



Economic Activity, Prices, and Monetary Policy in Japan

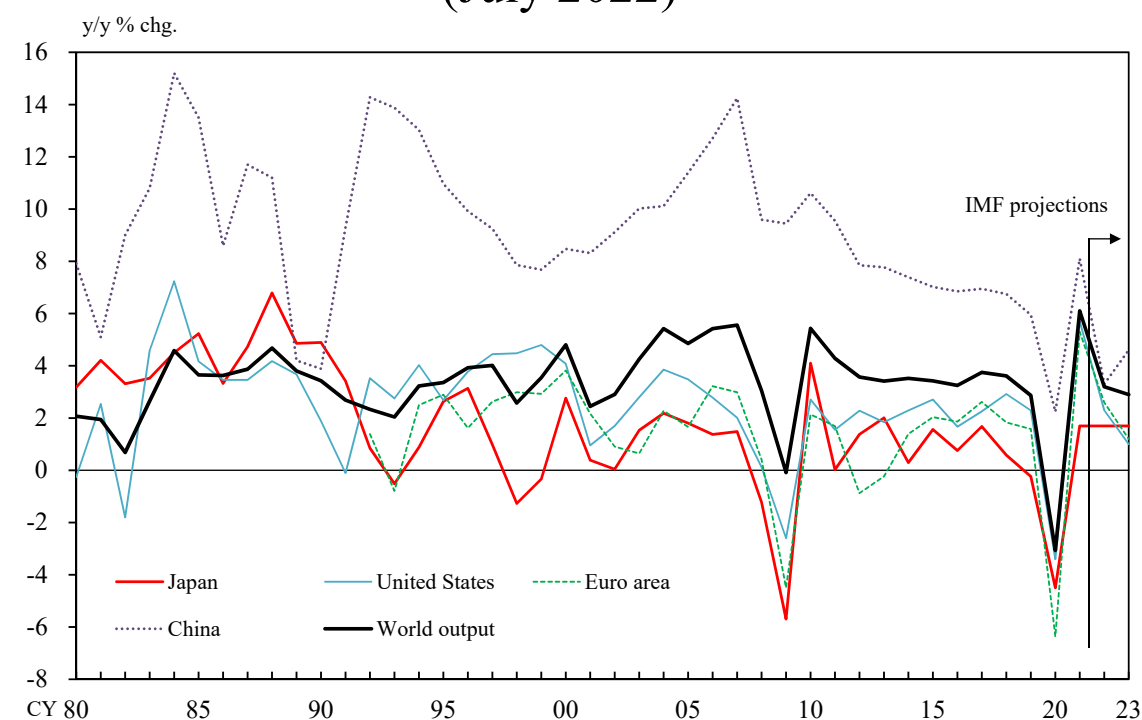
Speech at a Meeting with Local Leaders in Fukuoka

August 25, 2022

NAKAMURA Toyoaki
Member of the Policy Board
Bank of Japan

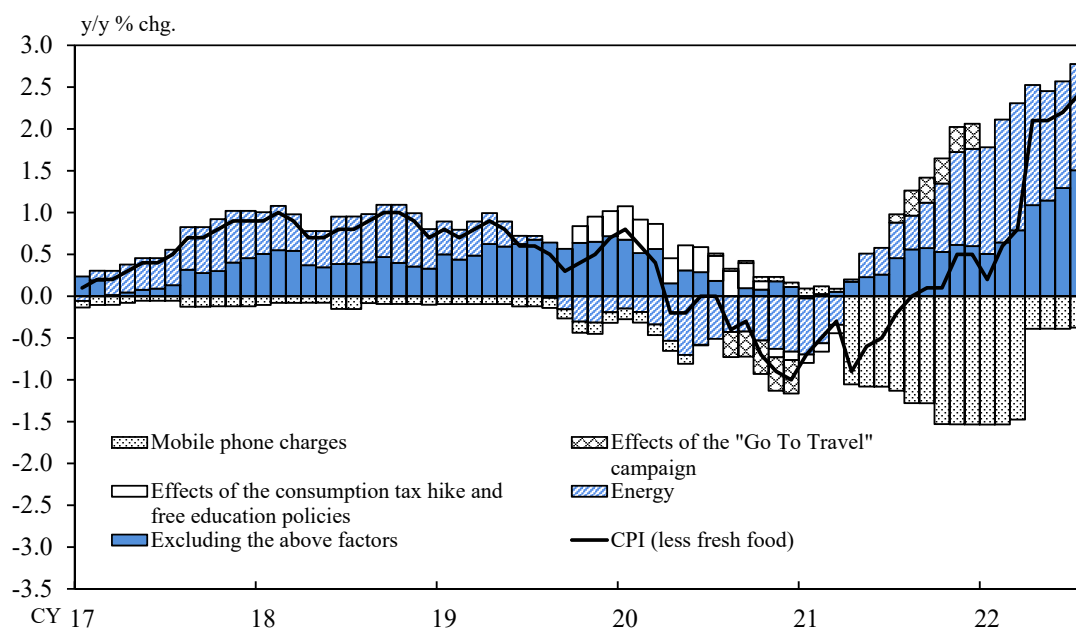
Chart 1

IMF Projections in the *World Economic Outlook* (July 2022)



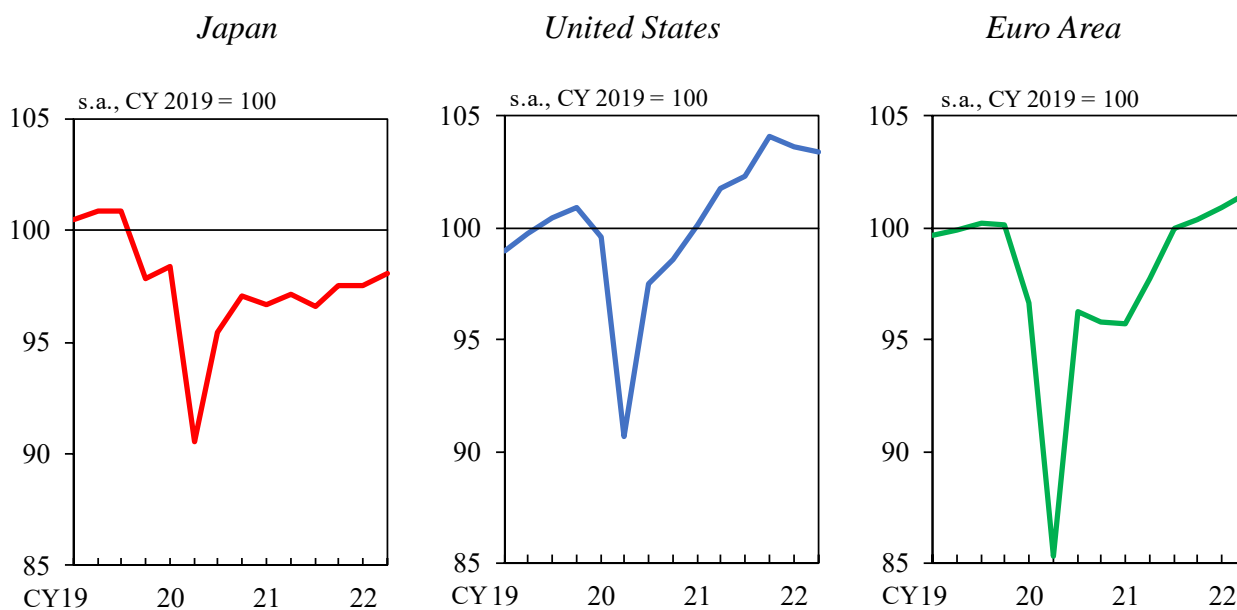
Source: International Monetary Fund (IMF).

CPI (Less Fresh Food)



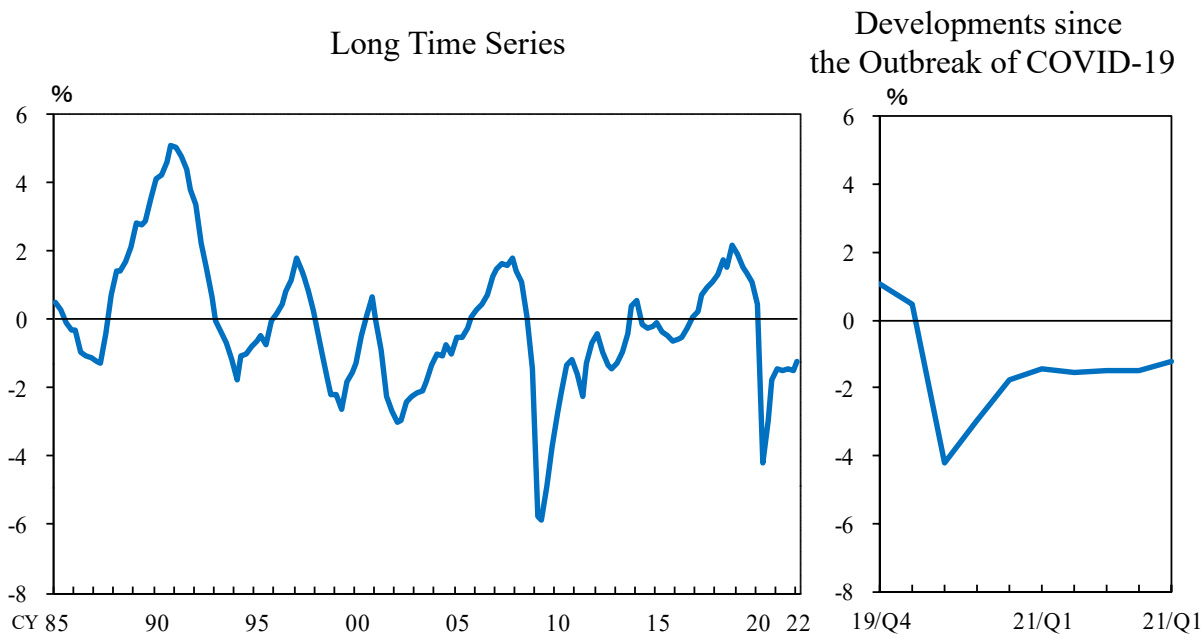
Notes: 1. Figures for energy are those for petroleum products, electricity, and manufactured and piped gas charges.
 2. Figures for the "effects of the consumption tax hike and free education policies" from April 2020 onward are Bank staff estimates and include the effects of measures such as free higher education introduced in April 2020.
 Source: Ministry of Internal Affairs and Communications.

Real GDP



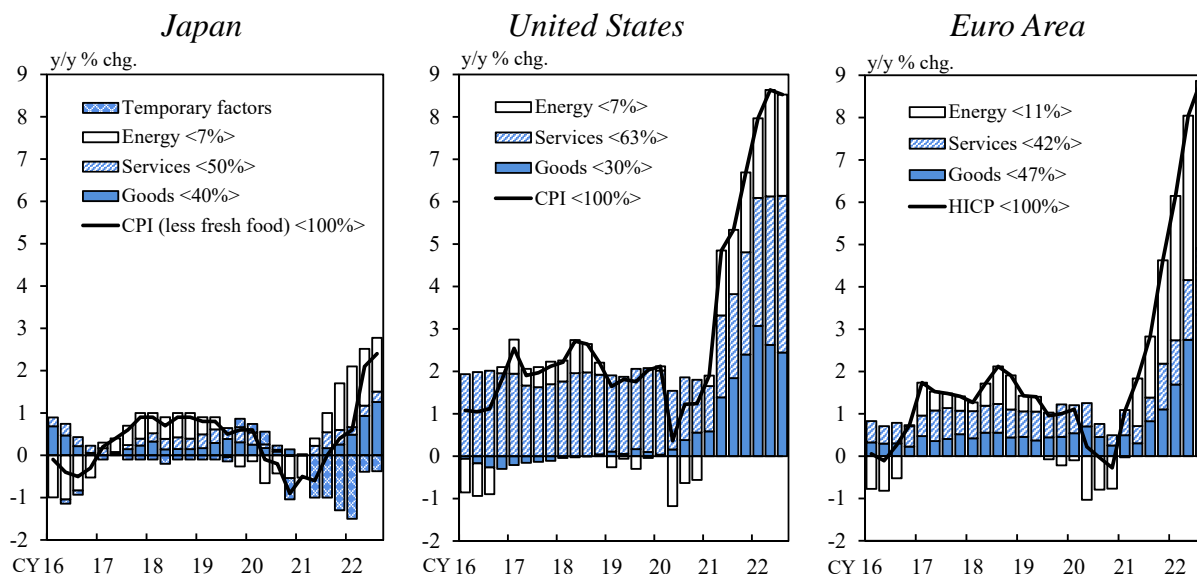
Sources: Cabinet Office; Haver.

Output Gap



Note: The output gap is estimated by the Bank's Research and Statistics Department.
 Source: Bank of Japan.

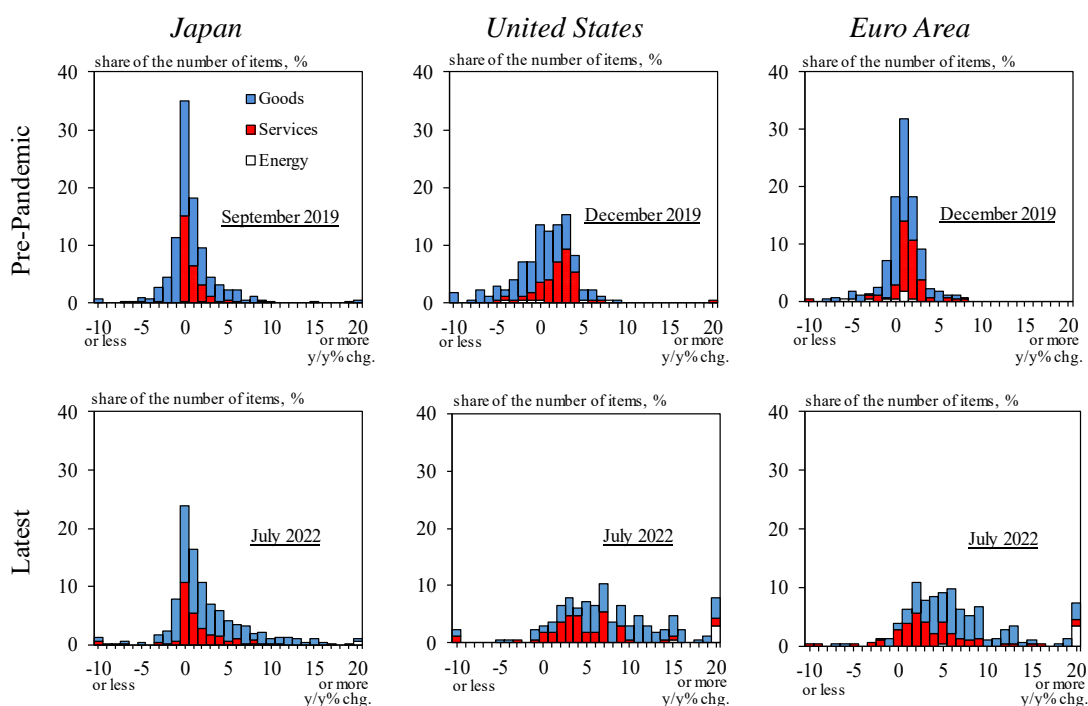
Consumer Prices



- Notes: 1. Figures for services include administered prices.
 2. Figures for temporary factors for Japan are Bank staff estimates and consist of the effects of the reduction in mobile phone charges, the consumption tax hike, free education policies, 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%).
 4. Figures for 2022/Q3 are those for July.

Sources: Haver; Ministry of Internal Affairs and Communications.

Price Change Distributions



Note: Figures for Japan are for the CPI for all items excluding fresh food. The pre-pandemic distribution for Japan is based on data for September 2019, which was before the CPI developments in Japan were affected by such factors as the consumption tax hike. Figures for the United States and the euro area are for the price index for all items.

Sources: Eurostat; Ministry of Internal Affairs and Communications; U.S. Bureau of Labor Statistics (BLS).

Forecasts of the Majority of the Policy Board Members

y/y% chg.

	Real GDP	CPI (all items less fresh food)	(Reference) CPI (all items less fresh food and energy)
Fiscal 2022	+2.2 to +2.5 [+2.4]	+2.2 to +2.4 [+2.3]	+1.2 to +1.4 [+1.3]
Forecasts made in April 2022	+2.6 to +3.0 [+2.9]	+1.8 to +2.0 [+1.9]	+0.8 to +1.0 [+0.9]
Fiscal 2023	+1.7 to +2.1 [+2.0]	+1.2 to +1.5 [+1.4]	+1.2 to +1.4 [+1.4]
Forecasts made in April 2022	+1.5 to +2.1 [+1.9]	+0.9 to +1.3 [+1.1]	+1.1 to +1.3 [+1.2]
Fiscal 2024	+1.1 to +1.5 [+1.3]	+1.1 to +1.5 [+1.3]	+1.4 to +1.7 [+1.5]
Forecasts made in April 2022	+1.1 to +1.3 [+1.1]	+1.0 to +1.3 [+1.1]	+1.2 to +1.5 [+1.5]

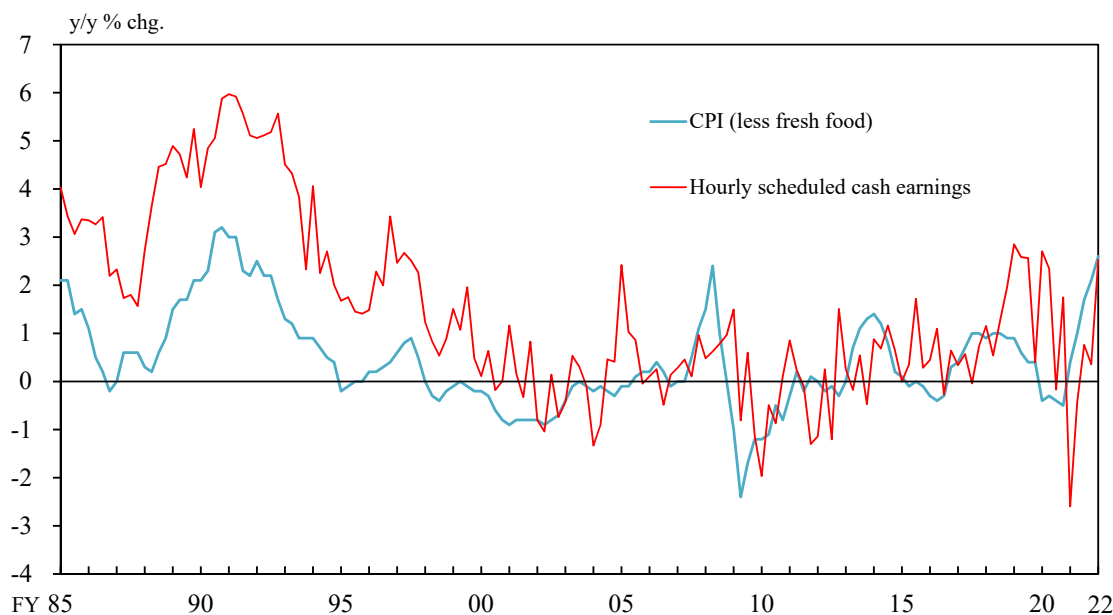
Notes: 1. Figures in brackets indicate the median of the Policy Board members' forecasts (point estimates).

2. The forecasts of the majority of the Policy Board members are constructed as follows: each Policy Board member's forecast takes the form of a point estimate -- namely, the figure to which they attach the highest probability of realization. These forecasts are then shown as a range, with the highest figure and the lowest figure excluded. The range does not indicate the forecast errors.

3. Each Policy Board member makes their forecasts taking into account the effects of past policy decisions and with reference to views incorporated in financial markets regarding the future conduct of policy.

Source: Bank of Japan.

Prices and Wages

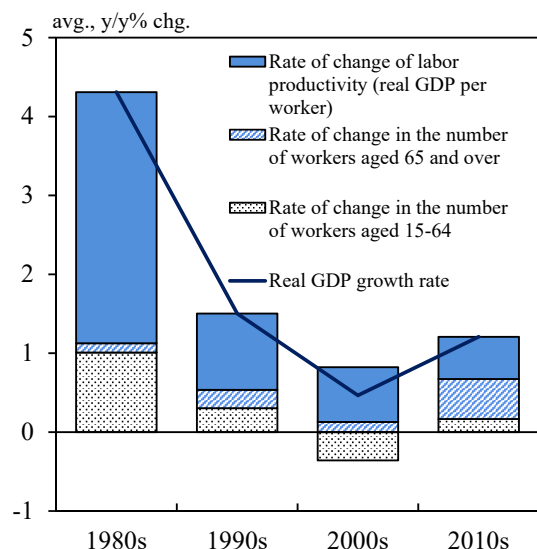


Notes: 1. For hourly scheduled cash earnings, Q1=March-May, Q2=June-August, Q3=September-November, and Q4=December-February. Figures are for full-time and part time employees before fiscal 1994 and for full-time employees thereafter.
 2. The CPI figures are Bank staff estimates and exclude the effects of the decline in mobile phone charges, consumption tax hikes, free education policies, and the "Go to Travel" campaign.

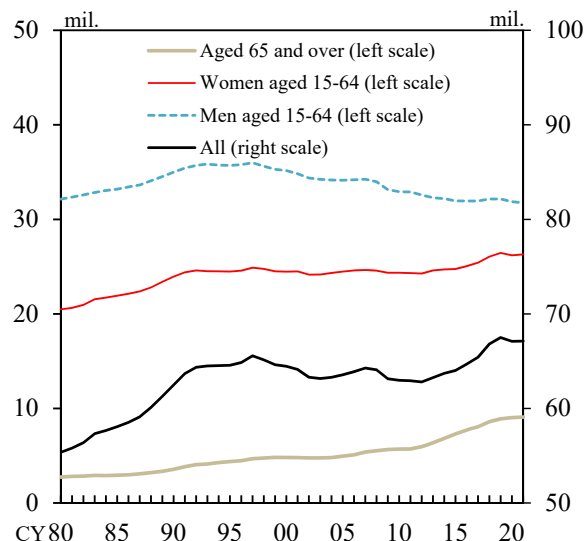
Sources: Ministry of Health, Labour and Welfare; Ministry of Internal Affairs and Communications.

Real GDP and Number of Persons Employed

Decomposition of Change in Real GDP Growth

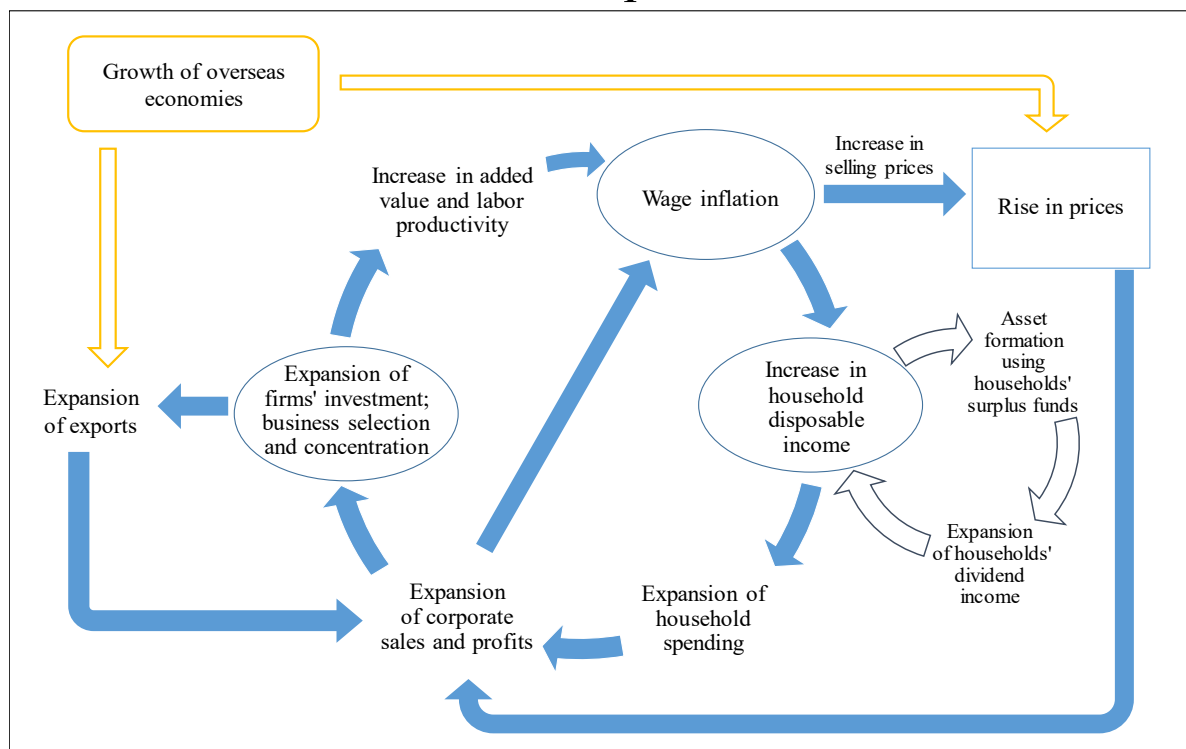


Number of Persons Employed

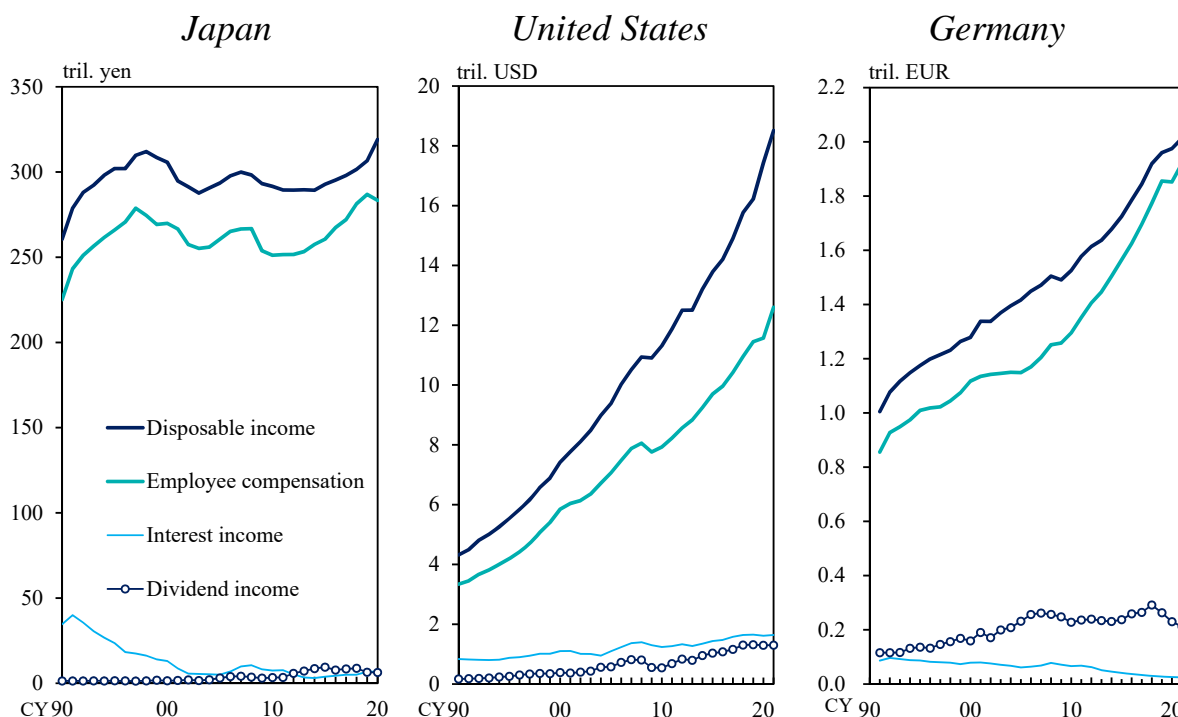


Sources: Cabinet Office; Ministry of Internal Affairs and Communications.

Growth of Japan's Economy through a Virtuous Cycle of Corporate Activity and Household Disposable Income



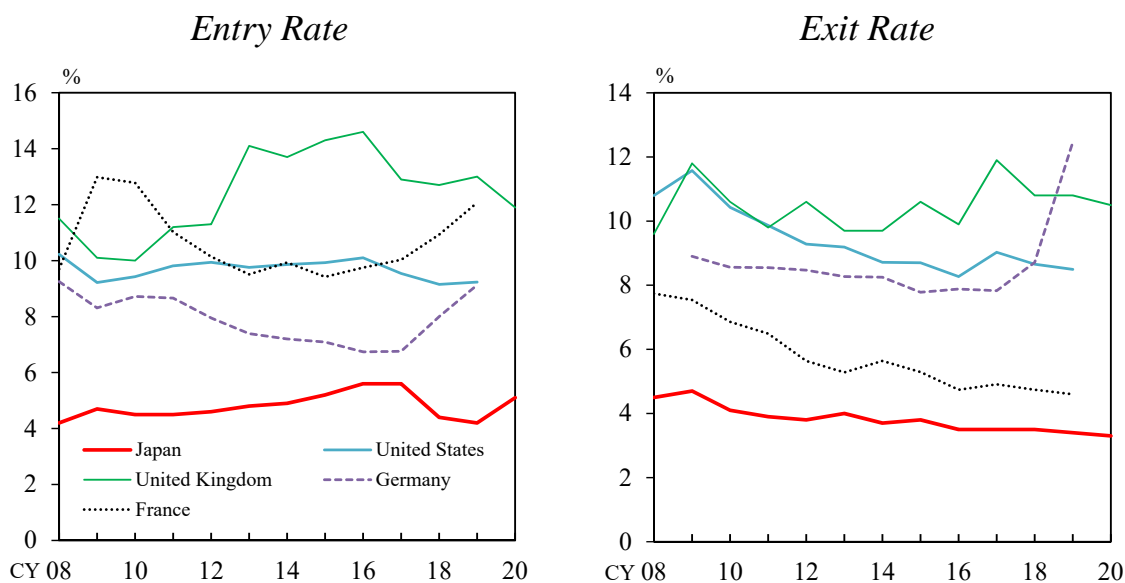
Household Disposable Income



Notes: 1. Figures for Japan before 1994 are calculated using year-on-year changes in each item in the 2000 *System of National Accounts*.
 2. Figures for interest income and dividend income in Germany are "other interests, rents" and "distributed income of corporations," respectively.

Sources: Bureau of Economic Analysis (BEA); Cabinet Office; Statistisches Bundesamt.

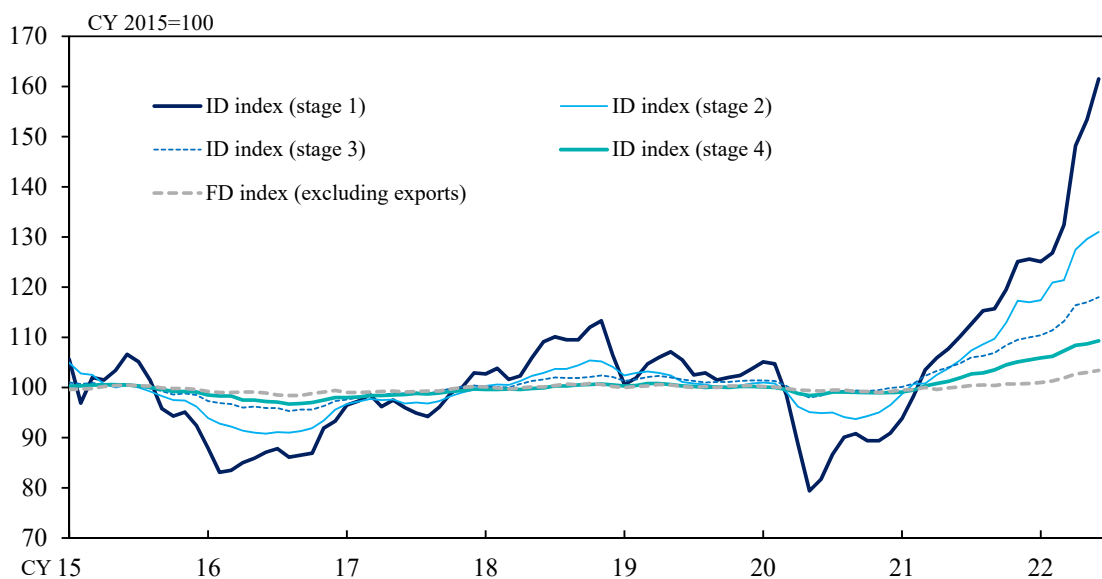
International Comparison of Entry and Exit Rates



Note: Figures for Japan are on a fiscal-year basis.

Sources: Eurostat; Ministry of Health, Labour and Welfare; Small and Medium Enterprise Agency; U.K. Office for National Statistics; U.S. Census Bureau.

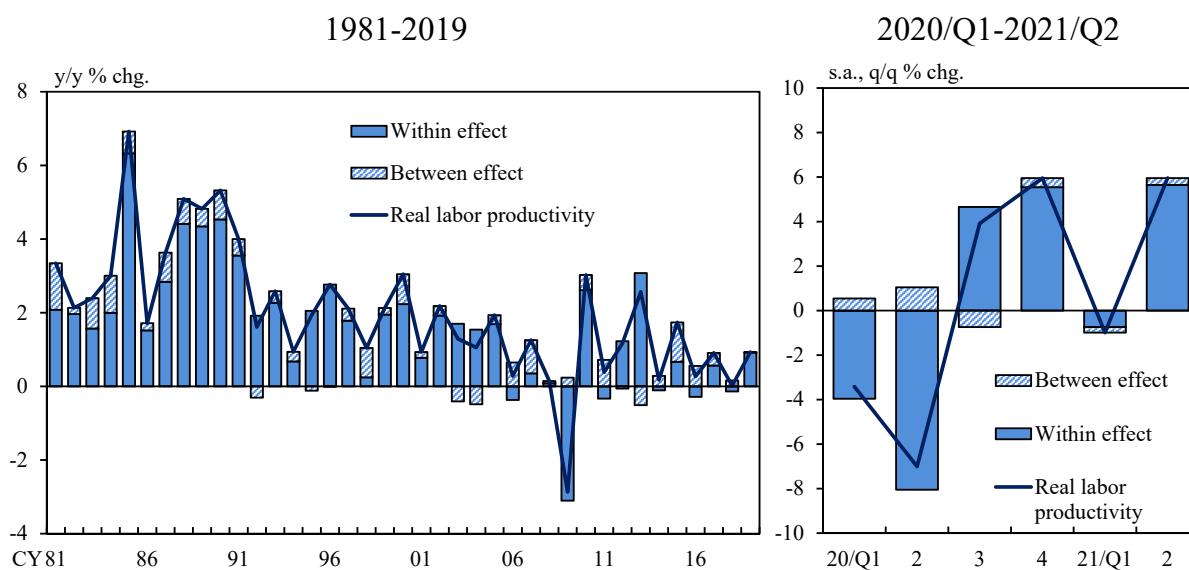
Final Demand-Intermediate Demand (FD-ID) Price Indexes (All Commodities)



Note: The indexes divide demand into the final demand stage and four stages of intermediate demand based on the Input-Output Tables for Japan. The prices of goods and services are then aggregated according to the stage to which they belong to compile the FD index and the ID indexes for stages 1 to 4, ranging from the most upstream to the downstream stages of the production process.

Source: Bank of Japan.

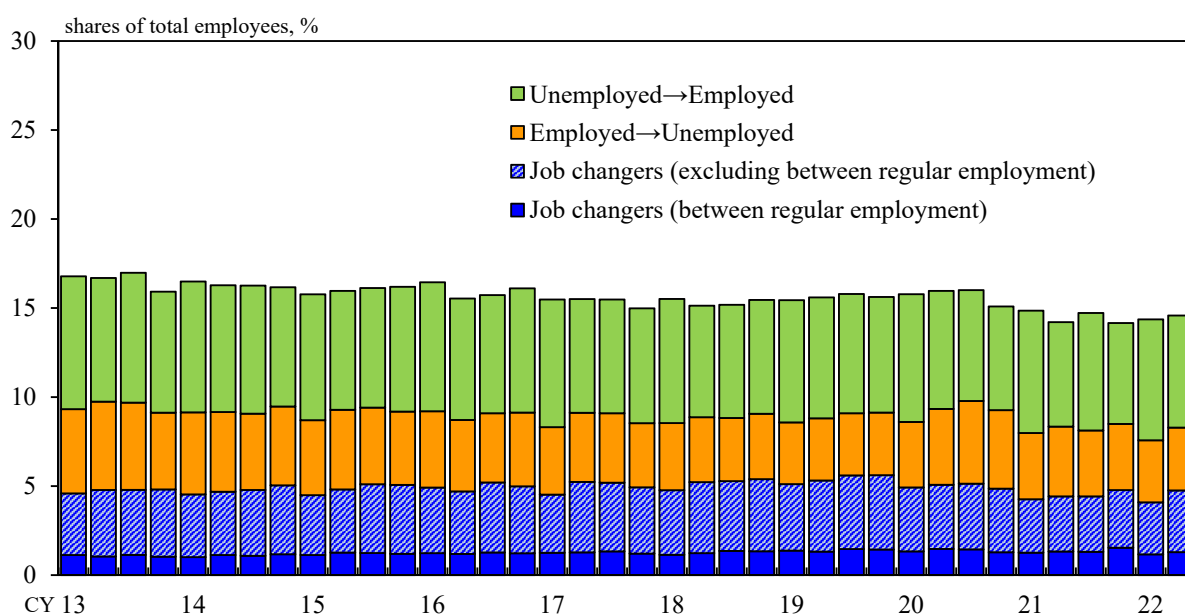
Decomposition of Real Labor Productivity



Note: Real labor productivity is calculated as productivity per hour worked. The left panel is based on the Cabinet Office's *System of National Accounts*. The right panel is based on the Ministry of Finance's *Financial Statements Statistics of Corporations by Industry, Quarterly*.

Source: Yagi, T., Furukawa, K., and Nakajima, J., "Productivity Trends in Japan: Reviewing Recent Facts and the Prospects for the Post-COVID-19 Era," *Bank of Japan Working Paper Series*, No. 22-E-10, July 2022.

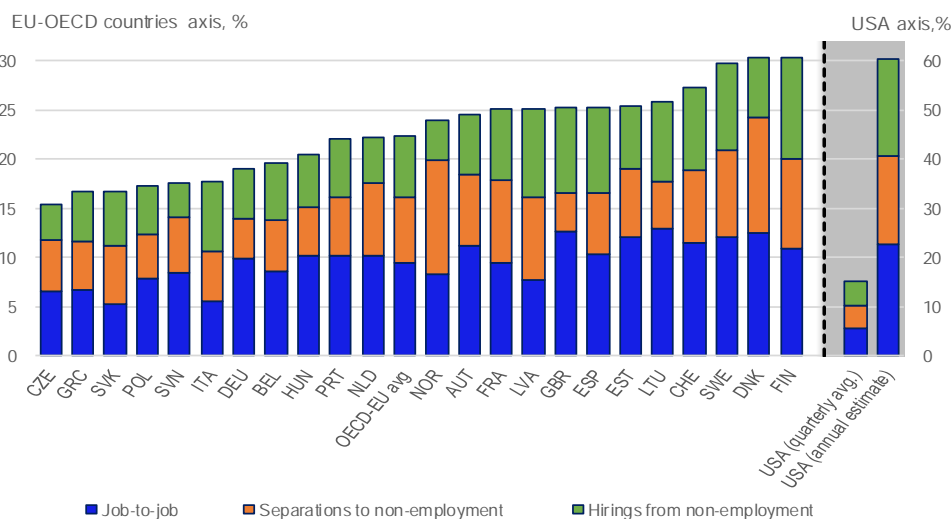
Labor Mobility in Japan



Note: Job changers are employees who have left their previous job in the past year and are currently employed. "Employed→Unemployed" refers to those who have left employment in the past year and are not currently employed.

Source: Ministry of Internal Affairs and Communications.

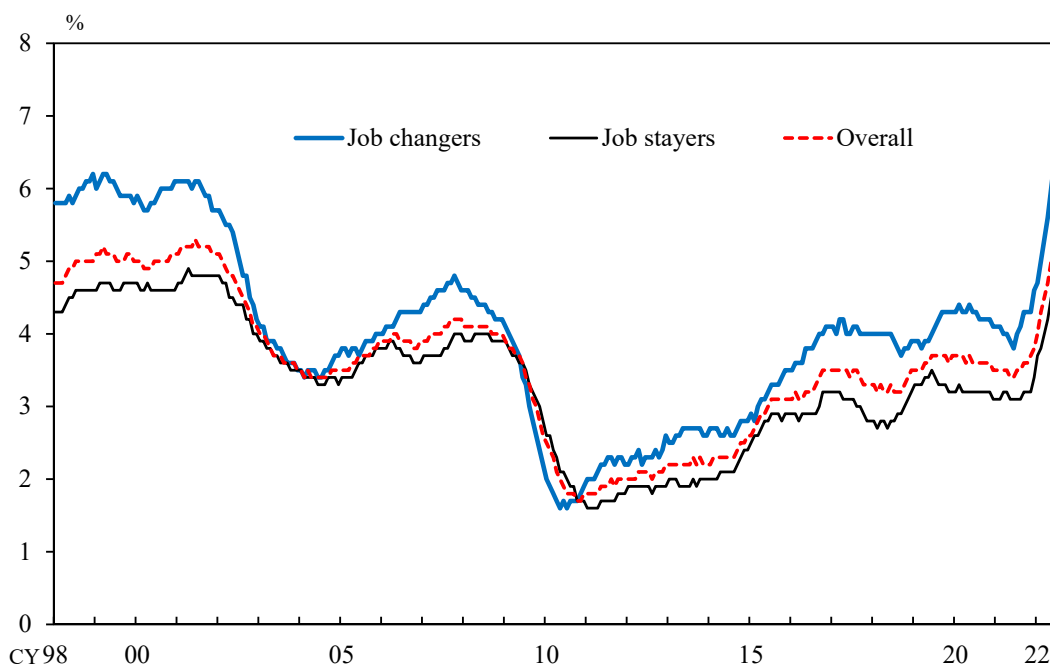
Labor Mobility in Europe and the United States (as of 2019)



- Notes: 1. Figures for Europe are percentages of those whose employment status has changed from the previous year relative to the number of all employed persons. Non-employment refers to the status of being unemployed or not being in the labor force. Figures for Norway are based on data for 2018.
2. Figures for the United States are percentages of those whose employment status has changed from the previous quarter relative to the number of all employed persons. Non-employment refers to non-employment that has lasted for more than one quarter. Quarterly average is the average of four quarters. Annual estimate is the cumulative total of four quarters.

Source: Causa, O., Luu, N., and Abendschein, M., "Labour market transitions across OECD countries: Stylised facts," *OECD Economics Department Working Papers*, No.1692, 2021.

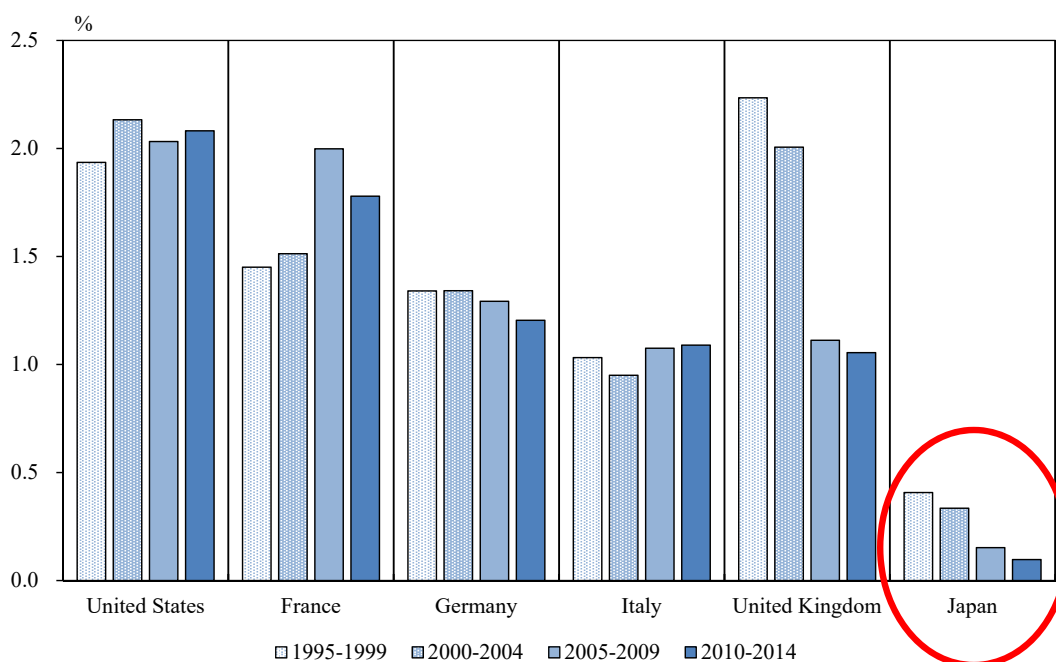
Wages of Job Changers/Stayers in the United States



Note: Figures are hourly data of 12-month moving averages of median wage growth.

Source: Federal Reserve Bank of Atlanta.

Ratio of Firms' Vocational Training Costs to GDP

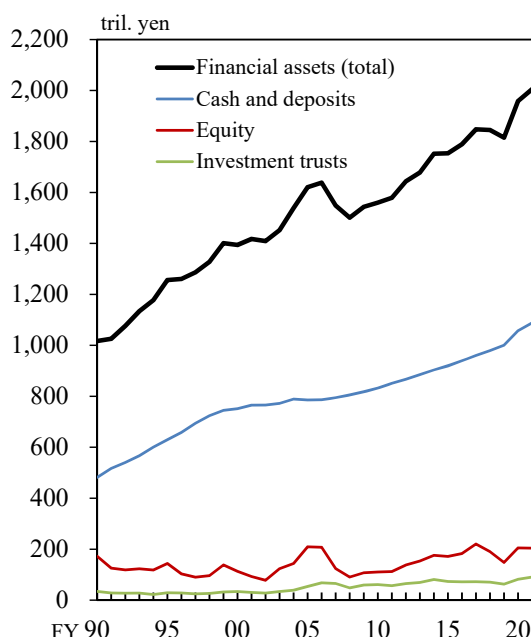


Note: Figures are estimated by Professor MIYAGAWA Tsutomu (Gakushuin University) based on the *System of National Accounts* of the Cabinet Office, JIP Database, and INTAN-Invest Database.

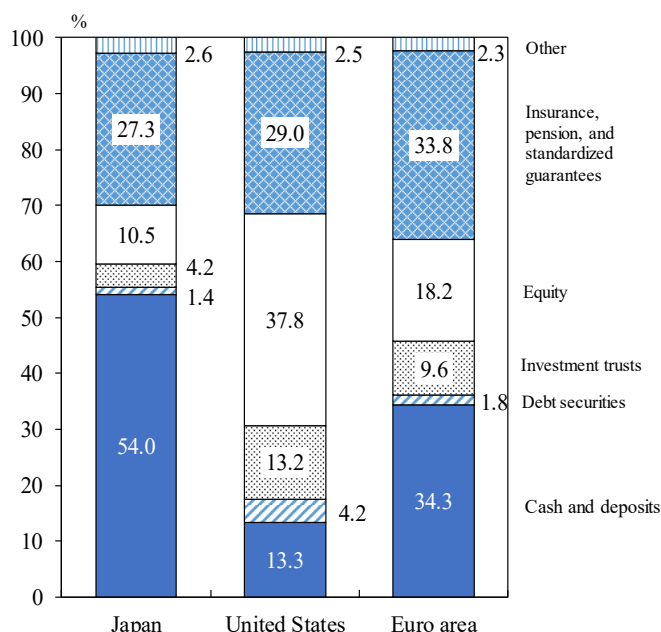
Source: Ministry of Health, Labour and Welfare.

Household Financial Assets

Japan



International Comparisons (as of end-March 2021)



Notes: 1. In the right panel, "Other" is the residual after deducting "Cash and deposits," "Debt securities," "Investment trusts," "Equity," and "Insurance, pension, and standardized guarantees" from total financial assets.

2. Also in the right panel, figures for the United States and the euro area are from "Flow of Funds: Overview of Japan, the United States and the Euro area," released by the Bank's Research and Statistics Department on August 20, 2021.

Source: Bank of Japan.