World Economic Trends II

<The 2019 Autumn/Winter Report>

- World Economy amid Continuing U.S.-China Trade Tension, and Monetary Policy -

(Summary)

February 2020

Cabinet Office Government of Japan

(Highlights)

○ The world economy is slowing down amid the continuing trade tension between the U.S. and China.

- Characterized by shrinking trade of goods and stagnation of manufacturing.

○ Moves toward further monetary easing are observed all around the world.

- As part of what they should address, major central banks have an issue of what policy measure and/or framework they should adopt to respond to changes in the structure of the economy and the financial sector.

(Contents)

"World Economic Trends": This report on trends of the world economy has been published semi-annually since 2002. This is the 36th issue.

Chapter 1 Section 1 World Economy amid Continuing U.S.-China Trade Tension

1. Current state of U.S.-China trade tension (1)

(1) Additional tariff measures by U.S. and China

(U.S.)

	Date for imposing additional tariffs	What to do	Examples of items subject to tariffs
List 1	July 6, 2018	Additional 25% tariffs on $34 billion worth of goods	Industrial machines Electronic parts
List 2	Aug 23, 2018	Additional 25% tariffs on $16 billion worth of goods	Plastic products Integrated circuits
List 3	Sep 24, 2018 May 10, 2019	Additional 10% tariffs & additional 25% tariffs on $200 billion worth of goods	Food products Furniture
List 4	Sep 1, 2019 Feb 14, 2020	Additional 15% tariffs & additional 7.5% tariffs on $120 billion worth of goods	Clothing Television
	Dec 15, 2019 → Postponed	Additional 15% tariffs on $160 billion worth of goods	Mobile phones Laptop computers

(China)

	Date for imposing additional tariffs	What to do		Examples of items subject to tariffs
List 1	July 6, 2018	Additional 25% tariffs on $34 billion worth of goods		Agricultural products like soybeans, cars (standard-sized cars, etc.), fishery products
List 2	Aug 23, 2018	Additional 25% tariffs on $16 billion worth of goods		Chemical products, medical facilities, energy products, cars (small-sized cars, buses, etc.)
List 3	Sep 24, 2018 Jun 1, 2019	Additional 5-10% tariffs & additional 5-25% tariffs on $60 billion worth of goods		Liquefied natural gas, food products & beverages, electrical products, auto parts
List 4	Sep 1, 2019 Feb 14, 2020	5.0-10% 2.5-5.0%	$75 billion worth of goods(*)	Soybean Oil
	Dec 15, 2019 → Postponed	5.0-10%		Wheat Car

(*) Goods for the List 4 overlap with those for the List 2 and List 3 in 4% and almost 60%, respectively.
Breakdowns between the starting months (Sep and Dec) are unavailable in value terms (1,717 and 3,361 items from Sep and Dec, respectively).

(2) What happened from August 2019

August 2019
- The U.S. and China announced their intention to implement the List 4 of additional tariff measures from September and December.
- The US announced higher rates for additional tariffs. (List 1-3: From October; List 4: From 1st day of implementation)

September
- The US and China implemented the List 4.

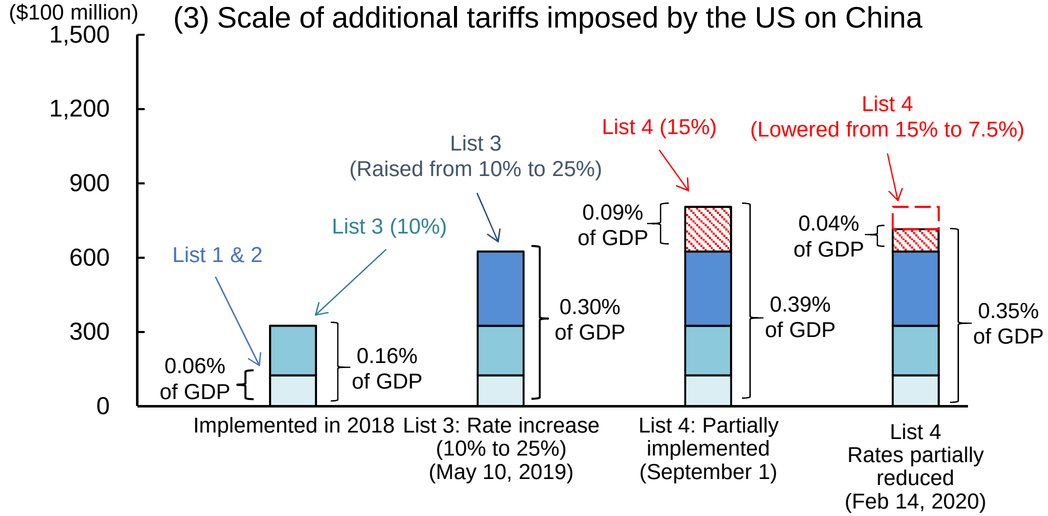
October
- After a ministerial-level meeting between the two countries, the US announced postponement of higher rates they planned to impose for the List 1-3 of additional tariffs in October.

December
- Having reached a Phase 1 agreement, the U.S. and China announced they would postpone implementing the Level 4 (what they planned to in December).

January 2020
- The US and China signed the 1st phase agreement.

2. Current state of U.S.-China trade tension (2)

(3) Scale of additional tariffs imposed by the US on China



(Note) Adapted from U.S. Department of Commerce. On the chart, ratios of GDP represent those of goods covered by additional tariffs to GDP of the US (2018).

(4) 1st phase agreement

○ The agreement states actions the US and China must take in 7 areas below:
(1) Intellectual property; (2) Technical transfer; (3) Agriculture; (4) Financial services; (5) Macroeconomic policies and exchange rate matters; (6) Expanding trade; and (7) Dispute resolution.

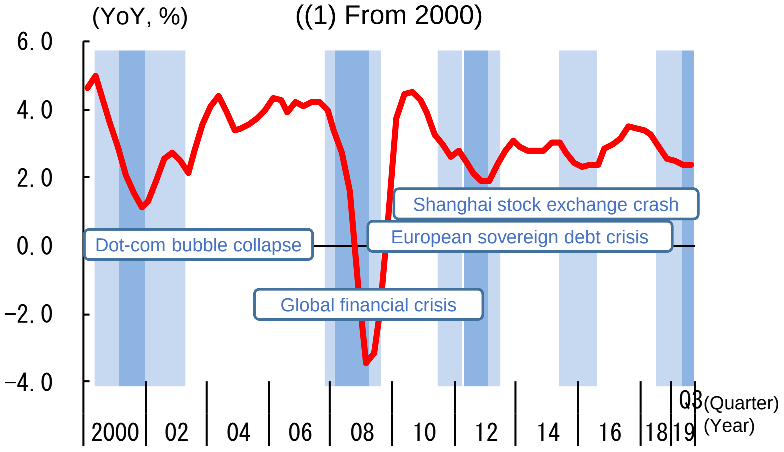
○ For (6), they agreed China would increase imports of goods and services from the U.S. by not less than $200 billion (*) in two years.

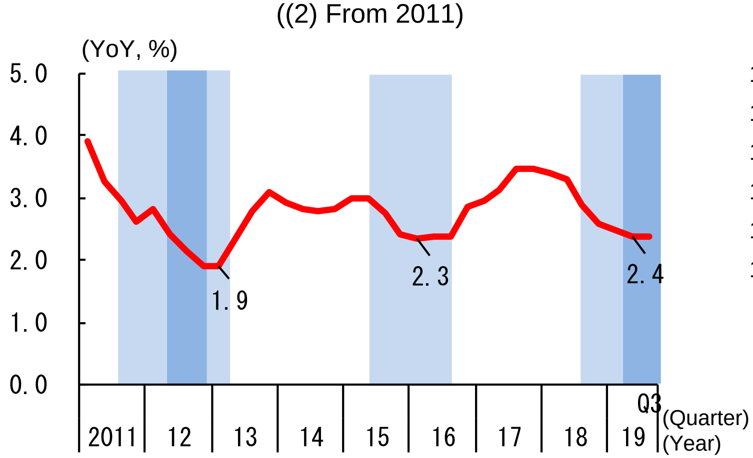
* Specifically, not less than $76.7 billion and $123.3 billion in 2020 and 2021, respectively, from the 2017 level. (In trade of goods & services with China, the US is expected to see a decline in the ratio of deficit to GDP (1.7% in 2017) by 0.4% and 0.6% in 2020 and 2021, respectively, from the 2017 level.)

3. Slowdown of the World Economy (1) (Growth rate & Trade)

(1) Global real economic growth rate

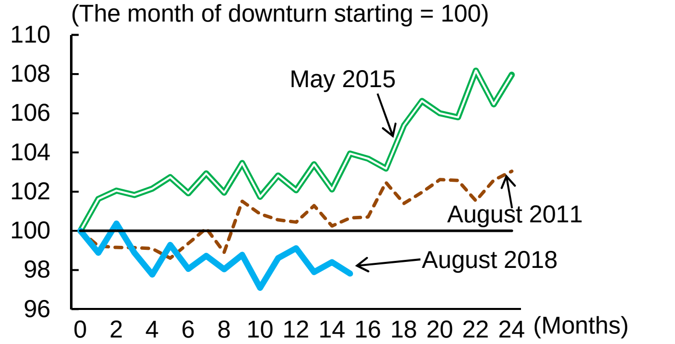
In the current phase of slowing down, the growth rate stands almost at the same level as in the days of the European sovereign debt crisis and the Shanghai stock exchange crash.





(2) Global trade volume

A larger decline and a slower recovery than in the latest two slowdown phases.



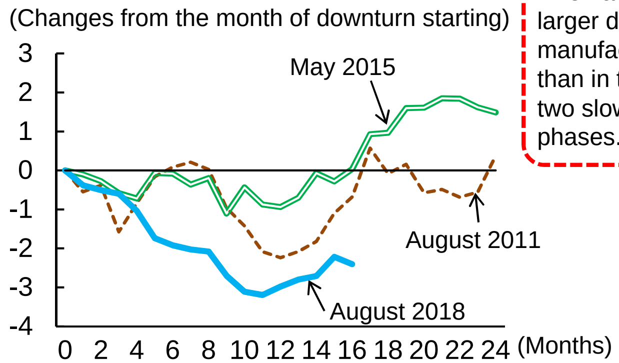
(Note) Adapted from Netherlands Bureau for Economic Policy Analysis (CPB). Seasonally adjusted.

(Note) Adapted from World Bank. Shades in light or dark blue represent periods when the OECD Composite Leading Indicators pointed to an economic downturn in two or three of the U.S., the Eurozone, and China, respectively. Figures on the right chart represent the lowest growth rate in each phase (1Q of 2013 & 2016, and 2Q of 2019).

4. Slowdown of the World Economy(2) (Business Confidence & Industrial Production)

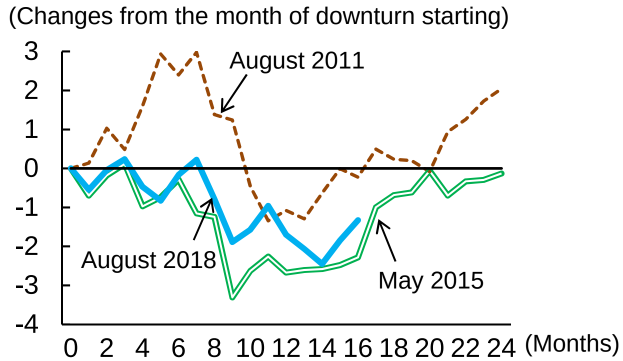
(3) Global business confidence

((1) Manufacturing)



A remarkably larger decline in manufacturing than in the latest two slowdown phases.

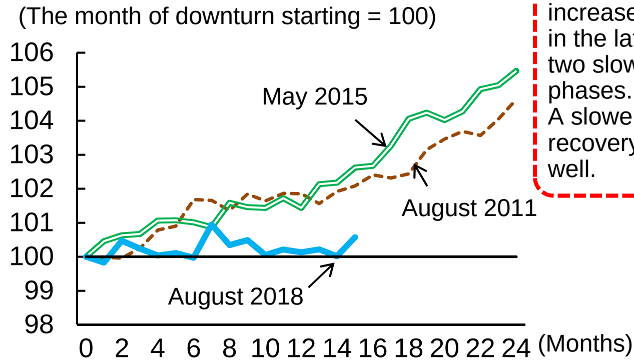
((2) Services industry)



(Note) Adapted from Markit. Changes in the business confidence DIs (seasonally adjusted) from the month of downturn starting.

(4) Global industrial production

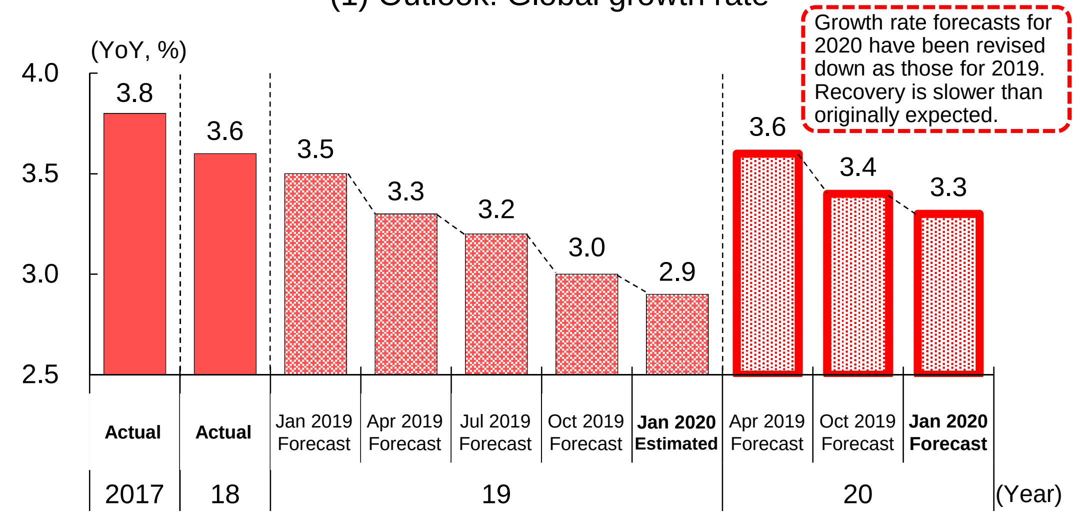
A smaller increase than in the latest two slowdown phases. A slower recovery as well.



(Note) Adapted from Netherlands Bureau for Economic Policy Analysis (CPB). Seasonally adjusted.

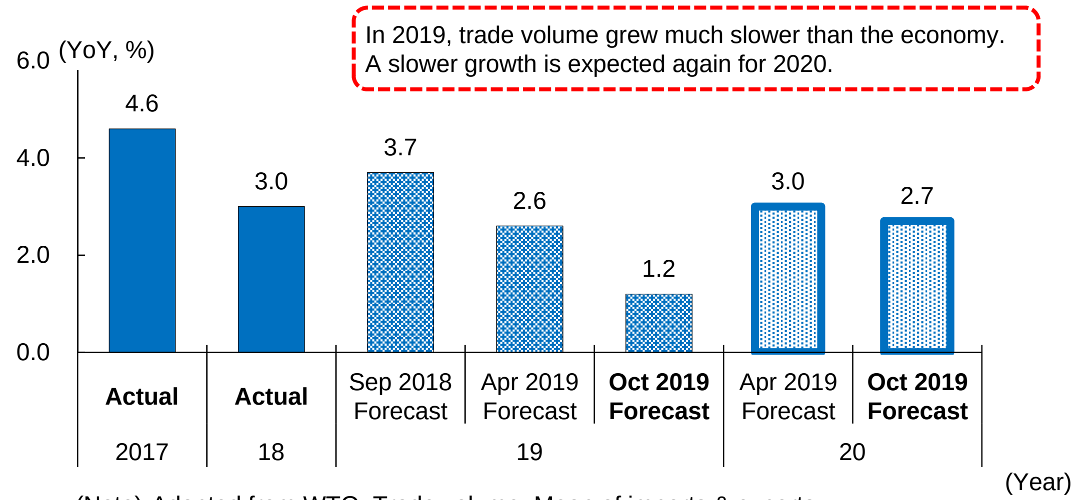
5. Outlook of the World Economy

(1) Outlook: Global growth rate



(Note) Adapted from IMF "World Economic Outlook".

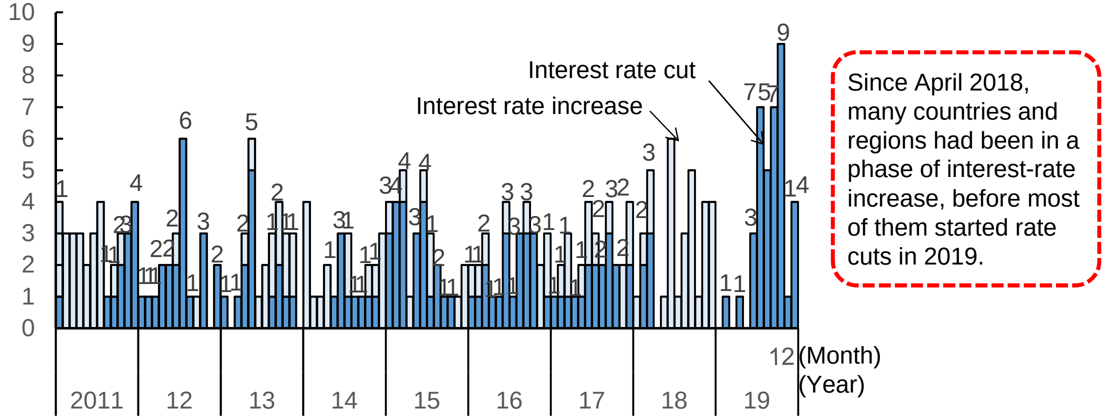
(2) Outlook: Global trade volume



(Note) Adapted from WTO. Trade volume: Mean of imports & exports.

6. Moves of Further Monetary Easing Observed Around the World, and Risk Factors in the Global Economy

(1) No. of countries & regions that changed the policy interest rate (G20)



(Notes) 1.Adapted from BIS. No. of changes made in policy interest rates by 16 central banks of G20 members excluding Argentina. (A series of changes made in a single month are counted as one.) On the chart, figures represent no. of rate cuts.

2.A policy interest rate refers to a specific series that BIS request each central bank to report to produce a dataset. They report a single series per month. For instance, changes are counted solely in the rate for main refinancing operations for the Eurozone, and the benchmark lending rate for China.

(2) Risk factors in the global economy

○ Developments of trade issues
- Between US & China and US & Europe (aircraft, automobile, digital services tax)

○ Outlook of the Chinese economy
- Economic stimulus measures, the issue of excessive debt, and impact of the spread of novel coronavirus infection.

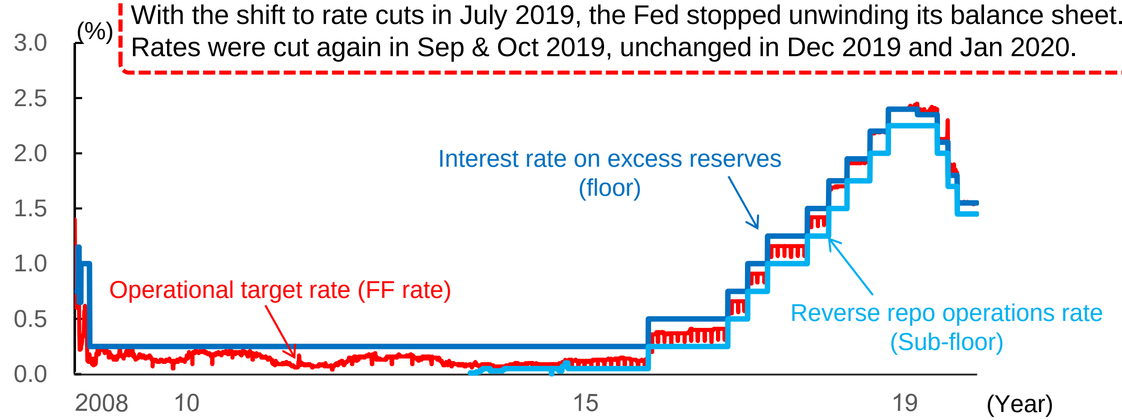
○ Withdrawal of the U.K. from the EU
- FTA negotiations between the U.K. and the EU during the transition period through the end of 2020.

○ Fluctuations in financial & capital markets
- Stock price & situation in the Middle East (crude oil price)

1. Developments of Monetary Policy and Its Challenges: The United States (1)

(1) The floor (and sub-floor) system for guiding the operational target rate

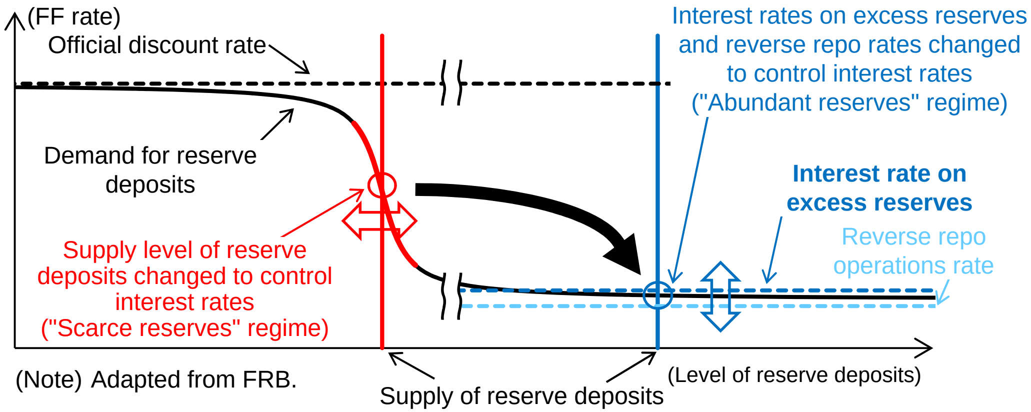
With the shift to rate cuts in July 2019, the Fed stopped unwinding its balance sheet. Rates were cut again in Sep & Oct 2019, unchanged in Dec 2019 and Jan 2020.



(Note) Adapted from FRB. A reverse repo operations rate refers to the rate of an interest the FRB pays when selling bonds with buy-back conditions (repo operations for selling bonds to absorb funds).

(2) Changes of methods for controlling interest rates

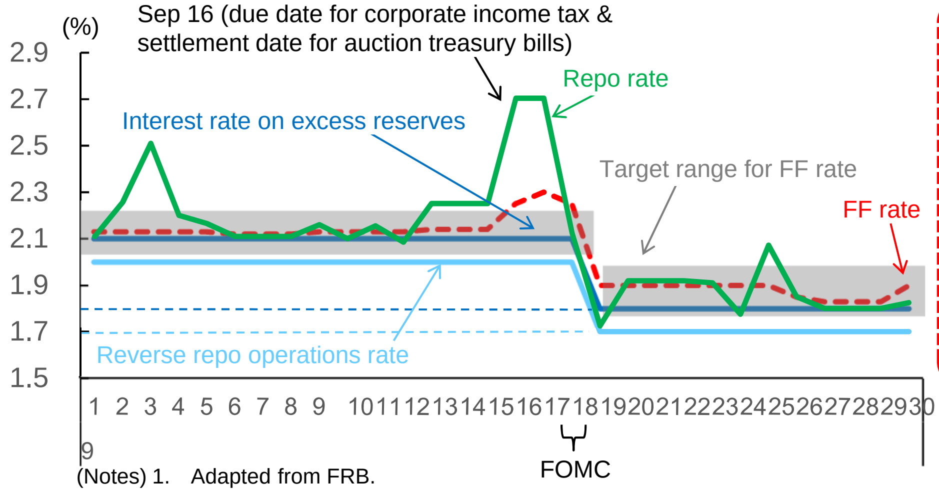
After so-called quantitative easing, the regime of "scarce reserves" regime was replaced by that of "ample reserves".



(Note) Adapted from FRB.

2. Developments of Monetary Policy and Its Challenges: The United States (2)

(3) Fluctuations in the FF and repo rates in September 2019



With rapid increases in short-term interests rate in mid-September 2019, the FF rate went above the target range. The FRB engaged in repo transactions to supply funds and purchased treasury bills.

(Notes) 1. Adapted from FRB.
2. The repo rate represents interest rates for repo transactions with undesignated items of bonds (overnight). A repo transaction refers to borrowing (lending) of short-term funds by selling (buying) bonds with buy-back (sell-back) conditions.
3. On September 17, interest rates reportedly went above 10% at some repo transactions.

(4) Challenge 1: Ways to control short-term interest rates

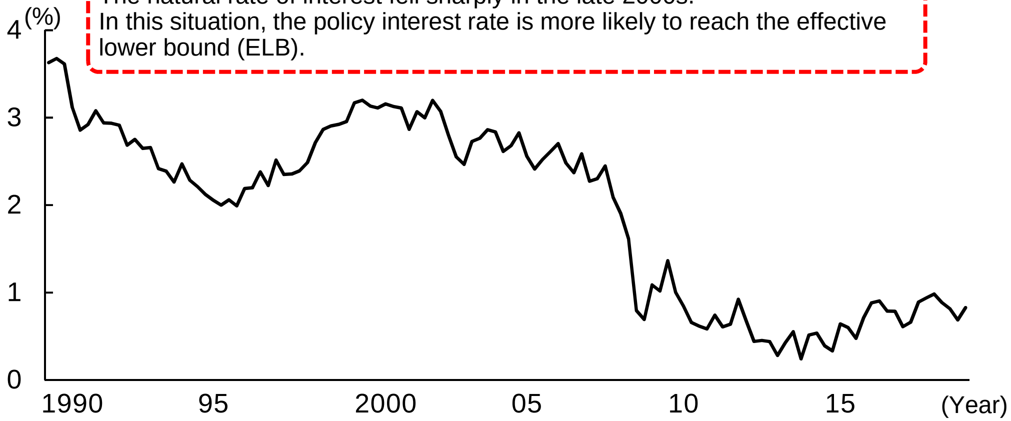
(Structural factors behind rapid increases in short-term interest rates)
- The FRB's unwinding of its balance sheet (from Oct 2017), which led to smaller reserve deposits
- Smaller inter-bank lending (minor roles it has to play after quantitative easing & more stringent financial regulations)

(Discussions for better methods for controlling interest rates)
- Need to secure sufficient reserve deposits for an "abundant reserves" regime
- Need to set a cap on short-term interest rates by, for instance, establishing a standing lending facility as banks often decline official discount rates
- Reconsider target interest rates

3. Developments of Monetary Policy and Its Challenges: The United States (3)

(5) Natural rate of interest

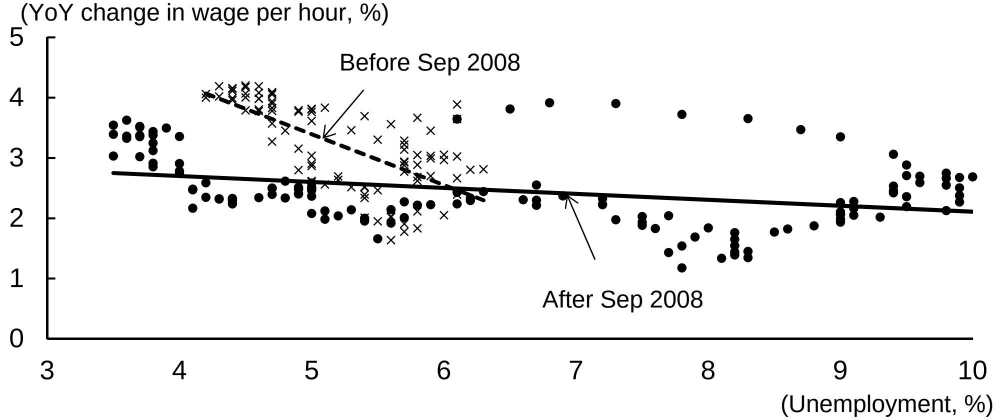
The natural rate of interest fell sharply in the late 2000s.
In this situation, the policy interest rate is more likely to reach the effective lower bound (ELB).



(Note) Adapted from the New York Fed. A natural rate of interest represents a real short-term interest rate consistent with potential GDP.

(6) Phillips curve

The Phillips curve flattened after the global financial crisis.
Stabilizing the expected inflation rate has become more critical.



(Notes) 1. Adapted from U.S. Department of Commerce & Department of Labor.

2. Before Sep 2008: Data for Jan 2001 through Sep 2008;
After Sep 2008: Data for Sep 2008 through Dec 2019.

(7) Challenge 2: Reconsidering the framework for monetary policy

○ To respond to the "New Normal," characterized by low interest rate, low inflation, and low growth, reconsider strategies, methodologies, and communication for monetary policy.

- Since Feb 2019, events called "Fed Listens" have been given by Federal Reserve Banks.
- The FOMC also started discussions in mid-2019, targeting at releasing conclusions around mid-2020.

(1) Whether to adopt a “makeup strategy”

- Examine, from the viewpoint of trust, whether to compensate for any shortfalls of inflation from a target with overshoots in future.
- Specifically, the Fed considers whether to set the average rate of inflation over a certain period as a target (average inflation targeting) or set a target path for the level of prices (price level targeting), against which past shortfalls should be taken into evaluation.

(2) Relevance of current tools of monetary policy, and addition

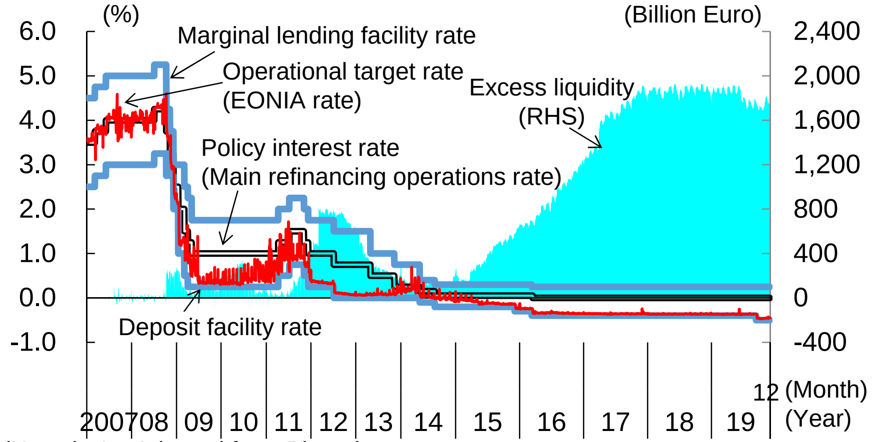
- Among the current tools, release of the target range of the FF rate, balance sheet policy, and forward guidance are under review.
- As additional tools, yield curve control and negative interest rate, among others, are examined. (At its meeting in October 2019, the FOMC discussed negative interest only skeptically as an option they could adopt in the current state of the economy.)

(3) Improve communication

- Forward guidance and economic projections of FOMC members (including dot plots representing their forecast of interest rates) are under review.

1. Monetary policy in the Eurozone (1)

(1) The corridor system for guiding the operational target rate



In Sep 2019, the ECB decided to lower the interest rate of deposit facility (lower limit of the corridor) further into the negative range and resume its asset purchase program.

(Notes) 1. Adapted from Bloomberg.
2. EONIA: Euro OverNight Index Average rate.
3. Excess liquidity equals to the use of the deposit facility less the use of the marginal lending facility plus excess reserves.

(2) Challenges

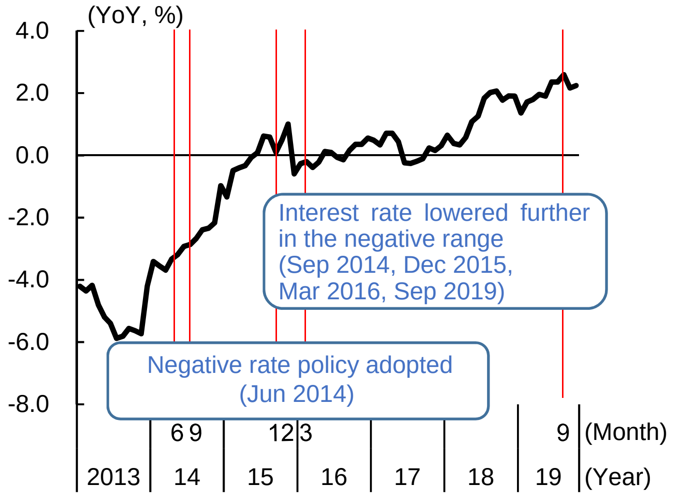
(1) Restrictions on further lowering of negative rates
- Smaller margins that force banks into lower profitability.
- Possibility of reaching a "reversal interest rate," where monetary easing leads banks to lend less.

(2) Medium and long-term restrictions on asset purchase programs
- Shortage of Germany government bonds with its public finance getting more balanced. (Purchases are restricted out of consideration for the issue of monetary financing.)

(3) Review of monetary policy strategy
- To be performed from Jan 2020 through the year-end.
- Definition of price stability, communication, and climate change, among others, will be put on the table.

2. Monetary policy in the Eurozone (2)

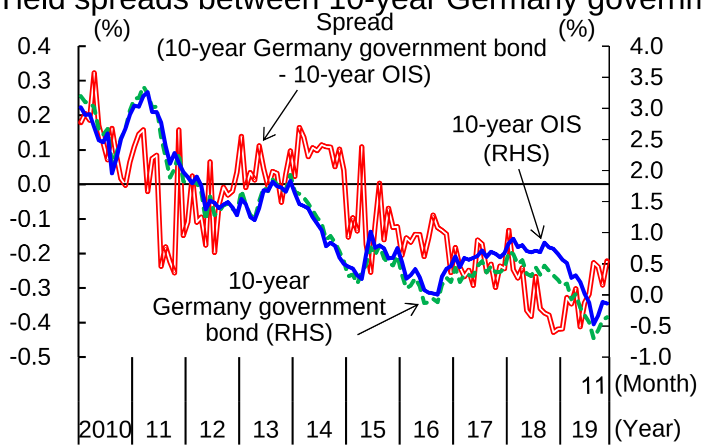
(3) Bank lending in the Eurozone



So far, the negative rate policy has caused no observed decline in bank lending.

(Note) Adapted from ECB.

(4) Yield spreads between 10-year Germany government bond and OIS

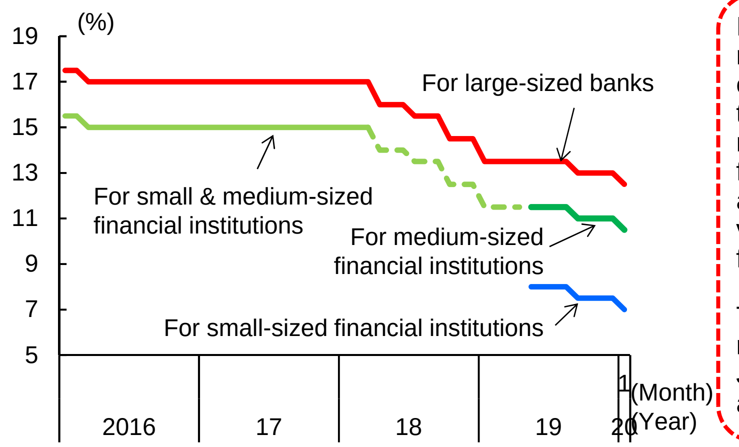


Spreads are narrowing between the indicators, suggesting shortage of Germany government bonds available in the market.

(Notes) 1. Adapted from Bloomberg and Datastream.
2. Overnight Index Swap (OIS) refers to interest rate swap transactions where overnight and fixed rates are exchanged. Fixed rates for OIS transactions are regarded as representative yield of safe assets like yields of German national bonds.

1. Developments of Monetary Policy and Its Challenges: China (1)

(1) Reserve requirement ratio



In May 2019, reserve requirement ratios were consolidated into three tranches, those for large, medium, and small-sized financial institutions, with abolition of several varieties left exceptionally for smaller ones.

The reserve requirement ratios were lowered in Jan and Sep 2019 and again in Jan 2020.

(Note) Adapted from PBC. Until April 2019, several different ratios had been set exceptionally for certain types of smaller financial institutions. They are omitted on the chart above. In 2018, ratios were lowered not only for large banks but also some of the medium and small ones (in April, July, and October). So, the series of "For medium and small-sized financial institutions" from April 2018 is shown in a dotted line.

(2) Challenges

(1) Interest rate liberalization

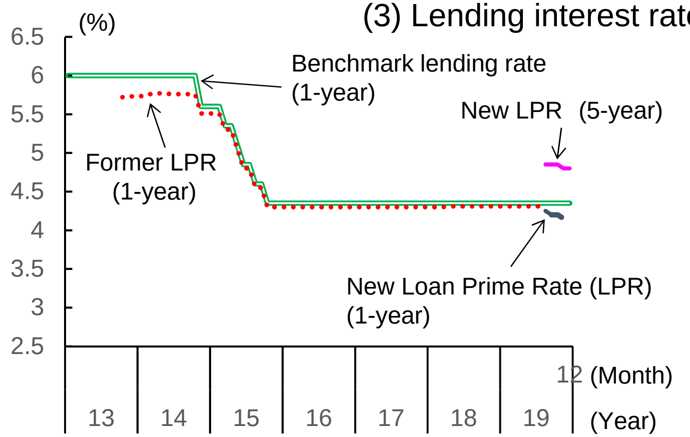
- A state of "dual-track interest rate," where the benchmark and market rates stand together.
- Banks conventionally refer to benchmark rates.

(2) Independence of the central bank

- The People's Bank of China (PBC) reports to the State Council.
- The IMF has pointed out the PBC's lack of independence in policy decision making as a lever of monetary policy factor that leaves the Bank unable to use communication.

2. Developments of Monetary Policy and Its Challenges: China (2)

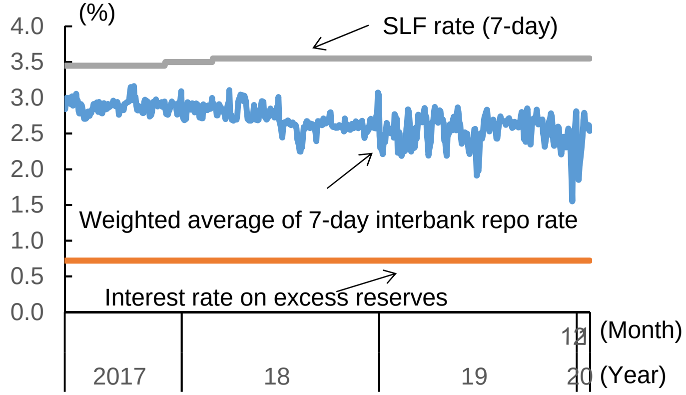
(3) Lending interest rate



In Aug 2019, the PBC started releasing a new Loan Prime Rate (LPR), calculated in a revised way to reflect market rates, allowing banks to lower lending rates.

(Note) Adapted from PBC & National Interbank Funding Center.

(4) Future scheme: Operational target rate and corridor system



The PBC considers shifting to a corridor system using the weighted average of 7-day interbank repo rates as operational target rate, the standing lending facility (SLF) as ceiling, and the interest rate on excess reserves as floor.

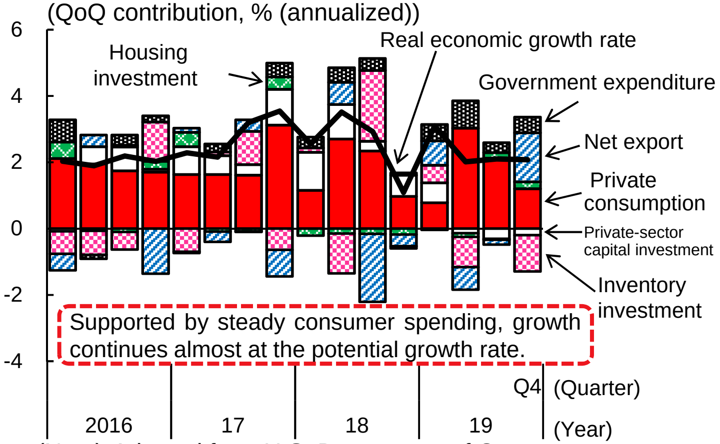
(Note) Adapted from PBC & National Interbank Funding Center.

Chapter 2　Economic Trends in Major Regions [U.S Economy]

In the U.S., despite declines in private-sector capital investment for three consecutive quarters, economic recovery continues supported by steady consumer spending in favorable employment and income conditions. However, careful watch must be kept on developments in corporate debt, fiscal and trade policies, and other issues.

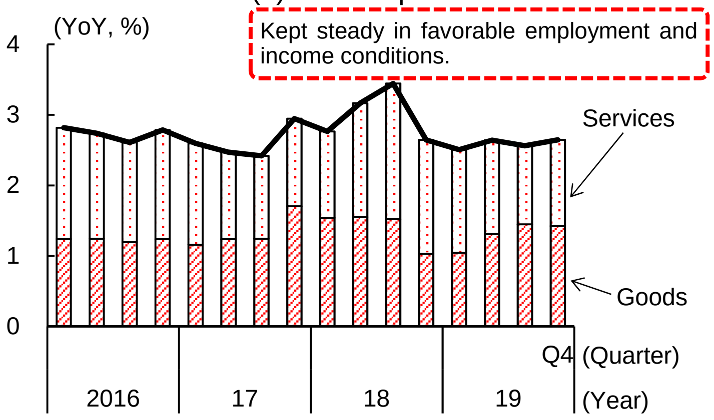
1. Trends of the U.S. Economy (1)

(1) Real economic growth rate



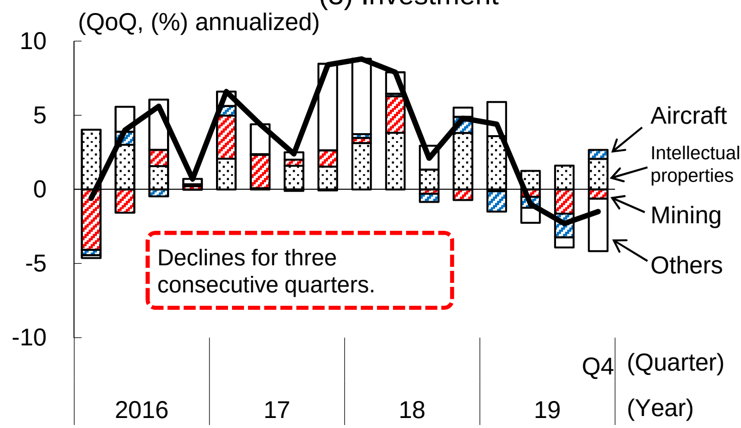
(Note) Adapted from U.S. Department of Commerce.

(2) Consumption



(Note) Adapted from U.S. Department of Commerce.

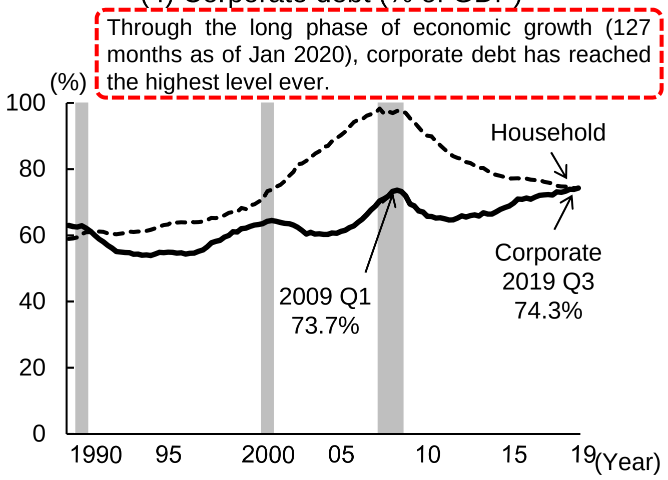
(3) Investment



(Note) Adapted from U.S. Department of Commerce.

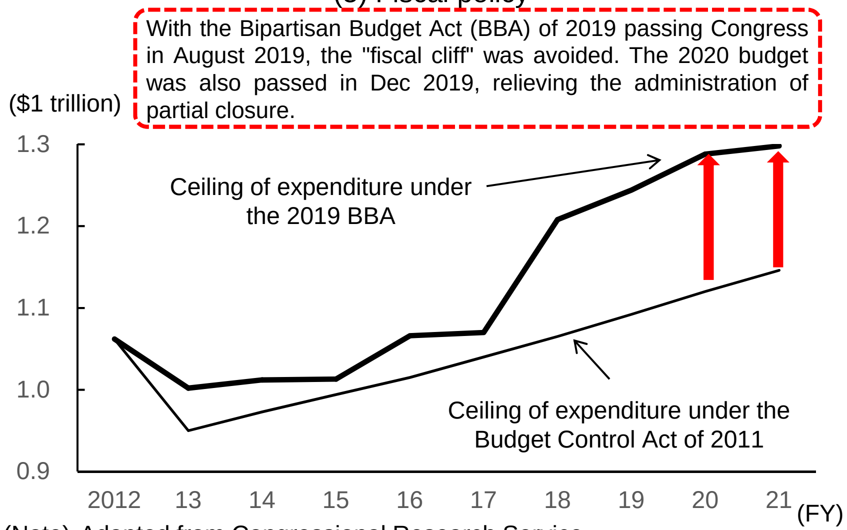
2. Trends of the U.S. Economy (2)

(4) Corporate debt (% of GDP)



(Note) Adapted from FRB & U.S. Department of Commerce.Shaded are phases of recession.

(5) Fiscal policy



(Note) Adapted from Congressional Research Service.

(6) Trade policy (Major issues except for China)

<U.S. - Mexico - Canada Agreement (USMCA; new NAFTA)>

Nov	2018	• Signed by the three countries.
Jun	2019	• Ratified by Mexico.
December		• Revised Agreement accepted by U.S. Democrats (more strict supervision of labor standards in Mexico, etc.), before signed by the three.
		• Ratified by Mexico.
January	2020	• Ratified by the U.S.

<Others>

- Additional taxes (Oct 2019) and raised rates imposed on the EU on ground of subsidies granted to Airbus. (Coming into force in March 2020)

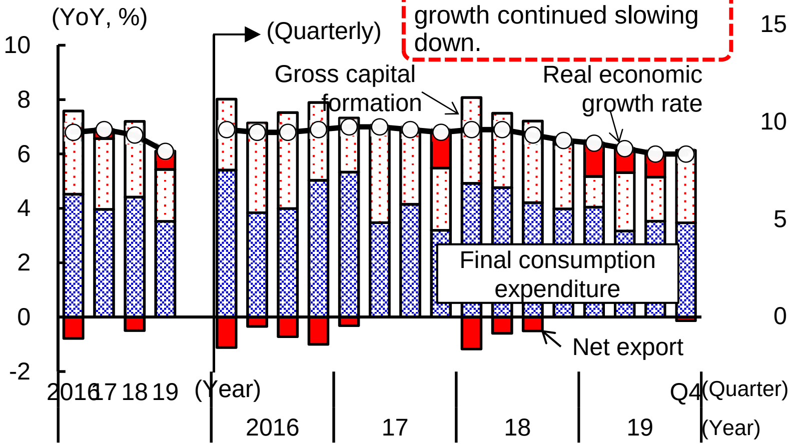
Chapter 2 Economic Trends in Major Regions [Chinese Economy]

In China, gradual slowdown of the economy continues. Not only external but also domestic demand remains stagnant. Inflation, seen in core consumer price and producer prices, shows a downward trend. However, rising prices of food products, especially pork, work as a factor pushing up inflation.

1. Trends of the Chinese Economy (1)

(1) Real economic growth rate

In late 2019, economic growth continued slowing down.

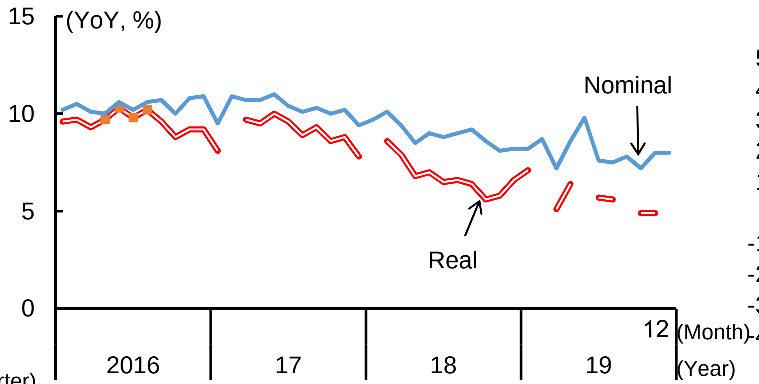


(Note) Adapted from National Bureau of Statistics of China.

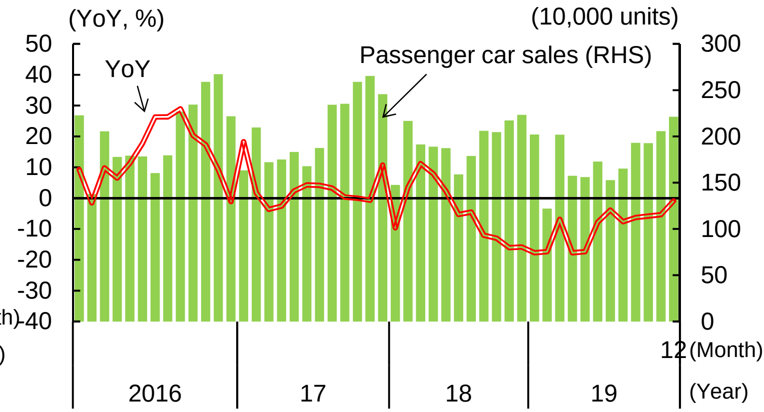
(2) Consumption

(3) Passenger car sales

Consumption, especially passenger car sales, continued to glow slower.



(Note) Adapted from National Bureau of Statistics of China. Real growth rates for Mar 2017, Jan & Feb 2018, and Mar, Jun, Sep & Dec 2019 are unavailable.

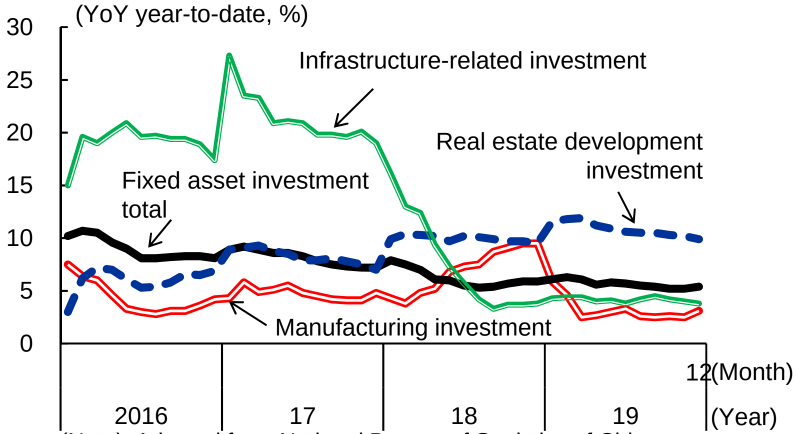


(Note) Adapted form China Association of Automobile Manufacturers. On a shipment basis

2. Trends of the Chinese Economy (2)

(4) Fixed asset investment

Fixed asset investment remains weak.

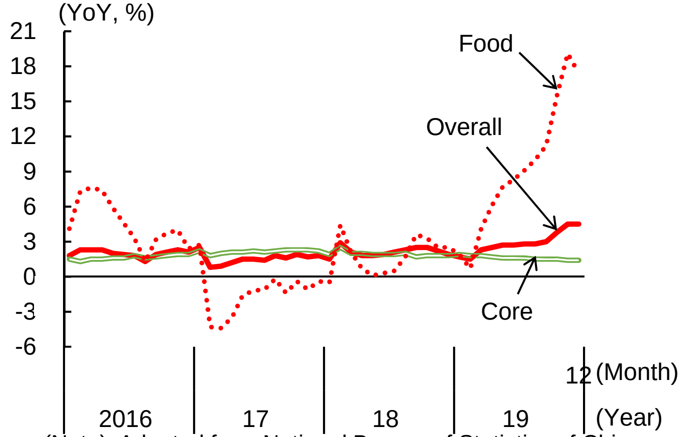


(Note) Adapted from National Bureau of Statistics of China.

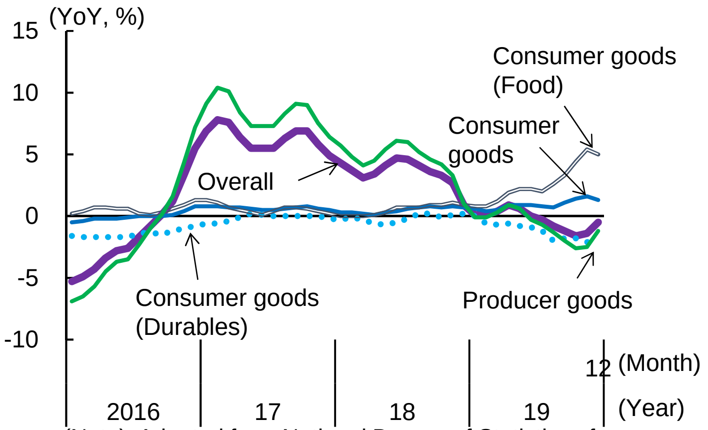
(5) Consumer price inflation

(6) Producer price inflation

Inflation is on a downward trend, though food prices are rising amid African swine fever (ASF) epidemic.



(Note) Adapted from National Bureau of Statistics of China.



(Note) Adapted from National Bureau of Statistics of China.

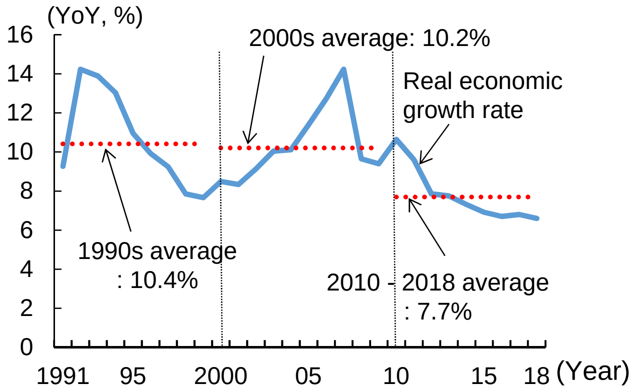
Chapter 2 Economic Trends in Major Regions [Chinese Economy]

Growth of the Chinese economy has been trend down on a medium and long-term basis. The IMF expects its growth rate will slow down to 4.0 - 4.5% by 2030, especially with the tertiary industry making up more of the economy. In the long term, aging population is another factor that will weigh on growth.

3. Medium & long-term growth trend of the Chinese economy (1)

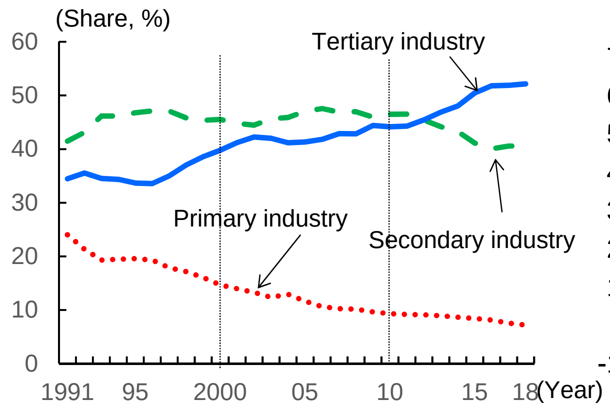
(1) Real economic growth rate (long-term)

Average growth rate fell sharply in the 2010s.



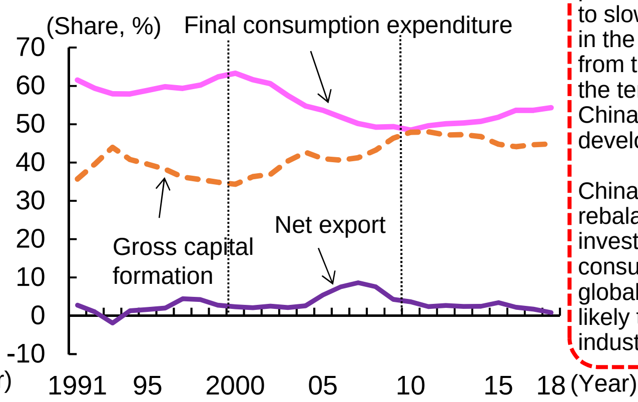
(Notes) 1. Adapted from National Bureau of Statistics of China.
2. Excluding 1990, the year of Tiananmen Square Incident, which gave significant impact.

(2) Shares of industries in nominal GDP



(Note) Adapted from National Bureau of Statistics of China.

(3) Shares of demand items in nominal GDP



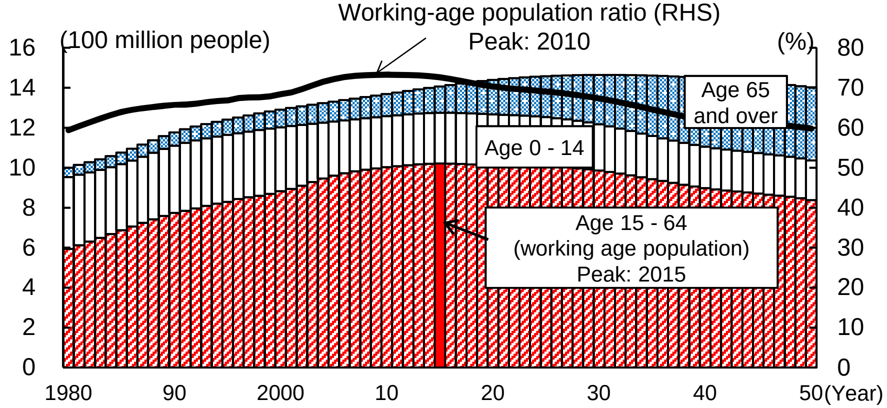
(Note) Adapted from National Bureau of Statistics of China.

Growth of labor productivity is expected to slow down with a shift in the industrial structure from the secondary to the tertiary industry, and China's catching up with developed economies.

China's effort to rebalance from investment to consumption after the global financial crisis was likely to help the tertiary industry grow faster.

4. Medium & long-term growth trend of the Chinese economy (2)

(4) Working-age population ratio

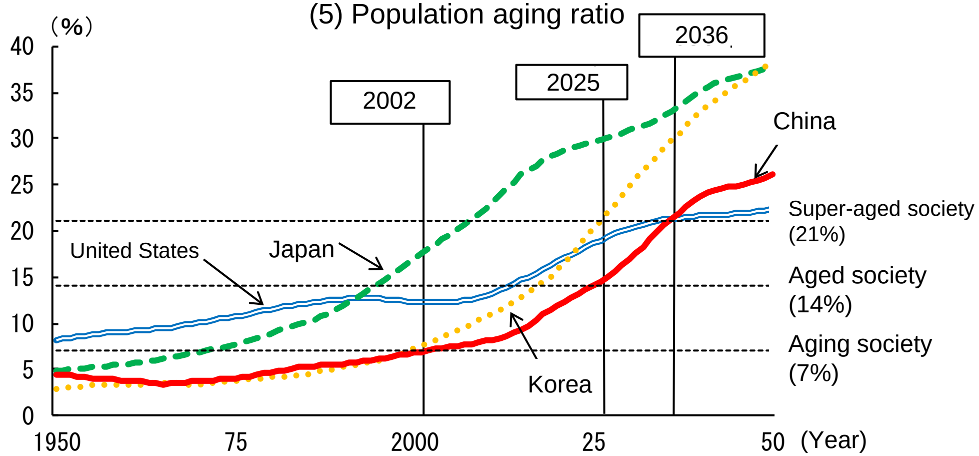


(Notes) 1. Adapted from United Nations "World Population Prospects 2019."
2. Figures for 2021 onwards are medium variant projection.

Working-age population is expected to start falling in 2015.

Even after the end of the one-child policy in 2016, the birthrate continues declining. In 2036, a super-aged society will appear as people aged 65 and older will account for more than 21%.

(5) Population aging ratio



(Note) Adapted from United Nations "World Population Prospect 2019."

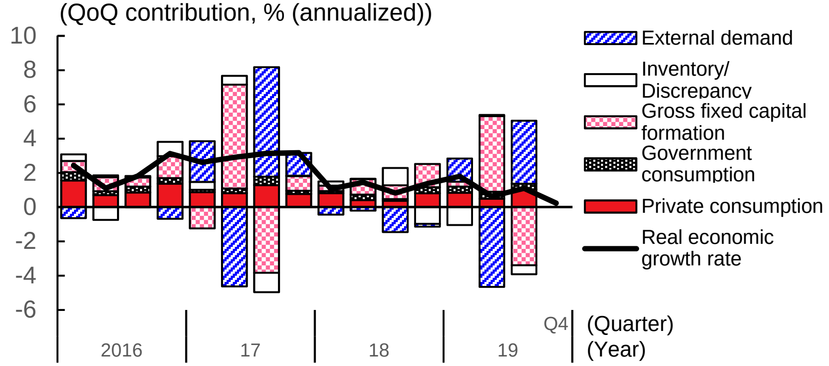
Chapter 2 Economic Trends in Major Regions [European Economy]

Despite relative steadiness in consumption, the Eurozone finds slowing down of external demand and stagnant manufacturing leave the economy in weak recovery.
Recovery is also weak in the U.K. as uncertainty concerning its withdrawal from the EU results in fluctuations in import and export and depressed investment.

1. Trends of the Eurozone Economy

(1) Real economic growth rate

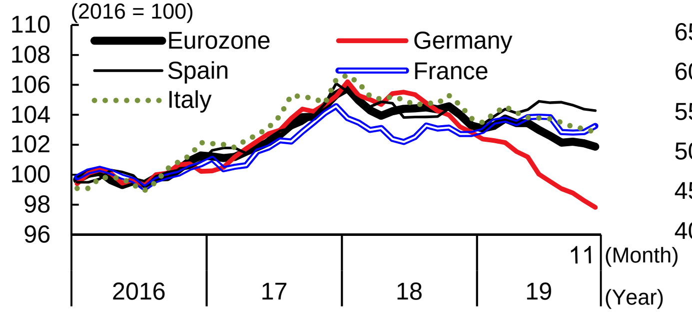
Consumer spending remains rather strong.



(Note) Adapted from Eurostat.

(2) Industrial production of major countries

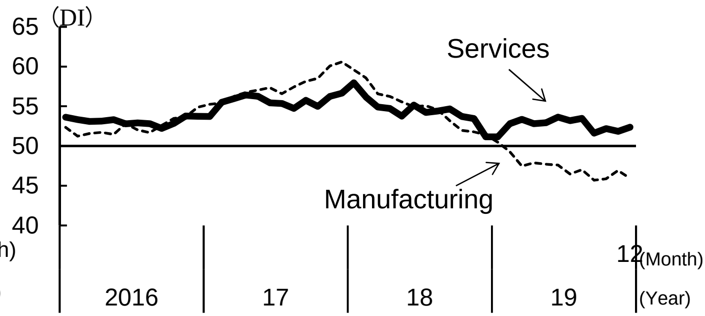
Weakness is evident in Germany, dependent heavily on export and manufacturing.



(Note) Adapted from Eurostat. Construction is excluded. Three-month moving average.

(3) Manufacturing & Services PMI

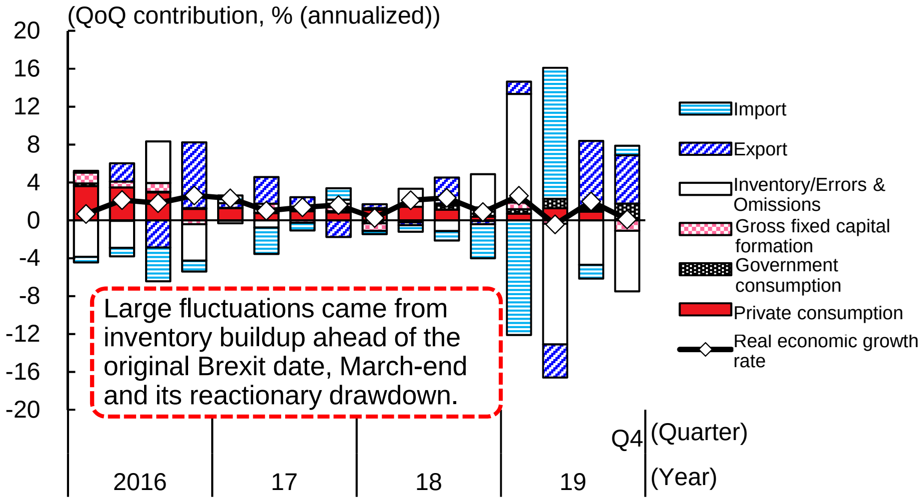
Despite continuing falls among manufactures, the services sector remains rather strong.



(Note) Adapted from Markit. The index for a month represents a change(direction) in the month from the previous one. A figure above 50 indicates improvement while one below 50 means deterioration.

2. Trends of the U.K. Economy

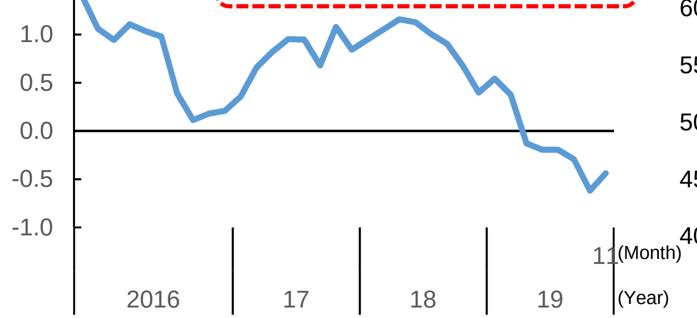
(1) Real economic growth rate



(Note) Adapted from U.K. Office for National Statistics.

(2) Investment intentions of companies

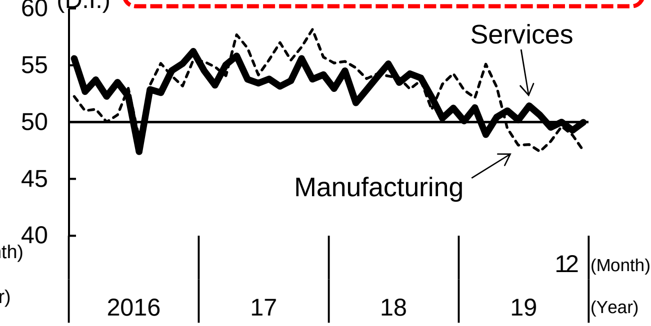
Uncertainty concerning withdrawal of the U.K. from the EU discourages companies to invest.



(Note) Adapted from Bank of England. Manufacturing & services. Companies are surveyed in their intentions to invest over coming 12 months.
Respondents give points, ranging between five and minus five.

(3) Manufacturing & Services PMI

Uncertainty concerning withdrawal of the U.K. from the EU leaves the services sector, including financial industry, in weakness.



(Note) Adapted from Markit. The index for a month represents a change (direction) in the month from the previous one. A figure above 50 indicates improvement while one below 50 means deterioration.