World Economic Trends II
<The 2018 Autumn/Winter Report>

- 'Sophistication of China`s Exports and U.S.-China Trade Tension -

(Summary)

March 2019

Cabinet Office
Government of Japan

Contents

About "World Economic Trends"

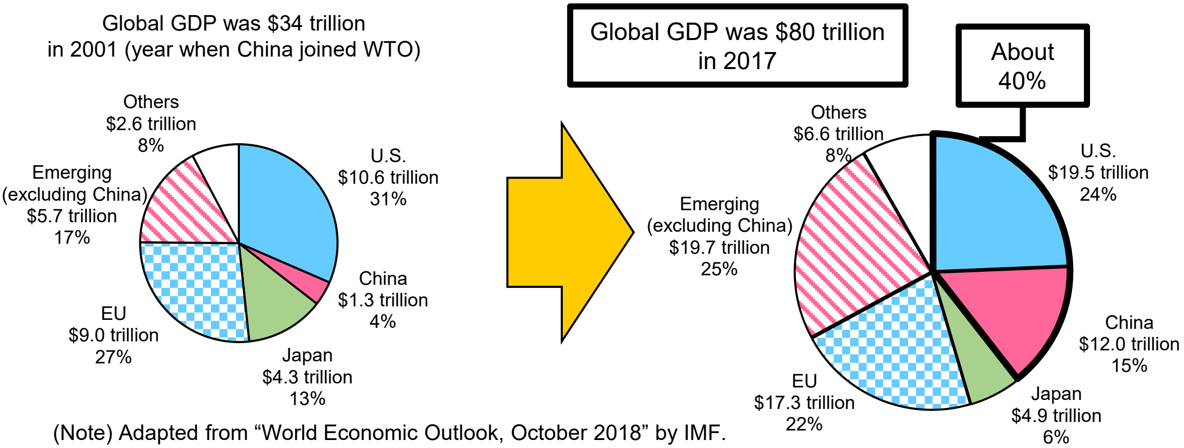
This report, published semi-annually since 2002, surveys and analyses the trend of the world economy. This is the 34th issue.

Chapter 1 U.S.-China trade tension and China's higher value-added economy (i)

1. Quantitative expansion of Chinese economy

(1) Share of major countries and regions in global GDP

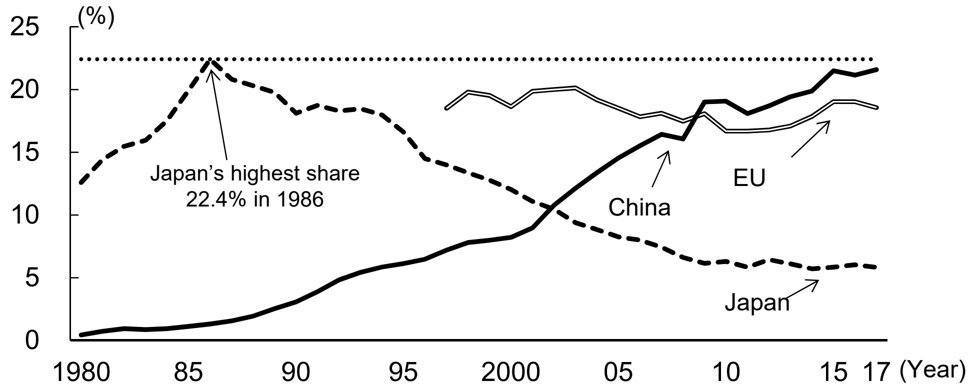
China's share expanded sharply after joining WTO. At present, the U.S. and China account for about 40% of global GDP.



(Note) Adapted from "World Economic Outlook, October 2018" by IMF.

(2) Share of countries and regions in U.S. imports

China has expanded its share to the same level of Japan in the middle of the 1980s.

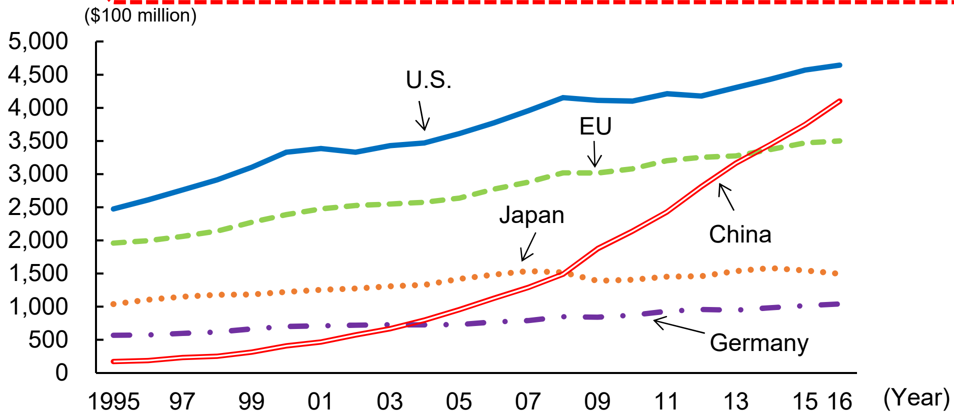


(Note) Adapted from U.S. Department of Commerce.

2. Efforts to improve the quality of Chinese economy

(3) R&D spending in major countries and regions

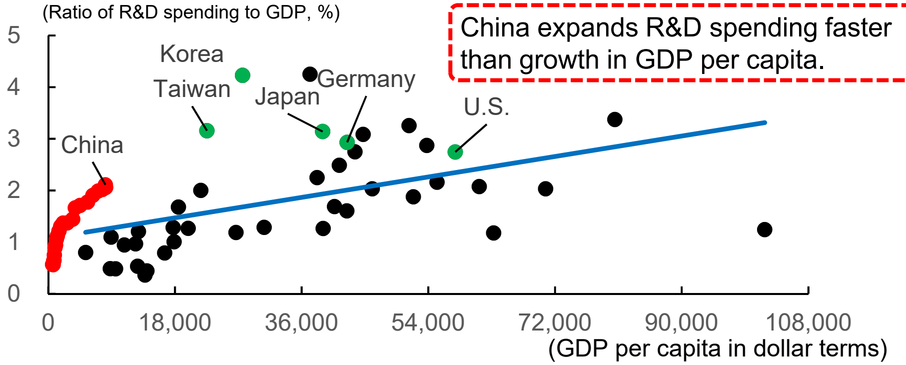
China's R&D spending continues to increase, approaching that of U.S.



(Note) Adapted from OECD Stat.

(4) Relationship between R&D spending and GDP per capita in major countries and regions

China expands R&D spending faster than growth in GDP per capita.



(Notes) 1. Adapted from "World Economic Outlook Database October 2018" by IMF and from OECD Stat.
2. Based on figures of OECD member countries, China, Taiwan, Singapore, Russia, Argentina, Romania, and South Africa.
3. Ratio of R&D spending to GDP is based on figures of Singapore in 2014, those of New Zealand, Republic of South Africa, and Swiss in 2015, those of China in 1995 to 2016, and those of other countries and regions in 2016.

Chapter 1 U.S.-China trade tension and China's higher value-added economy (ii)

3. Background of U.S.-China trade tension

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

(U.S.)

Date for imposing additional tariffs (final list release date)	What to do (against China)	Example of items subject to tariffs
Jul 6, 2018 (Jun 15, 2018)	Additional 25% tariffs on $34 billion worth of goods	Industrial machines Electronic parts
Aug 23, 2018 (Aug 7, 2018)	Additional 25% tariffs on $16 billion worth of goods	Plastic products Integrated circuits
Sep 24, 2018 (Sep 18, 2018)	Additional 10% tariffs on $200 billion worth of goods (*)	Food products Furniture
The date is undecided	Additional 25% tariffs on $257 billion worth of goods (**)	-

(China)

Date for imposing additional tariffs (final list release date)	What to do (against U.S.)	Example of items subject to tariffs
Jul 6, 2018 (Jun 16, 2018)	Additional 25% tariffs on $34 billion worth of goods	Agricultural products like soybeans, cars, fishery products
Aug 23, 2018 (Aug 8, 2018)	Additional 25% tariffs on $16 billion worth of goods	Chemical products, medical facilities, energy products, cars
Sept 24, 2018 (Aug 3, 2018)	Additional 5-10% tariffs on $60 billion worth of goods	Liquefied natural gas, food products & beverages, electrical products

((Notes) 1.* The tariffs were to be raised to 25% at Jan 1, 2019 as of Sept 24, 2018. As a result of the US-China Summit held on Dec 1, 2018, the tariff hike was postponed to Mar 1, 2019, and further postponed based on the progress of trade talks (the deadline was not published as of Mar 1, 2019).
2.** In Sep 18, 2018 President Trump announced that the U.S. would impose additional 25% tariffs on $257 billion worth of goods if China should invoke countermeasures.

(2) Status of US-China trade talks

Dec 1, 2018 US-China Summit
- Regarding the additional tariff measures worth $200 billion (as the 3rd round of a series of measures), the U.S. decided to leave tariffs unchanged at 10% after Jan 1, 2019
- Both governments agreed to make effort to conclude negotiations within 90 days
- If they don't reach an agreement, the U.S. will raise the 3rd round of tariffs to 25%

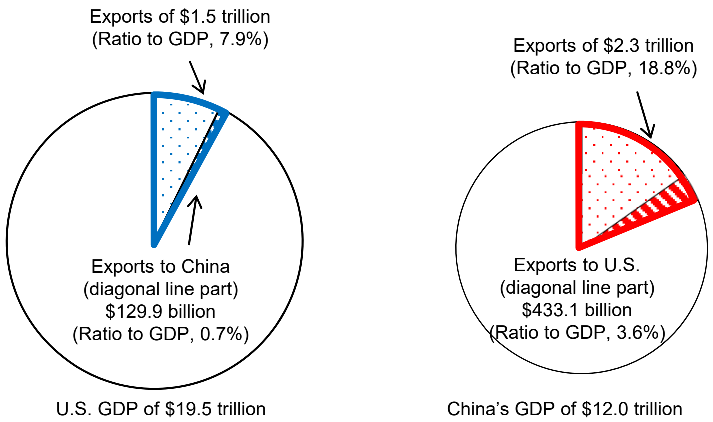
Jan 2019 Ministerial and vice-ministerial level meeting was held

Feb 2019 Ministerial and vice-ministerial level meeting was held

4. Scale of economy brought by U.S.-China trade tension

(3) Share of the U.S. and China's exports in respective GDP

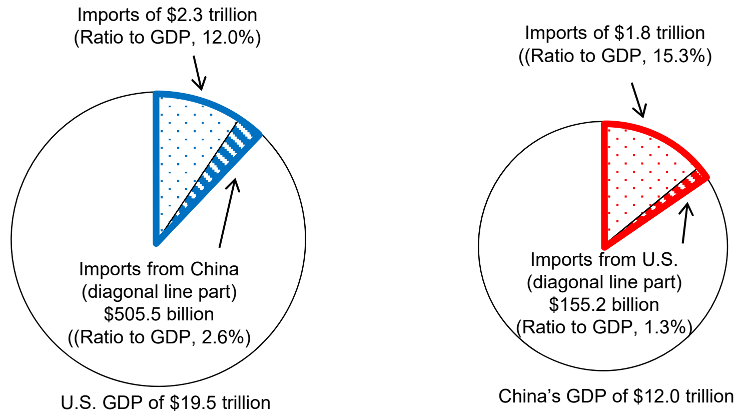
Effects of exports are relatively great in China.



(Note) Adapted from U.S. Department of Commerce, National Bureau of Statistics of China, and General Administration of Customs of the People's Republic of China.

(4) Share of the U.S. and China's imports in respective GDP

Effects of imports are relatively great in U.S.



(Note) Adapted from U.S. Department of Commerce, National Bureau of Statistics of China, and General Administration of Customs of the People's Republic of China.

Chapter 1 U.S.-China trade tension and China's higher value-added economy (iii)

5. Effects on Chinese financial and capital markets

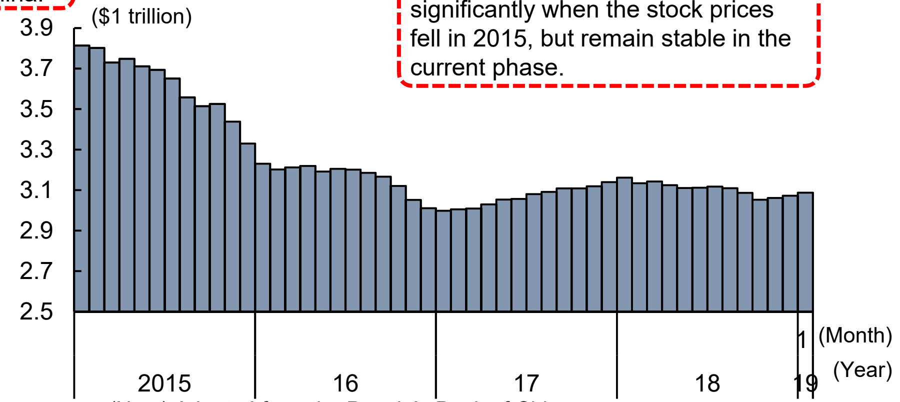
(1) Renminbi exchange rate

The renminbi depreciated significantly around mid 2018, mainly due to implementation of additional tariff measures by U.S. and China.

(Notes) 1. Adapted from Bloomberg.
2. "Counter-cyclical factors" are an additional item for the method of calculating central parity rates. The factors are said to prevent currency rates from fluctuating too much by separating from fundamentals.

(2) Foreign reserves

Foreign reserves decreased significantly when the stock prices fell in 2015, but remain stable in the current phase.

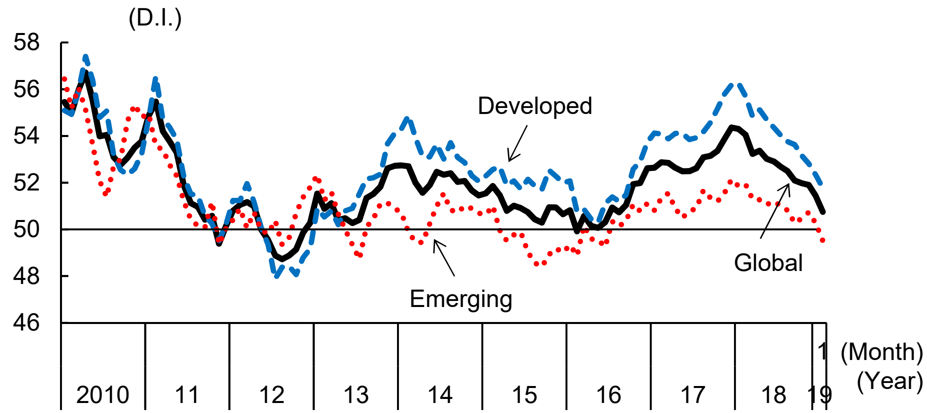


(Note) Adapted from the People's Bank of China.

6. Effects on global corporate sentiment

(3) Global manufacturing business confidence

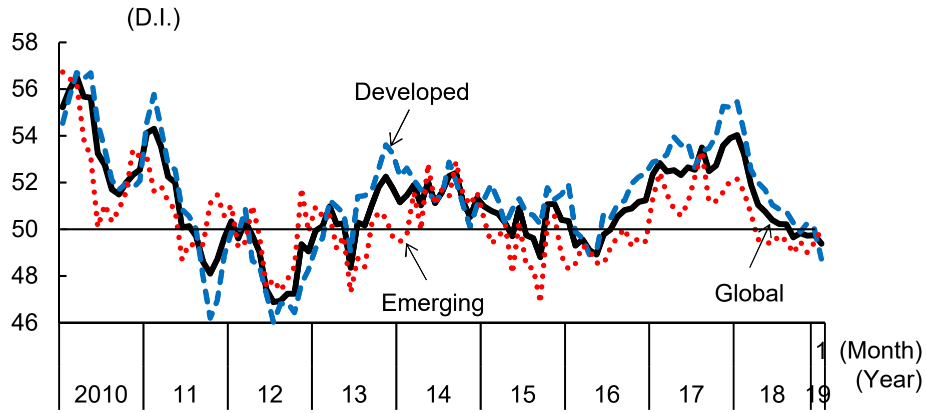
Declining trend in both developed and emerging markets since the beginning of 2018.



(Note) Adapted from Markit.

(4) Global manufacturing new export orders

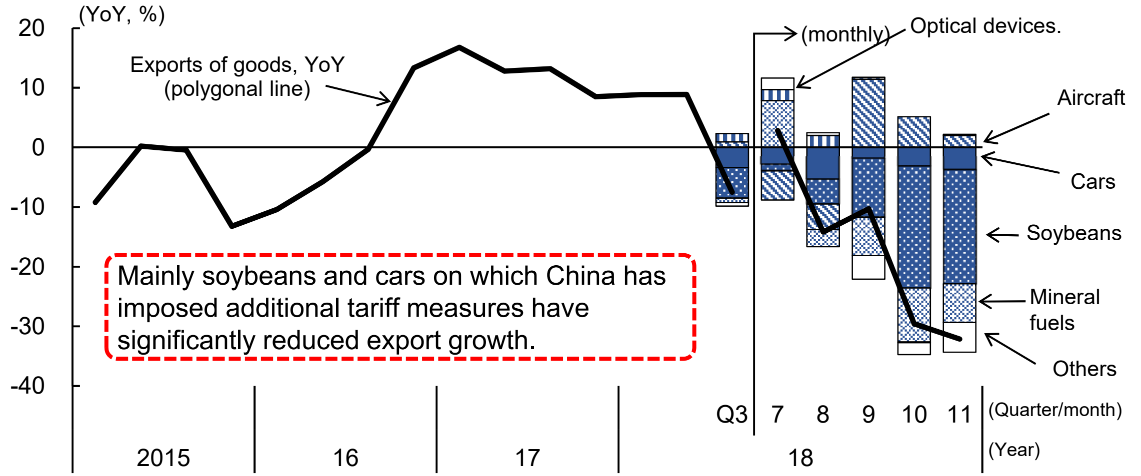
Sharp drop due to intensifying U.S.-China trade tension.
Lower than the breakpoint of 50 in both developed and emerging markets



(Note) Adapted from Markit.

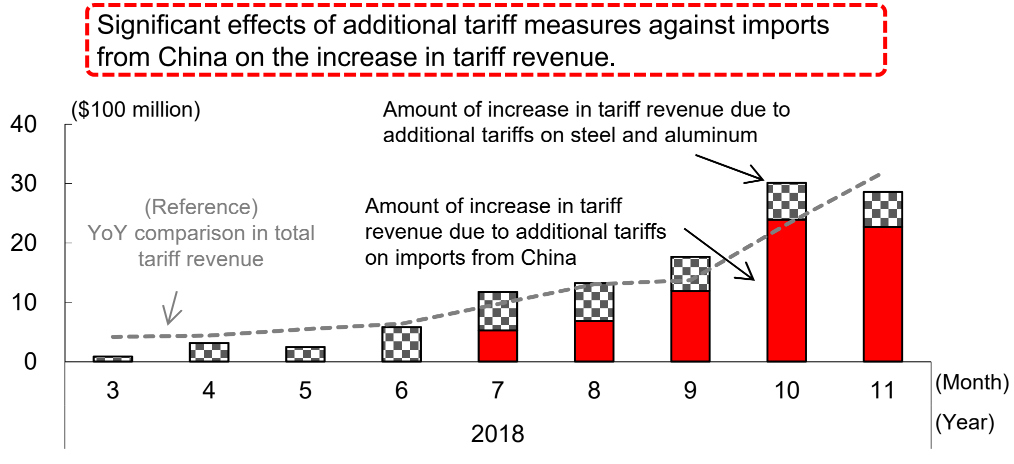
7. More burden on American producers and consumers

(1) U.S. Exports to China (by product)



(Notes) 1. Adapted from U.S. Department of Commerce.
2. On a customs basis, nominally/not seasonally adjusted.

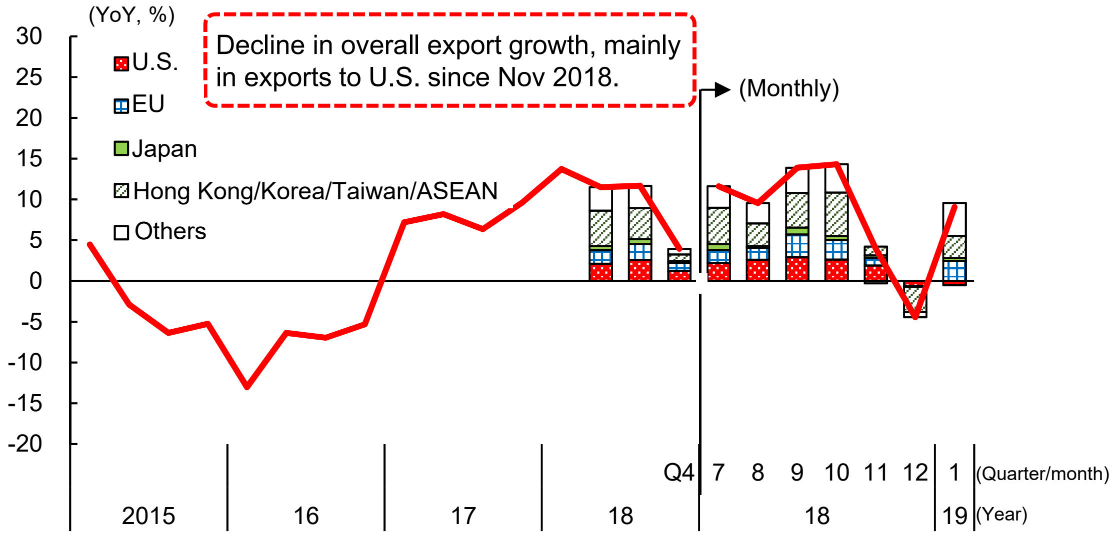
(2) Amount of increase in U.S. tariff revenue



(Notes) 1. Adapted from U.S. Department of Treasury, and Department of Commerce.
2. Amount of increase in tariff revenue due to additional tariff measures is estimated by Cabinet Office based on statistic item numbers designated and published as items subject to additional tariff measures.

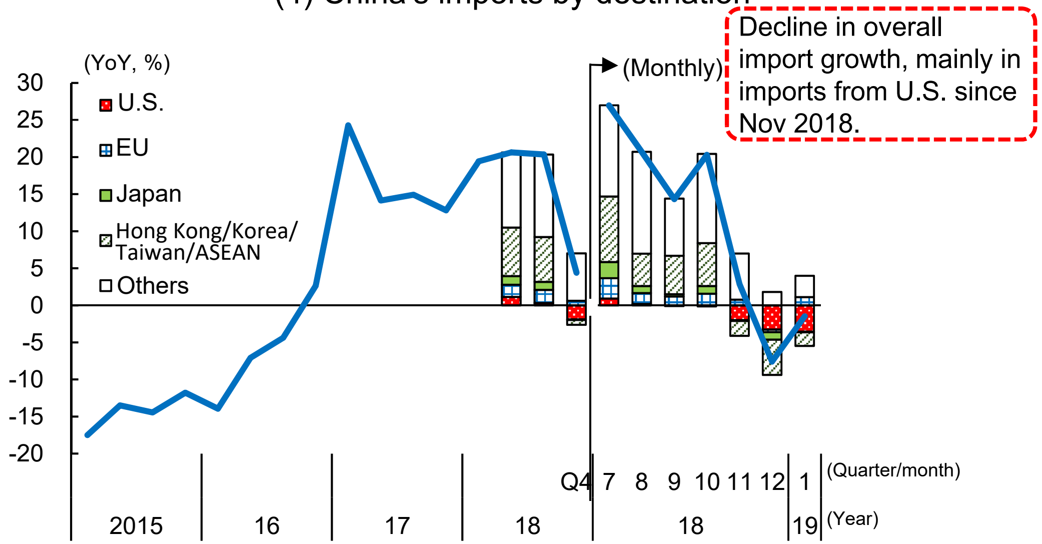
8. Effects of U.S.-China trade tension on China's exports and imports

(3) China's exports by destination



(Note) Adapted from General Administration of Customs of the People's Republic of China.

(4) China's imports by destination

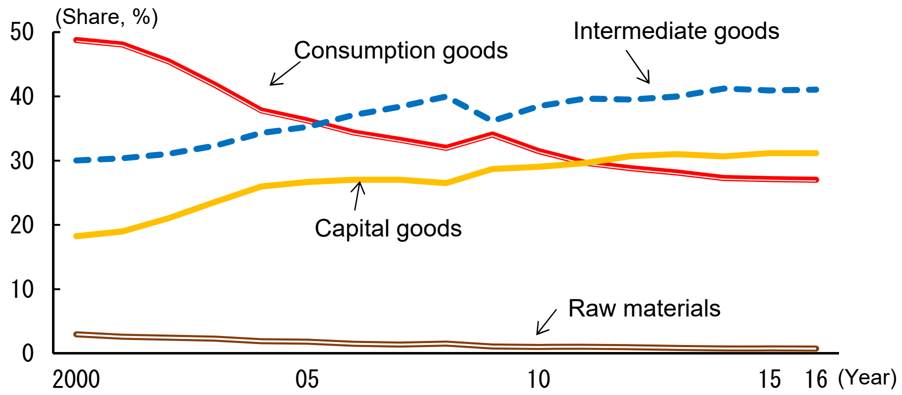


(Note) Adapted from General Administration of Customs of the People's Republic of China.

9. Structural changes in China's exports and imports

(1) China's exports by production stage

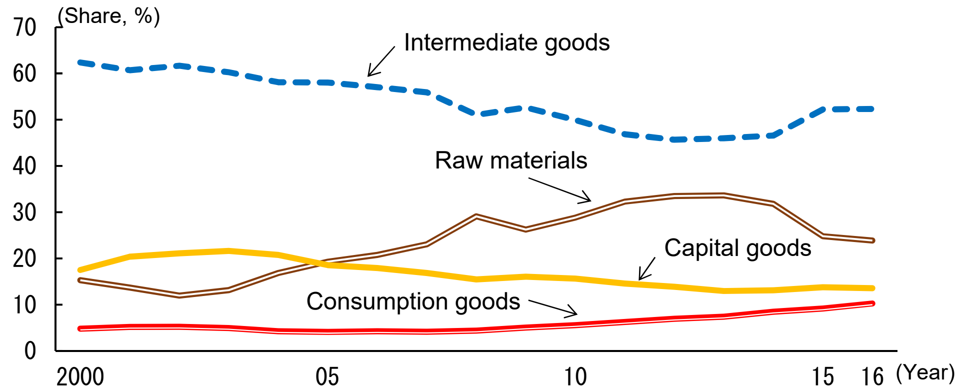
The share of consumption goods decreased, while the shares of intermediate goods and capital goods increased.



(Note) Adapted from "RIETI-TID 2016" by Research Institute of Economy, Trade and Industry.

(2) China's imports by production stage

The shares of consumption goods and raw materials increased while the shares of intermediate goods and capital goods decreased.

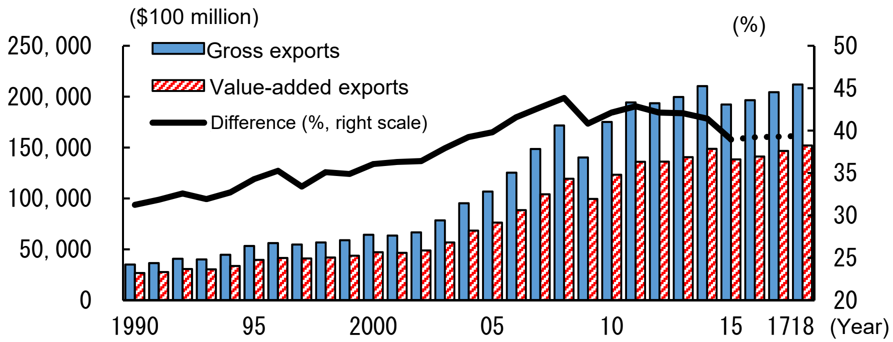


(Note) Adapted from "RIETI-TID 2016" by Research Institute of Economy, Trade and Industry.

10. China's higher value added exports (i)

(3) Trends in global gross exports and value added exports

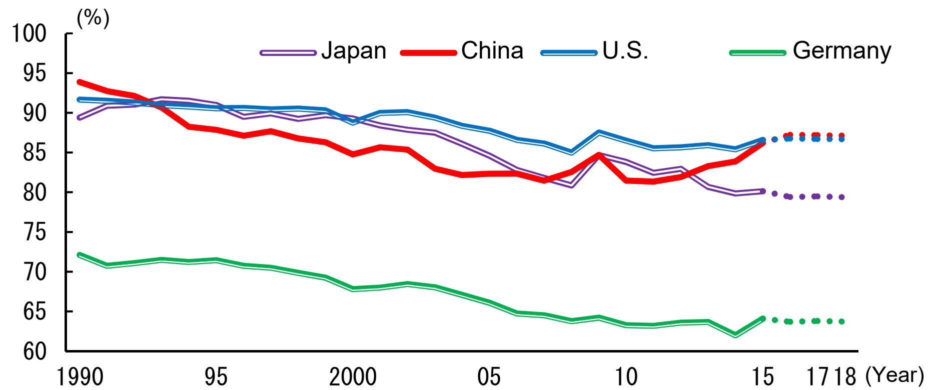
Global value chain (GVC) development lost momentum after the global financial crisis.



(Notes) 1. Adapted from UNCTAD-Eora GVC Database.
2. Figures after 2016 are estimated by the nowcast models created by UNCTAD.
3. Difference (%) is a ratio of the difference between the amount of value-added exports and the amount of Gross exports to the amount of value added exports.

(4) Share of value added exports in gross exports

In China, the share of domestic value added in exports rose (dependency on overseas imports in producing exports declined) after the global financial crisis.



(Notes) 1. Adapted from UNCTAD-Eora GVC Database.
2. Figures after 2016 are estimated by the nowcast models created by UNCTAD.

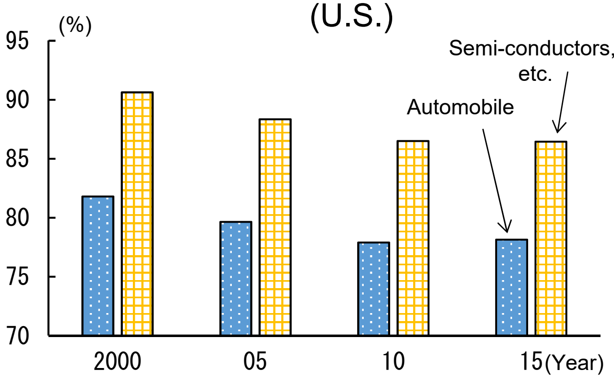
Chapter 1 U.S.-China trade tension and China's higher value added economy (vi)

11. China's higher value added exports (ii)

(1) Share of domestic value added in U.S. and China's exports

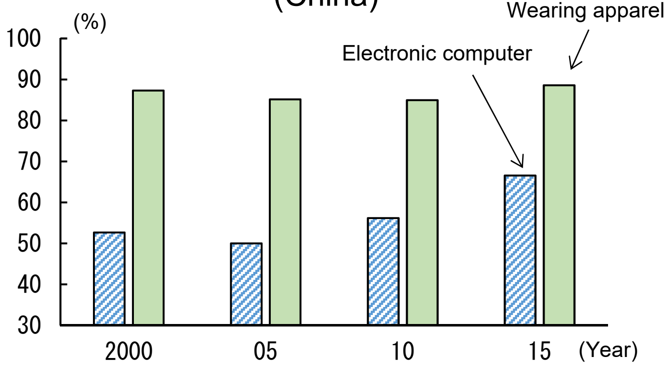
Shares of domestic value added in automobile and semi-conductor exports from U.S. are on a downward trend.
Share of domestic value added in computer exports from China is on an upward trend.

(U.S.)



(Note) Adapted from UNCTAD-Eora GVC Database.

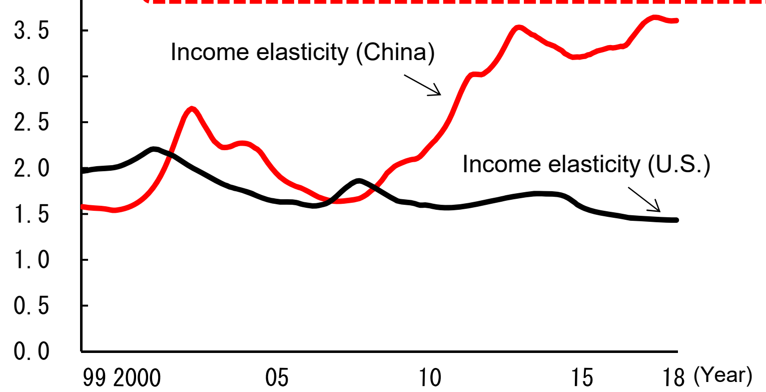
(China)



(Note) Adapted from UNCTAD-Eora GVC Database.

(2) Income elasticity of U.S. and China's exports

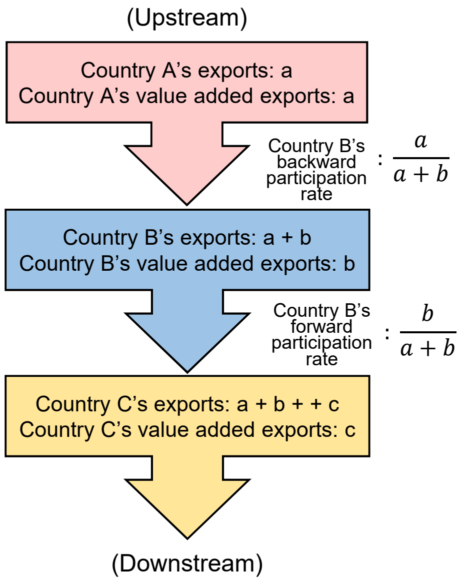
Income elasticity of China's exports is on an upward trend reflecting its higher value-added exports.
China's export structure is more subject to sluggish external demand than that of U.S.



(Note) Adapted from World Bank, BIS, and National Bureau of Statistics of China.

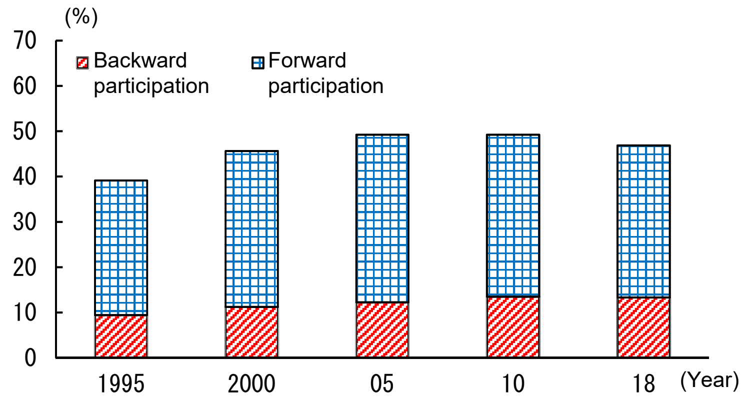
12. China's higher value added exports (iii)

(Image of GVC participation rate)



(3) GVC participation rate of U.S.

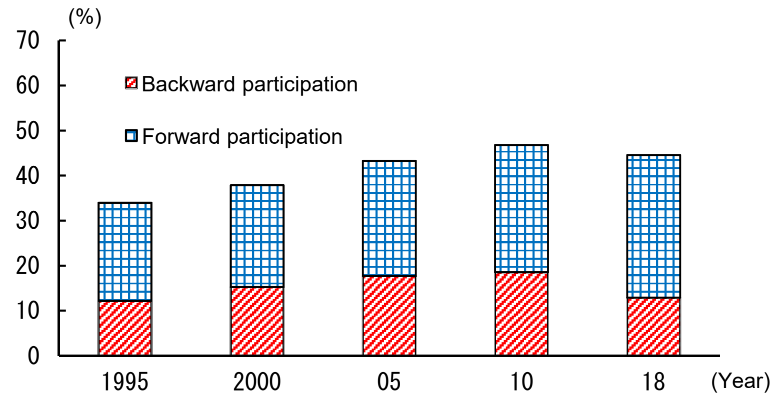
Mostly "forward participation" in the past, but gradual increase in "backward participation"has been observed..



(Notes) 1. Adapted from UNCTAD-Eora GVC Database.
2. Figures for 2018 are estimated by the nowcast models created by UNCTAD.

(4) GVC participation rate of China

Along with the increasing share of domestic value added in exports, "forward participation" has been expanding.

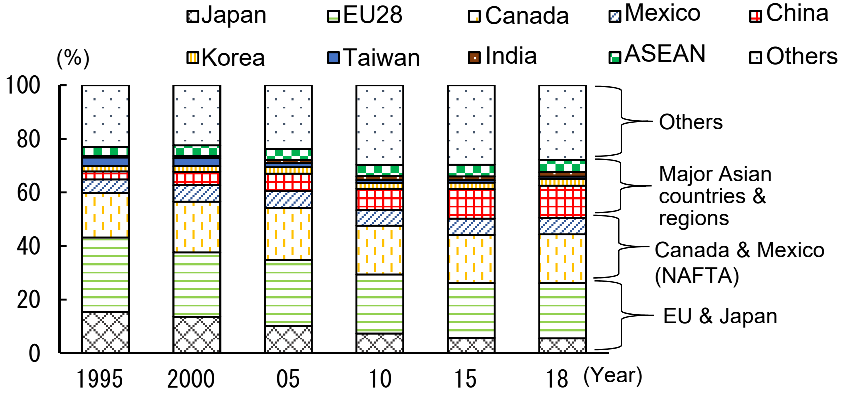


(Notes) 1. Adapted from UNCTAD-Eora GVC Database.
2. Figures for 2018 are estimated by the nowcast models created by UNCTAD.

13. Effects through supply chains (i)

(1) Foreign value added in U.S. exports: share by country and region

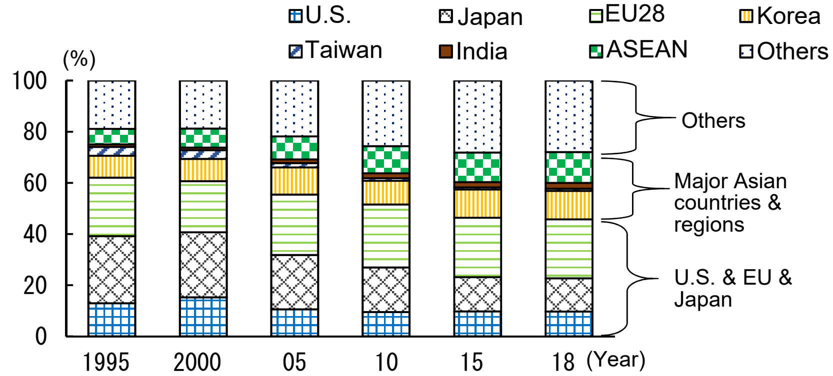
Increasing dependency on imports from China.



(Notes) 1. Adapted from UNCTAD-Eora GVC Database.
2. Figures for 2018 are estimated by the nowcast models created by UNCTAD.

(2) Foreign value added in China's exports: share by country and region

Decreasing dependency on imports from developed countries.
Strengthening GVC ties with ASEAN.

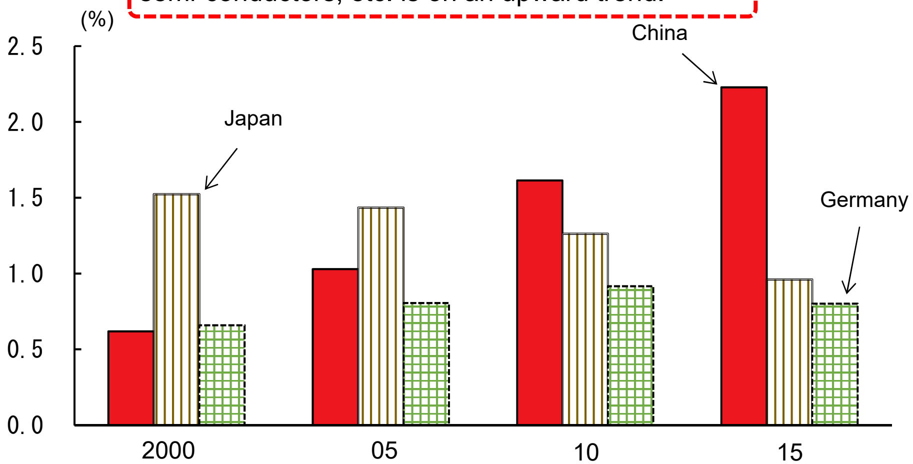


(Notes) 1. Adapted from UNCTAD-Eora GVC Database.
2. Figures for 2018 are estimated by the nowcast models created by UNCTAD.

4. Effects through supply chains (ii)

(3) Ratio of value added in semi-conductors, etc. exported from U.S. by country

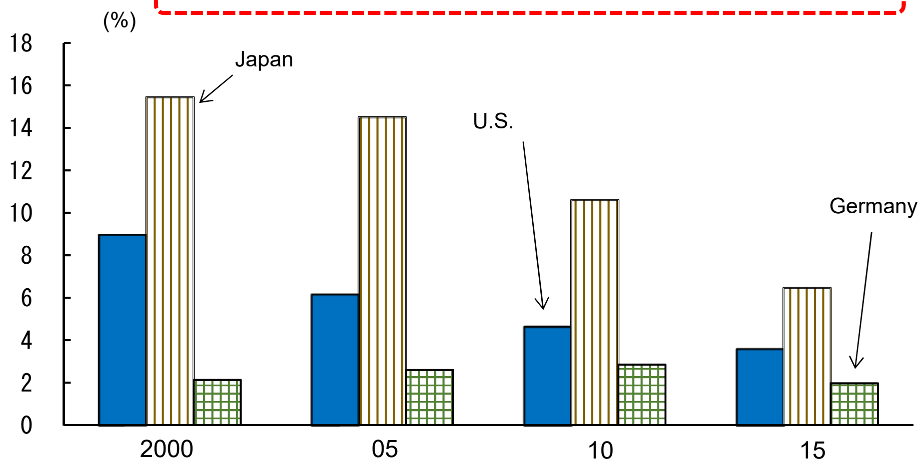
China's share of value added in U.S. export of semi-conductors, etc. is on an upward trend.



(Note) Adapted from UNCTAD-Eora GVC Database.

(4) Ratio of value added in computers exported from China by country

U.S. share of the value added in China's computer exports is on a downward trend.



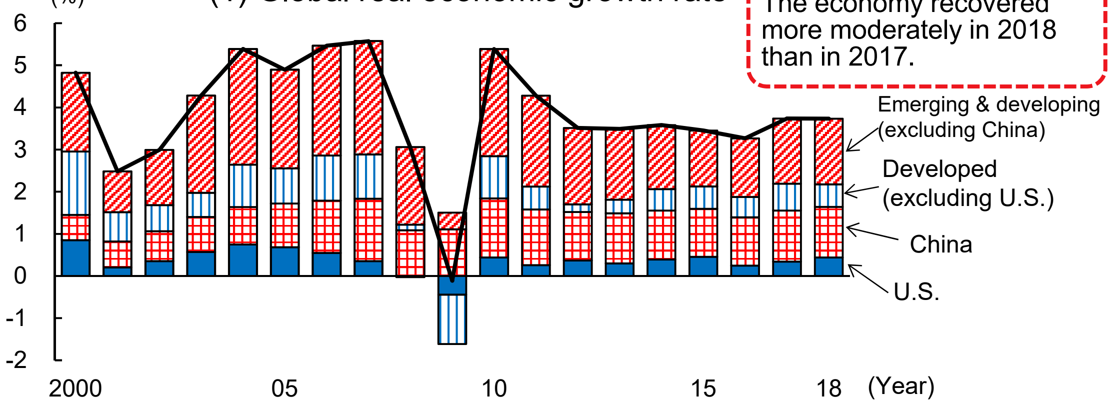
(Note) Adapted from UNCTAD-Eora GVC Database.

Chapter 2 Economic Trends in Major Regions (World economy)

The world economy has been recovering moderately on the whole. With increasing uncertainty on economic policies, the growth pace in 2019 is expected to be a little slower than that in 2018. Crude oil prices have been on an upward trend in 2019 mainly due to coordinated production cut after a significant drop in 2018.

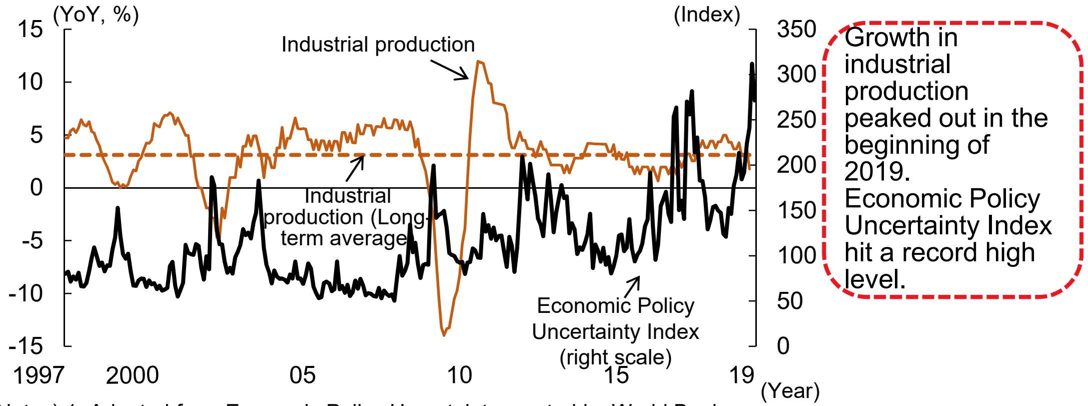
1. Characteristics in current economic conditions

(1) Global real economic growth rate



(Notes) 1. Adapted from "World Economic Outlook 1, October 2018" by IMF.
2. 39 developed countries and 155 emerging & developing countries are classified according to IMF classification.
3. Contribution of each country and region is estimated based on its weight in the previous year's nominal GDP.

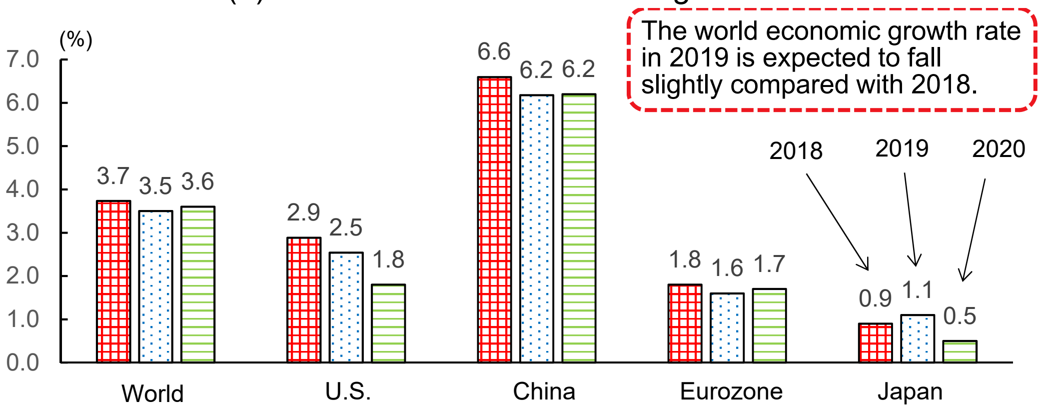
(2) Global industrial production and Economic Policy Uncertainty Index



(Notes) 1. Adapted from Economic Policy Uncertainty created by World Bank.
2. Long-term averages of real goods export and industrial production are average values between January 1997 and November 2011, and between January 1997 and December 2018, respectively.

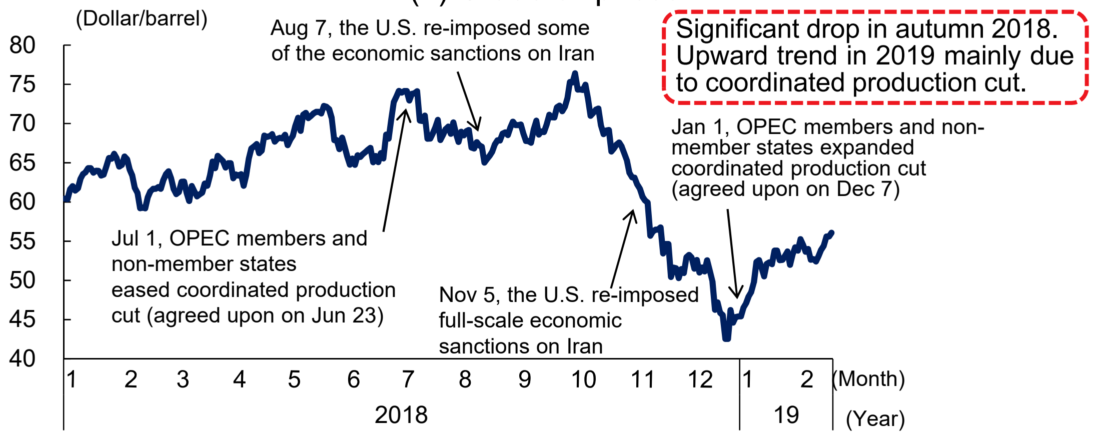
2. Outlook for world economic growth and crude oil prices

(3) Outlook for world economic growth



(Note) Adapted from "World Economic Outlook update, January 2019" by IMF. Figures for 2018, 2019, and 2020 are all predicted.

(4) Crude oil prices



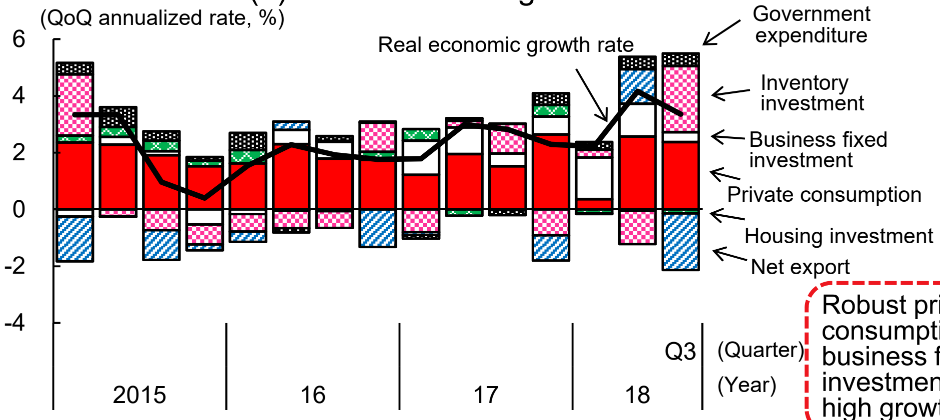
(Notes) 1. Adapted from Bloomberg.
2. Crude oil prices are WTI futures prices.

Chapter 2 Economic Trends in Major Regions (U.S. economy)

The U.S. economy has been continuing its long-term economic recovery for more than nine and half years since the global financial crisis, with the employment situation improving continuously. FRB raised interest rates four times in 2018. The effect of the partial government shutdown on the economy will be limited in full-year 2019.

1. Current state of U.S. economy

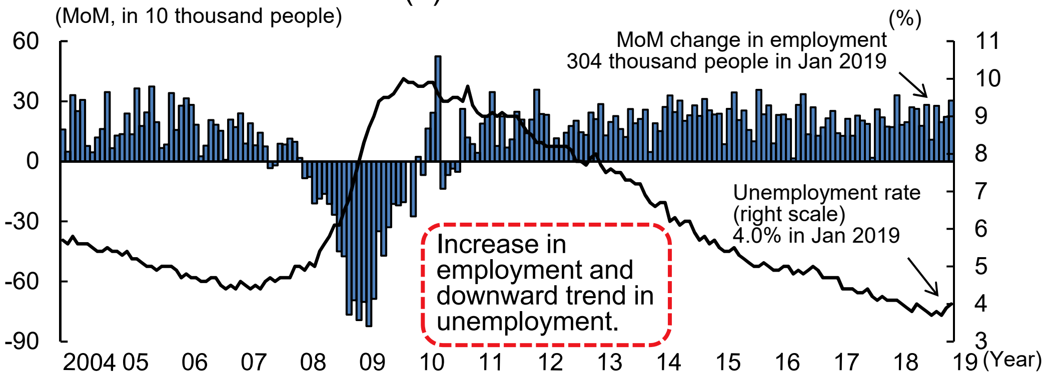
(1) Real economic growth rate



Robust private consumption and business fixed investment supported high growth.

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

(2) Labor market

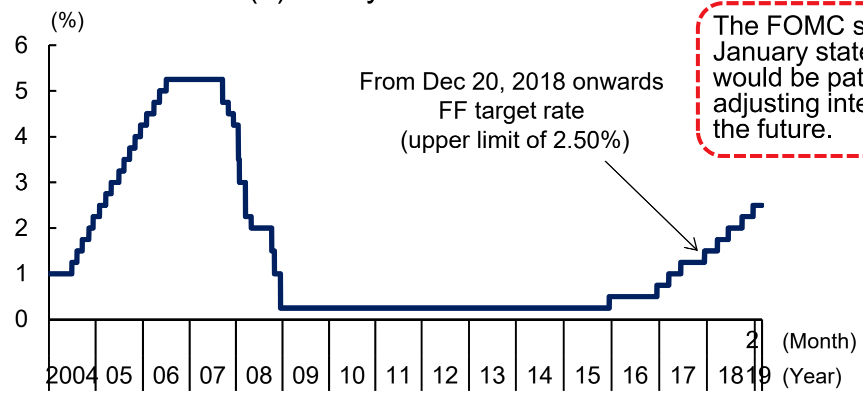


(Notes) 1. Adapted from U.S. Department of Labor.
2. Nonfarm employment.

2. Movements in U.S. policy

(3) Policy interest rates

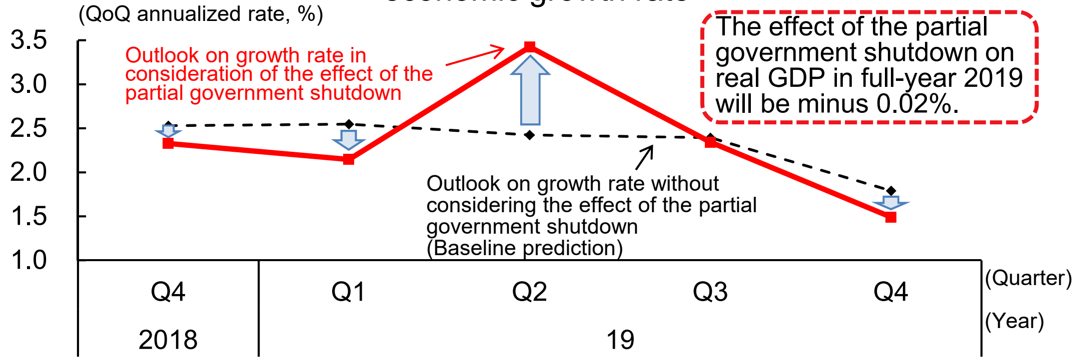
The FOMC said in its January statement that it would be patient in adjusting interest rates in the future.



(Notes) 1. Adapted from FRB.
2. Policy Interest rate is FF (Federal Funds) target rate.
FF rate has been incremented or decremented by 0.25% points since Dec 2008.
3. In January, FOMC also made another statement that it would review its balance sheet normalization program.

(4) Effect of the partial government shutdown on real economic growth rate

The effect of the partial government shutdown on real GDP in full-year 2019 will be minus 0.02%.



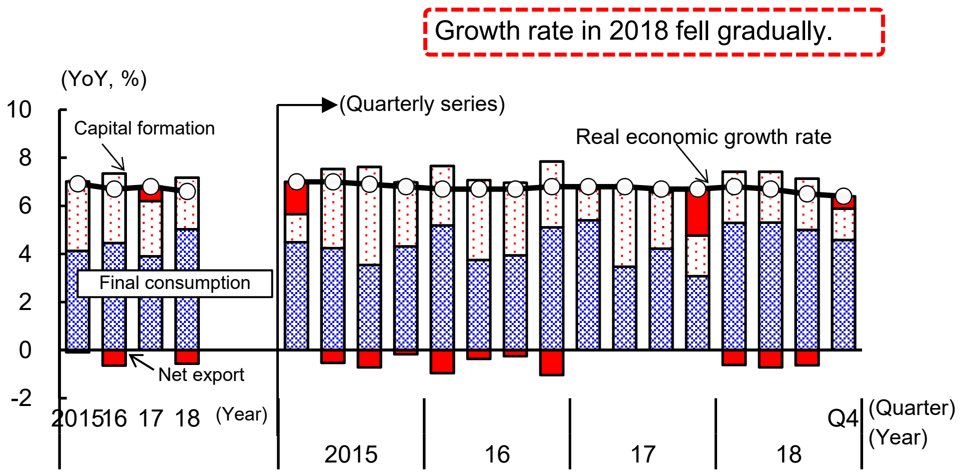
(Notes) 1. Adapted from "The Budget and Economic Outlook: 2019 to 2029 (Jan 28, 2018)" and "The Effects of the Partial Shutdown Ending in January 2019 (Jan 28, 2019) created by the Congressional Budget Office (CBO).
2. The period of the partial government shutdown was 35 days from Dec 22, 2018 to Jan 25, 2019.
3. The effect of the partial government shutdown includes delay in expenditure for the purchase of goods and service by the federal government, but does not include indirect effects due to failure of businesses to obtain authorization from the federal government, for instance.

Chapter 2 Economic Trends in Major Regions (Asian economy)

The Chinese economy has slowed down moderately. This is because growth in infrastructure investment has fallen due to effects caused by efforts to reduce debt, and growth in consumption has somewhat fallen since autumn in 2018. Against the background of the slowdown of the Chinese economy, growth in exports to China has fallen in Asian countries.

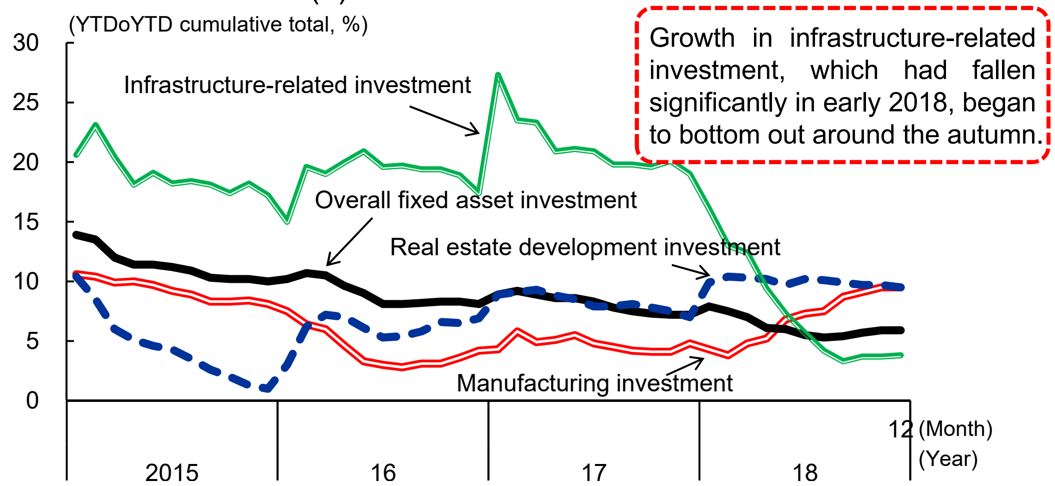
1. Slowdown of Chinese economy

(1) China's real economic growth rate



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

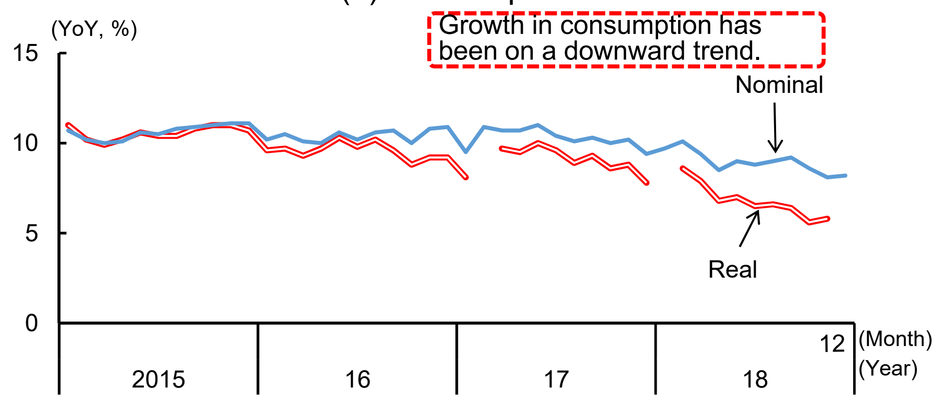
(2) Fixed asset investment



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

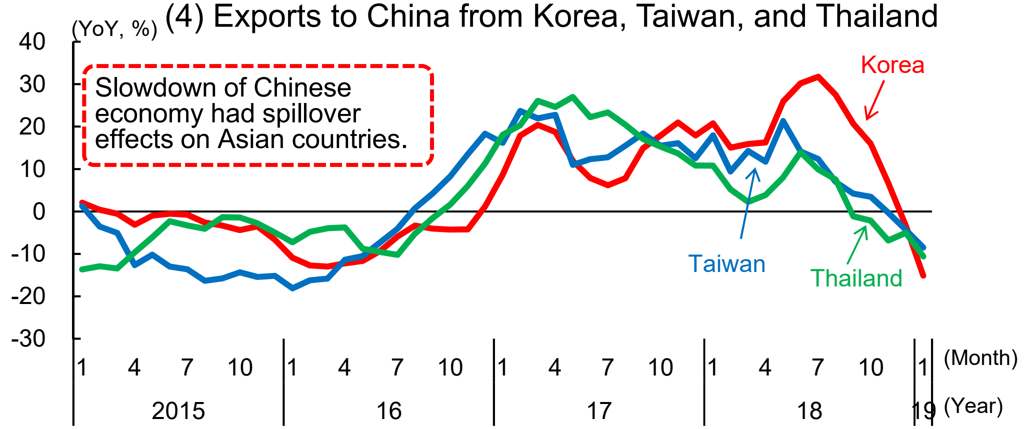
2. Slowdown of Chinese economy and its spillover effects

(3) Consumption



(Notes) 1. Adapted from National Bureau of Statistics of China.
2. Real growth rates in Mar 2017, Jan-Feb 2018, and Dec 2018 are not published.

(4) Exports to China from Korea, Taiwan, and Thailand



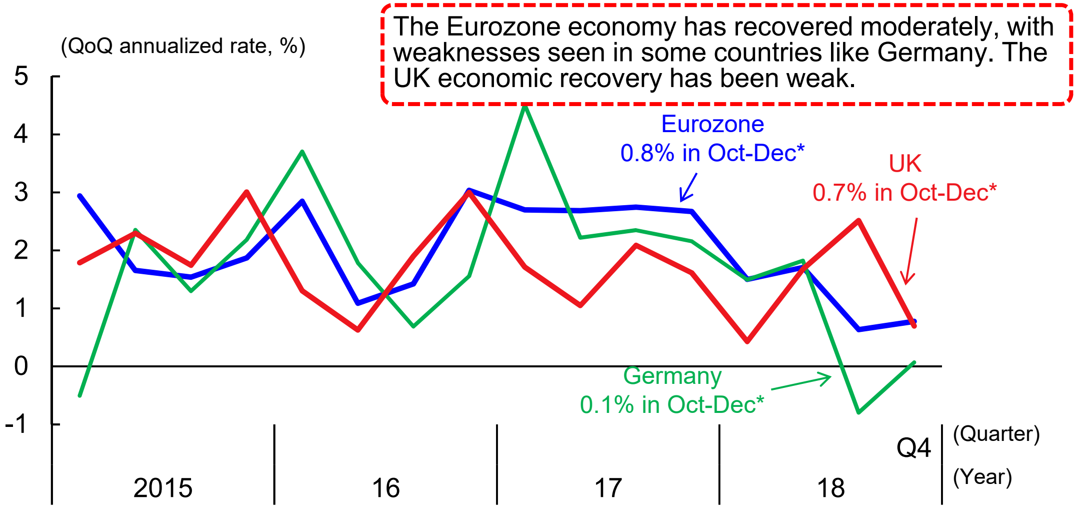
(Notes) 1. Adapted from Korea Customs Service, Ministry of Finance, R.O.C.(Taiwan) and Ministry of Commerce, Thailand.
2. U.S. doller-based, 3-month moving averages, including exports to Hong Kong.

Chapter 2 Economic Trends in Major Regions (European economy (i))

The Eurozone economic growth rate fell as the economy of Germany had remained at a standstill since the latter half of 2018, due to temporary factors including a slowdown in the pace of expansion in external demand and the introduction of WLTP. Uncertainty over Brexit weighed down capital investment, resulting in weaker recovery.

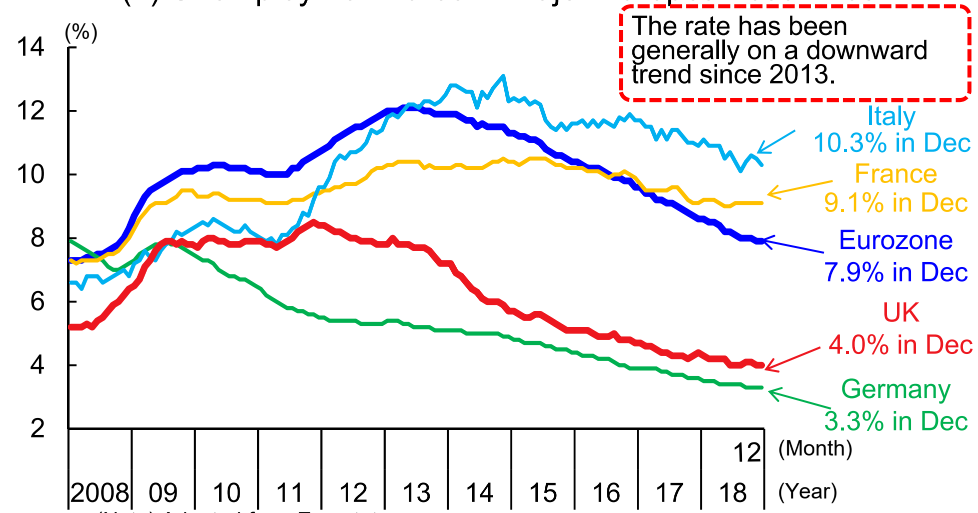
1. Trends in European economy

(1) Real economic growth rates in major European countries



(Note) Adapted from Eurostat, the Federal Statistical Office and Office for National Statistics.

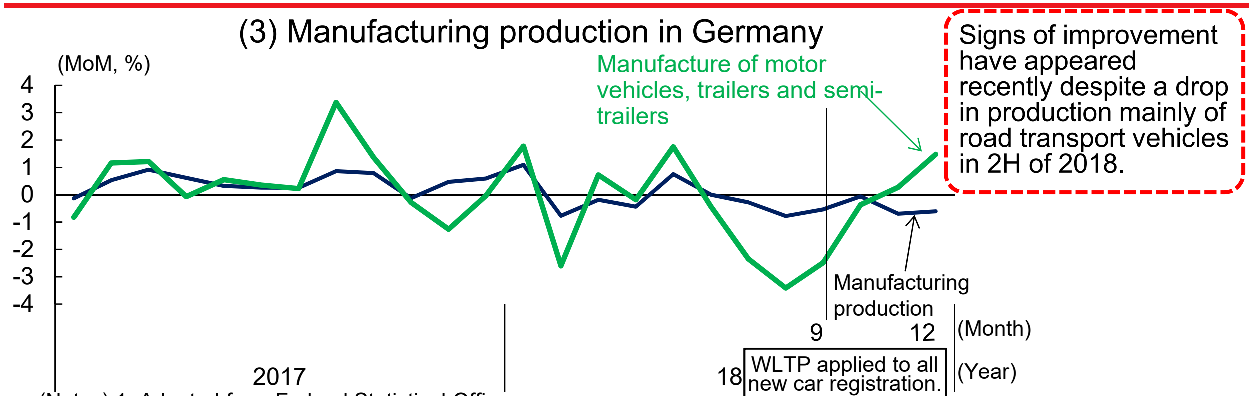
(2) Unemployment rates in major European countries



(Note) Adapted from Eurostat.

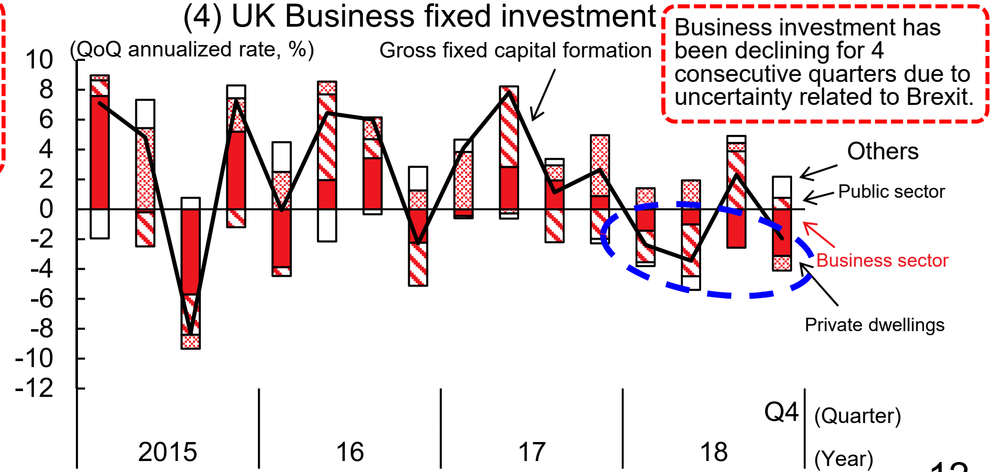
2. Weaknesses in German and UK economies

(3) Manufacturing production in Germany



(Notes) 1. Adapted from Federal Statistical Office.
2. WLTP (Worldwide harmonized Light vehicles Test Procedure) is a globally harmonised test procedure for measuring CO2 emissions and fuel consumption from cars and vans in conditions close to actual running.
3. The share of road transport vehicles, etc. in manufacturing industry is 17.7% (2015).
4. 3-Month moving averages.

(4) UK Business fixed investment



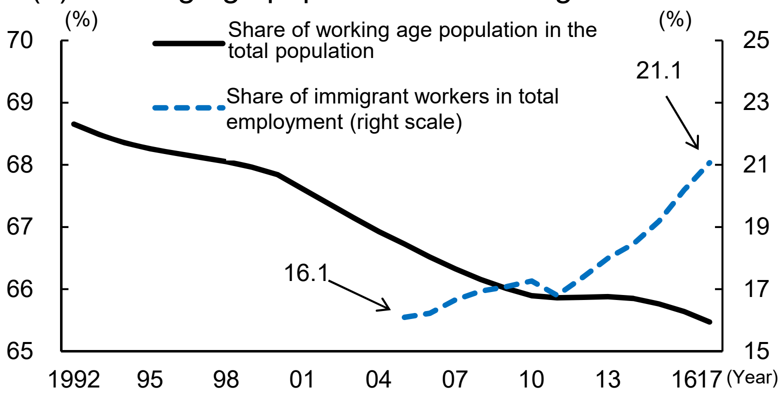
(Note) Adapted from Office for National Statistics.

Chapter 2 Economic Trends in Major Regions (European economy (ii))

In Germany and UK, the number of immigrants has been increasing with the tight labor supply-and-demand situation continuing. Increased political and policy uncertainty in Italy, including an ongoing conflict with EU over Italy's expansionary budget plan, has caused the financing environment to deteriorate, showing Italy has entered into a recession.

3. Utilization of immigrants in Germany and UK

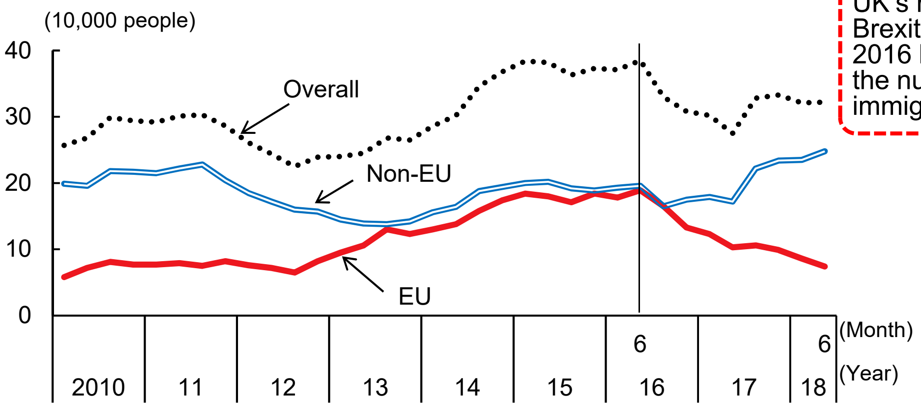
(1) Working age population and immigrants in Germany



Immigrant workers have partially offset the decrease in labor force population.

(Notes) 1. Adapted from World Bank, Federal Statistical Office.
2. The working age population is defined as those aged 15 to 64.
3. 1% point on the left longitudinal axis shows about 827 thousand people, while 2% points on the right longitudinal axis show about 883 thousand people.
4. Immigrants are defined as those who have moved to live in the territory of the current Federal Republic of Germany since 1949 (See text for details).

(2) Net immigration to UK

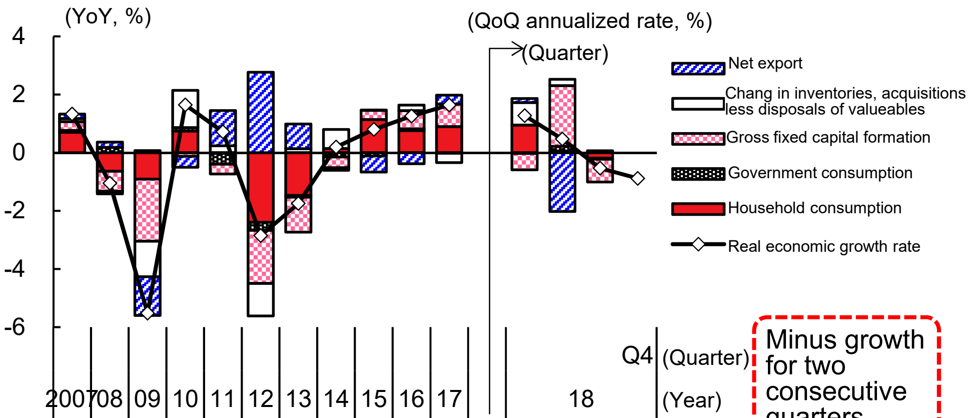


UK's referendum on Brexit held in June 2016 has reduced the number of immigrants from EU.

(Notes) 1. Adapted from Office for National Statistics.
2. Figures for 2018 are provisional.
3. Number of net increases in the past year until the time of publication (by quarter).
4. Immigrants are those who are defined by UN (as those who move to countries other than that of their usual residence for a period of at least 12 months).

4. Weaknesses in Italy

(3) Italy's real economic growth rate

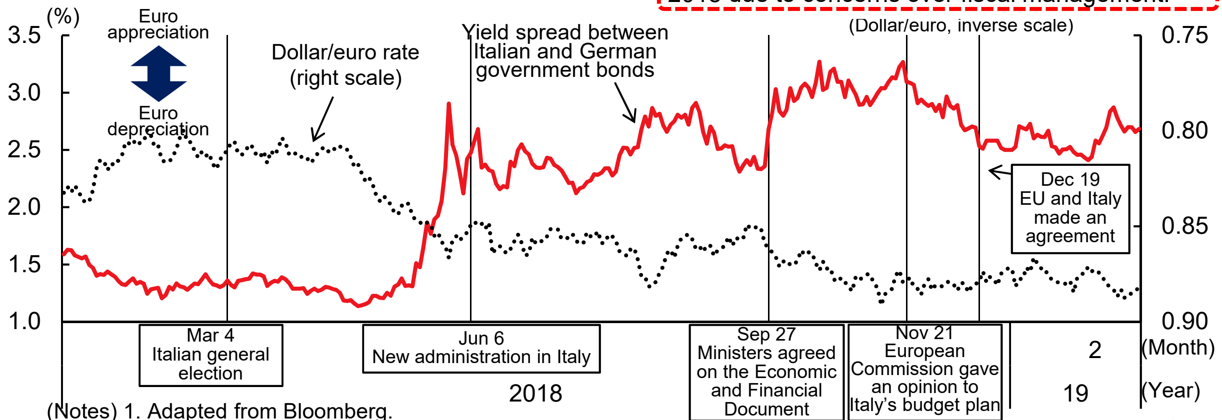


Minus growth for two consecutive quarters.

(Note) Adapted from Italian National Institute of Statistics.

(4) Italy's fiscal risk premium

The risk premium has been widened since June 2018 due to concerns over fiscal management.



(Notes) 1. Adapted from Bloomberg.
2. Yield spread between Italian and German government bonds is calculated by subtracting the German 10-year bund yield from the Italian 10-year bond yield.