World Economic Trends I

<The 2018 Spring/Summer Report>

- Review of Risks to the World Economy Posed by Growing Private-Sector Debt -

July 2018

Cabinet Office

Government of Japan

Contents

About "World Economy Trends"

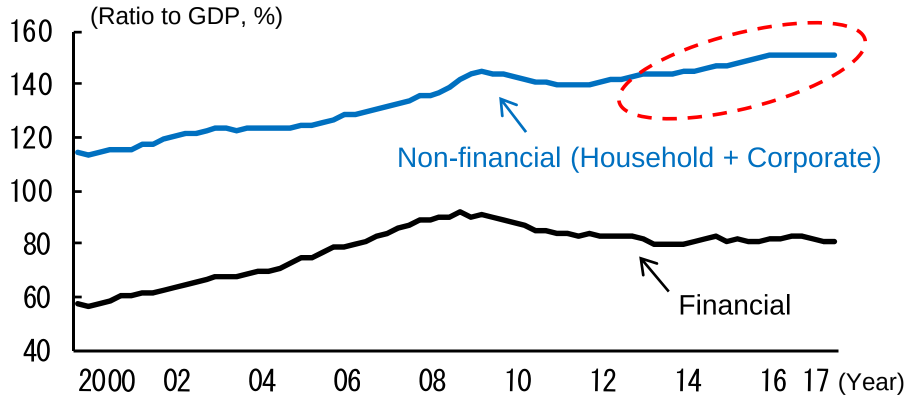
This report, published semi-annually since 2002, surveys and analyses the trend of the world economy. This is the 33rd issue.

Chapter 1 Review of risks to the world economy with focus on private-sector debt (Overview)

1. Private-sector debt-to-GDP ratio

(1) Financial and non-financial sectors

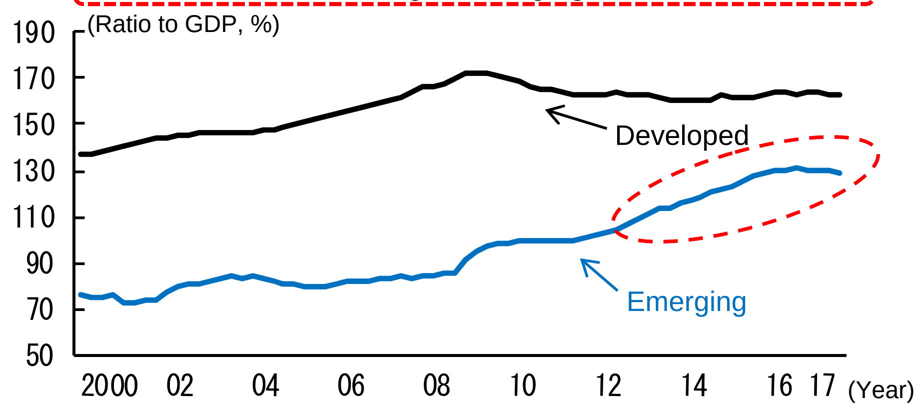
After the global financial crisis, debt decreased in the financial sector while it increased in the non-financial sector.



(Note) Adapted from IIF.

(2) Non-financial sector (developed and emerging economies)

In the non-financial sector, debt leveled off in developed countries while increasing in emerging economies.

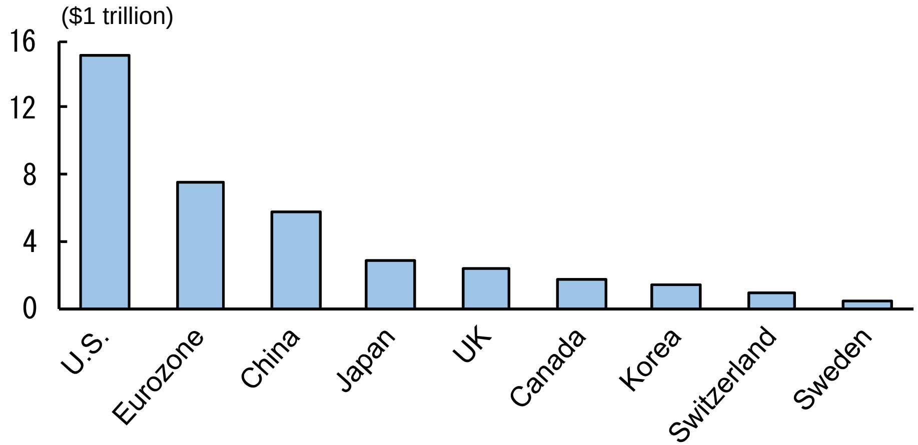


(Note) Adapted from IIF.

2. Private-sector debt outstanding

(3) Household (July-September 2017)

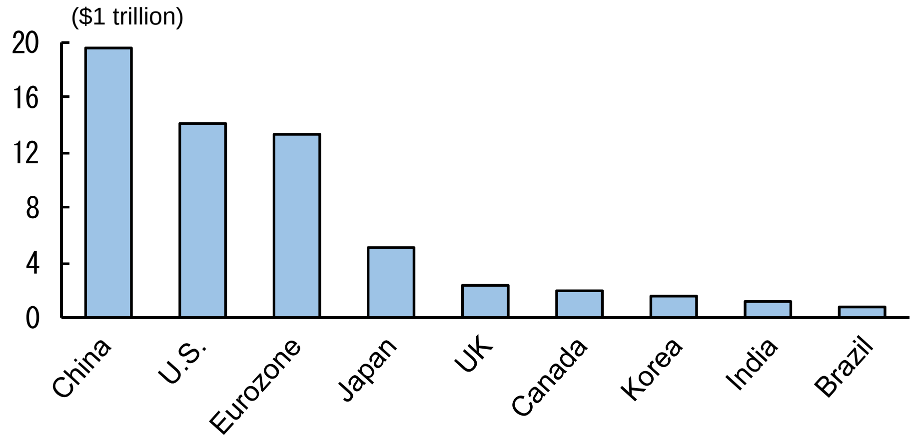
U.S. is extremely indebted, double the extent of the Eurozone.



(Note) Adapted from BIS.

(4) Non-financial corporate (July-September 2017)

China, ranked 1st, U.S. and Eurozone are extremely indebted.

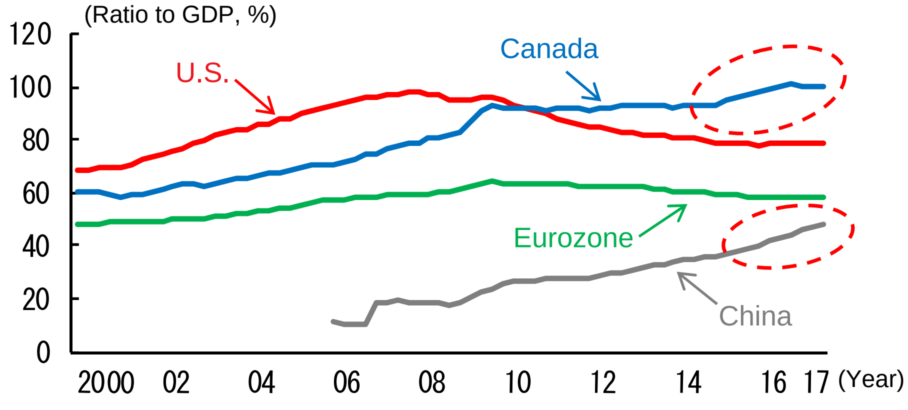


(Note) Adapted from BIS.

Household

(1) Debt-to-GDP ratio

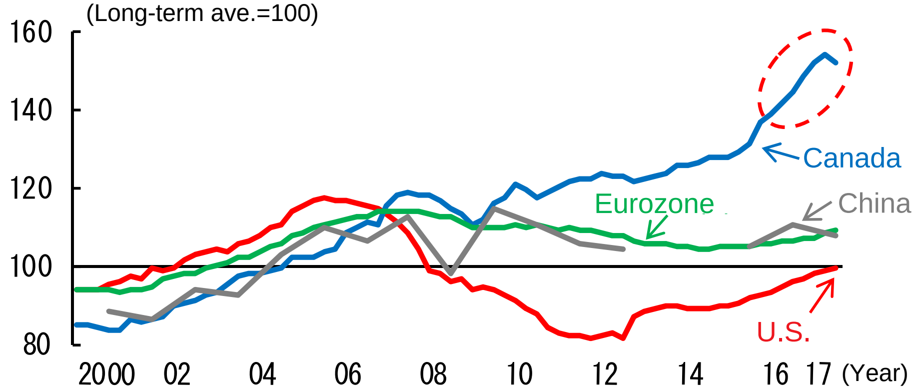
After the global financial crisis, debt leveled off in U.S. and Eurozone while continued to increase in Canada and China.



(Note) Adapted from BIS.

(2) Deviation of house price-to-income ratio from long-term average

In U.S., Eurozone, and China, the ratio stays around the long-term average while rising high above the average in Canada.

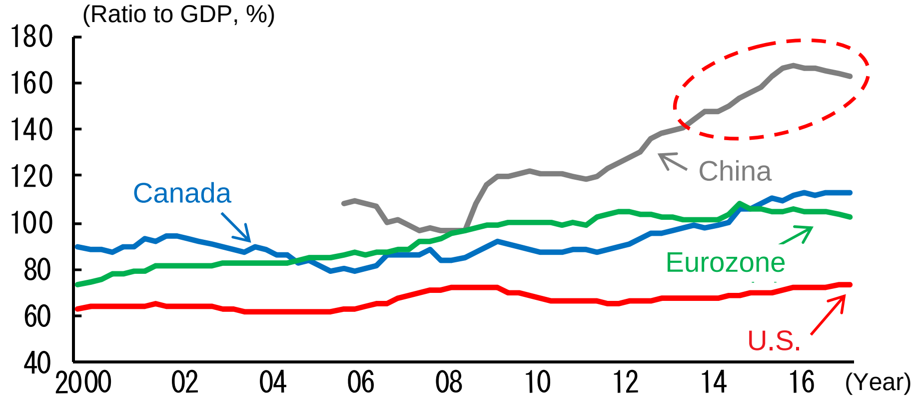


(Note) Adapted from OECD. Stat. For China, adapted by Cabinet Office from National Bureau of Statistics of China.

Non-financial corporate

(3) Debt-to-GDP ratio

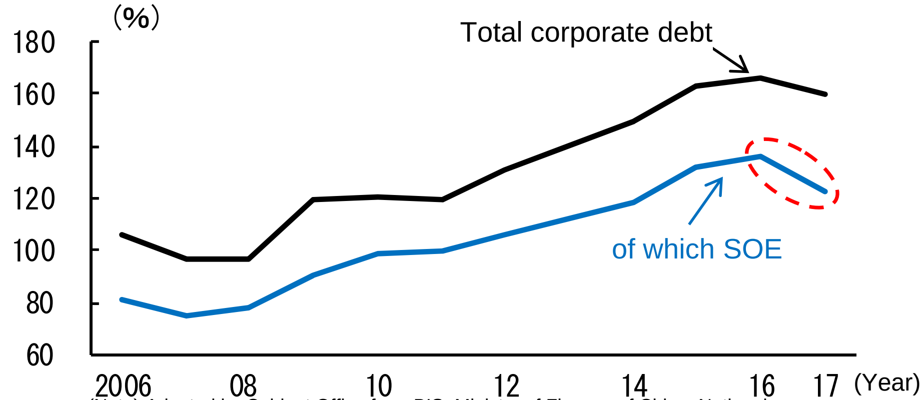
After the global financial crisis, debt increased sharply in China. China has been the main contributor for the global increase of corporate debt.



(Note) Adapted from BIS.

(4) Debt-to-GDP ratio: China

State-owned enterprises (SOEs) are responsible for most of the debt. With effort to address excessive debt, the ratio fell in 2017.



(Note) Adapted by Cabinet Office from BIS, Ministry of Finance of China, National Bureau of Statistics of China.

Chapter 1 Review of risks to the world economy with focus on private-sector debt (Summary)

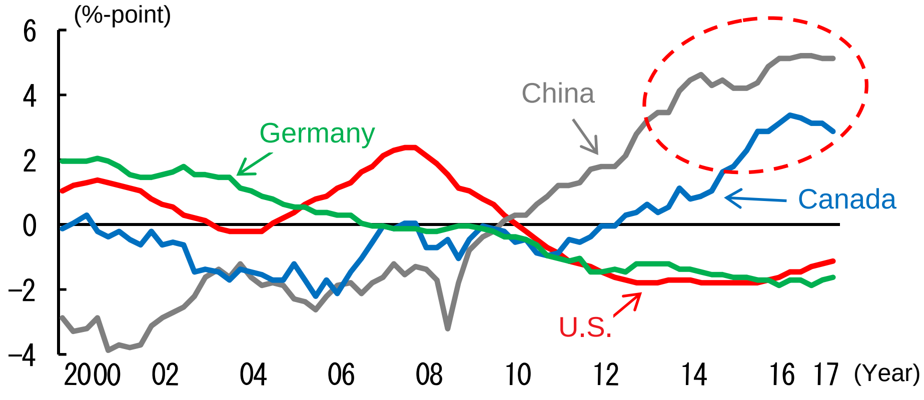
Evaluating household and corporate debt comprehensively by using two indicators:

(1) Debt service ratio (share of household and corporate income used to service debt): Its deviation from the long-term trend;

(2) Debt-to-GDP ratio of non-financial sector: Its deviation from the long-term trend.

(1) Debt service ratio (share of household and corporate income used to service debt): Its deviation from the long-term trend;

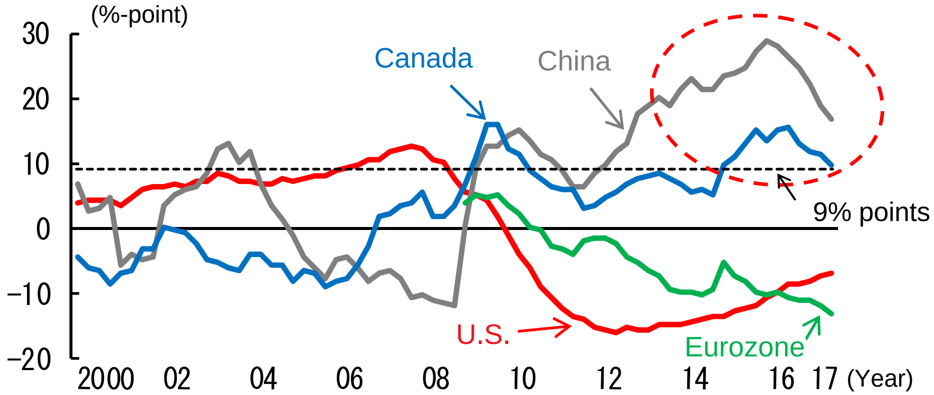
After the global financial crisis, China and Canada are high above the long-term average.



(Note) Adapted from BIS.

(2) Debt-to-GDP ratio of non-financial sector: Its deviation from the long-term trend.

The Bank for International Settlements (BIS) regards a more than 9%-point deviation of debt-to-GDP ratio from a long-term trend as a warning signal for a possible financial crisis occurring within 3 years. China and Canada are above this threshold, though on a downward trend since 2016.



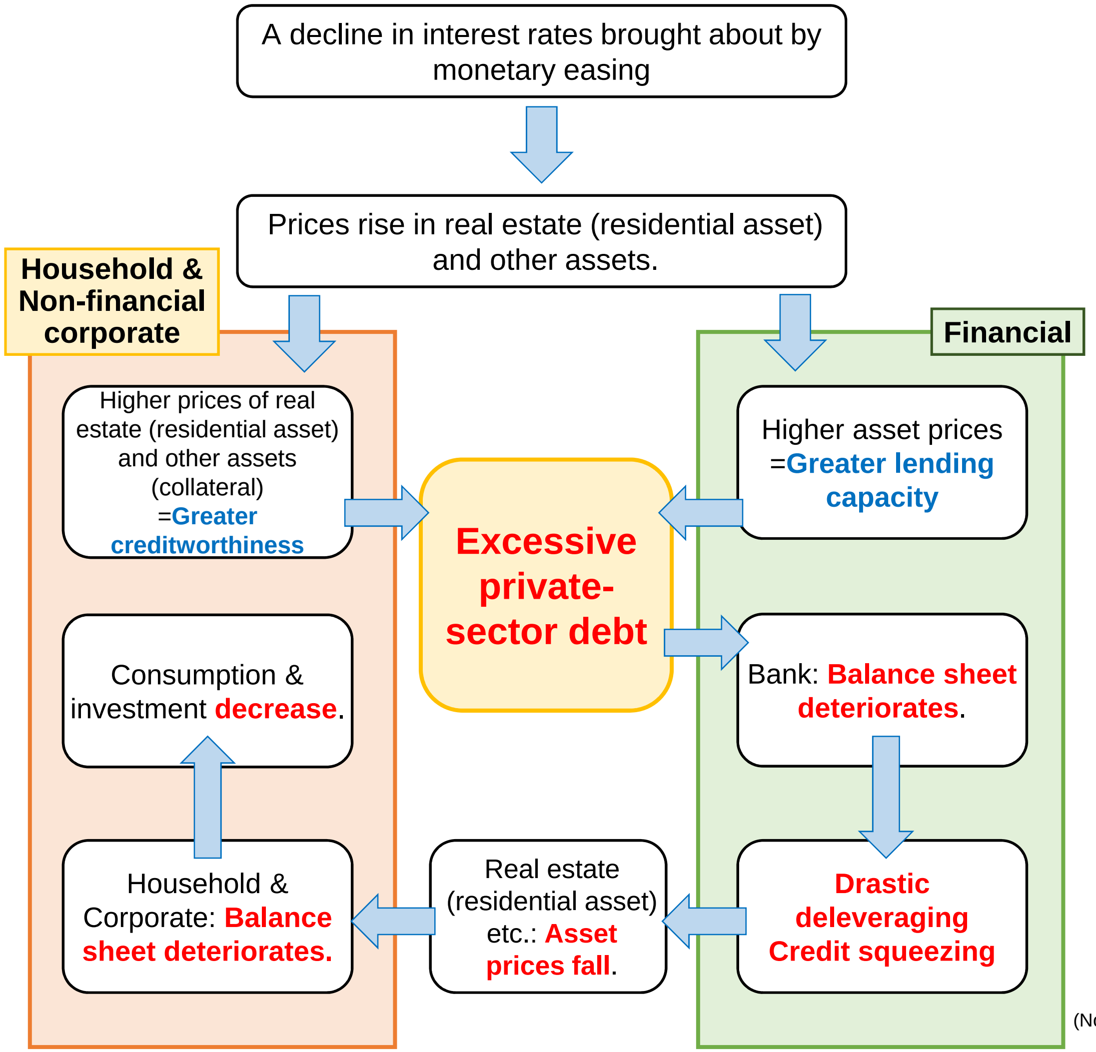
(Note) Adapted from BIS.

These indicators suggest that the current state is not under a situation where the possibility of another global financial crisis has been growing year by year.

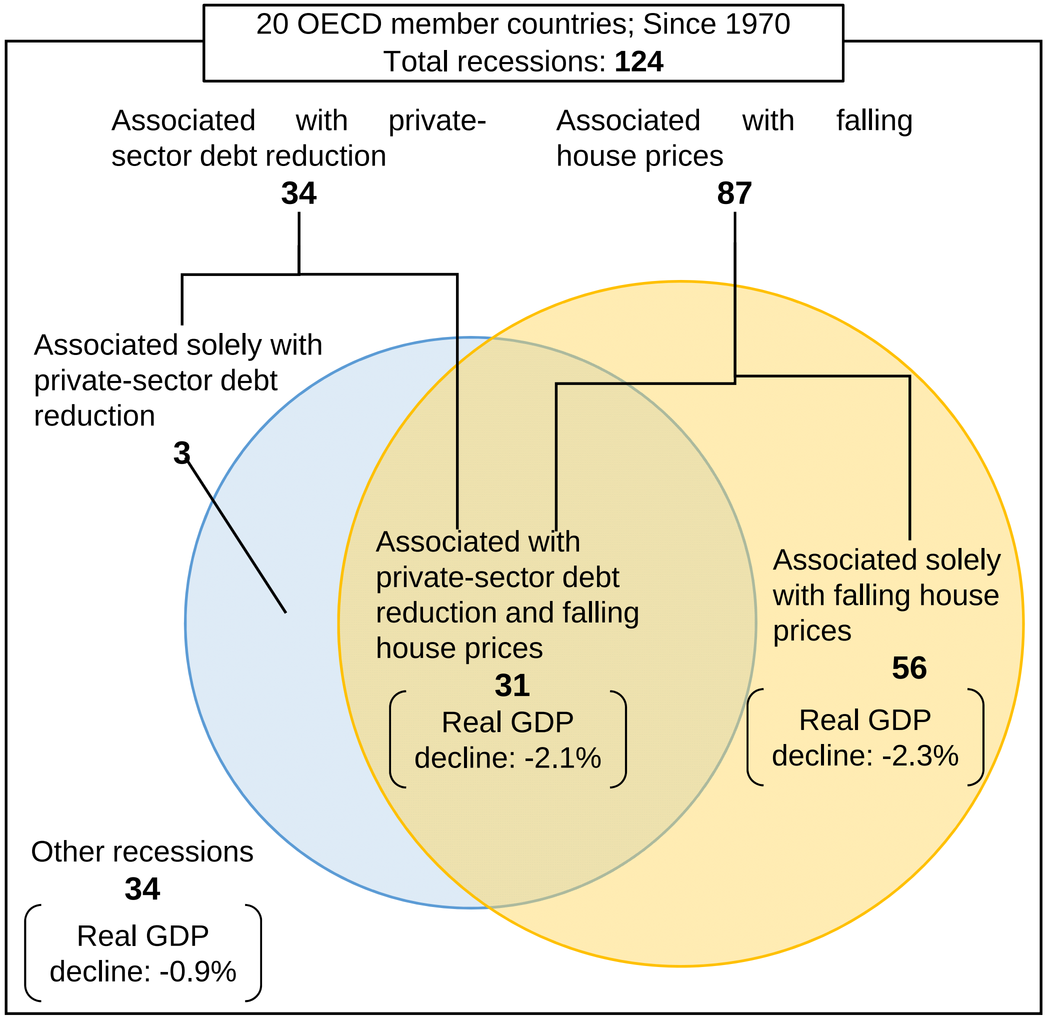
However, private-sector debt in China and Canada should be closely monitored.

A long period of monetary easing drives up house and other asset prices, with excessive private-sector debt piled up. Recessions triggered by private-sector debt reduction and/or falling house prices cause larger declines in real GDP.

(1) Relation between excessive private-sector debt and asset price "bubble"



(2) Recessions associated with private-sector debt reduction and/or falling house prices



(Notes) 1. Adapted from OECS.Stat and BIS.
2. Decrease of real GDP refers to the median of real GDP declines observed between the peak and trough of a phase.

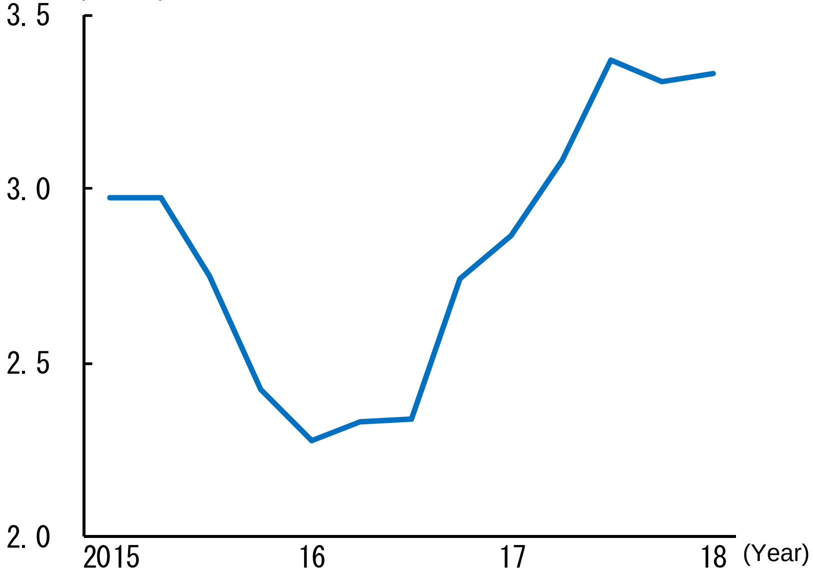
Chapter 2 Economic Trends and Structural Changes in Major Regions (World economy)

In the first half of 2018, the world economy, after a period of "slow trade" that had been observed after the global financial crisis, showed continuously synchronized recovery across regions, supported mainly by growing international trade. Moderate recovery of the world economy is expected to continue. However, attention should be given to risks including situation over trade issues.

1. World economy: Current state and outlook

(1) Global real economic growth

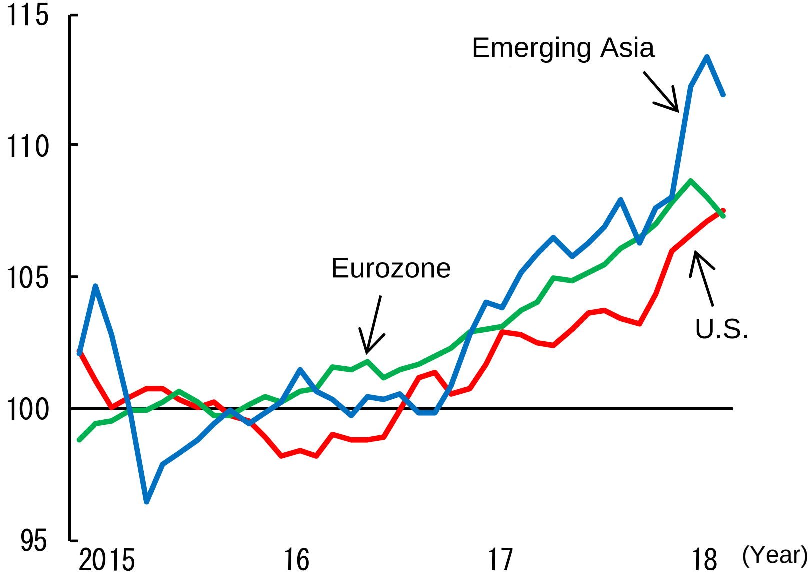
In 2017, the world economy showed a steady recovery. In 2018, synchronized recovery has been continuing around the globe.



(Note) Adapted from World Bank.

(2) Exports of major economies

Exports have been growing at an accelerated pace in both developed and emerging economies since the end of 2017.



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

2. Major risks of world economy

- Situations over trade issues;
- Movements of U.S. monetary policy;
- Negotiations for UK withdrawal from EU;
- China's excessive debt problem and drastic fluctuations of real estate prices;
- Fluctuations in financial & capital markets

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

Since the end of the global financial crisis, the U.S. economy has been on a recovery path for nine years. The steady recovery is expected to continue for the time being. Household debt, a risk factor, remains almost unchanged in the ratio to disposable income. The ratio of delinquent mortgages has been falling.

1. U.S. economy: Current state and outlook

Six indicators all maintain an upward trend.

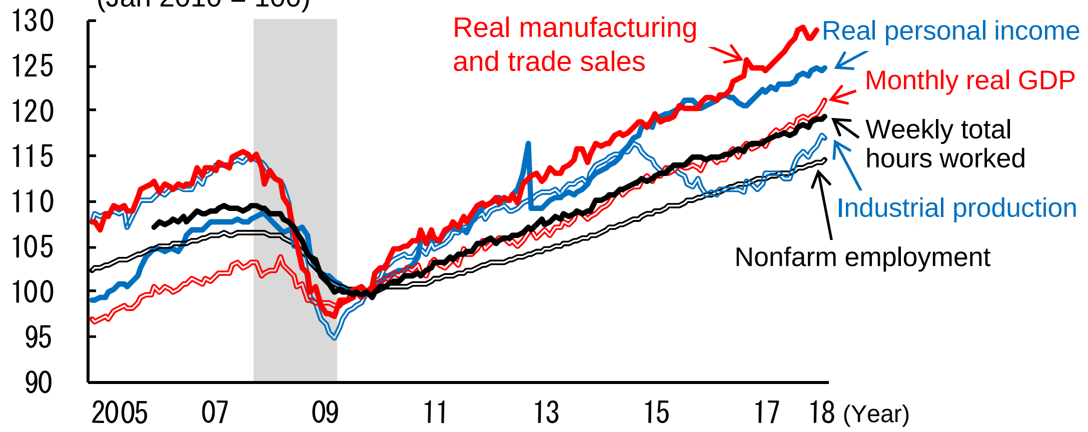
(1) Length of recovery

Ranking	Months	(Peak)		(Trough)
1st	120	Mar 1991	-	Mar 2001
2nd	106	Feb 1961	-	Dec 1969
3rd	92	Nov 1982	-	Jul 1990
Current phase	**108** (as of Jun 2018)	**Jun 2009 -**		

Expected to be the second longest recovery

(Note) Adapted from National Bureau of Economic Research (NBER).

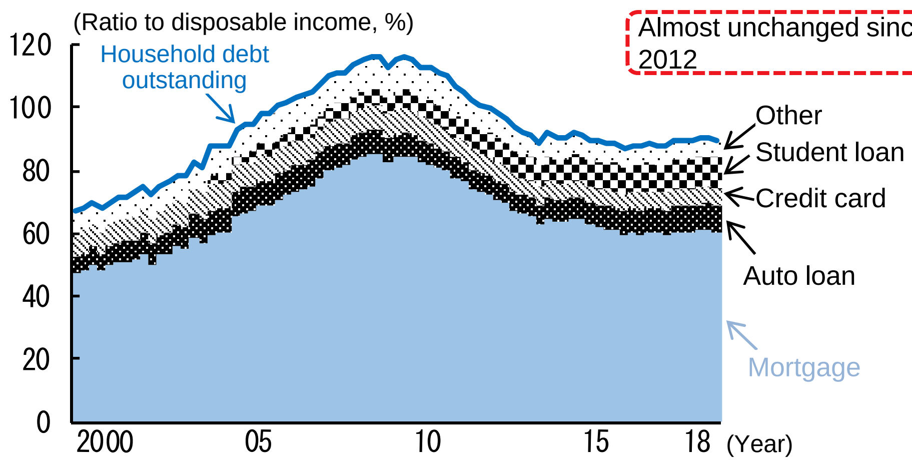
(2) Indicators used by NBER to identify peaks and troughs of business cycle



(Note) Adapted from U.S. Department of Commerce (DoC), U.S. Department of Labor, FRB, Conference Board, and Macroeconomic Advisers.

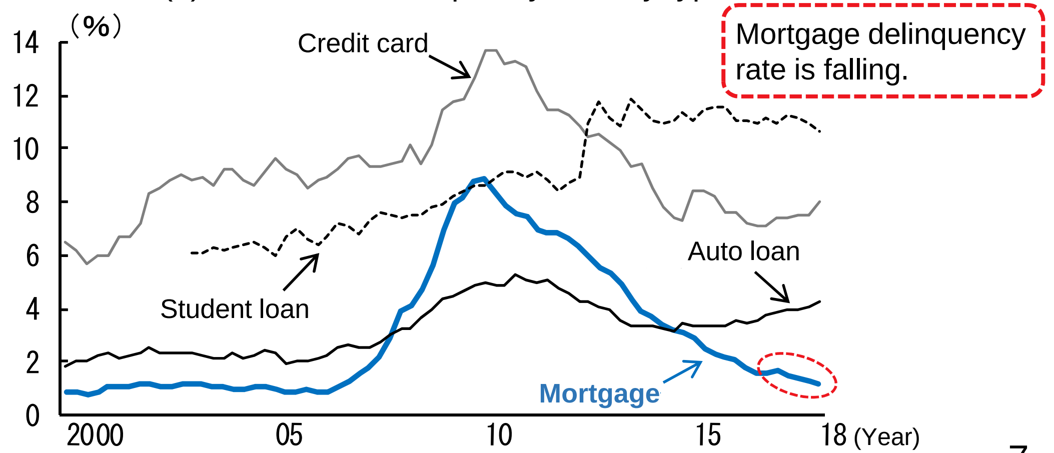
2. Household debt

(3) Household: Ratio of debt outstanding to disposable income



(Note) Adapted from FRB of New York and DoC.

(4) Household delinquency ratio by type of loan



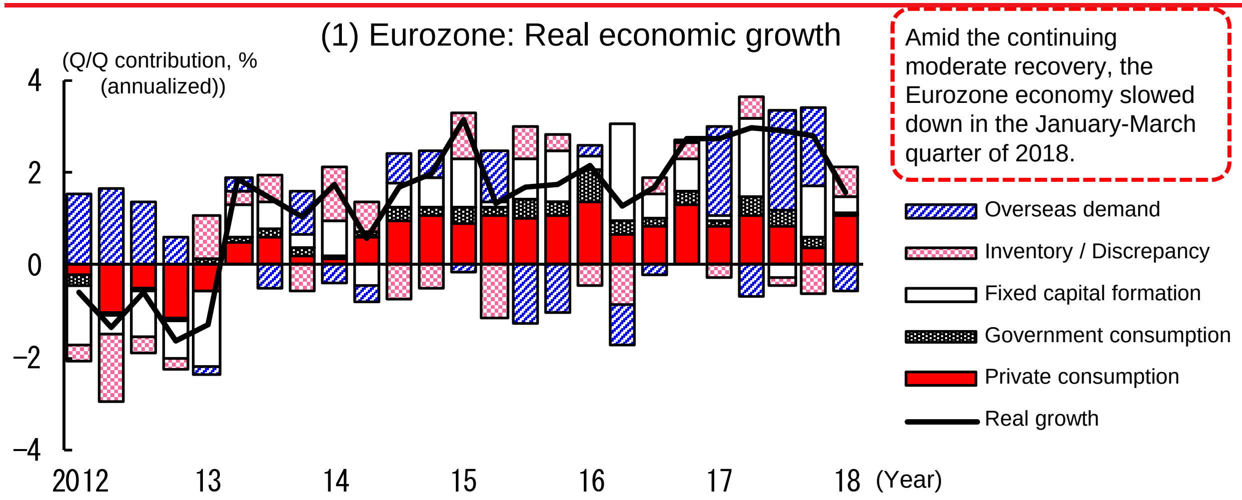
(Note) Adapted from FRB of New York.

Chapter 2 Economic Trends and Structural Changes in Major Regions (European economy)

The Eurozone economy maintains a moderate recovery, though supply constraints are becoming evident in Germany, etc.
The UK is weighed down by uncertainty over Brexit.

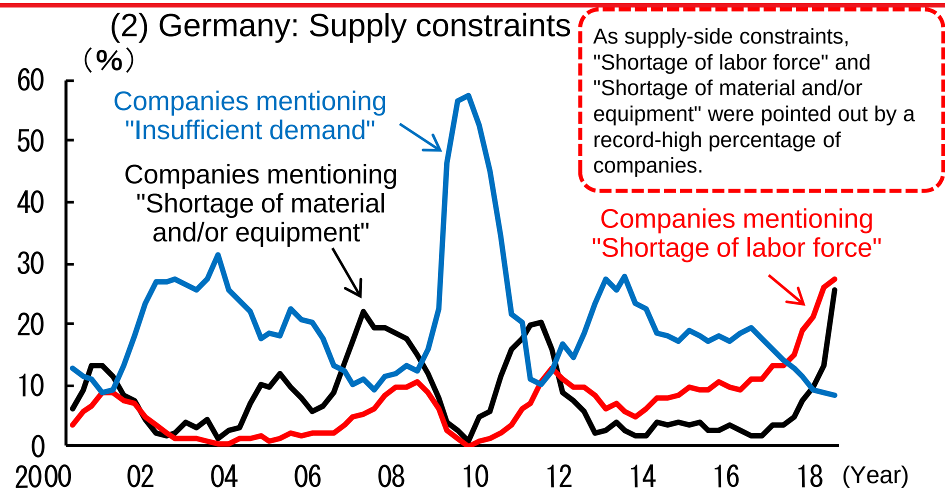
1. Supply constraints in Eurozone

(1) Eurozone: Real economic growth



(Note) Adapted from Eurostat.

(2) Germany: Supply constraints



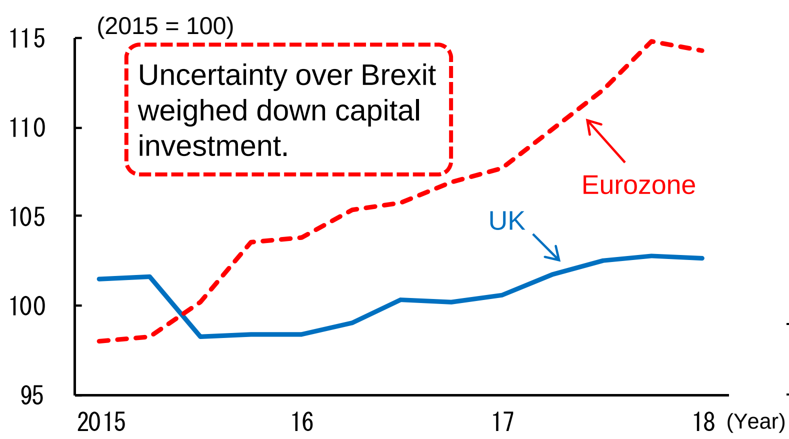
(Note) Adapted from European Commission.

2. Uncertainty in Brexit

(Movements for Brexit)

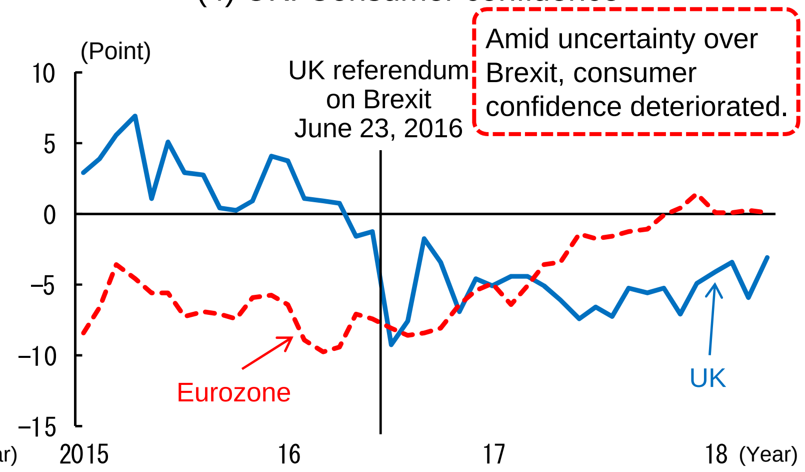
Schedule	
June 23, 2016	Referendum held in UK
March 29, 2017	Withdrawal formally declared by UK
October 18 & 19, 2018: EU summit	Practical deadline for withdrawal negotiations btw UK and EU (Proceeding to parliamentary processes at EU & UK)
March 29, 2019	UK withdrawal from EU
December-end, 2020	End of transition period under withdrawal agreement, if any

(3) UK: Capital investment



(Note) Adapted from Office for National Statistics and Eurostat.

(4) UK: Consumer confidence



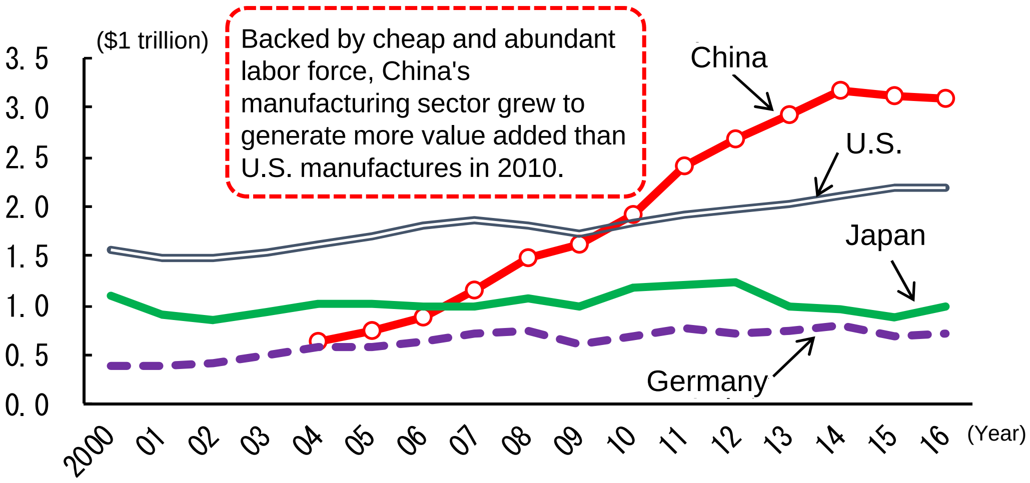
(Note) Adapted from European Commission.

Chapter 2 Economic Trends and Structural Changes in Major Regions (Asian economy)

In China, the working age population peaked out in 2014, and the economy entered a phase where automation is needed in manufacturing, etc. Mainly with “Made in China 2025,” the government intends to upgrade its manufacturing industry. Recently, they have made advancements in deployment and domestic production of industrial robots.

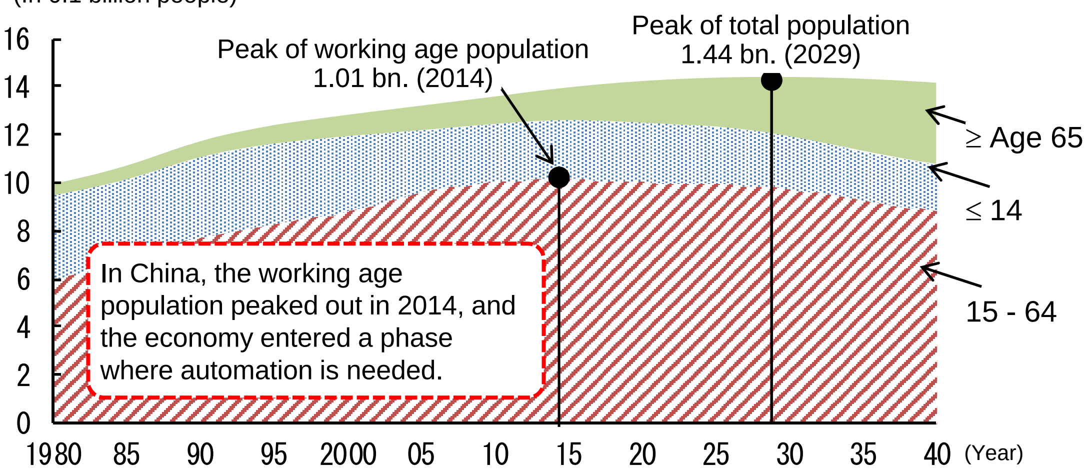
1. Development of manufacturing industry and decreasing working age population

(1) Value added in manufacturing (nominal)



(Note) Adapted from United Nations Statistics Division.

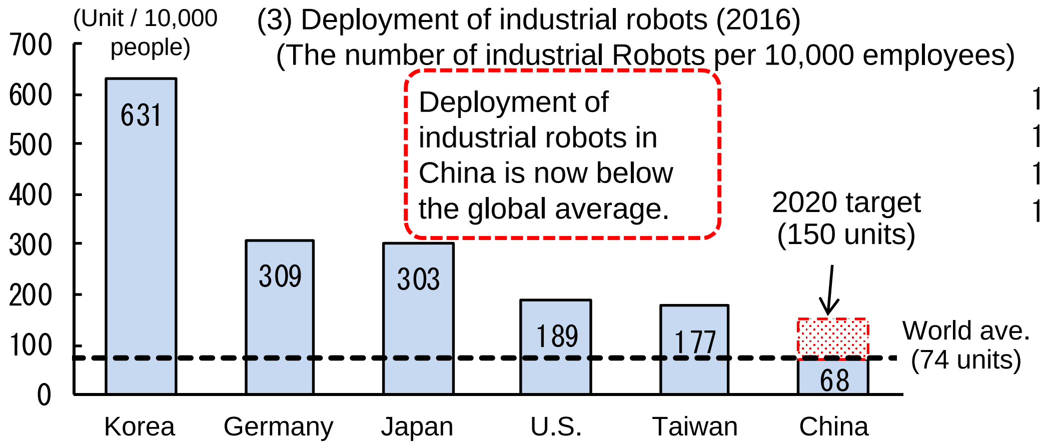
(2) Population by age group



(Notes) 1. Adapted from United Nations "World Population Prospects 2017".
2. Figures for 2016 onwards are medium variant.

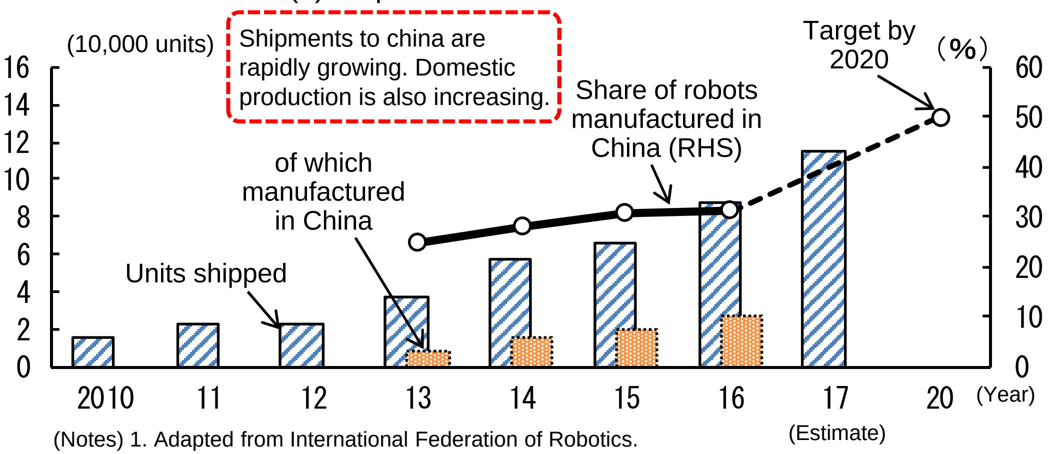
2. Deployment of industrial robots

(3) Deployment of industrial robots (2016)
(The number of industrial Robots per 10,000 employees)



(Note) Adapted from International Federation of Robotics.

(4) Shipments of industrial robots to China



(Notes) 1. Adapted from International Federation of Robotics.
2. Figure for 2017 is estimated.