Japan's Inflation Dynamics and the Role of Monetary Policy

Speech at Columbia University in New York

April 22, 2022

KURODA Haruhiko

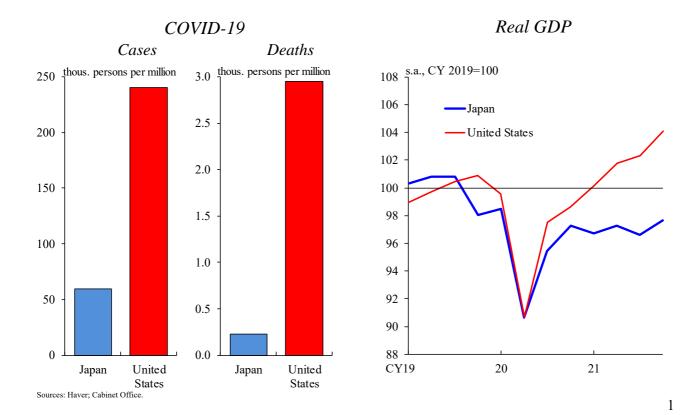
Governor of the Bank of Japan

Introduction

- I. Developments in Economic Activity and Prices in Japan and the United States
- II. The Role of the Bank's Monetary Policy

Conclusion: Toward Achieving Sustainable Growth with Price Stability

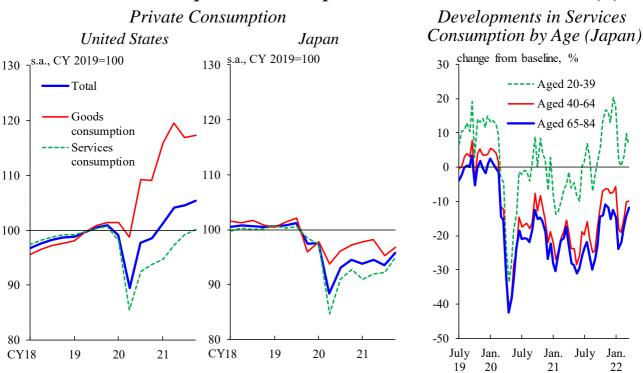
Economic Developments in Japan and the United States (1)



I. Developments in Economic Activity and Prices in Japan and the United States

Chart 2

Economic Developments in Japan and the United States (2)

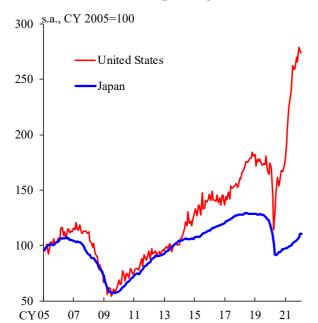


Note: In the right-hand chart, figures are from the reference series in *JCB Consumption NOW*, which take changes in the number of consumers into account. Figures are the arithmetic averages of the corresponding age groups in five-year increments. The baseline is the average for the corresponding half of the month for 2016 through 2018.

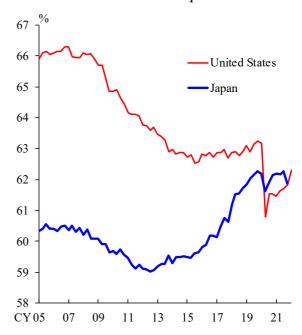
Sources: Haver; Cabinet Office; Nowcast Inc./ JCB, Co., Ltd., "JCB Consumption NOW."

Labor Market Conditions in Japan and the United States





Labor Force Participation Rate



Sources: Haver; Ministry of Health, Labour and Welfare.

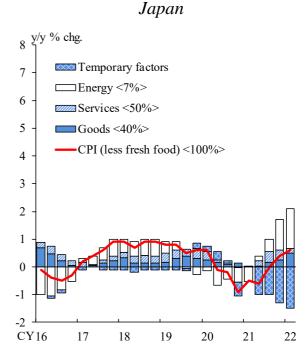
3

I. Developments in Economic Activity and Prices in Japan and the United States

Chart 4

Consumer Prices in Japan and the United States

United States % chg. 8 \Box Energy < 7%> 7 Services <63%> 6 Goods <30%> 5 CPI <100%> 4 3 2 -2 CY16 19 20 17 18 21 22



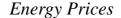
Notes: 1. Figures for services include administered prices.

2. Figures for temporary factors for Japan are staff estimates and consist of mobile phone charges and the effects of the consumption tax hike, policies concerning the provision of free education, and the "Go To Travel" campaign, which covers a portion of domestic travel expenses.

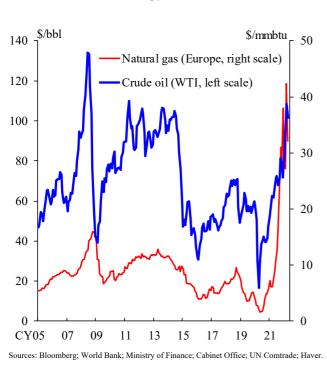
3. Figures in angular brackets show the share of each component. Figures for temporary factors for Japan include mobile phone charges (weight: 3%).

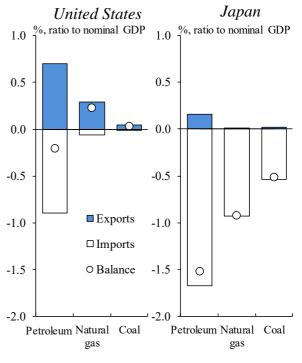
Sources: Ministry of Internal Affairs and Communications; Haver.

Commodity Prices and Commodity Exports and Imports



Trade Balance in Energy Resources (2021)





5

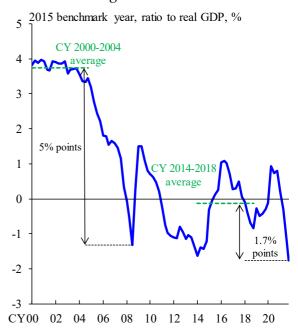
II. The Role of the Bank's Monetary Policy

Chart 6

Output Gap and Trading Gains and Losses in Japan

Output Gap 3 2 1 0 -2 -3 -5 -6 CY00 08 10 12 14 18 02 04 06 16

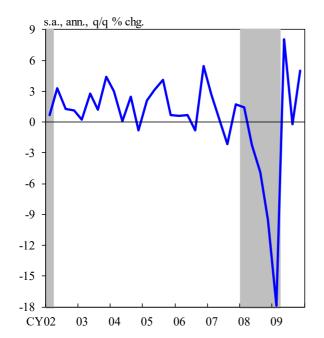
Trading Gains and Losses



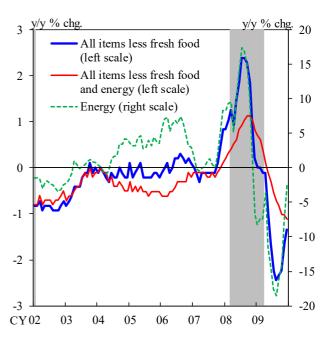
Sources: Bank of Japan; Cabinet Office.

Developments in Japan's Economic Activity and Prices in 2008





Consumer Prices



Note: Shaded areas denote recession periods. Sources: Cabinet Office; Ministry of Internal Affairs and Communications

7

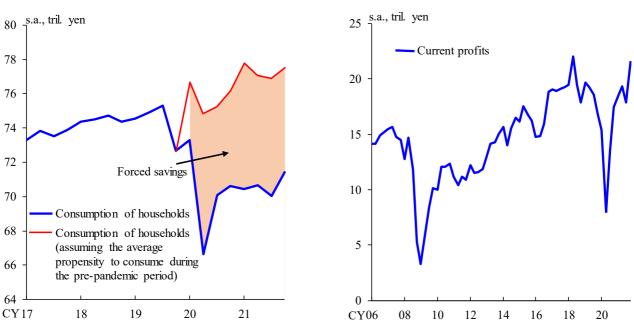
II. The Role of the Bank's Monetary Policy

Chart 8

Forced Savings in the Household Sector and Corporate Profits in Japan

Forced Savings

Corporate Profits

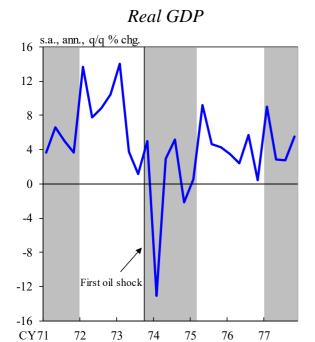


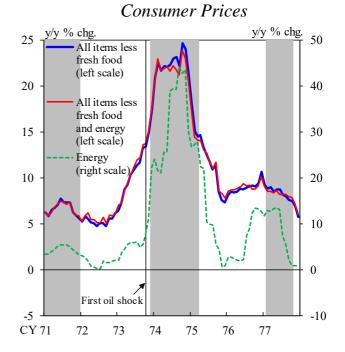
Notes: 1. In the left-hand chart, Consumption of households (assuming the average propensity to consume during the pre-pandemic period) = Disposable income, etc. (consisting of disposable income and "adjustment for the change in pension entitlements" and excluding special cash payments) × Average propensity to consume during the pre-pandemic period. "Pre-pandemic period" in the equation refers to the period from 2015 through 2019.

2. In the right-hand chart, figures are based on the Financial Statements Statistics of Corporations by Industry, Quarterly and exclude "finance and insurance." Figures from 2009/Q2 onward exclude pure holding companies.

Sources: Cabinet Office; Ministry of Finance, etc.

Developments in Japan's Economic Activity and Prices at the Time of the First Oil Shock





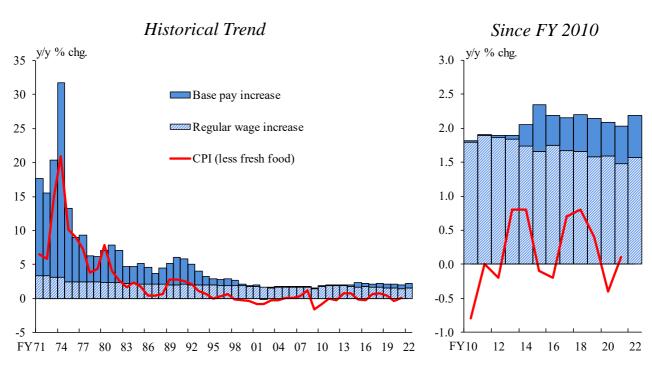
Note: Shaded areas denote recession periods. Sources: Cabinet Office; Ministry of Internal Affairs and Communications

9

II. The Role of the Bank's Monetary Policy

Chart 10

Prices and Wages in Japan



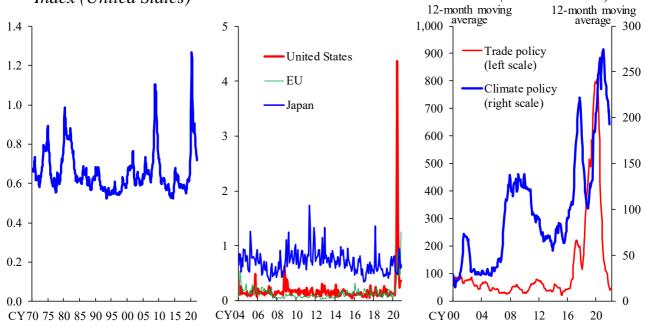
Notes: 1. Figures for wages through fiscal 2014 are based on the Comprehensive Survey on Wage Conditions conducted by the Central Labour Relations Commission. Those from fiscal 2015 onward are based on the wage negotiation results where the resulting increase in wages is clear among the results compiled by the Japanese Trade Union Confederation (RENGO).

2. The CPI figures for fiscal 1997 onward are adjusted for the consumption tax hikes.

Sources: Ministry of Internal Affairs and Communications; Central Labour Relations Commission; Japanese Trade Union Confederation (RENGO).

Heightened Economic Uncertainty

Macroeconomic Uncertainty Economic Surprise Index Economic Policy Uncertainty *Index (United States) Index (United States)*



Note: The latest period is December 2021 for the left-hand chart, November 2020 for the middle chart, and January 2022 for trade policy and December 2021 for climate policy in the right-hand chart.

Sources: Jurado, Kyle, Sydney Ludvigson, and Serena Ng (2015). "Measuring uncertainty," American Economic Review, 105(3); Scotti, Chiara (2016). "Surprise and uncertainty indexes: Real-time aggregation of real-activity macro-surprises," Journal of Monetary Economics, 82; Baker, Scott, Nicholas Bloom, and Steven J. Davis (2016). "Measuring economic policy uncertainty," Quarterly Journal of Economics, 131(4); Gavriilidis, Konstantinos (2021). "Measuring Climate Policy Uncertainty" SSRN.

11

Conclusion: Toward Achieving Sustainable Growth with Price Stability

Chart 12

Decomposition of Economic Growth in Japan and the United States

$$\frac{\text{(a)}}{\text{GDP = Total population}} \times \frac{\frac{\text{(b)}}{\text{Employed persons}}}{\frac{\text{Total population}}{\text{Total population}}} \times \frac{\frac{\text{(c)}}{\text{Total hours worked}}}{\frac{\text{GDP}}{\text{Employed persons}}} \times \frac{\frac{\text{(d)}}{\text{GDP}}}{\text{Total hours worked}}$$

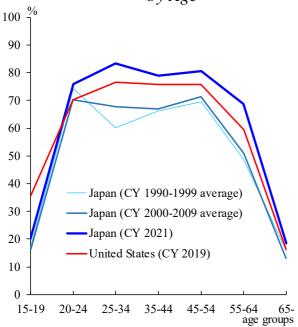
$$\frac{\text{GDP per capita}}{\text{GDP per capita}} \times \frac{\frac{\text{(d)}}{\text{GDP}}}{\text{Total hours worked}} \times \frac{\frac{\text{(d)}}{\text{GDP}}}{\text{Total hours worked}}$$

	Japan							United States						
	average, %								average, %					
		GDP	Total population	GDP per capita	Employed persons/ Total population (b)	Hours worked per person (c)	GDP per hour worked (d)		GDP	Total population	GDP per capita	Employed persons/ Total population (b)	worked per person	GDP per hour worked (d)
٠	1990s	1.6	0.3	1.3	0.1	-1.2	2.4	1990s	3.2	1.2	2.0	0.1	-0.0	1.9
	2000s	0.5	0.1	0.4	-0.2	-0.5	1.0	2000s	1.9	1.0	1.0	-0.5	-0.4	1.9
	2010s	1.2	-0.1	1.3	0.6	-0.4	1.2	2010s	2.3	0.7	1.6	0.5	0.1	1.0

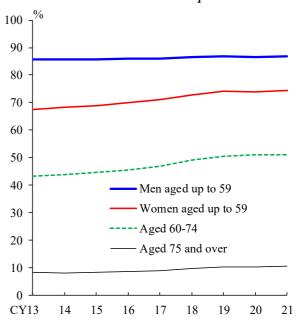
Sources: Cabinet Office; Ministry of Internal Affairs and Communications; OECD

Labor Force Participation Rate in Japan

Women's Labor Force Participation Rate by Age



Developments in the Labor Force Participation Rate



Sources: Ministry of Internal Affairs and Communications; OECD.