



# World Economic Trends II <The 2021 Autumn/Winter Report>

— Economic Growth in China and  
Changes in Trade Structure —

(Summary)

February 2022

Cabinet Office

Government of Japan

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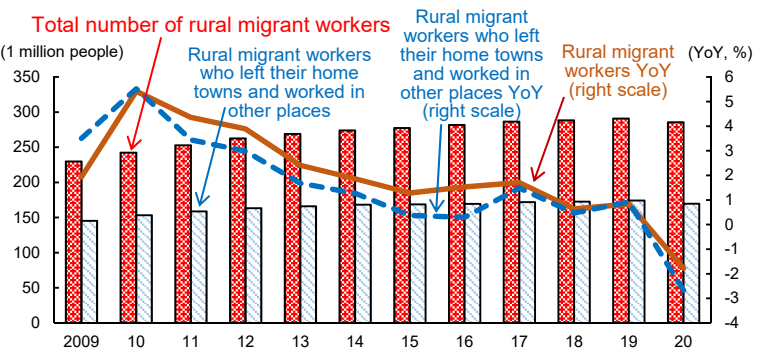
About “World Economic Trends”: This report, published since 2002, surveys and analyzes the trends of the world economy.  
This is the 39th issue.

# 1-1 China Aiming to Achieve High-Quality Growth [Shortage of Redundant Labor Force and the Transition of the Growth Model]

- In China, the growth of the number of migrant workers from rural areas peaked in the 2010s. On the other hand, the rate of wages continued to increase at a high level, and the level of wages is now higher than those of Southeast Asian countries. In China, a transition from growth relying on an increase in the labor supply is being pursued. In the 14th Five-Year Plan (March 2021), "high-quality development" was upheld as the policy direction.
- Also due to the minimum wage hike, income disparities between urban and rural areas are decreasing. However, the Gini coefficient is increasing, indicating the issue of disparities within urban areas. The Five-Year Plan states the goal of achieving "common prosperity" by 2025, aiming to close the gap of income and consumption level.

(1) Number of migrant workers

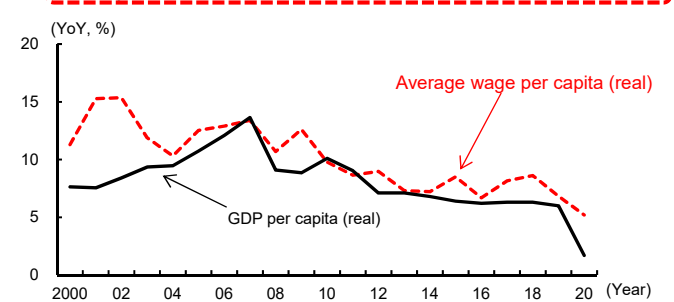
The growth of the number of migrant workers (number of rural migrant workers) peaked in the 2010s.



(Note) 1. Adapted from Ministry of Human Resources and Social Security of the People's Republic of China.  
2. "Migrant workers who left their home towns and worked in other places" refers to those who leave their home towns (their registered place) to take non-agricultural jobs for more than six months.

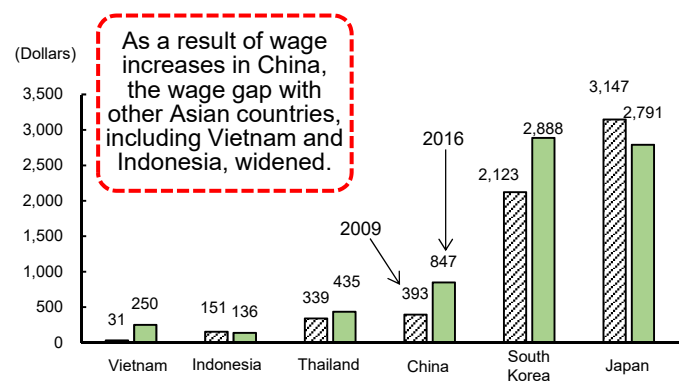
(2) Real GDP growth rate per capita and real wage increase

The average wage has in general been growing more rapidly than GDP.



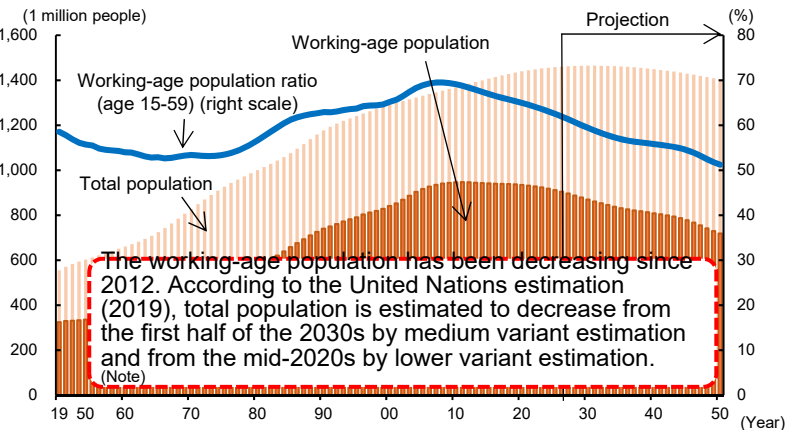
(Note) 1. Adapted from National Bureau of Statistics of China.  
2. The average wage shows wage per capita of urban workers, including those who work at state-owned units, collective-owned units, share-holding corporations Ltd., and foreign funded units (not including workers at township and village enterprises, private units, or self-owned businesses).

(3) Wage levels in Asian countries (nominal)



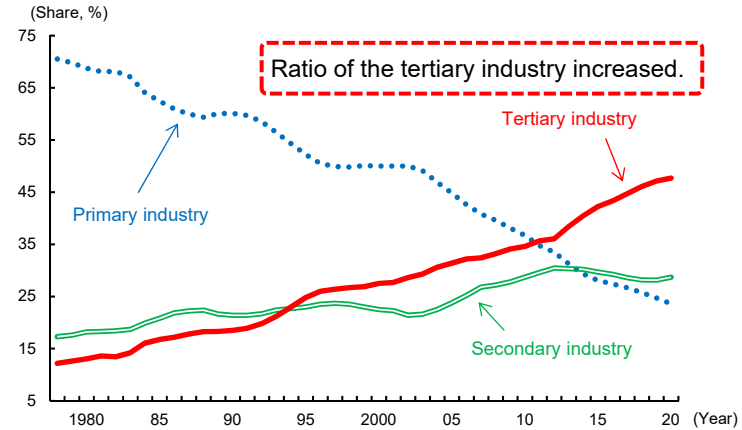
(Note) 1. Adapted from ILO.  
2. Data of 2012 and 2015 is used for Indonesia; data for 2011 and 2017 is used for Thailand.

(4) Total population and working-age population



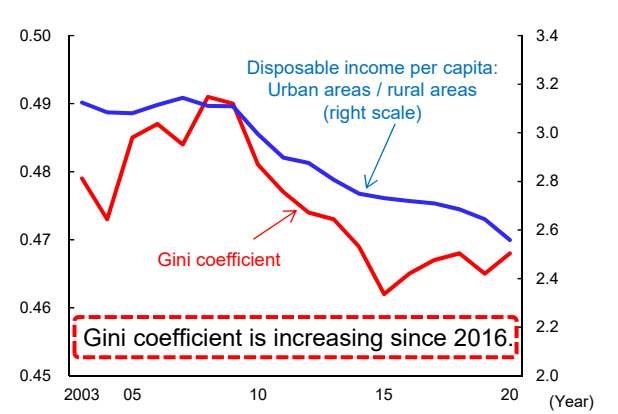
(Note) Adapted from "World Population Prospects 2019" by UN.  
(Note) The actual birthrate in 2020 (1.3) was even lower than the lower variant estimation (1.45), partly due to the pandemic.

(5) Ratio of those employed by industry



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

(6) Gini coefficient and disparities between urban and rural areas



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

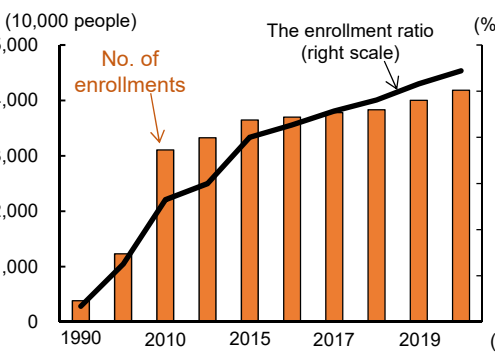
# 1-1 China Aiming to Achieve High-Quality Growth

## [Industrial Structure Upgrade and Progress in Human Resources Development / R&D Investment]

- The Chinese government aims to increase the average years of education and the ratio of higher education, and is working on the development of human resources. R&D investment is increasing mainly among private sector companies, reaching near the average level of OECD countries.
- Such trend results in innovation among distinctive emerging companies in new areas such as the production of new energy vehicles, represented by EV production. The number of patent applications also increased significantly from around 2010, now reaching the top in the world.

(1) The higher education enrollment ratio and the number of enrollments

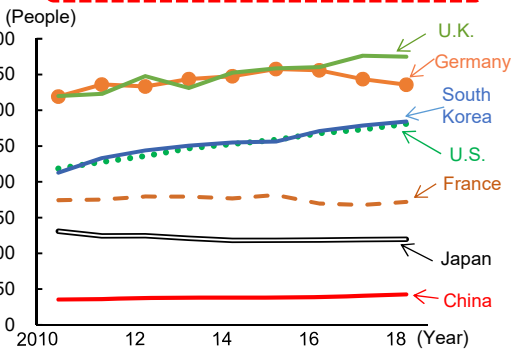
The higher education enrollment ratio is increasing.



(Note) Adapted from Ministry of Education of the People's Republic of China. The enrollment ratio shows the ratio of students enrolled in higher education institutions among those aged from 18 to 22.

(2) Number of doctorate holders (per 1 million population)

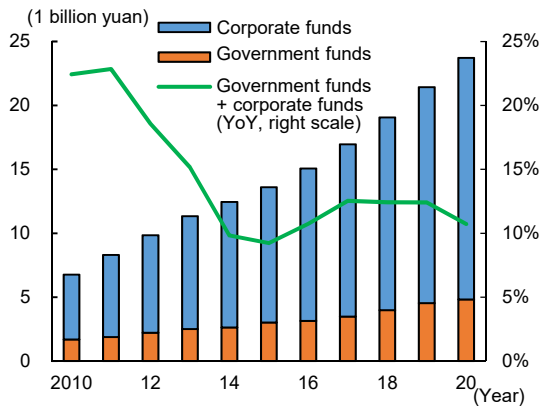
The number of doctorate holders in China remains low per population.



(Note) Adapted from National Institute of Science and Technology Policy, Ministry of Education, Culture, Sports, Science and Technology.

(3) Source of R&D investment

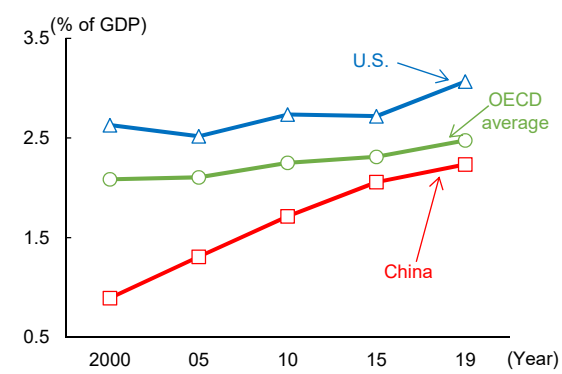
The amount of R&D investment is increasing, mainly among private sector companies



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

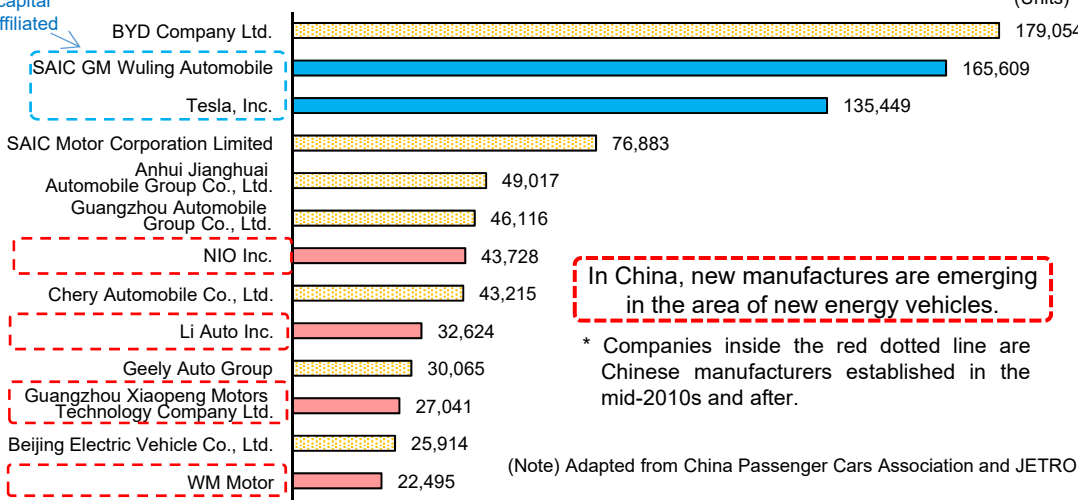
(4) Ratio of R&D investment of major countries to GDP

The ratio of R&D investment to GDP in China has been increasing since 2000, approaching near the OECD average.



(Note) Adapted from OECD.

(5) Number of automobile sales by new energy vehicle manufacturers (2020)



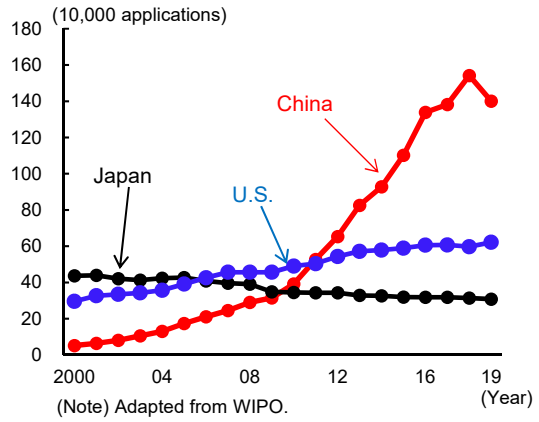
In China, new manufactures are emerging in the area of new energy vehicles.

\* Companies inside the red dotted line are Chinese manufacturers established in the mid-2010s and after.

(Note) Adapted from China Passenger Cars Association and JETRO.

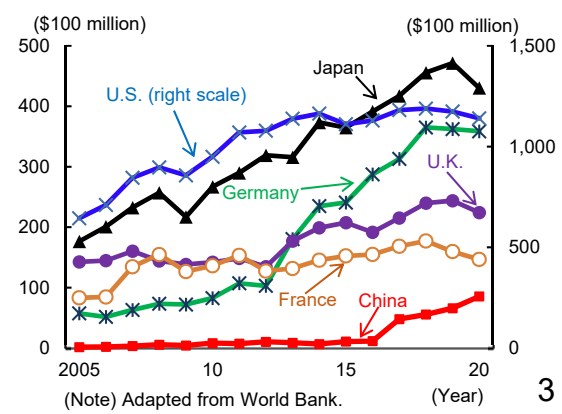
(6) Number of patent applications by nationality

The number of patent applications in China has reached the top in the world. The amount of patent royalties received is also increasing.



(Note) Adapted from WIPO.

(7) The amount of patent royalties received by nationality



(Note) Adapted from World Bank.

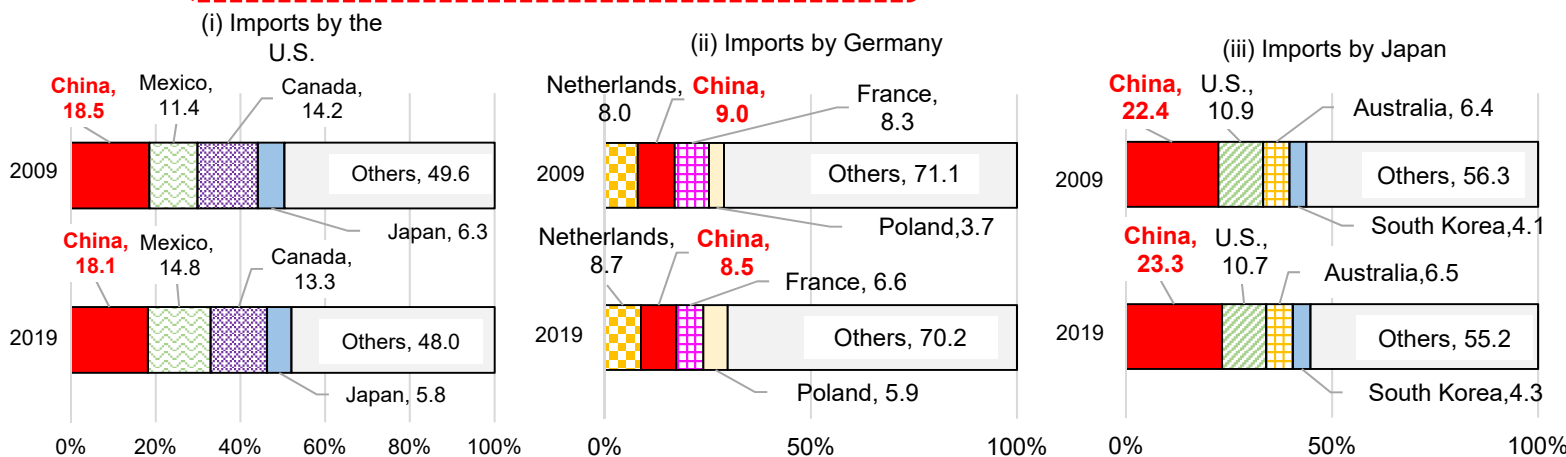
## 1-2 Changes in Trade Structure Involving China [Changes in Import from China among Developed Countries]

- The role of China in the global value chain is changing with its economic growth. As for imports by the U.S., Germany, and Japan:
- (1) the share of China in the imports of each country remained generally unchanged from 2009 to 2019 for all imported items;
  - (2) there are many items mostly imported from China for all three countries; and
  - (3) focusing on major items, goods mostly imported from China are shifting from labor-intensive goods to capital-intensive goods with the progress of industrial advances in China.

(1) Origin of imports by the U.S., Germany, and Japan (2009 and 2019)

Share of China in imports by the U.S., Germany, and Japan is generally unchanged from 10 years ago for all imported items.

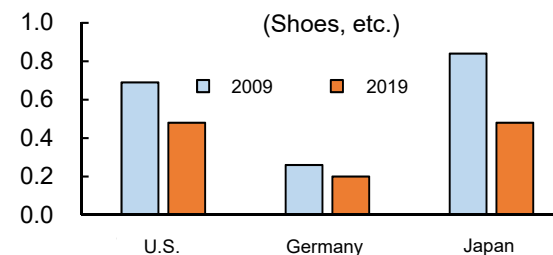
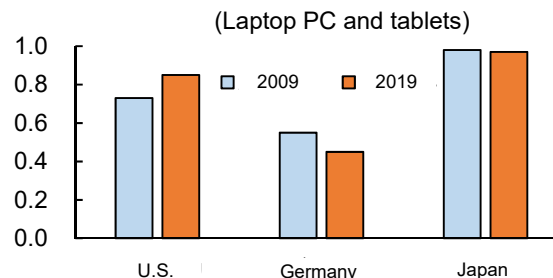
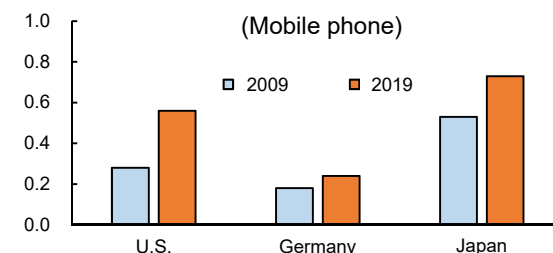
(\*) Shows the top four countries in terms of import share as of 2019



(3) Changes in import concentration ratio(\*) of major items that are imported from China the most (from 2009 to 2019)

(\*) Calculated by the square sum of the share of import origin country. A larger figure shows that the import is more concentrated on certain countries.

While the import concentration ratio is increasing for mobile phones, it is decreasing for shoes and other goods.



(2) Number of items mostly imported from certain countries in the U.S., Germany, and Japan (2019, top three countries from which many items are imported)

(\*) Among about 5,000 items in total, the number of items for which import from one country accounts for 50% or more (goods of concentrated supply). Figures in brackets show the ratio among the total number of items.



Imports by the U.S., Germany and Japan are concentrated on China for many items.

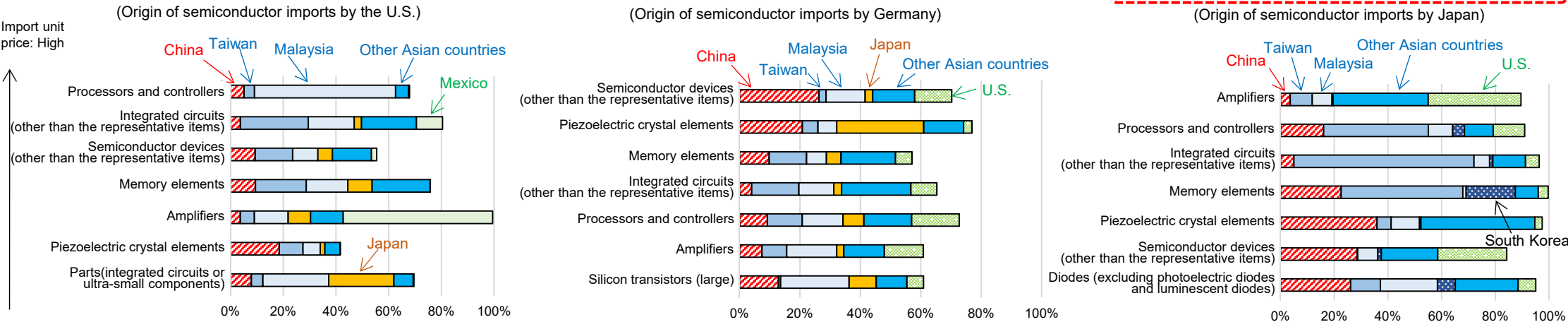
(Note) Adapted from Centre d'études prospectives et d'informations internationales.

# 1-2 Changes in Trade Structure Involving China [Semiconductor Trade]

- As for semiconductors, developed countries rely heavily on imports from Asia.
- Comparing the semiconductor exports of China and Taiwan, the unit price is slightly higher for Taiwan among the same export items, and items with a large export share in China tend to have a lower unit price as of 2019. On the other hand, there are items with higher unit prices with a large export share in Taiwan, showing that the competitive area differs between them.

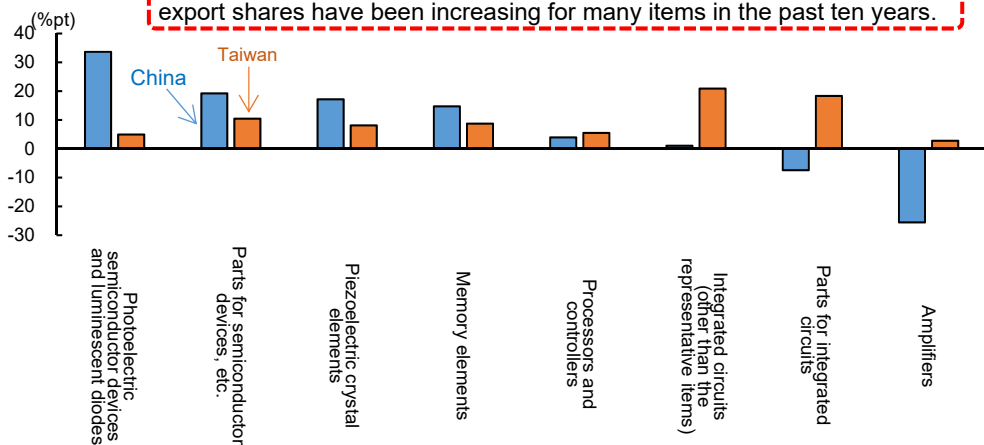
(1) Origin of the imports of semiconductors by the U.S., Germany, and Japan (2019, top seven items in terms of imported unit price)

The share of Asian countries is large for the origin of semiconductor imports.

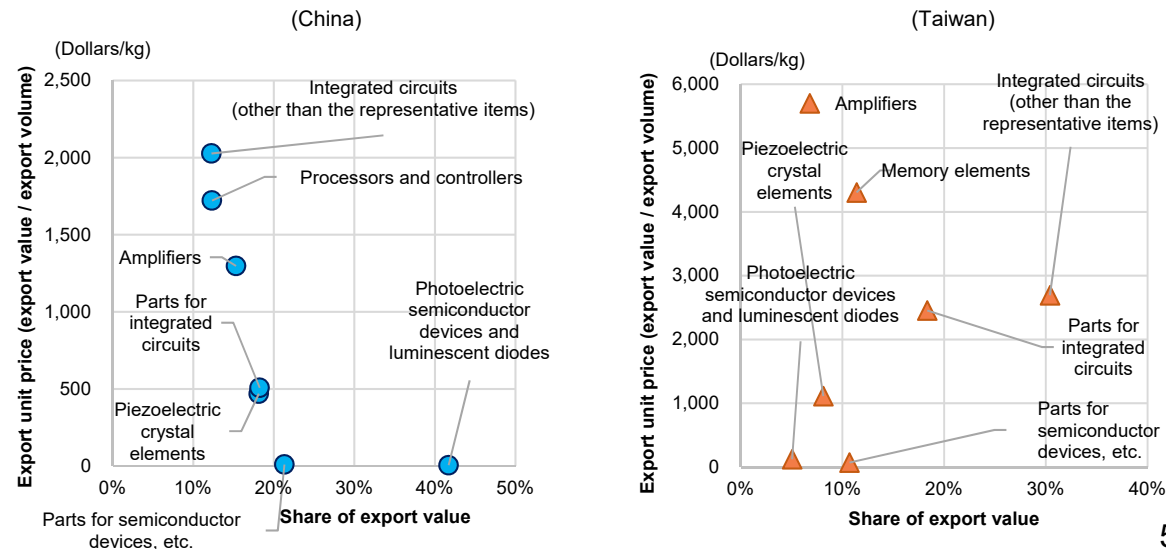


(2) Changes in the export value shares of China and Taiwan in the global export market (from 2009 to 2019)

When China and Taiwan are viewed from the exporter's perspective, export shares have been increasing for many items in the past ten years.



(3) Export value shares and export unit prices of semiconductors in China and Taiwan (2019)



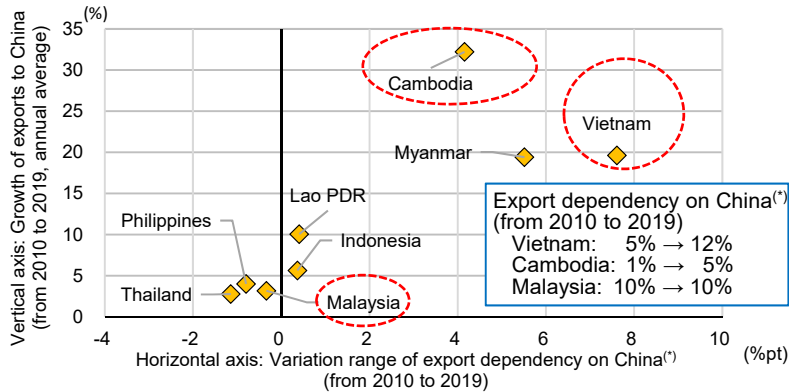
(Note) Adapted from Centre d'études prospectives et d'informations internationales.

# 1-2 Changes in Trade Structure Involving China [Changes in Trade Structure in Asian Countries]

- As for trends in the 2010s, the division of labor among China and ASEAN countries has been reinforced with the progress of industrial advances in China.
- As for the value of exports from Vietnam to China, the growth of highly skilled, capital-intensive goods is relatively high. Malaysia has held high competitive power in the semiconductors area already since 2010, and had been exporting many parts also to China. Malaysia continuously exports many items to China as of 2019. As for Cambodia, exports of labor-intensive or resource-intensive goods to China are increasing significantly.

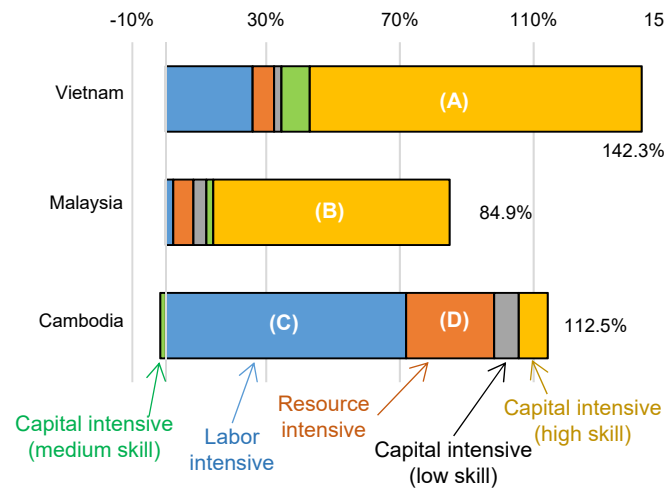
(1) Variation range of ASEAN countries' export dependency on China(\*) and growth of exports to China (from 2010 to 2019)

In Vietnam, exports to China have increased in the past ten years, and dependency has increased largely as well. The growth of exports to China is the largest for Cambodia among the ASEAN countries. The dependency of Malaysia was already high as of 2010.



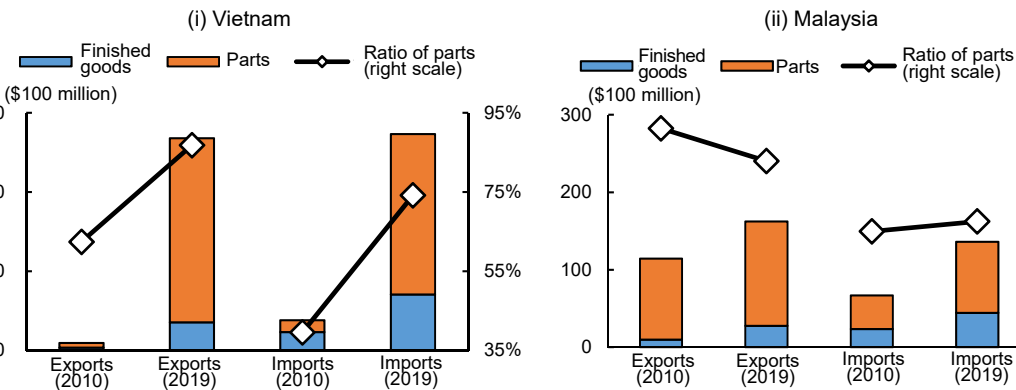
(\*) Export dependency on China: Ratio of export value to China to nominal GDP

(2) Growth in exports from Vietnam, Malaysia, and Cambodia to China (from 2015 to 2019), contribution by area



- (A):** ICT-related industries led by foreign capitals developed, and along with the progress of the division of labor with ICT cluster regions in China, increases have been seen mainly in the following:
- integrated circuits (processors and controllers); and
  - parts for electric devices for phones or telecommunications (wired/wireless).
- (B):** Competitive as a global production base of semiconductors with investments from Western countries
- Integrated circuits (processors and controllers)
  - Semiconductor memory devices
- (C) (D):** Substantial investments and loans from China since 2000s
- (C):** Handbags, clothes, shoes, etc.
- (D):** Polished rice, nuts, banana

(3) Ratio of parts and finished goods among trade with China (electromechanical products)



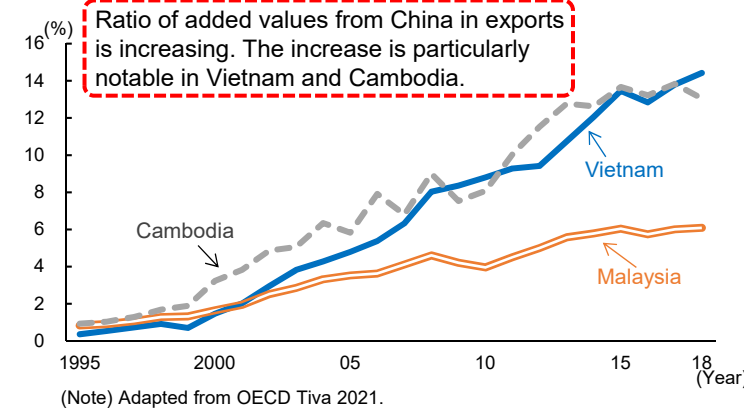
(Note) Adapted from Centre d'études prospectives et d'informations internationales.

Regarding value of exports to/imports from China for electromechanical products:

(i) they increased rapidly from 2010 to 2019 in Vietnam, with the ratio of parts also increasing sharply; and

(ii) in Malaysia, the ratio of parts was already large as of 2010.

(4) Ratio of added values from China in exports

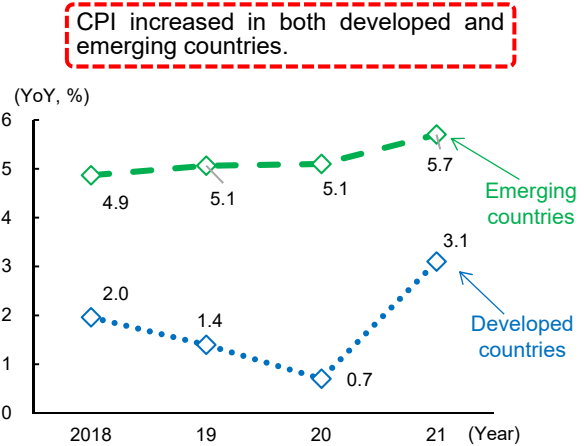


(Note) Adapted from OECD Tiva 2021.

## 2-1 Trends of the World Economy [Global Price Rise and Supply Constraints / World Economy Outlook and Risk]

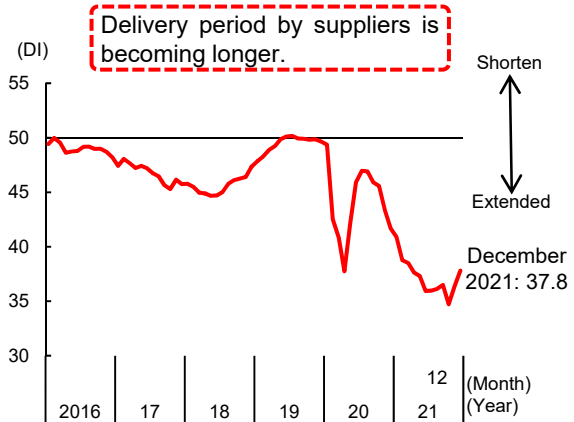
- Prices have risen globally with demand expansion and constraints on the supply side. Constraints on supply side can be observed in various aspects, including a raw materials shortage, logistics, and a labor shortage.
- Although it is expected that the world economy will continue recovering in 2022, it is necessary to keep a close watch on supply and demand tightness, the impact of the scaling down of monetary easing and interest rate hikes in Western countries, the slowdown of the Chinese economy, and the trend of the pandemic.

(1) Rate of increase in consumer price index (CPI)



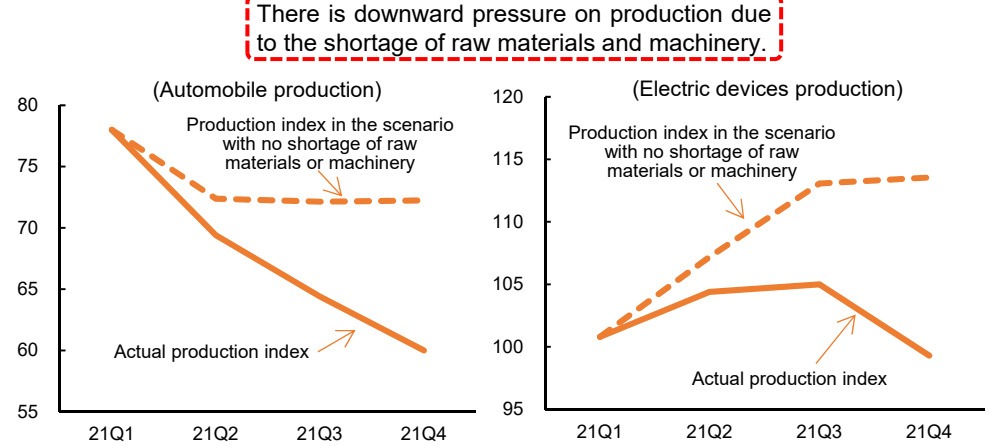
(Note) Adapted from "World Economic Outlook" (January 2022) by IMF. Estimated figures for 2021.

(2) Companies' recognition on delivery period by suppliers (manufacturing industry, global)



(Note) Adapted from Markit.

(3) Germany: Impact of supply constraints on production



(Note) 1. Adapted from the European Commission and Eurostat.  
2. Production index is a monthly seasonally-adjusted figure, Q1 = figure for January, Q2 = figure for April, Q3 = figure for July, Q4 = figure for October.

(4) World economy outlook

\* Data in brackets indicate revisions from the previous outlook (October 2021). (YoY, %)

	2020 [actual]	2021 [estimated]	2022	2023
<b>World</b>	-3.1	5.9	4.4 (-0.5)	3.8 (+0.2)
Developed countries	-4.5	5.0	3.9 (-0.6)	2.6 (+0.4)
U.S.	-3.4	5.6	4.0 (-1.2)	2.6 (+0.4)
Eurozone	-6.4	5.2	3.9 (-0.4)	2.5 (+0.5)
Japan	-4.5	1.6	3.3 (+0.1)	1.8 (+0.4)
Emerging countries	-2.0	6.5	4.8 (-0.3)	4.7 (+0.1)
China	2.3	8.1	4.8 (-0.8)	5.2 (-0.1)

(Note) Adapted from "World Economic Outlook" (January 2022) by IMF.

According to IMF, it is expected that the world economy will continue to recover. However, with the scaling down of monetary easing in the U.S. earlier than expected, continuous supply constraints, and the slowdown of the Chinese economy, the outlook on growth in 2022 was revised down.

(5) Downward risks on world economy

- Supply and demand tightness
  - Prolongation and deterioration of supply constraints
  - Decrease in the purchasing power of consumers due to price rise
- Impact of the scaling down of monetary easing and interest rate hikes in Western countries
  - Instability in international finance
- Slowdown of Chinese economy
  - Decrease in exports from different countries to China
- Trend of the pandemic
  - Spread of infection with more infectious variants etc.

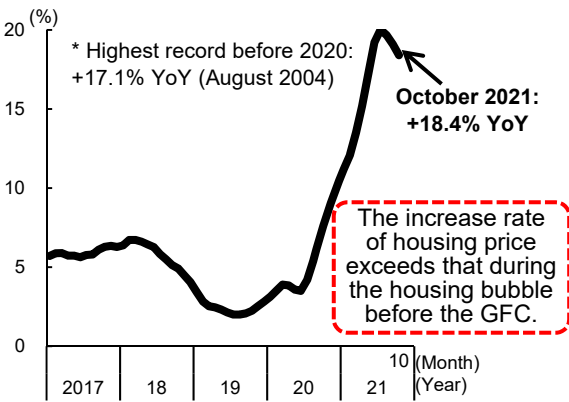


## 2-2 Topics in Major Regions [U.S. and European Economy]

### [Topic (1): Housing market in the U.S.]

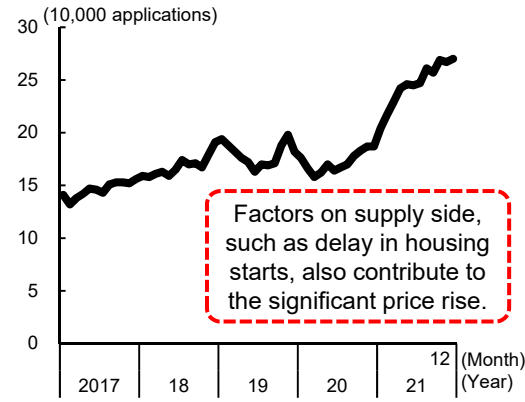
➤ In the U.S., housing prices rose significantly due to both supply and demand reasons. Although the household debt situation differs compared to before the Global Financial Crisis (GFC), the trend must be watched carefully.

(1) Housing price increase rate



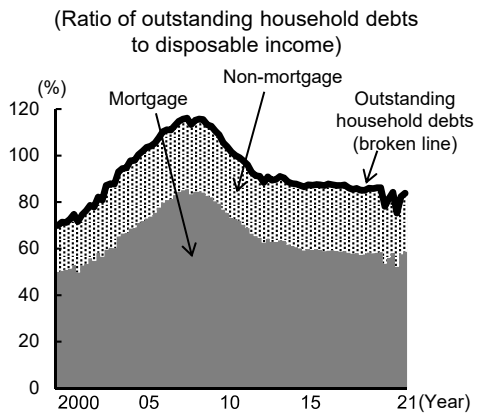
(Note) Adapted from S&P Global Ratings.

(2) New privately-owned housing units authorized, but not started



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

(3) Household debt situation



(Note) Adapted from Federal Reserve Bank of New York and U.S. Department of Commerce.

(Ratio of subprime groups in the amount of mortgages)



(Note) Adapted from Federal Reserve Bank of New York.

### [Topic (2): Issues faced by the new German administration, which continue from the days of Merkel]

➤ In Germany, the new administration led by Chancellor Scholz (heading SPD) was launched in December 2021, forming a so-called traffic signal coalition with The Greens and the FDP. Issues faced by the new administration include the post-COVID restoration of fiscal discipline, harmonization of energy security and decarbonization, and inclusion and integration of immigrants and other social minorities.

(4) New Scholz administration in Germany

#### Major policies (from the coalition agreement)

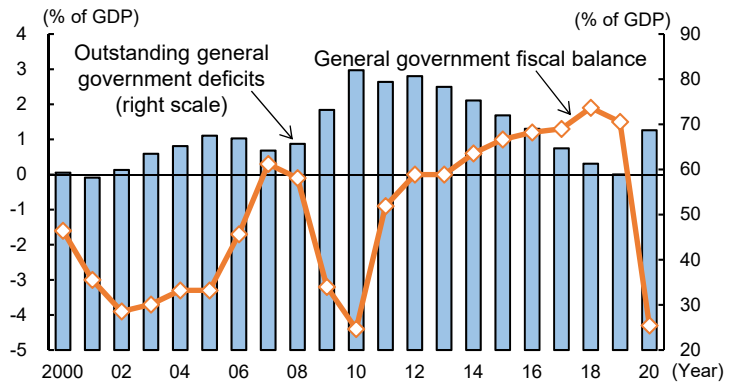
- Fiscal discipline was under moratorium due to the pandemic, but it will be restored from 2023.
- Realization of a decarbonized society by 2045
- Improvement of the labor environment, including the improvement of measures regarding immigrants
- Raising the minimum wage by 25%: €9.6 (about ¥1,240) → €12 (about ¥1,550)<sup>(\*)</sup>
- Having 15 million electric vehicles on the road by 2030

(\*) Specific figures are as follows:

As of December 2021: €9.6 (about ¥1,240), January 2022: €9.82 (about ¥1,270), July 2022: €10.45 (about ¥1,350) and October 2022 (\* plan by the administration): €12 (about ¥1,550)

(Note) Prepared based on information from the SPD website and news reports.

(5) Fiscal condition of Germany



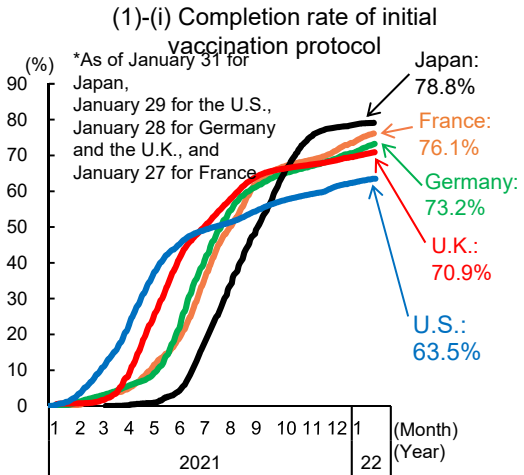
Viewing the economic trend, fiscal discipline (debt break) is scheduled to be restored from 2023.

(Note) Adapted from Eurostat.

# (Reference 1-1) Trends of the World Economy [Progress of Vaccination and Economic Recovery]

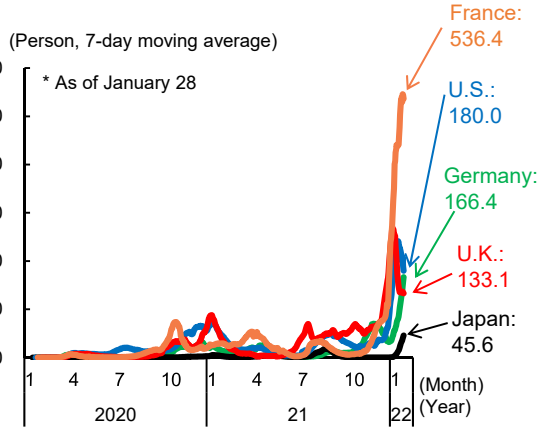
- Progress has been seen in vaccination since early 2021 in developed countries. Thereafter, although confirmed cases are on the rise, the number of deaths has been kept lower than before. Strict lockdown measures implemented from 2020 to spring in 2021 are now rarely seen, with the progress in vaccination driving the move towards the recovery of the world economy.
- On the other hand, the progress of vaccination is slower in emerging countries compared to developed countries. When there was an infection spread in Southeast Asia in the summer of 2021, lockdowns were implemented in various countries, holding down economic activities.

## (1) Developed countries



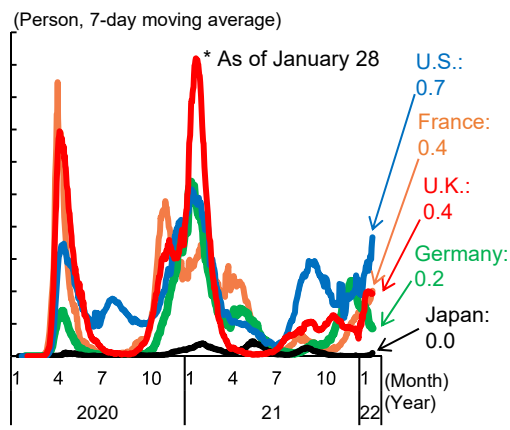
(Note) Adapted from Our World in Data and the website of Prime Minister's Office of Japan.

(1)-(ii) Number of confirmed cases



(Note) Adapted from WHO and CEIC.

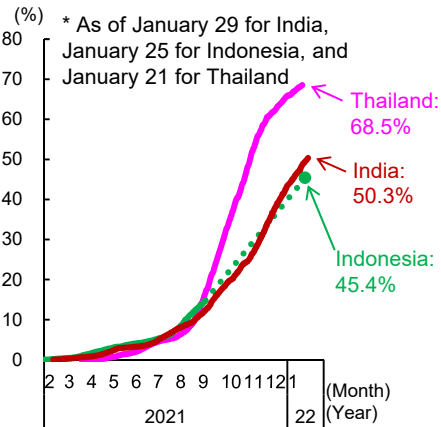
(1)-(iii) Number of deaths



(Note) Adapted from WHO and CEIC.

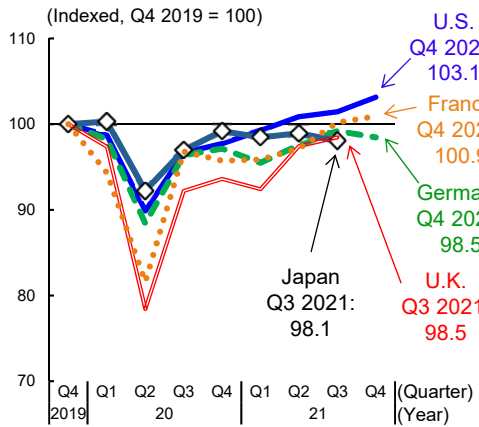
## (2) Emerging countries

(2)-(i) Ratio of full vaccination



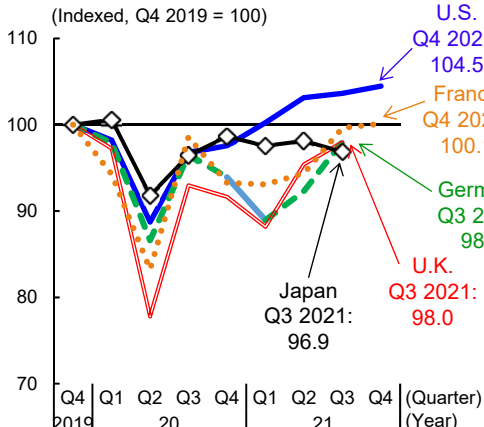
(Note) Adapted from Our World in Data.

(1)-(iv) Real GDP



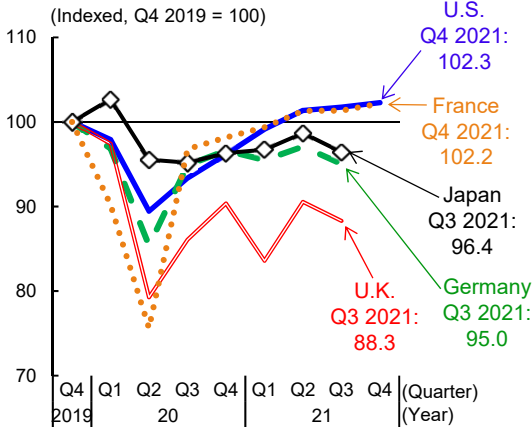
(Note) Prepared from the statistics of each country.

(1)-(v) Private consumption



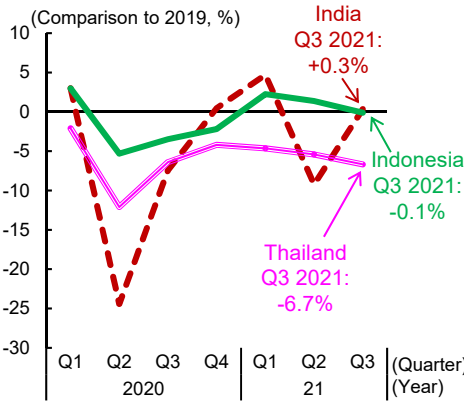
(Note) Prepared from the statistics of each country.

(1)-(vi) Capital investment



(Note) Prepared from the statistics of each country.

(2)-(ii) Real GDP



(Note) Prepared from the statistics of each country.

# (Reference 1-2) Trends of the World Economy [Monetary Policy / Fiscal Policy]

- In Western countries, there is a movement to contract large-scale monetary easing measures along with the stabilization of the financial market and economic recovery. Policy interest rate hikes can be found in other major countries as well, and movements toward the monetary policy normalization is becoming pervasive throughout the world.
- Also regarding fiscal policies, some of the large-scale and repeated support measures have finished against the background of economic recovery. Efforts for restoring fiscal soundness are implemented or considered in various countries, and it is expected that budget deficits will also decrease.

(1) Monetary policies in Western countries

**[U.S.]**

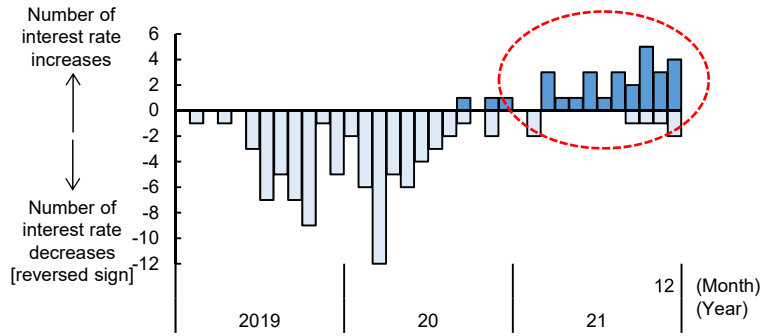
- Reduce the monthly pace of its net asset purchases by \$10 billion for U.S. Treasury securities and \$5 billion for MBS [from November to December 2021].
- Reduce the monthly pace of its net asset purchases by \$20 billion for U.S. Treasury securities and \$10 billion for MBS [From January 2022].

\* The monthly pace of net asset purchased will be brought to an end in early March 2022.

**[Eurozone]**  
The pace of asset purchase will be decreased for the pandemic emergency purchase programme (PEPP) [Q4 2021 and Q1 2022].

**[U.K.]**  
Bank Rate will be increased from 0.10% to 0.25% [From December 2021].

(2) Number of interest rate increases/decreases in G20



(Note)  
 1. Adapted from BIS. The number of changes in policy interest rates by 16 central banks in G20 countries and regions (excluding Argentina) is counted (counted once for repeated changes within a month).  
 2. Policy interest rates are specific series where central banks are requested to report for the preparation of dataset by BIS.

(3) Economic measures since March 2020 in major countries (operation size)

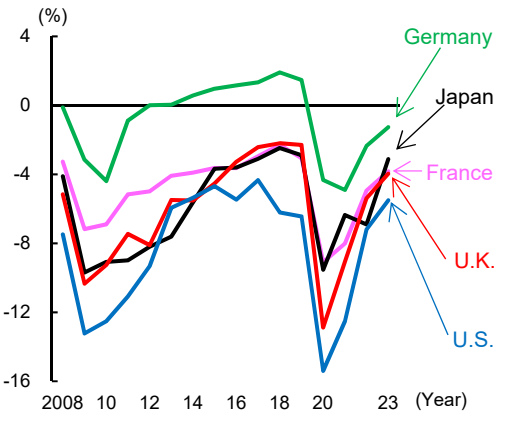
	Operation size, accumulated amount		% of GDP
<b>Japan</b>	About ¥293 trillion		54%
<b>U.S.</b>	About \$6.5 trillion	(About ¥694 trillion)	31%
<b>U.K.</b>	About £0.7 trillion	(About ¥96 trillion)	32%
<b>France</b>	About €0.7 trillion	(About ¥80 trillion)	28%
<b>Germany</b>	About €1.3 trillion	(About ¥164 trillion)	40%

(Note) 1. Tabulated by Cabinet Office based on materials released by each government (since March 2020).  
 2. The operation size of economic measures in Japan includes the first to third supplementary budgets for FY2020 and does not include the economic measures in FY2021 (Operation size: ¥78.9 trillion, 14.7% of GDP). There are duplications in the sizes of measures for both fiscal years, so they cannot be simply summed up. Data for countries other than Japan are based on information as of December 22, 2021. As for the U.S., Build Back Better (\$1.75 trillion) passed by the House of Representatives on November 19, 2021, is not included because it has not been enacted as of December 22, 2021.  
 3. Percentage of GDP is the comparison to the nominal GDP in 2020 (calendar year).

(4) Examples of measures terminated in 2021

U.S.	U.K.
<ul style="list-style-type: none"> <li>○Enhancing unemployment benefit (adding unemployment benefits, expanding the coverage to freelance workers, etc., extending the unemployment benefit period) : Terminated in September 2021</li> <li>○Paycheck Protection Program (loans for SMEs with repayment exemption for employment maintenance) : Application terminated in May 2021.</li> </ul>	<ul style="list-style-type: none"> <li>○Coronavirus Job Retention Scheme (a system to compensate for the part of the wages for furloughed employees) : Terminated in September 2021</li> <li>○Support for business operators to which business shutdown measures are applied (benefits depending on the assessed valuation of real property for business) : Terminated in June 2021</li> </ul>

(5) Outlook of governmental fiscal balance to GDP

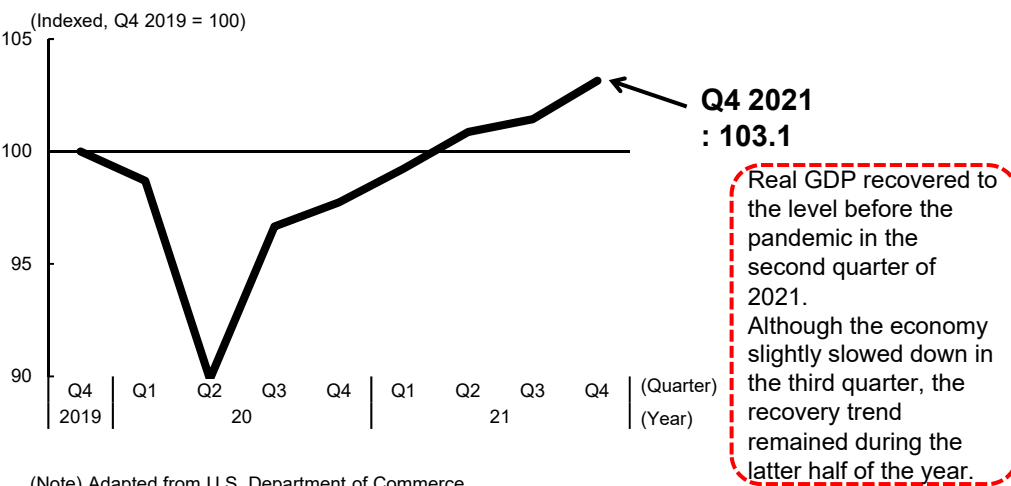


(Note) Adapted from Economic Outlook No.110 (December 2021) by OECD. Projected figures for 2021 and after.

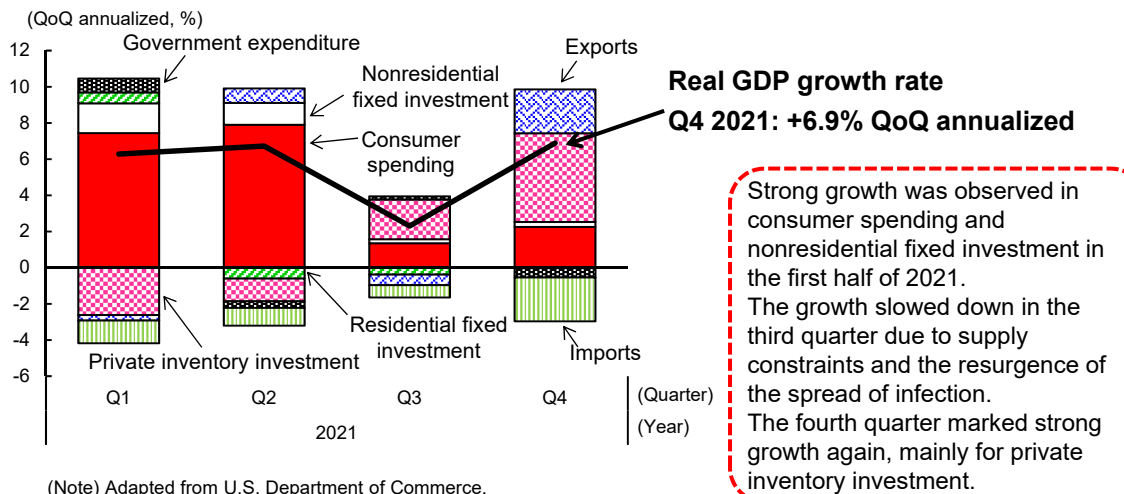
# (Reference 2-1) Economic Trends in Major Regions [U.S. Economy]

- In the U.S., real GDP for the second quarter of 2021 exceeded the level before the pandemic, and the economy has been continuing to recover thereafter as well.
- The impact of the pandemic still remains in some of the service sectors, including food services and accommodations, where there is a delay in the recovery of consumption and employment numbers. It is possible that progress in addressing such issues related to the pandemic holds the key to further recovery.

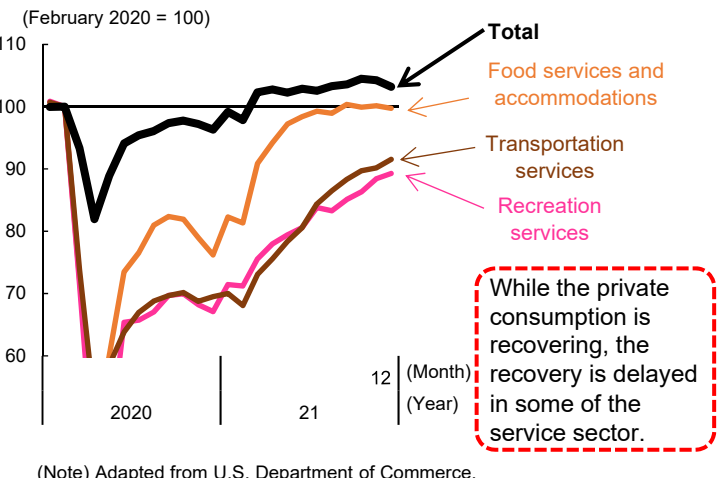
(1) Real GDP (level)



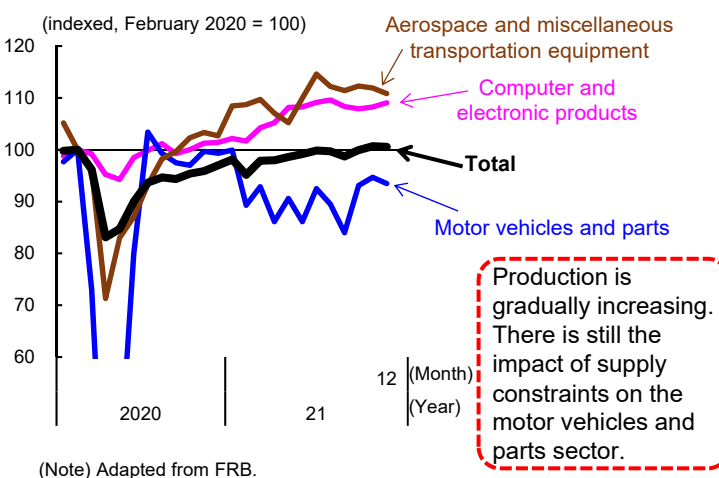
(2) Real GDP growth rate



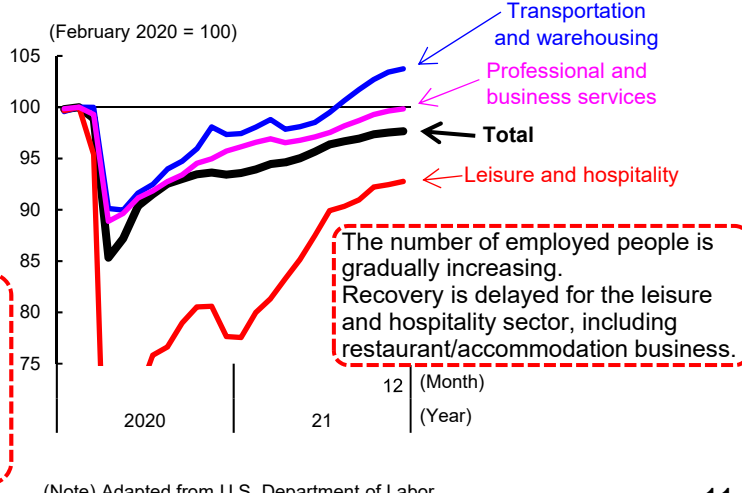
(3) Real personal consumption expenditures



(4) Industrial production

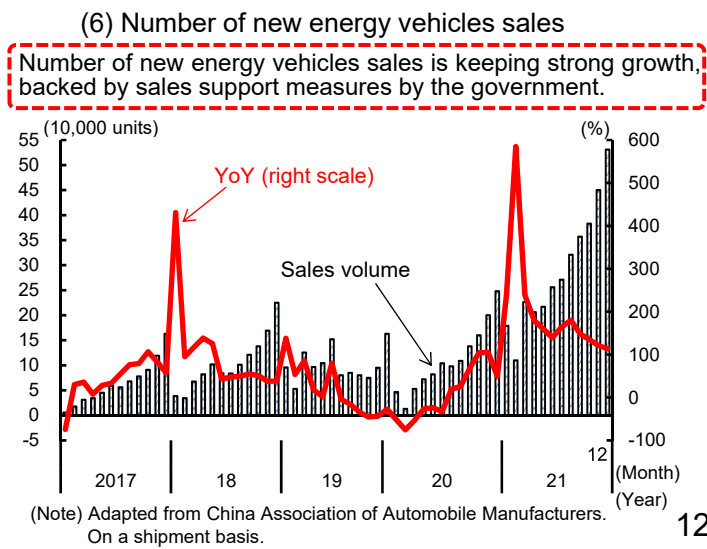
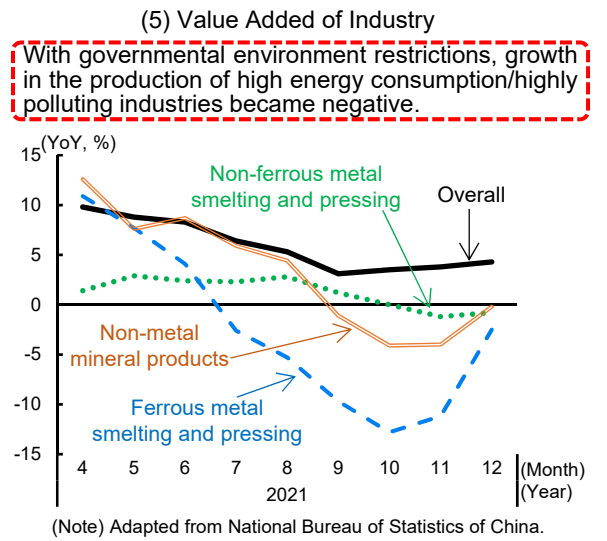
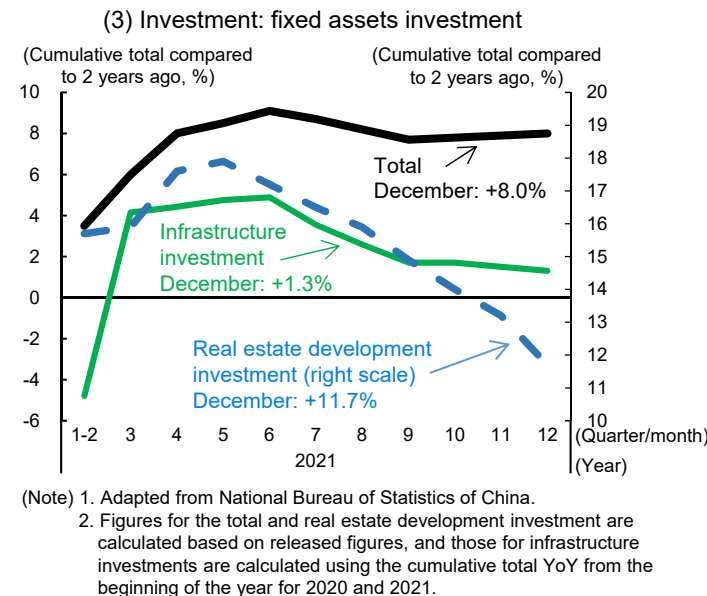
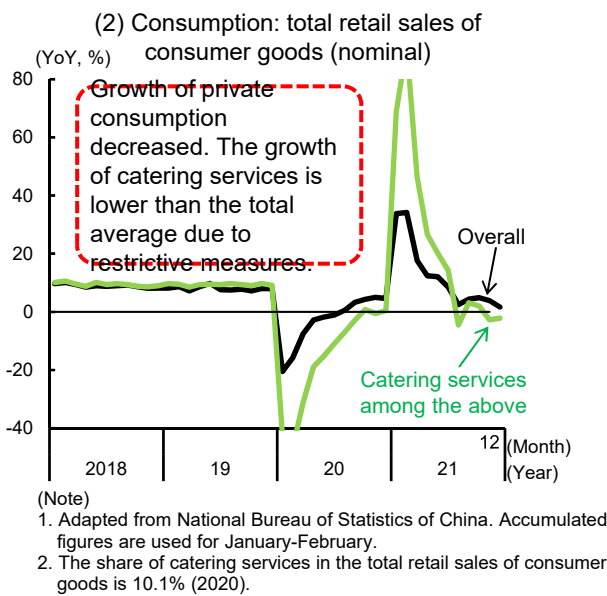
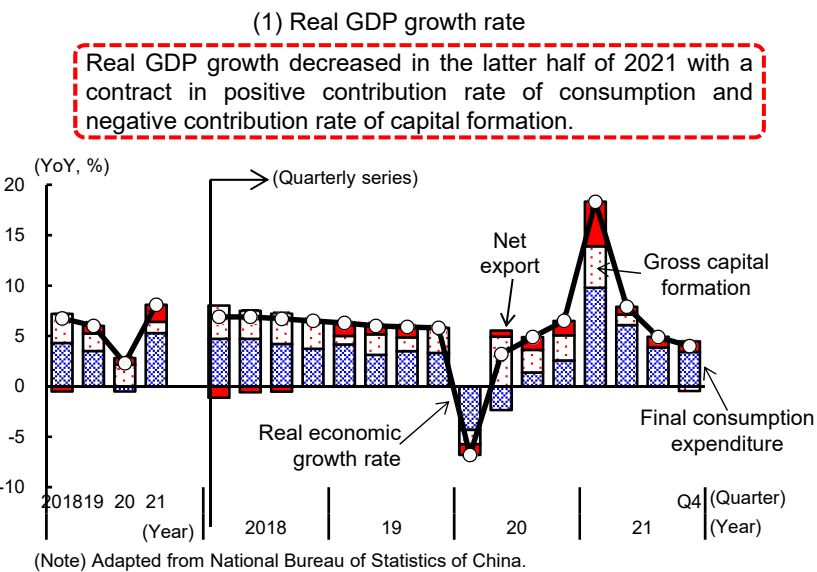


(5) Employees on nonfarm payrolls



# (Reference 2-2) Economic Trends in Major Regions [Chinese Economy]

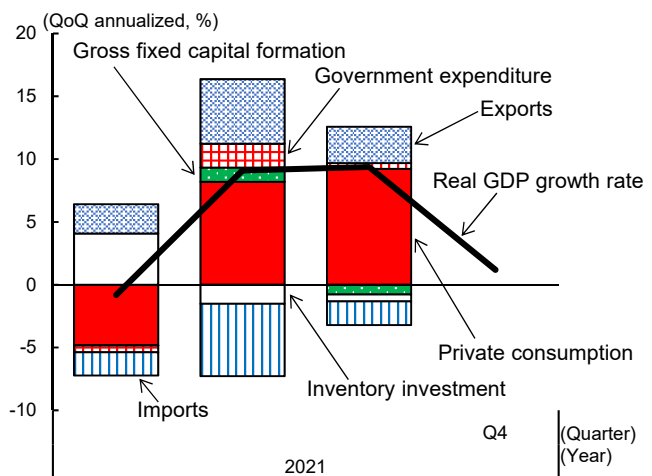
- In China, the pace of economic recovery has slowed down since the latter half of 2021. Consumption growth decreased with intermittent restrictive measures on economic activities. In addition, growth in real estate development investment decreased due to the reinforced measures to hold down the overheating of the real estate market.
- Government policies for the realization of a decarbonized society are bringing downward pressure on production. On the other hand, the policies may also work as a growth factor, for example, in the form of sales support measures for new energy vehicles promoting corporate innovation.



# (Reference 2-3) Economic Trends in Major Regions [European Economy]

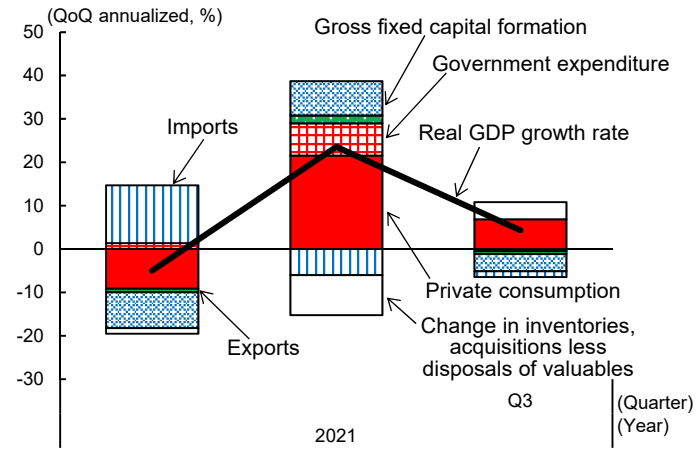
➤ In Europe, the economy recovered, led by private consumption, along with the lifting of restrictions. However, supply constraints are prolonged due to the shortage in raw materials and parts facing the rapid recovery in global demand. Also, since the autumn of 2021, the pace of recovery in business confidence in the service sector is slowing down with the resurgence of the spread of infection.

(1) Eurozone real GDP growth rate



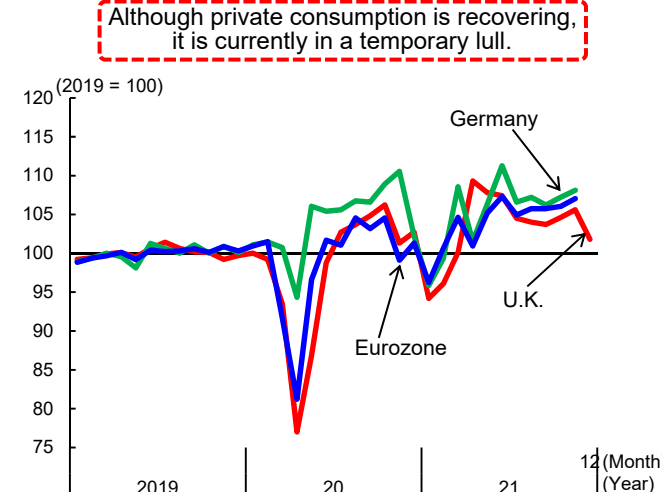
(Note) Adapted from Eurostat.

(2) U.K. real GDP growth rate



(Note) Adapted from Office for National Statistics.

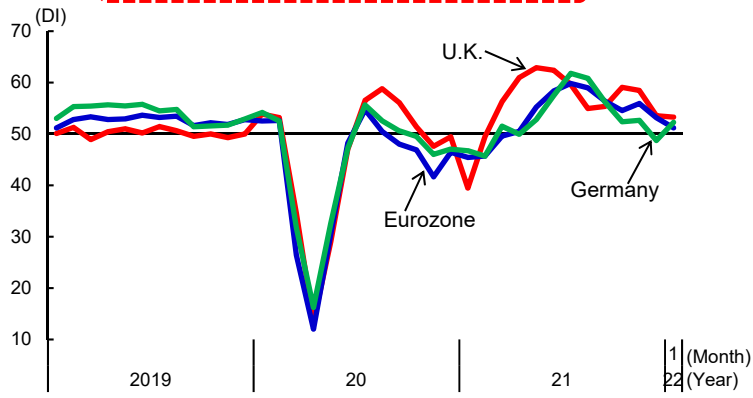
(3) Private consumption



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

(4) Business confidence in the service sector

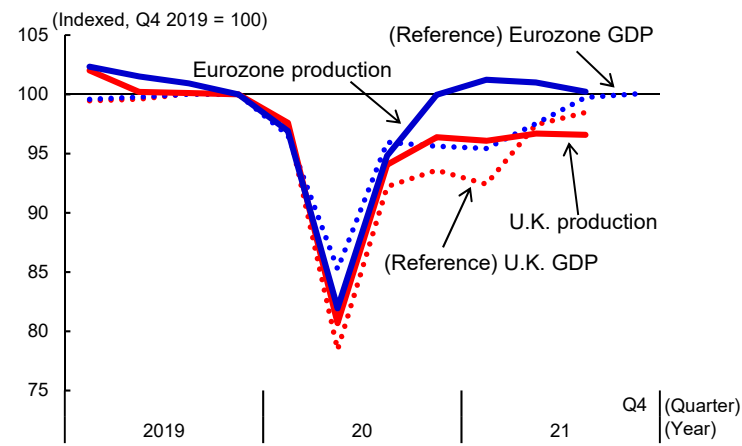
The recovery pace of business confidence in the service sector is slowing down.



(Note) 1. Adapted from Markit.  
2. Over 50 shows improvement, under 50 shows deterioration.

(5) Production

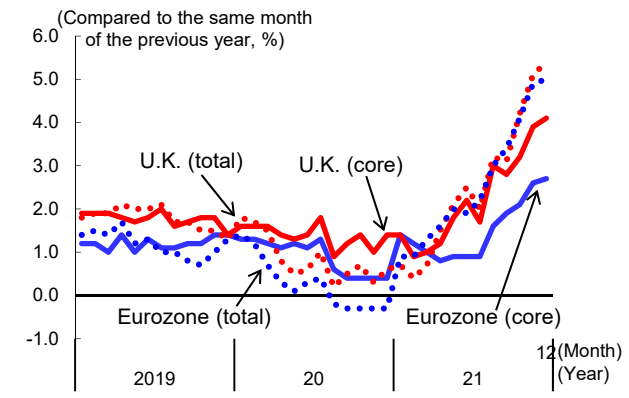
Production peaked after recovery.



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

(6) Price

Price increase rate is increasing.



(Note) Adapted from Eurostat, and Office for National Statistics. 13