



Economic Activity, Prices, and Monetary Policy in Japan

Speech at a Meeting with Business Leaders in Hakodate

September 4, 2019

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Member of the Policy Board of the Bank of Japan

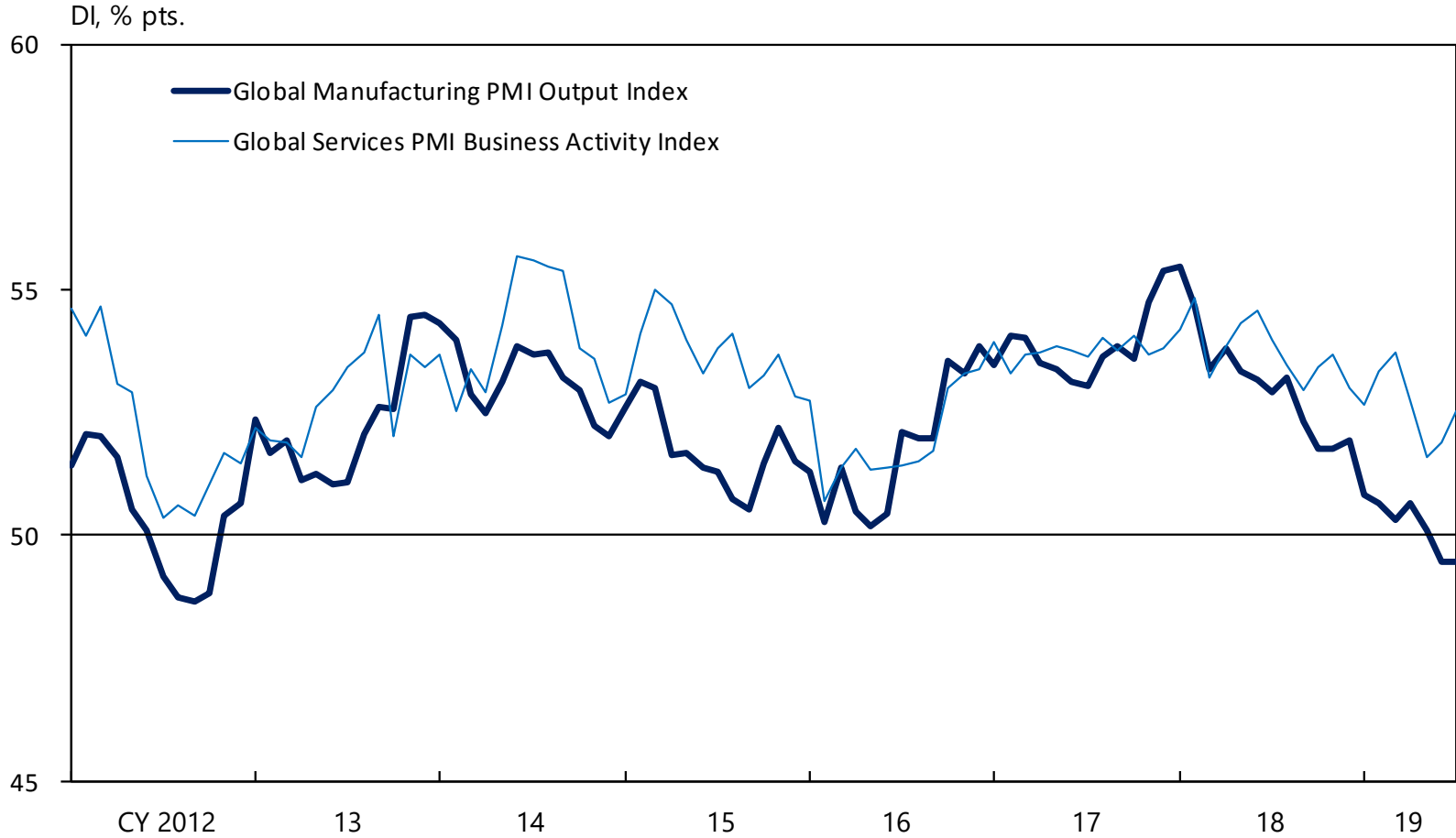
World Economic Outlook by the IMF

		July 2019 forecasts (y/y % chg.)			Difference from April 2018 forecasts (% pts.)		
		2018	2019	2020	2018	2019	2020
World		3.6	3.2	3.5	-0.3	-0.7	-0.3
Advanced Economies	Japan	0.8	0.9	0.4	-0.4	0.0	0.1
	United States	2.9	2.6	1.9	0.0	-0.1	0.0
	Euro Area	1.9	1.3	1.6	-0.5	-0.7	-0.1
	Germany	1.4	0.7	1.7	-1.1	-1.3	0.2
	France	1.7	1.3	1.4	-0.4	-0.7	-0.4
	United Kingdom	1.4	1.3	1.4	-0.2	-0.2	-0.1
Emerging Economies	China	6.6	6.2	6.0	0.0	-0.2	-0.3
	Brazil	1.1	0.8	2.4	-1.2	-1.7	0.2
	India	6.8	7.0	7.2	-0.6	-0.8	-0.7
	Russia	2.3	1.2	1.9	0.6	-0.3	0.4

Note: For India, figures are presented on a fiscal year basis.

Source: IMF, "World Economic Outlook (July 2019, April 2018)."

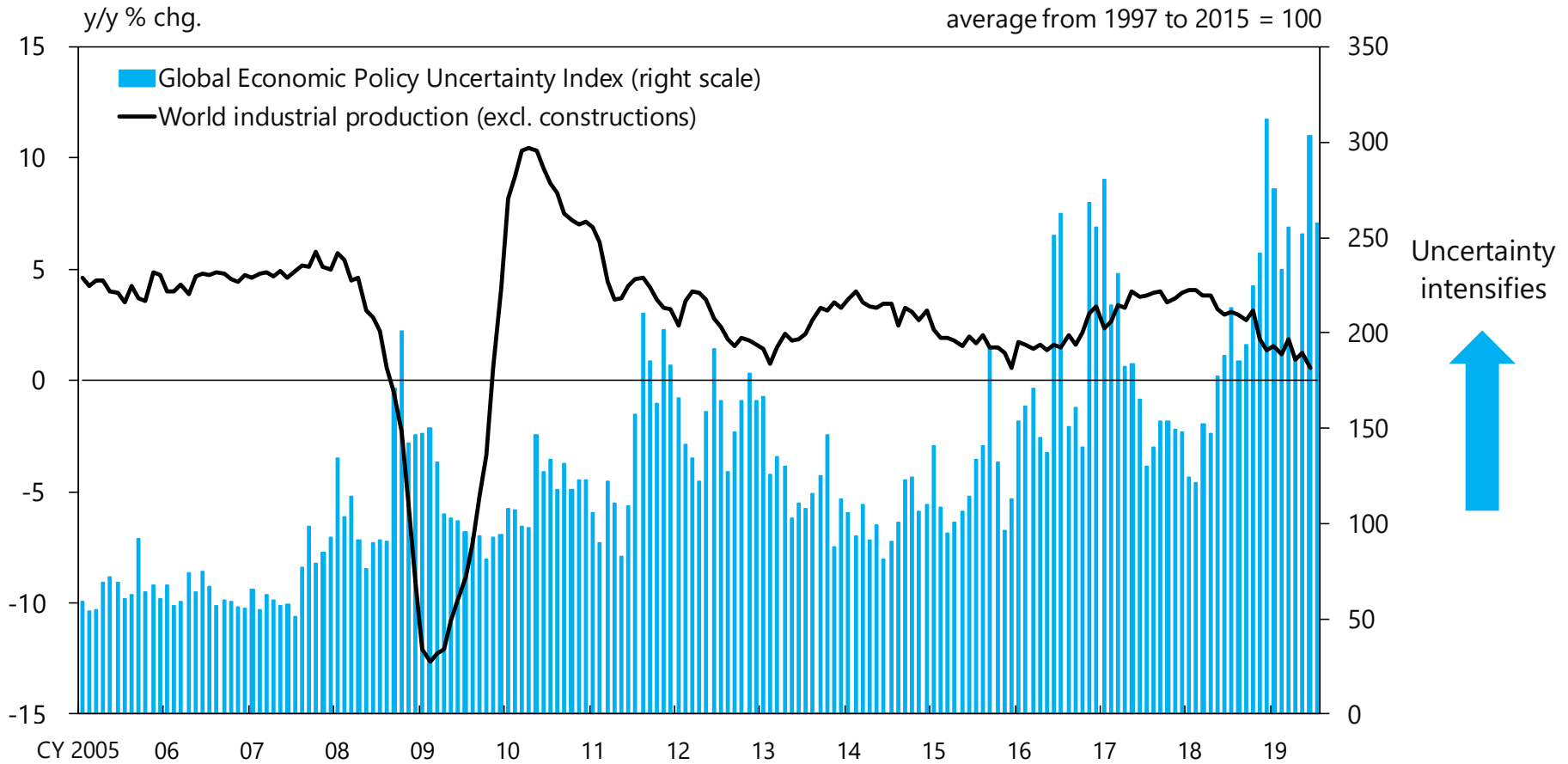
Global PMI



Note: Figures are from the J.P. Morgan Global PMI. Figures above 50 indicate improvement and below 50 show deterioration on a month-on-month basis.

Source: IHS Markit (© and database right IHS Markit Ltd 2019. All rights reserved.)

Global Production and Economic Policy Uncertainty

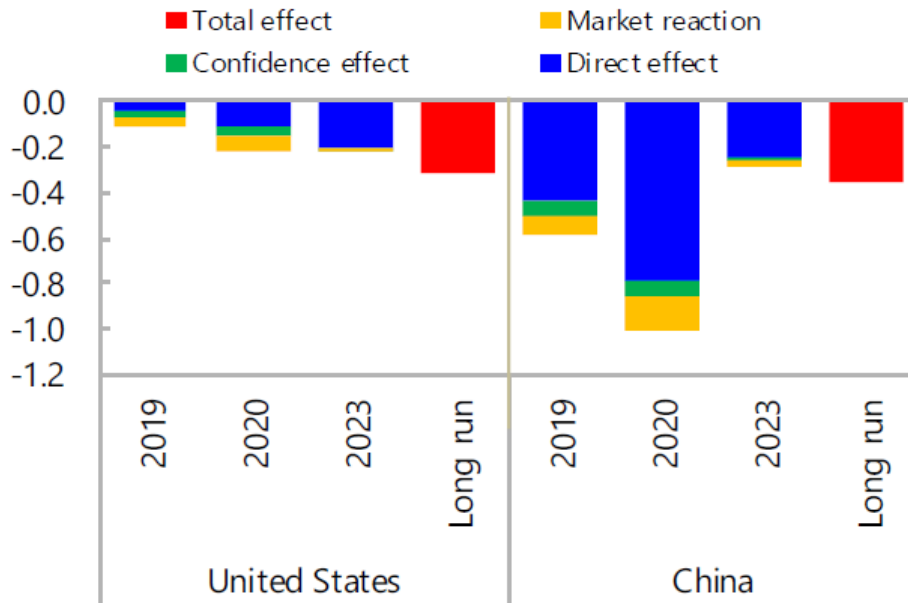


Notes: 1. World industrial production is a weighted average of industrial production volume for each country. The latest figure is as of June 2019.
 2. *Global Economic Policy Uncertainty Index* is a GDP-weighted average for 20 major countries including the United States, China, Japan, and European countries. The latest figure is as of July 2019.

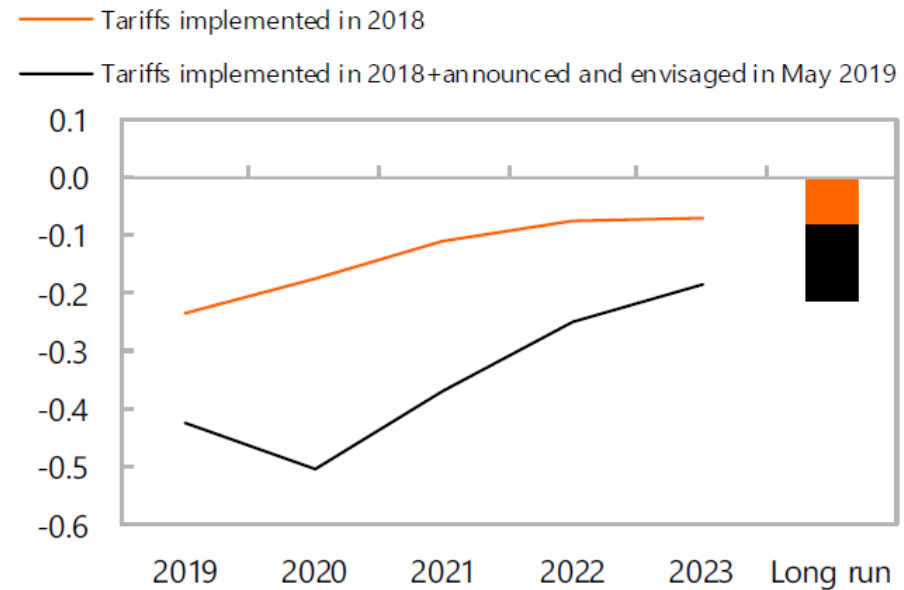
Sources: Economic Policy Uncertainty, "Global Economic Policy Uncertainty Index"; CPB Netherlands Bureau for Economic Policy Analysis, "Industrial Production Volume, CPB World Trade Monitor."

Effects of the U.S.-China Trade Friction (Estimates by the IMF)

Impact on Real GDP of the U.S. and China



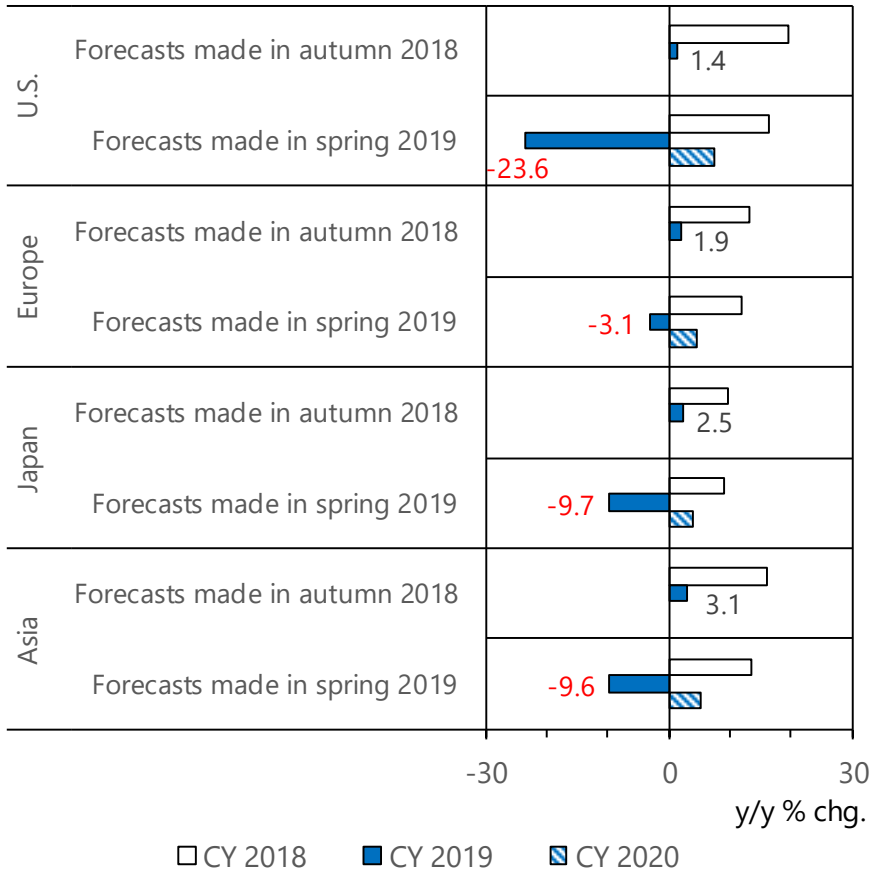
Impact on Global Real GDP



- Notes: 1. The left-hand graph indicates the marginal (i.e. additional) impact on the level of GDP from the announced and envisaged tariffs between the United States and China. The figures are the deviations from baseline projections in percentage terms. Announced tariffs correspond to an increase in tariffs from 10 percent to 25 percent on USD 200 billion of U.S. imports from China as of May 2019. Envisaged tariffs are the possible 25 percent tariff on the roughly USD 267 billion of U.S. imports from China. The simulations assume retaliation by China.
2. The right-hand graph shows the marginal effect on global GDP of the tariffs that were implemented in 2018 as well as the tariffs that were announced and envisaged in May 2019. The figures are the deviations from baseline projections in percentage terms.

World Semiconductor Market Forecasts

World Semiconductor Market Forecasts by Country/Region



World Semiconductor Shipments

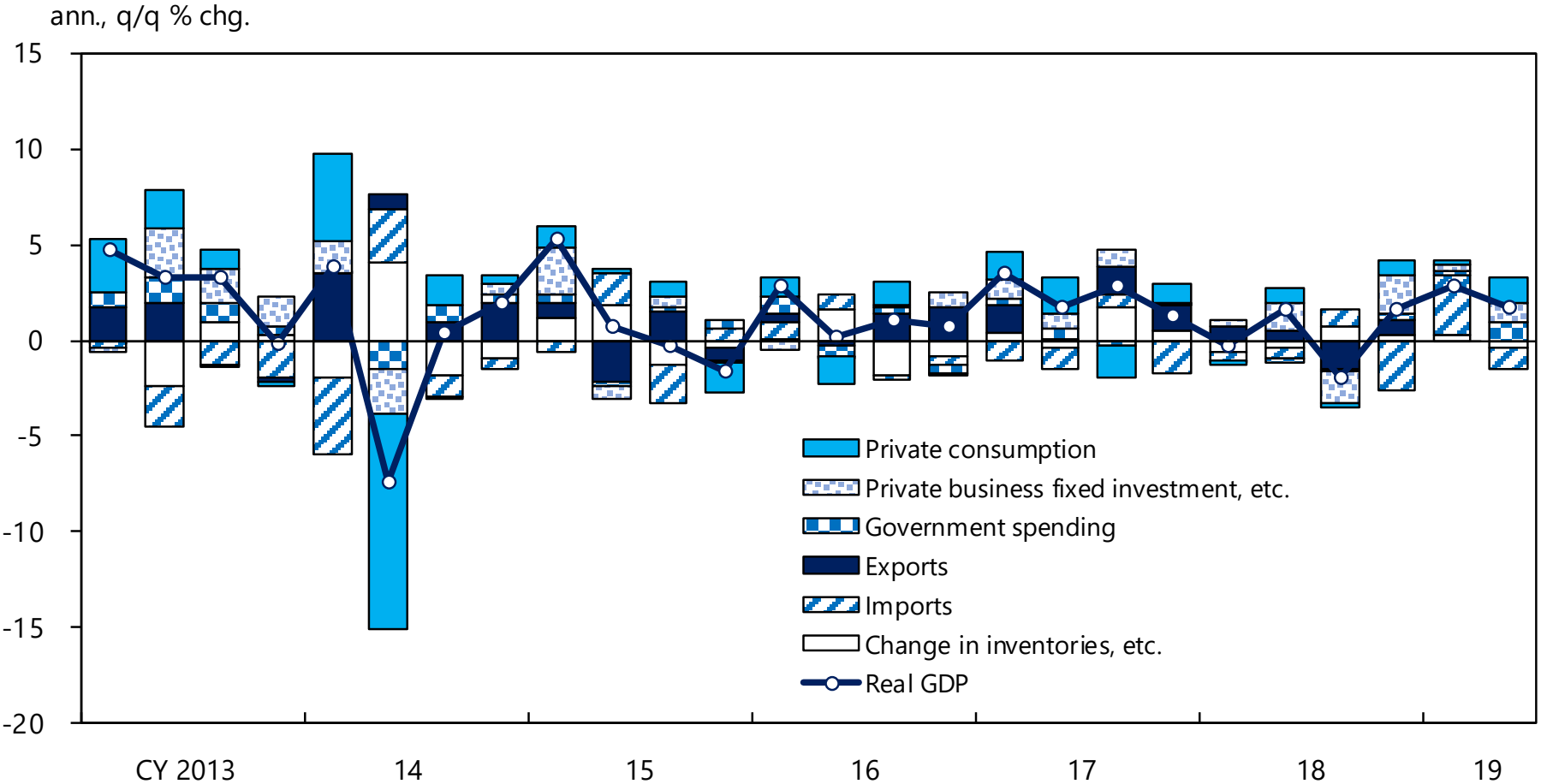


Notes: 1. Figures are on a U.S. dollar denominated basis.

2. In the left-hand graph, figures for CY 2018 in the forecasts made in spring 2019 are actual figures. Others are forecasts.

Source: WSTS Inc.

Real GDP Growth and Breakdown by Component



Source: Cabinet Office, "Quarterly Estimates of GDP for April-June 2019 (First Preliminary Estimates)."

Outlook for Economic Activity and Prices (July 2019 Outlook Report)

medians of Policy Board members' forecasts, y/y % chg.

	Real GDP	CPI (all items less fresh food)	(Reference) Excluding the effects of the consumption tax hike and policies concerning the provision of free education
Fiscal 2019	+0.7	+1.0	+0.8
Forecasts made in April 2019	+0.8	+1.1	+0.9
Fiscal 2020	+0.9	+1.3	+1.2
Forecasts made in April 2019	+0.9	+1.4	+1.3
Fiscal 2021	+1.1	+1.6	
Forecasts made in April 2019	+1.2	+1.6	

Note: The direct effect of the consumption tax hike on the CPI for fiscal 2019 and fiscal 2020 is estimated to be 0.5 percentage point for each year. The direct effects of policies concerning the provision of free education on the CPI for fiscal 2019 and fiscal 2020 are estimated to be minus 0.3 percentage point and minus 0.4 percentage point, respectively.

Source: Bank of Japan, "Outlook for Economic Activity and Prices (July 2019)."

Real Exports

Breakdown by Region

	y/y % chg.		s.a., q/q % chg.					s.a., m/m % chg.		
	CY 2017	2018	2018 Q3	Q4	2019 Q1	Q2	Q3	2019 May	June	July
United States	3.4	2.3	-0.2	4.1	0.3	4.7	-2.0	-5.3	2.8	-1.9
EU	4.6	6.1	-3.6	2.9	2.0	-3.4	6.7	-10.1	8.8	4.7
Asia	9.0	3.2	-0.1	-0.6	-3.2	0.5	-1.0	-6.3	7.4	-3.5
China	14.1	5.9	-0.4	-0.5	-5.4	1.6	-2.7	-0.4	2.4	-4.1
NIEs, ASEAN, etc.	6.4	1.8	0.1	-0.8	-1.9	-0.2	-0.3	-9.3	10.3	-3.4
Others	3.1	3.5	-6.9	2.7	-3.0	-2.5	14.2	8.1	-7.2	17.0
Real exports	6.4	2.2	-1.6	0.5	-1.7	0.1	2.1	-4.5	4.1	0.9

Breakdown by Goods

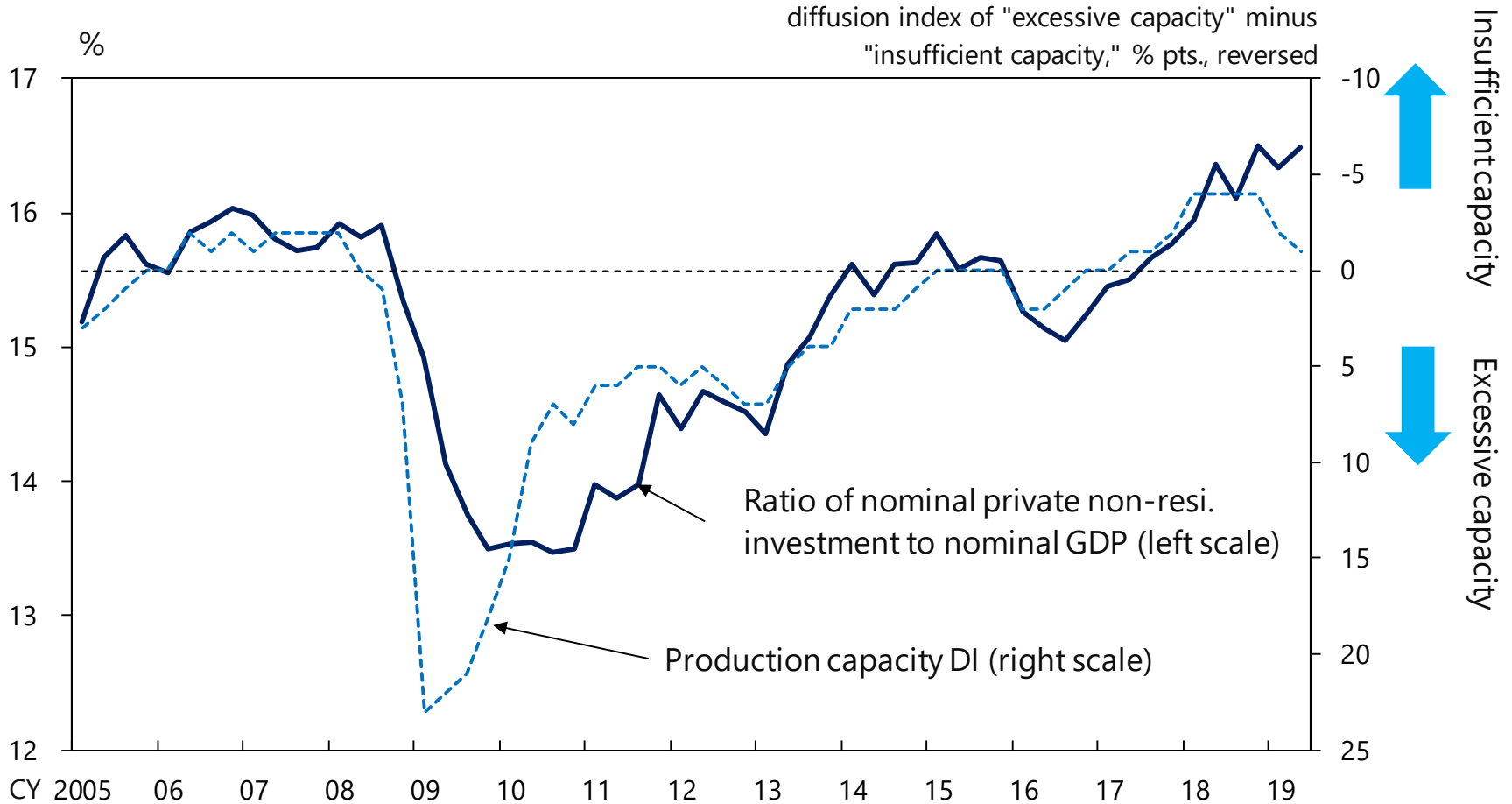
	y/y % chg.		s.a., q/q % chg.					s.a., m/m % chg.		
	CY 2017	2018	2018 Q3	Q4	2019 Q1	Q2	Q3	2019 May	June	July
Intermediate goods	1.4	2.5	0.4	3.0	-2.6	3.2	0.4	-6.5	9.2	-3.1
Motor vehicles and related goods	5.2	5.6	-2.9	1.9	0.2	-0.1	-1.1	-3.0	-2.3	1.5
IT-related goods	8.0	4.1	0.4	-1.1	-3.6	2.2	0.8	-5.1	5.0	-0.7
Capital goods	12.3	5.3	-2.3	-0.2	-3.6	-1.5	1.2	-9.1	4.1	1.7
Real exports	6.4	2.2	-1.6	0.5	-1.7	0.1	2.1	-4.5	4.1	0.9

Notes: 1. NIEs, ASEAN, etc. includes other Asian countries such as India and Bangladesh.

2. Motor vehicles and related goods includes motor vehicles, parts of motor vehicles, and power generating machine. IT-related goods includes computers and units, telecommunication machinery, semiconductors, audio and visual apparatus, and medical and optical instruments. Capital goods includes metalworking machinery, construction machines, electrical power machinery, semiconductor production equipment, and ships.

3. Figures for 2019/Q3 are those of July.

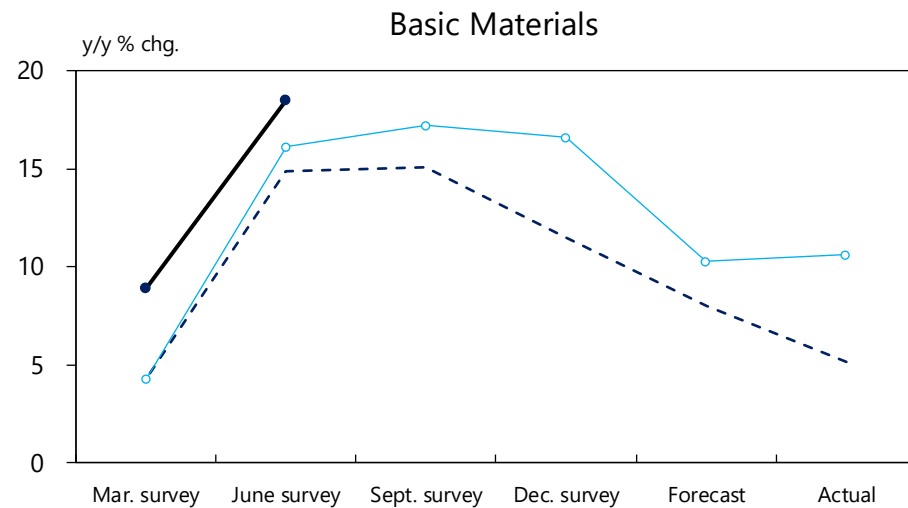
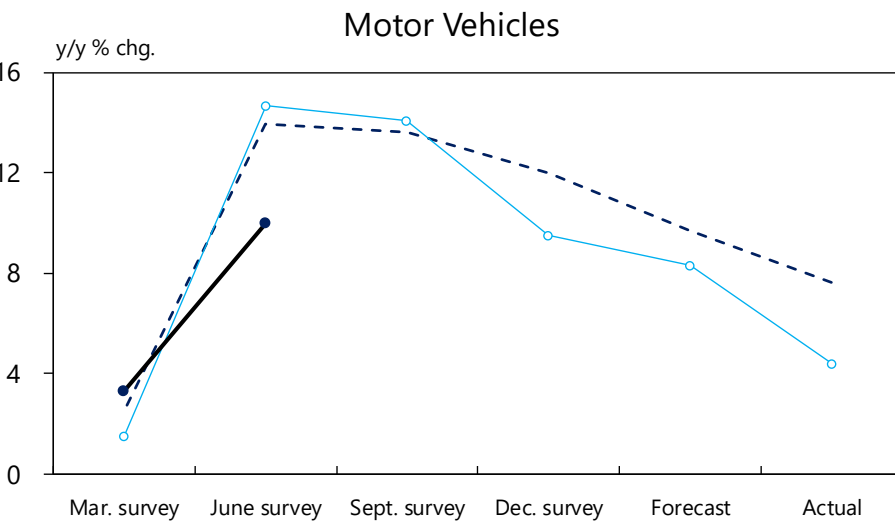
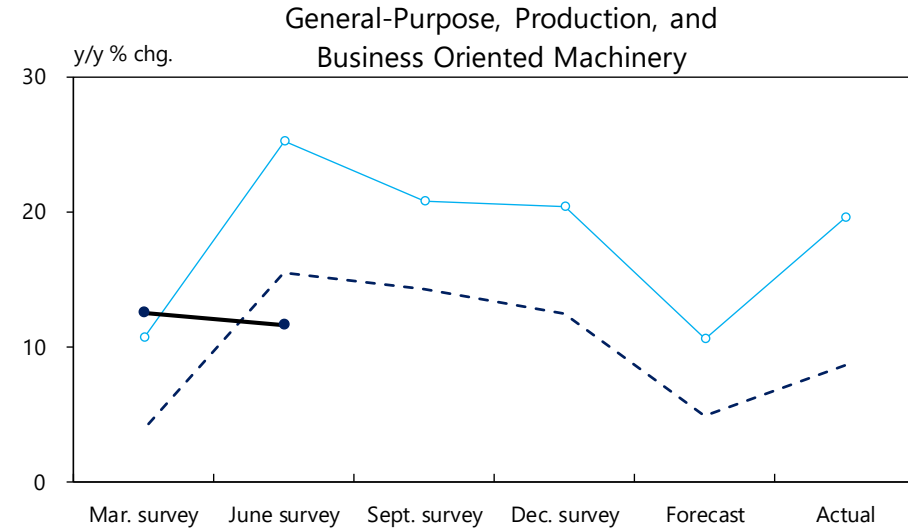
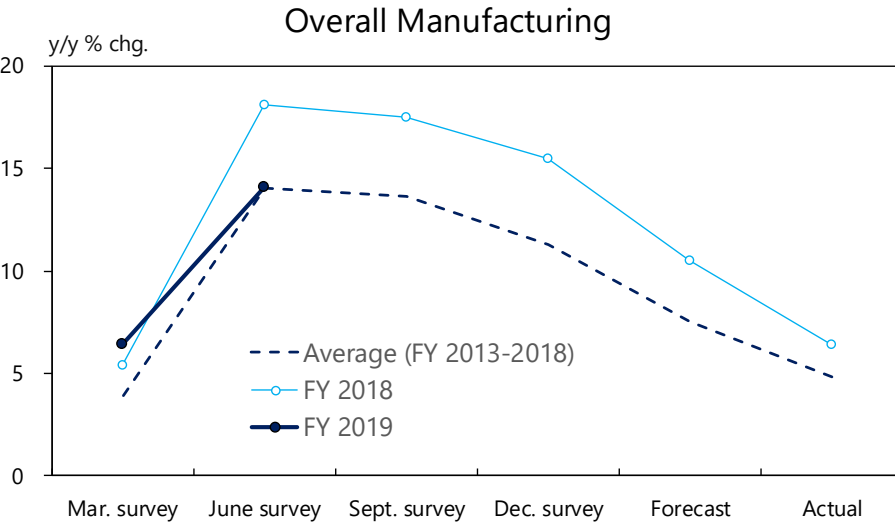
Business Fixed Investment (Ratio to Nominal GDP)



Note: Production capacity DI shows figures for large enterprises of all industries.

Sources: Cabinet Office, "National Accounts"; Bank of Japan, "Tankan (Short-Term Economic Survey of Enterprises in Japan)."

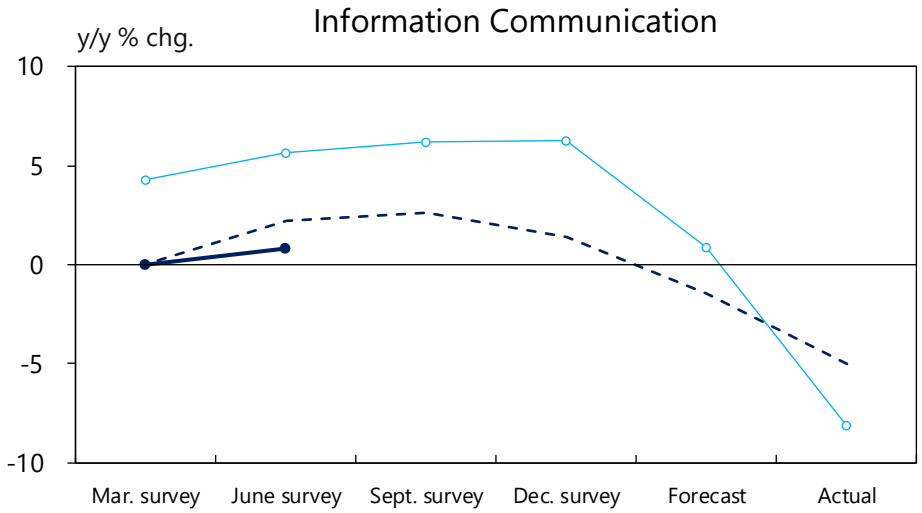
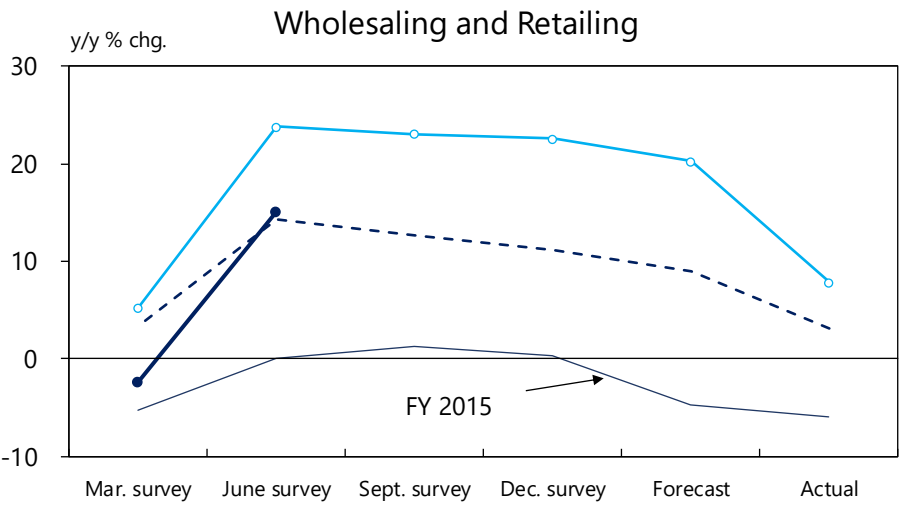
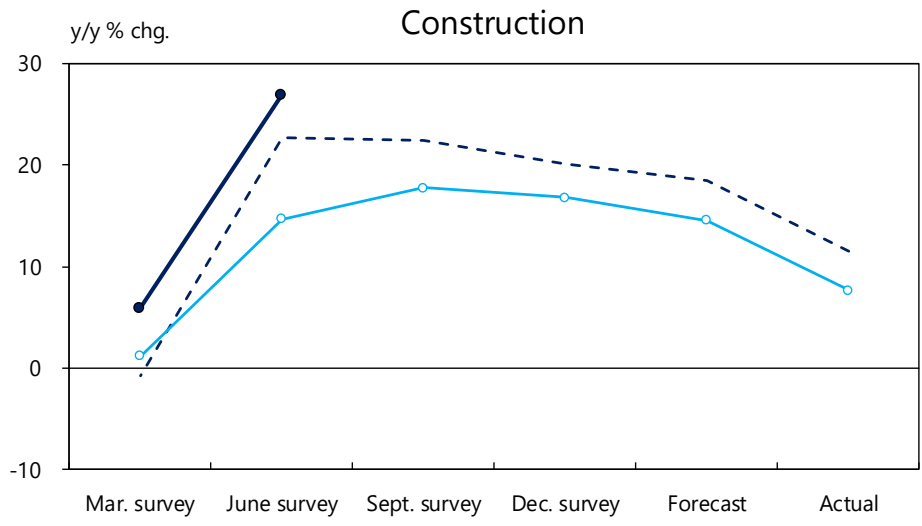
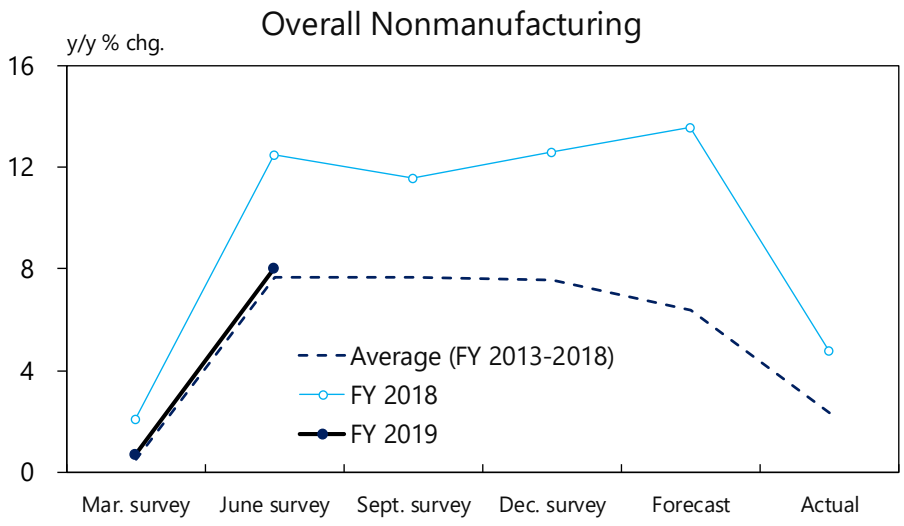
Developments in Business Fixed Investment Plans (Large Manufacturing Firms) Chart 10



Note: Figures include software investment and exclude land purchasing expenses.

Source: Bank of Japan, "Tankan."

Developments in Business Fixed Investment Plans (Large Nonmanufacturing Firms)

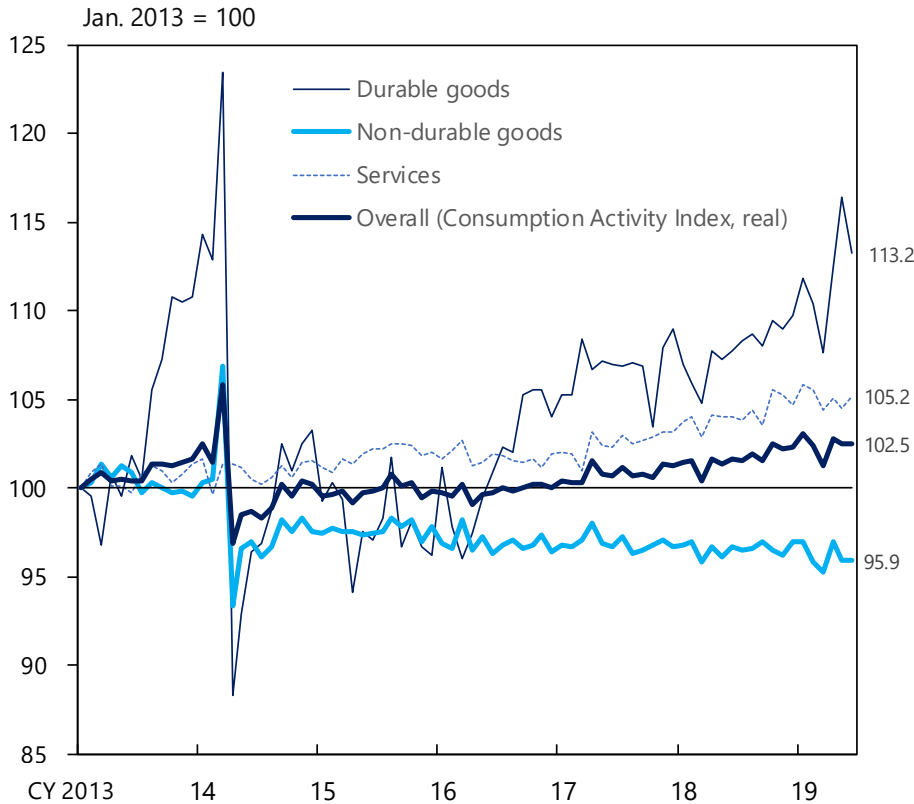


Note: Figures include software investment and exclude land purchasing expenses.

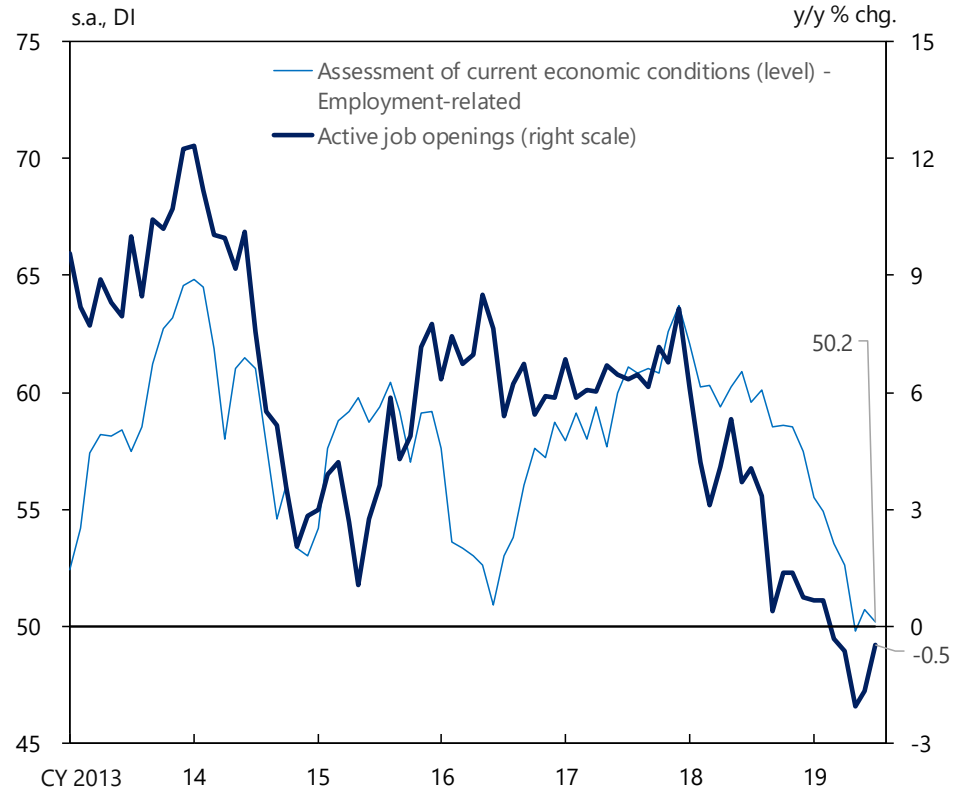
Source: Bank of Japan, "Tankan."

Household Consumption (1)

Real Consumption



Employment-Related Indicators



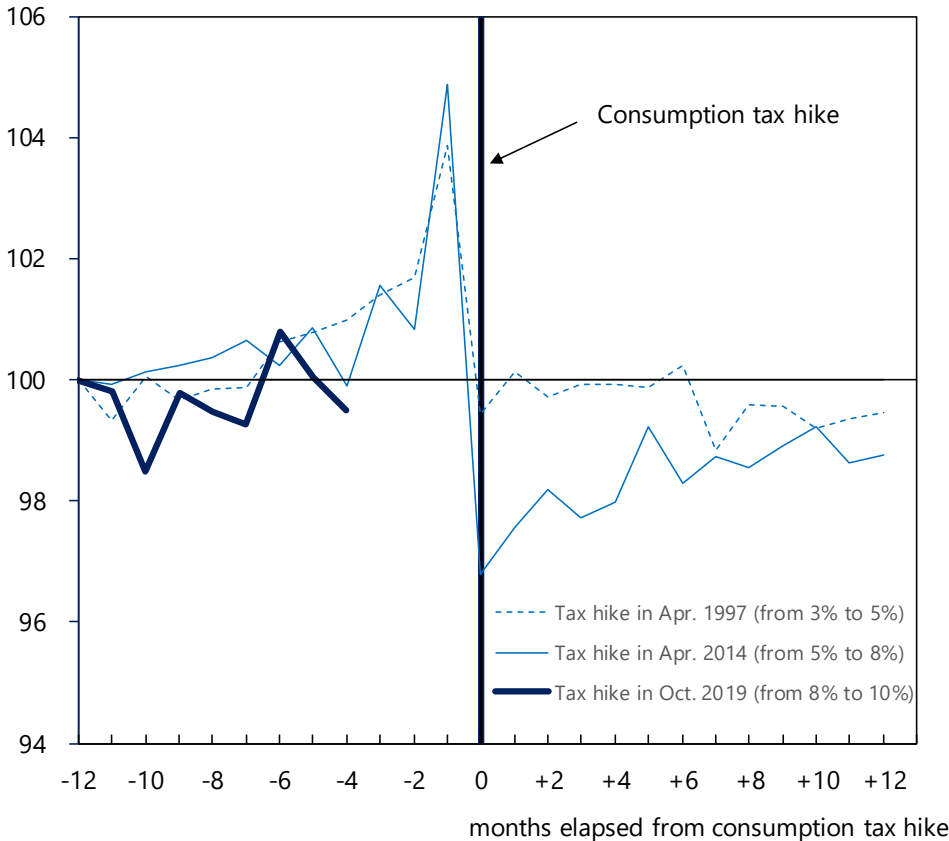
Note: The latest figures are as of June 2019 for the real consumption and July 2019 for others.

Sources: Bank of Japan, "Consumption Activity Index"; Cabinet Office, "Economy Watchers Survey"; Ministry of Health, Labour, and Welfare, "Employment Referrals for General Workers."

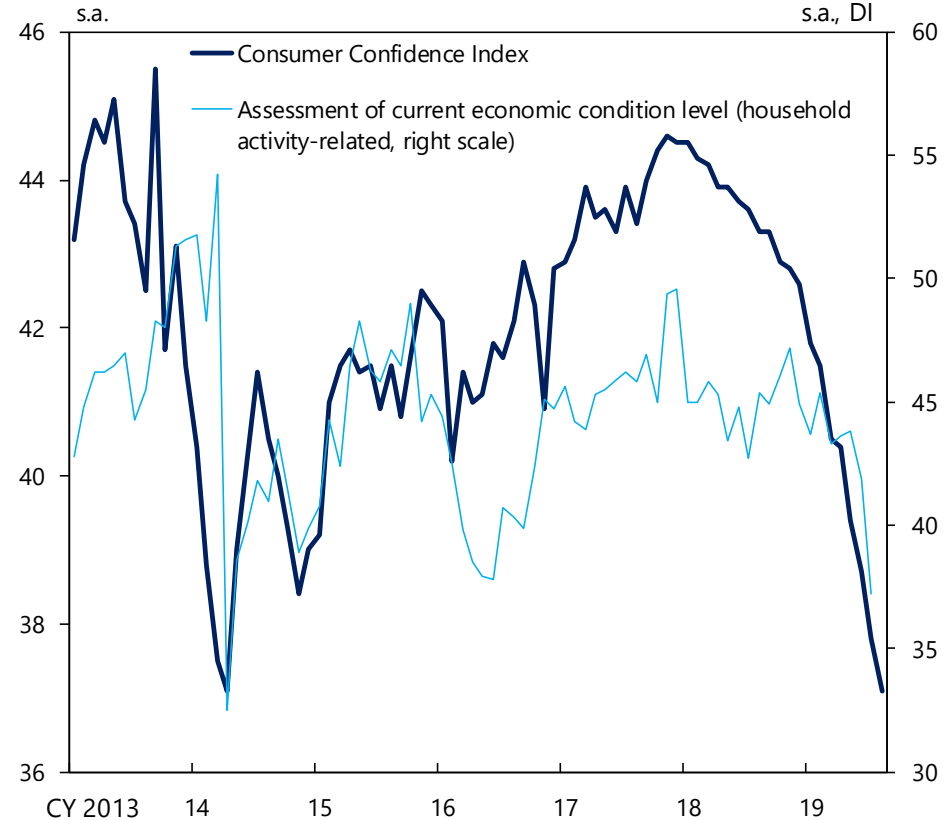
Household Consumption (2)

Consumption Before and After Tax Hikes

Apr. 1996, Apr. 2013, Oct. 2018 = 100



Consumer Sentiment

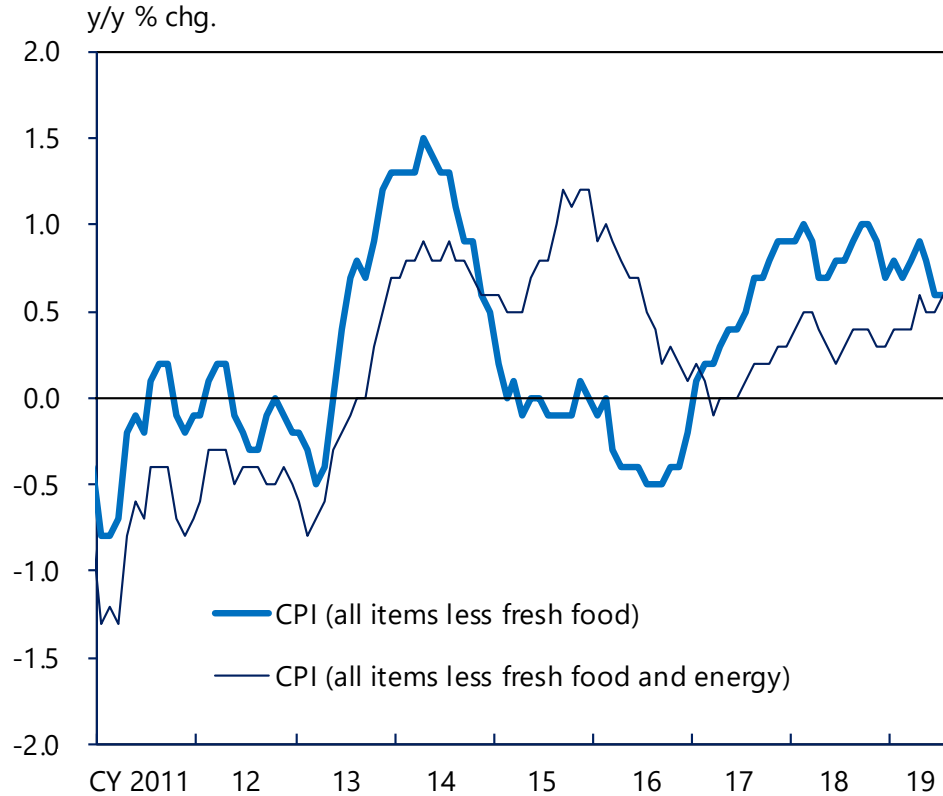


Note: Households with two or more persons are counted in Consumer Confidence Index (seasonal adjusted figures).

Sources: Cabinet Office, "Synthetic Consumption Index," "Consumer Confidence Survey," "Economy Watchers Survey."

Consumer Prices

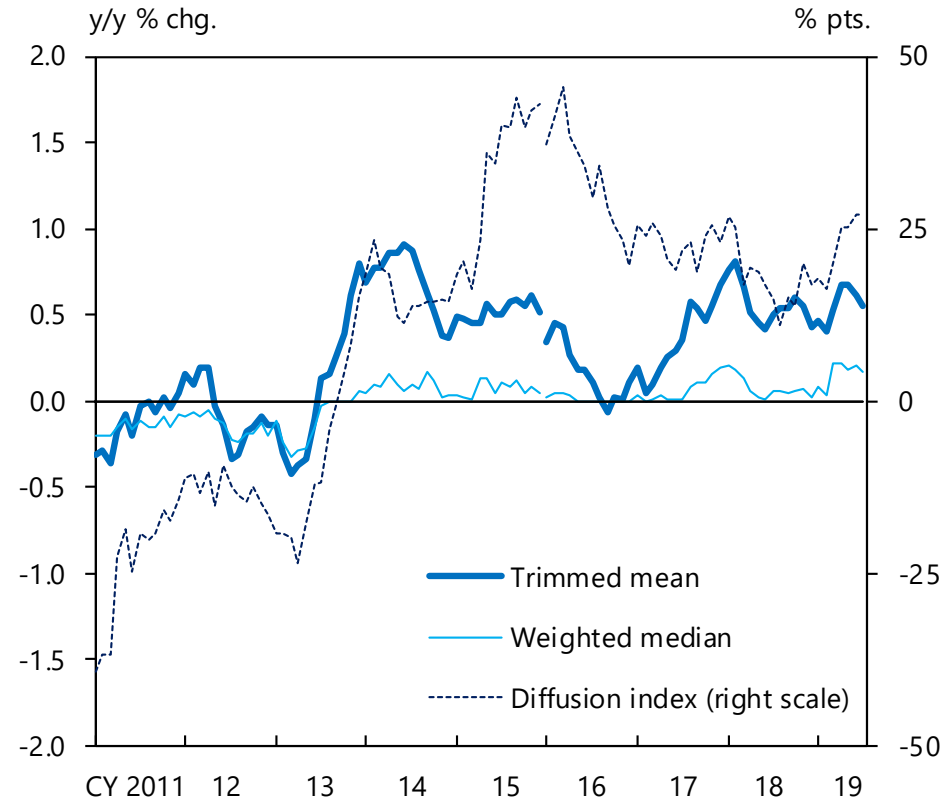
Consumer Price Index



Note: Figures are adjusted for changes in the consumption tax rate.

Source: Ministry of Internal Affairs and Communications, "Consumer Price Index."

Measures of Underlying Inflation



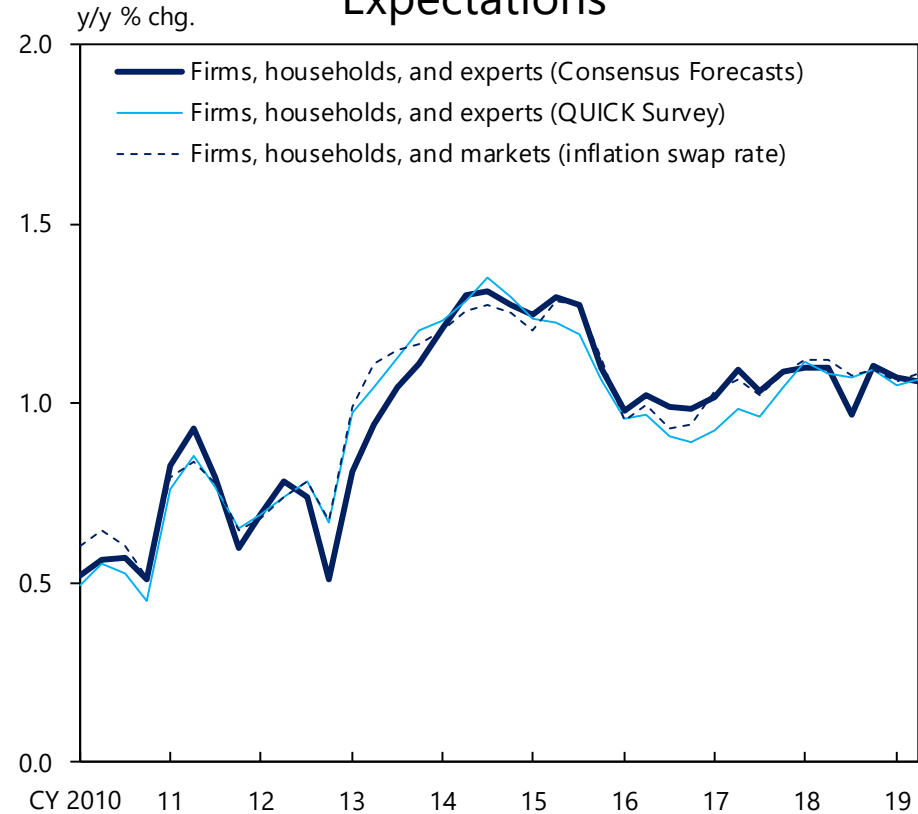
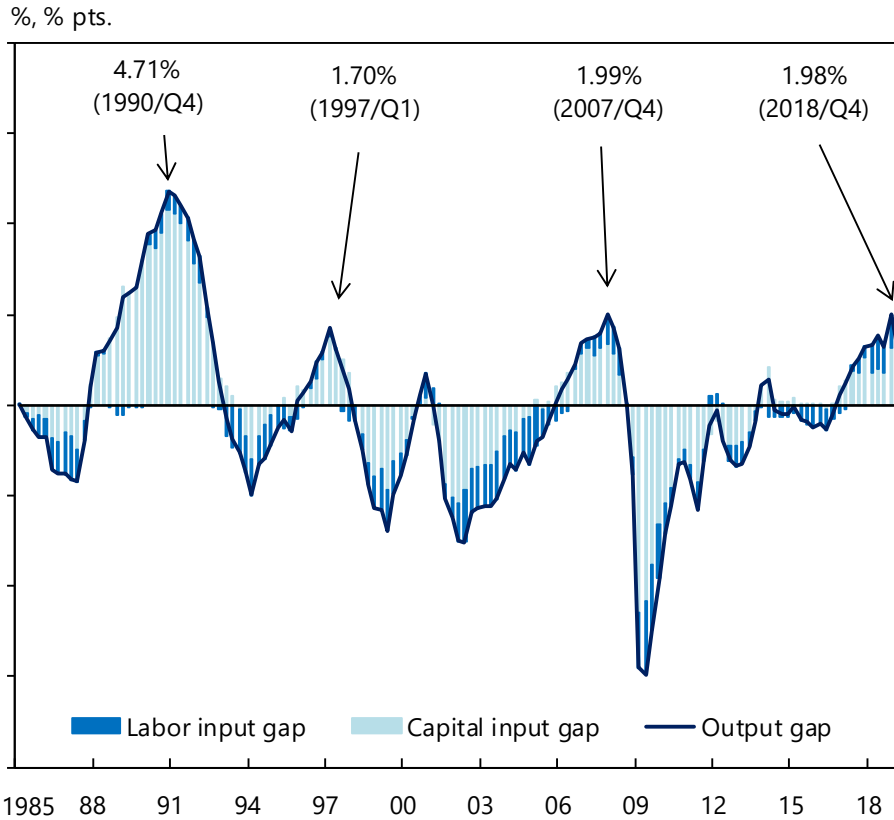
Note: The diffusion index is defined as the share of increasing items minus that of decreasing items. The share of increasing/decreasing items is the share of items in the CPI (less fresh food, consumption tax adjusted), for which the price increased/decreased from a year earlier.

Sources: Bank of Japan, "Measures of Underlying Inflation"; Ministry of Internal Affairs and Communications.

Output Gap and Inflation Expectations

Output Gap

Synthetic Indicators of Inflation Expectations



- Notes: 1. The data for the output gap in the left-hand graph are the estimates by the Bank's staff as of July 3, 2019.
2. In the right-hand graph, semiannual data from the *Consensus Forecasts* up through 2014/Q2 are linearly interpolated. Figures for the Bank's *Opinion Survey on the General Public's Views and Behavior* (Opinion Survey) exclude inflation expectations by respondents whose annual inflation expectations were $\pm 5\%$ or greater. The output prices DI in the *Tankan* represents the difference between the share of firms that raised prices in the preceding three months and the share of firms that lowered prices.
3. In the right-hand graph, inflation expectations of firms are taken from the *Tankan* and those of households are taken from the Bank's Opinion Survey. For experts' and markets' inflation expectations, data from the *Consensus Forecasts*, the QUICK Survey, and inflation swap rates are used as indicated by their respective lines.

Outline of the Bank's Monetary Policy

Chart 16

(1) Yield Curve Control

Short-term rate: The Bank will apply minus 0.1 percent to the Policy-Rate Balances.

Long-term rate: The Bank will purchase JGBs so that 10-year JGB yields will remain at around zero percent. While doing so, the yields may move upward or downward to some extent mainly depending on developments in economic activity and prices.

(2) Asset Purchases

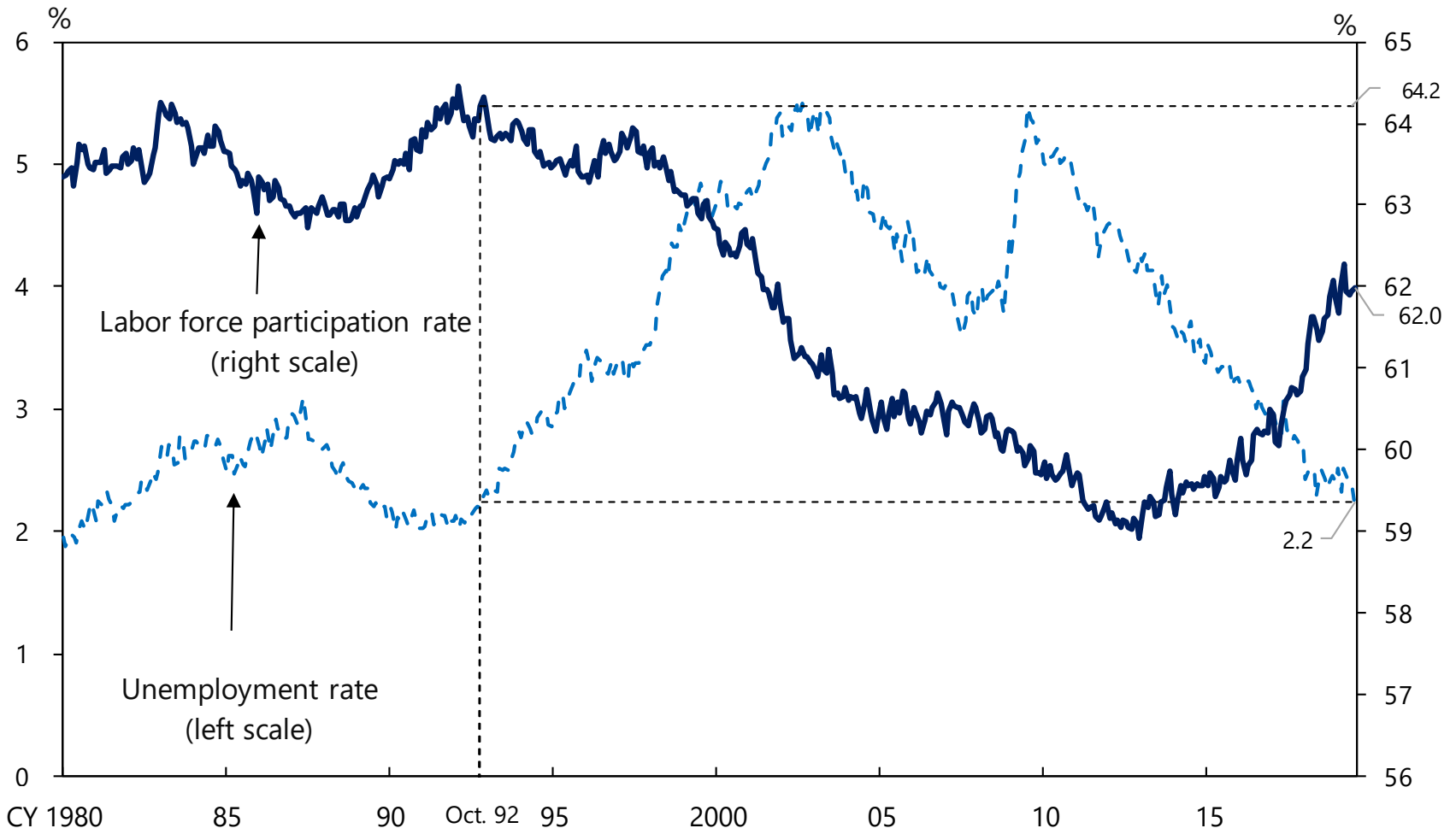
The Bank will purchase ETFs and J-REITs so that their amounts outstanding will increase at annual paces of about 6 trillion yen and about 90 billion yen, respectively. With a view to lowering risk premia of asset prices in an appropriate manner, the Bank may increase or decrease the amount of purchases depending on market conditions.

(3) Commitment

Overshooting commitment: The Bank will continue expanding the monetary base until the year-on-year rate of increase in the observed CPI (all items less fresh food) exceeds 2 percent and stays above the target in a stable manner.

Forward guidance for policy rates: The Bank intends to maintain the current extremely low levels of short- and long-term interest rates for an extended period of time, at least through around spring 2020, taking into account uncertainties regarding economic activity and prices including developments in overseas economies and the effects of the scheduled consumption tax hike.

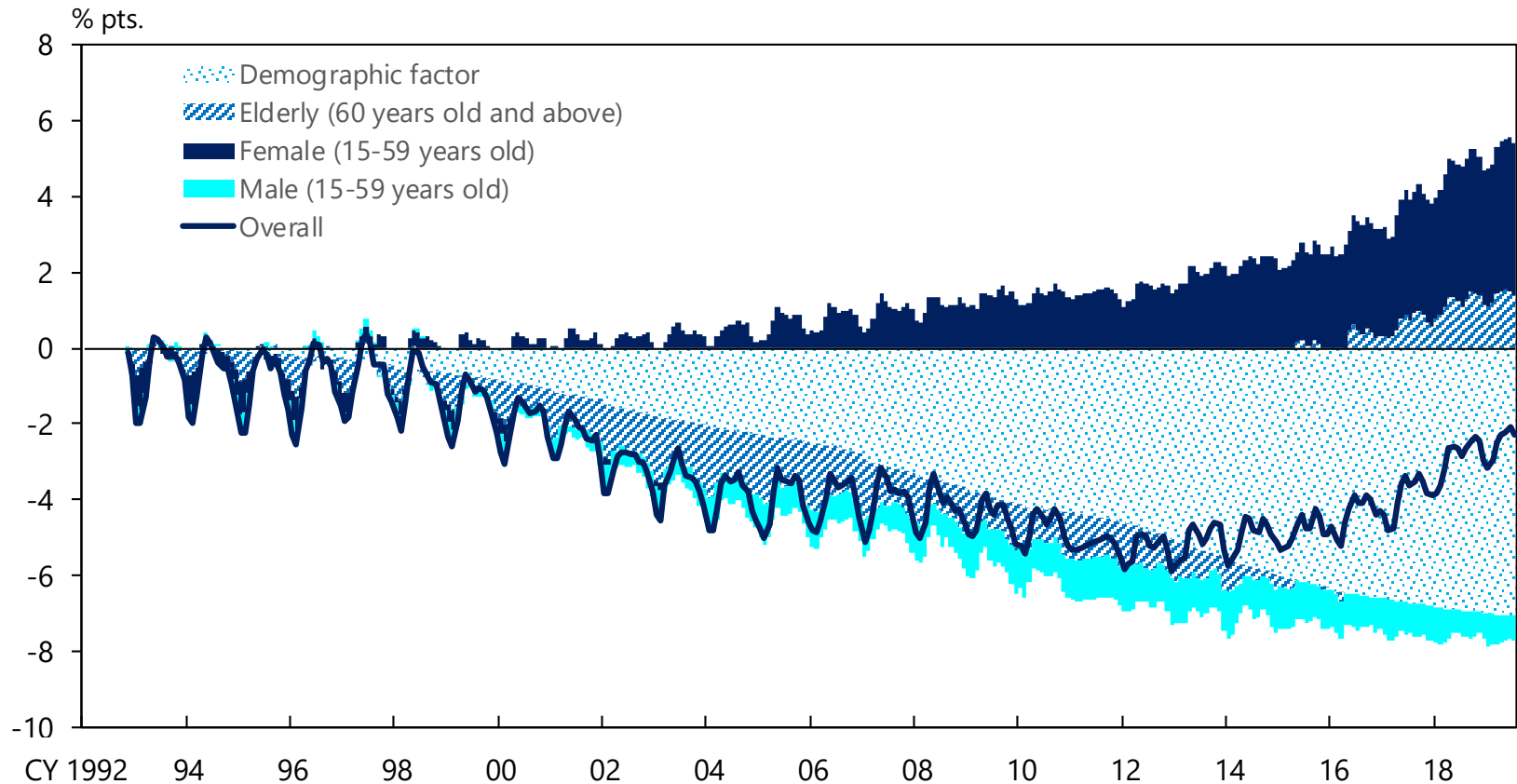
Unemployment Rate and Labor Force Participation Rate



Note: Seasonally adjusted figures.

Source: Ministry of Internal Affairs and Communications, "Labour Force Survey."

Factors that Contributed to the Change in the Labor Force Participation Rate



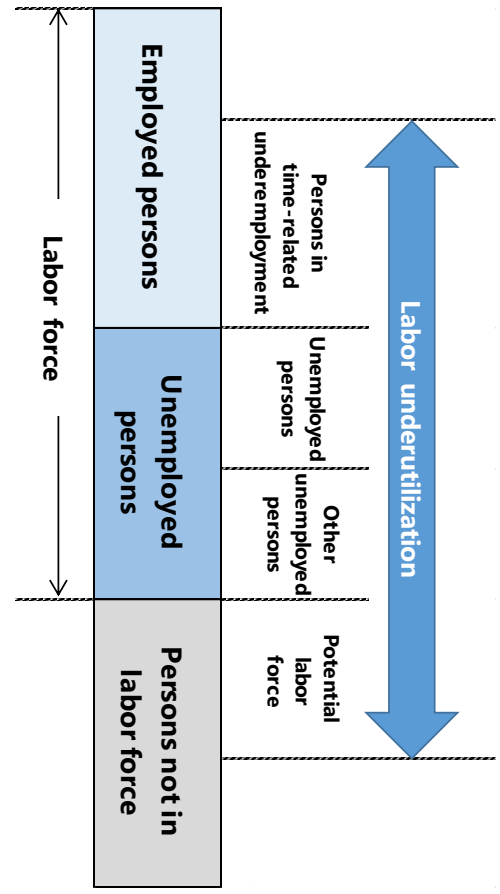
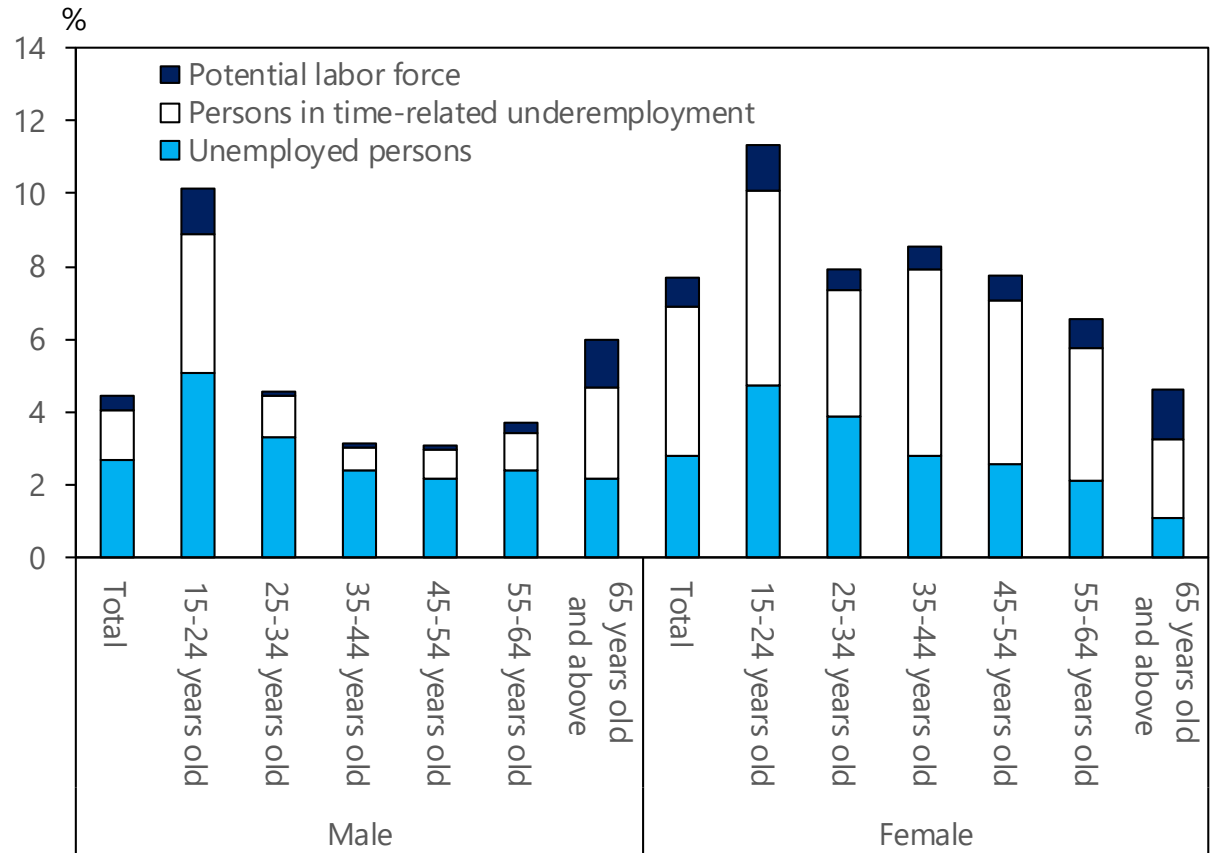
Notes: 1. Given that the labor force participation rate is the population-weighted average of all age groups, the change in the labor force participation rate from October 1992 to July 2019 is decomposed into a demographic factor (the effect of changes in the demographic pyramid) and changes in the labor force participation rate of age groups. The labor force participation rate of each age group is calculated from the original series.

2. Figures are cumulative from October 1992.

3. Original series are linearly interpolated from March to August 2011 when data were not released.

Source: Ministry of Internal Affairs and Communications, "Labour Force Survey."

Labor Underutilization Indicator 4 (LU4) by Gender and Age Group (Average of the Apr.-June Quarter of 2019)



Notes: 1. Ratios to the sum of labor force and potential labor force.

2. Labor Underutilization Indicator 4 (LU4) is the sum of unemployed persons, persons in time-related underemployment, and the potential labor force.

Source: Ministry of Internal Affairs and Communications, "Labour Force Survey (Detailed Tabulation)."