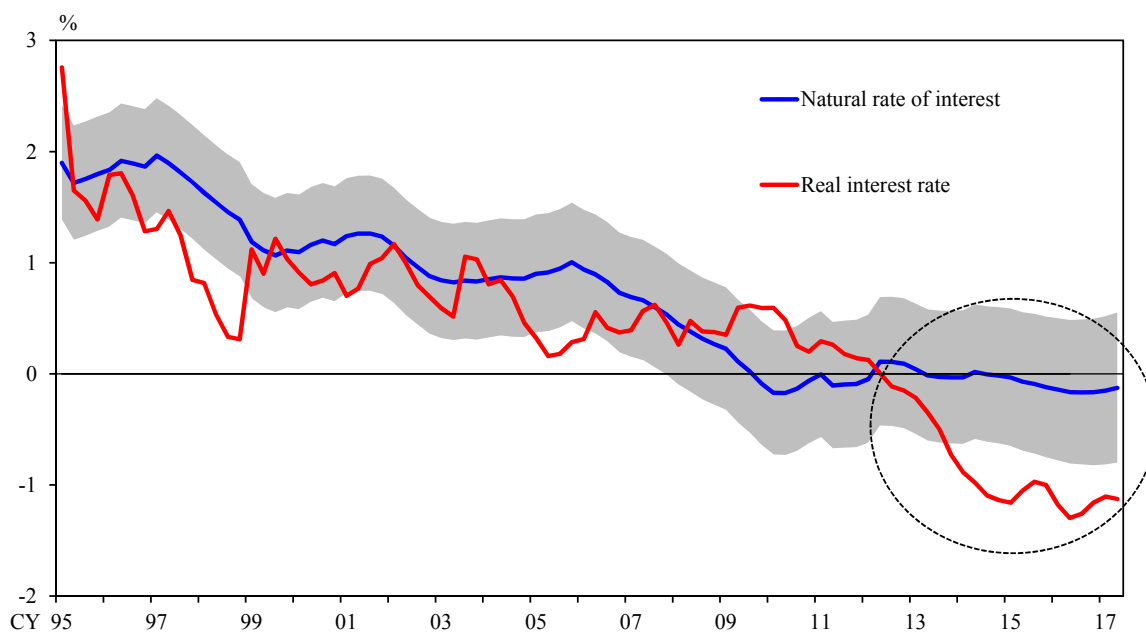
Notes: 1. Figures for the uncollateralized overnight call rate are monthly averages.
2. The CPI figures are adjusted for changes in the consumption tax rate.
Sources: Bank of Japan; Ministry of Internal Affairs and Communications; Bloomberg.

Transition of BOJ's Monetary Policy

		Operating target	Target of short-term interest rates	(1) Affecting longer-term interest rates	(2) Affecting risk premiums	(3) Applying a negative interest rate to the current accounts	(4) Affecting inflation expectations
Feb. 1999	Zero Interest Rate Policy	Uncollateralized O/N call rate	"As low as possible" (virtually 0%)	Policy duration effect (forward guidance)			
Aug. 2000							
Mar. 2001	Quantitative Easing Policy	Current account balances at the BOJ	Around 0%	Policy duration effect (forward guidance)			
Mar. 2006							
Oct. 2010	Comprehensive Monetary Easing Policy	Uncollateralized O/N call rate	0 to 0.1% (virtually 0%)	JGB purchases / Fixed-rate funds-supplying operation Policy duration effect (forward guidance)	Purchases of risk assets (CP, corporate bonds, ETFs, J-REITs)		"Price stability target of 2%" (since Jan. 2013)
Apr. 2013							
Apr. 2013	Quantitative and Qualitative Monetary Easing (QQE)	Monetary base	Around 0% ↓ Negative territory (since Jan. 2016)	Large-scale JGB purchases	Purchases of risk assets	Negative interest rate (since Jan. 2016)	Strong and clear commitment
Sep. 2016	QQE with Yield Curve Control	Short- and long-term interest rates (Short-term policy interest rate + 10-yr JGB yields)	Negative territory	Yield curve control (operating target: 10-yr JGB yields)	Purchases of risk assets	Negative interest rate	Inflation-overshooting commitment

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Japan's Natural Rate of Interest and Real Interest Rate

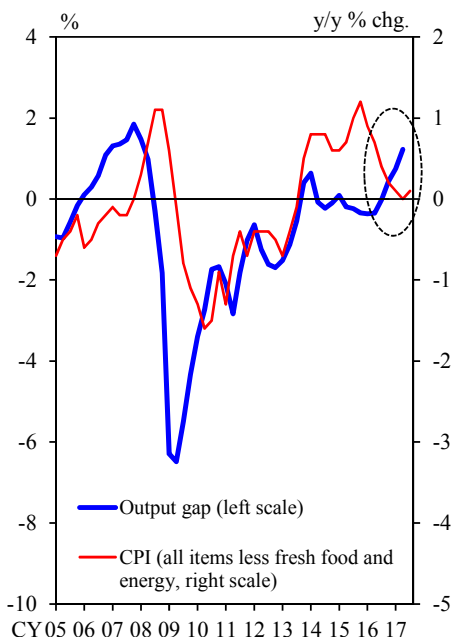


Note: Based on BOJ staff estimations using 10-year JGB yields, etc. For details of the estimation procedures of the natural rate of interest, see Imakubo *et al.* (2015), "The Natural Yield Curve: Its Concept and Measurement," Bank of Japan Working Paper Series, 15-E-5. The shaded area indicates the 95 percent confidence interval for the natural rate of interest.

Sources: Consensus Economics Inc., "Consensus Forecasts"; Bloomberg; Bank of Japan, etc.

Japan's Economy

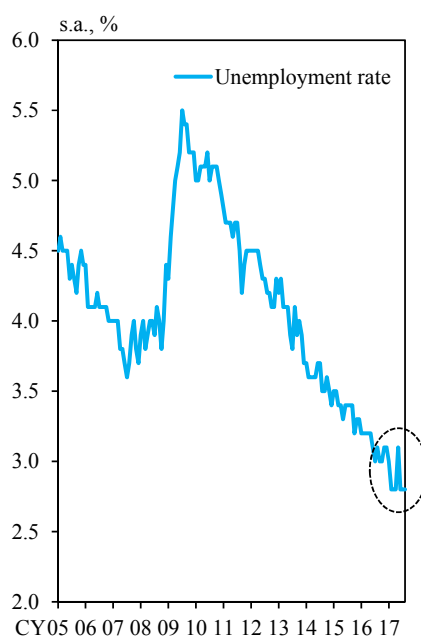
Output Gap and Prices



Corporate Profits



Unemployment Rate



Notes: 1. The output gap is based on BOJ staff estimations.
 2. The CPI figures are adjusted for changes in the consumption tax rate. The figure for 2017/Q3 is the July-August average.
 3. Figures for corporate profits are based on the *Financial Statements Statistics of Corporations by Industry, Quarterly*. Excluding "finance and insurance."
 Sources: Bank of Japan; Ministry of Internal Affairs and Communications; Ministry of Finance.

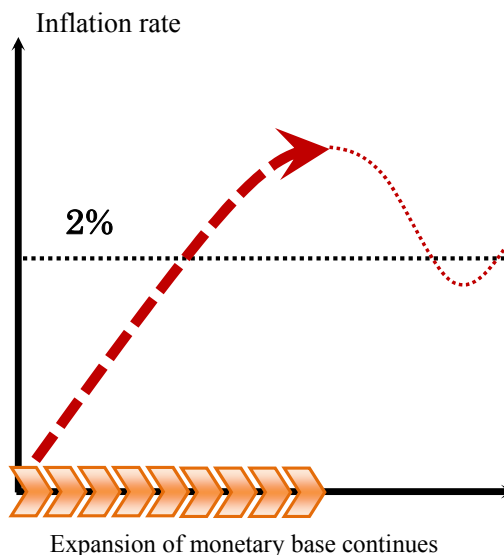
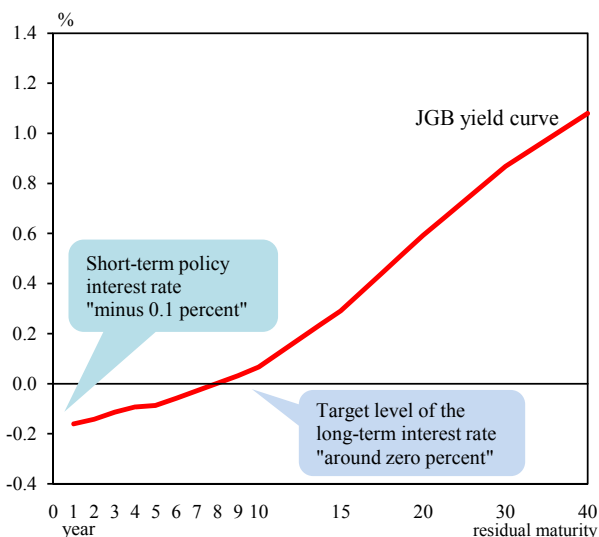
QQE with Yield Curve Control

Yield Curve Control

BOJ facilitates the formation of a yield curve that is considered most appropriate for maintaining the momentum toward achieving the price stability target of 2 percent, taking account of developments in economic activity and prices as well as financial conditions.

Inflation-overshooting Commitment

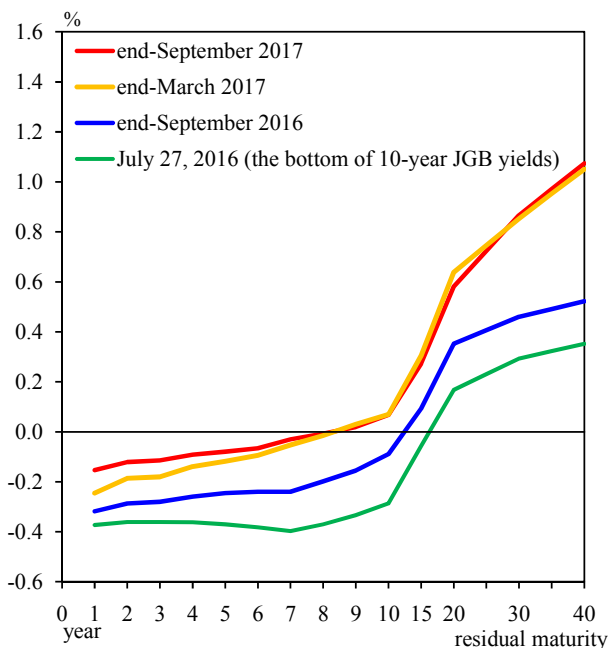
BOJ will continue expanding the monetary base until the year-on-year rate of increase in the observed CPI exceeds 2 percent and stays above that level in a stable manner.



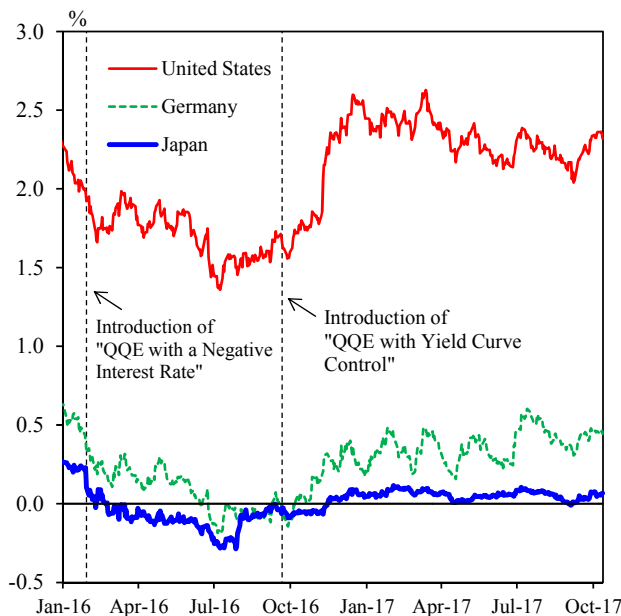
Source: Bloomberg.

Interest Rates

Japan's Yield Curve



10-year Government Bond Yields in Selected Advanced Economies



Source: Bloomberg.

Evolution of the "Lender of Last Resort"

Conventional "Lender of Last Resort" Function

- Responding to the risk of the deterioration of business conditions at one financial institution tainting those at other financial institutions mainly through depositors' inferences



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Liquidity Assistance to Nonbanks

- Responding to the risk of the deterioration of business conditions at nonbanks destabilizing financial markets

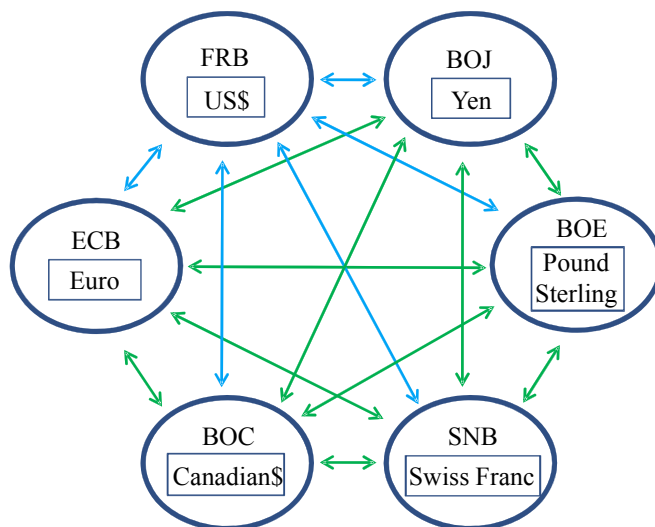
Liquidity Assistance to a Market

- Responding to the contraction of market activities resulting from concerns over counterparty risk among market participants

Liquidity Assistance of Foreign Currencies

- Responding to foreign currency liquidity shortages faced by globally active financial institutions

Network of Central Banks' Swap Lines



"Designing frameworks for central bank liquidity assistance" (Excerpt)

Changes in the Environment Surrounding Central Banks

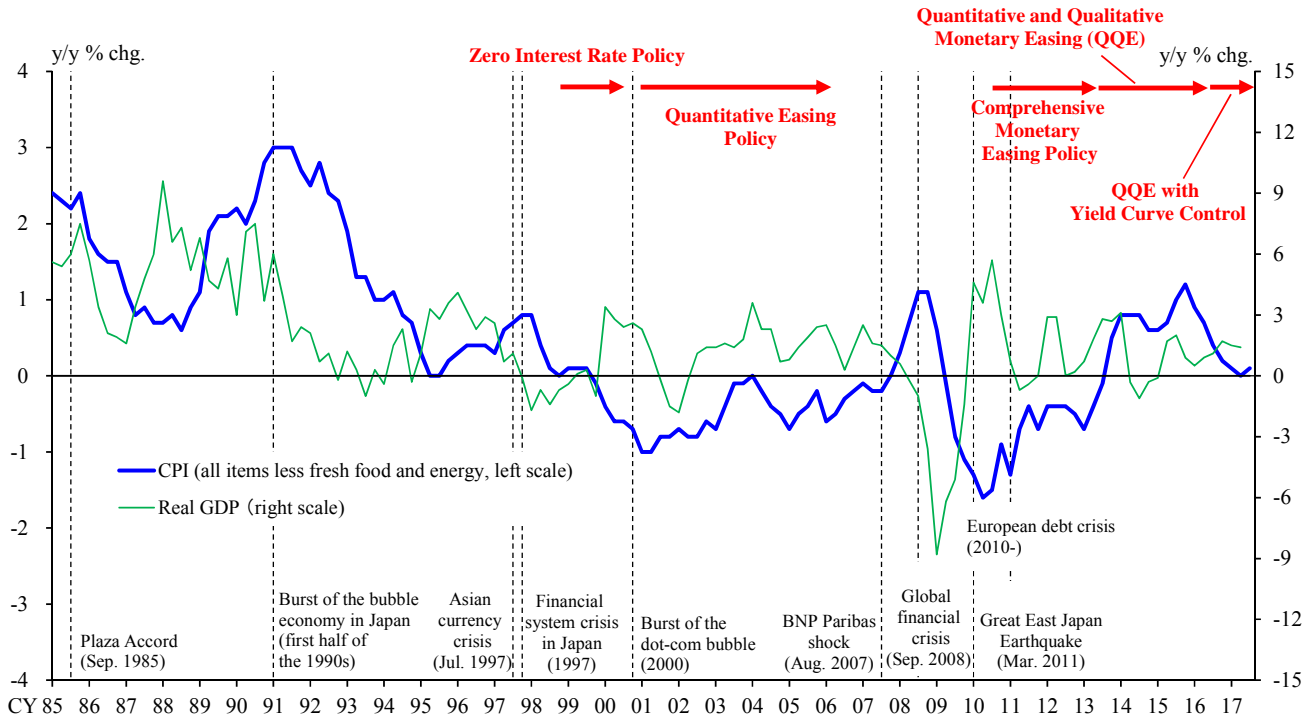
- Growing importance of liquidity assistance for globally active financial institutions
 - Expansion of financial institutions' international activities, and strengthening of relationship among markets
- Growing needs for transparency and accountability of liquidity assistance
 - Increasing difficulty in non-disclosure of the details of liquidity assistance since the global financial crisis
- Rise in the weight of market-based forms of financial intermediation (funding through financial markets)
 - Growing importance of maintaining market function and market liquidity



Principle of Central Banks' Liquidity Assistance

Bilateral liquidity assistance	
◆ Principle of cooperation among central banks	
	Principle 1: Allocation of responsibility
	Principle 2: Information-sharing
◆ Principle of practical issue	
	Principle 3: Eligibility
	Principle 4: Solvency
	Principle 5: Collateral
	Principle 6: Provision of foreign currency
	Principle 7: Transparency
Liquidity assistance to a market	
	Better understanding of market-based forms of financial intermediation
	Principle 8: Information-sharing among central banks

Japan's Economy and BOJ's Monetary Policy



Note: The CPI figures are adjusted for changes in the consumption tax rate.
 Sources: Ministry of Internal Affairs and Communications; Cabinet Office.