Japan's Economy and Monetary Policy

Speech at a Meeting with Business Leaders in Ehime

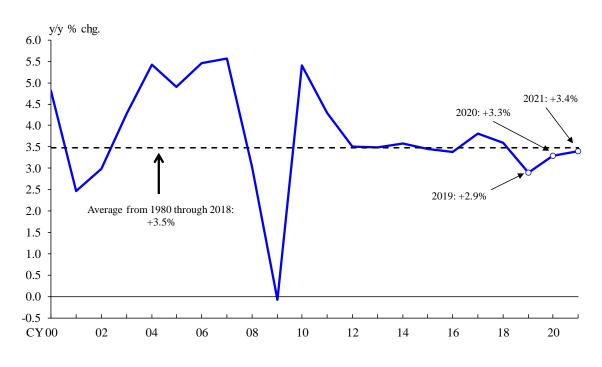
February 5, 2020 WAKATABE Masazumi

Deputy Governor of the Bank of Japan

I. Financial and Economic Developments

Chart 1

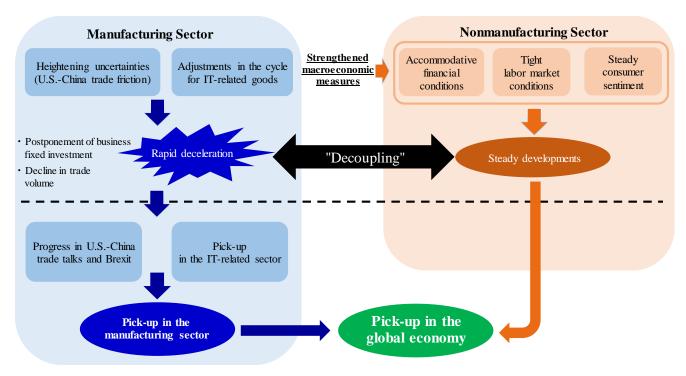
Global Growth Rate



Note: Figures for 2020 and 2021 are the IMF's projections as of January 2020.

Source: IMF.

Global Decoupling between the Manufacturing and Nonmanufacturing Sectors



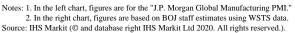
I. Financial and Economic Developments

Global Business Sentiment

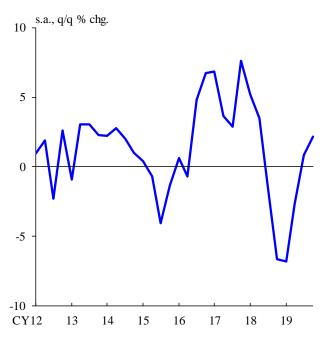
Chart 3

Developments in the Global Manufacturing Sector

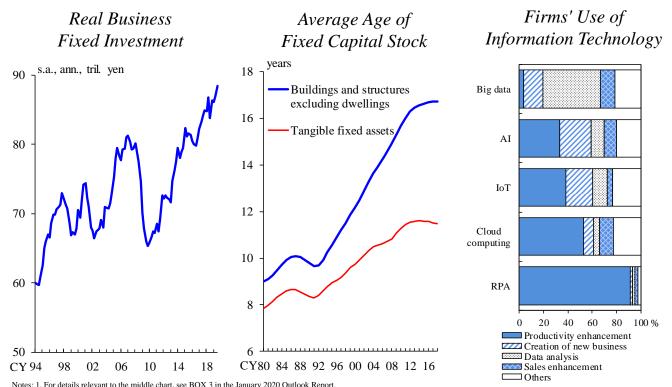




World Semiconductor Shipments



Business Fixed Investment



Notes: 1. For details relevant to the middle chart, see BOX 3 in the January 2020 Outlook Report.

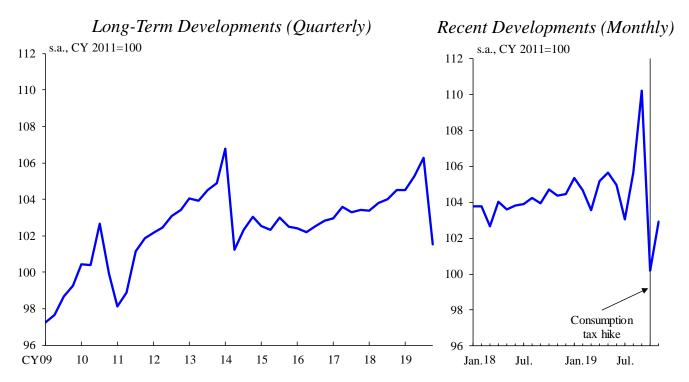
2. In the right chart, figures are from the survey for fiscal 2018. For details, see BOX 3 in the January 2020 Outlook Report.

Sources: Cabinet Office; Research Institute of Economy, Trade and Industry; Ministry of Internal Affairs and Communications; Japan Users Association of Information Systems.

I. Financial and Economic Developments

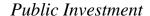
Chart 5

Private Consumption

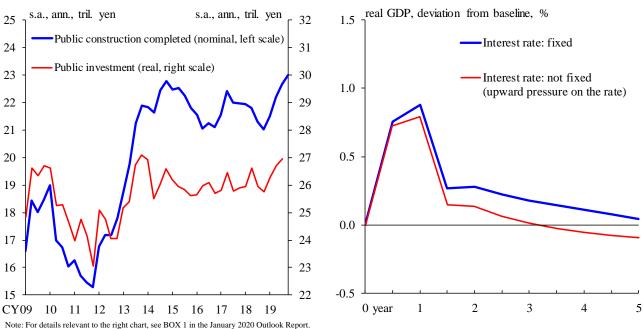


Note: Figures are for the Consumption Activity Index (travel balance adjusted, real). They exclude inbound tourism consumption and include outbound tourism consumption. Sources: Bank of Japan, etc.

Government Spending



Simulation <Case: Public Investment Increases by 1% of Nominal GDP during the First Year>



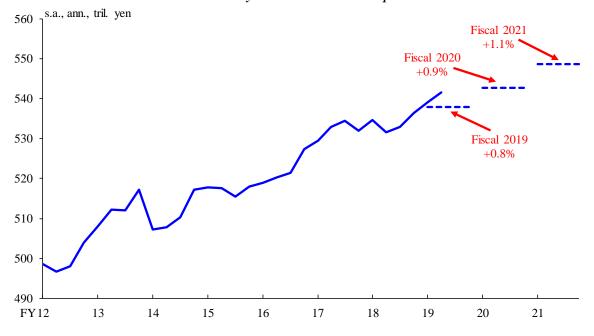
Note: For details relevant to the right chart, see BOX 1 in the January 2020 Outlook Report. Sources: Cabinet Office; Ministry of Land, Infrastructure, Transport and Tourism; Bank of Japan, etc.

I. Financial and Economic Developments

Chart 7

BOJ's Economic Forecasts

Real GDP January 2020 Outlook Report>



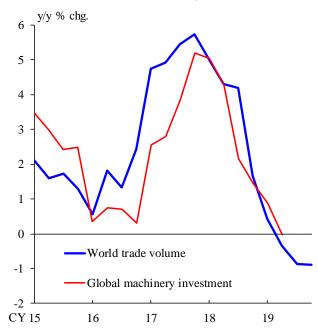
Note: Forecasts are the medians of the Policy Board members' forecasts (point estimates). Sources: Cabinet Office; Bank of Japan.

Uncertainties regarding Overseas Economies

Policy Uncertainty Index

CY 1997-2015 average=100 350 — Global economic policy uncertainty index 300 - 250 - 200 - 150 - 100

World Trade Volume and Global Machinery Investment



Note: In the right chart, figures for world trade volume are for real imports.

Sources: Economic Policy Uncertainty; CPB Netherlands Bureau for Economic Policy Analysis; IMF.

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19

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I. Financial and Economic Developments

50

CY 15

16

Chart 9

Developments in Private Consumption before and after the Consumption Tax Hikes

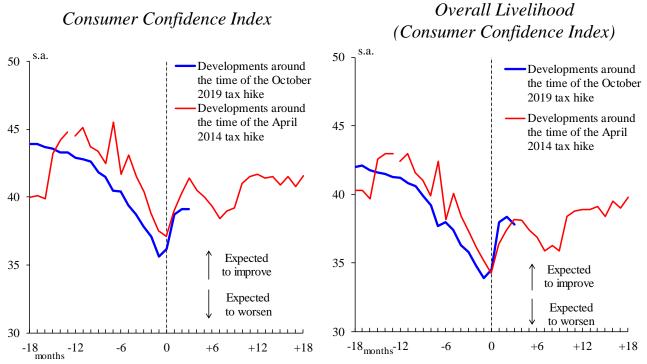
Durable Goods Nondurable Goods (Automobiles + Household Electrical Appliances) s.a., average 16-18 months before the tax hike=100 s.a., average 16-18 months before the tax hike=100 140 Developments around Developments around the time of the October the time of the October 2019 tax hike 130 2019 tax hike Developments around 105 Developments around the time of the April the time of the April 2014 tax hike 120 2014 tax hike 100 110 100 95 90 80 -6 +6 +12-6 0 +6 +12+18

Notes: 1. Month 0 is the month in which the consumption tax rate was raised -- namely, April 2014 or October 2019.

2. In the right chart, nondurable goods include goods classified as "semi-durable goods" in the SNA.

Sources: Bank of Japan, etc.

Developments in Consumer Sentiment before and after the Consumption Tax Hikes



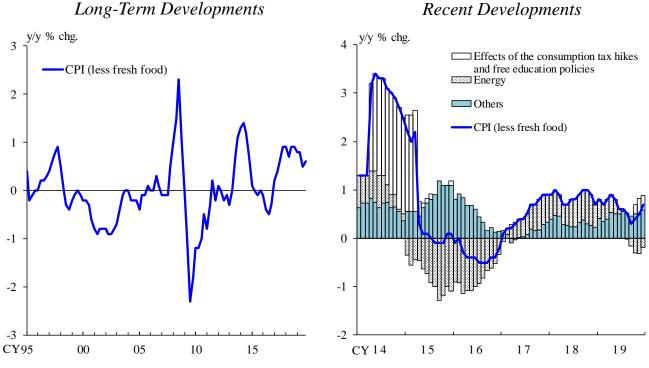
Notes: 1. Month 0 is the month in which the consumption tax rate was raised -- namely, April 2014 or October 2019.

2. There is a discontinuity in the data in April 2013 due to a change in the survey method.

II. Price Developments

Chart 11

Consumer Prices



Note: In the left chart, figures exclude the effects of the consumption tax hikes. They incorporate the effects of the October 2019 tax hike and policies concerning

the provision of free education.

Source: Ministry of Internal Affairs and Communications.

BOJ's Price Forecasts

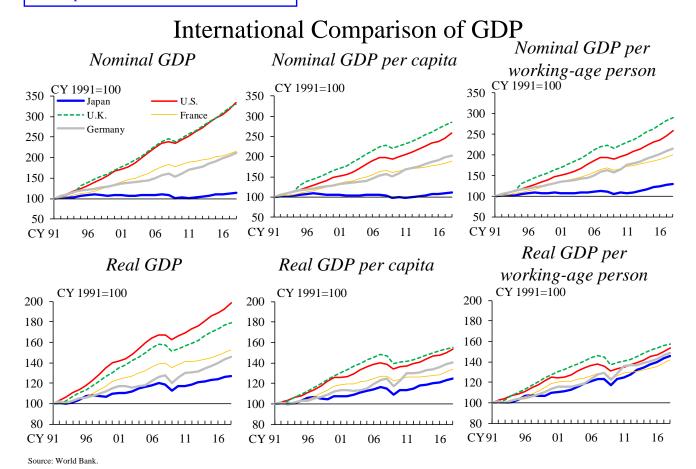
CPI (All Items Less Fresh Food) <January 2020 Outlook Report>



Note: Figures exclude the effects of the consumption tax hike in April 2014. Forecasts are the medians of the Policy Board members' forecasts (point estimates). Sources: Ministry of Internal Affairs and Communications; Bank of Japan.

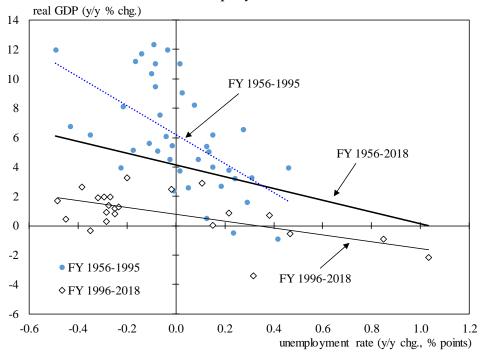
III. Japanification and Economic Growth

Chart 13



Okun's Law

Relationship between Economic Growth Rate and Unemployment Rate

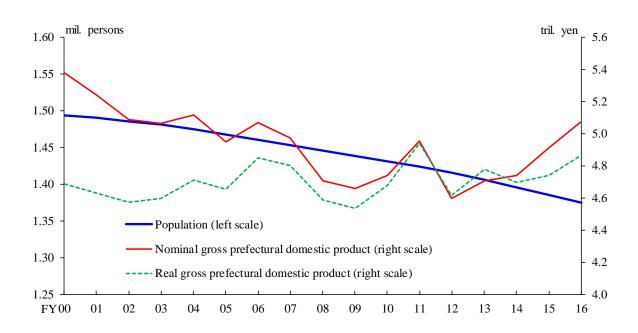


Sources: Cabinet Office; Ministry of Internal Affairs and Communications.

III. Japanification and Economic Growth

Chart 15

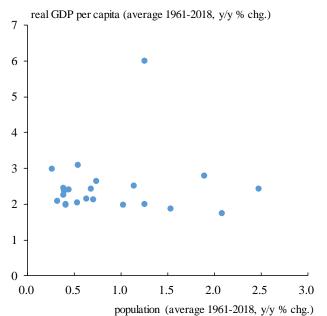
Total Population and Gross Domestic Product of Ehime Prefecture



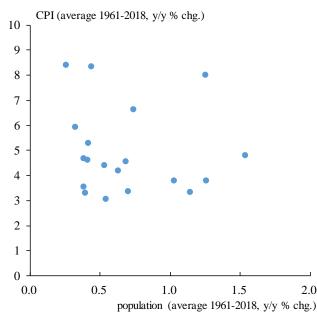
Source: Cabinet Office.

Relationships between Population Growth and GDP/Inflation

Population Growth and GDP Growth per Capita



Population Growth and Inflation



Notes: 1. Figures are those of 22 OECD member countries for which data from 1961 onward are available.

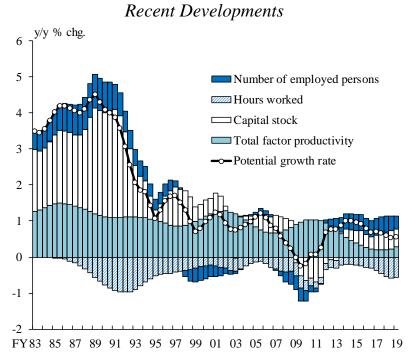
2. In the right chart, figures for Israel, Mexico, and Turkey, of which inflation rates are above 10 percent, are not shown.

Source: World Bank

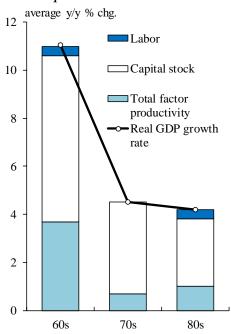
III. Japanification and Economic Growth

Chart 17

Potential Growth Rate

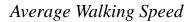


Developments in the 1960s-80s

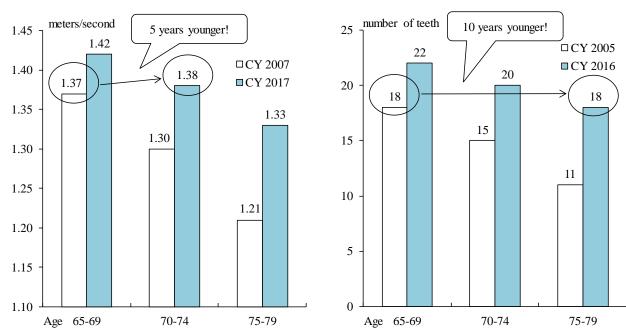


Note: In the right chart, figures are from the "White Paper on International Economy and Trade 1998." Sources: Ministry of International Trade and Industry; Bank of Japan.

Evidence of Slowdown in Physical Aging



Average Number of Teeth



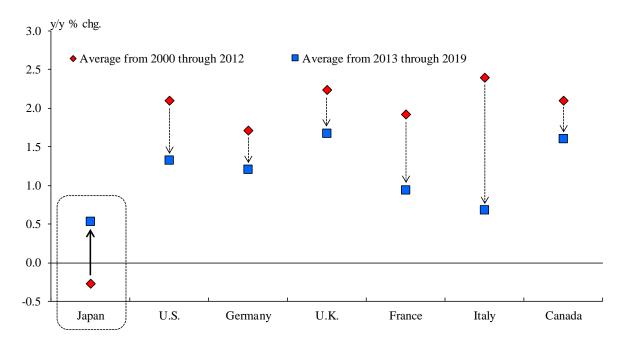
Notes: 1. See Toshitaka Sekine, "Does Demography Really Matter?," presentation at the G20 Symposium titled "For a Better Future: Demographic Changes and Macroeconomic Challenges," 2019.

In the left chart, average walking speed is the arithmetic average of men's and women's walking speeds.
 Sources: National Center for Geriatrics and Gerontology; Ministry of Health, Labour and Welfare.

Conclusion

Chart 19

Price Developments in G7 Countries



Notes: 1. Figures for Japan are the CPI (excluding the effects of the April 2014 consumption tax hike and incorporating the effects of the October 2019 tax hike and policies concerning the provision of free education); those for U.K. and Canada are the CPI; those for U.S. are the PCE deflator; and those for the euro area countries are the HICP. 2. The figure for the U.S. for 2019 is the January-November average.

Sources: Ministry of Internal Affairs and Communications; Haver.