World Economic Trends I < The 2020 Spring/Summer Report>

World Economy under COVID-19 Pandemic

(Summary)

November 18, 2020 Cabinet Office Government of Japan

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About "World Economic Trends": This report, published semi-annually since 2002, surveys and analyzes the trend of the world economy. This is the 37th issue.

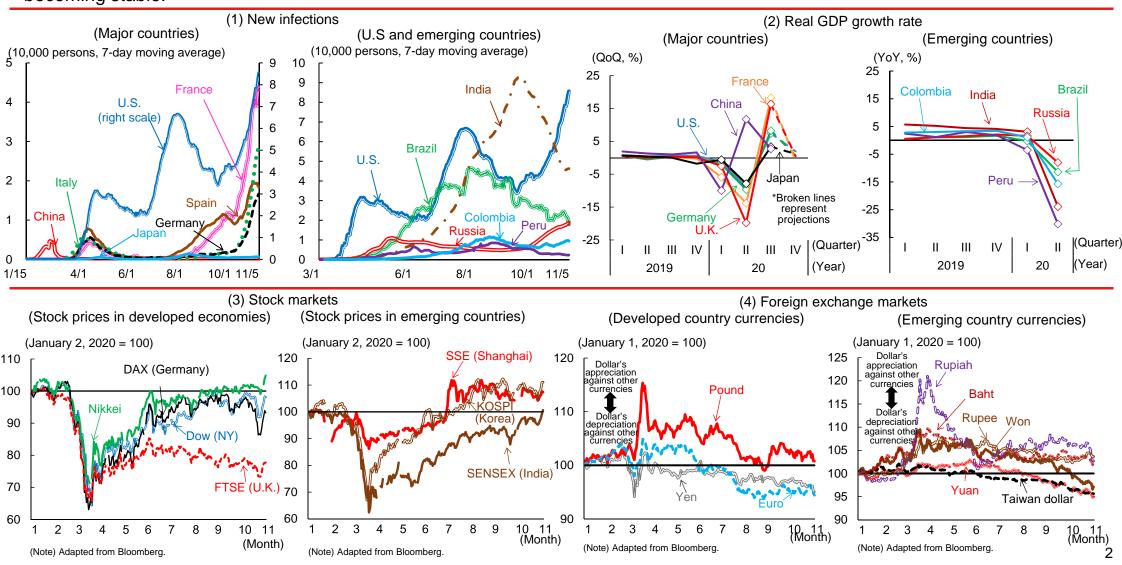
Chapter 1 World Economy under COVID-19 Pandemic

[Global COVID-19 Spread, Economic Shutdown to Reopening]

COVID-19 spread from China to major Western countries, emerging countries and the rest of the world.

Real GDP growth plunged in China in the first quarter of 2020 and in major Western countries and emerging countries in the second quarter.

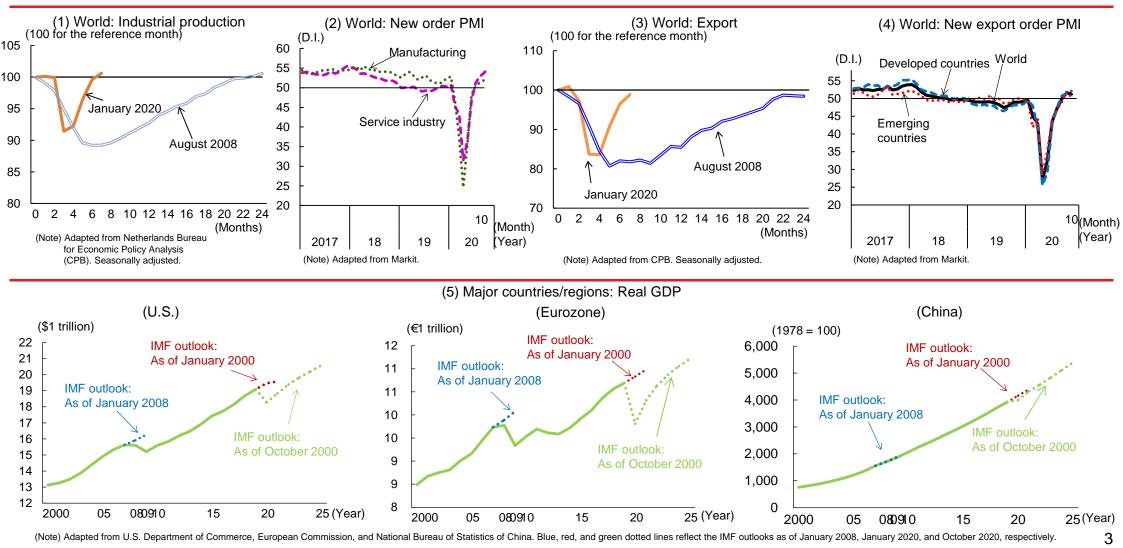
In international financial markets, stock prices crashed with currency exchange rates fluctuating in March, before gradually becoming stable.



Chapter 1 World Economy under COVID-19 Pandemic

[Impacts on World Economy and Recovery Path]

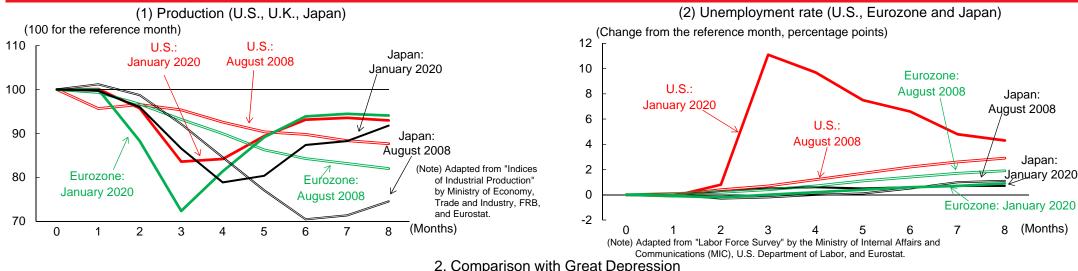
Industrial production declined more rapidly than during the global financial crisis but entered a recovery phase relatively earlier. The new order PMI (purchasing managers' index) has improved, reaching over 50. While exports posted a narrower decline than during the global financial crisis, they recovered more slowly than production did, although the new export order PMI also improved. The U.S. and Eurozone GDP path moved downward due to the global financial crisis. GDP paths in the three poles after the latest plunge hold the key to future global economic growth.

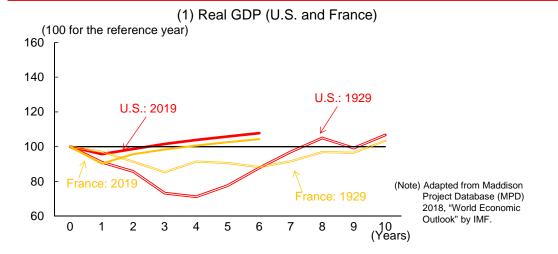


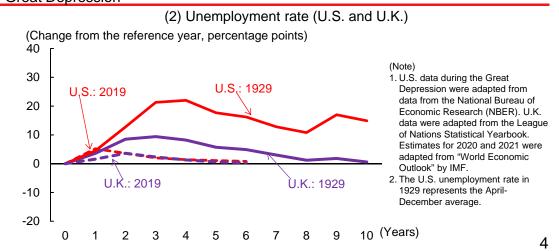
Chapter 1 World Economy under COVID-19 Pandemic [Comparison with Earlier Crises]

As the COVID-19 spread greatly suppressed economic activities, European and U.S. economic activities plunged more sharply than during the global financial crisis. In response to gradual economic reopening and fiscal and monetary policy support, however, the current recovery is relatively faster. Compared with the global financial crisis and the Great Depression, the unemployment rate rose faster this time in the United States. In Europe, however, the unemployment rate's rise was limited thanks to policy support for employment. Indications are that policy support has played a great role in the global economic recovery after economic reopening.

1. Comparison with Global Financial Crisis







Chapter 1 World Economy under COVID-19 Pandemic [World Economy Risks after COVID-19 Spread]

Based on economic and social changes, it is important to design policies for supporting recovery.

Lockdowns to hold down the COVID-19 pandemic have been artificial, reflecting no structural economic damage. As the pandemic has been spreading again, however, measures to suppress economic activities have been introduced again, increasing uncertainties about the future. As such uncertainties lead confidence to stagnate, concern about fiscal spending's sustainability through the subsequent prolongation of recession can be considered to be a medium-term risk for the world economy.



Uncertainties are growing through the renewed COVID-19 spread. As economic activities are restricted again in response to the renewed COVID-19 spread, growing uncertainties about the future have the potential to affect household consumption. corporate capital investment, and new employment over the long term. Capital investment restrictions and employment protection would exert downward pressure on productivity over the medium to long term.





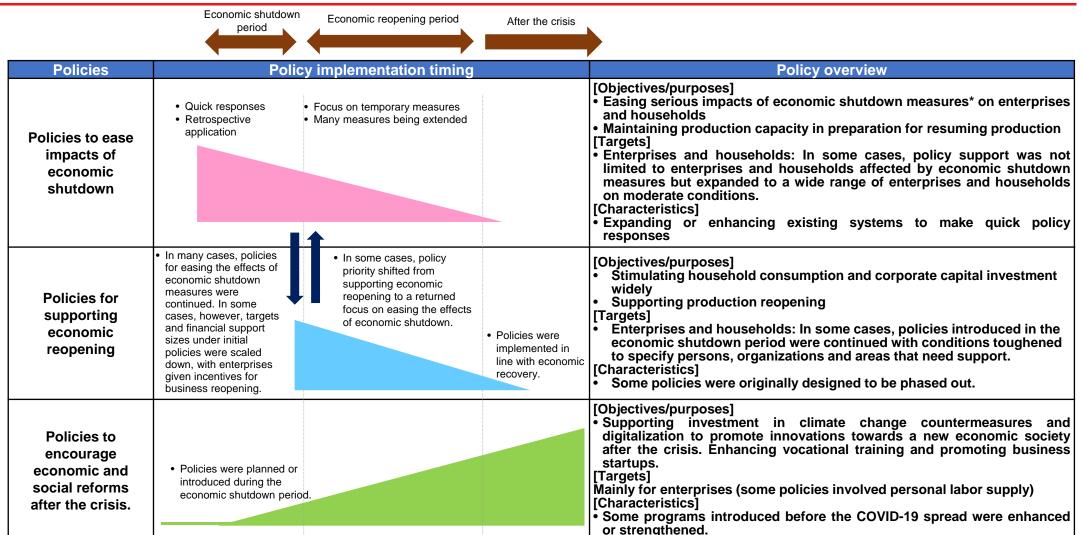
Trade issue trends and impacts on cross-border human traffic: Depending on the renewed COVID-19 spread in emerging and other countries, cross-border human traffic could take a long time to recover. Trade issues' impacts on trade and constraints on human traffic would weigh on global economic recovery.



Spillover effects of deteriorating fiscal conditions in developed countries and government debt accumulation in emerging and developing countries: While fiscal expansion has been inevitable as a crisis response, concern about its medium-term sustainability is likely to grow if economic stagnation is prolonged with fiscal conditions continuing deterioration in developed countries. As some emerging and developing countries have failed to hold down the COVID-19 spread, a concern is that a rise in the ratio of government debt to GDP under global economic stagnation would affect money flow in international financial and capital markets.

[(1) Overview and Characteristics]

Based on economic recovery conditions, policy priority gradually shifted from easing impacts of economic shutdown to supporting economic reopening. In response to the renewed COVID-19 spread, however, economic shutdown has been extended or resumed. Since the initial economic shutdown period, policies for encouraging reforms in anticipation of an end to the crisis have been introduced.



^{*}Economic shutdown measures include closing shops and facilities and restricting going outside and general social movement.

[(1) Overview and Characteristics]

Unprecedented policy scale

- √ Economic measures in the entire world were worth about \$12 trillion (about 1,300 trillion yen), equivalent to 8.5% of global GDP (IMF, as of October 13).
- √ See the table below for a breakdown by country

	Value	
Japan	About ¥233.9 trillion	42%
U.S.	About \$3.3 trillion (About ¥355 trillion)	15%
U.K.	About £569.5 billion (About ¥80 trillion)	26%
France	About €590 billion (About ¥72 trillion)	24%
Germany	About €1.3 trillion (About ¥155 trillion)	37%
Italy	About €611.2 billion (About 75 trillion)	34%
Canada	About C\$452.9 billion (About 37 trillion)	20%



√ Comprehensive measures including not only fiscal and monetary measures but also deregulation

<Specific deregulation measures> Easing regulations on remote medical care (U.S., France) and leverage for large banks (U.S.)

✓ Including the enhancement of existing policies and the resumption of policies taken amid the global financial crisis

<Specific cases for enhancing existing policies> Enhancing unemployment benefits (U.S.), enhancing operation curtailment systems (Germany), enhancing layoff systems and shortening screening periods (France), etc.

<Specific cases for resuming policies during the</p> global financial crisis>

Central bank's asset-purchasing program (U.S.)





Launching new initiatives (Examples)

- ✓ In cooperation with the government, the central bank launched financial mediation services for small and medium enterprises (U.S.)
- ✓ Introduction of an employment maintenance system (U.K.)
- ✓ Creating a recovery fund under an emergency recovery measure and authorizing the European Commission to issue bonds (EU) * Details of the examples in red are described later. 7

[(2) Major details]

Supporting enterprises

- Benefits for small and medium enterprises
- Subsidies
- Moratorium on or exemption from rent payment
- Moratorium on, cuts in or exemption from value added and income taxes
- Providing credit guarantees
- Loans (including those for supporting business startups), etc.

Supporting households

- Cash benefits for individuals or households
 - -Among major countries, only Japan and South Korea provided cash benefits to all people (individuals and households) without incomebased restrictions.
- Enhancing unemployment benefits
- Moratorium rent payment and student loan repayment
- Lowering value added tax rates
- Support for eating-out, etc.



Job retention support

- Employment maintenance systems (subsidizing wages for employees on leave)
- Return-to-work support benefit
- Cutting or eliminating employers' share of social insurance premium payments
- Exemption from loan repayment obligations on condition of employment maintenance, etc.

Growth strategy

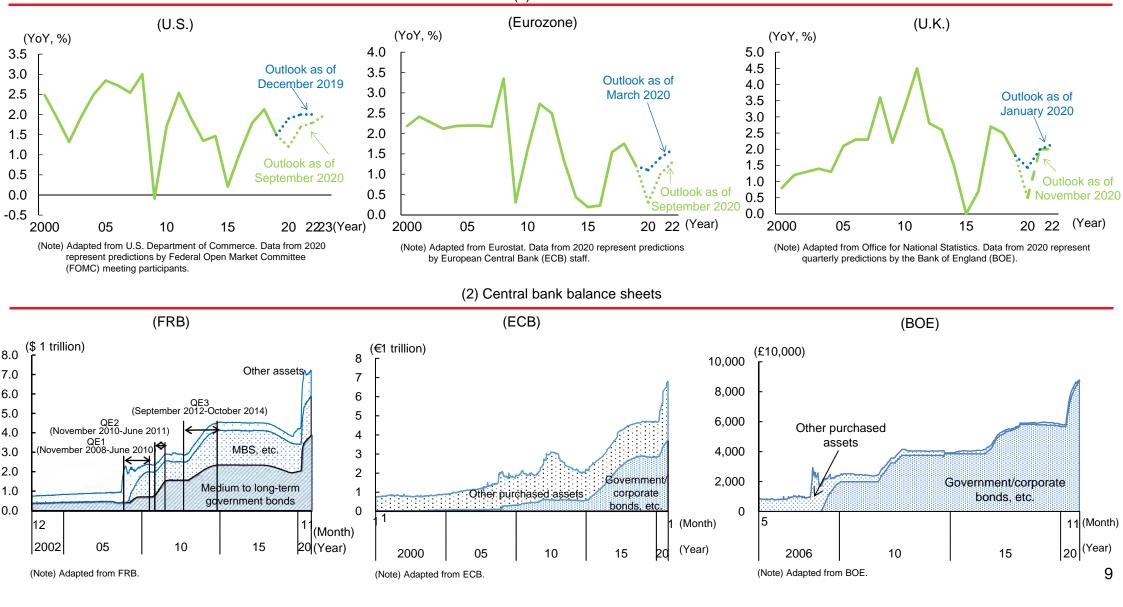
- Loans for supporting business startups (relisted)
- Germany
- Promoting a national hydrogen strategy and an AI strategy, supporting quantum technology research and development
- France
- Investment in future technologies (supporting cutting-edge technology development, returning to domestic production), cutting tax involving production, supporting green technology development
- EU, etc.

^{*}Red-letter measures are detailed later.

[(3) Monetary policies and their effects]

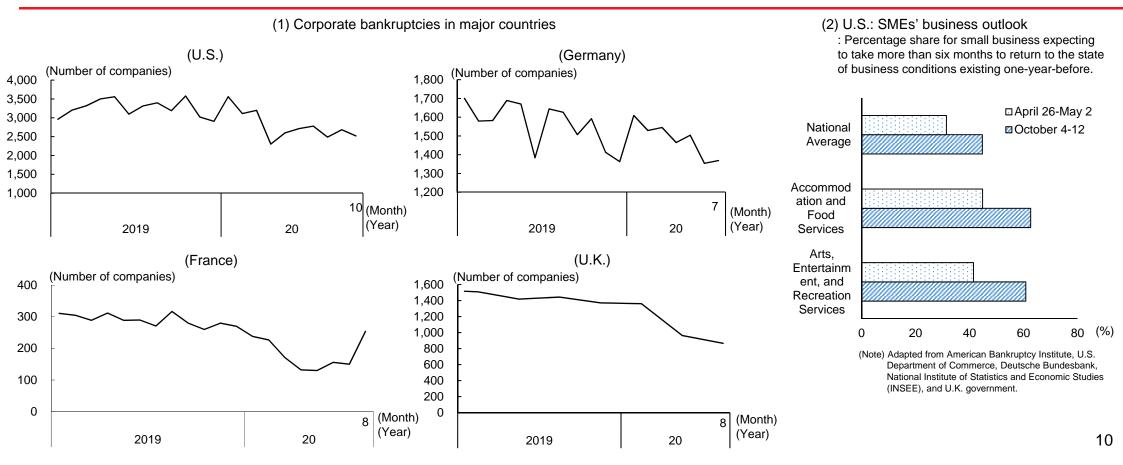
In major countries, price hikes in 2020 are expected to fall by approximately one percentage point from levels projected before the COVID-19 spread. They are projected to remain low even in 2022. Central banks implemented monetary easing measures, rapidly expanding their balance sheets.

(1) Price trends



[(4) Enterprise Support Measures and Business Trends]

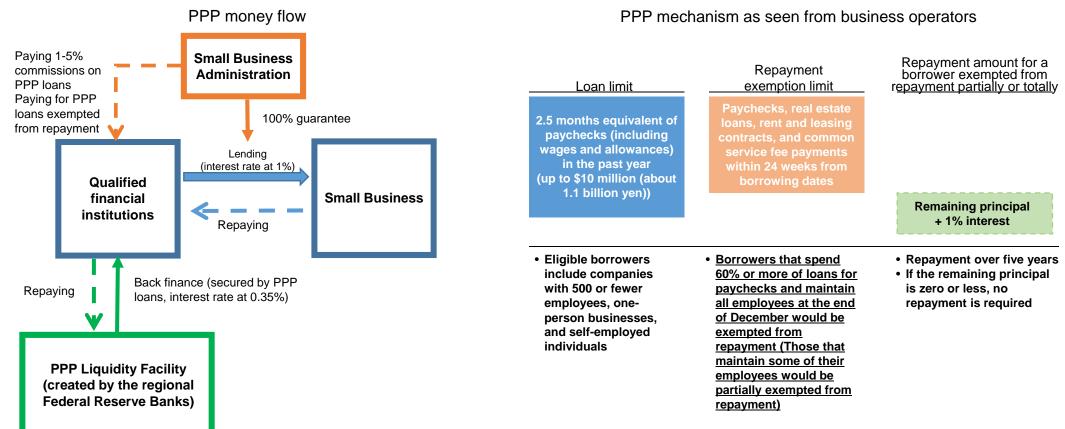
- ✓ A demand plunge under the current crisis has seriously affected areas dominated by small and medium enterprises (SMEs), which feature (1) constraints on liquidity and borrowings and (2) a limited number of trading partners that are difficult to find substitutes for in supply chains.
- ✓ Means to provide SMEs with liquidity include credit guarantees, loans, and benefits, as well as moratorium on, reduction of and exemption from rent, power bills and tax payments to reduce fixed expense.
- ✓ Corporate bankruptcies in major countries have not necessarily increased from pre-pandemic levels. Rather, they have decreased in some countries. Relevant factors may include delayed judicial procedures under the economic shutdown and policy measures (including U.S. SME loans, U.K. moratorium on rent payments, and suspension of bankruptcy filings in France and Germany). Surveys on SMEs' business confidence indicate that they are not optimistic about future business conditions.



[(4) Enterprise Support Measures and Business Trends]

Specific large-scale SME support measure: U.S. Paycheck Protection Program (PPP)

- ✓ Private financial institutions provide small business with loans to cover payroll costs, payments on business mortgage interest payments, rent, or utilities (from February 15).
- ✓ SMEs would conditionally be exempted from all or partial loan repayments (the Small Business Administration would pay private lenders amounts subjected to the exemption). A ceiling on such loans is set at \$659 billion (about 72 trillion yen), of which approvals through the application deadline of August 8 covered 525 billion (about 57 trillion yen).
- ✓ The regional Federal Reserve Banks have launched the PPP Liquidity Facility to provide private financial institutions with back finance secured by PPP loans. The scheme has enhanced the PPP by paving the way for small financial institutions: which pay higher fundraising costs than large banks, to participate in the PPP (outstanding PPP loans stood at \$68.2 billion as of August 31).

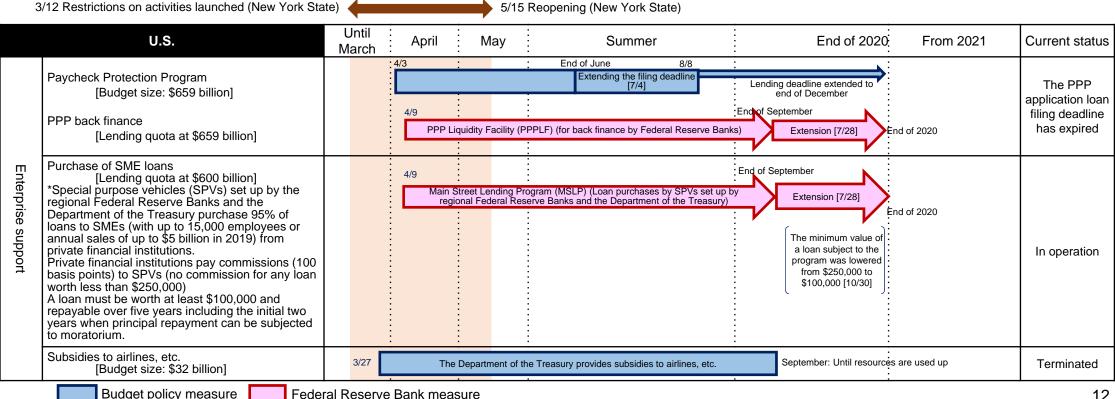


[(4) Enterprise Support Measures and Business Trends]

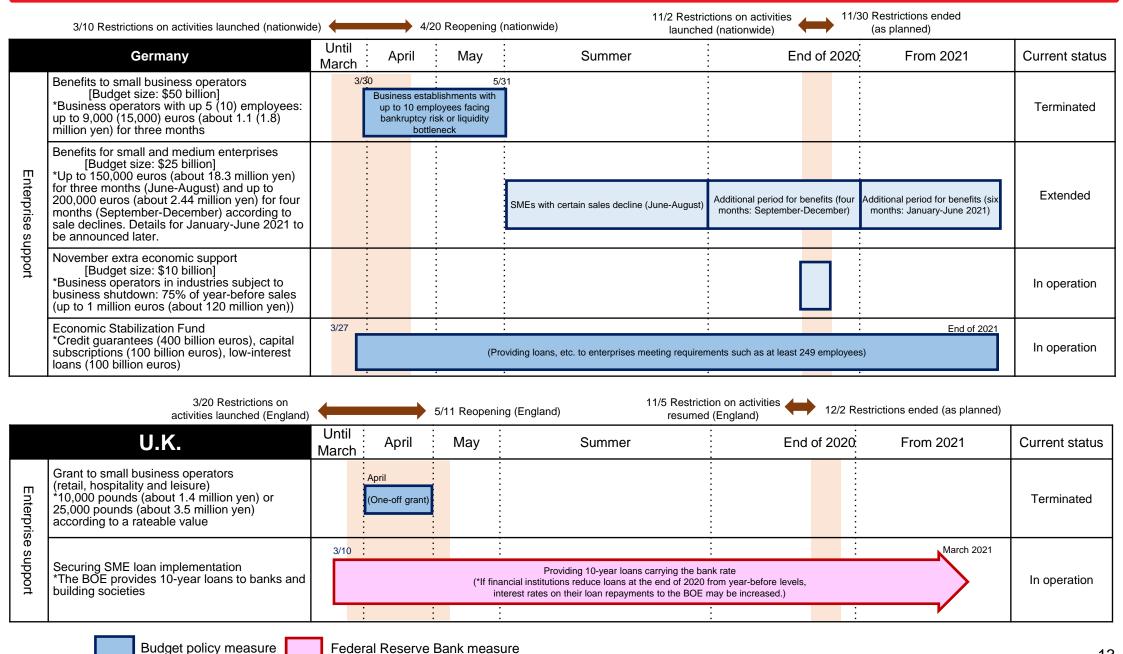
(Domestic comments regarding the PPP)

- In April, Treasury Secretary Stephen Mnuchin and others stated that the PPP protected more than 30 million jobs for hardworking Americans.
- In June, the government lowered the minimum percentage share of payroll expenses for PPP loans regarding repayment exemption (from 75% to 60%) and extended the period for spending PPP loans on paychecks (from 8 weeks to 24 weeks) [relaxation of requirements for repayment exemption], leading to concern that companies would spend loans for non-paycheck purposes and extend layoffs until the end of the year.
- A key point is the extent to which PPP borrowers would maintain employment at the end of the PPP.
- The maintenance of all employees, one of the requirements for repayment exemption, means that the total number of fulltime employees should remain unchanged and that the same employees would not have to be maintained. Experts question how the PPP would be effective for maintaining human capital over the medium to long term (Autor et al. 2020).

Enterprise support measures in major countries (summary)



[(4) Enterprise Support Measures and Business Trends]



Chapter 2 Policy Responses in Major Countries [(5) Employment support and labor market trend]

Employment support measures under a crisis include subsidizing wages for employees on leave, return-to-work support benefits, moratoriums on employers' shares of payroll tax and social insurance premium payments, and loans to business operators that would not have to be repaid if they maintain employment. To support job losers, unemployment insurance benefits are expanded.

> Introduced here are employment maintenance systems used widely in many countries under the current crisis.

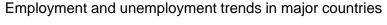
Employment maintenance systems used in Europe

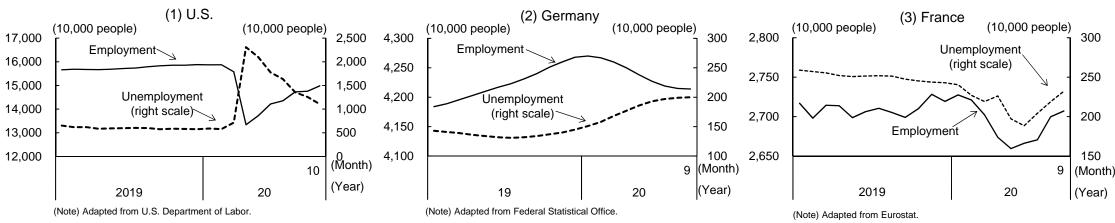
	Number of workers filing for support	(Reference) Number of employees	Budget quota	Execution amount
Germany	12.85 million (as of October)	42.14 million (as of September)	_	_
France	14 million (as of July 6)	27.07 million (as of September)	€24 billion (about ¥2.9 trillion)	€17 billion (about ¥2.1 trillion) (As of end of May)
U.K.	9.6 million (as of October 18)	32.51 million (as of September)	£54 billion (about ¥7.6 trillion)	£41.4 billion (about ¥5.8 trillion) (as of October 18)
(Reference) U.S.	_	149.81 million (as of October)	\$659 billion (about ¥72 trillion)	\$525 billion (about ¥57 trillion) (as of August 8)

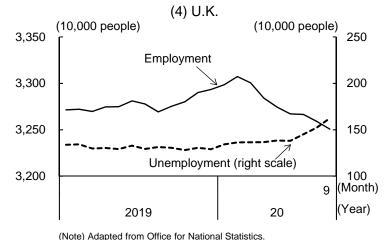
(Note) Described here are German short-term work benefits, French temporary leave benefits, the U.K. Coronavirus Job Retention Scheme, and the U.S. Paycheck Protection Program.

[(5) Employment support and labor market trend]

- ✓ During the economic shutdown period, unemployment rapidly increased in the United States, but unemployment increases in Germany and the United Kingdom were relatively moderate. Such difference may be attributable not only to employment system differences but also to a contrast between employment support measures for enterprises in Germany and the United Kingdom and the expansion of unemployment insurance benefits to job losers in the United States.
- ✓ After economic reopening, unemployment decreased and remained high in the United States. In Germany, France and the United Kingdom, unemployment showed no major increase until summer before increasing on the later termination of policy support.







Employment	Unemployment (right sca

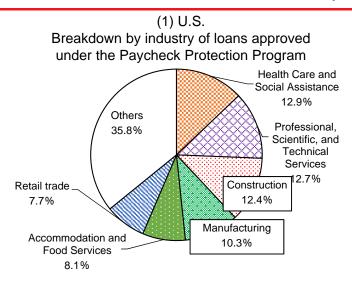
	Employment	Unemployment (right scale)	Non-labor force population
U.S.	From February to April: -25.36 million From April to October: +16.4 million	From February to April: +17.29 million From April to October: -12.02 million	From February to April: +8.33 million From April to October: -3.36 million
Germany	From February to September: -0.53 million	From February to September: +0.42 million	_
France	From February to May: -0.62 million From May to September: +0.48 million	From February to May: -0.3 million From May to September: +0.35 million	From February to May: +0.07 million
U.K.	From February to September: -0.57 million	From February to September: +0.26 million	From February to September: +0.47 million

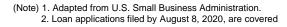
Labor market trends in major countries

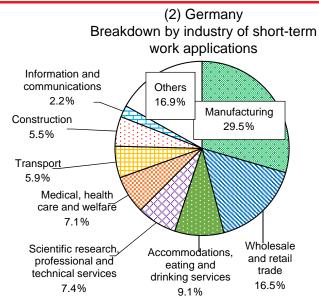
(Note) Non-labor force population in France was adapted from Datastream.

[(5) Employment support and labor market trend]

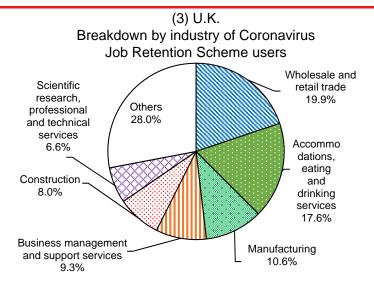
- ✓ Many countries including those in Europe have used employment maintenance systems. Some countries enhanced such systems for nonregular employees vulnerable to dismissal at the time of an economic slump (e.g., Germany has enhanced support for temporary employees between March and the end of the year, while excluding 'mini jobs' (with a monthly pay of up to 450 euros or a contract term of up to two months) from the enhanced support).
- ✓ These systems provide enterprises with incentives to maintain employment contracts and are effective for supporting the livelihood of workers and reopening economic activities quickly after the economic shutdown. They can prevent a rapid increase in layoffs and allow enterprises to cut labor costs in proportion to needs (business closure lengths), and are assessed as displaying highly positive cost-benefits.
- ✓ If prolonged, however, these systems could delay a labor transition from sectors where demand is not expected to recover.
- ✓ While it is difficult to decide when to end an employment maintenance system, the announcement of a timetable for phasing out such system in the United Kingdom has been appreciated as reducing uncertainties for enterprises (see the next slide).
- ✓ Employment maintenance systems have been frequently used in many countries. Sectors using these systems vary by country and center on those affected seriously by the economic shutdown (see below).







(Note) 1. Adapted from Federal Employment Agency.2. Short-term work applications filed by May 2020 are covered.



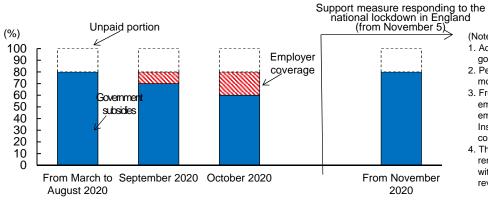
(Note) 1. Adapted from U.K. government.
2. Applications filed by July 31, 2020, are covered

[(5) Employment support and labor market trend]

Phasing out support policy: U.K. employment support system

- (1) The United Kingdom created the Coronavirus Job Retention Scheme on March 1. Its budget size is £54 billion (about 7.6 trillion yen). The scheme provides subsidies covering 80% of monthly wages for employees on temporary leave at enterprises that maintain employment.
- (2) From September, subsidies were offered to cover 70% of wages in exchange for enterprises' coverage of 10%. From October, subsidies were offered to cover 60% of wage in exchange for enterprises' coverage of 20%. In response to a national lockdown in England from November 5, the scheme has been covering 80% of wages since November. (Subsidies' coverage is planned to be reviewed in January 2021).
- (3) After the Job Retention Scheme is terminated at the end of March 2021, the government plans to introduce the Job Support Scheme that would (1) cover two-thirds of wages for employees who cannot work because of business closure requests, etc. and (2) cover 61.67% of wages for unworked work hours for employees returning to short-time work, with employers paying 5%, on condition that they work for at least 20% of their normal work hours.

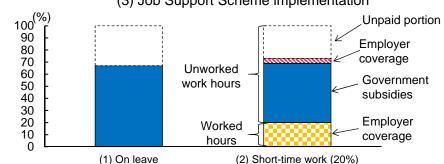
(1) and (2) Job Retention Scheme implementation



(Note)

- 1. Adapted from U.K. government.
- 2. Percentage shares of monthly wages
- 3. From August 2020, employers covered their employees' National Insurance and pension contributions
- 4. The scheme is planned to remain until March 2021, with the subsidy coverage reviewed in January.

(3) Job Support Scheme implementation



(Note)

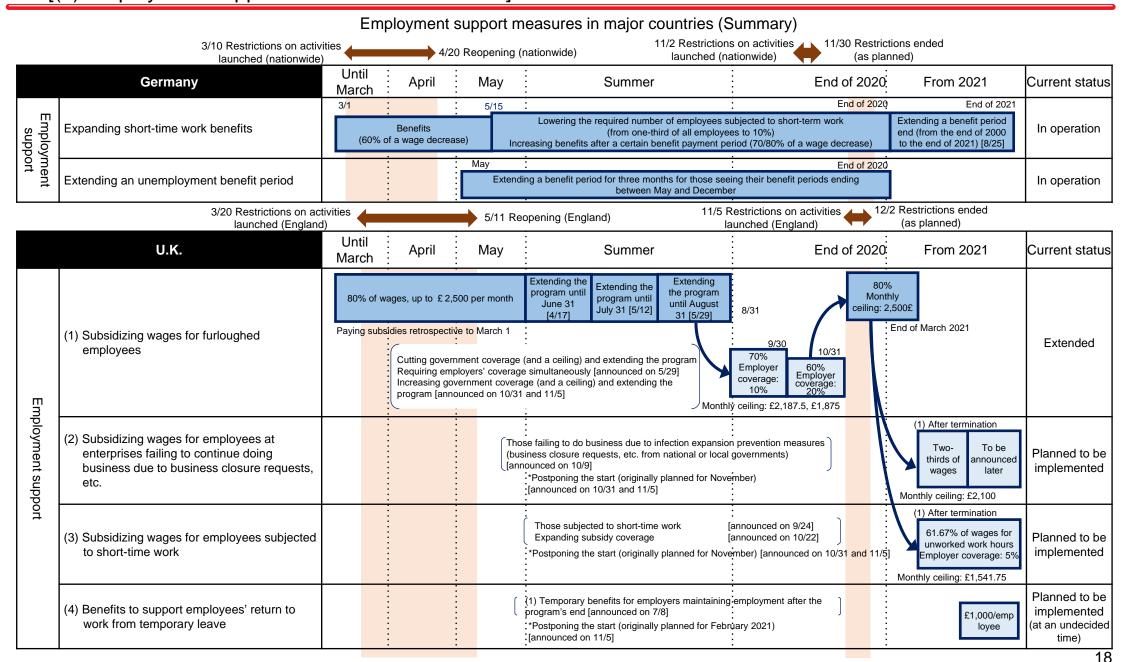
- 1. Adapted from U.K. government.
- 2. Percentage shares of monthly wages
- 3. The first pillar refers to (1) and the second to (2). The figure in a bracket in (2) represents the percentage share of worked hours in normal work hours.

(Comments on the U.K. Job Retention Scheme)

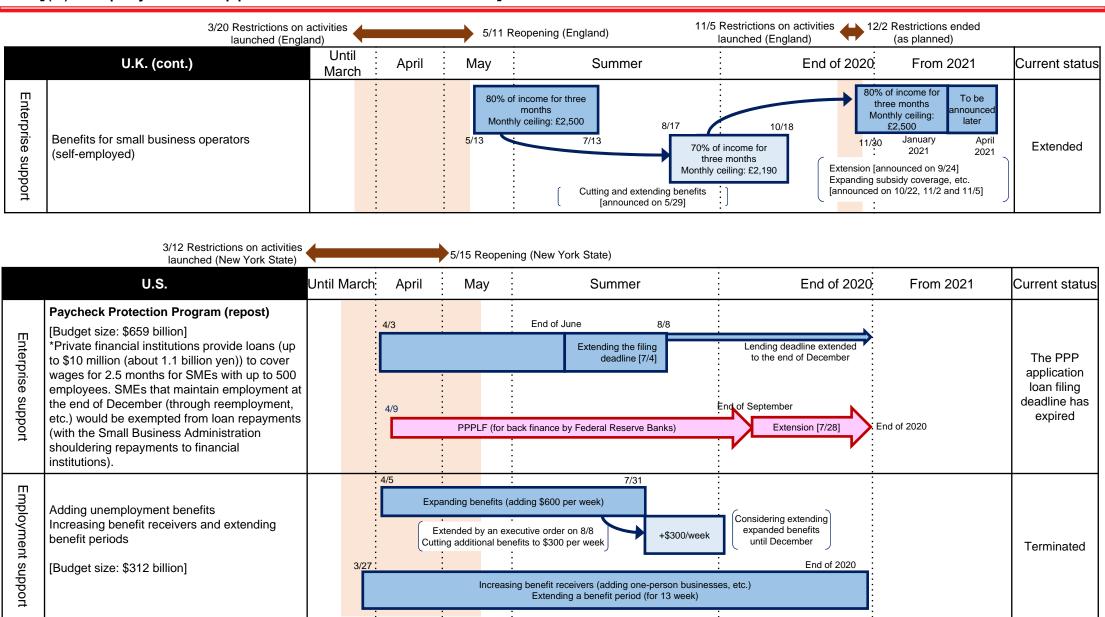
- When claims began to be filed for the scheme in April, Chancellor of the Exchequer Rishi Sunak stated that millions of jobs would be protected in the United Kingdom.
- Enterprises were feared to abuse the scheme (e.g., an employer could keep employees on telework at home, disguise them as on temporary leave and receive subsidies.)
 - *Until June, employees subject to subsidies had not been allowed to work as part-time employees.
- School shutdown and constraints on care services reportedly make it more difficult for women to return to work from leave. It is pointed out that the phaseout of the scheme should be flexible regarding job categories (whether jobs can be subjected to telework at home) and household conditions (whether employees engage in childcare or nursing care).

Sources: Andrew et al. (2020), Adams-Prassel et al. (2020)

[(5) Employment support and labor market trend]



[(5) Employment support and labor market trend]



[(6) Policies to promote economic and social reforms]

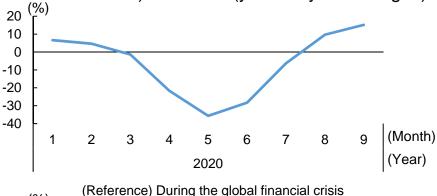
Startup Support Measures in European Countries

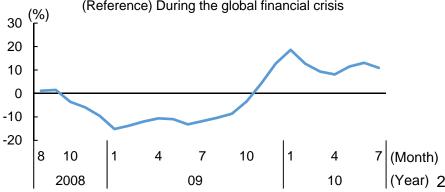
- ✓ In a bid to achieve economic recovery, governments have come up with policies to promote the redistribution of resources to high-productivity sectors and improve productivity through new technological innovations from the medium to long-term viewpoint to accelerate economic and social reforms.
- ✓ To promote economic growth and create job opportunities, governments in Europe have implemented financial and other support measures for startup enterprises.
- ✓ In France, the number of business startups (excluding one-person businesses) in the July-September quarter increased 15.2% year on year. Startups including one-person businesses increased remarkably in accommodation, eating and drinking service, manufacturing, and construction sectors. The French government in March announced a startup support measure, which is expected to help increase startups.

Support measures in major European countries

Country	Size	Major details		
Germany	€2 billion (about ¥240 billion)	 Funding through the Corona Matching Facility (capital subscription) Funding through local agencies (capital subscription) 		
France	€4 billion (about ¥490 billion)	 Funding through public investment banks (convertible bonds) Credit guarantee Accelerating tax refunds Providing subsidies immediately 		
U.K.	£1.25 billion (about ¥180 billion)	 Funding through the Future Fund (lending) Loans and subsidies to enterprises conducting research and development 		

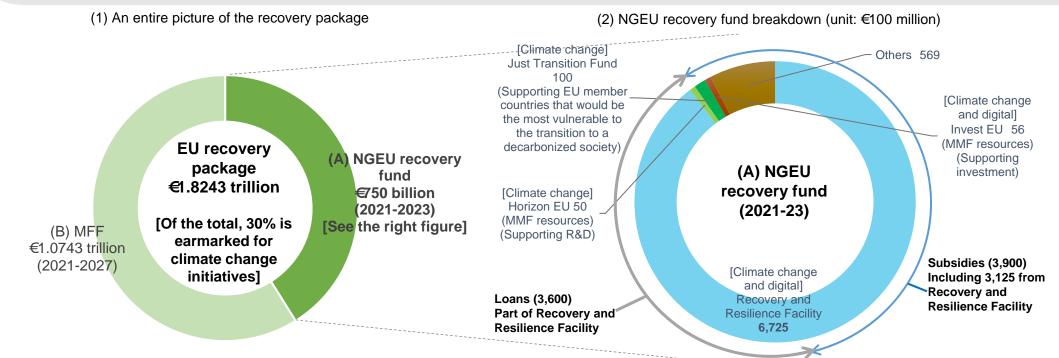
Number of business startups (excluding one-person businesses) in France (year-on-year changes)





[(6) Policies to promote economic and social reforms]

- ✓ The EU formulated the Next Generation EU recovery package (NGEU) as an extraordinary budget separately from the earlier-formulated Multiannual Financial Framework (MFF). The NGEU gives priority to climate change and digitalization initiatives.
- ✓ The NGEU aims to support demand recovery and enhance the EU's growth potential and economic resilience.



(A) NGEU recovery fund

- The European Commission issues bonds to raise funds in the capital market. These bonds will be redeemed by 2058.
- The EU plans to introduce a plastic waste tax in 2021 and border carbon and digital taxes in 2023 to raise financial resources for bond redemption.
 (B) MFF
- MFF resources include contributions from the EU members and a portion of valued added tax revenues.

Recovery and Resilience Facility

- Each EU member will formulate a three-year spending plan from 2021 regarding the facility for approval by the European Commission.
- Of the subsidies, 70% will be distributed to the member countries in 2021-22 and the remaining 30% in 2023.
- * Subsidies for 2021-22: Based on 2015-19 unemployment rates, living standards, population

Subsidies for 2023: Based on real GDP contraction in 2020, and 2020-21 real GDP fluctuation, living standards, and population.

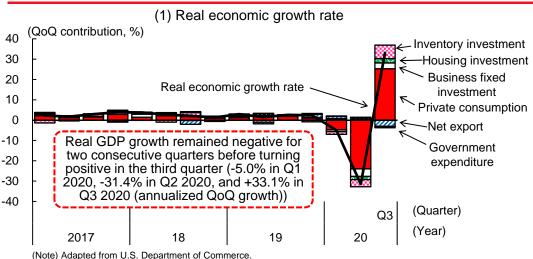
Message from 2020 World Economic Trends I

- ✓ While advanced and Asian economies have rebounded from a substantial plunge caused by the COVID-19 pandemic, Western countries are seeing another wave of COVID-19 infections. Continuous policy support is indispensable for sustaining the rebound.
- ✓ These economies' relatively quick rebound from the COVID-19 plunge is attributable not only to their gradual reopening but also to the seamless implementation of fiscal and monetary policy measures responding to economic reopening conditions. Quick and large-scale prompt policy responses have also been successful.
- ✓ Countries have implemented many common policy responses. Policy objectives gradually transitioned from easing economic shutdown effects to supporting economic reopening. When economic activities were restricted again due to the re-expansion of COVID-19 infections, these countries flexibly enhanced economic support.
- ✓ During a transition to gradual economic reopening, countries focused on support for sectors and enterprises vulnerable to the economic shutdown and switched to policy incentives for enterprises to have employees return from leave to work.
- ✓ Some policies taken during the economic shutdown sought to promote economic and social reforms after the crisis. Given that many countries implemented various initiatives such as support for business startups and digital investment for a new economic society after the pandemic and saw a rebound in business startups, it is important to nurture reforms.

Chapter 3 Economic Trends in Major Regions [U.S. economy (1)]

The U.S. economy rapidly deteriorated due to the COVID-19 pandemic. Since May, however, consumption, production, and employment rebounded, reflecting gradual economic reopening. It scored positive growth in the third quarter after a contraction.

1. Trends in U.S. economy (1)



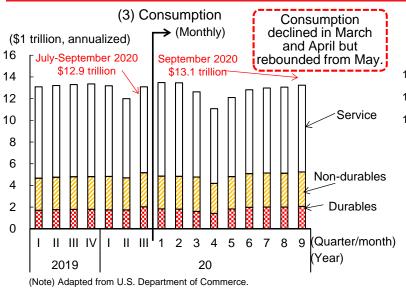
Ranking	Months	(Trough)		(Peak)
<u>1st</u>	<u>128</u>	<u>June 2009</u>	ı	February 2020
2nd	120	March 1991	١	March 2001
3rd	106	February 1961	١	December 1969
4th	92	November 1982	۲	July 1990

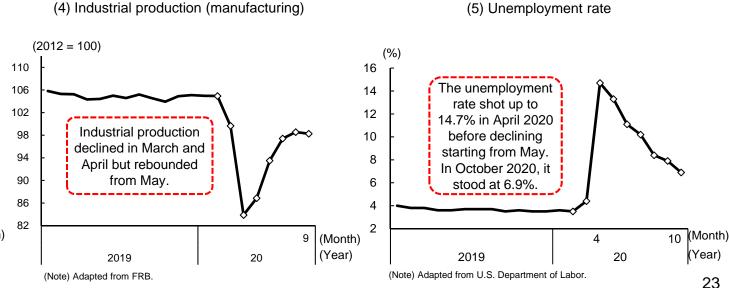
(2) Length of recovery

In April 2020, the
National Bureau of
Economic
Research (NBER)
identified February
2020 as a peak.
The longest-ever
recovery ended.

(Note) Adapted from NBER.

2. Trends in U.S. economy (2)





Chapter 3 Economic Trends in Major Regions

[U.S. economy (2)]

While the rebound is expected to continue, attention must be paid to domestic and overseas COVID-19 trends. We should also take note of a budget deficit expansion through the enactment of various measures, future monetary policy trends, and China and other trade issues.

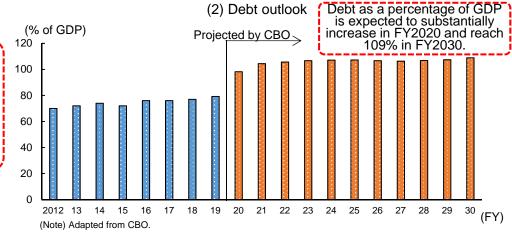
3. Trends in U.S. economy (3)

(1) Growth forecasts by various organizations

	2019 (actual)	2020 (projected)	2021 (projected)	2022 (projected)
IMF (October 2020)		-4.3%	3.1%	1
OECD (September 2020)	rotember 2020) FOMC ptember 2020) CBO	-3.8%	4.0%	1
FOMC (September 2020)		-3.7%	4.0%	3.0%
CBO (July 2020)		-5.8%	4.0%	2.9%

(Note) The FOMC projection represents the median of projections by FOMC meeting participants (year-on-year growth in the October-December quarter).

Growth is forecast to substantially fall in 2020 before recovering in 2021. However, there are uncertainties about the re-expansion of COVID-19 infections.



4. Trends in U.S. economy (4)

(3) Change in policy interest rate

Interest rate projections by FOMC meeting participants (as of the September 2020 meeting) 2020 2021 2022 2023 2019 (actual) (projected) (projected) (projected) (Actual) (Projected) Two rate cuts Unchanged Unchanged Unchanged Unchanged Three rate cuts On March 16, 2020, the target Federal Funds (FF) rate was cut to 0.00-0.25% 95 2000 15 20 1990 05 (Year) (Note) 1. Adapted from FRB.

The FOMC held two extraordinary meetings in March 2020. The policy interest rate target was cut to 0.00-0.25% for an effective zero interest-rate policy. The target FF rate is projected by the FOMC meeting participants to

remain unchanged until 2023.

(4) Trade issues

(China)

- The Hong Kong Autonomy Act was enacted (July 14) Paving the way for sanctions to be imposed on individuals and organizations infringing on Hong Kong's autonomy
- o Restrictions on trade with Chinese enterprises

(Europe)

- o The reason for an additional tariff that is planned to be implemented is the Digital Service Tax introduction.
- o The reason for an additional tariff that has been imposed since October 2019 is EU subsidies granted to Airbus. (A plan to expand the range of products subject to the additional tariff is under consideration.)

^{2.} The policy interest rate represents the target FF rate. Since December 2008, the target has been displayed as a range of 0.25 percentage points. The graph tracks the upper limit.

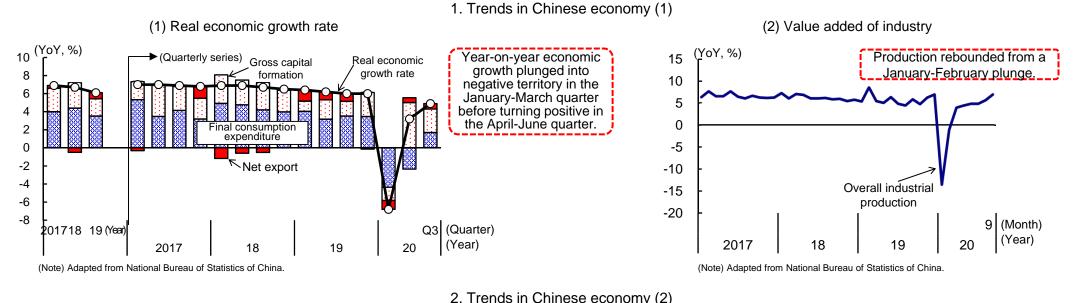
Chapter 3 Economic Trends in Major Regions

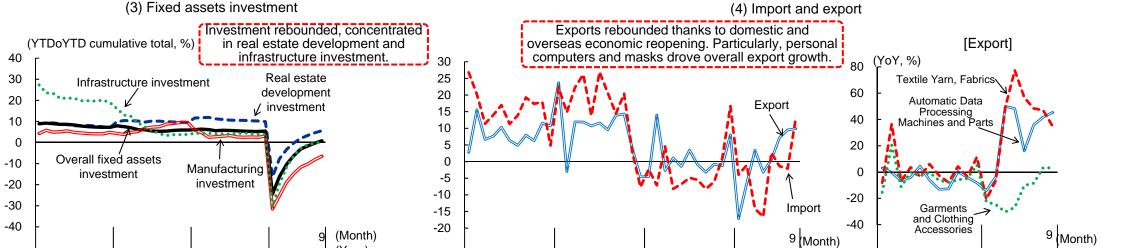
(Year)

[Chinese economy]

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

The Chinese economy is recovering. Production plunged due to economic shutdown before rebounding quickly in line with economic reopening. On the demand side, investment has rebounded in addition to exports.





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

2017

2019

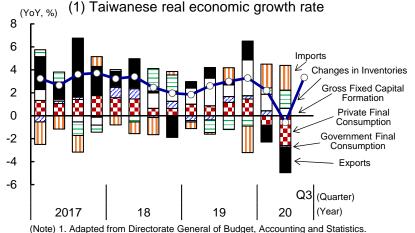
(Year)

Chapter 3 Economic Trends in Major Regions [Chinese and Asian economies]

However, consumption is taking more time to rebound due to a plunge in contact-based consumption and deterioration in employment.

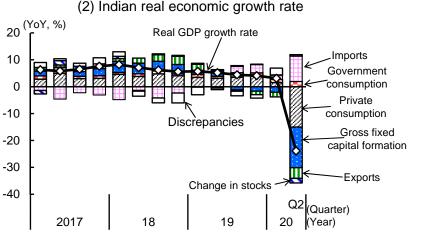
Other Asian economies plunged in various ways depending on COVID-19 infection trends and containment measures.

3. Trends in Chinese economy (3) (5) Total retail sales of consumer goods (6) Online retail sales (7) Urban surveyed unemployment rate The unemployment rate considerably Consumption, in particular catering service, is taking more time to recover, while online retail sales are increasing increased in February. (YoY, %) (YTDoYTD cumulative total) 50 6.5 Nominal growth rate Online retail sales (goods) 10 40 6.0 0 30 Total retail sales 20 -10 Real growth rate 5.5 10 -20 5.0 0 -30 Online retail sales -10 -40 4.5 (goods and services) Catering services -20 -50 -30 4.0 (Month) (Month) (Month) (Year) 2017 18 20 2017 18 20 (Year) (Year) 18 (Note) 1. Adapted from National Bureau of Statistics of China. (Note) 1. Adapted from National Bureau of Statistics of China. 2. Real growth rate have yet to be published for March 2017, January-February (Note) Adapted from National Bureau of Statistics of China 2. Data for June and October 2017 have yet to be published. 2018, March 2019, June 2019, September 2019, and December 2019. Trends in other Asian economies



Adapted from Directorate General of Budget, Accounting and Statistics.
 As data for the July-September quarter of 2020 represent first estimates, some part of their breakdown has yet to be published.

(2) Indian real economic growth re



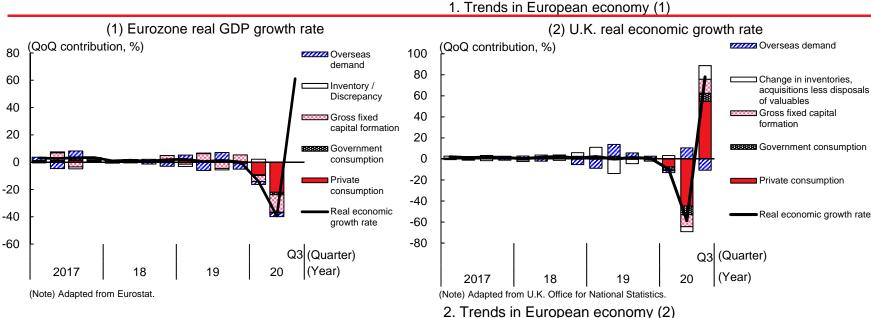
In Taiwan, a region where the COVID-19 pandemic has not spread widely, the economic contraction was relatively limited. However, In India, a country where the pandemic has spread widely with severe lockdowns implemented, the economy posted a deep contraction.

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Chapter 3 Economic Trends in Major Regions

[European economy (1)]

In Europe as well, real GDP sharply contracted in the first and second guarters of 2020. Although production and exports are rebounding in line with economic reopening, the European Commission has forecast that the Eurozone would post negative economic growth in the fourth guarter due to the re-expansion of COVID-19 infections.

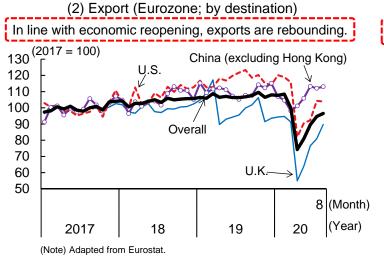


As national lockdowns were implemented to hold down COVID-19 infections, European real GDP including private consumption declined sharply in the first and second quarters.

In the second quarter, particularly, real GDP posted the largest contraction since GDP began to be compiled.

(1) Production In line with economic reopening, production is rebounding 110 (2017 = 100) 100 90 80 Eurozone Germany 70 Spain France 60 ····· Italy 50 (Month) (Year) 2017 18 19 (Note) 1. Adapted from Eurostat.

2. The construction industry is excluded from the industrial production



(3) Outlook of real GDP growth rate

Negative growth is expected for the fourth quarter 2020.

Country/	Real GDP growth rate (QoQ/YoY)				
Country/	Actual	Projected	Projected		
region	Q3 2020	Q4 2020	2020	2021	
Eurozone	12.6%	-0.1%	-7.8%	4.2%	
Eurozone	12.6%	(-3.5)	(+0.9)	(-1.9)	
Cormony	8.2%	0.6%	-5.6%	3.5%	
Germany	0.2%	(-2.6)	(+0.7)	(-1.8)	
France	18.2%	-1.0%	-9.4%	5.8%	
France	10.2%	(-3.9)	(+1.2)	(-1.8)	
U.K.	15.5%	0.5%	-10.3%	3.3%	
U.K.	13.5%	(-2.9)	(-0.6)	(-2.7)	

(Note) Adapted from Autumn 2020 Economic Forecast (November 5), European Commission.

Data in brackets indicate revisions from previous projections (July). 27

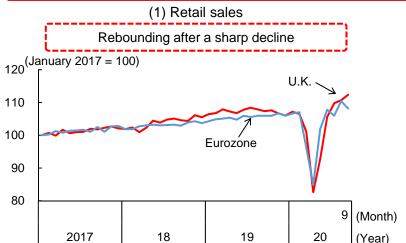
Chapter 3 Economic Trends in Major Regions

[European economy (2)]

While consumption is rebounding, the unemployment rate is rising, indicating that future consumption trends should be closely watched.

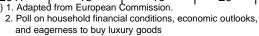
Next year's economic recovery is expected to be weak. There are risks regarding the budget balance deterioration and U.K.-EU trade negotiations.

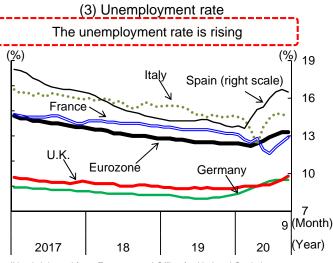
3. European economic outlook and risks





(2) Consumer confidence Consumer confidence is rebounding now 10 (<u>D</u>.l.) 14 12 0 10 Eurozone -10 -20 10 (Month) 2017 18 19 (Year) (Note) 1. Adapted from European Commission.





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

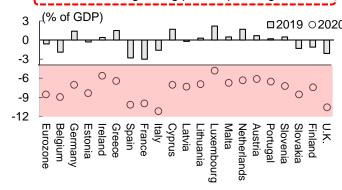
(1) Outlooks by international organizations A weak recovery is expected for 2021.

(YoY, %) 2020 2021 5.2 Eurozone -8.3 4.2 **IMF** Germany -6.0 (October 2020) France -9.8 6.0 U.K. -9.8 5.9 5.1 Eurozone -7.9 -5.4 4.6 OECD Germany (September 2020) France -9.5 5.8 U.K. -10.17.6

(Note) Adapted from "World Economic Outlook, October 2020" by IMF and "Economic Outlook, September 2020" by OECD.

4. Eurozone and U.K. economic outlook and risks

(2) Budget outlook Budget balances are dramatically deteriorating due to growing public spending.



(Notes) 1. Adapted from Eurostat.

2. Budget balances are on a general government basis.

(3) EU-U.K. trade negotiations

While the negotiation deadline is nearing major išsues are still pending

(Major issues)

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- How to secure U.K. harmony with EU regulations on labor and government subsidies (presence or absence of U.K. decision-making rights)
- Fishing rights in U.K. waters

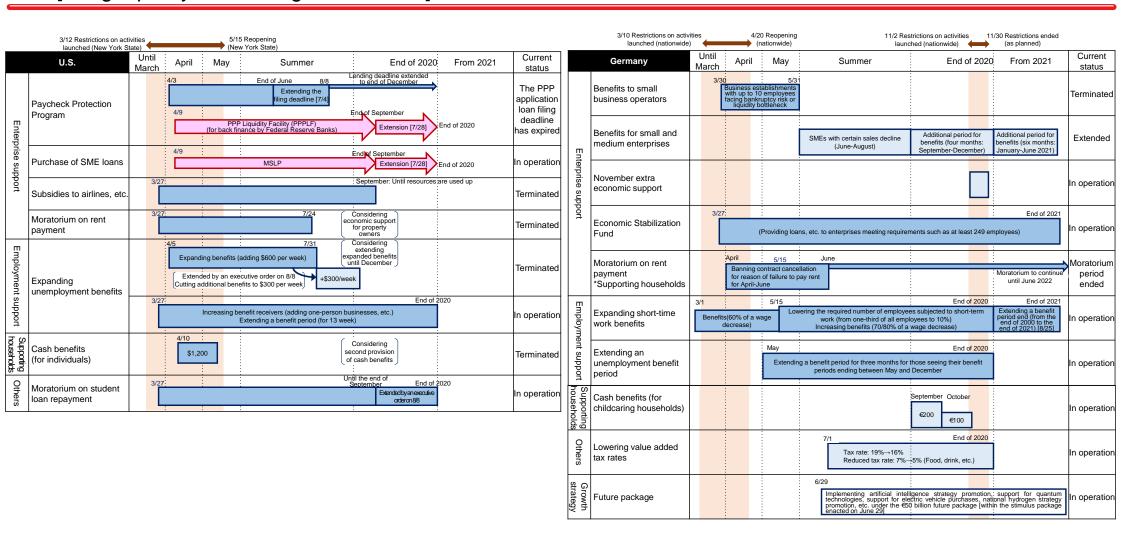
(Agreed measures)

Continuing free trade without tariffs or volume quotas

(Key schedule)

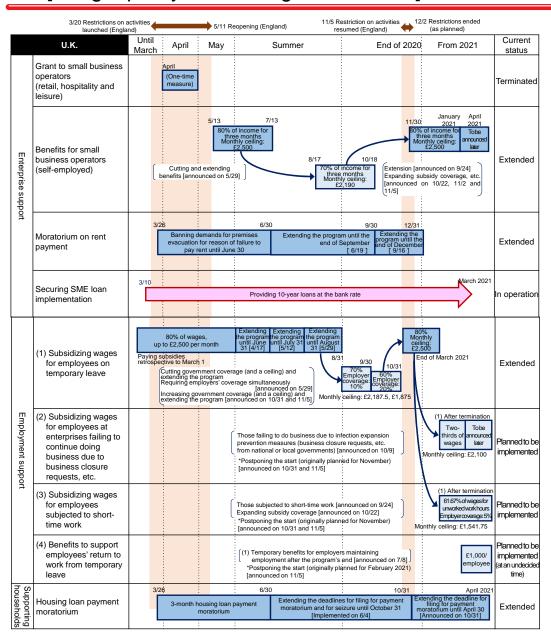
12/31: The transition period will end.7

(Reference) Chapter 2 Policy Responses in Major Countries [Budget policy: Chronological overview]



(Note) Dates in the table basically represent those for starting and ending the implementation of (applications for) measures (if starting dates for some measures are unknown, dates for deciding on or enacting them are given).

(Reference) Chapter 2 Policy Responses in Major Countries [Budget policy: Chronological overview]



	3/20 Restrictions on launched (Engla			5/11 Re		testriction on activities 12	/2 Restrictions ended (as planned)	
	U.K. (cont.)	Until March	April	May	Summer	End of 2020	From 2021	Current status
Ott	Lowering value added tax rates					x rate: 20%→5% d drinking, and tourism)	March 2021 Extending the programunti March 31 [924]	In operation
Others	Support for eating-out				Monday, Tuesday and Wednesday in August Covering a half of eating out costs Up to £10			Terminated
Growth strategy	Energy efficiency improvement for public facilities and housing				9,	30 January Providing subsidies for energefficiency improvement and low-carbonization in the publisector including schools and hospitals	y lic	In operation
						·		
	EU	Until March	April	Мау	Summer	End of 2020	From 2021	Current status
Employment support	Subsidizing employee leave benefits (loans to member governments to cover subsidies)		4/9				End of FY2022	In operation
Others	NGEU recovery fund						2021-2023 Economic recovery and structural reforms (specifics left to each member country)	Planned to be implemented
Growth strategy	Healthcare, environment, and digitalization R&D (Horizon Europe)						2021-2027 Subsidies for research projects	Planned to be implemented
strategy	Investment promotion program (InvestEU)						2021-2027 Credit guarantees, technical advices, etc.	Planned to be implemented

(Note) Dates in the table basically represent those for starting and ending the implementation of (applications for) measures (if starting dates for some measures are unknown, dates for deciding on or enacting them are given).

(Reference) Chapter 2 Policy Responses in Major Countries [Monetary policy: Overview]

		FRB	ECB	BOE
	Policy interest	FF rate (target range): 1.50 ~ 1.75% [October 2019] →1.00 ~ 1.25% [3/3] →0.00 ~ 0.25% [3/15] *Duration: Of the 17 FOMC meeting participants on September 16, 13 agreed that it would be appropriate to maintain the current target until the end of 2023.	Main refinancing rate: 0.00% [March 2016] Marginal facility rate: 0.25% [March 2016] Deposit facility rate: -0.50% [September 2019]	Bank rate (reserve deposit rate): 0.75% [August 2018] →0.25% [3/10] →0.10% [3/19]
Asset put	es	U.S. Treasuries: \$500 billion [3/15] →No ceiling [3/23] →\$80 billion/month [6/10] •Duration: Continuation over several months [6/10] Corporate bonds (new) Corporate bonds (outstanding) Total: \$750 billion [3/23] •Duration: Until September 2020 [3/23] →Until December 2020 [7/28]	Eurozone member government bonds, corporate bonds, commercial paper (CP) [added on 3/18], covered bonds, asset-backed securities: (1) Asset purchase program: Total: €20 billion/month [September 2019] + €120 billion [3/12] · Duration: Until December 2020 for €120 billion [3/12] (2) Pandemic Emergency Purchase Program	U.K. government bonds: £435 billion [August 2016] →£625 billion [3/19] →£725 billion [6/17] →£875 billion [11/4] · Duration: Until around the end of 2021 (11/4) Corporate bonds: £10 billion [August 2016] →£20 billion [3/19]
pulcilases	or quai	CP: No ceiling published [3/17] (including flexible handling of government bonds' share of assets and purchase of Greek	CP: No ceiling set [3/17] · Duration: Until March 2021	
ses	for quantitative easing)	Mortgage-backed securities: \$200 billion [3/15] →No ceiling set (adding commercial mortgage-backed securities) [3/23] → \$40 billion/month [6/10] · Duration: Continuation for several future months [6/10]	government bonds): Total: €750 billion [3/18] →€1.35 trillion [6/4] · Duration: Until December 2020[3/18] →Until June 2021 [6/4]	
		Municipal bonds: \$500 billion [4/9] · Duration: Until September 2020 [4/9] → Until December 2020 [6/9]		3

(Reference) Chapter 2 Policy Responses in Major Countries [Monetary policy: Overview]

	FRB	ECB	BOE
SME cash	Purchase of SME loans: \$600 billion [4/9] ·Duration: Until September 2020 [4/9] →Until December 2020 [7/28]		Securing implementation of SME loans: [3/10] ·Providing 4-year loans at the bank rate →Extending maturity to 10 years [9/24] ·Duration: Until March 2021 [9/24]
cash flow support	Securing implementation of the Paycheck Protection Program: \$349 billion [4/9] →\$659 billion [4/16] ·Duration: Until September 2020 [4/9] →Until December 2020 [7/28]	-	
5	Provision to primary dealers [3/17] · 90-day or shorter loans with the discount rate · Duration: Until September 2020 [3/17] →Until December 2020 [7/28]	Targeted Longer-Term Refinancing Operations (TLTRO 3) [March 2019] · Providing 3-year loans with low interest ·Interest rate: -0.25 to -0.75% →-0.5 to -1.0% [4/30] · Duration: Until June 2021	Contingent Term Repo Facility [3/24] ·3-month or shorter loans with low interest (0.25%) ·Duration: Ended in June 2020
Liquidity provision	Provision to money market funds (MMFs) [3/23] · Providing loans to banks for purchasing assets sold by MMFs (The interest rate is the discount rate (if loans are secured by Treasury securities) · Duration: Until September 2020 [3/23] →Until December 2020 [7/28]	Pandemic emergency longer-term refinancing operation (PELTRO) [4/30] • Providing loans maturing in July 2021 with a negative interest rate of 0.25% • Duration: Until December 2020	
on	Provision to investors in asset-backed securities (ABS): \$100 billion [3/23] Loans to ABS holders (interest rates are set according to security details) Duration: Until September 2020 [3/23] →Until December 2020 [7/28]		

(Note) Adapted from FRB, ECB and BOE.