

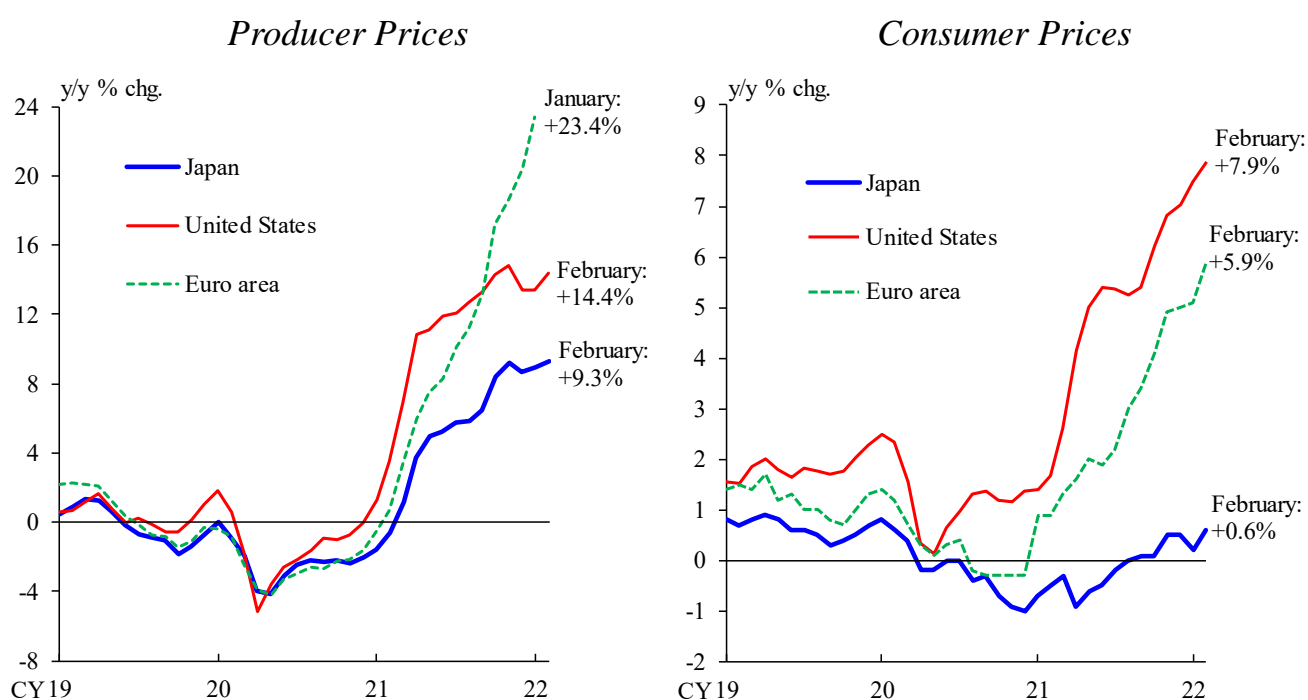
# The COVID-19 Crisis and Inflation Dynamics

March 29, 2022

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*Deputy Governor of the Bank of Japan*

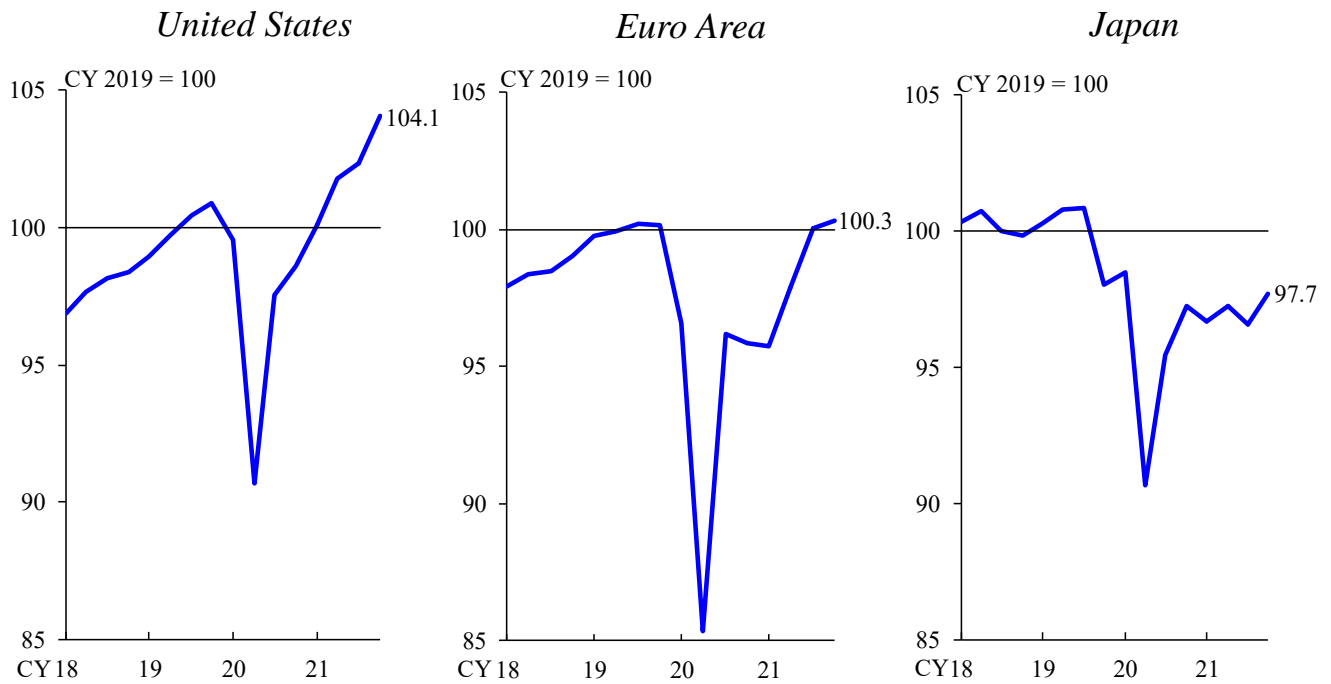
Chart 1

## Price Developments in Japan, the United States, and the Euro Area



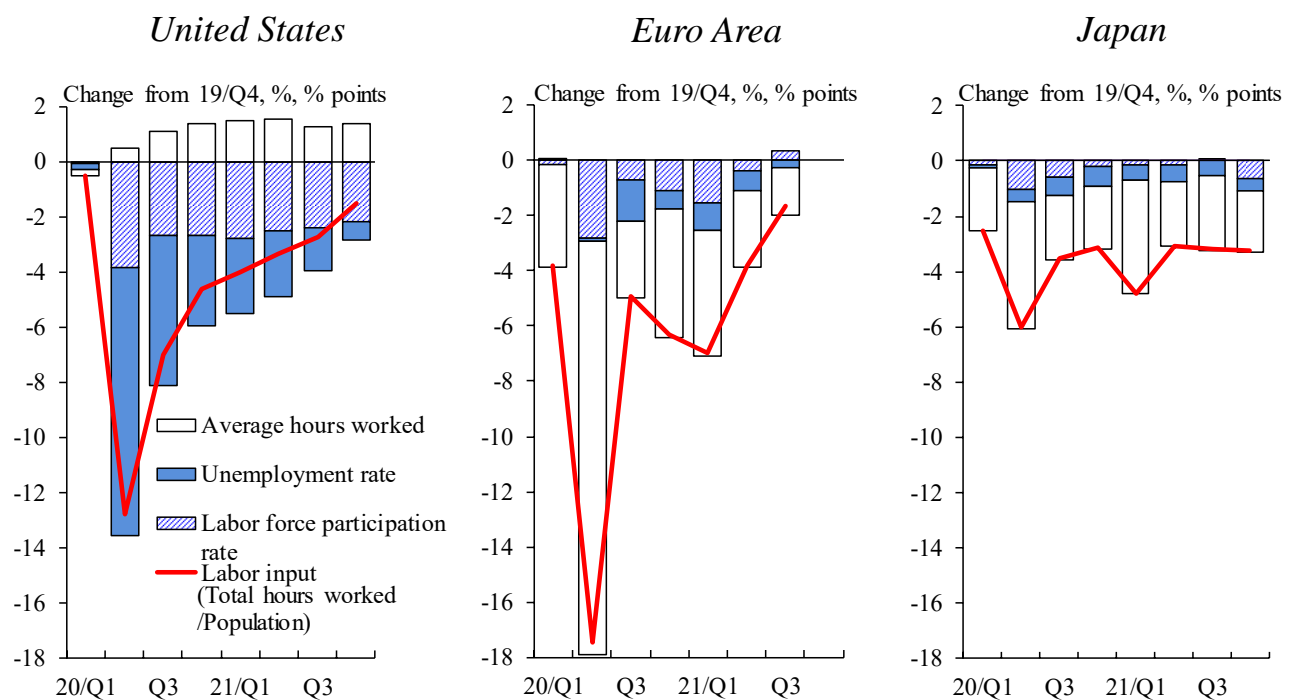
Notes: 1. In the left-hand chart, figures for Japan are for the producer price index (PPI) for all commodities (adjusted to exclude the effects of the consumption tax hike). Those for the United States are for the PPI for final demand goods. Figures for the euro area are for the PPI for total industry except construction, sewerage, waste management, and remediation activities.  
2. In the right-hand chart, figures for Japan are for the CPI for all items excluding fresh food.  
Sources: Bank of Japan; BLS; Eurostat; Haver; Ministry of Internal Affairs and Communications.

# Real GDP in Japan, the United States, and the Euro Area



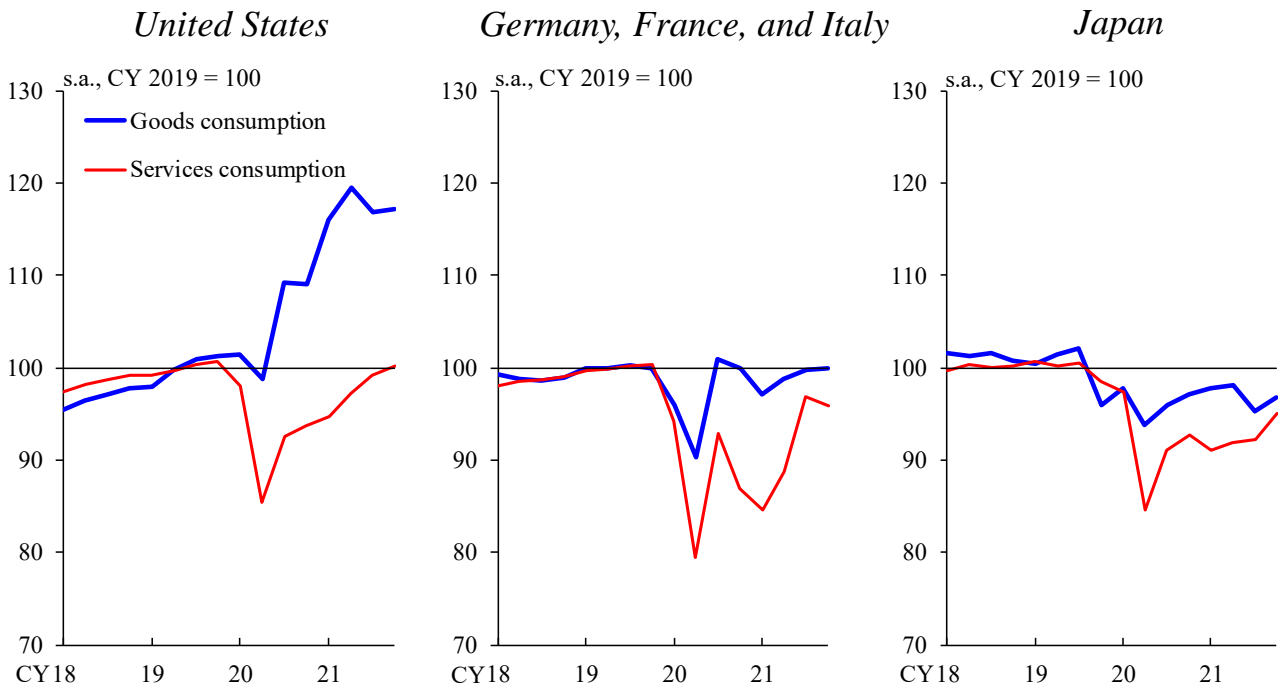
Sources: Haver; Cabinet Office.

# Labor Supply



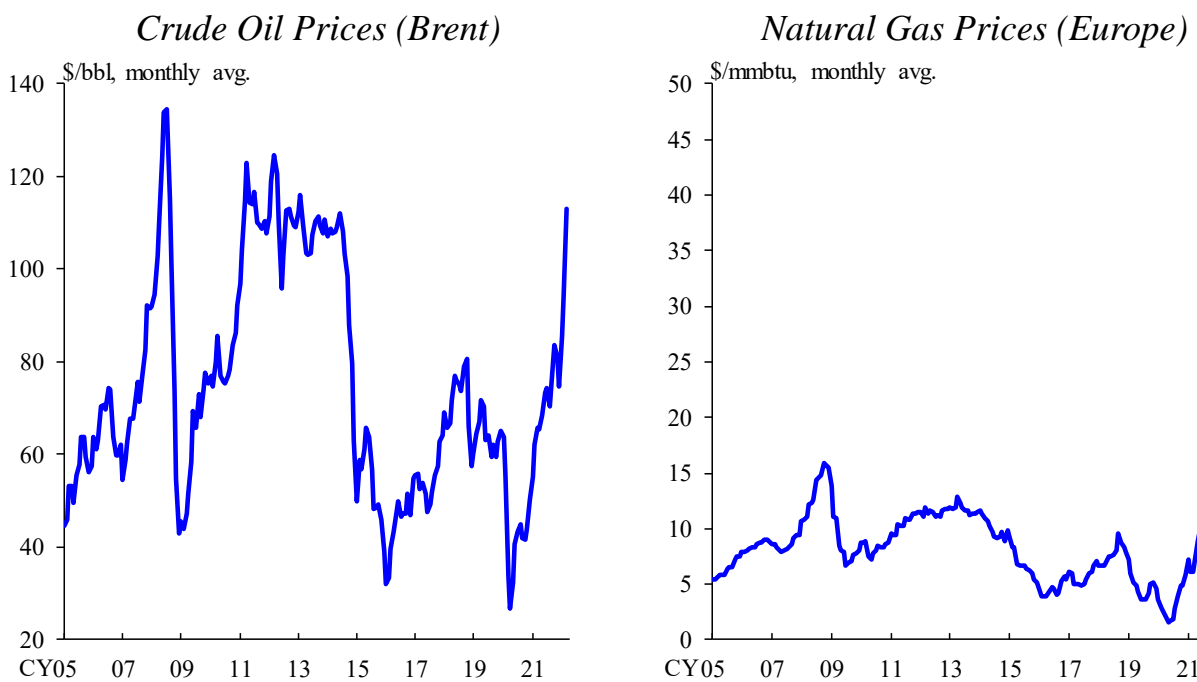
Source: Haver.

## Sectoral Shift in Demand



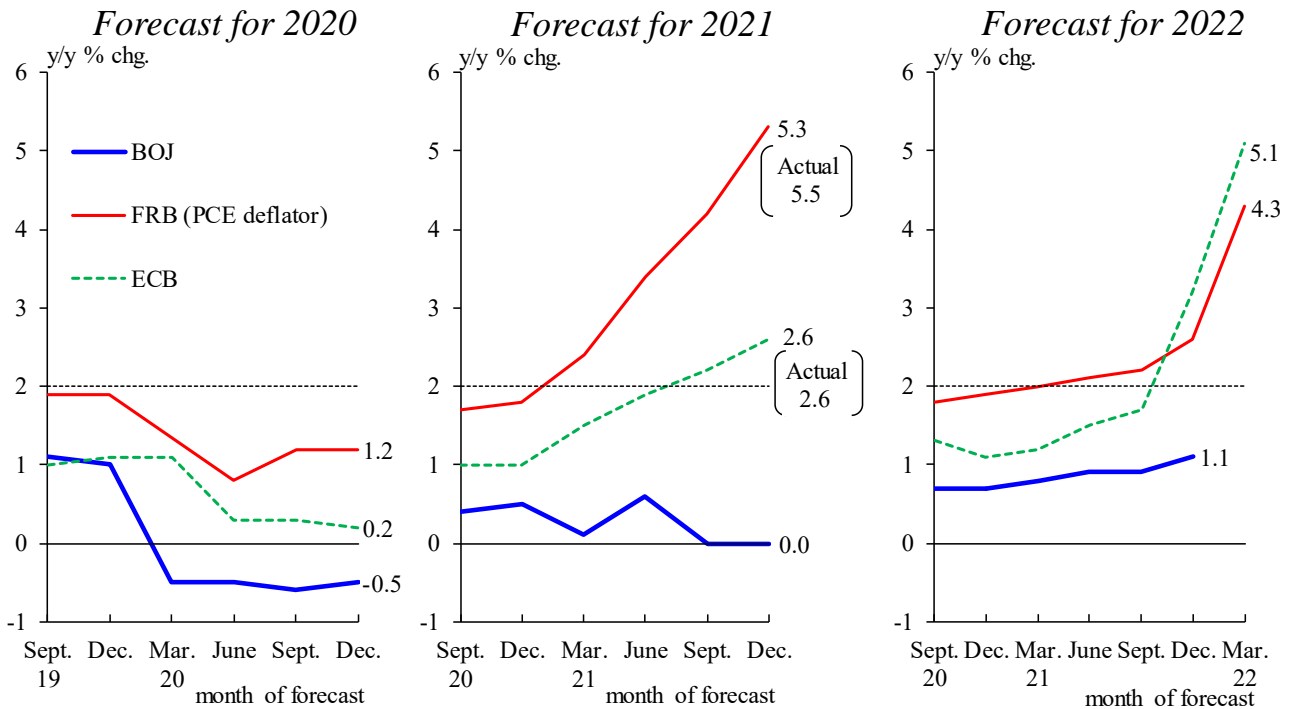
Sources: Haver; Cabinet Office.

## Energy Prices



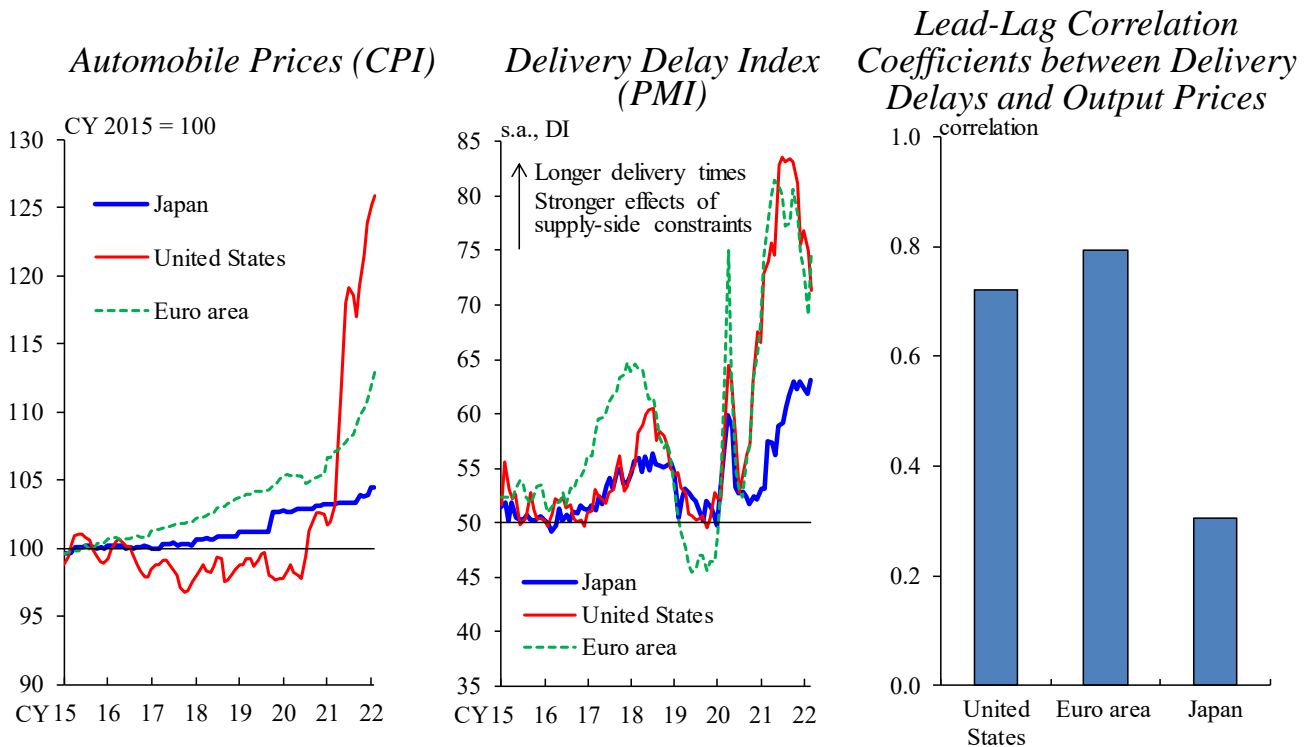
Sources: Bloomberg; World Bank.

# Inflation Forecasts of the BOJ, the FRB, and the ECB



Notes: 1. Forecasts of the Federal Reserve (FRB) and the European Central Bank (ECB) are as of the month shown on the horizontal axis. Those of the Bank of Japan (BOJ) are as of the month following the month shown on the horizontal axis. Forecasts of the BOJ are for the year-on-year rate of change in the CPI for all items excluding fresh food on a fiscal year basis. Those of the FRB are for the percent change in the overall personal consumption expenditure (PCE) deflator from the fourth quarter of the previous year to the fourth quarter of the year indicated. Those for the ECB are for the year-on-year rate of change in the overall Harmonized Index of Consumer Prices (HICP) on a calendar year basis.  
 2. Since the FRB did not release a forecast in March 2020, the figures of the December 2019 and the June 2020 forecasts are connected.  
 3. The BOJ's forecast in April 2020 is the average of the highest and lowest figures of the forecasts of the majority of the Policy Board members.  
 Sources: FRB; ECB; BOJ.

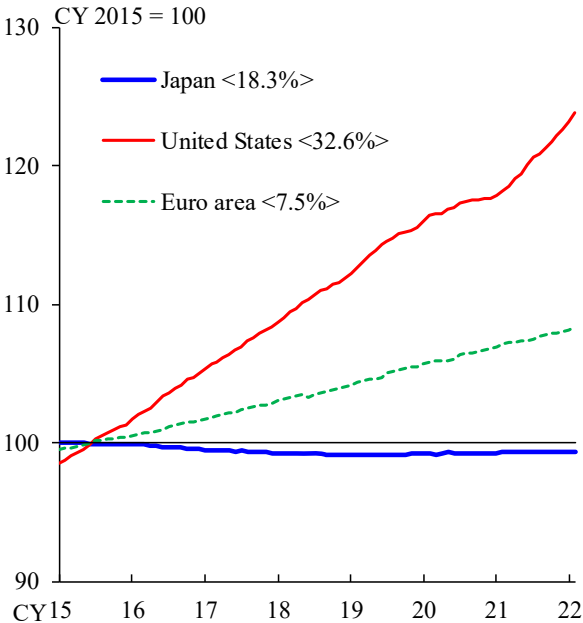
# Supply-Side Constraints and Inflation



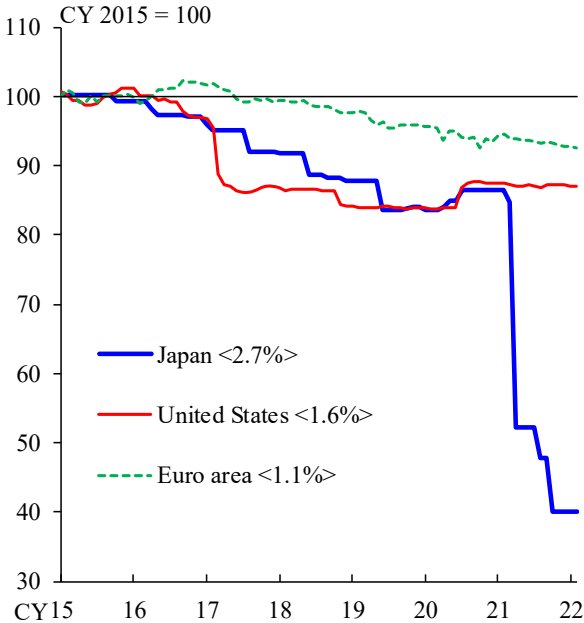
Notes: 1. In the middle chart, Delivery delay index = 100 – Suppliers' delivery times index. Figures for the United States and the euro area are for the respective manufacturing PMIs. Those for Japan are for the au Jibun Bank Japan Manufacturing PMI.  
 2. In the right-hand chart, each bar shows the largest lead-lag correlation coefficient between the delivery delay index and the output prices index. In the estimation, the output prices index lags behind the delivery delay index by one month for the United States, three months for the euro area, and four months for Japan. The estimation period is from May 2007 to June 2021.  
 Sources: Ministry of Internal Affairs and Communications; Haver; Copyright © 2022 by S&P Global Market Intelligence, a division of S&P Global Inc. All rights reserved.

# Key Services Prices

*Housing Rent*

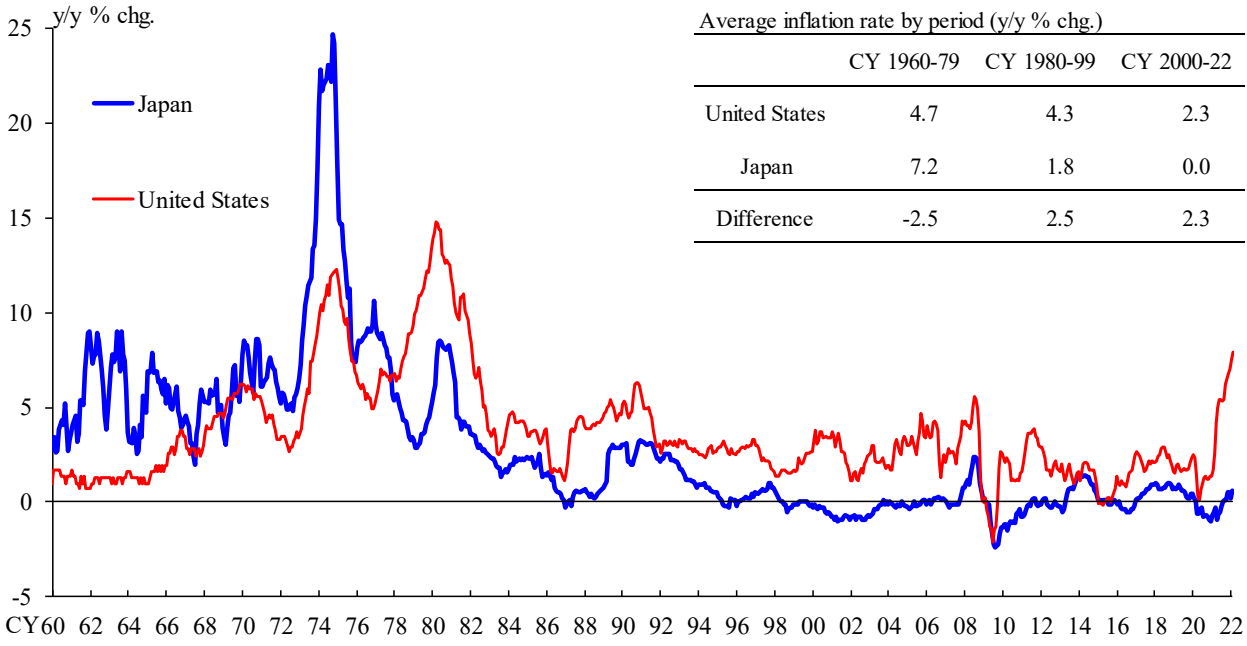


*Mobile Phone Charges*



Notes: 1. The figures in angular brackets show the weight of each component in the price index of the respective economy.  
 2. In the right-hand chart, figures for the euro area through December 2016 are the weighted averages of France and Italy. Those from January 2017 onward are calculated using the month-on-month rate of change in wireless telephone services in the euro area.  
 Sources: Ministry of Internal Affairs and Communications; BLS; Haver.

# Historical Developments in Consumer Prices



Notes: 1. Figures for the United States are for the CPI for all items. Figures for Japan through December 1970 are for the CPI for all items excluding imputed rent, while those from January 1971 onward are for the CPI for all items excluding fresh food.  
 2. Figures for Japan from April 1997 onward exclude the effects of the consumption tax hikes. Those from October 2019 onward also exclude the effects of free early childhood education and childcare.  
 3. In the table, figures for CY 2022 are through February.  
 Sources: Ministry of Internal Affairs and Communications; Haver.