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FY2018, FY2019 and FY2020 Economic Outlook

- The global economy is headed for a slowdown in 2020, and uncertainty remains high

February 15, 2019

Mizuho Research Institute

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Key points of our forecast

- The global economy is headed for a slowdown through 2020. In 2019, the moderation of the IT cycle will also serve as a drag in addition to the deceleration of the Chinese and European economies. In 2020, while the Chinese economy will continue to follow a slowdown, the US economy will also moderate as the effect of fiscal stimulus wears off.

- The Japanese, Eurozone and Chinese economies are slowing down. Even though the US economy remains on solid footing and continues to decouple from the rest of the world, in 2019 the global economy may revisit the economic slowdown experienced during 2015 to 2016 in the event the US economy loses momentum.

- The sharp slowdown of the Chinese economy and semiconductor market resembles the situation in 2015 to 2016. Crude oil market trends and yen appreciation risks reflecting the receding prospects of US interest rate hikes must be watched closely.

- Monetary policy is turning accommodative around the world, reflecting the slower growth of the global economy. In addition to the US suspending its interest rate hikes, the Eurozone has also put off its interest rate hike. Although US fiscal policy is still expansionary, it could tighten in 2020 in the absence of additional fiscal expenditures.

- Among the risk factors are the escalation of trade tensions, US domestic political discord, breakdown of Brexit negotiations, return of Italy's debt crisis, China's economic slowdown and its spread to emerging market (EM) economies, Middle East geopolitical risks and rise of crude oil prices.

- In FY2019 and FY2020, Japan's economic growth is forecast to remain below its potential growth rate and lack strength. The drags upon growth are the deceleration of exports in FY2019, and the adjustment of capital investment in FY2020.

- The Bank of Japan (BOJ) will keep the policy interest rate unchanged and will have little room for further monetary easing in the event of an economic slowdown. While one option may be to push interest rates further into negative territory in the event of a sharp appreciation of the yen, the option is limited in consideration of its negative side effects.

I. General Overview

The global economy is headed for a mild slowdown

(1) Overview of our forecast: we forecast a gradual slowdown of the global economy through 2020

- The growth rates of the relevant countries and regions are set to fall for two years in a row, given China's stagnation and slowdown in IT in 2019, and the fading impact of US policy measures in 2020.

[Outlook on the global economy]

	2015	2016	2017	2018	2019	2020	2018	2019	2018	2019
	(Y-o-y % change)						(Y-o-y % change)		(% point)	
	Calendar year						(Forecast in Dec 2018)		(Breadth of change from forecast in Dec 2018)	
Total of forecast area	3.5	3.4	3.9	4.0	3.7	3.5	3.9	3.8	0.1	-0.1
Japan, US, Eurozone	2.4	1.6	2.2	2.2	1.8	1.4	2.2	2.0	-	-0.2
US	2.9	1.6	2.2	2.9	2.7	1.7	2.9	2.7	-	-
Eurozone	2.1	2.0	2.4	1.8	1.3	1.4	1.9	1.5	-0.1	-0.2
UK	2.3	1.8	1.8	1.4	1.3	1.5	-	-	-	-
Japan	1.2	0.6	1.9	0.7	0.5	0.5	0.7	1.0	-	-0.5
Asia	6.2	6.2	6.1	6.2	5.8	5.8	6.2	5.9	-	-0.1
China	6.9	6.7	6.8	6.6	6.2	6.1	6.6	6.2	-	-
NIEs	2.1	2.4	3.2	2.8	2.3	2.0	2.7	2.3	0.1	-
ASEAN5	4.9	4.9	5.3	5.2	5.0	4.8	5.2	5.0	-	-
India	7.6	7.9	6.2	7.5	7.2	7.2	7.5	7.2	-	-
Australia	2.5	2.8	2.4	3.1	2.5	2.3	3.1	2.5	-	-
Brazil	-3.5	-3.3	1.1	1.4	2.4	2.3	1.4	2.4	-	-
Mexico	3.3	2.9	2.1	2.0	1.8	1.7	2.2	2.2	-0.2	-0.4
Russia	-2.5	-0.3	1.6	2.3	1.3	1.7	1.6	1.3	0.7	-
Japan (FY)	1.3	0.9	1.9	0.5	0.6	0.5	0.7	0.7	-0.2	-0.1
Crude oil prices (WTI, USD/bbl)	49	43	51	65	56	54	65	68	-	-12

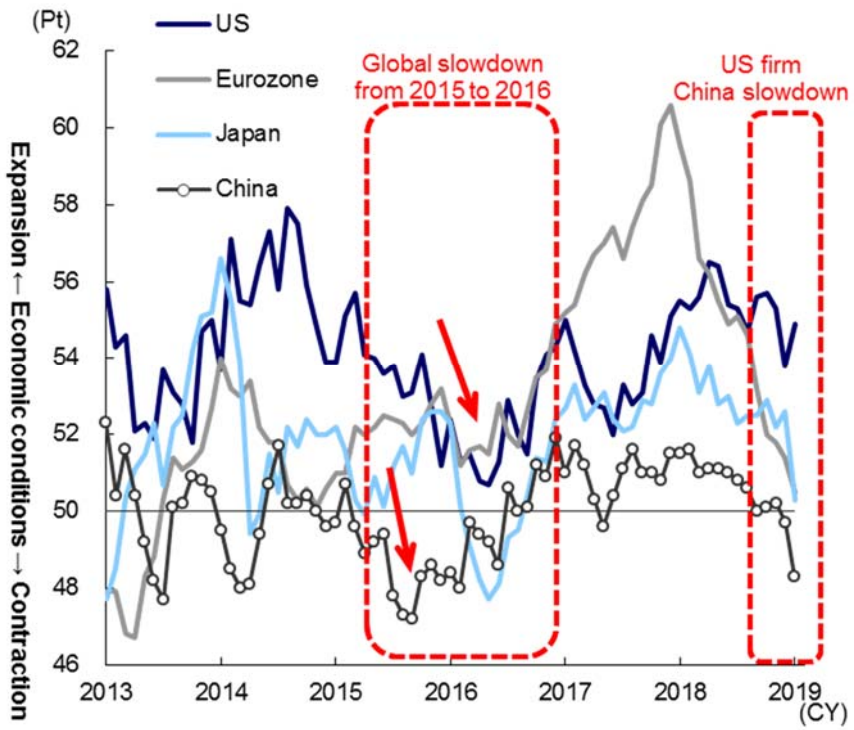
Note: The shaded areas are forecasts. The total of the forecast area is calculated upon the 2016 GDP share (PPP) by the IMF

Sources Made by MHRI based upon releases by the International Monetary Fund (IMF) and statistics of relevant countries and regions

(2) Overview of the global economy: concerns about the US being the sole driver

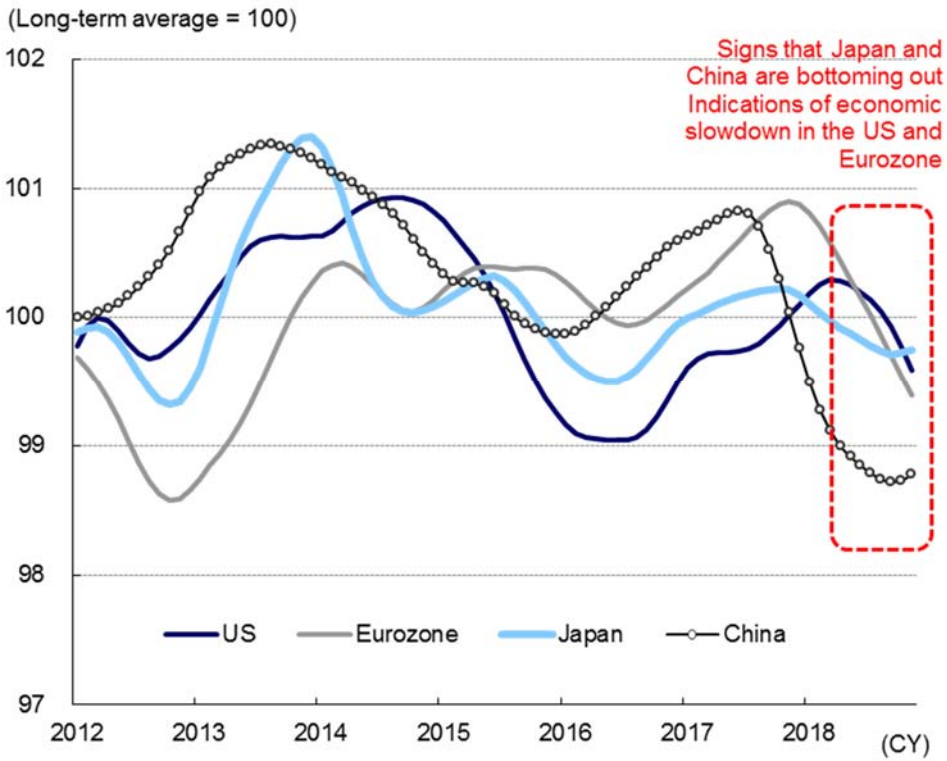
- In contrast to clearer signs of a global economic slowdown in places such as China and Europe, the US economy remains on solid footing.
  - While the manufacturing PMI fell below 50 in China and close to 50 in the Eurozone and Japan, it remains high in the US.
  - Looking forward, while leading indicators indicate a bottoming out in Japan and China, they suggest an economic slowdown in the US and the Eurozone.

[Global manufacturing PMI]



Source: Made by MHRI based upon Markit

[OECD Leading Indicators]



Source: Made by MHRI based upon OECD

While the slowdown in 2019 and 2020 will be milder than in 2016, the recovery will also be weak

- Our main scenario outlook is a slowdown through 2020. The sub-scenario outlook is a sharp slowdown in 2019 (mainly in China), followed by a recovery in 2020 due to measures taken by each country. On the other hand, a synchronized global recession is a possibility in the event the intensification of trade tensions coincide with other factors such as a no-deal Brexit.

[The period of 2015 to 2017 compared with current conditions and the prospective scenario out until 2020]

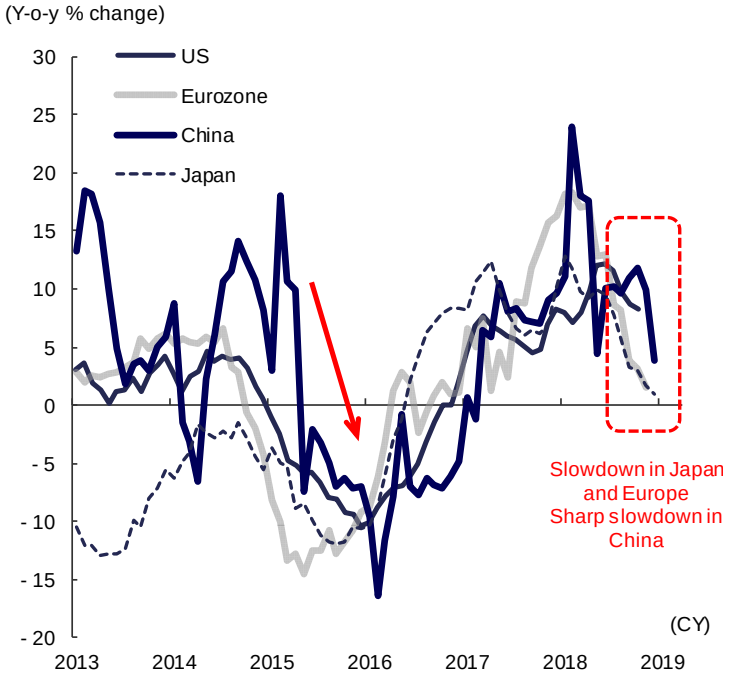
	Economic slowdown in 2015 to 2016	Recovery period throughout 2017	Current conditions	Scenario for 2019 and 2020
Global economy	Slowdown in emerging markets also spreads to developed countries	Recovery	Peak out	Slowdown focused on Europe and China in 2019 and the US in 2020
US economy	Slowdown due to strong dollar and weak oil prices, etc.	Recovery	Firm, due in part to support by fiscal policy measures	Firm in 2019, slowdown in 2020
Chinese economy	Substantial slowdown due to inventory adjustments	Recovery, reflecting economic stimulus measures	Slow due to deleveraging and the impact of US-China trade tensions	Moderate slowdown underpinned by economic stimulus measures
IT cycle	Deterioration	Recovery (super cycle)	Growth in sales of semiconductors slows down	Recovery from second half of 2019
Oil price	Sharp drop (From $100 levels to $20 levels)	Rebound ($40 to $50 levels)	Sharp drop at end of 2018 (From $70 levels to $40 levels)	$50 levels
Foreign exchange	Strong dollar → Strong yen	Weak yen	Strong dollar in 2018, but a strong yen trend recently	Range bound Concerns for the risk of a strong yen
Politics	Political instability in Europe (Brexit decision)	European political instability will ebb following French presidential election	Uncertainty factors such as US-China trade tensions and turmoil surrounding Brexit	Uncertainty persists with downside risk

Source: Made by MHRI

The emerging market (EM) slowdown spread to developed market (DM) countries in 2015 to 2016. Japan, Europe and China are currently in a slowdown

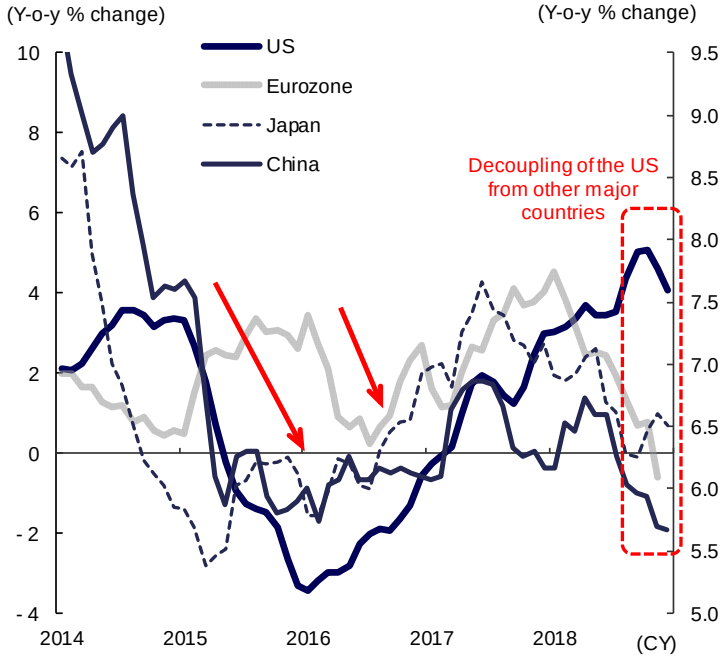
- In 2015 to 2016, the slowdown in China and IT led to lower oil prices, and the slowdown spread to the EM and subsequently the DM countries. While current conditions may be described as a decoupling with the US as the sole winner, there is also a risk of the slowdown spreading to the US.
  - Exports fell worldwide in 2015 to 2016. In addition to the current slowdown in Japan and Europe, the Chinese economy is also slowing sharply. This may lead to a global slowdown.
  - Production slowed through 2015 in Japan, the US and China. Europe also slowed from 2016 due to political uncertainties. While Japan, Europe and China are currently slowing down, the US remains strong. Looking forward, the risk of a US slowdown needs to be monitored.

[Export values of major countries]



Note: 3-month moving average of y-o-y
Source: Made by MHRI based upon the US Department of Commerce, Eurostat, National Bureau of Statistics of China, Japan's Ministry of Finance

[Industrial production of major countries]

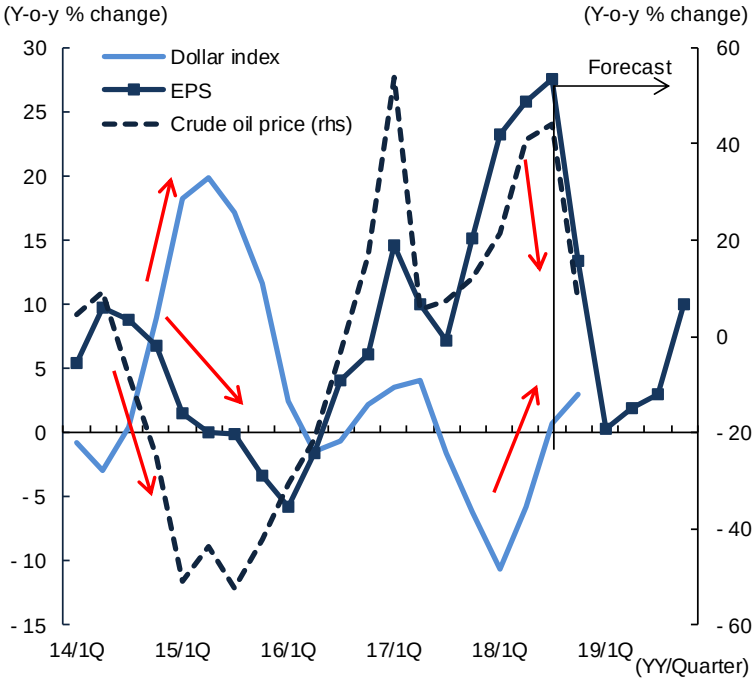


Note: 3-month moving average of y-o-y
Source: Made by MHRI based upon the FRB, Eurostat, National Bureau of Statistics of China, Japan's Ministry of Economy, Trade and Industry

Keep a close eye upon a US economic slowdown and yen appreciation risks

- The US needs to avoid the combination of weak oil prices and a strong dollar. In contrast, yen appreciation risks are a concern for Japan.
  - When oil prices fell and the dollar appreciated from late 2014 throughout 2015, it served as downward pressure on the earnings of US companies.
  - While the US Federal Reserve's (Fed) retreat from interest rate hikes has alleviated concerns about a further appreciation of the dollar, it has led to the sharp rise of yen appreciation risks.
    - ✓ When the Fed - which had anticipated gradual rate hikes up to the second half of 2015 - suspended its interest rate hikes, the ebb of speculation on a rate hike caused the appreciation of the yen.

[EPS of companies that make up the S&P500, price of crude oil and the dollar index]



Source: Made by MHRI based upon Datastream

[USD/JPY and the FF futures rate]

Source: Made by MHRI based upon Bloomberg

Given the economic slowdown, monetary policy will likely turn accommodative and fiscal policy expansionary

- Monetary policy should remain more or less accommodative through 2019 and 2020 (The US will suspend interest rate hikes, while the Eurozone will also forgo interest rate hikes).
- Fiscal policy will be more or less expansionary among all countries in 2019. However, the US will tighten in 2020 unless there is additional fiscal spending.

[Outlook for monetary policy and fiscal policy by country and region (main scenario)]

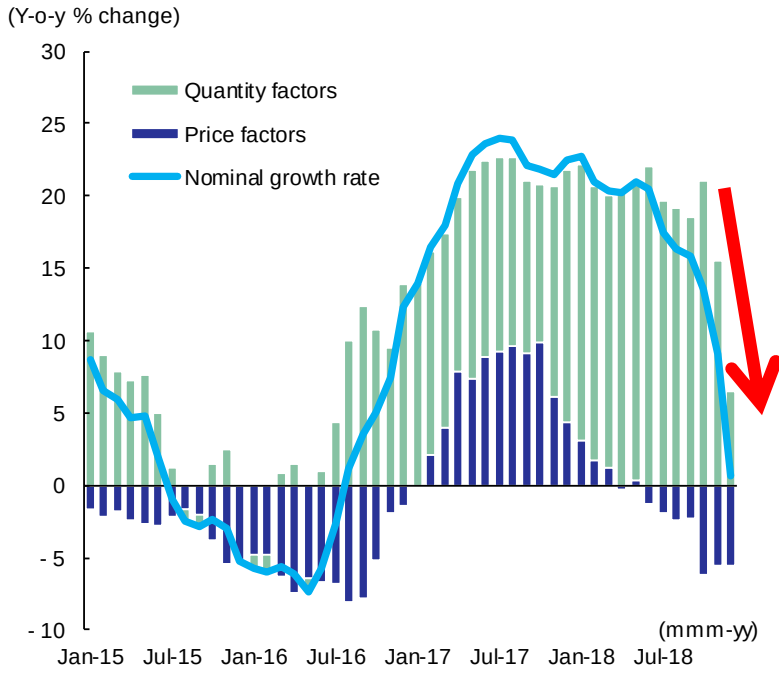
	Monetary Policy		Fiscal Policy	
	2019	2020	2019	2020
US	Suspension of interest rate hikes Continues to reduce BS	Leave interest rates unchanged Suspend BS reduction	Expansionary	Tightening
Eurozone	Leaves interest rates unchanged BS is flat		Slightly expansionary	Generally neutral
China	Lowers deposit reserve requirement ratio Continues to support funding		Tax cuts, measures to stimulate consumer spending, increased infrastructure investment	Maintains proactive fiscal policy
Other EM countries	Upward pressure on interest rate hikes wanes	Interest rate cuts in some countries	Some countries have expansionary policies	
Japan	Unchanged		Slightly expansionary (slight expansion despite consumption tax hike due to measures to deal with tax hike and measures to build national resilience)	

Source: Made by MHRI

IT-related: the slowdown of the semiconductor market is intensifying

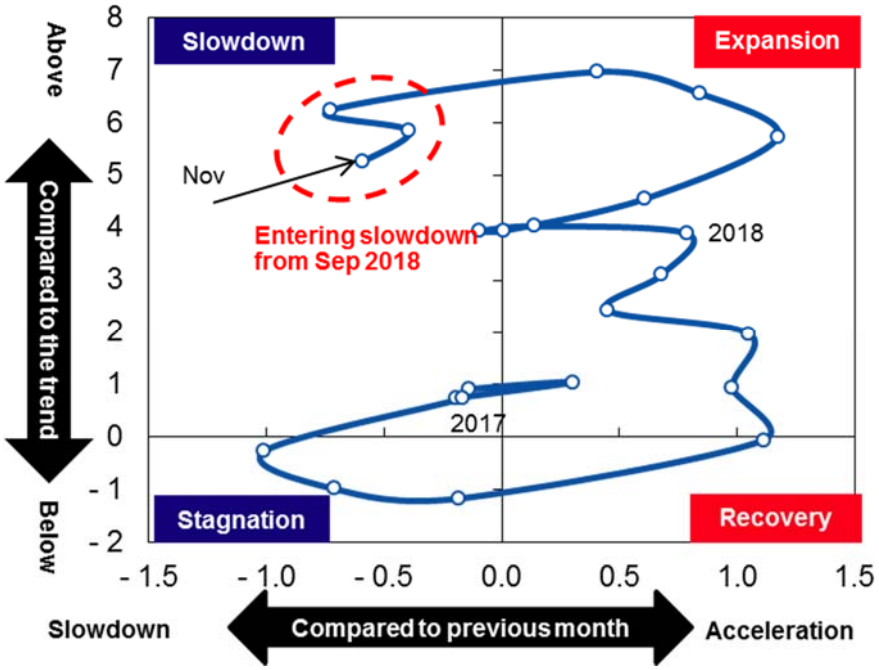
- Semiconductor sales slowed substantially (on a y-o-y base) in the Oct-Dec quarter of 2018. The Silicon Cycle Index (SCI) is in a slowdown phase.
- The semiconductor market will stay in an adjustment cycle until mid-2019. We forecast that the market will bottom in the second half of 2019.
  - Progress in inventory adjustments and investment in new data centers are positive factors.
- However, given that the rise of uncertainties due to US-China trade tensions and China's economic slowdown will weigh on the market, semiconductor demand is unlikely to accelerate to the extent it did in 2017. The chances are remote that the semiconductor market will serve as the driver of the global economy.

[Global semiconductor sales]



Source: Made by MHRI based upon CIEC Data

[SCI Business Cycle Clock]

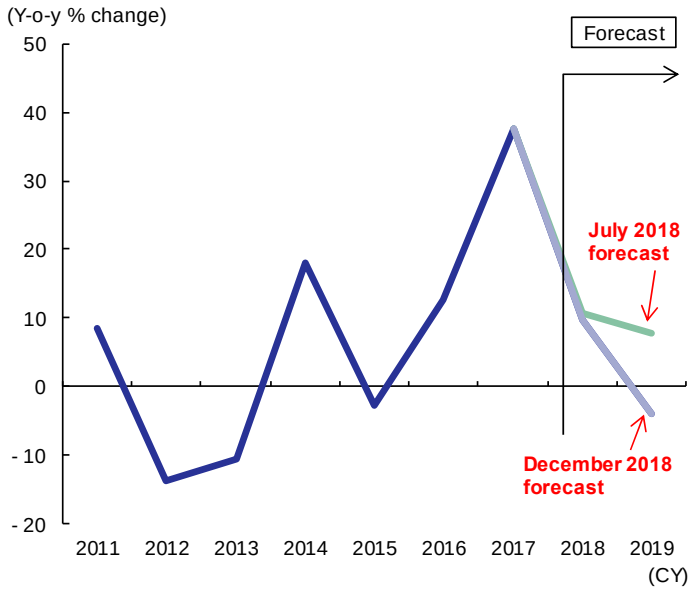


Source: Made by MHRI

IT-related: investment in semiconductor manufacturing equipment to decline in 2019

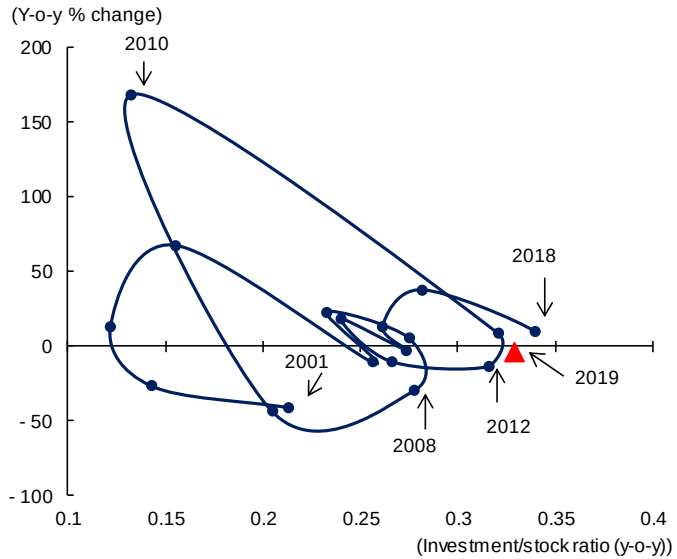
- Investment in semiconductor manufacturing equipment is also waning. Industry association, SEMI, revised downward its forecast on growth in 2019 from its initial forecast of positive growth to growth below the previous year.
  - The downward revision of the forecast stems from restraints upon investment in memory manufacturers such as those in South Korea due to concerns about a drop in the price of memory, and postponement of investment in semiconductor manufacturing equipment among Chinese companies due to US-China trade tensions.
- The stock cycle indicates that the investment-to-stock ratio is at high levels due to the acceleration of investment in recent years. Given the likelihood of stock adjustment pressures this year, the odds are high that investment in semiconductor manufacturing equipment will dip into negative territory.

[Growth rate and forecast on investment in semiconductor manufacturing equipment]



Note: Forecast by SEMI
Source: Made by MHRI based upon SEAJ, SEMI, SEMI Japan, *Worldwide Semiconductor Equipment Market Statistics*

[Stock cycle for semiconductor manufacturing equipment]



Note: Stock value calculated using the Benchmark Year Method. The initial stock amount is taken to be the aggregate from 1991 to 2000. The capital depreciation rate is taken to be 24.7% based on Cabinet Office materials. The figure for 2019 is the SEMI forecast.
Source: Made by MHRI based upon SEAJ, SEMI, SEMI Japan, *Worldwide Semiconductor Equipment Market Statistics*

II. The Japanese Economy

The Japanese economy lacks strength

The Japanese economy: lacks strength

- Japan's economic growth turned positive (1.4% q-o-q p.a.) for the first time in two quarters in the Oct-Dec quarter of 2018. However, in consideration of an expected rebound due to the fading impact of the natural disasters last summer, Japan's growth turned out to lack strength, falling short of recouping the dip in the Jul-Sep quarter of 2018. Despite the firmness of domestic demand, external demand served as a drag, reflecting the slowdown of China-bound exports, and public investment also contributed as negative pressures due to the decline of the rate of progress of public works projects.

- FY2019 forecast on Japan's GDP: +0.6% q-o-q p.a. Export growth turned out to be tepid, reflecting the slowdown of the Chinese economy and moderation of IT demand. Personal consumption is continuing to follow firm footing, reflecting strong labor market conditions. Although a temporary surge in consumption and subsequent reactionary decline should occur before and after the consumption tax hike, the decline of consumption through the fall of real income should turn out to be milder than at the time of the consumption tax hike in 2014 due to the implementation of various income support measures.

- FY2020 forecast on Japan's GDP: +0.5% q-o-q p.a. Capital investment will moderate along with the gradual rise of adjustment pressures. Turning to construction investment, the reactionary decline will turn out to be benign, given the delay in progress of construction due to the shortage of construction workers.

- Turning to the risks, it will be necessary for the time being to keep a close eye upon the escalation of trade tensions. There are concerns that the rise of uncertainty would serve as downward pressures upon the Japanese economy through the decline of exports and capital investment.

Japan: FY2018 (+0.5%), FY2019 (+0.6%), FY2020 (+0.5%)

- The Japanese economy will most likely lack strength in FY2019 and FY2020.
  - In FY2019, export growth will moderate due to the global economic slowdown. The impact of the consumption tax hike will be small due to the introduction of various measures.
  - In FY2020, adjustment pressures on capital expenditure will gradually intensify. However, we do not forecast a major backlash after the 2020 Tokyo Olympic Games.

[Outlook on the Japanese economy]

		2017 FY	2018	2019	2020	2018 Jan-Mar	2018 Apr-Jun	2018 Jul-Sep	2018 Oct-Dec	2019 Jan-Mar	2019 Apr-Jun	2019 Jul-Sep	2019 Oct-Dec	2020 Jan-Mar	2020 Apr-Jun	2020 Jul-Sep	2020 Oct-Dec	2021 Jan-Mar
GDP (real)	Q-o-q % ch	1.9	0.5	0.6	0.5	-0.2	0.6	-0.7	0.3	0.2	0.3	0.4	-0.5	0.3	0.2	0.2	0.2	0.1
	Q-o-q % ch p.a.	—	—	—	—	-0.9	2.2	-2.6	1.4	0.7	1.1	1.6	-2.0	1.2	0.8	0.9	0.7	0.5
Domestic demand	Q-o-q % ch	1.5	0.7	0.7	0.4	-0.3	0.7	-0.5	0.7	0.2	0.3	0.6	-0.9	0.3	0.3	0.2	0.2	0.2
Private sector demand	Q-o-q % ch	1.8	1.0	0.6	0.2	-0.4	0.9	-0.6	0.7	0.2	0.3	0.8	-1.5	0.2	0.4	0.2	0.1	0.2
Personal consumption	Q-o-q % ch	1.1	0.6	0.6	0.1	-0.2	0.6	-0.2	0.6	0.0	0.4	1.2	-2.0	0.4	0.3	0.1	0.1	0.3
Housing investment	Q-o-q % ch	-0.7	-4.4	-2.6	-8.3	-2.0	-2.0	0.5	1.1	0.6	1.0	-1.8	-4.5	-4.7	-2.4	-0.2	0.5	0.2
Capital investment	Q-o-q % ch	4.6	3.3	2.2	1.2	1.0	2.5	-2.7	2.4	0.2	0.4	1.0	0.5	0.4	0.4	0.5	-0.4	-0.3
Inventory investment	Q-o-q contribution, % pt	(0.1)	(-0.0)	(-0.2)	(0.1)	(-0.3)	(0.0)	(0.1)	(-0.2)	(0.1)	(-0.1)	(-0.1)	(0.1)	(0.0)	(0.1)	(0.0)	(0.0)	(0.0)
Public sector demand	Q-o-q % ch	0.6	-0.1	1.2	1.1	0.0	-0.1	-0.3	0.4	0.2	0.3	0.1	0.7	0.4	-0.0	0.3	0.5	0.1
Government consumption	Q-o-q % ch	0.4	0.9	0.8	0.9	0.2	0.1	0.2	0.8	-0.3	0.3	0.3	0.1	0.1	0.3	0.2	0.3	0.3
Public investment	Q-o-q % ch	0.5	-3.4	2.8	1.9	-0.7	-0.6	-2.1	-1.2	2.0	0.6	-0.7	3.2	1.7	-1.3	0.4	1.1	-0.4
External demand	Q-o-q contribution, % pt	(0.4)	(-0.2)	(-0.2)	(0.2)	(0.1)	(-0.1)	(-0.1)	(-0.3)	(-0.0)	(-0.0)	(-0.2)	(0.4)	(0.0)	(-0.0)	(0.0)	(-0.0)	(-0.0)
Exports	Q-o-q % ch	6.4	1.9	1.4	1.5	0.4	0.4	-1.4	0.9	0.4	0.4	0.4	0.4	0.3	0.4	0.5	0.4	0.2
Imports	Q-o-q % ch	4.0	3.3	2.4	0.7	0.0	1.3	-0.7	2.7	0.4	0.7	1.7	-2.0	0.1	0.6	0.3	0.5	0.4
GDP (nominal)	Q-o-q % ch	2.0	0.4	1.7	1.4	-0.4	0.5	-0.6	0.3	0.6	0.7	0.5	0.0	0.5	0.9	0.2	-0.3	0.2
GDP deflator	Y-o-y % ch	0.1	-0.1	1.2	0.9	0.5	-0.1	-0.4	-0.3	0.4	0.9	0.9	1.4	1.3	1.4	1.4	0.5	0.2
Domestic demand deflator	Y-o-y % ch	0.6	0.5	0.6	0.6	0.9	0.5	0.6	0.5	0.4	0.4	0.3	0.8	0.9	1.1	0.8	0.3	0.3

Notes: Figures in the shaded areas are forecasts.
Source: Made by MHRI based upon Cabinet Office, *Preliminary Quarterly Estimates of GDP.*

Japan: the year-on-year change of the CPI (excluding food and energy) is forecast to slow down

[Outlook on the Japanese economy (major economic indicators)]

		2017 FY	2018	2019	2020	2018 Jan-Mar	2018 Apr-Jun	2018 Jul-Sep	2018 Oct-Dec	2019 Jan-Mar	2019 Apr-Jun	2019 Jul-Sep	2019 Oct-Dec	2020 Jan-Mar	2020 Apr-Jun	2020 Jul-Sep	2020 Oct-Dec	2021 Jan-Mar
Industrial production	Q-o-q % ch	2.9	1.0	0.6	0.4	-1.1	1.2	-1.3	1.9	-0.5	0.3	0.7	-0.8	-0.2	0.4	0.6	-0.3	0.2
Ordinary profits	Y-o-y % ch	6.9	5.8	0.9	0.6	0.2	17.9	2.2	1.0	0.6	-1.0	7.4	-1.1	-0.4	1.1	-0.4	0.2	1.3
Nominal compensation of employees	Y-o-y % ch	2.2	2.7	2.0	1.5	2.6	3.8	2.6	3.2	2.0	1.8	2.1	1.5	1.7	1.4	1.3	1.3	1.2
Unemployment rate	%	2.7	2.4	2.5	2.7	2.5	2.4	2.4	2.4	2.4	2.5	2.4	2.5	2.6	2.6	2.7	2.7	2.8
New housing starts	P.a., 10,000 units	94.6	96.0	89.8	84.9	89.7	96.6	95.3	95.5	97.6	97.2	91.3	86.7	83.8	84.5	84.9	85.0	85.2
Current account balance	P.a., JPY tril	21.8	18.7	14.4	18.0	18.7	22.1	17.2	16.8	18.2	16.2	12.6	15.5	16.2	17.5	18.6	18.6	18.9
Domestic corporate goods prices	Y-o-y % ch	2.7	2.0	1.0	1.1	2.5	2.4	3.0	2.3	0.4	-0.2	-1.0	2.3	2.5	1.8	2.0	0.3	0.5
Domestic corporate goods prices (ex consumption tax)	Y-o-y % ch	-	-	0.0	0.2	-	-	-	-	-	-	-	0.5	0.7	-0.1	0.1	-	-
Consumer prices, ex fresh food	Y-o-y % ch	0.7	0.8	0.7	0.8	0.9	0.7	0.9	0.9	0.7	0.5	0.4	0.9	1.0	1.2	1.0	0.5	0.5
Consumer prices, ex fresh food (ex consumption tax)	Y-o-y % ch	-	-	0.2	0.3	-	-	-	-	-	-	-	-0.1	0.0	0.1	0.0	0.4	-
Consumer prices, ex fresh food and energy	Y-o-y % ch	0.2	0.3	0.8	0.8	0.5	0.3	0.3	0.3	0.4	0.5	0.5	0.9	0.9	1.1	1.0	0.6	0.4
Consumer prices, ex fresh food and energy (ex consumption tax)	Y-o-y % ch	-	-	0.3	0.3	-	-	-	-	-	-	-	0.0	0.0	0.2	0.1	0.5	-
Uncollateralized overnight call rate	%	-0.06	-0.05	-0.05	-0.05	-0.06	-0.07	-0.06	-0.06	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05
Yield on newly-issued 10-yr JGBs	%	0.05	0.07	0.10	0.10	0.06	0.04	0.10	0.07	0.07	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Nikkei average	JPY	20,984	22,000	22,000	22,900	22,366	22,341	22,654	21,897	21,000	22,500	21,500	21,500	22,500	22,500	22,500	23,000	23,500
Exchange rate	USD/JPY	111	111	109	109	108	109	111	113	109	109	109	109	108	108	108	109	109
Crude oil price (WTI nearest term contract)	USD/bbl	54	63	55	55	63	68	69	59	54	57	56	55	54	53	54	55	56

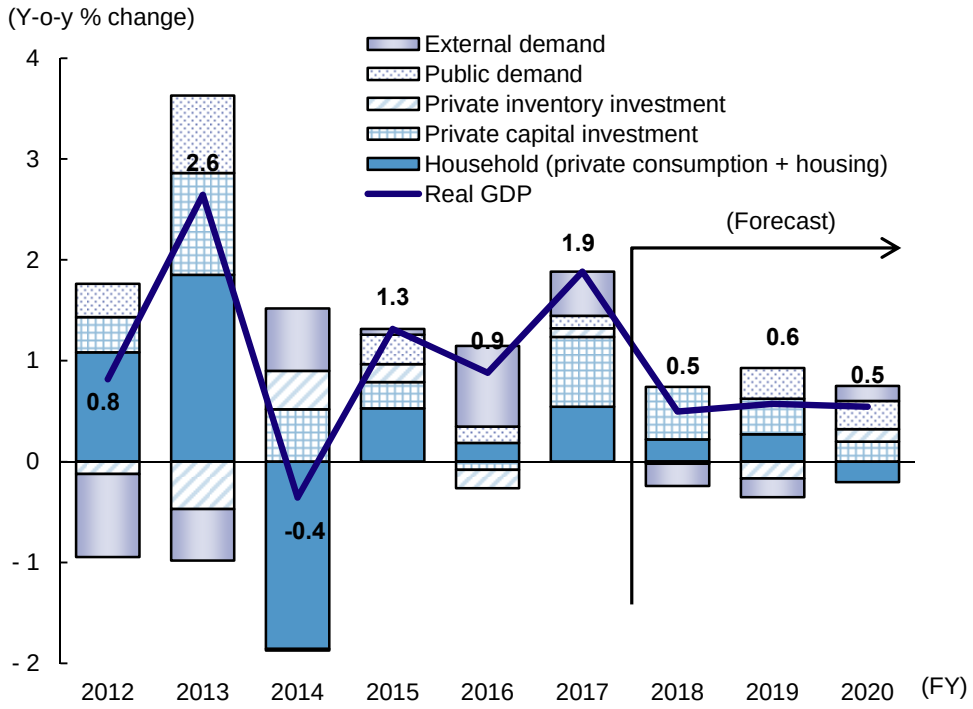
Notes: 1. Figures in the shaded areas are forecasts.The readings above may differ from public releases because the rates of change are calculated on the basis of real-terms data
2. Consumer prices (both including and excluding the impact of the consumption tax hike) reflect the impact of free pre-school education for the Oct-Dec quarter of 2019 and the Jan-Mar, Apr-Jun and Jul-Sep quarters of 2020
3. Ordinary profits are based upon the *Financial Statements Statistics of Corporations by Industry* (all industries basis) (ex finance & insurance)
4. Nominal compensation of employees is based upon the renewed data of the *Monthly Labour Survey* by the Ministry of Health, Labour and Welfare.
5. Of the finance-related indices, the uncollateralized overnight call rate refers to the rate at the end of term, the yield on newly-issued 10-yr JGBs refers to the average of the end-of-month rates during the relevant term, and all others are averages during the relevant terms

Sources: Made by MHRI based upon relevant statistics

Outlook: note downward pressures from the slowdown of exports in FY2019 and the adjustment of capital investment in FY2020

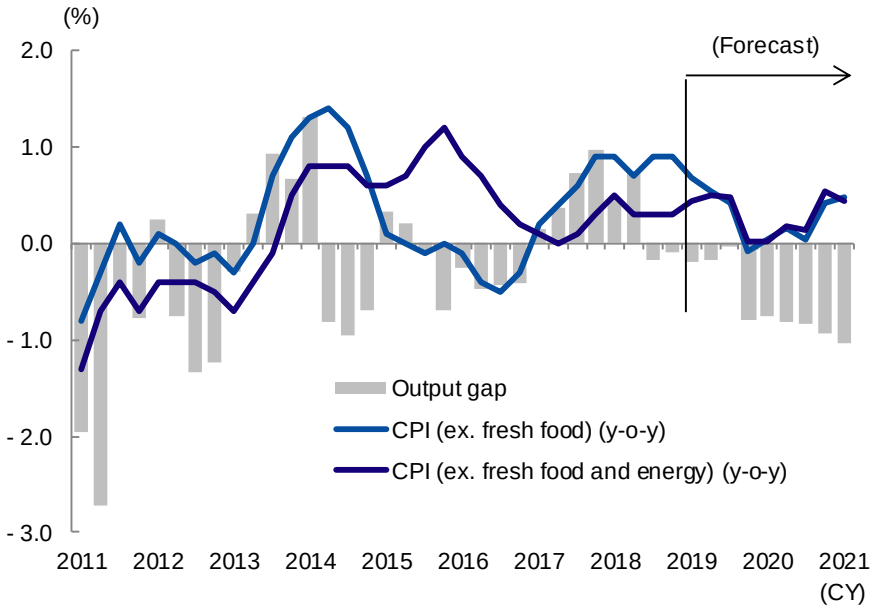
- FY2019 GDP forecast: +0.6%. A downward revision from our December forecast (+0.7%). Export growth will turn sluggish due to the global economic slowdown.
- FY2020 GDP forecast: +0.5%. Pressure to adjust capital investment will gradually intensify. Even so, we do not expect a major backlash after the 2020 Tokyo Olympic Games.

[Factor contribution to the rate of growth in real GDP]



Source: Made by MHRI based upon Cabinet Office, *National Accounts*

[Output gap and CPI (forecast)]

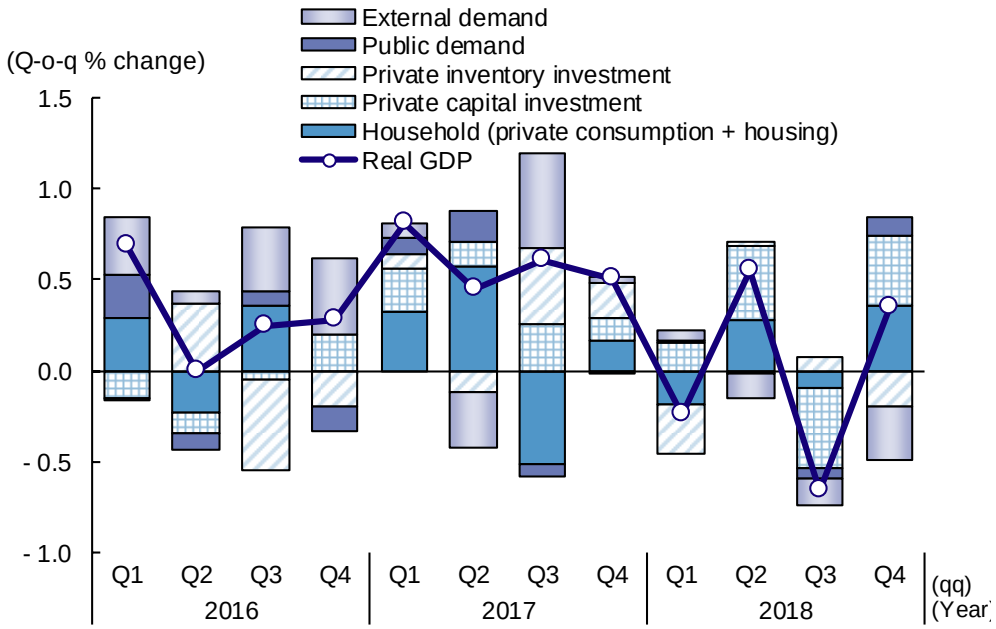


Note: Output gap estimated by MHRI.
The CPI excludes the consumption tax.
Source: Made by MHRI based upon Ministry of Internal Affairs and Communications and Cabinet Office

Current status and forecast: real GDP lacked strength in the Oct-Dec quarter (+1.4% q-o-q p.a.)

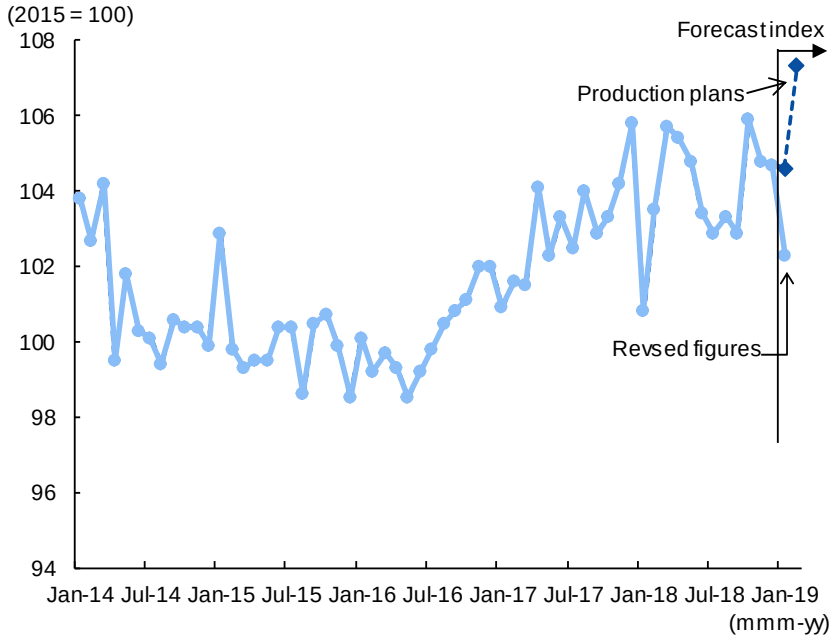
- Even though Japan's real GDP grew +0.3% q-o-q (+1.4% q-o-q p.a.) in the Oct-Dec quarter, recording positive growth for the first time in two quarters, the growth lacked strength.
  - Despite expectations toward a rebound from the impact of natural disasters during the summer, growth was insufficient to recoup the dip in the Jul-Sep quarter.
  - While domestic demand such as personal consumption and capital investment was firm, external demand and public investment served as drags upon growth.
- Industrial production grew only a modest +1.9% q-o-q in the Oct-Dec quarter.
  - Production plans also indicate there could be a lack of strength in the Jan-Mar quarter. Production is slowing due to sluggish overseas-bound shipments.

[Quarterly real GDP]



Source: Made by MHRI based upon Cabinet Office, *Preliminary Quarterly Estimates of GDP.*

[Industrial production index]

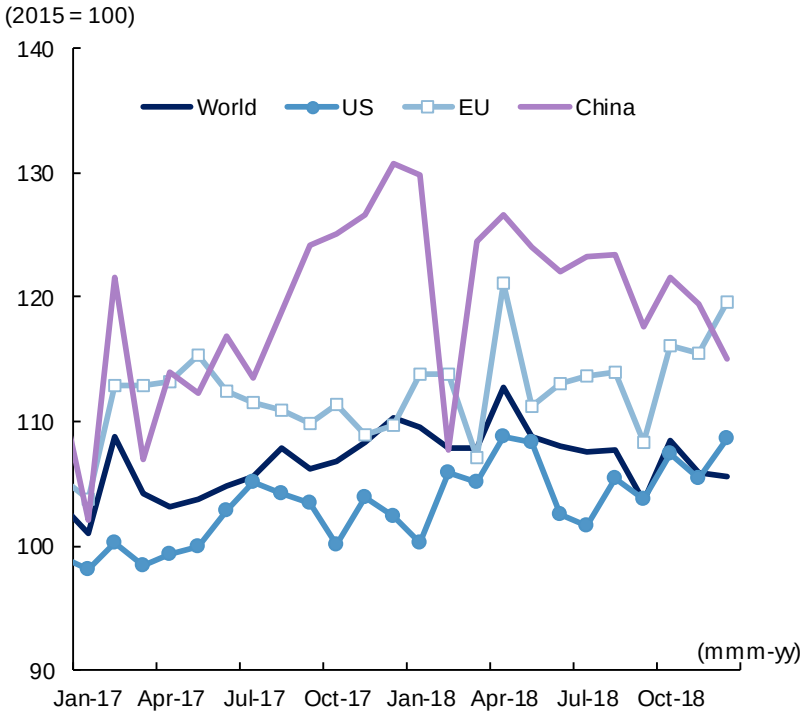


Source: Made by MHRI based upon Ministry of Economy, Trade and Industry, *Indices of Industrial Production*

External demand: exports to China are currently falling. We expect export growth to remain weak due to the global economic slowdown

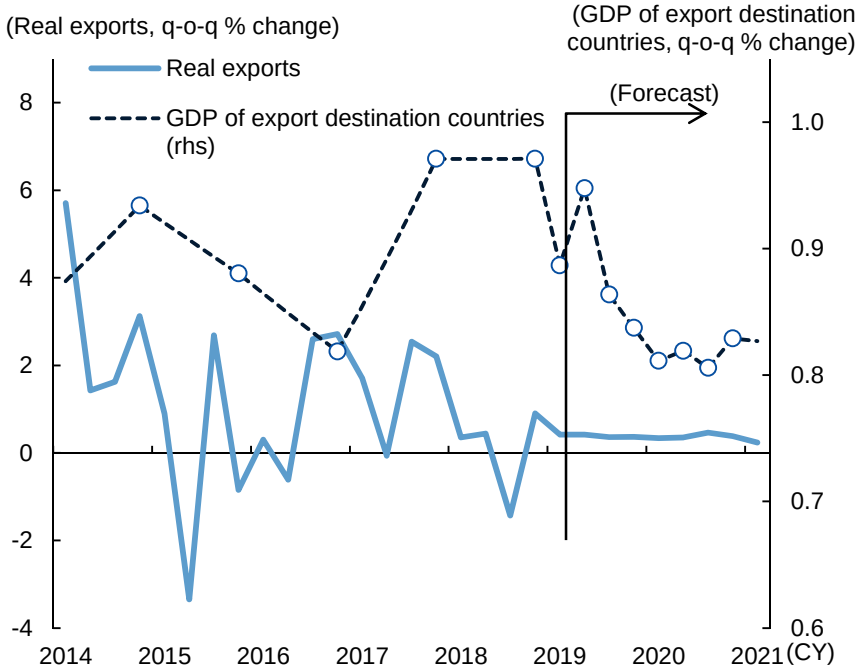
- Exports to China are currently falling. We expect export growth to remain weak due to the slowdown of the global economy.
  - Looking closer, in terms of goods, exports of general machinery are falling. In addition to China's economic slowdown, the uncertainties surrounding trade tensions may have led to postponements in investment.
  - We are inclined toward the view that export growth will remain weak for the time being, based upon prospects that the overseas economies such as China will continue to slow down and that IT-demand has already peaked out.

[Export volume index (by region)]



Source: Made by MHRI based upon Bank of Japan, *Real Exports and Real Imports*,

[SNA real exports and GDP of export destination countries]



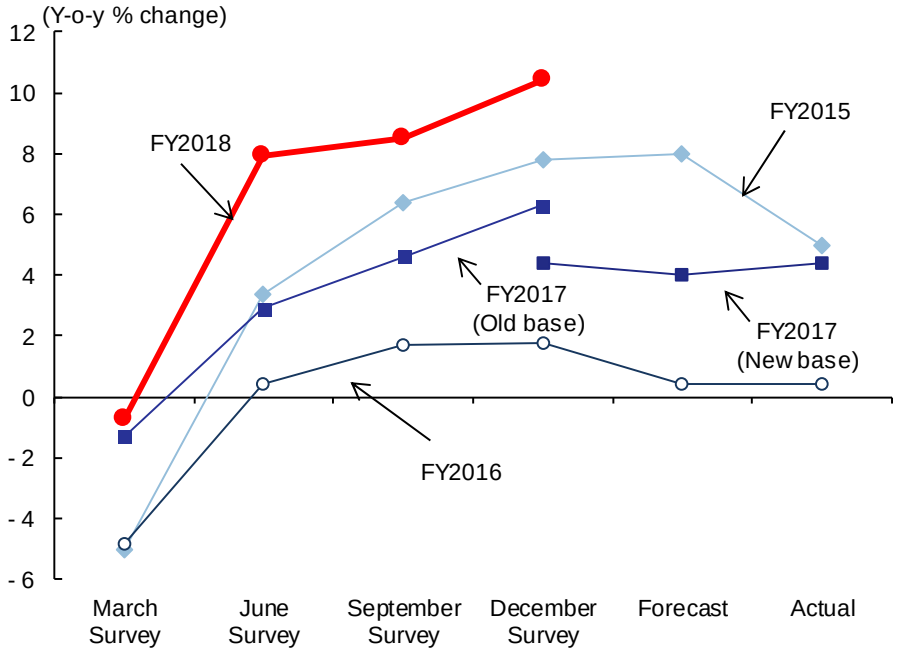
Note: The GDP of export destination countries is the weighted average of the real GDP of major export destination countries for Japan by the export amount, 2019 to 2020 only are quarterly data.

Source: Made by MHRI based upon IMF, *World Economic Outlook*, Ministry of Finance, *Trade Statistics*

Fixed (capital) investment: despite support by needs for investment in labor-saving initiatives, growth will gradually slow down due to adjustment pressures

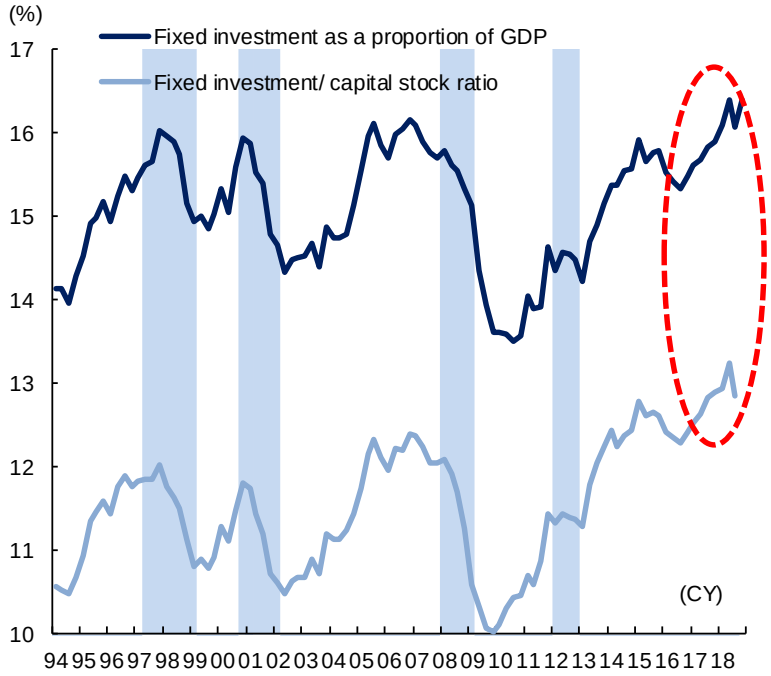
- Corporate investment appetite for investment remains high. Looking forward, high levels of corporate earnings and the needs to streamline and invest in labor-saving initiatives should underpin fixed (capital) investment.
  - On the other hand, investment is already at high levels from the perspective of the capital stock ratio. Fixed (capital) investment will gradually slow down due to adjustment pressures.

[Fixed Investment Plans (BOJ *Tankan* December Survey)]



Note: Includes land purchasing expenses and excludes software
Source: Made by MHRI based upon Bank of Japan, *Short-term Economic Survey of Enterprises in Japan* (*TANKAN*).

[Fixed Investment as a proportion of GDP and fixed investment as a proportion of capital stock]

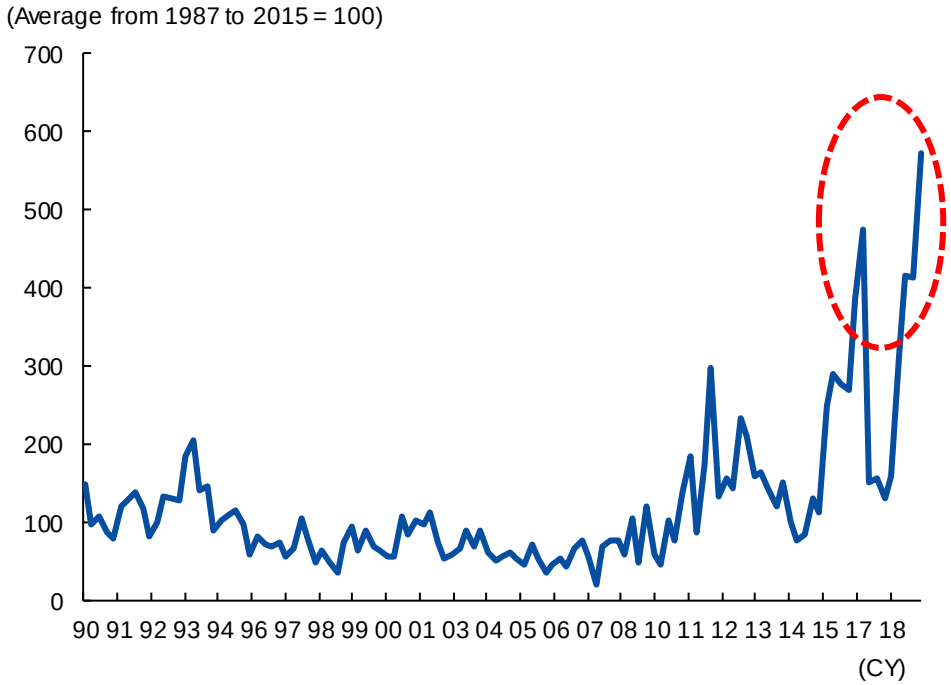


Note: Shaded areas indicate periods of recession
Source: Made by MHRI based upon Cabinet Office, *Preliminary Quarterly Estimates of GDP* and *Preliminary Fixed Capital Stock*

Fixed (capital) investment: risks of a negative impact in the event uncertainties escalate regarding trade policy

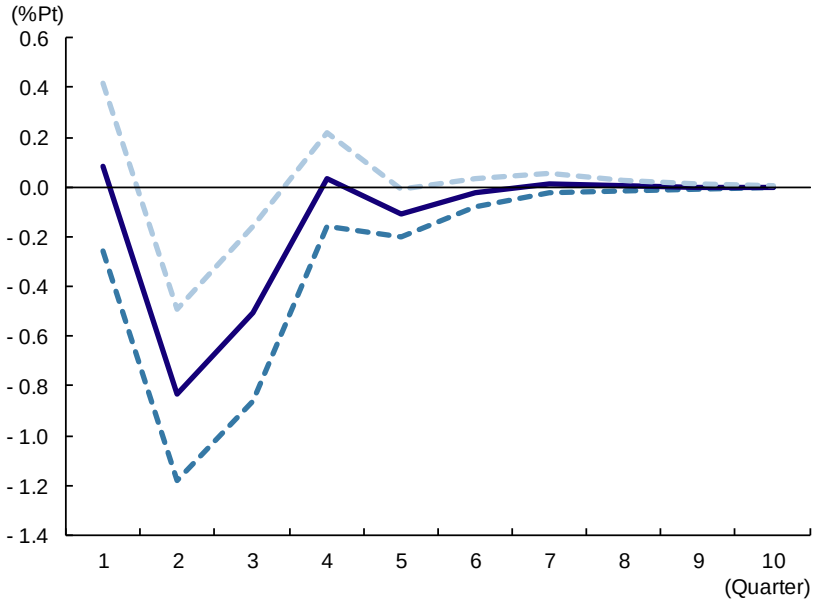
- There has been a sharp rise of Japan's trade policy uncertainty index since 2018, reflecting the rise of uncertainties regarding US trade policy.
- The rise of uncertainties regarding trade policy has a negative impact on fixed (capital) investment, albeit with a lag.
  - An interval of 1 standard error in the uncertainty shock could push down the rate of growth in fixed (capital) investment following Q1 of 0.8% points.
    - ✓ In the event trade tensions intensify going forward, the rise of uncertainties could serve as a drag on fixed (capital) investment.

[Trade policy uncertainty index of Japan]



Note: Showing the figure for January 2019 for the January to March 2019 quarter (seasonally-adjusted)
Source: Made by MHRI based upon Arbatli et al. (2017)

[Impulse response of fixed (capital) investment to trade policy uncertainty shocks (all industries)]

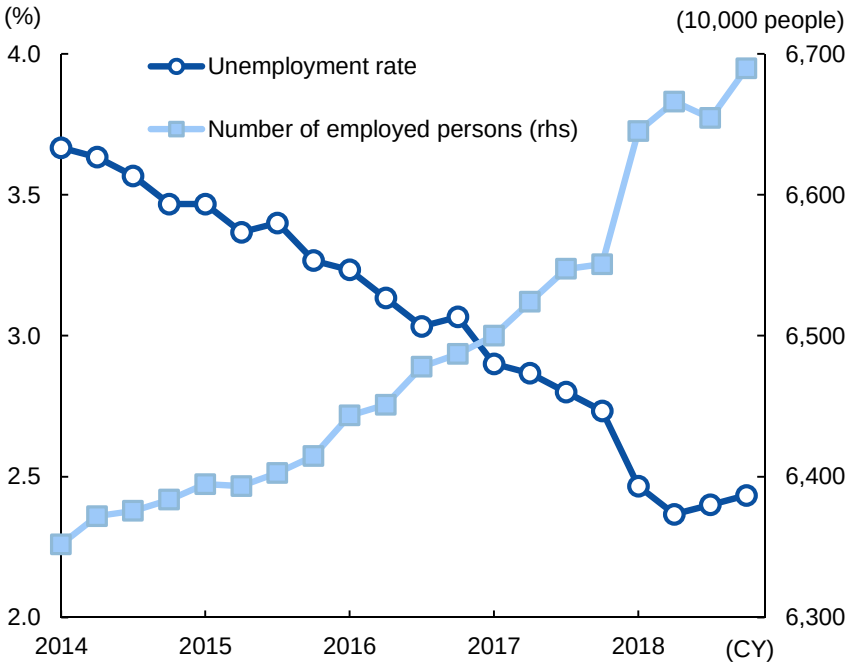


Note: Indicating the change in fixed investment (y-o-y growth rate) if affected by one standard deviation of trade policy uncertainty shock. The dotted lines indicate the confidence interval for ±1 standard error
Source: Made by MHRI

Employment: given strong corporate sentiment towards hiring, the favorable employment conditions should continue

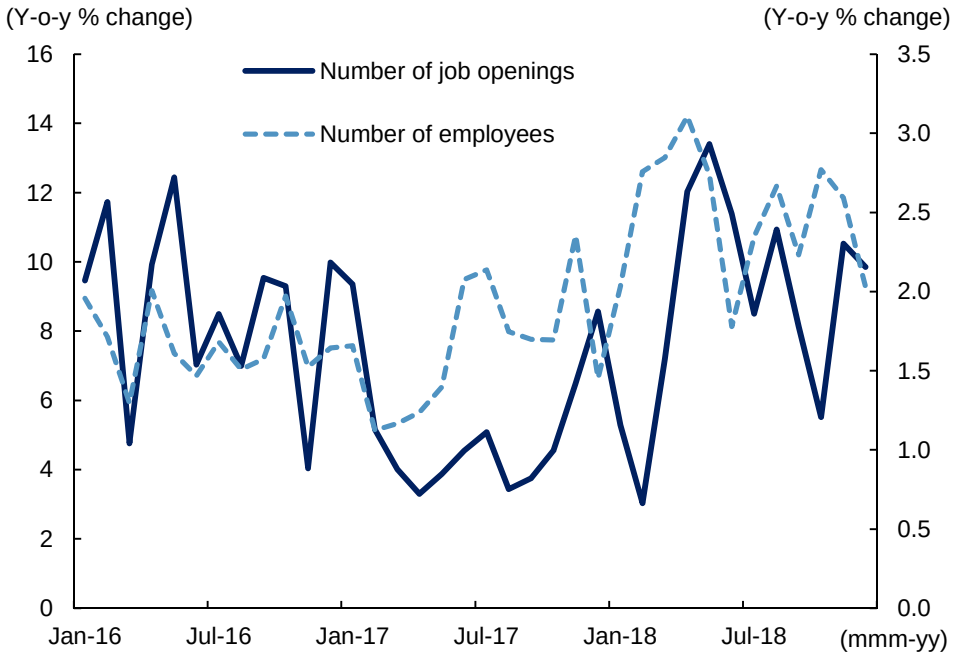
- Given the strong corporate sentiment towards hiring, the favorable employment conditions should continue.
  - The unemployment rate is at historical low and the number of employed persons is also increasing gradually.
  - The number of job openings (the sum of the number of job advertisements and active job openings) continued to rise in FY2018, and corporate sentiment towards employment is high.

[Unemployment rate and the number of employed persons]



Note: Seasonally-adjusted. Quarterly base
Source: Made by MHRI based upon Ministry of Internal Affairs and Communications, *Labour Force Survey*

[The number of job openings and the number of employees]

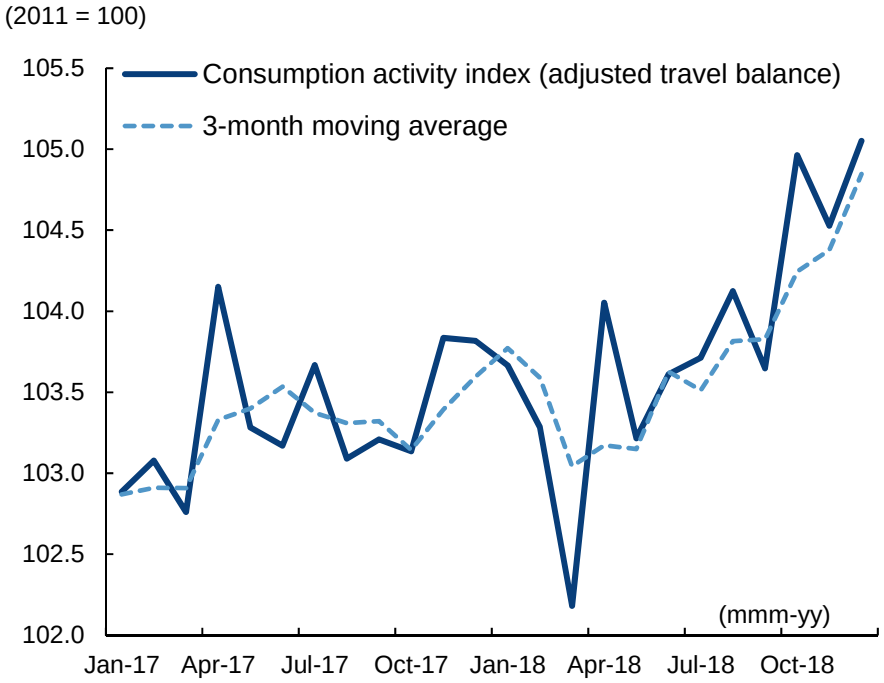


Note: 1. The number of job openings is the sum of the number of job advertisements and active job openings
2.The number of job advertisements is the chronological series according to MHRI
Source: Made by MHRI based upon Association of Job Information of Japan, Ministry of Health, Labour and Welfare, and Ministry of Internal Affairs and Communications

Consumer spending: given favorable employment conditions, personal consumption should remain firm

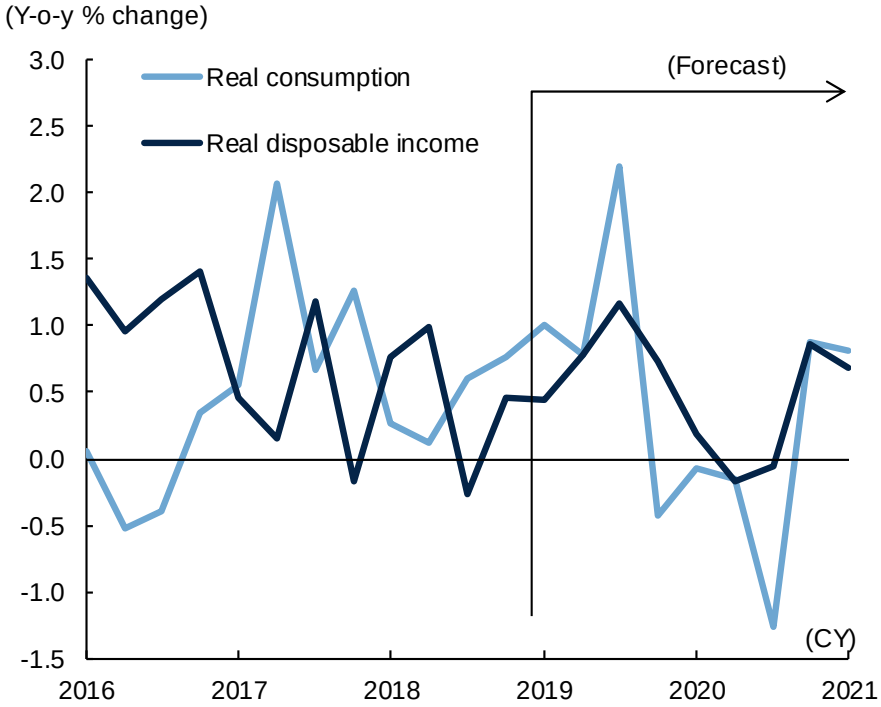
- Personal consumption is firm and should continue to follow solid footing.
  - Given prospects of that the number of employed persons will continue to rise gradually due to factors such as the labor force participation among the elderly, disposable incomes should also be firm. While there could be short-term fluctuations before and after the consumption tax hike, on balance, we forecast personal consumption to be firm.

[Consumption activity index]



Note: Seasonally-adjusted real base, adjusted travel balance. The dotted line indicates the 3-month moving average
Source: Made by MHRI based upon Bank of Japan, *Consumption Activity Index*

[Real disposable income and real consumption (forecast)]



Source: Made by MHRI based upon Cabinet Office, *Annual Report on National Accounts*

Government: public investment will increase due to government stimulus measures

- Public investment will increase during the three years up until FY2020 based on the *Three-year Emergency Response Plan for Disaster Prevention, Disaster Mitigation, and Building National Resilience* (the "*Plan*").
  - The total project size up to FY2020 is approximately 7 trillion yen and will push up nominal GDP by a cumulative 1% point due to the expansion of public demand.
    - ✓ A total of 2.4 trillion yen will be invested in the *Plan* from the FY2018 second supplementary budget and the FY2019 initial budget, and will be executed as economic stimulus measures mainly in the second half of FY2019.

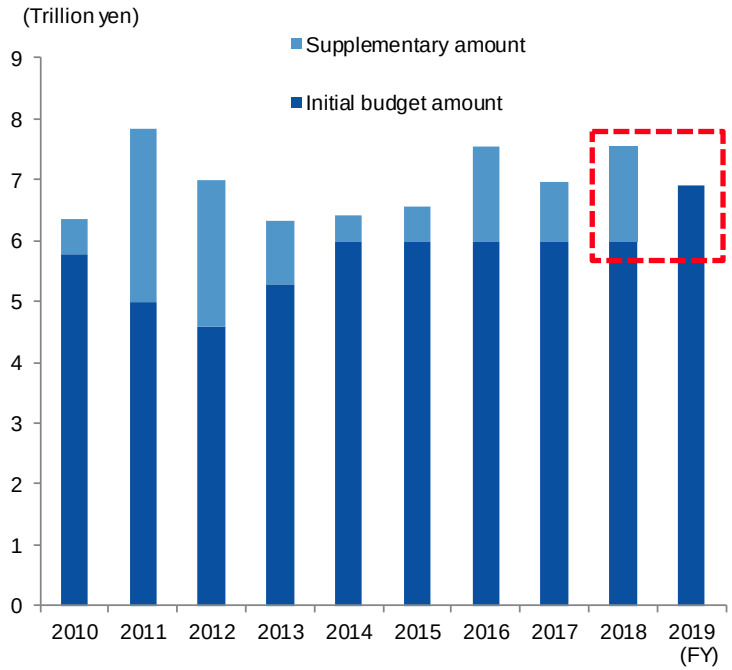
Outline of the *Three-year Emergency Response Plan for Disaster Prevention, Disaster Mitigation, and Building National Resilience*

	Project size (trillion yen)
I. Maintenance of important infrastructure functions, etc., for disaster prevention	**3.6**
・Prevent and minimize damage caused by large-scale flooding, landslide disasters, earthquakes, tsunamis, etc.	3.0
・Secure the capabilities to respond to disasters through rescue/first aid/medical activities	0.4
・Obtain necessary information, etc. to facilitate evacuations	0.2
II. Maintenance of important infrastructure functions, etc., to support the national economy and public life	**3.4**
・Secure energy supplies such as electricity	0.3
・Secure food supplies, lifelines, and supply chains, etc.	1.0
・Secure land, sea, and air transportation networks	2.0
・Secure the information communication functions/information services necessary in daily life, etc.	0.0
Total project size	**About 7 trillion yen**

Note: 0.6 trillion yen in measures using the Fiscal Investment and Loan Program, including approximately 0.3 trillion borne by the private sector

Source: Made by MHRI based upon *the Three-year Emergency Response Plan for Disaster Prevention, Disaster Mitigation, and Building National Resilience* (Cabinet decision of December 14, 2018)

[Public works-related expenses]

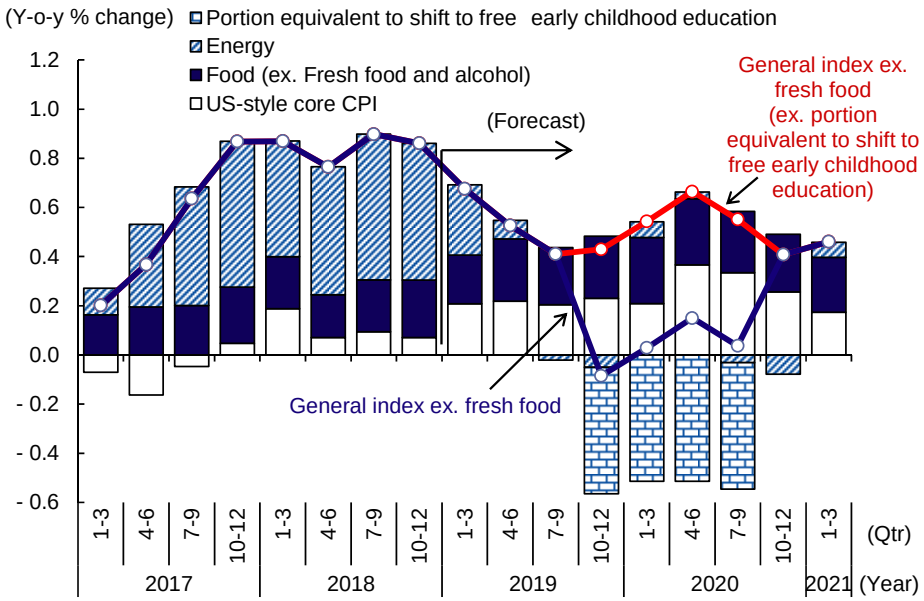


Source: Made by MHRI based upon the Ministry of Finance

Prices: sluggish rise of prices due to slumping crude oil prices. Cuts in mobile telephone charges may push down prices further

- We expect a mild slowdown of the rise of the core CPI, as sluggish crude oil prices weigh upon prices.
  - The core CPI has dipped to the vicinity of 0%. Price growth will be weak even when structural factors such as free early childhood education are excluded.
- There is risk of a further decline of prices due to cuts in mobile telephone charges and the measure to make higher education free.
  - The downward pressure on the CPI from the cuts to mobile telephone charges by the three major mobile telephone companies will be as much as -0.9% (assuming a 40% cut in price from April 2019).
  - Once free higher education comes into effect from April 2020, the downward impact on CPI could be as much as -0.1%.

[Factor contribution to core CPI (general Index excluding fresh food)]



Note: Excluding the impact of the consumption tax hike.US-style core CPI excludes the impact of free early childhood education

Source: Made by MHRI based upon Ministry of Internal Affairs and Communications, *Consumer Price Index*

[Downward risk factors for CPI]

Factor	Details	Starting period	Impact on core CPI
Lower mobile telephone charges	Based upon the assumption that the 3 major mobile telephone companies cut mobile telephone charges by 40%	Apr-Jun quarter of 2019	-0.9%
Shift to free private high school and higher education	Subsidies for part of entrance fees and tuition in accordance to household income	April 1, 2020	-0.1%

Note: 1. Higher education refers to universities, junior colleges, colleges of technology and specialized training colleges
2. For mobile telephone charges, the rate of cut and timing of the cut in charges is unknown. For the shift to free higher education, the details are still unclear Consequently actual conditions could differ from our assumptions, so the calculations need to be viewed with a certain degree of latitude.

Source: Made by MHRI based upon various media reports, Cabinet Office, *New Economic Policy Package*, and Ministry of Internal Affairs and Communications, *Consumer Price Index and Family Income and Expenditure Survey*

Impact of the consumption tax hike: given the implementation of various income support measures, the downward impact upon income will be much smaller than at the time of the consumption tax hike in 2014

- The downward impact on income from the consumption tax hike will be much smaller than at the time of the consumption tax hike in 2014.
  - The downward impact of the consumption tax hike on real disposable incomes will be about 0.5% pt (c.f., about 3% pt in FY2014).
    - ✓ In addition to the difference in breadth of the consumption tax hike, the impact will be mitigated by various income support measures such as reduced tax rates, free education, and point redemptions.
  - Furthermore, the reduced tax rates will curb the rate of increase in tax inclusive prices of items such as food and beverages which in turn will suppress the increase in perceived inflation and thrift consciousness.
    - ✓ Since food and beverages subject to reduced taxes are frequently purchased by consumers, it should have a large impact on perceived inflation.

[Policies to support incomes following tax hikes]

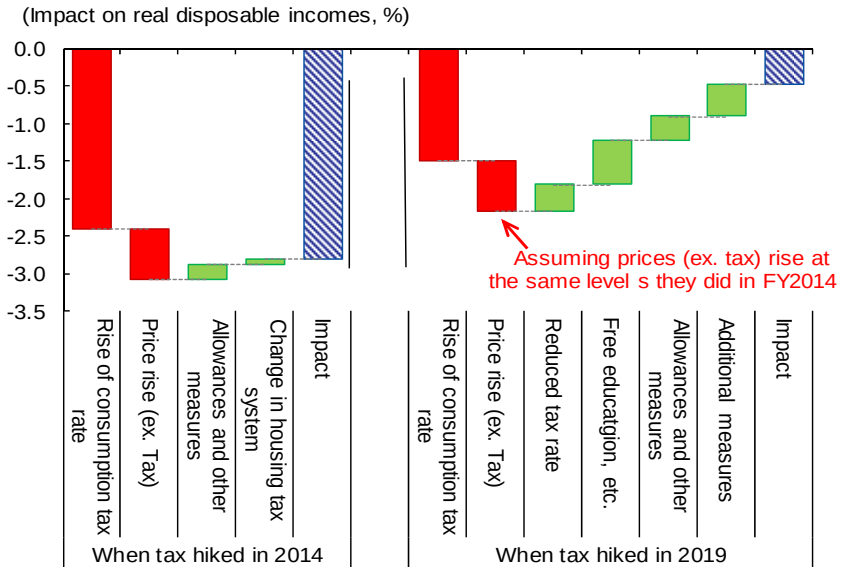
At the time of the 2014 tax hike	Size
Allowances and other measures	0.6 tn yen
Lower taxes on mortgages	0.2 tn yen
Total	0.8 tn yen

At the time of the 2019 tax hike	Size
Reduced tax rate	1.1 tn yen
Free early childhood and higher education Support for raising children, improved conditions for childcare workers and nursing care workers	1.8 tn yen
Pension benefits, enrichment of social welfare benefits, etc.	1.0 tn yen
Point redemptions, premium vouchers	0.6 tn yen
Support to purchase housing and automobiles (tax cuts, payment of benefits)	0.7 tn yen
Total	5.2 tn yen

Note: The impact of measures is the value converted to a full financial year. Furthermore, the Ministry of Finance is also treating part of the public investment for disaster prevention, disaster mitigation, and building national resilience (1,3 trillion yen in FY2019) as a measure to offset the consumption tax hike.

Source: Made by MHRI based upon Ministry of Finance

[Impact of the consumption tax hike on real disposable incomes]



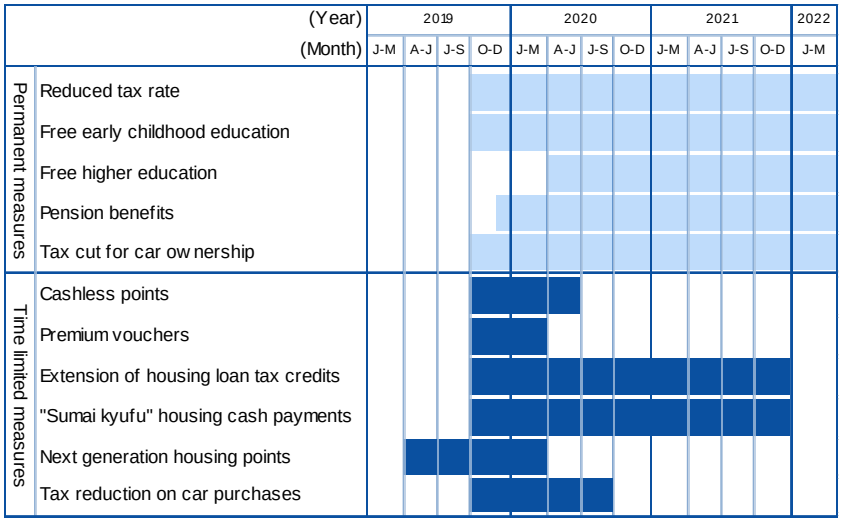
Note:
1. The price index is the household final consumption expenditure deflator (excluding imputed rent and FISIM)
2. The impact is the value converted to a full financial year
3. The additional measures are point rewards, premium vouchers, extension of housing loan tax credits, expansion of "sumai-kyufu" housing cash payments and relaxation of eligibility requirements, housing "eco-points" and tax cuts for car purchases.

Source: Made by MHRI based upon Ministry of Finance

Consumption tax hike impact: Risk 1 - economic slowdown when the impact of countermeasures lapse

- Most of the additional measures to counter the consumption tax hike are time-limited measures. There are concerns that the economy will slow down when such measures lapse in mid-2020 and at the end of 2021.
  - Measures such as point redemptions, premium vouchers, next generation housing points and tax cut on car purchases will successively come to an end in mid-2020.
    - ✓ In particular, the end of point redemptions in July 2020 will mean consumers face a 5% increase in prices. There are concerns about a backlash to consumption.
  - Housing loan tax credits and "sumai-kyufu" housing cash payments will lapse at the end of 2021, leading to a fall in housing starts.

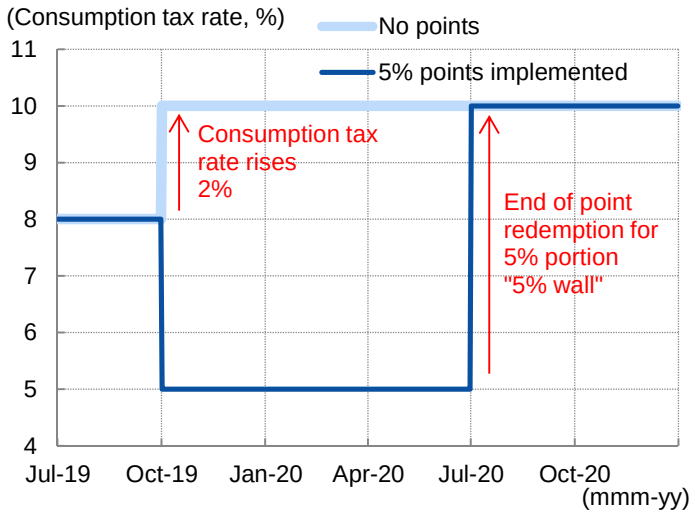
[Schedule for consumption tax hike relief measures to lapse]



Note:1. The first payment of support benefits for pensioners will be December 2019
2. The tax cuts for car ownership will only apply to new car registrations from October 2019.
3. The impact of the entire system for housing loan tax credits and the "sumai-kyufu" housing cash payments is schedule to be ineffective at the end of 2021.
4. The next generation housing points apply to houses with construction contracts and commencement of construction between April 2019 and March 2020 and handover from October 2019 and later

Source: Made by MHRI

[July 2020 "5% wall" when point rewards lapse]



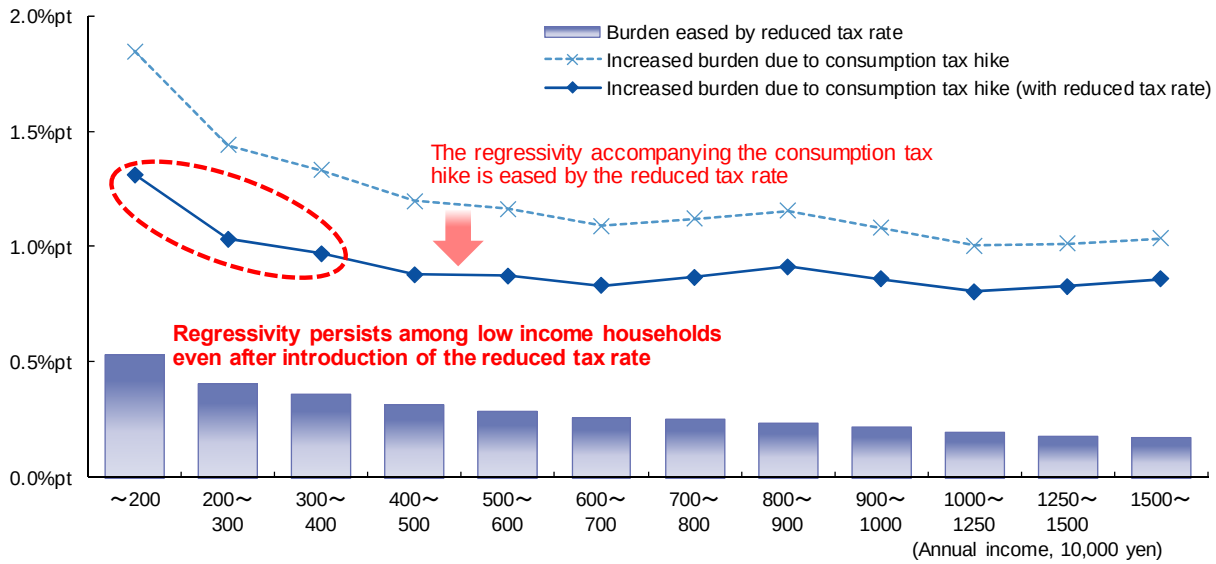
Note: Point rewards apply to cashless payments for small and medium-sized retail companies, etc. The rate of the point rewards for large franchise chains is likely to be 2%. The points will not apply to medical expenses, education expenses, gift certificates, cars and housing.

Source: Made by MHRI

Consumption tax hike impact: Risk 2 - the regressive nature of consumption tax will deteriorate for low income households

- For middle income households, the deterioration of the regressive nature ("regressivity") of the consumption tax hike will be mitigated by the reduced tax rate.
  - The rate of additional burden of consumption tax (vs. disposable incomes) will tend to increase for households with annual incomes below 6 million yen ➔ deterioration in the regressive nature of consumption tax.
  - The reduced tax rate will mean that the rate of additional burden on middle income households with annual income of 4 to 6 million yen will be almost the same as high income households.
- However, the rate of additional burden for low income households with annual incomes below 4 million yen will remain high even when the reduced tax rate is considered ➔ the deterioration of the consumption tax's regressive nature persists.
  - Consumption among such households will be restrained unless they receive benefits of other support measures such as free education and benefits for pensioners.

[Rate of additional burden of consumption tax by annual income bracket (vs. disposable incomes)]

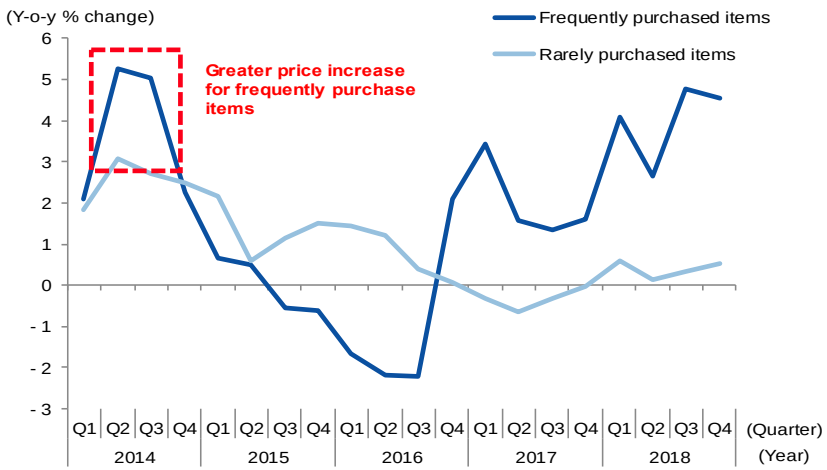


Note: 1. Households with two or more workers, 2017
2. Does not take into account the impact of any income support measures other than reduced tax rate
Source: Made by MHRI based upon Ministry of Internal Affairs and Communications, *Family Income and Expenditure Survey*

Consumption tax hike impact: Risk 3 - the rise of prices of frequently purchased items could offset the impact of the reduced tax rate

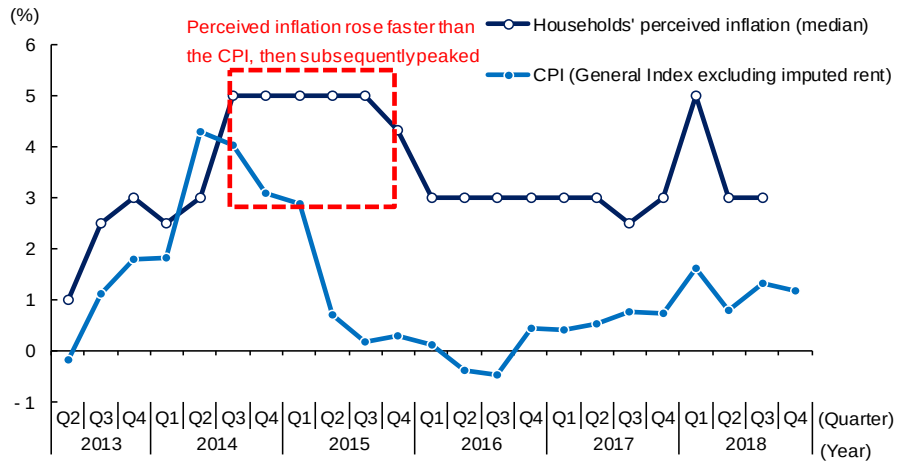
- The pace of increase of prices of frequently purchased items is accelerating. A further rise of prices may lead to the stagnation of consumption.
  - Since 2018, the rise of the consumer price index for frequently purchased items has accelerated, reflecting the rise in prices of fresh food and gasoline.
  - Although fresh food and gasoline prices are currently slowing down, there is a tendency in Japan for prices to rise at the time of a consumption tax hike. This would offset the impact of the reduced tax rate and may lead to the stagnation of consumption due to the rise of perceived inflation and thrift-consciousness.
    - ✓ There are concerns that the phenomenon that occurred in 2014 will be repeated: "rise of prices of frequently purchased items ➔ rise of perceived inflation ➔ intensification of thrift-consciousness ➔ stagnation of consumer spending".

[CPI from the perspective of the purchase frequency of items]



Note: 1. Frequently purchased items are those purchased at least 15 times per year (approximately 40 items. Accounting for about 12% weighting in the core CPI). Rarely purchased items are those purchased fewer than 0.5 times per year (approximately 190 items. Accounting for about 19% weighting in the core CPI).
2. Includes the impact of consumption tax hike. The figure for the Oct-Dec 2018 quarter is the average for October and November.
Source: Made by MHRI based upon the Ministry of Internal Affairs and Communications, *Consumer Price Index*

[CPI and perceived inflation]



Note: 1. Households' perceived inflation is the median response to the survey question, "By what percent do you think prices have changed compared with one year ago?"
2. CPI excludes imputed rent. Includes the impact of consumption tax hikes. The figure for the Oct-Dec 2018 quarter is the average for October and November.
Source: Made by MHRI based upon the Bank of Japan, *Opinion Survey on the General Public's Views and Behavior*, and the Ministry of Internal Affairs and Communications, *Consumer Price Index*

BOJ: policy left unchanged. Limited scope for additional easing in the event of economic slowdown

- The Bank of Japan (BOJ) lowered its outlook on prices in the *Outlook for Economic Activity and Prices* ("*Outlook Report*") released in January 2019. Despite the rise of concerns toward uncertainties regarding the future course of the global economy, the BOJ raised its outlook on economic growth, reflecting the government's measures to ease the impact of the scheduled consumption tax hike.
  - Since the BOJ's price outlook did not factor in the impact of anticipated cuts in cellphone communication charges, the outlook may be subject to downward revisions. The BOJ remains alert to a downswing of inflation expectations.
- The BOJ will likely keep policy interest rate unchanged by forward guidance until it ascertains impact of the consumption tax rate hike. In the event of a sharp rise of the yen, a policy option may be to push interest rates further down into negative territory. However, the BOJ will most likely be cautious in its judgment in light of potential adverse side effects.

[*Outlook for Economic Activity and Prices* (January 2019)]

(Y-o-y % change)

	Real GDP	CPI (All items except fresh food)	
			Excluding impact of consumption tax hike
FY2018	+0.9 to +1.0 (+0.9)	+0.8 to +0.9 (+0.8)	
Forecast made in October 2018	+1.3 to +1.5 (+1.4)	+0.9 to +1.0 (+0.9)	
FY2019	+0.7 to +1.0 (+0.9)	+1.0 to +1.3 (+1.1)	+0.8 to +1.1 (+0.9)
Forecast made in October 2018	+0.8 to +0.9 (+0.8)	+1.5 to +1.7 (+1.6)	+1.3 to +1.5 (+1.4)
FY2020	+0.7 to +1.0 (+1.0)	+1.3 to +1.5 (+1.5)	+1.2 to +1.4 (+1.4)
Forecast made in October 2018	+0.6 to +0.9 (+0.8)	+1.5 to +1.7 (+1.6)	+1.4 to +1.6 (+1.5)

Note: Forecasts of the majority of Policy Board Members. Figures in brackets indicate the median of the Policy Board members' forecasts (point estimates)

Source: Made by MHRI based upon Bank of Japan materials

[Options for additional easing]

Policy Tool		Probability
Pushing the negative interest rate further down	* Expand the negative margin of the policy interest rate, as an option in the event of the sharp rise in the yen. * There are concerns that further drops in long-term interest rates would result in the worseneing of investment performance of life insurers and pension funds and an adverse impact on profits of financial institutions due to narrowing spreads between deposit and lending rates.	Low
Reducing the lending rate on the Loan Support Program into negative territory	* Deal with concerns over a possible downswing of profits of financial institutions by reducing the lending rate on the Loan Support Program, thereby creating room for pushing down the already negative policy interest rate deeper into negative territory. * This might have the risk of stimulating calls for the reduction in existing lending rates, with adverse side effects possibly more than offsetting the policy effects.	Low
Lengthening of the target maturity of the yield curve control	* Strengthen downward pressure on yields in the entire yield curve by lengthening the target maturity of the yield curve control from the current 10 years to 20 years. * It remains to be seen whether pushing interest rates further down would have the effect of boosting the economy and pushing up prices. Any further drop in yields of ultralong-term bonds would adversely affect investment by pension funds and life insurers. * If lower interest rates dampen demand for the yen, this can be expected to produce a favorable effect on exchange rates.	Possible
Expansion of ETF purchases	* Expand the increase in ETF purchases from the current 6 trillion yen a year. This can be expected to have the effect of underpinning the stock market in the event of sharp falls in stock prices. * But this spawns concerns over the side effects, including the distortion of the market functions or the greater risk of the BOJ incurring losses.	Possible
Expansion of JGB purchases	* The effects of boosting the economy and pushing up prices are uncertain. * This policy is not sustainable if the government issues more JGBs. Thus, it is hard for the BOJ to boost JGB purchases substantially. * There is the risk that this policy may sharpen criticisms against monetization by the central bank.	Possible

Source: Made by MHRI

III. Asian Economies

A slowdown through 2020

Asian economies: slowdown through 2020

- China's economic growth fell from the previous quarter for the third consecutive quarter in the Oct-Dec quarter of 2018. While external demand turned negative in 2018 and retail sales also slumped, investment served to underpin growth.

- Amid concerns regarding an economic slowdown due to US-China trade tensions, the Chinese authorities have implemented counter-cyclical adjustments to stabilize the economy, leading to our view that the decline in rate of growth in 2020 will be mild.

- In the Asian economies (excluding China), growth rates were mixed in the Oct-Dec quarter, with some countries picking up and others falling from the previous quarter. Even among countries where growth picked up, there were disparities depending upon the state of domestic demand. Exports turned out to be lackluster across the region. China-bound exports fell year-on-year at the end of 2018, revealing the spread of the impact of China's economic slowdown and US-China trade tensions.

- In terms of the outlook for Asian economies (excluding China), we forecast the growth rates particularly for exports to fall in 2020 due to the global economic slowdown including the US and China. By region, the NIEs will slow down given their heavy dependence on exports. In the ASEAN countries, the economic slowdown will be moderate due to their relatively high dependence on domestic demand. Even though India also has a high dependence on domestic demand, it should be noted that the government's approval ratings have been falling in the run-up to the May 2019 general election, providing reasons to believe that growth will be flat through 2020 due to uncertainties regarding reforms. Keep a close eye upon political events such as the Thai general elections (March) and the Indonesian presidential and legislative elections (April).

- We forecast a slowdown for the Asian economies as a whole in 2020.

Asia: China, NIEs, ASEAN growth projected to slow through 2020, while India's growth is expected to flatten out

- China: the decline in growth should be turn out to be mild due to support by counter-cyclical adjustments to address concerns of a slowdown stemming from US-China trade tensions.
- NIEs and ASEAN: a slowdown, particularly in exports, reflecting the global economic slowdown that includes the US and China.
  - The NIEs will slow down given their heavy dependence on exports, while the slowdown in ASEAN countries should be moderate due to their relatively high dependence on domestic demand. Among the latter, Indonesia is an exception to the foregoing with prospects that growth will accelerate through 2020, due to the continuation of reforms in view of the incumbent's popularity in the run-up to the presidential election in April 2019.
- While India also has a high dependence on domestic demand, the government's approval ratings are falling in the run-up to the presidential election in May. Growth should flatten out in 2020 due to uncertainties regarding reforms.

[Outlook on the Asian economies]

(Units: %)

	2014	2015	2016	2017	2018	2019	2020
Asia	6.4	6.2	6.2	6.1	6.2	5.8	5.8
China	7.3	6.9	6.7	6.8	6.6	6.2	6.1
NIEs	3.5	2.1	2.4	3.2	2.8	2.3	2.0
South Korea	3.3	2.8	2.9	3.1	2.7	2.5	2.0
Taiwan	4.0	0.8	1.5	3.1	2.6	2.1	2.0
Hong Kong	2.8	2.4	2.2	3.8	3.4	2.1	2.0
Singapore	3.9	2.2	2.4	3.6	3.3	2.4	2.1
ASEAN5	4.6	4.9	4.9	5.3	5.2	5.0	4.8
Indonesia	5.0	4.9	5.0	5.1	5.2	5.1	5.2
Thailand	1.0	3.0	3.3	3.9	4.2	3.2	2.9
Malaysia	6.0	5.1	4.2	5.9	4.7	4.7	4.0
The Philippines	6.1	6.1	6.9	6.7	6.2	6.0	5.7
Vietnam	6.0	6.7	6.2	6.8	7.1	6.6	6.4
India	7.0	7.6	7.9	6.2	7.5	7.2	7.2
(Reference) Asia ex. China and India	4.2	3.8	3.9	4.5	4.3	4.0	3.8
(Reference) Asia ex. China	5.4	5.4	5.7	5.3	5.8	5.5	5.4

Note: Real GDP growth rate (y-o-y). Shading denotes forecasts. Average figures are calculated from the 2016 GDP share from the IMF (purchasing power parity base)
Source: Made by MHRI based upon statistics of the relevant countries and regions

Asia: domestic demand turned out mixed in the Oct-Dec quarter, and exports were lackluster

- The rates of growth in the Oct-Dec quarter turned out to be mixed, with some countries rising and others slowing from the Jul-Sep quarter. Results were also varied even among countries which experienced higher growth.
  - Amongst those countries that experienced higher growth, domestic demand boosted growth in the Philippines and Vietnam. However, in Taiwan, domestic demand was tepid and the increase was due to the decline of imports and rise of inventories.
- Exports were lackluster even among countries that experienced a rise of their economic growth rate. All countries suffered year-on-year declines in exports to China at the end of 2018.
  - The economic slowdown in China and the decline in procurement of parts by China, due to US-China trade tensions, spread to Asian countries through trade.

[Rate of growth in real GDP]

(Q-o-q % change, annualized)

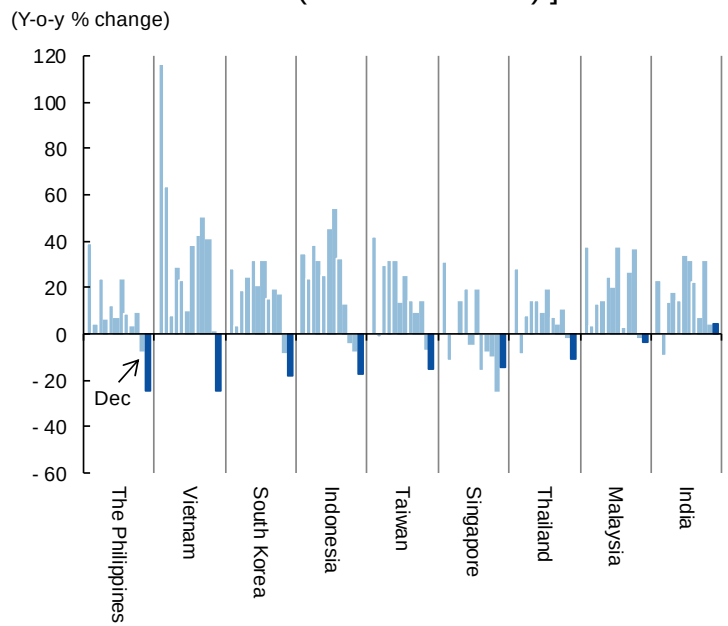
	2017			2018			
	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
South Korea	2.6	5.7	- 0.8	4.1	2.4	2.3	3.9
Taiwan	2.2	4.9	3.3	2.8	1.4	1.9	1.5
Hong Kong	3.5	2.9	3.4	8.7	- 0.6	0.3	N.A.
Singapore	2.8	11.2	2.1	2.1	1.4	3.5	1.6
Thailand	4.9	4.8	1.6	8.4	3.7	- 0.1	N.A.
Malaysia	5.1	7.2	4.2	5.6	1.2	6.7	5.7
The Philippines	8.1	7.0	5.6	5.9	6.0	6.1	6.4

(Y-o-y % change)

China	6.8	6.7	6.7	6.8	6.7	6.5	6.4
Indonesia	5.0	5.1	5.2	5.1	5.3	5.2	5.2
Vietnam	6.3	7.5	7.7	7.5	6.7	6.8	7.3
India	5.6	6.3	7.0	7.7	8.2	7.1	N.A.

Source: Made by MHRI based upon each country's and region's statistics, and CEIC Data

[Value of China-bound exports by the countries of Asia (Jan – Dec 2018)]

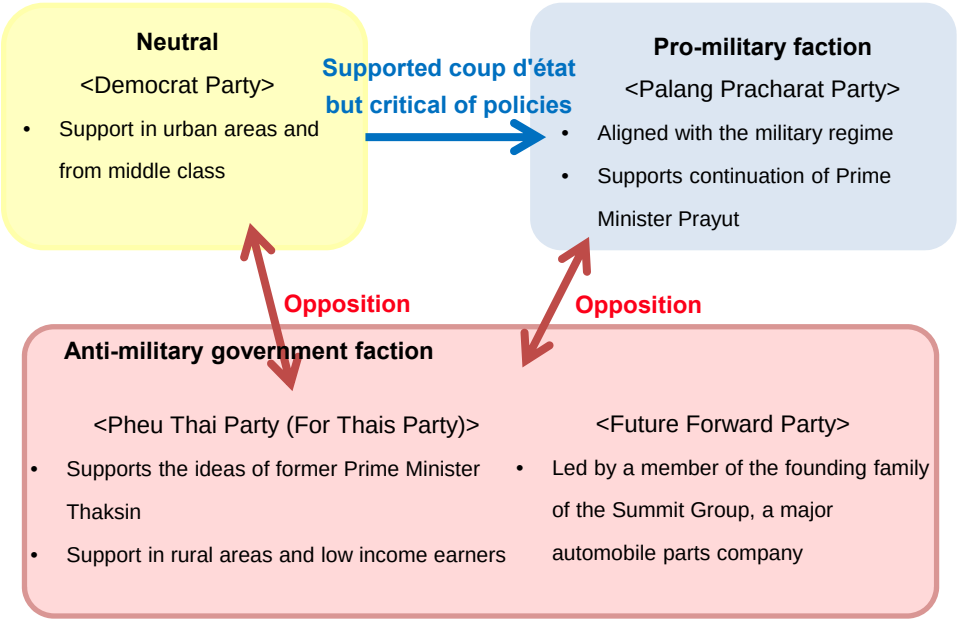


Note: China-bound exports by the countries of Asia, on the basis of China's imports from each of the countries according to China's statistics.
Source: Made by MHRI based upon General Administration of Customs of the People's Republic of China

Asia: despite firm domestic demand in ASEAN countries and India, a boost on a par with 2015 to 2016 appears unlikely

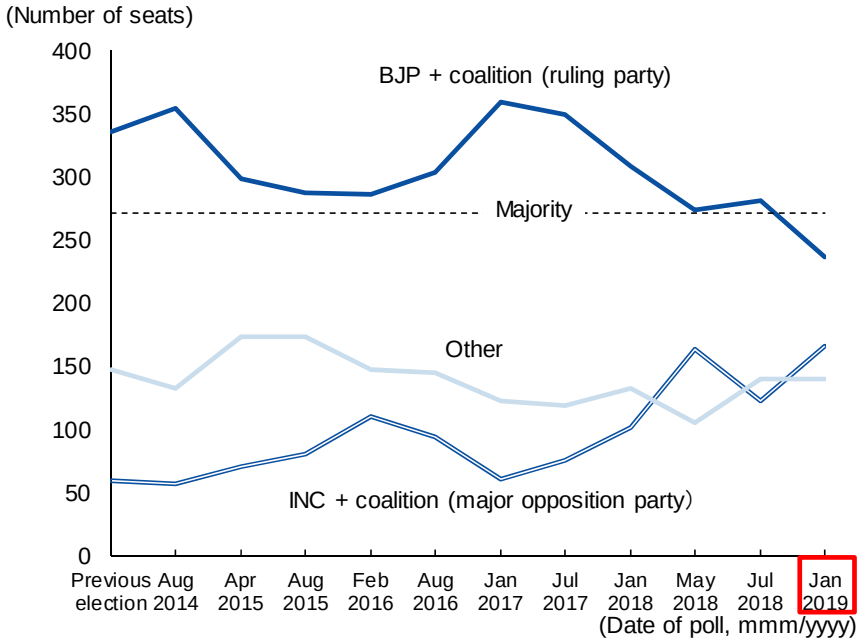
- The economies of the ASEAN countries and India, particularly domestic demand, accelerated during the global economic slowdown in 2015 to 2016. This was attributed to politics and policies such as the rebound from the 2014 coup d'état in Thailand and the full-scale improvement in India's investment environment when the Modi administration came to power in 2014.
- Domestic demand should be strong in ASEAN countries and India, but the boost from policies will be limited. Reforms will continue in Indonesia with the incumbent favored to win the presidential elections (April 2019). On the other hand, while the pro-military faction aligned with the military regime in the Thai general elections (March 2019) would still follow growth policies in the event of a victory, there are risks of a slowdown due to demonstrations by the anti-military faction. The outlook for reforms in India are unclear due to the Modi administration's declining approval ratings ahead of India's general election (May 2019).

[Thailand's political disputes]



Source: Made by MHRI based upon media reports

[Forecast on Indian lower house election based on public opinion polls]

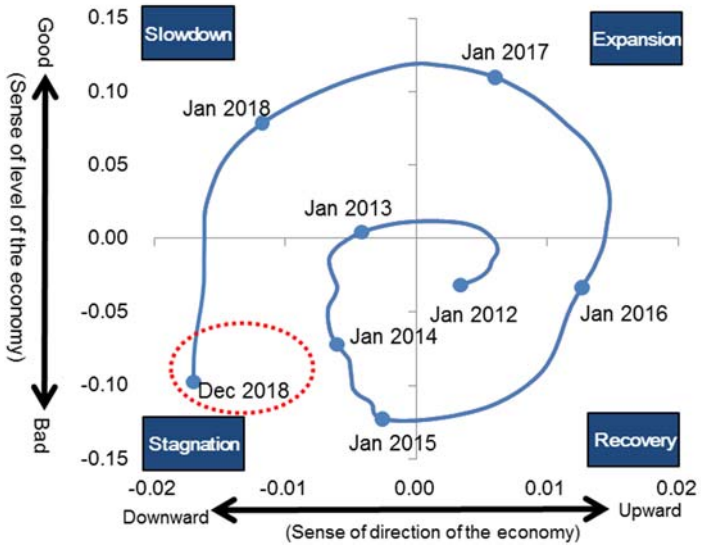


Source: Made by MHRI based upon India Today Mood of the Nation

China: the business cycle clock remains in a stagnation

- China's economy remains stagnant. Looking forward, trade tensions could aggravate the decline in exports and cause the stagnation to persist.
  - According to the business cycle clock of China's diffusion index, the Chinese economy entered a slowdown in 2017, and a subsequent stagnation from the second half of 2018.
  - The production-inventory balance turned negative for the first time in three years in the Oct-Dec quarter of 2018. In negative periods of the production-inventory balance in the past, such periods on average lasted seven quarters. If the negative balance lasts for such average term this time, it would be around mid-2019 that the negative balance ceases to widen, and the second half of 2020 that the balance returns to positive territory.
    - ✓ Although the business cycle clock should emerge out of the stagnation phase around mid-2019, the stagnation may persist in the event of an escalation of US-China trade tensions.

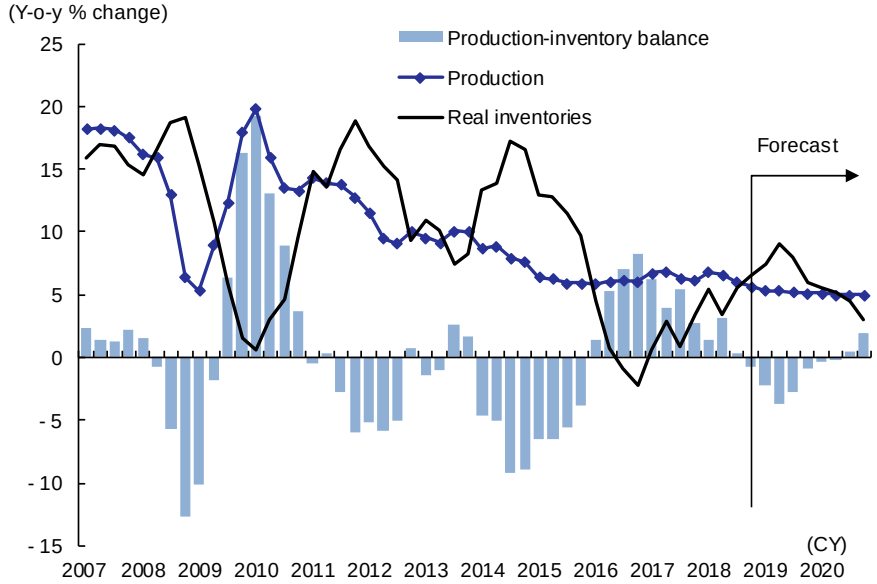
[Business cycle clock of China's diffusion index]



Note: The diffusion index comprises six indices of production, retail sales of consumer goods, investment in fixed assets, exports, ratio of job offers to applicants and corporate earnings, respectively standardised, and adjusted to remove the trend and outliers, weighted equally. The Y-axis plots the upward and downward divergence from the trend, while the X-axis plots the variation (m-o-m change) in the time series for the cycle components.

Source: Made by MHRI based upon National Bureau of Statistics of China and the General Administration of Customs, China

[Production-inventory balance (forecast)]



Note: The production – inventory balance = production (y-o-y) minus inventory (y-o-y). Inventory is made real using PPI

Source: Made by MHRI based upon National Bureau of Statistics China

China: policy management in 2019 will center around the reinforcement of counter-cyclical adjustments to stabilize the economy

- At the Central Economic Work Conference in December 2018, China decided to strengthen counter-cyclical adjustments and to implement measures that focus on maintaining stability.
  - In addition to cutting the deposit reserve ratio requirement four times during the period from 2018 through January 2019, there has been targeted monetary easing such as successive support measures since October 2018 including the reinforcement of the supply of funds to the private sector and small firms.
  - The economy is being supported by fiscal policies such as tax cuts and reduction in fees as well as an increase in issuance of local government bonds for infrastructure investment.

[Major monetary and fiscal policies in 2019]

● Fiscal Policy		Size (based on media reports)
1	Tax cuts, reduction in fees	1.5 tn yuan (2018: 1.3 tn yuan)
	Reduce burden on small firms	n/a
	Cuts to personal income tax	300 bn yuan
2	Infrastructure investment	
	Increase issuance of local government bonds	2 tn yuan + (2018: 1.35 tn yuan)
	Investment in railway construction	850 bn yuan (2018: 802.8 bn yuan)
3	Subsidize purchases such as cars and eco friendly household appliances	Total subsidies of 50 bn yuan

● Monetary Policy	
1	Lower the deposit reserve requirement ratio
2	Foster lower short-term interest rates
3	Support private sector small micro enterprises
	・Raise cap on relending and rediscounting
	・Established TMLF (Targeted medium-term lending facility focused on private sector small firms)
	・"125 goal" with setting of a formal target for a certain percentage of new bank loans to go to non-state companies

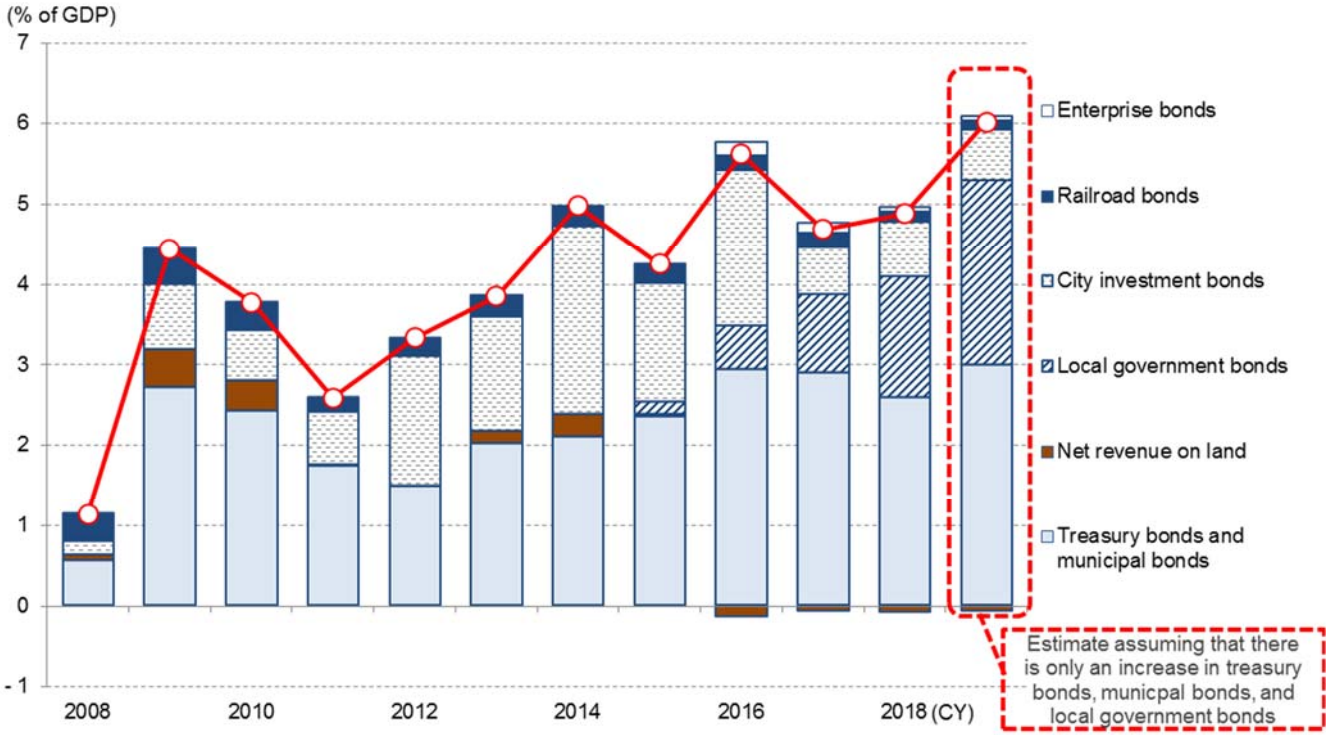
Source: Made by MHRI based upon various media reports

China: in 2019, fiscal resources will be expanded for greater support of the economy through infrastructure investment etc.

- In 2019, government finances for the purpose of economic stabilization will be kept at a high level.
  - At present, there is scope to expand fiscal resources such as increasing the issuance of city investment bonds* in addition to raising the fiscal deficit as a percentage of GDP and increasing the issuance of local government bonds for the construction of infrastructure.

    * Bonds issued by local government financing platforms to fund investment in regional infrastructure.
  - Furthermore, financial techniques such as lending by government financial institutions and increased use of PPP could also be used as "quasi-fiscal policy".

[Ratio of fiscal resources (in the broad meaning) to GDP]



Note: In 2019, the budget deficit was 3% of GDP (c.f., 2.6% in 2018) and the issuance of local government bonds was 2.25 trillion yuan (1.35 trillion yuan in 2018). Others are assumed as unchanged from 2018.

Source: Made by MHRI based upon CEIC Data, and Wind

China: despite stimulus policies in a bid to stabilize consumption, widening income gaps may dampen its impact

- Despite the government's measures to support the purchase of durable goods, etc., in a bid to stimulate consumer spending, the widening income gap is a source of concern.
  - In addition to monetary and fiscal policies, measures to promote replacement purchases of cars and eco/smart household electrical appliances, are aimed at reversing the slump in retail sales in 2018.
  - However, growth in incomes by income bracket in 2018 slowed down sharply particularly in the middle income bracket. There are also concerns that if a similar trend continues in 2019, the recovery in consumption by the middle class, that drive the consumption of durables, will be delayed and undermine consumer spending as a whole.
    - ✓ Given the possibility that sample changes for the household survey in 2018 may be causing discrepancies in the actual statistics, future trends need to be monitored closely.

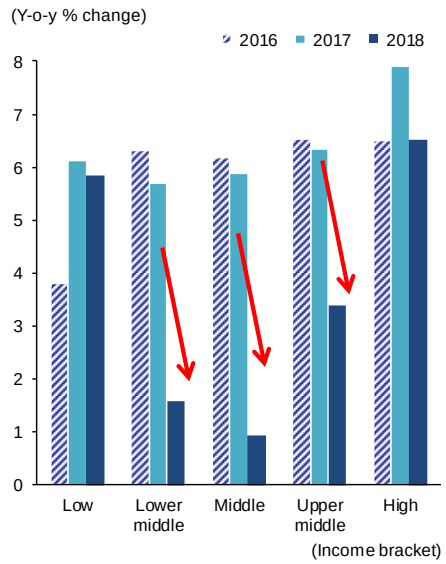
[Initiatives to stimulate consumer spending]

Method	Target products and area
Payment of subsidies	○Cars: Replace vehicles below exhaust gas standards "China III" and purchase new energy vehicles with advanced integrated performance. In rural areas replace three-wheel vehicles with trucks below 3.5 tons or passenger vehicles below 1.6l ○ Household appliances: eco/smart household electrical appliances, replacement of old model appliances, high resolution TVs, set-top box, VR/AR equipment
Tax cuts	○Used cars: Lower value-added tax on companies selling used cars
Other	○Consumer related infrastructure: Core communications network infrastructure in small and medium-sized cities and rural areas, car parks, logistics, recharging facilities for new energy vehicles, etc. rural environment such as treatment of rubbish and sewage

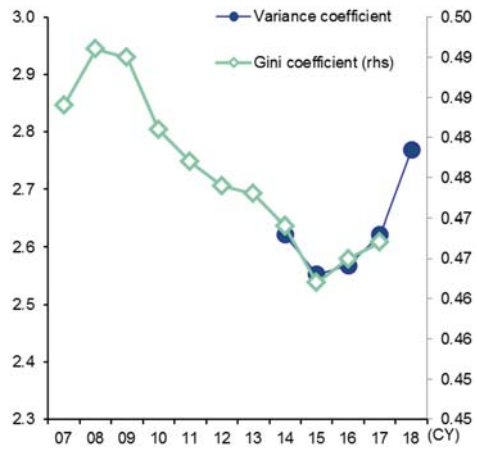
Source: Made by MHRI based upon the National Development and Reform Commission

[Disposable income per person by income bracket]

<Income growth (real) by income bracket>



<Variance coefficient and Gini coefficient>



Note: Variance coefficient = (average income for high income bracket – average income for low income bracket)/average income for middle income bracket

Source: Made by MHRI based upon National Bureau of Statistics China

China: housing market entering an adjustment phase

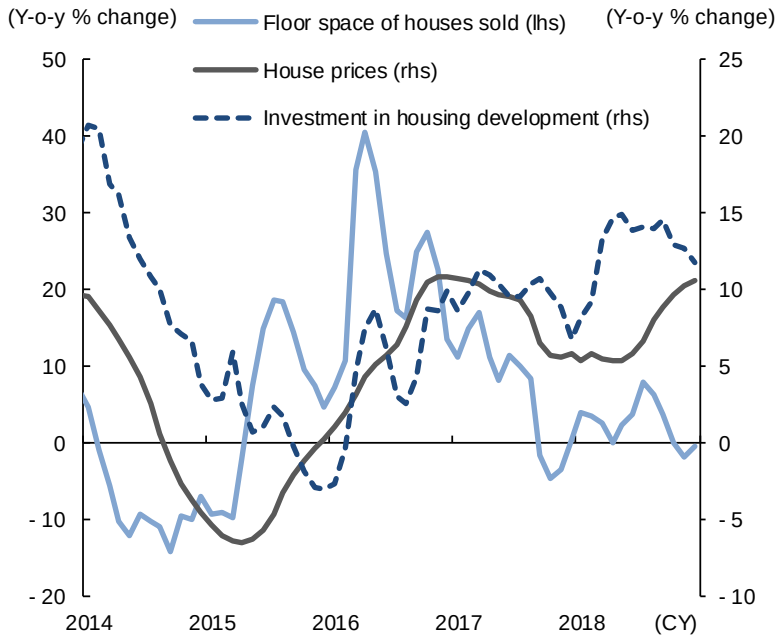
- China's housing market is projected to enter an adjustment phase, reflecting the continuation of policies to curb investment.
  - Even though housing prices are currently rising after bottoming out in the second half of 2017, the housing market is projected to enter an adjustment phase due to the continuation of policies to curb investment.
    - ✓ Given the cool-down in rise of floor space of houses sold since the second half of 2018, housing investment is also slowing down with a lag.
  - However, note that the housing market may overheat again if the tightening policies of local governments are relaxed and monetary easing is expanded.

[Examples of factors causing housing prices to rise and measures to suppress investment]

Factors pushing up prices	Measures suppressing investment
Shantytown redevelopments	The State Council's Executive Meeting proposed the abolishment of the promotion of the method of compensation payments which is said to be one of the factors pushing up prices
Measures to promote population inflows	Central Government guidance to be cautious toward excessive easing of housing purchase regulations in areas where there has been excessive solicitation of human resources such as Chongqing, Wuhan and Changsha
Real estate investment by companies	Regulation of housing investment by corporations in areas such as Hangzhou, Xi'an and Changsha

Source: Made by MHRI based upon various media reports

[Major housing-related indices (nationwide)]



Note: 1. The latest readings are as of December 2018
2. Floor space of housing sold and housing-related investments are backward 3-month moving averages

Source: Made by MHRI based upon CEIC Data