

# Japan's Economy and Monetary Policy

*Speech at a Meeting with Business Leaders in Aomori*

June 27, 2019

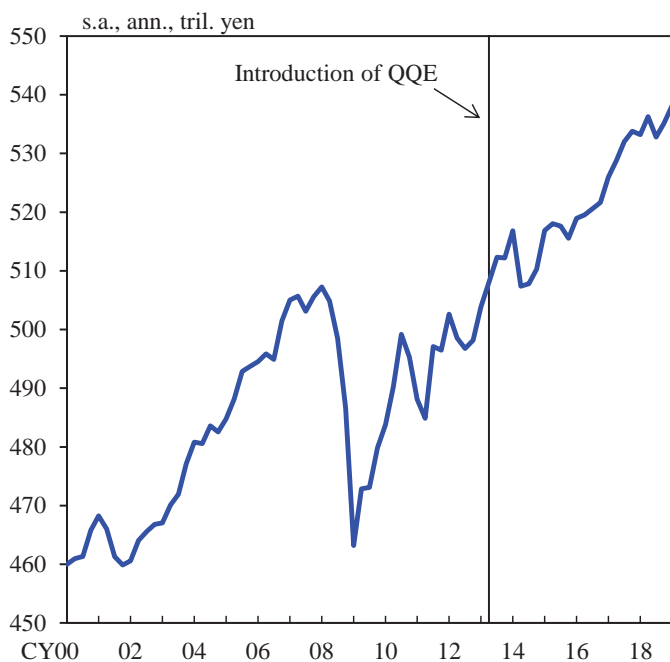
Masazumi Wakatabe

*Deputy Governor of the Bank of Japan*

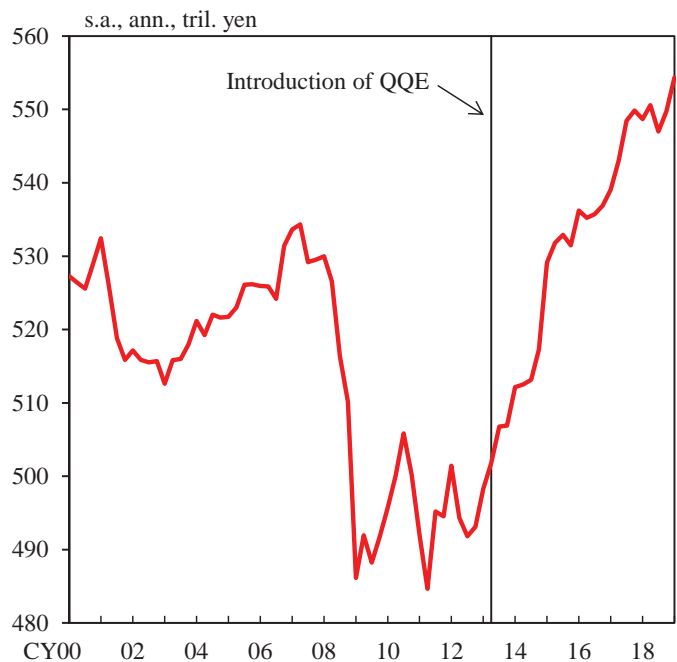
Chart 1

## Japan's Economy

*Real GDP*

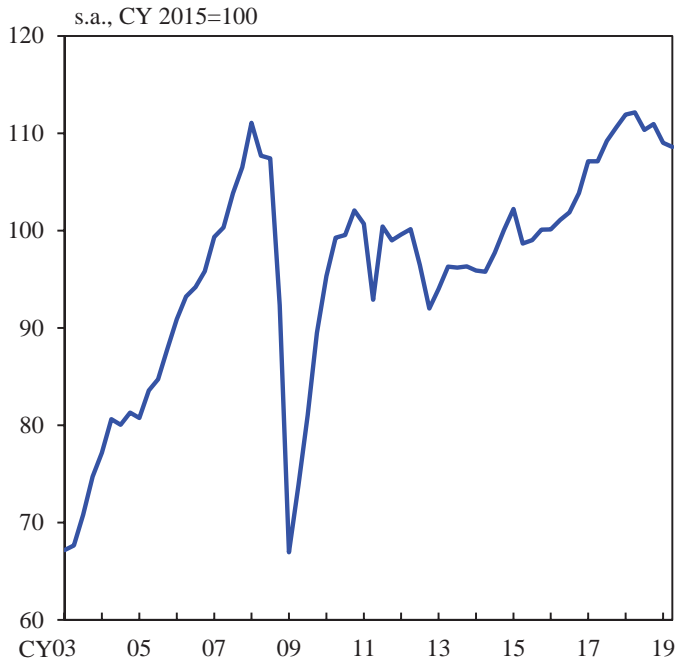


*Nominal GDP*

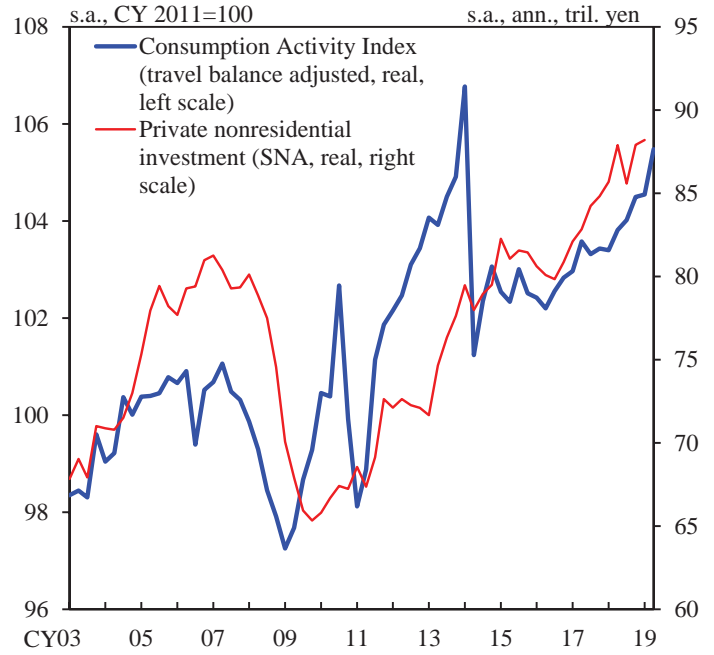


# Exports and Domestic Demand

*Real Exports*



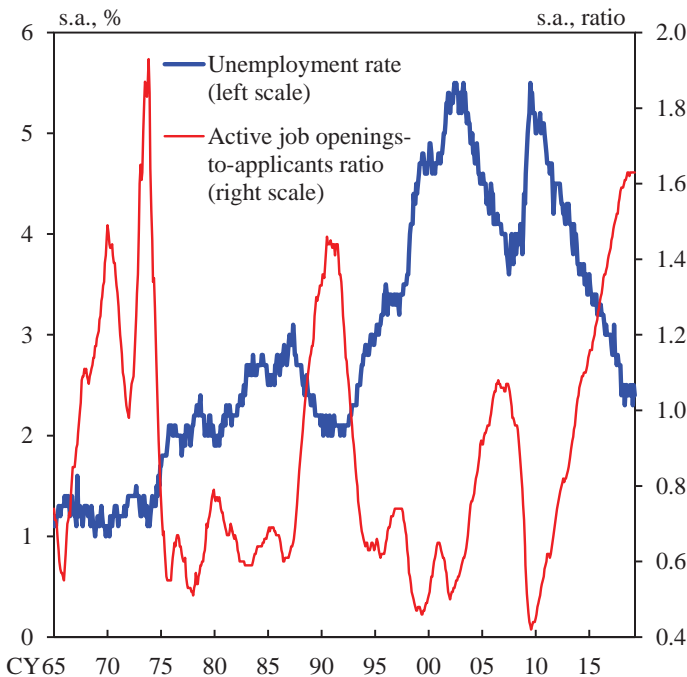
*Domestic Demand*



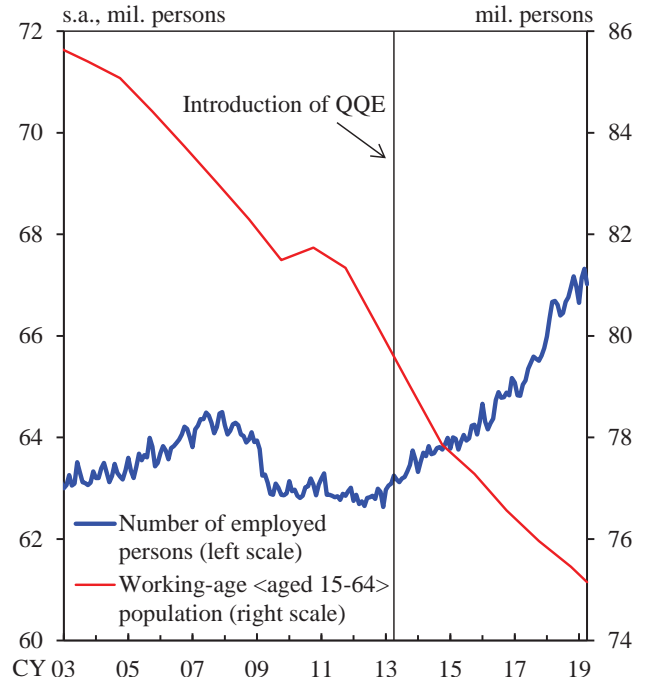
Note: In the right chart, figures for the Consumption Activity Index (travel balance adjusted) exclude inbound tourism consumption and include outbound tourism consumption.  
Sources: Ministry of Finance; Cabinet Office; Bank of Japan, etc.

# Labor Market Tightening

*Active Job Openings-to-Applicants Ratio and Unemployment Rate*



*Working-Age Population and Number of Employed Persons*

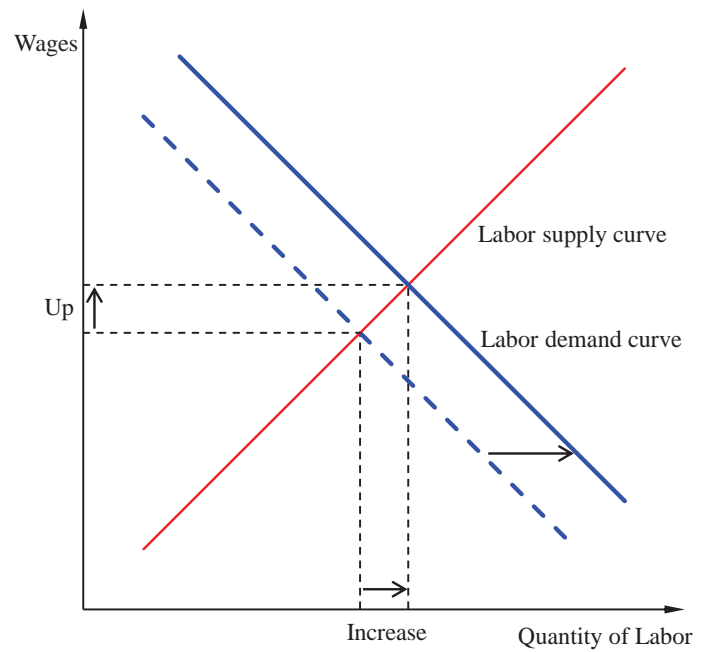
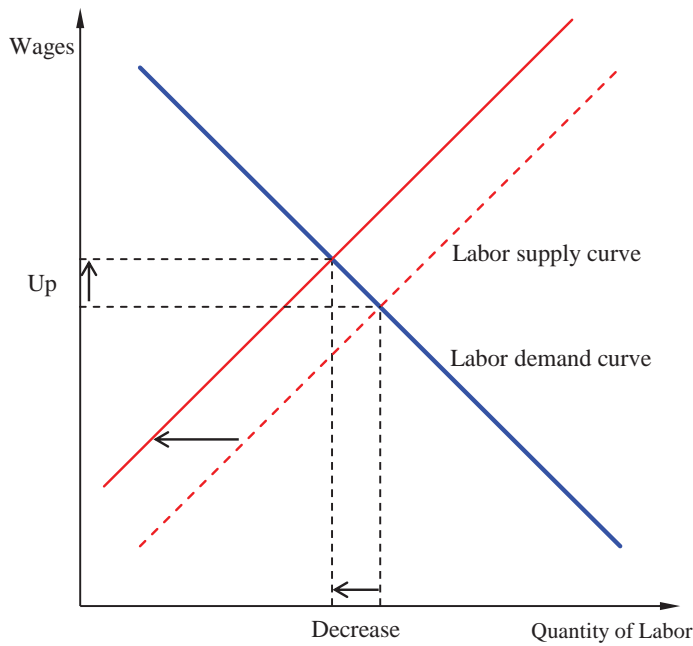


Sources: Ministry of Internal Affairs and Communications; Ministry of Health, Labour and Welfare.

# Mechanism of Labor Market Tightening

*Decrease in Labor Supply*

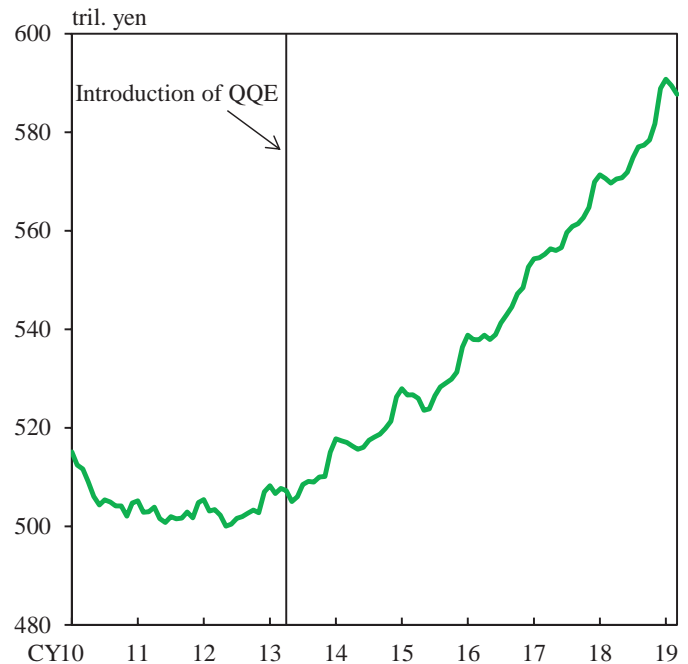
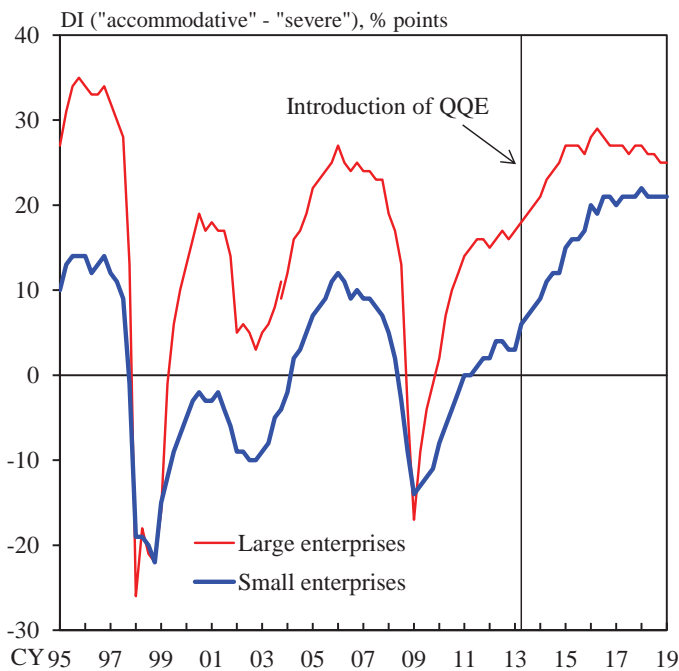
*Increase in Labor Demand*



# Effects of QQE: Financial Conditions

*Lending Attitudes of Financial Institutions as Perceived by Firms*

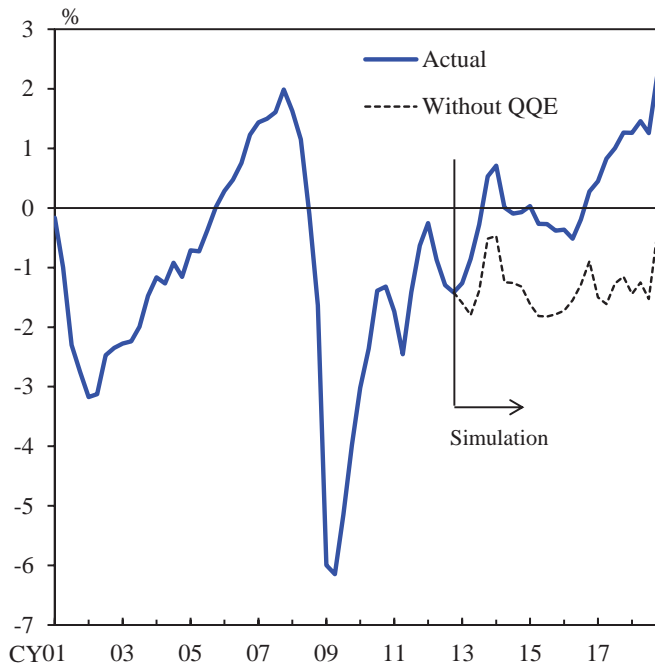
*Amount Outstanding of Private-Sector Funding*



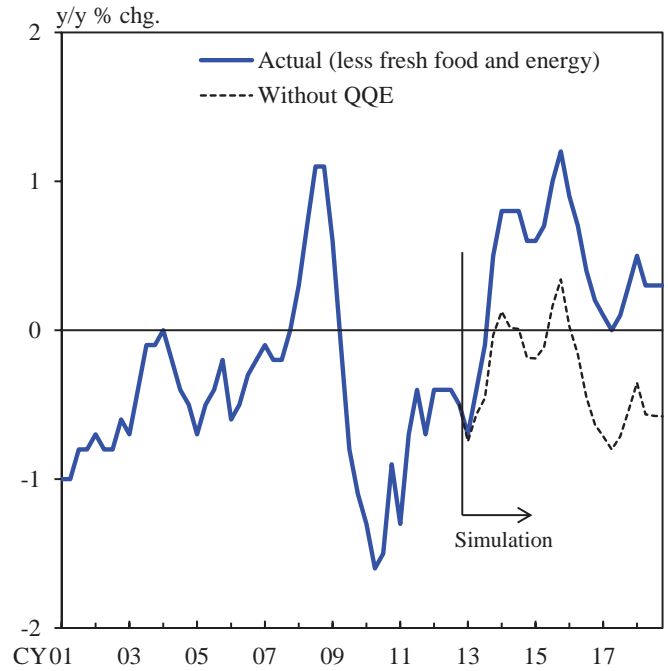
Notes: 1. In the left chart, figures are based on the *Tankan*. All industries. There is a discontinuity in the data in December 2003 due to a change in the survey framework.  
 2. The right chart shows the sum of loans (domestic private banks and *shinkin* banks), CP, and corporate bonds. Loans outstanding among domestic private banks are adjusted for special items, such as the foreign exchange rates.  
 Sources: Japan Securities Depository Center; I-N Information Systems; Bank of Japan, etc.

# Effects of QQE: Economic Activity and Prices

*Output Gap*



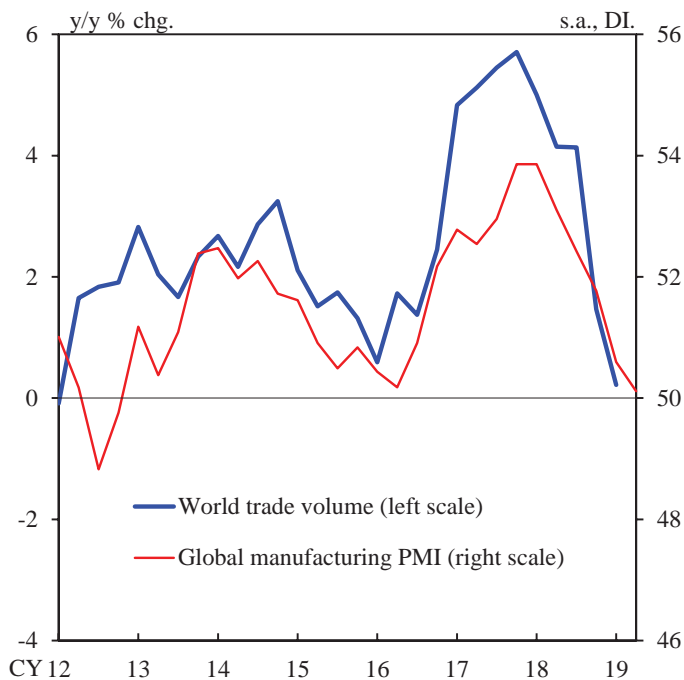
*Consumer Price Index*



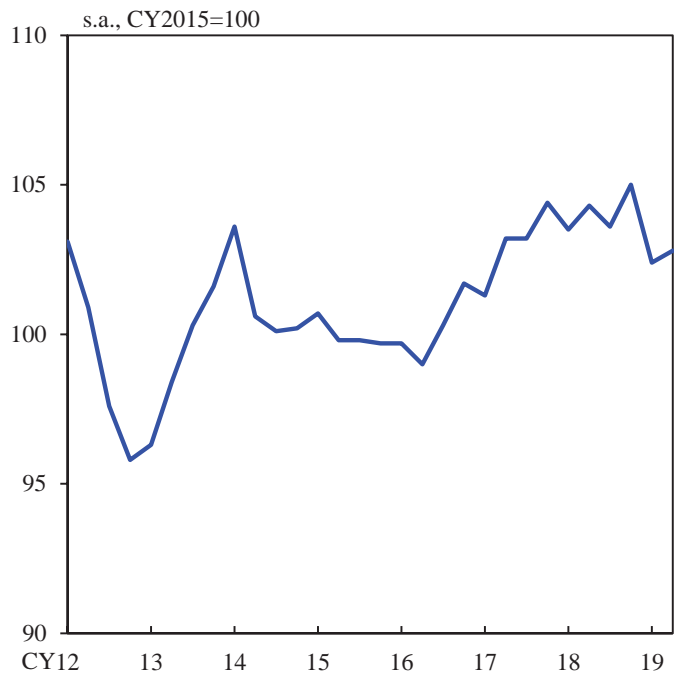
Note: For details of the simulation, see footnote 2 in the main text.  
Sources: Bloomberg; Ministry of Internal Affairs and Communications; Bank of Japan, etc.

# Recent Developments in Overseas Economies and Japan's Production

*World Trade Volume and Global Manufacturing PMI*



*Japan's Industrial Production*



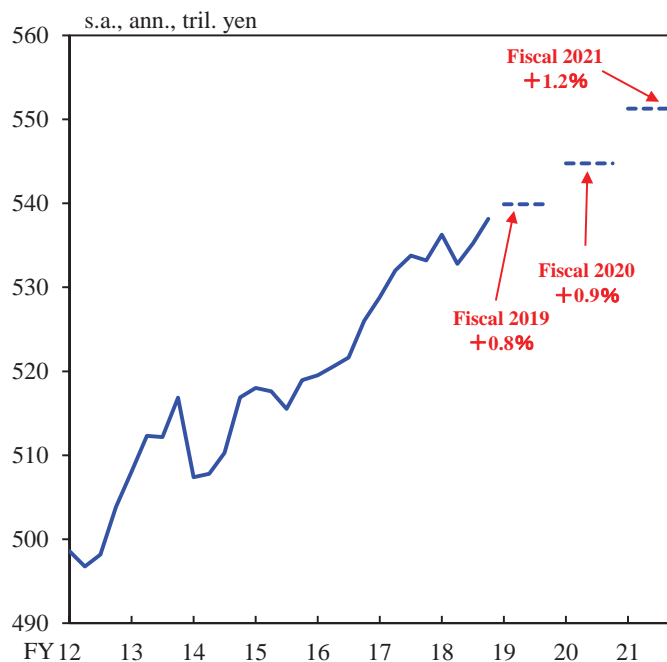
Note: In the left chart, figures for the trade volume are those for real imports. Figures for the global manufacturing PMI are the "J.P. Morgan Global Manufacturing PMI."  
Sources: CPB Netherlands Bureau for Economic Policy Analysis; IHS Markit (© and database right IHS Markit Ltd 2019. All rights reserved.); Ministry of Economy, Trade and Industry.

# Outlook for Economic Activity

*IMF Projections for Major Economies  
(as of April 2019)*

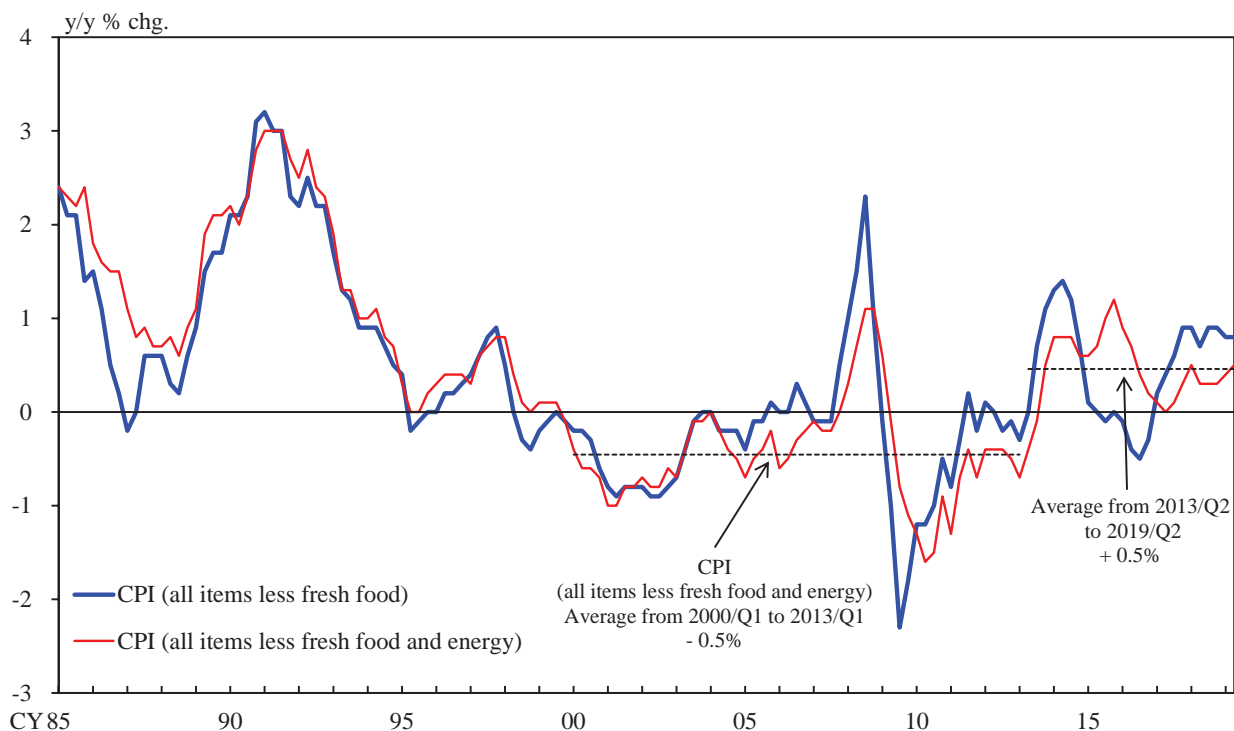
*BOJ's Forecasts of Real GDP  
(April 2019 Outlook Report)*

	y/y % chg., % points			
	2017	2018	2019 Projection	2020 Projection
World	3.8	3.6	<b>3.3</b> <b>(-0.2)</b>	<b>3.6</b> <b>(0.0)</b>
Advanced economies	2.4	2.2	1.8 (-0.2)	1.7 (0.0)
United States	2.2	2.9	2.3 (-0.2)	1.9 (0.1)
Euro area	2.4	1.8	1.3 (-0.3)	1.5 (-0.2)
Japan	1.9	0.8	1.0 (-0.1)	0.5 (0.0)
Emerging market and developing economies	4.8	4.5	4.4 (-0.1)	4.8 (-0.1)
China	6.8	6.6	6.3 (0.1)	6.1 (-0.1)
ASEAN-5	5.4	5.2	5.1 (0.0)	5.2 (0.0)
Latin America and the Caribbean	1.2	1.0	1.4 (-0.6)	2.4 (-0.1)



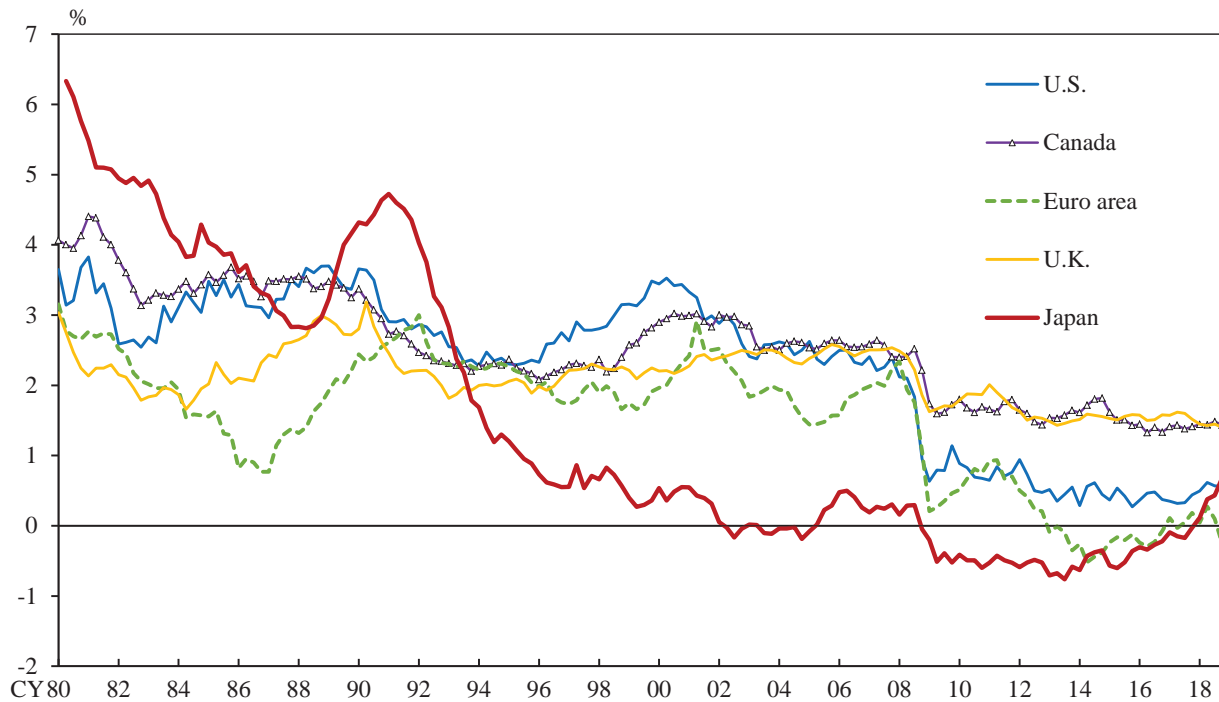
Notes: 1. In the left chart, figures in parentheses show the differences from the January 2019 projections.  
2. In the right chart, forecasts are the medians of the Policy Board members' forecasts (point estimates).  
Sources: IMF; Cabinet Office; Bank of Japan.

# Consumer Prices



Note: Figures are adjusted for changes in the consumption tax rate.  
Source: Ministry of Internal Affairs and Communications.

## Natural Rates of Interest



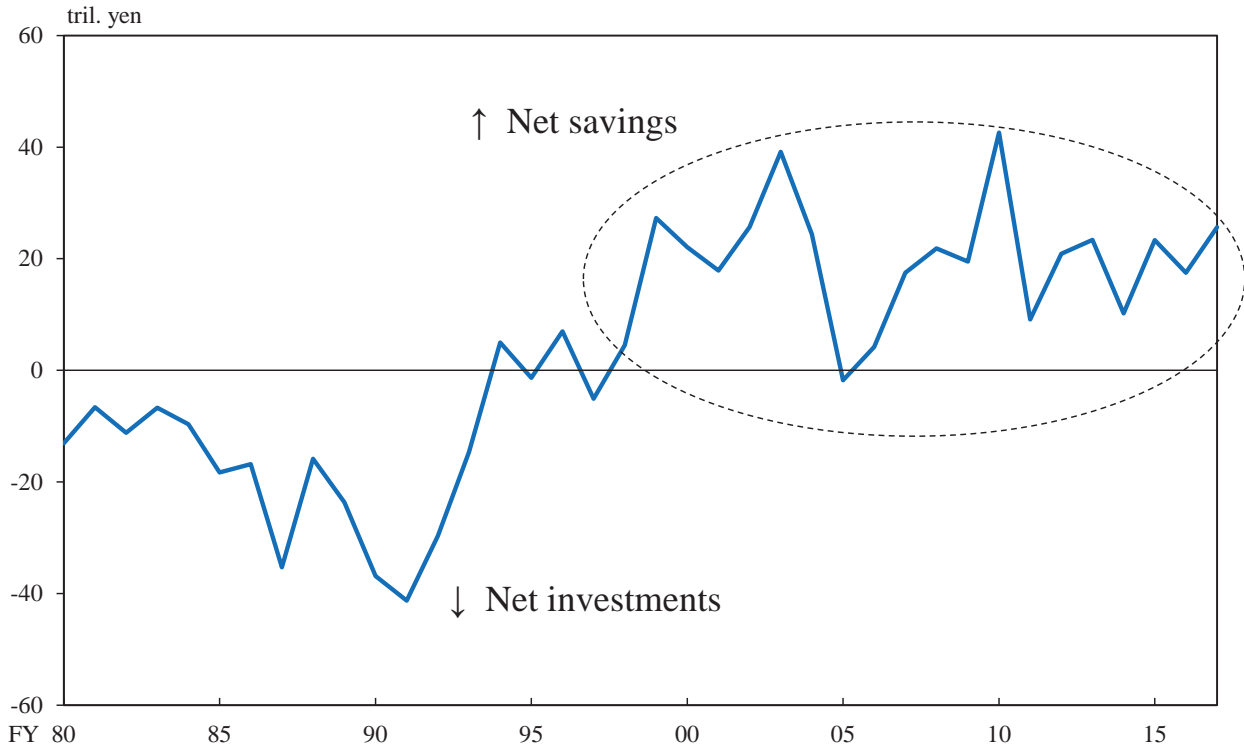
Sources: Kathryn Holston, Thomas Laubach, and John C. Williams, "Measuring the Natural Rate of Interest: International Trends and Determinants," *Journal of International Economics*, 2017, 108, S59-S75; Yosuke Okazaki and Nao Sudo, "Natural Rate of Interest in Japan: Measuring Its Size and Identifying Drivers Based on a DSGE Model," *Bank of Japan Working Paper Series*, no.18-E-6, 2018.

## Discussions over the Monetary Policy Framework Overseas

Proposals	Description
<b>Higher Inflation Target</b>	... raise the target [from 2 percent] to, say, 3 or 4 percent (Bernanke, 2017)
<b>Average Inflation Targeting</b>	... targeting average inflation over a multiyear period (Clarida, 2019)
<b>Price-Level Targeting</b>	... [targeting] the level of prices on a steady growth path, rising by (say) 2 percent per year (Bernanke, 2017)
<b>Temporary Price-Level Targeting</b>	... apply a price-level target ... only to periods around ZLB episodes, retaining ... the current 2 percent [inflation] target at other times (Bernanke, 2017)
<b>Inflation Target Range</b>	... [setting a] goal within that range ..., perhaps year by year, depending on specific economic circumstances (Rosengren, 2018)
<b>Nominal GDP Targeting</b>	... targeting the growth rate or the level of nominal GDP (Svensson, 2019)

Sources: Ben S. Bernanke, "Temporary Price-Level Targeting: An Alternative Framework for Monetary Policy," The Brookings Institution, October 12, 2017, <https://www.brookings.edu/blog/ben-bernanke/2017/10/12/temporary-price-level-targeting-an-alternative-framework-for-monetary-policy/>; Richard H. Clarida, "The Federal Reserve's Review of Its Monetary Policy Strategy, Tools, and Communication Practices," remarks at the 2019 U.S. Monetary Policy Forum, February 22, 2019; Eric S. Rosengren, "Considering Alternative Monetary Policy Frameworks: An Inflation Range with an Adjustable Inflation Target," speech at the Money, Models, & Digital Innovation Conference, January 12, 2018; and Lars E.O. Svensson, "Monetary Policy Strategies for the Federal Reserve," prepared for a presentation at the Conference on Monetary Policy Strategy, Tools, and Communication Practices at the Federal Reserve Bank of Chicago, June 5, 2019.

# Saving-Investment Balance of the Private Corporate Sector

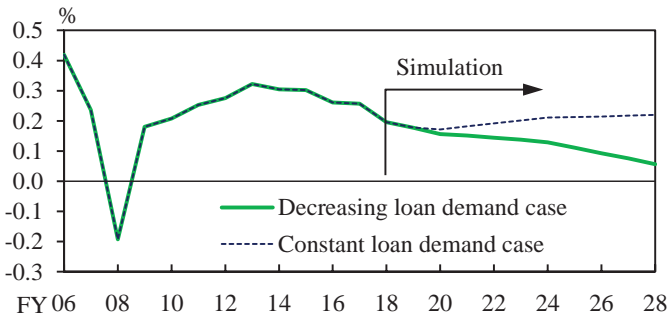


Note: Private non-financial corporations.  
Source: Bank of Japan.

# Simulation of Medium- to Long-Term Bank Profits

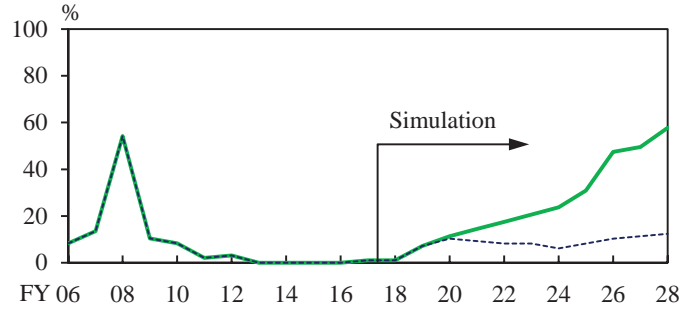
## Net Income ROA

### [Domestic Regional Banks]

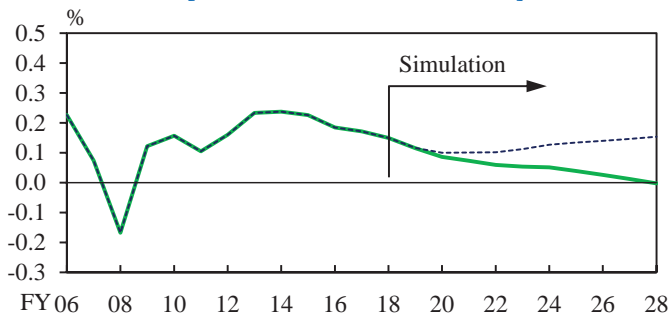


## Share of Banks with Net Losses

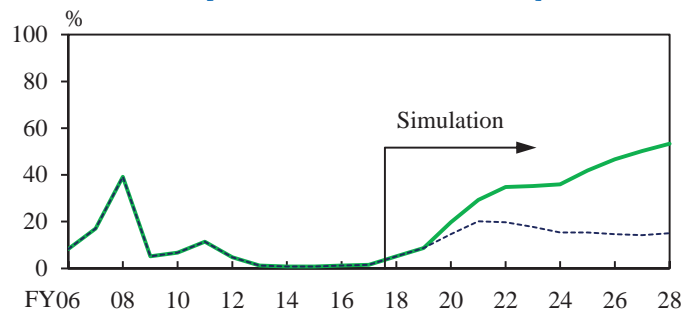
### [Domestic Regional Banks]



### [Domestic Shinkin Banks]



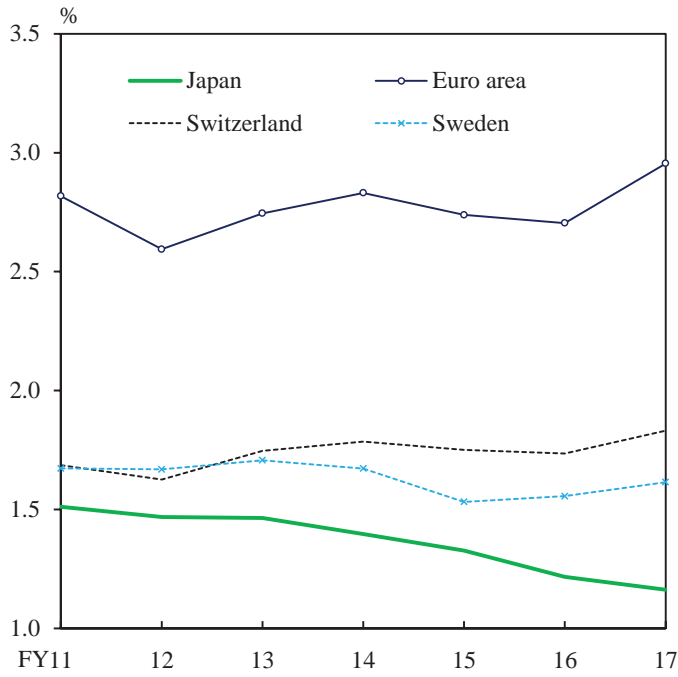
### [Domestic Shinkin Banks]



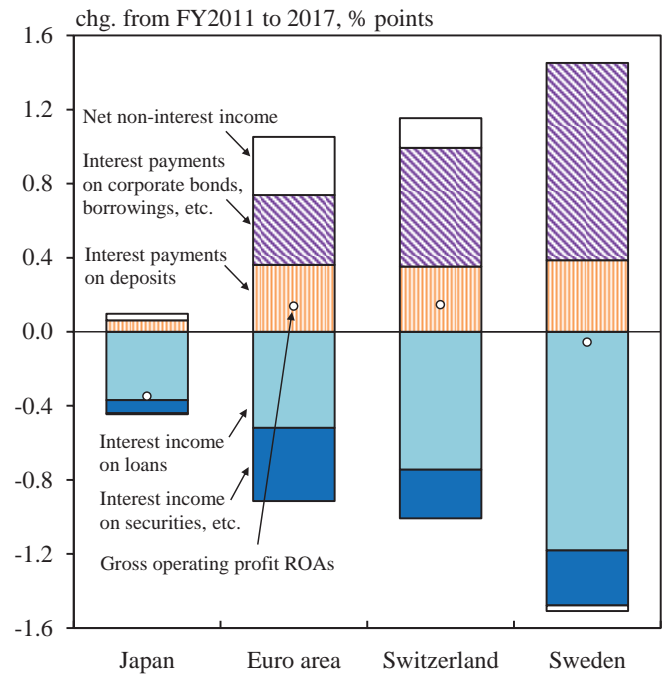
Source: Bank of Japan.

# Comparison with Negative Policy Rate Countries

## Gross Operating Profit ROAs



## Factors in their Changes



Note: Gross operating profits of Japanese banks include realized gains/losses on stockholdings to make them comparable with those of banks in other countries.  
Sources: S&P Global Market Intelligence; Bank of Japan.