Monthly Economic Report

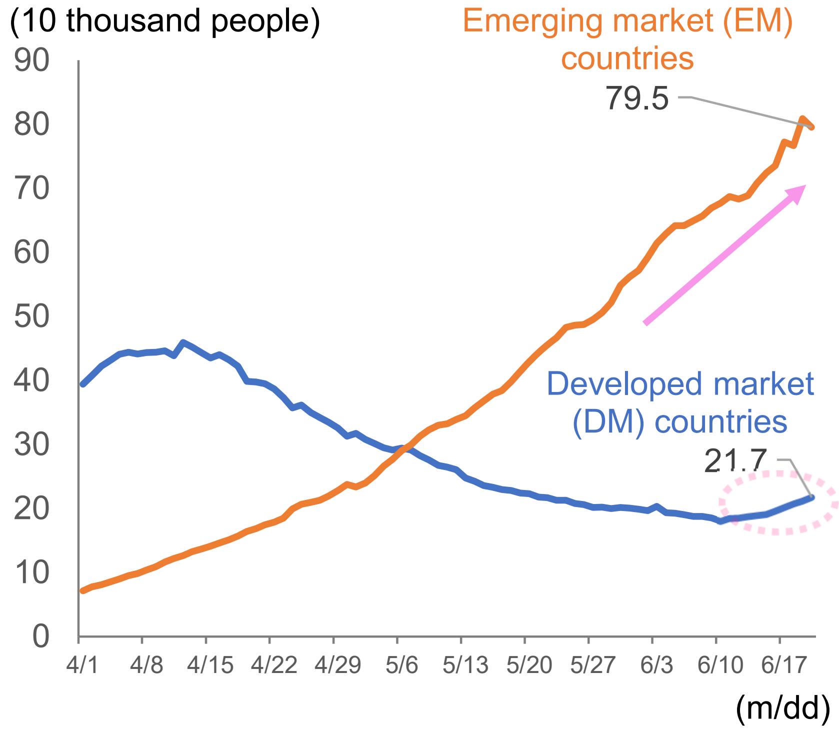
June 22, 2020

Mizuho Research Institute

Topic of the month (1): Number of people infected with COVID-19 rising, particularly in EM countries

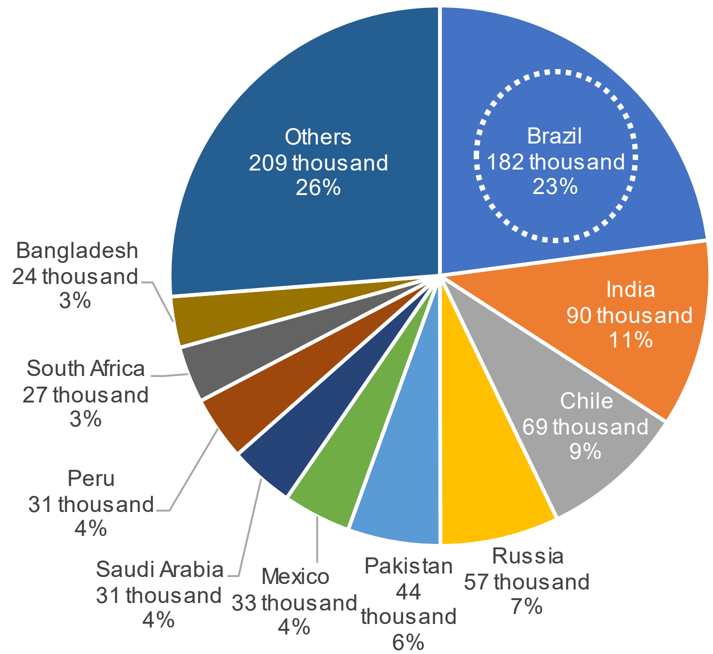
- The number of people infected with the novel coronavirus (COVID-19) is rising close to nine million, primarily due to the accelerating pace of infections in emerging market (EM) countries.
- Brazil accounts for 23% of the weekly number of new infections in EM countries.
  - The top 10 countries, including India, Chile and Russia, account for about three-fourths of the world's total number of infections.

Weekly number of new infections in the world



Note: As of June 20. 7-day backward moving average
Source: Made by MHRI based upon Johns Hopkins University

Weekly number of new infections in EM countries (Breakdown by country)



Note: As of June 20.
Source: Made by MHRI based upon Johns Hopkins University

Topic of the month (2) : Approval of EU recovery fund shelved; Intensive debate on Brexit set for Jul-Sep

- The EU summit on June 19 failed to forge consensus and shelved approval of the EU recovery fund (Next Generation EU).
  - As expected prior to the summit, the EU leaders remained divided on many points, including the nature of funds (grants or loans), uses of funds, distribution of funds among member states, repayment methods and the timing of fund distribution. The next EU summit seen to take place in mid-July should prove the crucial stage. We expect the approval by the end of July.
- Negotiations between the UK and the EU on a new agreement have run into rough waters. The UK and the EU at their meeting on June 15 agreed to hold intensive talks on the new agreement centering around a free trade agreement (FTA) in Jul-Sep. Given the UK government's tough stance and signs of the EU's willingness to compromise, we expect to see an accord on the new agreement by the end of 2020.
  - The UK stated that it would not extend the transition beyond the end of the year. There remains a host of issues, such as regulatory alignment on goods, fishery rights and dispute settlement. However, the EU's chief negotiator Michel Barnier said "I am ready to find compromises", hinting at some concessions on the issue of the alignment of regulations.

Points at issue at the EU Summit for the establishment of the recovery fund

Nature of funds	Grants or loans. The Netherlands, Austria, Sweden and Denmark, the four countries nicknamed the "Frugal Four," are opposed to grants. Germany, France and Italy are in favor.
Uses of funds	Some point out that the uses of funds are limited to the environment and digital-related, etc., not much relevant to responses to the coronavirus crisis.
Distribution of funds	The distribution of funds is computed by using economic indicators, such as the average unemployment rate for 2015-2019, totally irrelevant to COVID-19. Italy, Spain and Poland would be the biggest beneficiaries. The Netherlands, Denmark, Austria and Belgium are opposed.
Repayment methods	The Netherlands and some other states are opposed to an expansion of the EU's own financial resources.
Timing of fund distribution	Though the recovery fund is intended to respond to the corona crisis, three-fourths of the funds are set to be distributed in and after 2023, according to a Belgian think tank.

Source: Made by MHRI based upon various news reports

Points at issue over Brexit

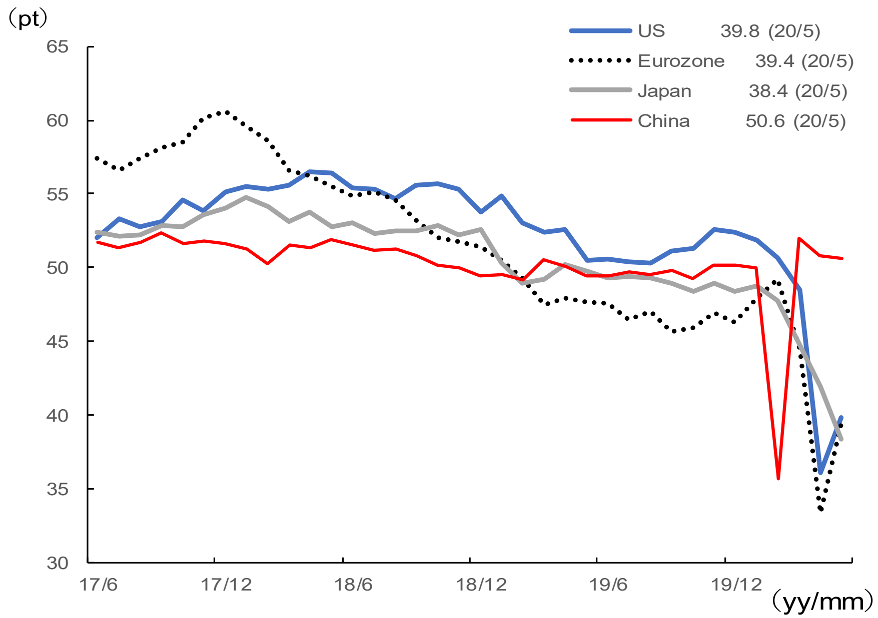
Alignment of rules for maintaining the fair competition environment necessary for tariff elimination	
Industrial subsidies	Deviation from the EU's state subsidization rules, such as prompt support for industries requiring assistance
Corporate taxation	Prevention of competition to lower tax rates, such as harmonization of the corporate tax base
Environmental criteria	Maintenance of environmental regulation levels and dispute settlements between the UK's new environment regulator and the European Commission
Protection of workers' rights	The UK is opposed to compliance with EU rules, such as taking of paid leave and limits on working hours
Key points at issue in areas other than goods	
Fishery policy	Maintenance of EU fishery operators' access to the UK's exclusive economic zone (EEZ)
Financial services	EU financial institutions' access to the UK's central clearinghouse, assessment on equivalence of regulations
Dispute settlement	Which organization is to mediate when trade disputes arise in the future between the UK and the EU? The UK is opposed to mediation by the European Court of Justice.
Harmonization with EU regulations	Introduction of "dynamic alignment" where the UK regulations are automatically changed in the event of changes in EU regulations
Data protection	Adequacy decision of the EU's protection of personal information

Source: Made by MHRI based upon various news reports

1. Current state of the global economy: economies reopen, but economic activity largely subdued due to vigilance against second wave of COVID-19 infections

- Japan, the US and Europe appear to have recorded the second consecutive quarter of negative growth in the Apr-Jun quarter due to limitations upon economic activity in Apr-May.
  - Economic activities are resuming, given the easing of lockdowns. In developed market (DM) economies, however, economic activity remains subdued due to concerns over a second wave of infections.
- In EM countries, the pace of infections is accelerating, raising the risk of the intensification of negative impacts on the economies and financial markets.
  - The number of COVID-19 infections is beginning to rise again in developed market (DM) economies where infections appeared to have initially ebbed, requiring renewed vigilance.

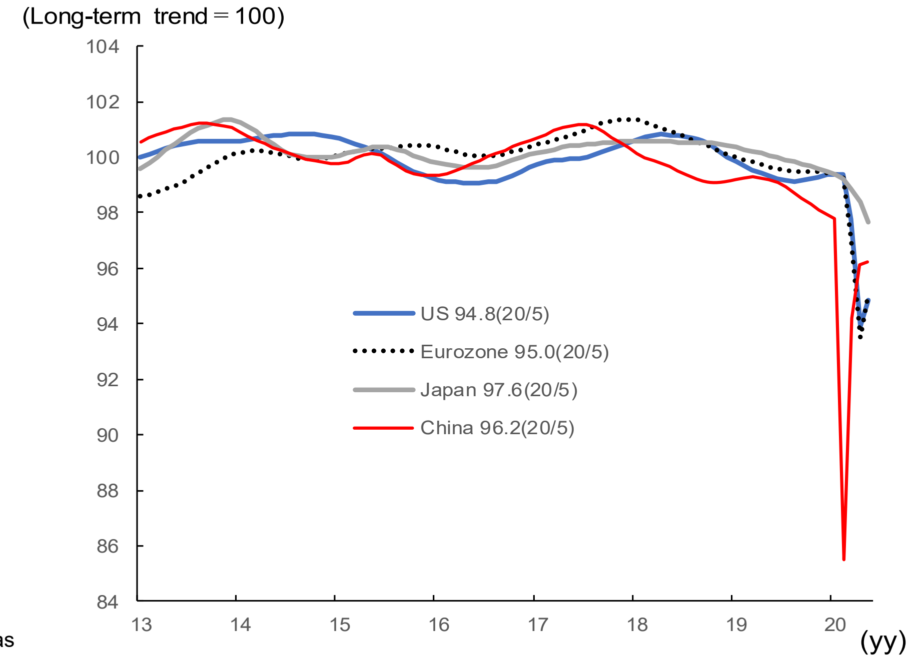
Global manufacturing PMI



Note: The Purchasing Managers' Index (PMI) is an index calculated by weighting indexes such as new orders, output, order backlogs, prices, employment, and quantity of purchases. The reading of 50 in the PMI is the "expansion-contraction" threshold

Source: Made by MHRI based upon Markit Economics, the National Bureau of Statistics of China

OECD composite leading indicator

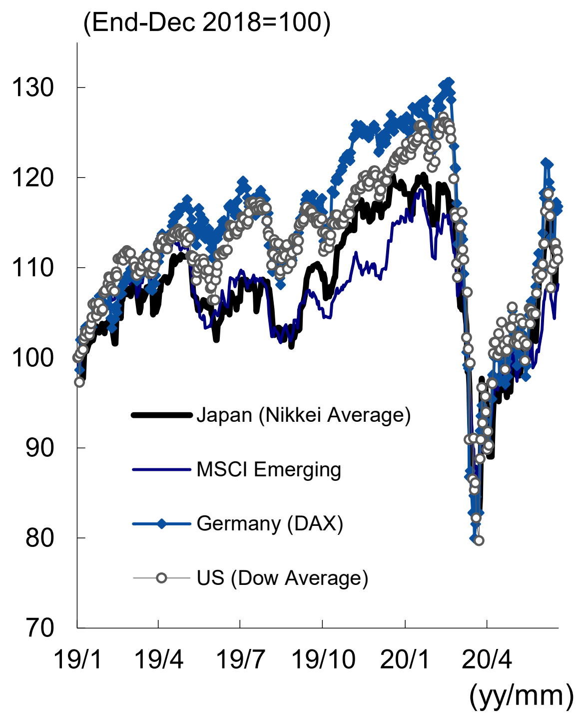


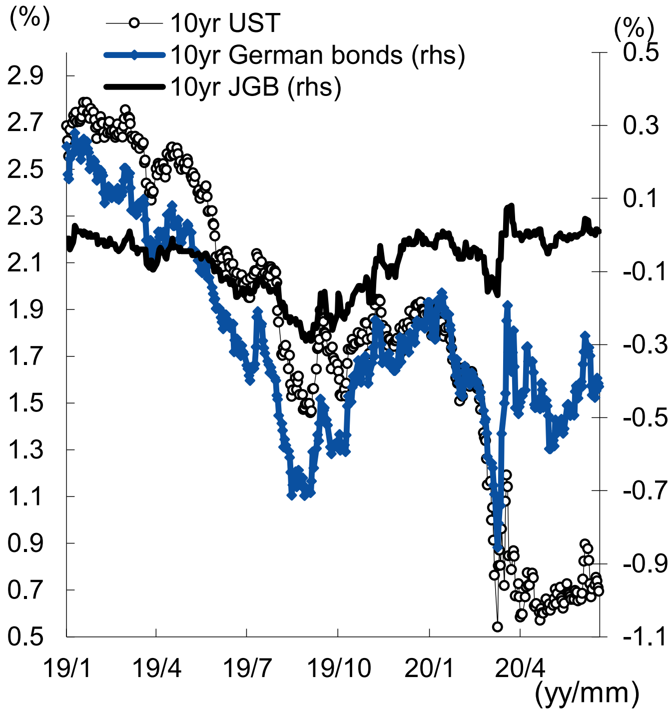
Source: Made by MHRI based upon OECD

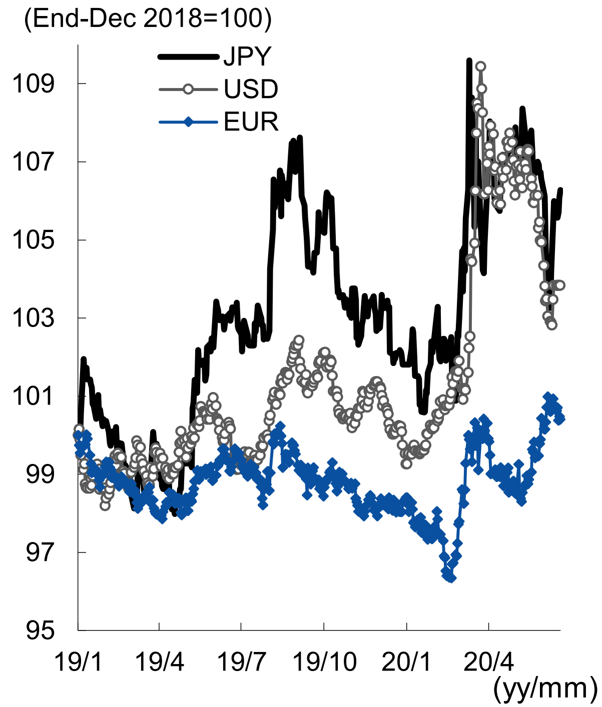
Overview of financial markets: stocks fluctuate due to concerns about second wave of COVID-19 infections

- Even though stock prices continued to bounce back in response to the resumption of economic activity in Europe and the US, market jitters persist due to concerns about a possible second wave of infections. While Japanese, US, and German 10yr government bond yields were subject to speculation on the increase of issues, rate rises were contained as the central banks kept their accommodative policy stance. The USD/JPY exchange rate was range-bound.

Major market trends







Note: Currency exchange rates are based upon the nominal effective exchange rates as released by the authorities of each country
Source: Made by MHRI based upon Bloomberg

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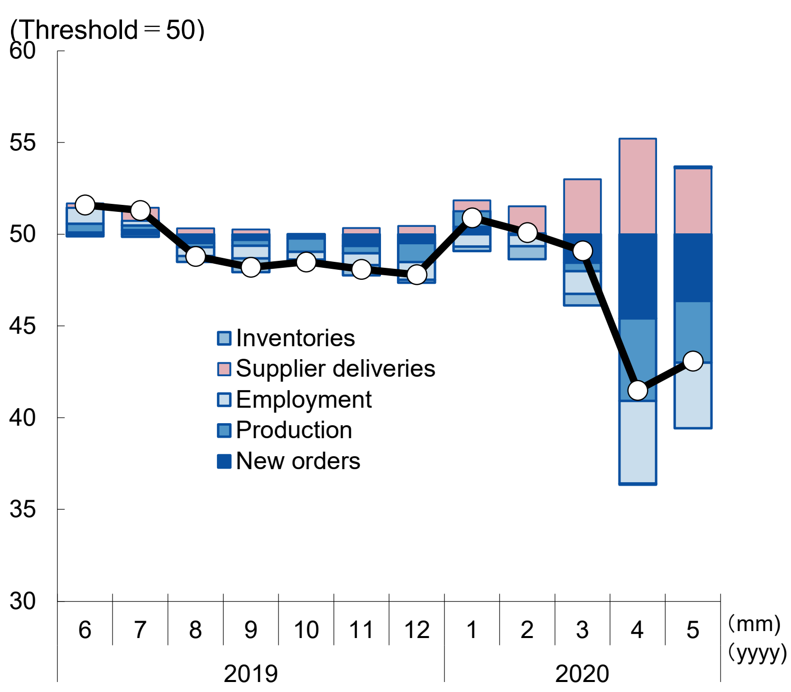
2. (1) US economy: corporate sentiment improved for both manufacturing and services in May, but remain sluggish

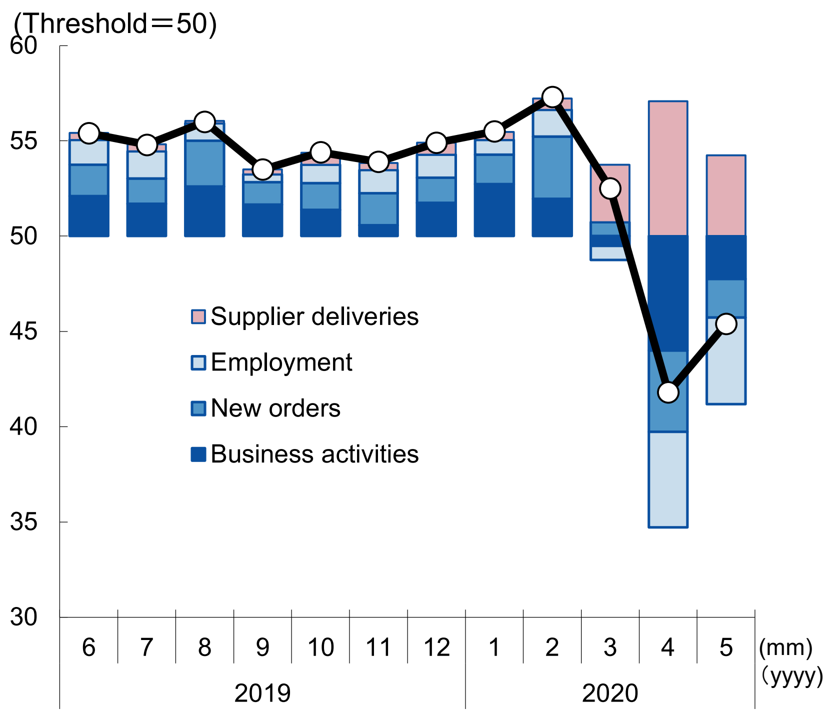
- In May, the ISM PMI stood at 43.1 for manufacturing, and 45.4 for non-manufacturing. While both rose from the preceding month, they remain considerably below the expansion-contraction threshold of 50.
- The new orders index rose to 33.2 (+4.7 pt m-o-m) for manufacturing, and to 41.9 (+9.0 pt m-o-m) for non-manufacturing.
  - The extent of improvement for non-manufacturing was relatively large as the sector reopened for economic activities sooner than manufacturing.
  - On the other hand, the employment index remained low, at around 30, for both manufacturing and non-manufacturing (32.1 and 31.8, respectively), an indication of slow reemployment.

ISM manufacturing PMI



Source: Made by MHRI based upon Institute for Supply Management

ISM non-manufacturing PMI



Source: Made by MHRI based upon Institute for Supply Management

Nonfarm payrolls rose for the first time in two months in May (+2.51 million m-o-m)

- The deterioration of employment appears to have been halted amid the easing of restrictions on business activity. Even so, compared with the level of employment in February, over 10% of jobs have been lost, a far cry from a return to normal levels (against 100 for February employment, April stood at 86 and May at 87).
- In the private sector, employment in the goods-producing sector and the service-providing sector rose for the first time in two months. The Paycheck Protection Program (PPP) appears to have contributed to a certain degree in maintaining employment.
  - In the leisure and hospitality sector, having the biggest impact, employment rose +1.24 million m-o-m, pushed by food services and drinking places that benefitted from the easing of restrictions on business activity. The leisure sector remained flat, while accommodations continued to worsen, indicating the varied degrees of improvement among industries.
- Against the backdrop of the resumption of economic activity, the index of aggregate weekly hours improved slightly.

Nonfarm payrolls (by industry)

(M-o-m change, 10 thousand workers)	Mar	Apr	May	Cumulative total since Mar
Nonfarm payroll employment	-137	-2069	251	-1818
Goods	-12	-237	67	-170
Services	-124	-1735	243	-1493
government	-2	-96	-59	-155
Leisure and hospitality	-74	-754	124	-630
Education and health services	-18	-259	42	-217
Professional and business services	-9	-219	13	-206
Retail trade	-9	-229	37	-192
Manufacturing	-5	-132	23	-110
Other services	-9	-127	27	-100
Construction	-7	-100	46	-53
Transportation and warehousing	-1	-55	-2	-57
Wholesale trade	-1	-38	2	-36
Information services	-1	-27	-4	-31
Financial activities	-2	-26	3	-23
Mining and extraction	-1	-5	-2	-7
Public services	-0	-0	-0	-1

Source: Made by MHRI based upon US Department of Labor

Total labor hours index (by industry)

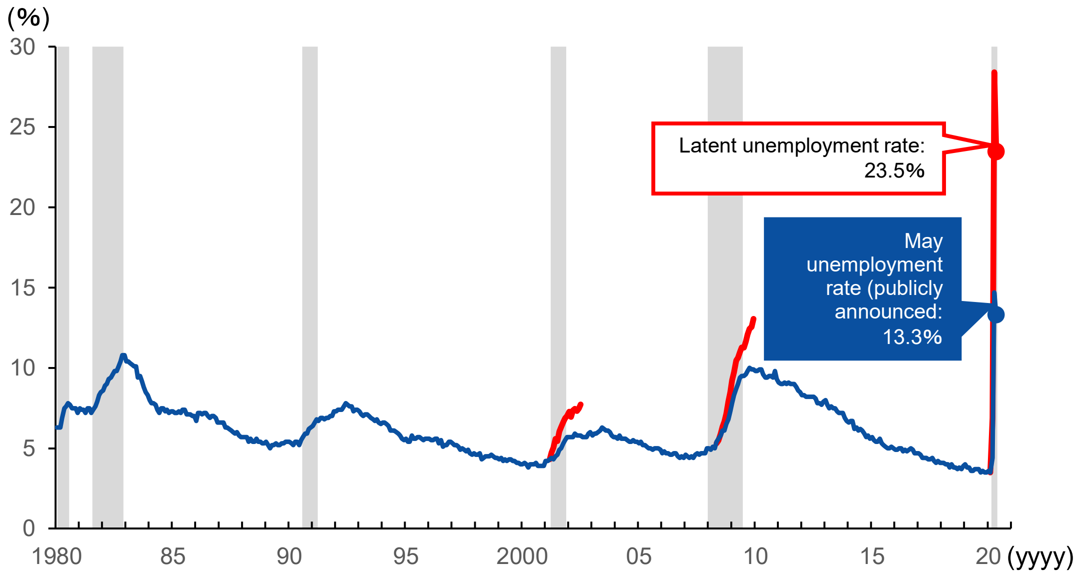
(M-o-m % change)	Mar	Apr	May	Compared to Feb
Private	-1.9	-15.1	4.3	-13.1
Goods	-1.3	-15.5	5.8	-11.8
Services	-2.1	-14.9	3.9	-13.4
Leisure and hospitality	-10.7	-46.5	21.4	-42.0
Other services	-3.1	-19.7	7.2	-16.6
Mining and extraction	-2.0	-12.2	-3.1	-16.5
Manufacturing	-1.1	-15.5	4.1	-13.0
Transportation and warehousing	-1.0	-11.7	1.3	-11.4
Retail trade	-0.9	-14.9	5.5	-11.1
Information services	-0.2	-8.9	-1.1	-10.1
Education and health services	-1.4	-11.4	2.9	-10.1
Professional and business services	-0.7	-10.4	2.0	-9.3
Construction	-1.4	-15.8	9.8	-8.8
Wholesale trade	-0.2	-9.2	1.2	-8.3
Financial activities	-0.3	-2.7	0.7	-2.3
Public services	-1.0	-0.2	-0.9	-2.1

Source: Made by MHRI based upon US Department of Labor

Unemployment rate in May edged down to 13.3% but still stays high

- Employed persons whose working hours were zero due to the impact of COVID-19, workers who were not counted in the labor force, and workers with reduced labor hours due to decreased demand declined from the previous month but stayed at high levels. The potential unemployment rate stood at 23.9% (publicly announced unemployment rate +10.6% pt).
- The broadest measure of unemployment (the U-6 unemployment rate which includes discouraged workers and persons marginally attached to the labor force) remained high at 21.2% (April: 22.8%).

Unemployment rate



(Contribution ratio by change in each item, %Pt)	Apr	May
Number of unemployed persons as publicly announced	＋14.7	＋12.8
Employed persons whose working hours were zero “due to other reasons” that are deemed to be COVID-19	＋4.8	＋2.9
Workers who are not counted in the labor force (because they “do not want to work” to avoid COVID-19 infections)	＋5.1	＋4.1
Workers with reduced labor hours due to decreased demand	＋4.5	＋3.7
Latent unemployment rate	28.4%	23.5%

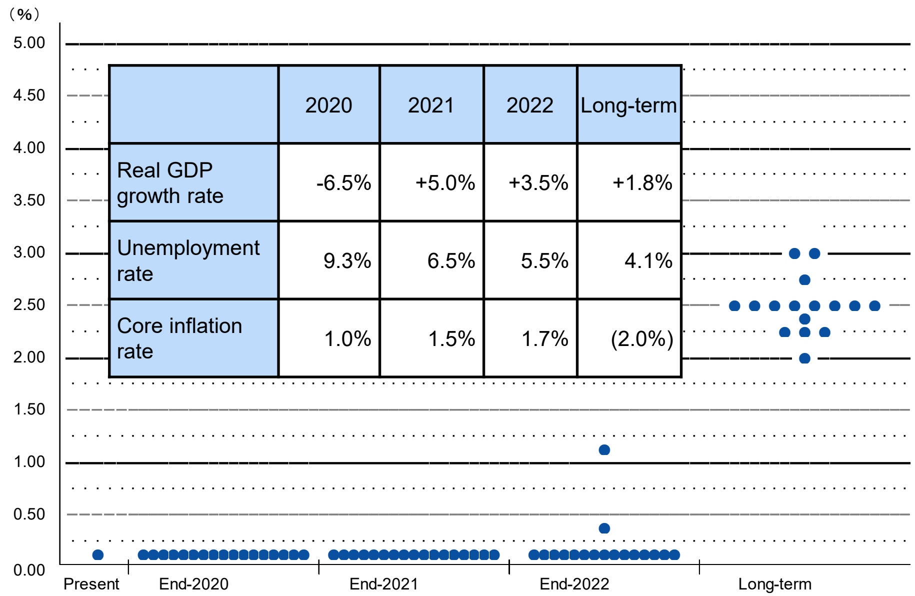
※The contribution with the labor force in February as a denominator.

Note: The shaded areas indicate periods of recession. The red-line graphs indicate the unemployment rate when workers not counted in the labor force, employed persons whose working hours were zero “due to other reasons” and workers who had to settle for less labor hours due to decreased demand are deemed unemployed persons.
Source: Made by MHRI based upon US Department of Labor

(2) US monetary policy: the Fed will keep zero interest rate until 2022; focus on addressing the high unemployment rate

- At its meeting in June, the FOMC made no policy changes other than the continuation of asset purchases at the current pace and took the stance to closely monitor the resumption of economic activity.
  - For the timing being (from June 12 through July 13), the Fed will continue to purchase USD 80 billion in Treasury bonds, USD 40 billion in MBS and USD 250-500 million per week in CMBS.
  - Monetary policy is in “a good place.” FOMC shares its outlook with markets. FOMC will closely monitor developments.
  - FOMC looked at forward guidance and asset purchases. FOMC will continue discussions on yield curve control in upcoming meetings and evaluate its stance.FOMC got no conclusion yet on yield curve control usefulness.
- With the quarterly Summary of Economic Projections (SEP) expecting high growth, high unemployment rate and low inflation in 2021-2022, the FOMC will keep the policy rate unchanged until 2022.

Outlook on the economy and monetary policy among FOMC participants



	2020	2021	2022	Long-term
Real GDP growth rate	-6.5%	+5.0%	+3.5%	+1.8%
Unemployment rate	9.3%	6.5%	5.5%	4.1%
Core inflation rate	1.0%	1.5%	1.7%	(2.0%)

Note: The economic outlook indicates the median rate for the Oct-Dec quarter of each year.
Source: Made by MHRI based upon FRB

Post-FOMC press conference by Fed Chair Jerome Powell (Summary)

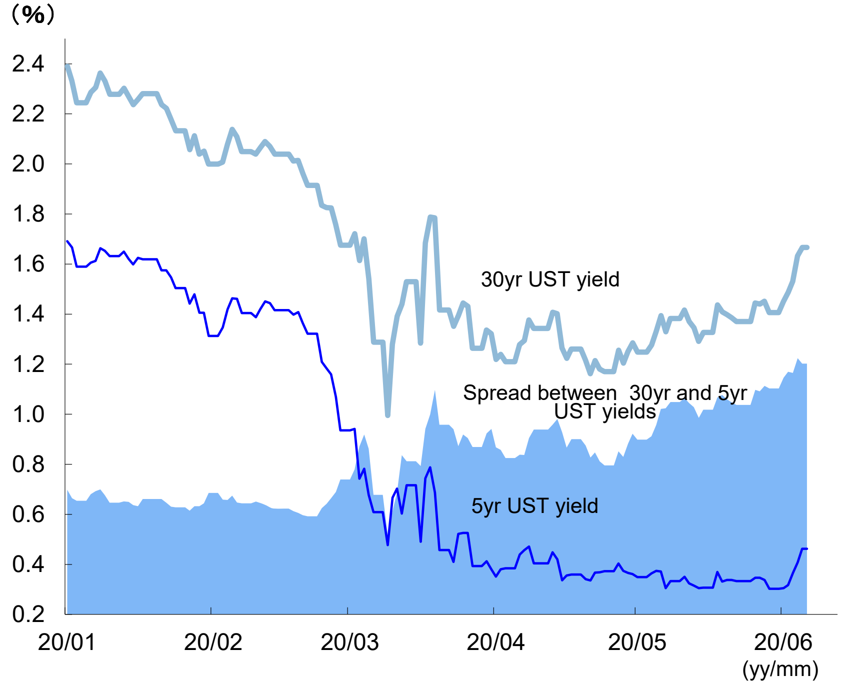
- The measures we discussed included explicit forms of forward guidance and asset purchases. We also reviewed the historical and foreign experience with targeting interest rates along the yield curve. Whether such an approach would usefully complement our main tools remains an open question
- Given the unusually high level of uncertainty about the outlook, there are a number of reasonably likely paths for the economy, and that it’s not possible to identify with confidence a single path as the “most likely” one.
- (FOMC did not change its policy as) monetary policy is in a good place, and it’s well understood in the markets (market views and SEP are in accord).
- Going forward, we expect to get a better understanding of the economy’s trajectory and, particularly, how we should best deploy those tools to achieve policy goals.
- We had a 128-month expansion, and we never did quite get inflation back to 2 percent on a symmetric, sustained basis. We have to be humble about our ability to move inflation up and particularly when unemployment is going to be high through the end of 2022.
- We are not thinking about raising rates. We are not even thinking about thinking about raising rates. We do think this is going to take some time.
- Even after a lot of strong job growth, a lot of people will still be struggling to find jobs, and we’ll still be providing strong accommodation for that.
- The difference from the Great Depression is that the government response has been so fast and so forceful and the origin of the economic slowdown was quite different.
- We didn’t change our longer-run estimate of potential growth or of the unemployment rate, because I still think we can avoid (the structural downward refraction).
- (Reasons for purchases of Treasury bonds) We cannot be sure of the financial markets restoring its function. The bond purchases also have the credit-easing effects.

Source: Made by MHRI based upon CQ

(3) US bond market: 10yr UST yields expected to move around 0.7% to 1.0%

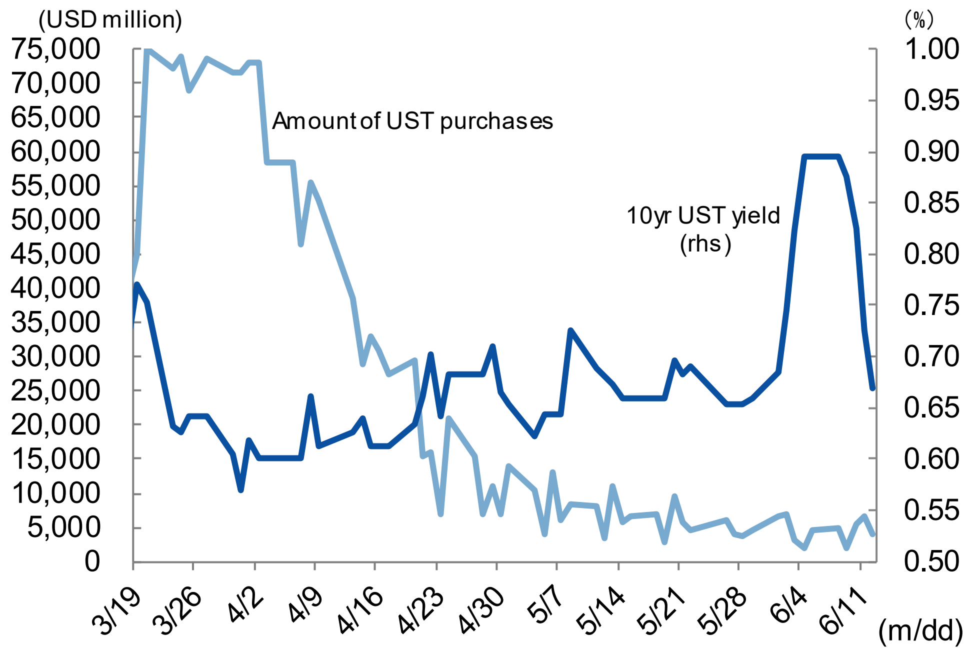
- US stocks rose and bonds declined, reflecting the improvement of economic indicators, including the May employment statistics released on June 5, with the 10yr US Treasury yield temporarily rising close to 0.9%. Subsequently, interest rates declined, given the FOMC's indication in June that it would keep the policy rate unchanged through the end of 2022.
  - Super long-term interest rates steepened greatly, with the long term-short term interest rate spread widening.
  - Behind the sharp rise in interest rates was a demand-supply factor, namely the slowing pace of asset purchases by the Federal Reserve Bank of New York amid the increase of US Treasury bond issues.
- As expectations rise regarding the resumption of economic activity and improvement of economic indicators, 10yr UST yields are expected to hover around 0.7% to 1.0%.

Long-term and short-term UST yield spread



Source: Made by MHRI based upon Bloomberg

Treasury bond purchases by the Federal Reserve Bank of New York

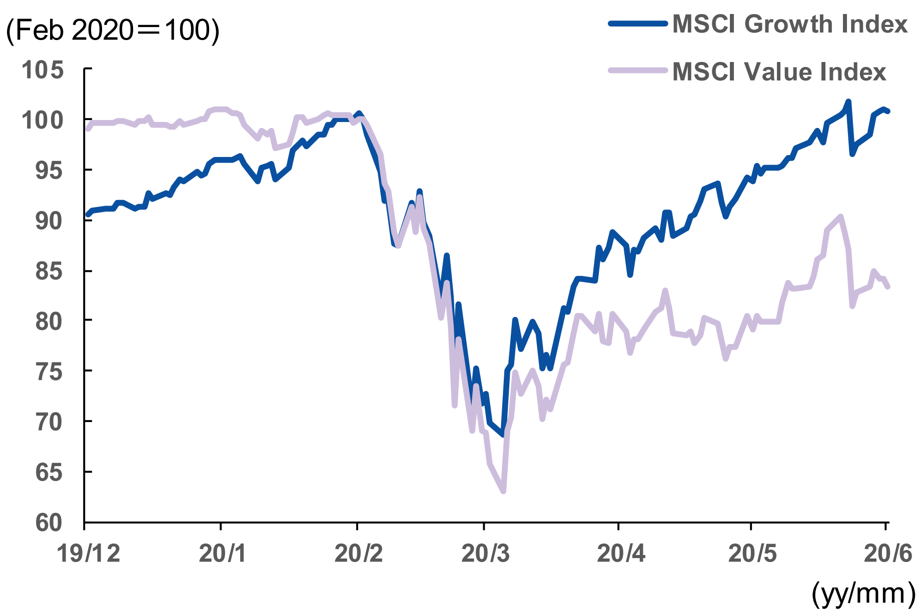


Source: Made by MHRI based upon Federal Reserve Bank of New York

(4) US stock market: growth stocks led the market upward
A heavy upside expected ahead

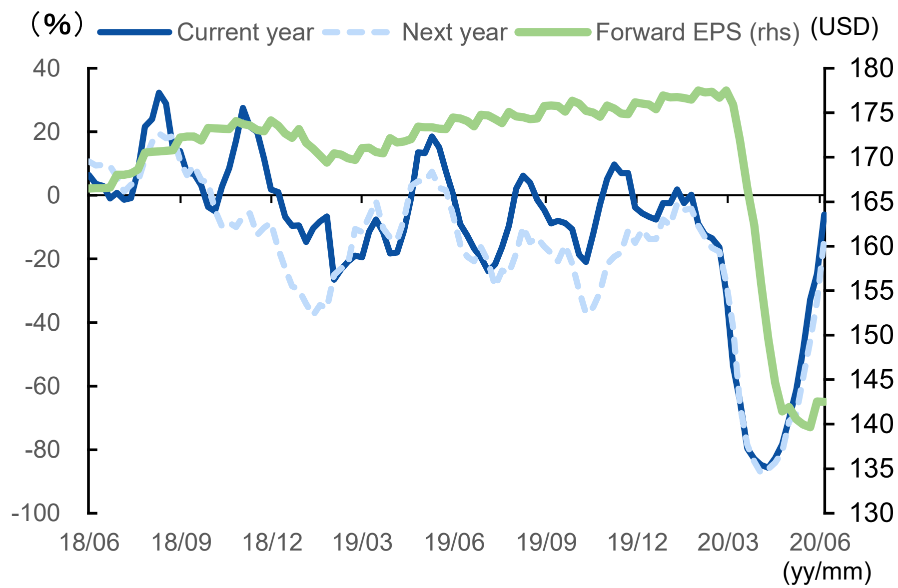
- The S&P 500 Index temporarily recouped 85% of its deepest fall, supported by expectations for an early recovery of the economy.
  - By industry, high-tech stocks climbed high, such as IT and telecommunications services.
  - Value stocks which recorded significant gains fell sharply on signs of a second wave of COVID-19 infections in some states that resumed economic activity. Thus, growth stocks served as the drivers of the market.
- Upward revisions of estimated corporate earnings increased. In terms of valuation, the forward P/E ratio remained high at 22x.
- As the stock market is currently overvalued, mainly with respect to high-tech stocks, and the upside is expected to prove heavy, given concerns regarding the second wave of infections weighing down the market.

MSCI Growth Index and Value Index



Source: Made by MHRI based upon Refinitiv

Trends in the Revision Index

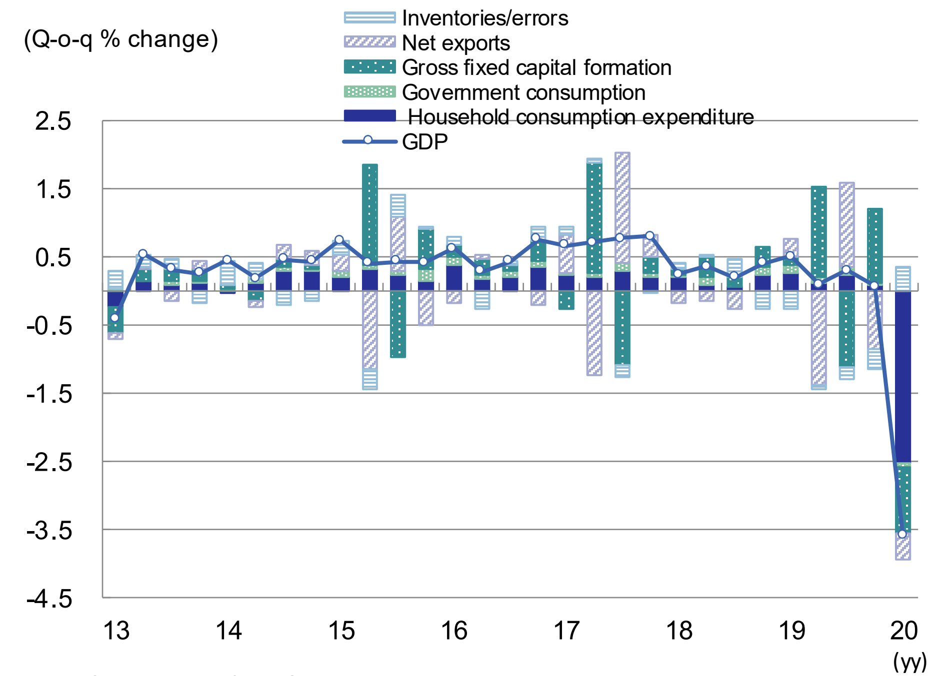


Note: Revision index = (number of stocks with earnings estimates revised upward – number of stocks with earnings estimates revised downward)/number of stocks estimated. All m-o-m changes.
Source: Made by MHRI based upon Refinitiv

3. The Eurozone economy: Jan-Mar qtr GDP -3.6% q-o-q, GDP likely to drop further in Apr-Jun qtr

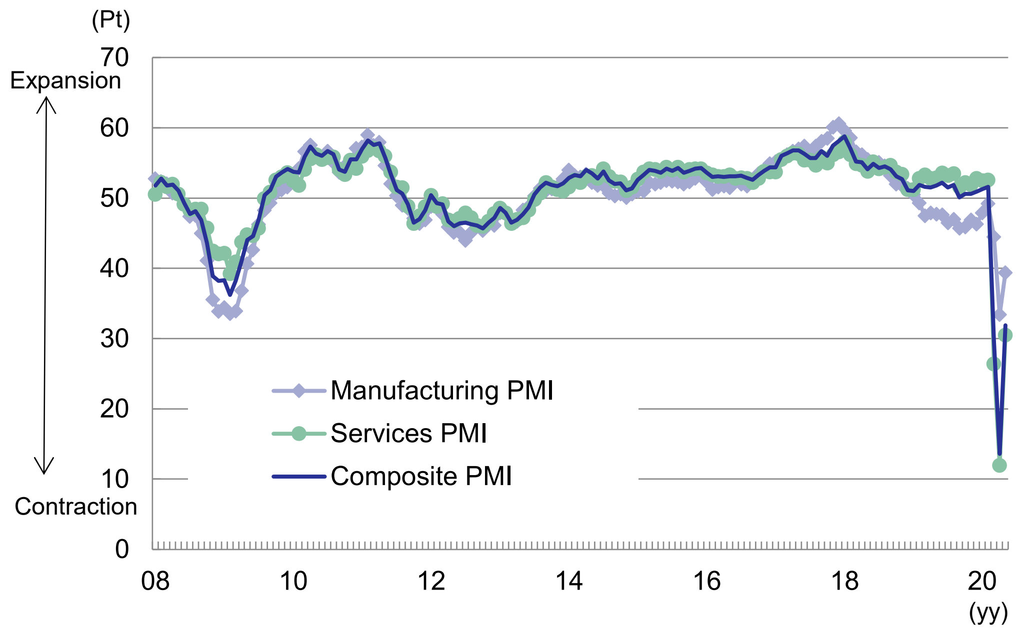
- The eurozone real GDP growth rate stood at -3.6% q-o-q, falling due to the impacts of the lockdowns, etc. since mid-March.
  - German GDP growth (-2.2% q-o-q) was dragged down by sluggish household consumption expenditures (-1.7%pt q-o-q) and equally by slower exports (-1.6%pt q-o-q).
- The May eurozone composite PMI, which has a high correlation with GDP, recovered to the level of March 2020, when the lockdowns started.
  - The indicator is still below the lowest level marked during the Global Financial Crisis in 2009, indicating the continuation of severe economic conditions.

Eurozone: real GDP



Note: Q-o-q growth of real GDP and contribution ratio by demand component
Source: Made by MHRI based upon Eurostat

Eurozone: PMI

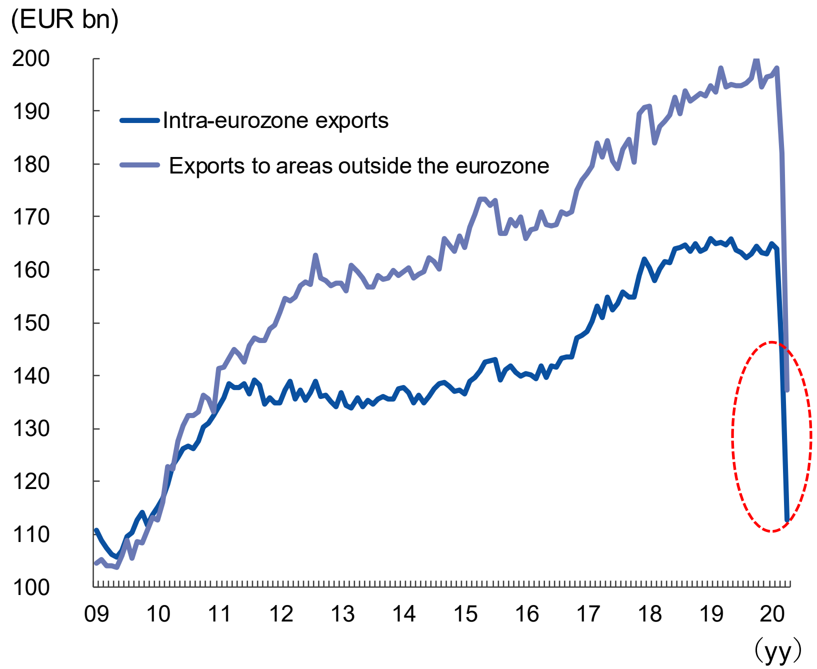


Note: PMI at 50 is the expansion/contraction threshold.
Source: Made by MHRI based upon HIS Markit

A recovery in production is expected to take time, given the sharp fall of demand from areas inside and outside the eurozone

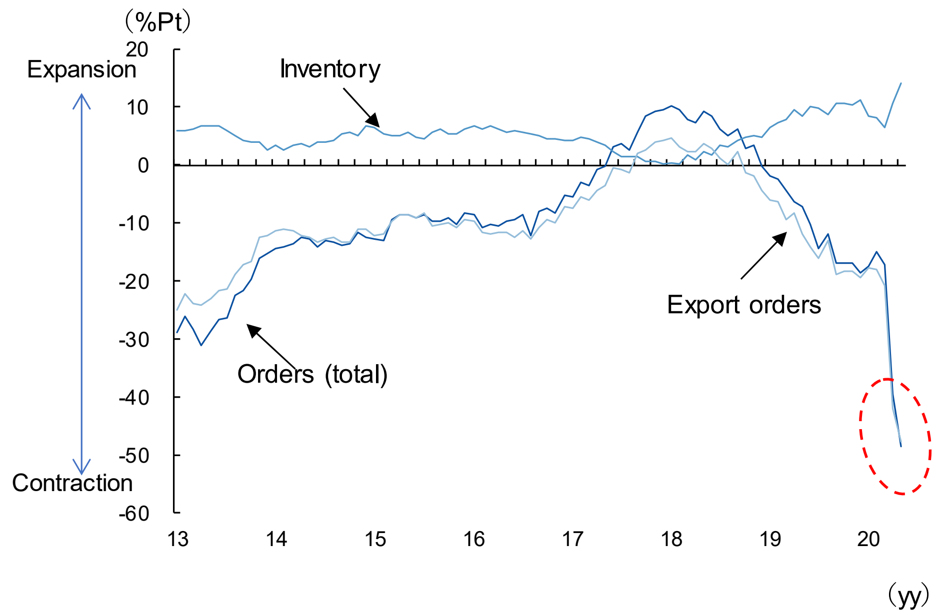
- The eurozone's nominal exports in April plummeted by -30.4% y-o-y, falling to the level of March 2010.
  - Following the lockdowns within the eurozone since mid-March, the breadth of the decline of capital investment in intra-eurozone exports (-31.6% y-o-y) was larger than the drop in exports to areas outside the eurozone (-29.4% y-o-y).
- Even in May, when the lockdowns were eased, the manufacturers' DI for orders received for exports to areas inside and outside the eurozone failed to recover, and it is expected to take time for production activity to recover.

Eurozone: nominal exports (seasonally-adjusted)



Source: Made by MHRI based upon Eurostat

Eurozone: manufacturing DI

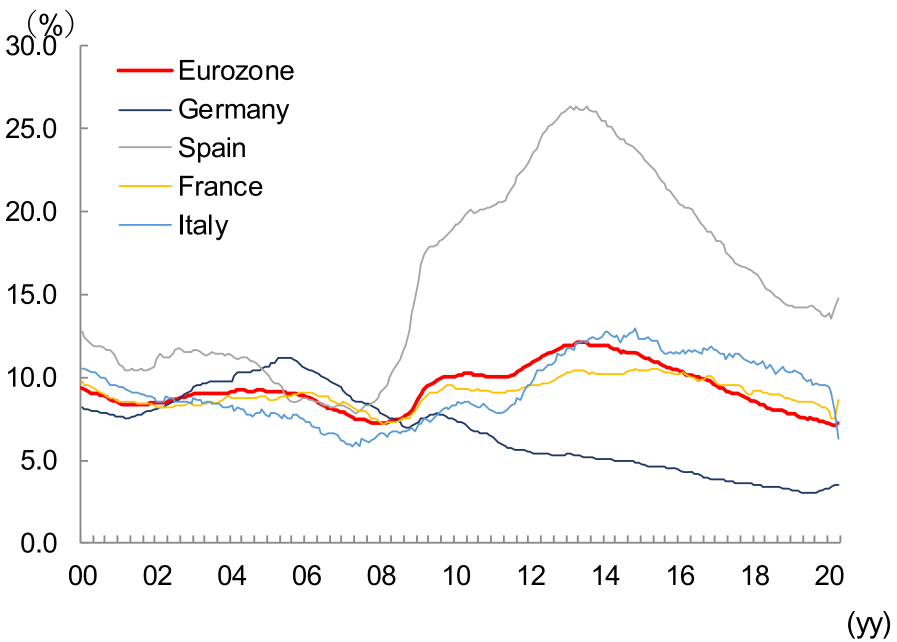


Note: DI at zero is the expansion/contraction threshold.
Source: Made by MHRI based upon the European Commission

Short-time work (partial unemployment) rises, squeezing household income

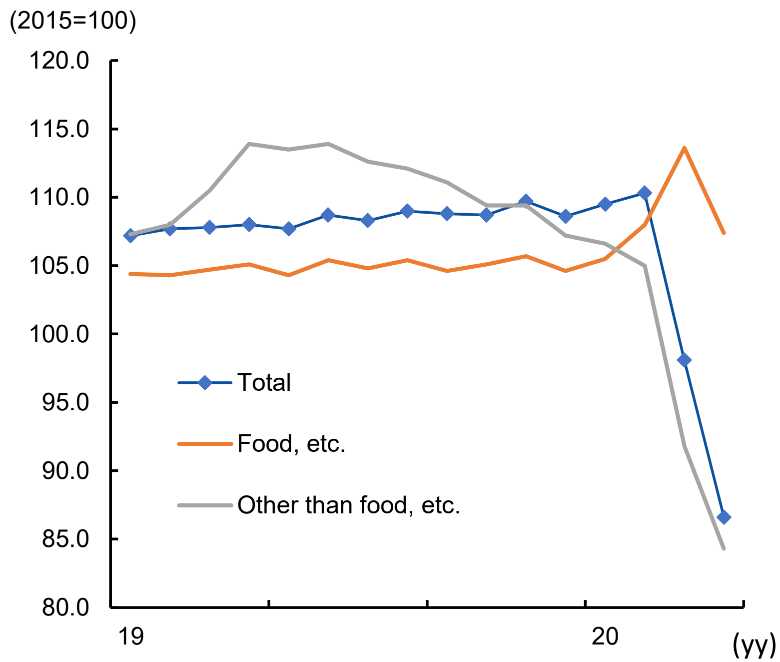
- In April, the eurozone unemployment rate stood at 7.3%, keeping the rise subdued at 0.2%pt from the previous month.
  - In Italy, the unemployment rate declined as job-seeking activities were not possible under lockdowns, and dismissals were prohibited, in principle, for two months from March 17.
- In the countries of Europe, the number of workers with reduced working hours, accompanied with income decreases, stayed at a high level, squeezing household income. Real retail sales (excluding motor vehicles) fell by -19.8% y-o-y in April, falling further from the preceding month (-9.0% y-o-y).
  - Given signs of a recovery in consumer sentiment in May, retail sales are expected to see a small rebound going forward.

Eurozone: unemployment rate



Source: Made by MHRI based upon Eurostat

Eurozone: real retail sales (excluding motor vehicles)

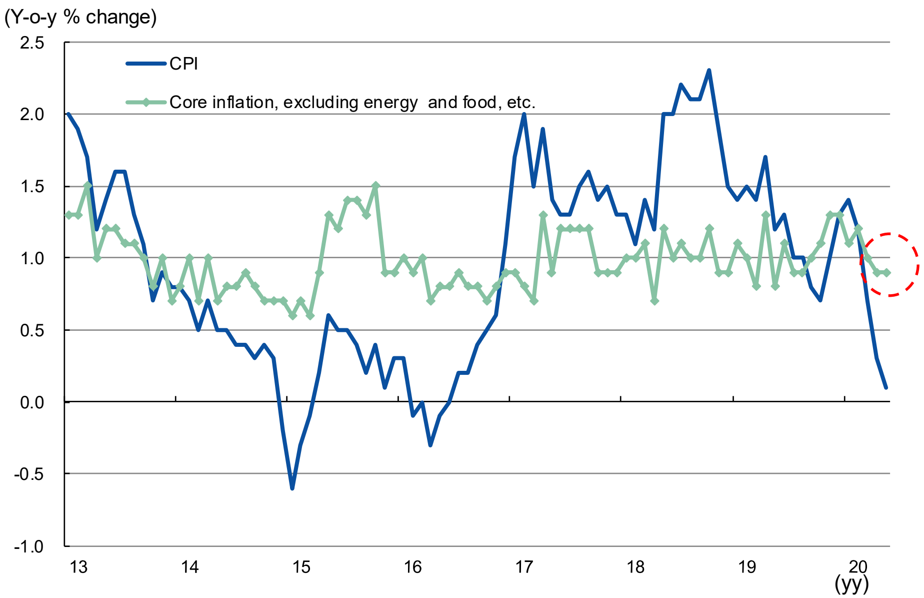


Source: Made by MHRI based upon Eurostat

The core inflation rate is expected to remain flat around 1%

- In May, the eurozone inflation rate (flash estimate) stood at +0.1% y-o-y, recording a -0.2% pt decline from the previous month.
  - The lower inflation rate stems chiefly from energy prices (-12.0% y-o-y) which recorded the lowest rise since July 2009.
  - The price of food, etc. continued to rise at a high rate (+3.3% y-o-y), given the ongoing rise of demand.
- The core inflation rate, which excludes volatile items such as energy and foods, was stable trending at +0.9% y-o-y.

Eurozone: CPI



Source: Made by MHRI based upon Eurostat.

Eurozone: price of food, etc.

Source: Made by MHRI based upon Eurostat.

German coalition government decides on additional EUR 130 billion stimulus package

- The German coalition government on June 3 agreed on the additional stimulus package equivalent to 3.8% of nominal GDP.
  - One of the focuses of the package is on the stimulation of consumption by the end of 2020.
    - The temporary reduction in the value-added tax (VAT) rates will be in force from July 1, 2020, end of December 31, 2020, and is intended to stimulate household consumption in the second half of 2020.
    - Subsidization of new vehicle purchases will be limited for electric vehicles.

Germany: draft package of additional stimulus measures (EUR 130 billion)

Key measures	Outline	Size of measures (as a % nominal GDP)	Implementation period
Reduction in VAT rates	･19%→16% (in the case of the reduced tax rate：7%→5%)	EUR 20 bn (0.6%)	Jul-Dec 2020
Per-child allowance for families	･EUR 300 per child （EUR 600 in the case of a single parent)	EUR 4.3 bn （0.1%）	Just once
Package for the future	･Add-on subsidy for EV purchases (EUR 2.2 bn) ･Hydrogen utilization (EUR 7.0 bn) ･Energy-saving buildings (EUR 1.0 bn), etc.	EUR 50 bn (1.5%)	—
Bridging support	･Support for accommodations, eating-out sector, etc.	EUR 25 bn (0.7%)	Jun-Aug 2020
Reduced electricity bills	･Decrease the Renewable Energies Levy	EUR 11 bn (0.3%)	2021
Support for municipalities	･Support for housing subsidies for low-income families ･Compensation for up to half of the decrease in business tax revenues ･Support for the enhancement of public transportation, medical services	—	2020-2021

Source: Made by MHRI based upon the German federal government website, Spiegel

ECB decides upon further easing, and the increase and extension of PEPP

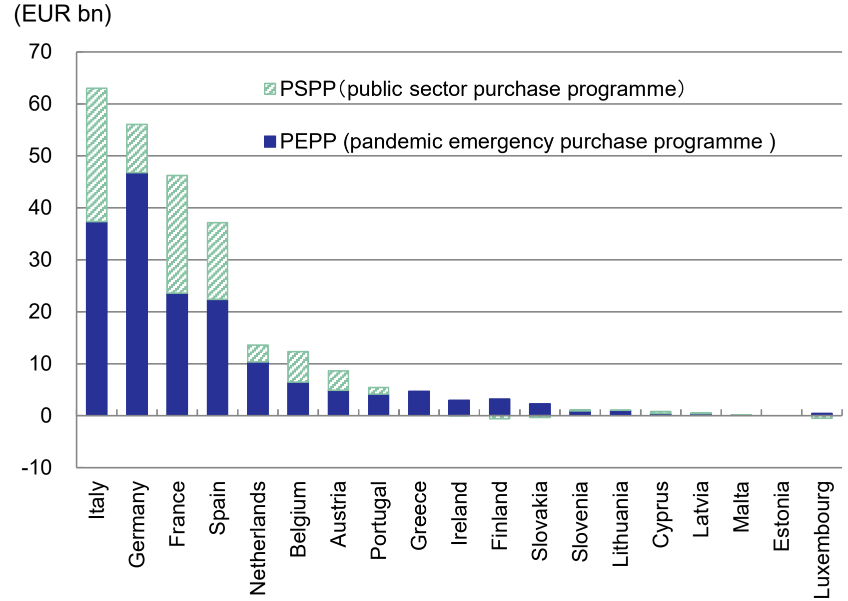
- On June 4, the ECB decided upon further monetary easing by increasing the Pandemic Emergency Purchase Programme (PEPP) by EUR 600 billion and extending the horizon for net purchases under the PEPP by six months. The PEPP will be a program for a total of EUR 1.35 trillion that runs until at least the end of June 2021.
  - The ECB cited the worsening economic outlook and the downward revision to the inflation outlook as the reasons for the increase in the PEPP. The ECB left the possibility open for a further extension of the PEPP period.
  - The cumulative purchases of public bonds by country in Mar-May show that the purchases of Italian public bonds are the largest. There is the risk of interest rate rises from 2022 onward when the ECB is expected to scale back its government bond purchases.
- For the time being, the ECB is in the stage of confirming the policy effects. There is a possibility of a further increase of PEPP purchases.

Key points of the June 4 ECB Governing Council meeting

Policy rates (kept unchanged)	**Main refinancing operations rate: 0％ (unchanged) Marginal lending facility rate: 0.25％ (unchanged） Deposit facility rate: -0.5％ (unchanged）**
Expansion of asset purchases (PEPP)	**The purchase program was increased by EUR 600 billion from EUR 750 billion to a total of EUR 1.35 trillion.**
Extension of the period for asset purchases (PEPP）	**The period was extended from the end of 2020 by six months to at least the end of June 2021, until the ECB judges that the coronavirus crisis phase is over.**
Clarification of policy for reinvestment of maturing PEPP securities	**The maturing principal payments from securities purchased under the PEPP will be reinvested until at least the end of 2022.**
ECB staff macroeconomic projections	**The real GDP growth foreseen to drop to -8.7% in 2020, rebound to +5.2% in 2021, and to +3.3% in 2022. The core inflation rate is seen to stand at 0.8％, 0.7％ and 0.9％ in 2020, 2021 and 2022.**

Source: Made by MHRI based upon ECB

ECB cumulative purchases of public bonds by country in Mar-May



Source: Made by MHRI based upon ECB

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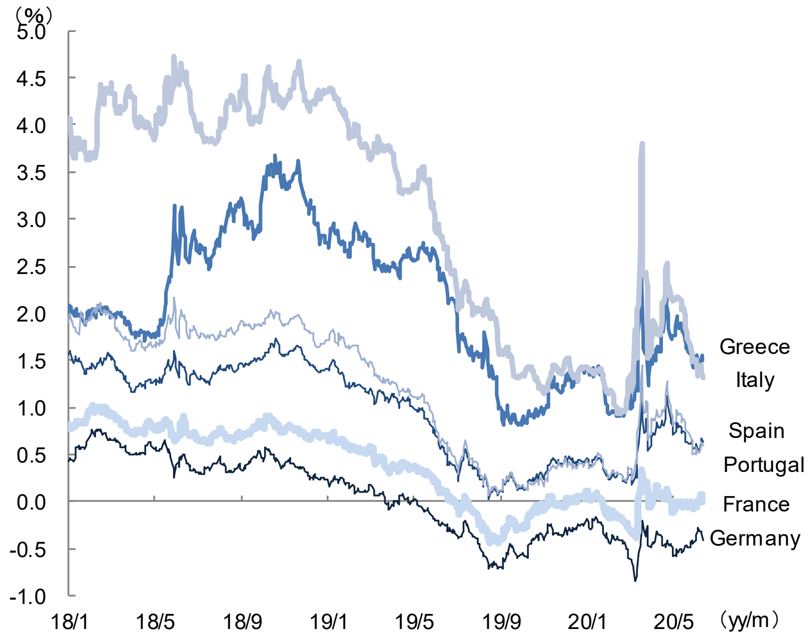
German 10yr government bond yield expected to trend around -0.4% to -0.2%

- German 10yr government bond yields temporarily rose to the upper half of the -0.2% range on expectations about the resumption of economic activity and under the impact of higher stock prices.
  - Under the Pandemic Emergency Purchase Programme (PEPP), the ECB plans to give priority to purchases of government bonds of Southern European countries, such as Italy and Spain , relative to the Public Sector Purchase Programme (PSPP).
  - Following the ECB's announcement of its plan to increase asset purchases under the PEPP and extend the PEPP period, spreads of government bonds of Southern European countries over German 10yr government bond yields narrowed.
- As countries begin to resume economic activities in stages, we expect the German 10yr government bond yield to trend around -0.4% to -0.2%.

Eurozone government bond yields (10yr)



Source: Made by MHRI based upon Bloomberg

ECB cumulative purchases and shares of public bonds by country in Mar-May

(EUR mn, %)

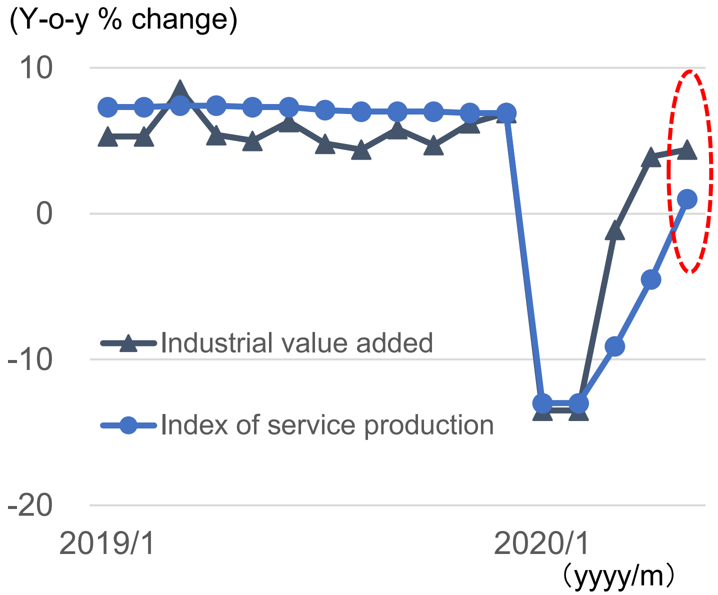
	PEPP		PSPP		Difference in purchase amount
	Purchases	Share	Purchases	Share	
Italy	37,365	20.0%	25,627	29.9%	11,738
Germany	46,749	25.1%	9,295	10.8%	37,454
France	23,575	12.6%	22,657	26.4%	918
Spain	22,392	12.0%	14,761	17.2%	7,631
Netherlands	10,389	5.6%	3,213	3.7%	7,176
Belgium	6,461	3.5%	5,871	6.8%	590
Austria	4,914	2.6%	3,730	4.3%	1,184
Portugal	4,150	2.2%	1,274	1.5%	2,876
Greece	4,690	2.5%	0	0.0%	4,690
Ireland	3,000	1.6%	-47	-0.1%	3,047
Finland	3,232	1.7%	-586	-0.7%	3,818
Slovakia	2,303	1.2%	-314	-0.4%	2,617
Slovenia	938	0.5%	213	0.2%	725
Lithuania	1,051	0.6%	59	0.1%	992
Cyprus	481	0.3%	324	0.4%	157
Latvia	396	0.2%	169	0.2%	227
Malta	123	0.1%	28	0.0%	95
Estonia	0	0.0%	0	0.0%	0
Luxembourg	459	0.2%	-466	-0.5%	925
Total	186,603	100%	85,808	100%	-

Source: Made by MHRI based upon ECB

4. The Chinese economy: industrial production leveling off on a y-o-y basis

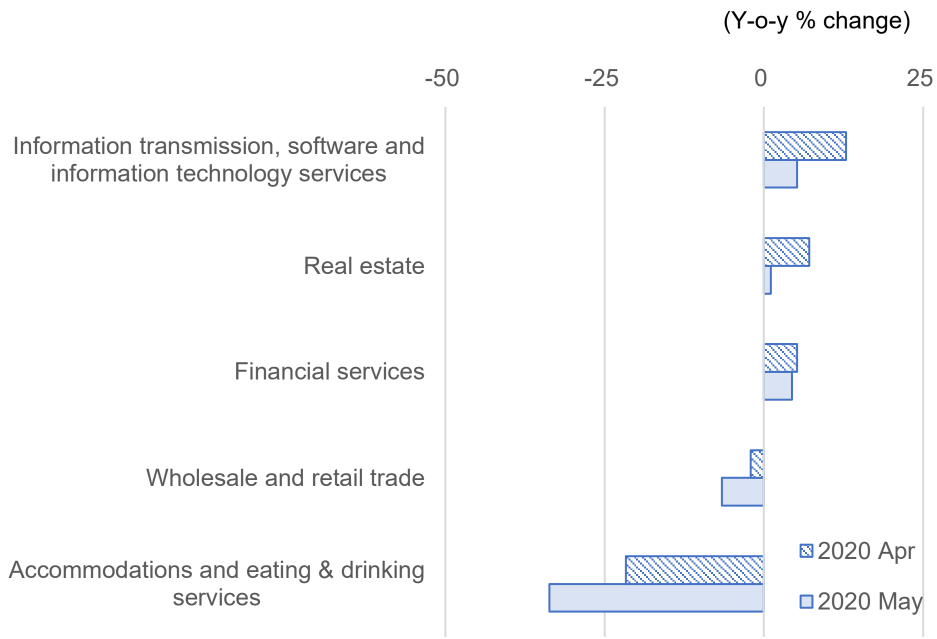
- Industrial value-added stood at +4.4% y-o-y in May, marking a slight upturn from April (3.9% y-o-y).
  - Production expanded in infrastructure-related sectors (construction machinery and cement, etc.) and motor vehicles. Even though the rise in production of PCs slowed slightly, it still remains high on a y-o-y basis.
- Indicators for service industry activity rose by +1% y-o-y (-4.5% y-o-y in April), recovering to move into positive territory, albeit at a low level.
  - While IT, real estate and financial services are faring well, the retail sector and accommodations and eating & drinking services still remain mired in negative territory.

Indicators of amount of industrial value-added and service industry production



Note: In real terms. For 2019, y-o-y of the year-to-date cumulative level.
Source: Made by MHRI based upon the National Bureau of Statistics of China, and CEIC data

Index of service production (major industries)

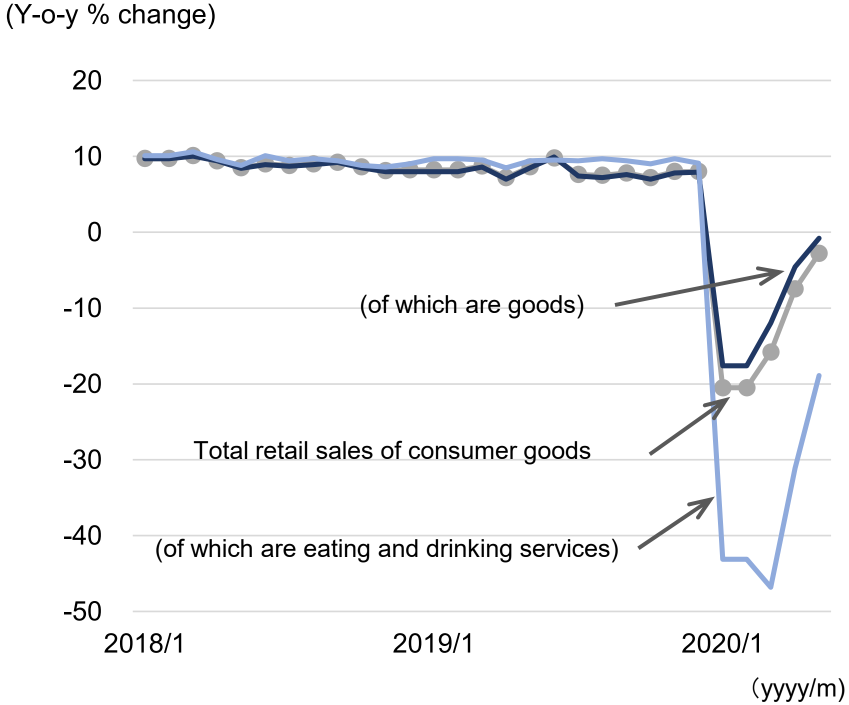


Source: Made by MHRI based upon the National Bureau of Statistics of China

Personal consumption recovered to year-ago levels in consumption of goods. The rate of unemployment is still high

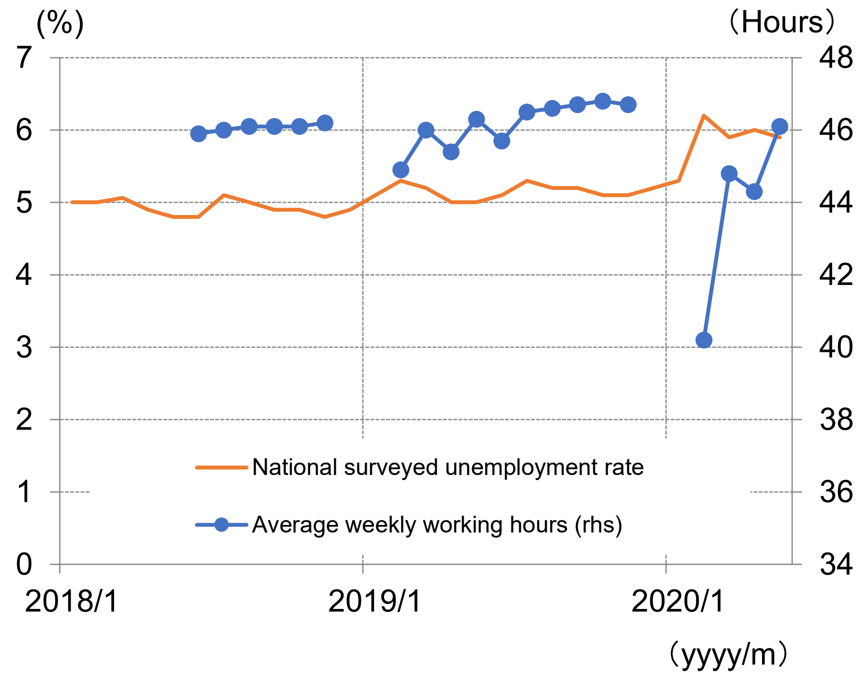
- Retail sales in May fell by -2.8% y-o-y. Despite the ongoing improvement, it is still moving in negative territory on a y-o-y basis.
  - Consumption of goods stood at -0.8% y-o-y, recovering roughly to the level a year ago. Eating and drinking services fell by -18.9% y-o-y, revealing that the pace of recovery is still sluggish.
- The absence of improvement in the employment environment will continue to serve as a drag upon the pace of recovery in consumption.
  - The surveyed unemployment rate in May stood at 5.9%, flattening out from April (6%). Average weekly labor hours came to 46.1 hours, returning to roughly the year-ago level of 46 hours.

Total retail sales of consumer goods



Note: In nominal terms. The cumulative total of January and February for January and February.
Source: Made by MHRI based upon the National Bureau of Statistics of China, and CEIC data

Unemployment rate/average weekly working hours

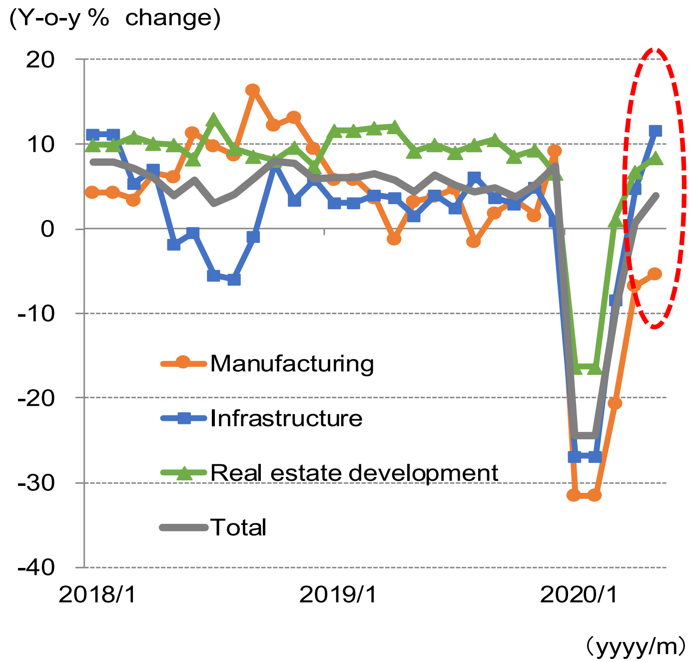


Source: Made by MHRI based upon the National Bureau of Statistics of China, and CEIC data, wind

Capex is continuing to recover mainly with respect to infrastructure. Investment among manufacturers is improving albeit weak

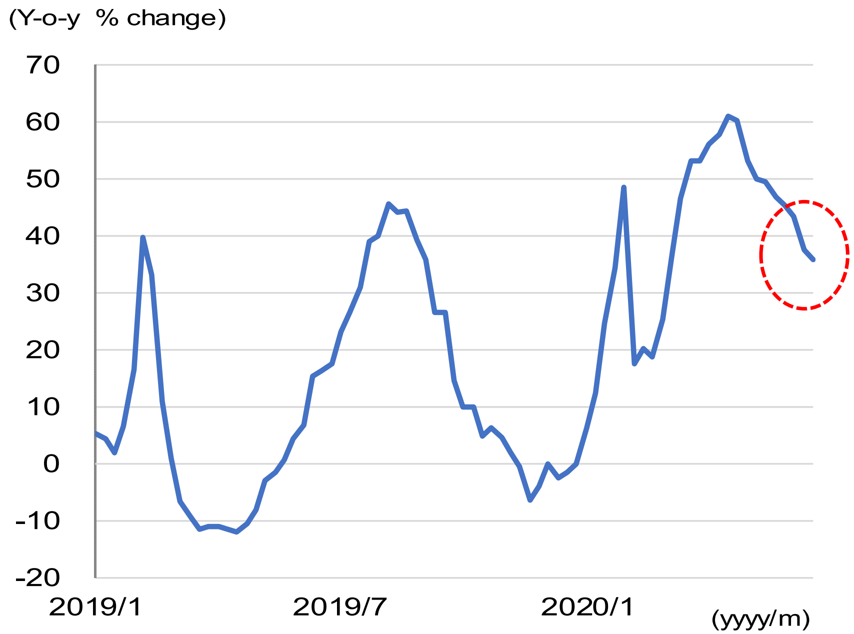
- Fixed asset investment rose +3.9% y-o-y in May, rising at a faster pace in the previous month (+0.7% y-o-y).
  - In addition to the expansion of the rise of infrastructure investment (+10.9% y-o-y) from the previous month (+4.8% y-o-y), real estate development investment also expanded (+8.4% y-o-y) from the previous month (+6.8%).
    - Growth of inventories of deformed steel bars, used in construction of buildings, peaked in mid-April. Inventories are now continuing to shrink.
  - On the other hand, investment among manufacturers stood at -5.3% y-o-y, marking an improvement, though small, from the previous month (-6.7% y-o-y).

Investment in fixed assets



Note: In nominal terms. The cumulative total of January to February for January and February.
Source: Made by MHRI based upon the National Bureau of Statistics of China and CEIC data

Inventories of steel products (deformed steel bars)



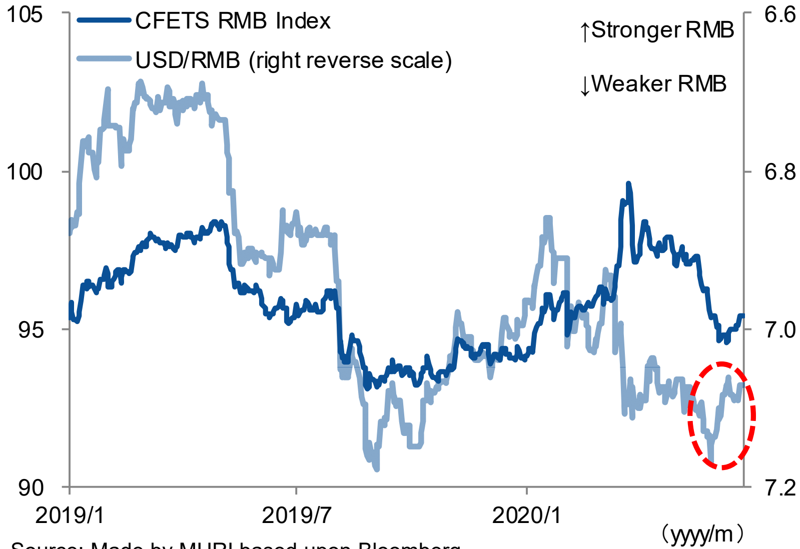
Note: The latest period covered is May 6-12, 2020.
Source: Made by MHRI based on wind

The yuan swayed by concerns regarding US-China tensions. Shanghai stocks rise on expectations of economic stimulus measures

- The yuan fluctuated against the US dollar amid the escalation of US-China tensions regarding Hong Kong.
  - Reflecting deliberations on the National Security Law for Hong Kong at the National People's Congress (NPC) on May 22, the yuan weakened amid rising concerns over US-China tensions as speculation spread that the US would impose sanctions, including the suspension of some of the special treatment of Hong Kong. On May 26, the yuan weakened closer to the 10-year low of 7.1789 yuan to the dollar recorded on September 3, 2019. Subsequently, however, the yuan firmed back in June as US President Trump's announcement of the end of the special treatment for Hong Kong was received as well within expectations.

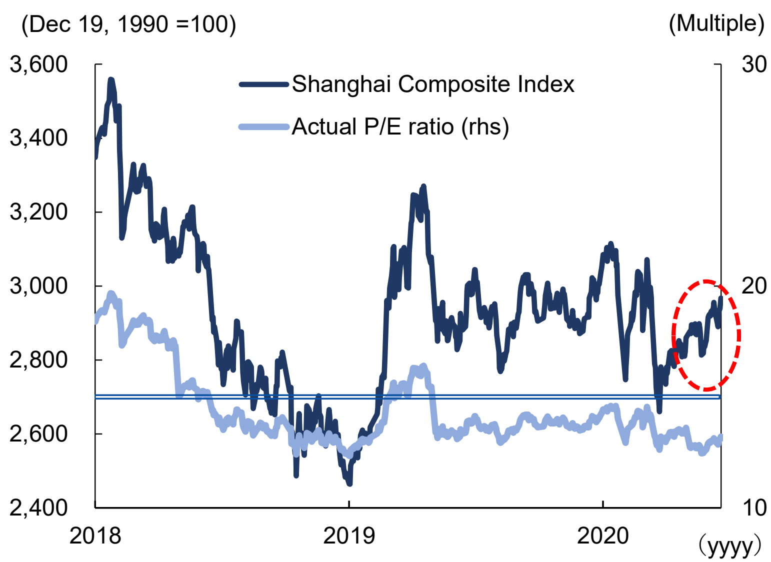
- The Shanghai Composite Index rebounded, underpinned by expectations toward economic stimulus measures and monetary easing.
  - After the consecutive holidays (May 1-5), Shanghai stocks stayed weak amid rising concerns over US-China tensions following the closing of the NPC on May 28, however, stocks staged a rebound, spurred by the progress in stimulus measures and expectations about new monetary easing measures by the People's Bank of China, recovering to 2,900PT on June 1.

USD/RMB rate



Source: Made by MHRI based upon Bloomberg

Shanghai Composite Index

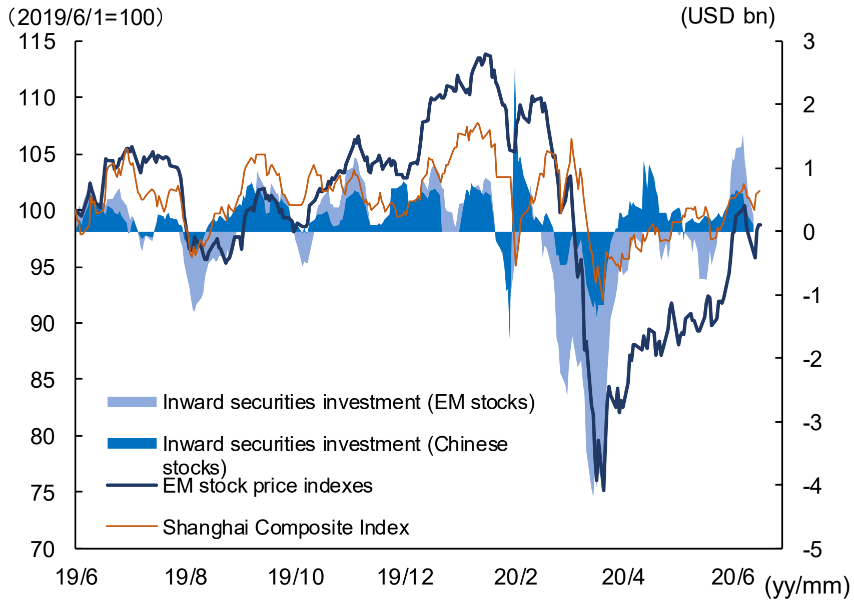


Source: Made by MHRI based upon the Shanghai Stock Exchange, wind

EM financial markets: recent recovery void of momentum

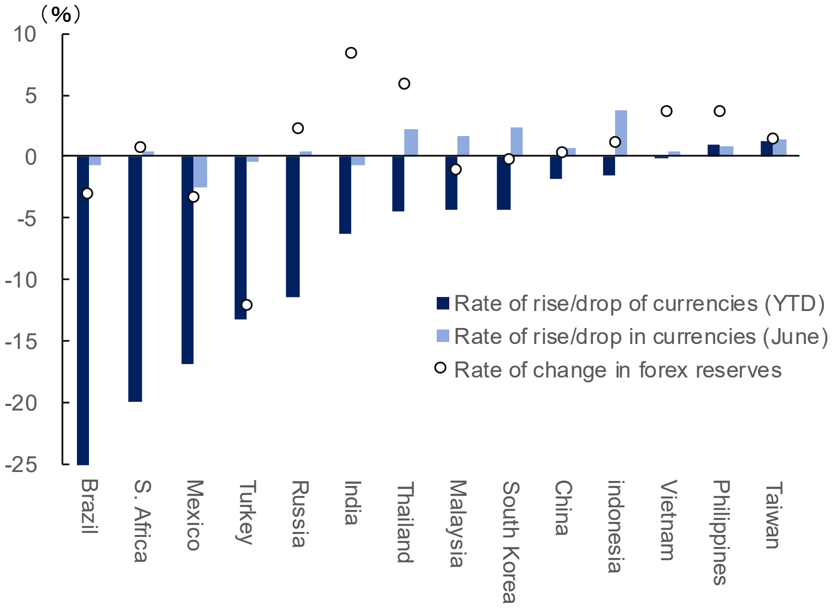
- Chinese stocks continued to pick up. The month of June saw a recovery in inward securities investment in EM stocks other than Chinese stocks.
  - Given that advances in US stocks were a large factor, EM stocks is predicted to remain instable since COVID-19 infections show no signs of abating.
- Even though many EM currencies are weaker than levels at the start of 2020, they are recovering due to the resumption of economic activity and rebounds from early declines.
  - As Turkey and Brazil are intervening in the currency market to help ease downward pressure on their currencies, their foreign exchange reserves are declining.
- Even so, given the weak economic fundamentals of EM countries, the upside of EM stocks and currencies should be heavy despite their current recovery.

EM stocks and inward securities investment



Note: EM stocks are based upon the MSCI Emerging index. Inward securities investment shown in the seven-day moving average
Source: Made by MHRI based upon Refinitiv, MSCI, JP Morgan

Rates of changes in EM currencies and forex reserves

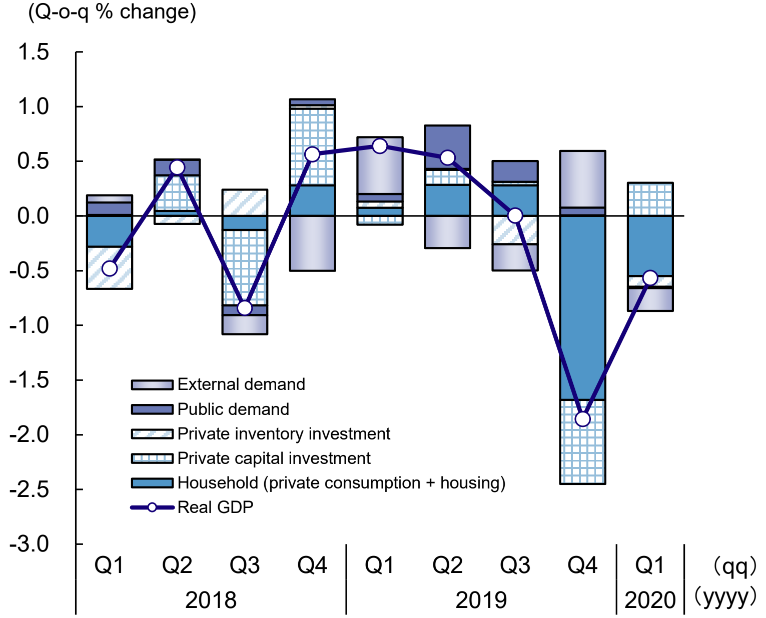


Note: The rates of change in foreign exchange reserves show comparison between the latest balance announced and the balance at the end of 2019.
Source: Made by MHRI based upon Refinitiv, central banks of countries concerned

5. (1) The Japanese economy: Jan-Mar quarter real GDP revised up to -2.2% q-o-q (2nd QE)

- According to the Second Preliminary Quarterly Estimates of GDP (2nd QE), Japan's real GDP in the Jan-Mar quarter of 2020 was revised upward to -0.6% q-o-q (-2.2% p.a.) from -0.9% q-o-q (-3.4% p.a.) in the First Preliminary Quarterly Estimates of GDP (1st QE).
  - ■ The upward revision stemmed chiefly from the upward revision of capital investment. The capital investment data is deemed to have an upward bias, because of a low rate of response to the survey for the Financial Statements Statistics of Corporations in the Jan-Mar quarter due to the impact of COVID-19 infections, and the likelihood that companies impacted have withheld replies to the survey.
  - ■ The final report of the Financial Statements Statistics of Corporations is due out at the end of July. Since the odds are high that capital investment in the Jan-Mar quarter will be revised downward at the same time of the release of the Preliminary Quarterly Estimates of GDP for the Apr-Jun quarter, the capital investment data of the Financial Statements Statistics of Corporations does not provide a reason to revise our economic outlook at this point in time.

Jan-Mar quarter of 2020 (2nd QE)



	2019 Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	2020 Jan-Mar	1st QE
Real GDP	0.6	0.5	0.0	-1.9	-0.6	-0.9
(Q-o-q change, p.a.)	2.6	2.1	0.0	-7.2	-2.2	-3.4
(Y-o-y change)	0.8	0.9	1.7	-0.7	-1.7	-2.0
Domestic demand	0.1	0.8	0.2	-2.4	-0.4	-0.7
	(0.1)	(0.8)	(0.2)	(-2.3)	(-0.4)	(-0.7)
Private demand	0.1	0.6	0.1	-3.3	-0.5	-0.9
	(0.1)	(0.4)	(0.1)	(-2.4)	(-0.3)	(-0.7)
Personal consumption	0.1	0.5	0.4	-2.9	-0.8	-0.7
Housing investment	1.4	-0.2	1.2	-2.3	-4.2	-4.5
Capital investment	-0.5	0.9	0.2	-4.8	1.9	-0.5
Inventory investment	(0.1)	(0.0)	(-0.3)	(0.0)	(-0.1)	(-0.0)
Public demand	0.3	1.6	0.8	0.3	-0.0	-0.0
	(0.1)	(0.4)	(0.2)	(0.1)	(-0.0)	(-0.0)
Government consumption	-0.2	1.5	0.7	0.2	0.0	0.1
Public investment	2.4	1.7	1.0	0.5	-0.6	-0.4
External demand	(0.5)	(-0.3)	(-0.2)	(0.5)	(-0.2)	(-0.2)
Exports	-1.8	0.2	-0.6	0.4	-6.0	-6.0
Imports	-4.5	1.8	0.7	-2.4	-4.9	-4.9
Nominal GDP	1.1	0.6	0.4	-1.5	-0.5	-0.8
GDP deflator (y-o-y change)	0.2	0.4	0.6	1.2	0.9	0.9

Note: Q-o-q percent change in real terms in the table on the right unless otherwise noted. Figures in parentheses indicate contribution to the rate of GDP growth.
Source: Made by MHRI based upon Cabinet Office, *Preliminary Quarterly Estimates of GDP.*

Apr-Jun quarter industrial production expected to fall by more than 10%

- In April, industrial production fell a sharp 9.1% m-o-m (March: -3.7% m-o-m).
  - By sector, particularly sharp falls were marked by transport equipment (-31.7% m-o-m) and iron, steel and non-ferrous metals (-14.3% m-o-m).
- Production plans for the Apr-Jun quarter stood at -12.8% q-o-q. The odds are high that production activity bottomed out in May.
  - The index of industrial production forecasts points to -4.1% m-o-m for May and +3.9% m-o-m for June. Motor vehicle output turned upward, and industrial production is estimated to have bottomed out in May.
- Production plans for the Apr-Jun quarter for information-related sectors (electronic parts and devices) and capital goods (excluding transport equipment) are -3% to -6% q-o-q, revealing a relatively small fall. However, as corporations are refraining from capital investment, output of capital goods should fall over the summer.

Industrial production index and forecast index

(Q-o-q% change)

		Actual	Plan		Plan
		20/04	20/05	20/06	20/Q2
Industry	Industrial production	- 9.1	- 4.1	3.9	- 12.8
	Iron, steel and non-ferrous metals	- 14.3	- 12.7	1.6	- 24.6
	Production machinery	2.5	3.3	8.5	- 1.5
	General purpose/commercial machinery	- 6.6	- 2.6	- 6.0	- 12.7
	Electronic parts/devices	- 2.5	0.1	- 2.4	- 2.7
	Electrical machinery	- 10.2	6.1	5.3	- 4.4
	Information and communication equipment	- 7.4	- 11.7	0.8	- 6.0
	Transport equipment	- 31.7	- 23.6	24.2	- 41.1
Type of goods	Capital goods (excluding transport equipment)	0.3	2.8	1.9	- 3.2

Note: 2Q of 2020 is calculated assuming May and June are forecasts and April is actual output.
Source: Made by MHRI based upon Ministry of Economy, Trade and Industry

Production outlook for major industries

[Transport equipment (motor vehicles)]
- **Forecast index: -23.6% m-o-m for May and +24.2% m-o-m for June. Automakers are planning to raise output (an easing of output cuts) during summer. Thus, the bottom of production levels will most likely be May.**

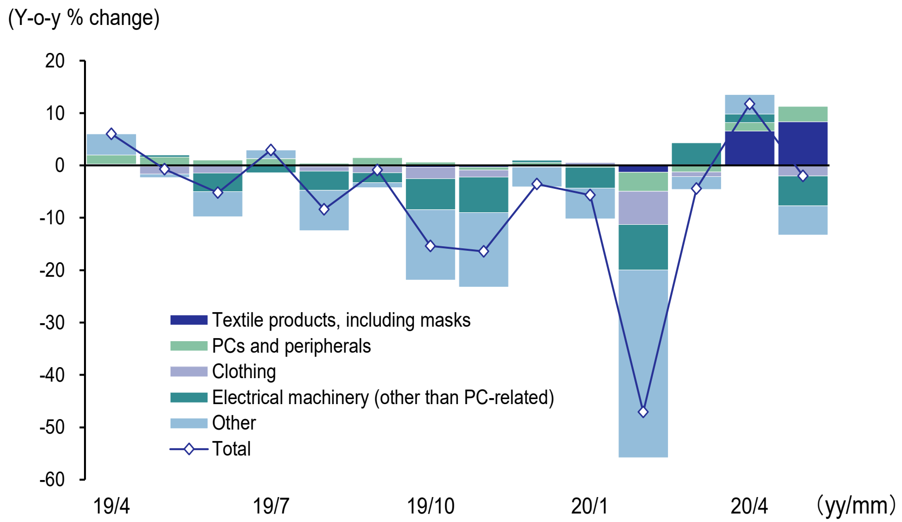
[Capital goods (excluding transport equipment)]
- Increasing demand for semiconductor-manufacturing equipment and a quick return of investment in China are positive factors.
- However, as Japanese firms are increasingly withholding capital investment at home, production of capital goods is expected to fall sharply down in summer.

[Information-related (electronic parts/devices, ITC machinery]
- Lower-than-expected demand for in-vehicle semiconductors.
- On the other hand, production adjustments should prove marginal, underpinned by 5G-related demand and rise of demand for PCs to accommodate remote work.

Exports fell sharper than expected due to weak overseas economies

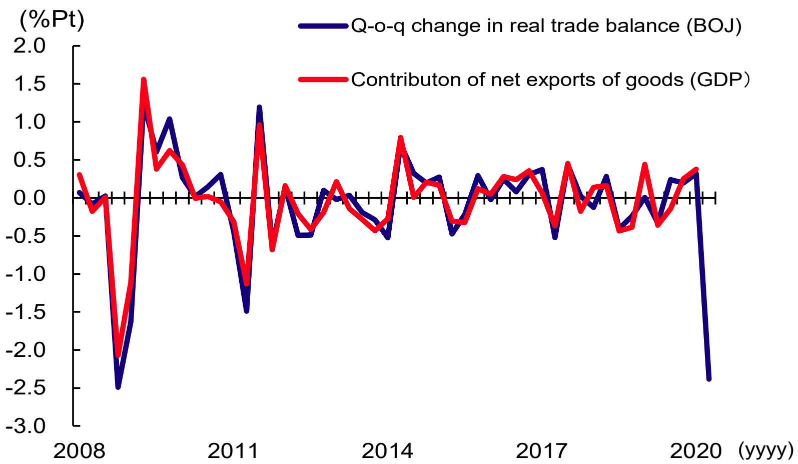
- In May, the export volume index stood at -6.7% m-o-m, comprised mainly of a sharp fall of motor vehicle-related exports (Apr-May: -20.8% q-o-q).
  - Exports to China, where measures taken to curb the COVID-19 infections were eased earlier than other countries, increased, but exports to Europe and the US were led down by motor vehicles.
  - On the other hand, the import volume index for Apr-May rose by +5.6% q-o-q, due to the increase of imports of masks and PCs from China.
- Despite prospects of an export recovery and import decline in June, the contribution by external demand is expected to fall sharply for the Apr-Jun quarter.
  - In June, exports are expected to pick up due to the relaxation of measures to prevent infections, while imports are expected to decline as a result of the fading one-off demand for masks.
  - Compared with the forecasts as of April, exports turned out to fall below expectations while imports grew faster than expected. Together, they are likely to push down Apr-Jun quarter GDP by more than -1%.

Nominal imports from China (y-o-y change by item)



Source: Made by MHRI based on Ministry of Finance, *Trade Statistics*

Q-o-q change in real trade balance and contribution of net export (goods)

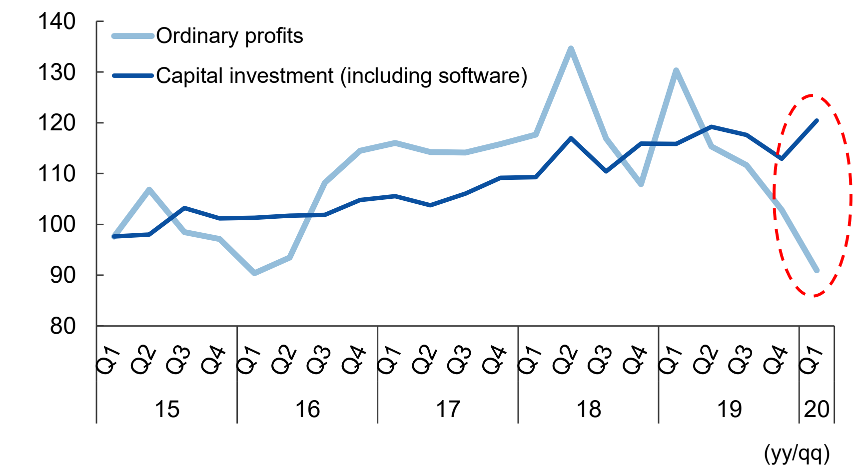


Note: The contribution of net exports for the Apr-Jun quarter was calculated by assuming that June data is unchanged from May.
Source: Made by MHRI based on Ministry of Finance, *Trade Statistics*, Bank of Japan, *Developments in Real Exports and Real Imports*

In the Jan-Mar quarter *Financial Statements Statistics of Corporations*, capital investment turned out stronger than actual trend

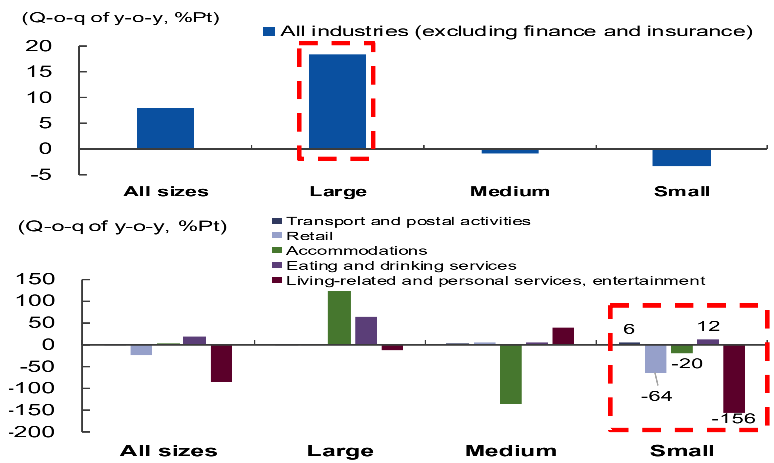
- While investment in plant and equipment (excluding finance and insurance, including software) in the Jan-Mar quarter rose into positive territory (+6.7% q-o-q) for the first time in three quarters, this was stronger than the actual trend.
  - Power plant investment by electric power companies and redevelopment investment by real estate firms stemming from the progress of investment plans set prior to the spread of COVID-19 infections are progressing.
  - The collection rate of survey slips dropped (approximately10% from the previous survey) due to the impact of COVID-19 infections. Enterprises affected heavily by the infections, mainly medium sized and small enterprises, appear to have failed to return their responses. The survey results will most likely be subject to downward revisions when the final revised report is released two months later around the end of July.
  - Ordinary profits deteriorated (-11.6% q-o-q). Given an even more stringent profit environment in the Apr-Jun quarter, capital investment is expected to drop over the summer.
- Short-term borrowings increased (from +3.8% y-o-y in 19/Q4 to +11.9% y-o-y in 20/Q1), indicating that corporate enterprises took steps to secure their cash on hand. However, there were no indications that medium-sized and small corporate enterprises increased borrowings as of March 2020.
  - In the accommodations and, living-related and personal services and entertainment sectors, borrowings by small corporate enterprises are not rising, indicating the urgent need for financial support by the government.

Investment in plant and equipment



Source: Made by MHRI based upon Ministry of Finance, *Financial Statements Statistics of Corporations by Industry, Quarterly*

Short-term borrowings



Source: Made by MHRI based upon Ministry of Finance, *Financial Statements Statistics of Corporations by Industry, Quarterly*

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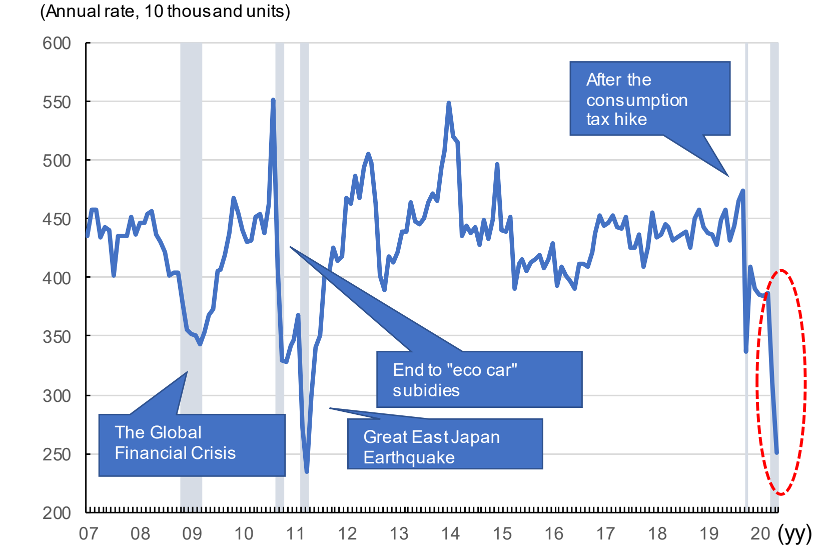
Consumer spending flattened out in May. While motor vehicle sales fell, other items picked up

- In May, motor vehicle sales fell -19.4% m-o-m (April: -19.5% m-o-m) recording a sharp fall for the second month in a row.
  - This translates into an annual rate of 2.51 million units, which is almost as low as the annual rate of 2.35 million units in April 2011, immediately after the Great East Japan Earthquake.
  - At the time of the earthquake which resulted in massive supply constraints, motor vehicle sales recovered to the pre-quake level five months later in August 2011. While there were no supply constraints during the recent “stay home” period, employee income was damaged. Thus, motor vehicle sales will likely require some time to recover to prior levels.

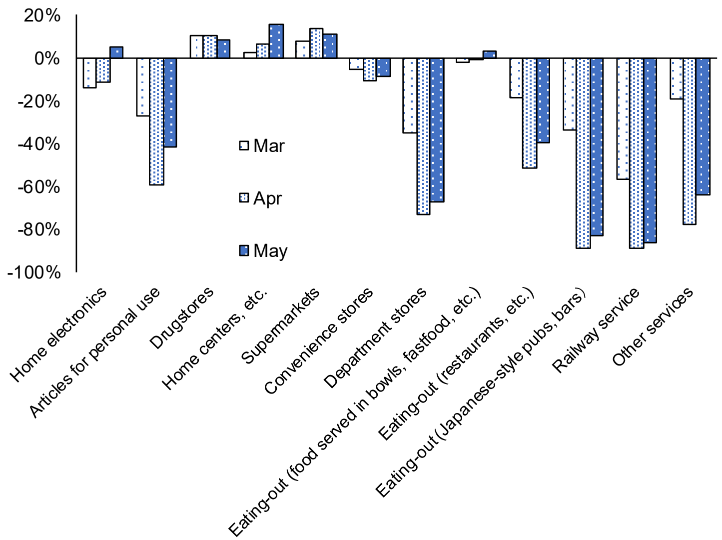
- According to IR information in May, the year-on-year fall narrowed somewhat compared with April. This stems primarily from the resumption of economic activity after the lifting of the declaration of a state of emergency.
  - Food and articles of daily use appear firm, and home office-related demand is fairly robust. The resumption of economic activity is highlighting the recovery trend of sectors related to articles for personal use. However, the recovery of service consumption, including eating-out, appears slow.

Motor vehicle sales (seasonally adjusted)



Note: Seasonally adjusted by MHRI.
Source: Made by MHRI based upon Japan Automobile Dealers Association, Japan Light Motor Vehicle and Motorcycle Association.

IR information released in May (y-o-y)

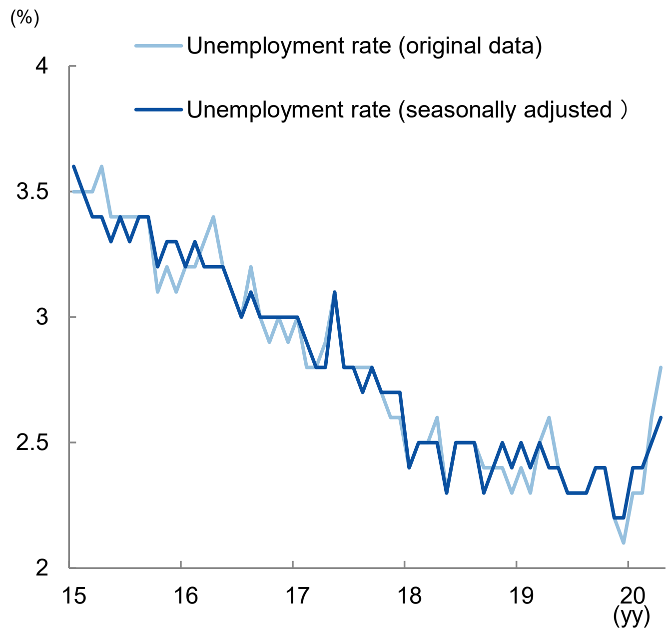


Note: The simple arithmetic average of figures released by companies. Other services include beauty care and amusement.
Source: Made by MHRI based on IR materials of various companies

The unemployment rate rose only marginally in April, but the fall of the number of employed persons already matched that in the Global Financial Crisis

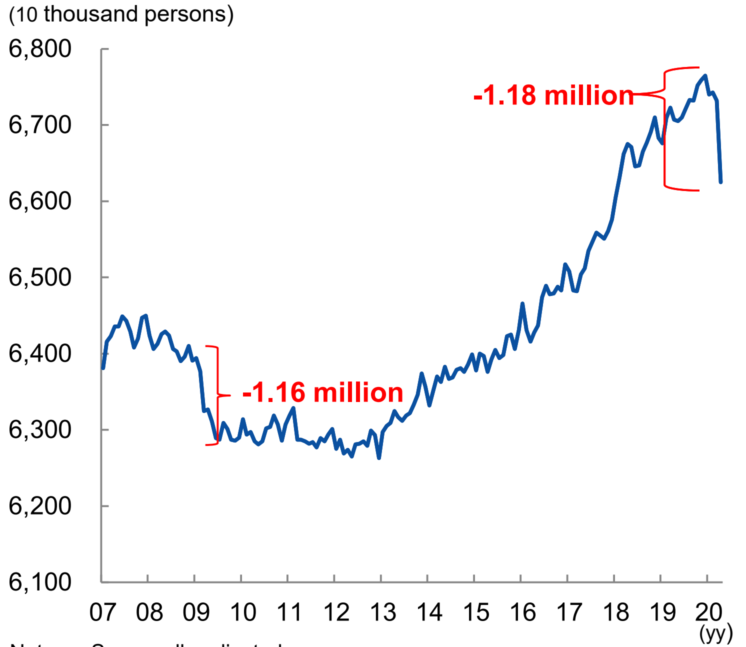
- The unemployment rate stood at 2.6% in April, in a minor rise from the previous month (2.5%). But the number of employed persons fell sharply by -1.07 million m-o-m.
  - The decline in the number of employed persons (Feb-Apr: -1.18 million) matches the fall at the time of the Global Financial Crisis (Aug 2008-Jul 2009: -1.16 million).
  - The rise in the unemployment rate was subdued because workers who lost their jobs were not counted as unemployed but were counted as the population not in the labor force (+940,000 m-o-m) (if 940,000 people had become unemployed, the unemployment rate would have been 3.9%).
  - In addition, the number of employed persons not at work surged to 5.97 million (original data; a change of +4.0 million over January). Following the lifting of the declaration of a state of emergency, a certain part of these persons are likely to go back to work in or after June. However, some will become unemployed, a factor that is expected to increase the unemployment rate during summer.

Trends of the unemployment rate



Source: Made by MHRI based upon Ministry of Internal Affairs and Communications, *Labour Force Survey*.

Trends of employed persons



Note: Seasonally adjusted
Source: Made by MHRI based upon Ministry of Internal Affairs and Communications, *Labour Force Survey.*

Direct spending of JPY 33 trillion under second supplementary budget; Reserve fund expanded significantly, including financing support and rent assistance

- Additional expenditures (direct spending) under the second supplementary budget amount to JPY 33.2 trillion. The size of projects, including fiscal investment and loans, etc. by private financial institutions amount to JPY 117.1 trillion.
  - The second supplementary budget features “enhancing financial support” (JPY 11.6 trillion), “establishing a rent support grant for SMEs” (JPY 2.0 trillion), and a large expansion of “contingency funds for COVID-19” (JPY 10.0 trillion).
- The supplementary budget will have limited effect in pushing up GDP (around +0.2% pt). Upside factors to the economy include payments to low-income households (the positive effects expected to emerge in the Jul-Sep quarter) and emergency comprehensive support grant for novel coronavirus disease (payments to medical treatment providers, support for the introduction of equipment to medical and nursing care institutions, etc. The positive effects expected to emerge in the Oct-Dec quarter).
  - While payments to corporations are mostly intended to cover their fixed costs, they will not serve to boost capital investment. Since loans from government-affiliated financial institutions need to be repaid in the future and the reserve fund contains uncertainties regarding the disbursements and purposes of the reserve fund, it is not reflected in the economic impact.
  - The second supplementary budget is appropriate for its emphasis upon the provision of financial support for companies and livelihood support for individuals rather than economic stimulus. The key is its prompt execution.

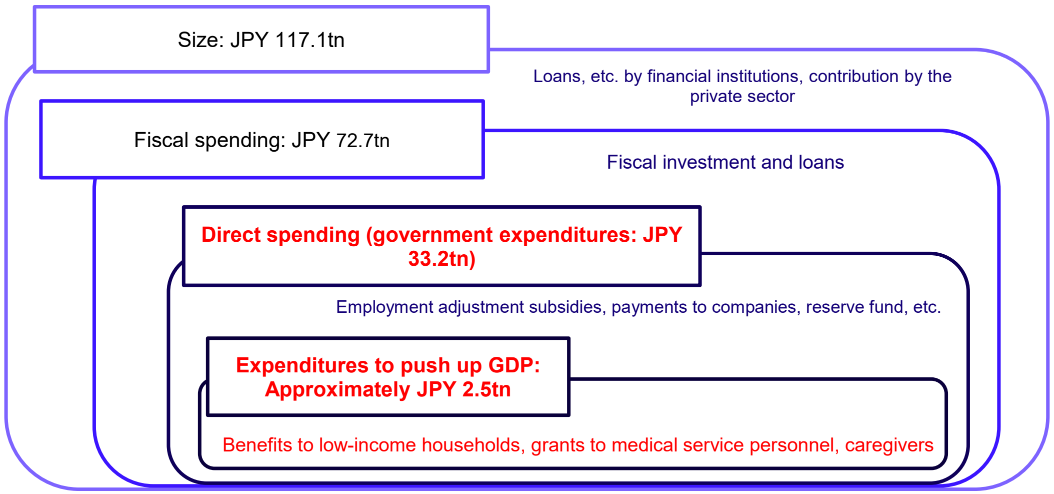
Overview of the 2nd supplementary budget

(JPY trillion)

Key policy measures	Budgetary Measures
Enhancing the Employment Adjustment Subsidy (General Account + Special Accounts)	1.3
Enhancing financial support (loans to companies, providing capitals)	11.6
Establishing a rent support grant for SMEs	2.0
Supporting medical treatment providers (Emergency Comprehensive Support Grant For Novel Coronavirus Disease, etc.)	3.0
Expanding of “Special Allocation for Revitalization to Cope with COVID-19”	2.0
Enhancing the Subsidy Program for Sustaining Businesses	1.9
Additional payments to low-income single parent households	0.1
Other (enhancing grants to sustain businesses, etc.)	0.6
Reserve fund	10.0
Total of additional expenditures (national government expenditures)	33.2

Source: Made by MHRI based upon Ministry of Finance

Size and direct spending of the 2nd supplementary budget



Source: Made by MHRI based upon Ministry of Finance, various news reports

(2) Monetary policy: BOJ expands financing support for firms

- At the Monetary Policy Meeting on June 15-16, the Bank of Japan (BOJ), raised its ceiling of financing support for firms, etc. from JPY 75 trillion to JPY 110 trillion (JPY 20 trillion for purchases of CP and corporate bonds, etc. and JPY 90 trillion for the Special Program to Support Financing in Response to the Novel Coronavirus (COVID-19)), in response to the expansion of zero interest loans by private financial institutions under the second supplementary budget.

- The BOJ revised down its assessment of the current economic situation, saying that “Japanese economy has been in an extremely severe situation due to the impact of the novel coronavirus (COVID-19).” Corporate profits and business sentiment have deteriorated, and the deceleration in the pace of increase in business fixed investment has become evident. BOJ Governor Haruhiko Kuroda noted that if the US Federal Reserve Board (FRB) does not raise its policy interest until 2022 as FRB Chairman Powell indicated, the BOJ may also find it difficult to change its monetary policy.

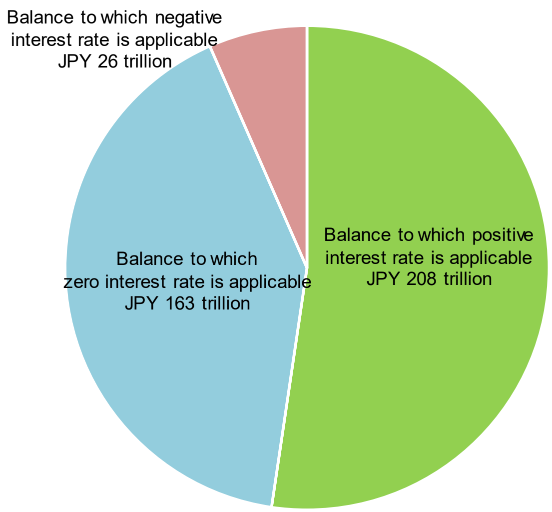
- As part of its financial support of firms, the BOJ will apply an interest rate of +0.1% to current account balances. The BOJ expects the interest-bearing portions of current accounts to increase going forward.
  - The lending balance under the Special Program to Support Financing in Response to the Novel Coronavirus stands at some JPY 16 trillion (out of the overall facility of JPY 90 trillion).

Bank of Japan’s economic outlook

	Outlook for Economic Activity and Prices (April 27)	Monetary Policy Meeting (June 16)	Change
Current economic situation	Japan's economy has been in an increasingly severe situation.	Japan's economy has been in an extremely severe situation.	↘
Overseas economies	Overseas economies have become depressed rapidly, reflecting the impact of the COVID-19 pandemic.	Overseas economies have been depressed significantly, reflecting the impact of the COVID-19 pandemic.	→
Domestic demand	Capital investment: Business sentiment has deteriorated, and the deceleration in the pace of increase in business fixed investment has become evident recently. Public investment: Has increased moderately. Private consumption: The employment and income situation has started to show some weakness, and private consumption has decreased significantly, mainly in services such as eating and drinking as well as accommodations.	Capital investment: Corporate profits and business sentiment have deteriorated, and the deceleration in the pace of increase in business fixed investment has become evident. Public iinvestment: Has increased moderately. Private consumption: The employment and income situation has shown some weakness, and private consumption has decreased significantly, mainly in services such as eating and drinking as well as accommodations.	↘
Exports/Production	Exports and industrial production: Have declined.	Exports and industrial production: Have declined substantially.	↘

Source: Made by MHRI based upon Bank of Japan

Composition ratio of current accounts (May 2020)



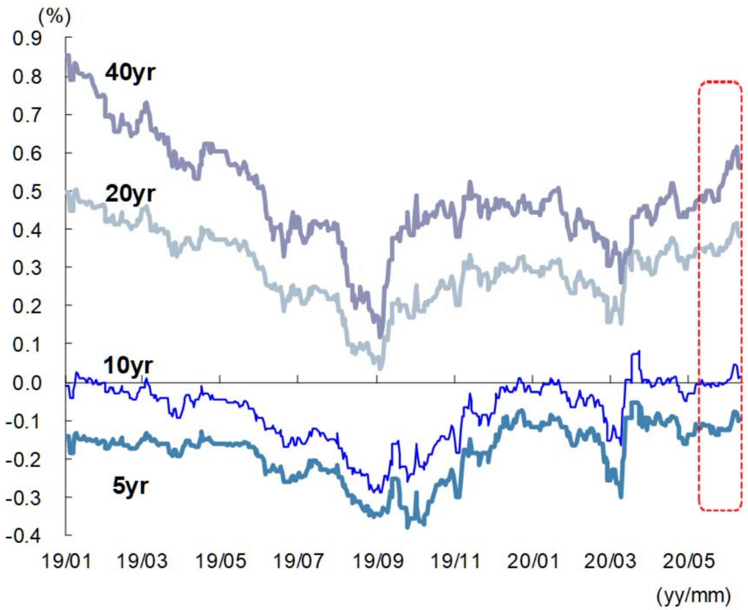
Source: Made by MHRI based upon Bank of Japan

(3) Japanese bond market: 10yr JGB yield trending near 0%

- 10yr JGB yields hovered around 0%. While market participants are aware of the risk of interest rate rises accompanying the rise of JGB issues, yields should remain close to 0% for the time being, with the BOJ's purchases likely to underpin supply and demand.
- Under the JGB purchase management policy for June, the BOJ made a slight increase of its purchases of JGBs in the medium- and long-term zones even though it was before the increase of JGB issues.(*)
  - ■ In zones shorter than medium- and long-term JGBs, interest rate rises stemming from the increase of JGB issues were largely contained in light of the BOJ's purchase policy.
  - ■ Prices of super long-term JGBs, for which the BOJ did not indicate its stance of raising its purchases, fell sharply at one point, causing the yield curve to steepen.

    (*) Calculated on the basis of estimates computed from the central range of the June JGB purchase policy.
- S&P revised down the JGB rating outlook to "stable" from "positive" on June 9. However, the outlook change did not have any noticeable impact on the yen bond market.

JGB yields



Source: Made by MHRI based upon Bloomberg

S&P revises down JGB rating outlook to "stable"

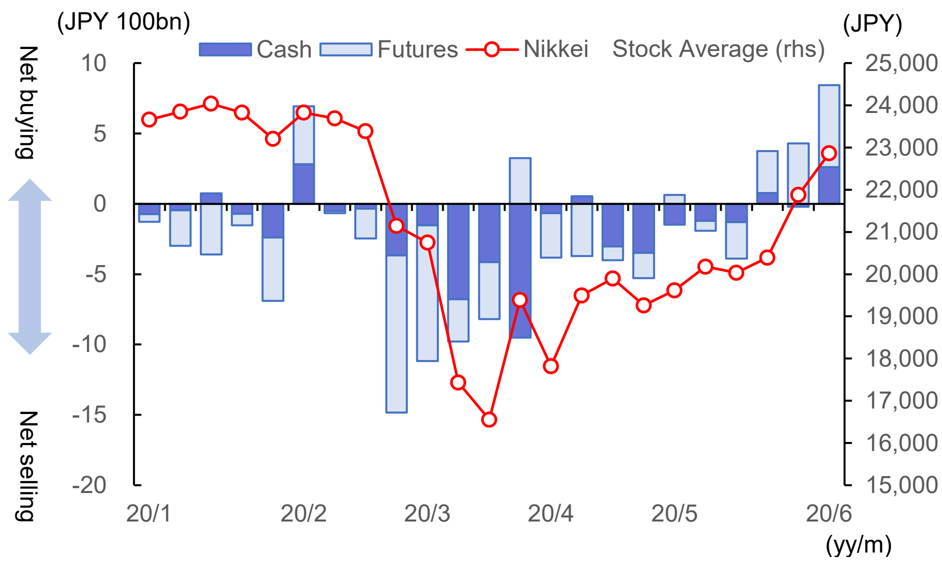
Change	• The outlook for Japan's long-term sovereign bond rating was revised from "positive" to "stable." ※The long-term and short-term JGB ratings were kept unchanged respectively at "A+/A-1."
Reasons for change	• The revision reflects the rise of uncertainties that Japan's general government debt as a percentage of nominal GDP could stabilize in the next one to two years due to the deterioration of fiscal performance.
Possibility of upgrade	• Looking forward, if S&P determines that Japan's fiscal rehabilitation will go ahead significantly faster than S&P currently expects, an upgrade is possible. • In the event S&P believes that the credibility of monetary policy has improved and inflation expectations stabilized at low positive levels have come to stay in Japan, an upgrade is possible as well.
Possibility of downgrade	• S&P may lower the ratings on Japan if structural changes lead economic growth to stay persistently below other high-income economies and a return of deflation puts long-term pressure on fiscal performance.

Source: Made by MHRI based upon S&P Global Ratings Japan

(4) Japanese stock market: although the stock market recovered due to foreigners' buying in futures, the upside will be limited for now

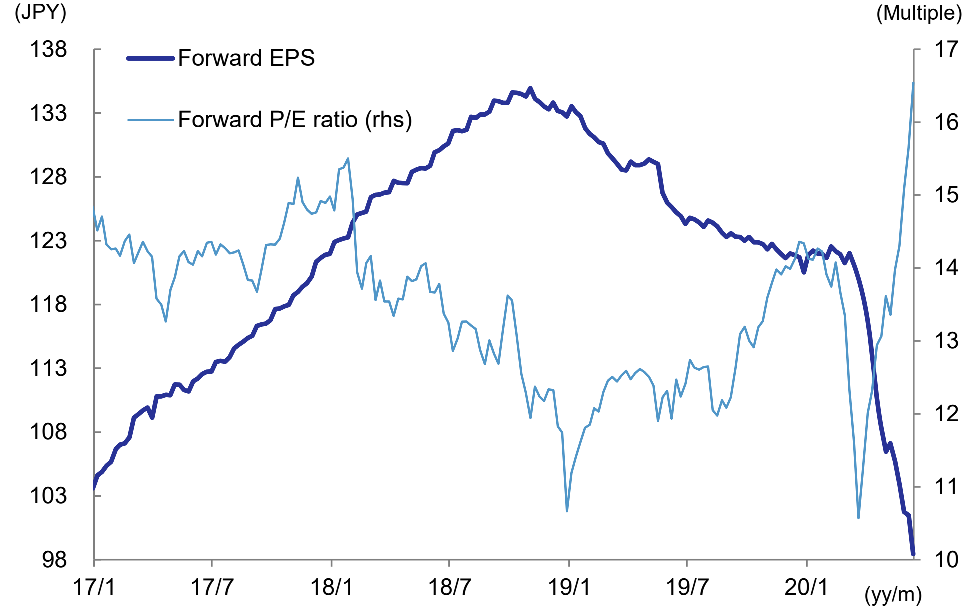
- The Nikkei Stock Average temporarily rose past 23,000, recouping 95% of its deepest fall.
  - Amid global buybacks of undervalued stocks, financials and transportation equipment served as the drivers.
- Individual investors, the principal buyers in April, moved to take profits. On the other hand, buybacks - mainly in futures - were evident among foreign investors.
  - Despite a market overheating reflecting inflows of mostly speculative funds, stocks fell back as selling to lock in profits pushed them down.
- Amid a strong sense of overvaluation, the upside of the market should be heavy for some time since expected corporate earnings have yet to bottom out.

Trading by foreigner investors and the Nikkei Stock Average



Note: The combined total of the first and section sections of the two markets
Source: Made by MHRI based upon Japan Exchange Group

TOPIX forward P/E ratio and forward EPS

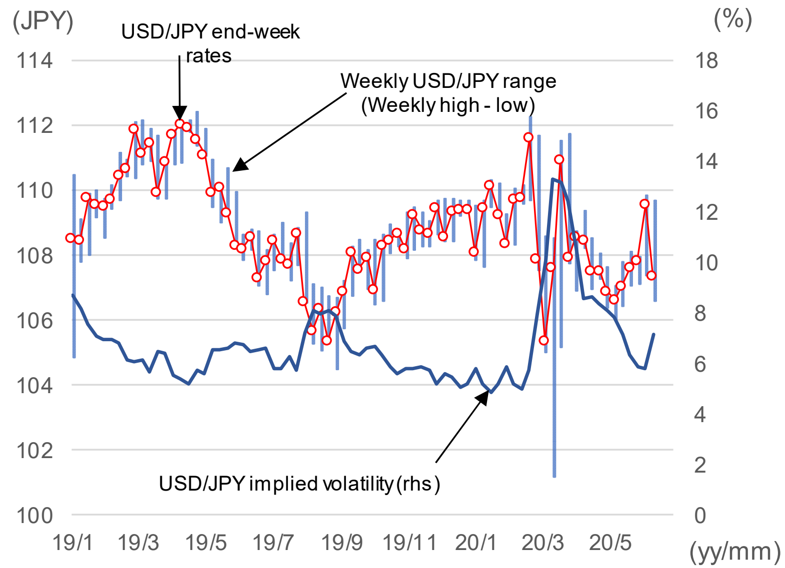


Note: Forward P/E ratio is for 12 months ahead and Forward EPS is the weighted average for 12 months ahead.
Source: Made by MHRI based upon Refinitiv

6. Forex market: USD/JPY exchange rate expected to move around the upper-half of the JPY100 level

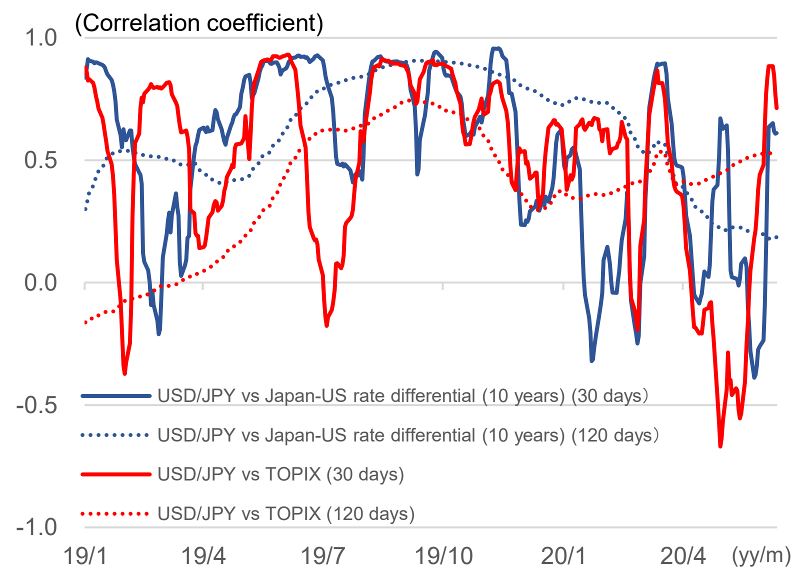
- USD/JPY exchange rates went through some volatile, swayed by stock market and interest rate trends. The implied volatility also rose slightly.
- The correlation coefficient between USD/JPY exchange rates and the Japan-US interest rate differential and the correlation coefficient between USD/JPY exchange rates and TOPIX both rose over the short-term period (30 days).
  - Stock prices fell sharply in response to the dovish outcome of the Federal Open Market Committee (FOMC) meeting on June 10 and renewed caution over a possible second wave of COVID-19 infections. Interest rate differentials between Japan and the US narrowed for reasons on the part of US interest rates. The dollar money market remained stable, prompting USD/JPY exchange rates to lower ground.
- The USD/JPY exchange rate is expected to move narrowly in the upper-half of the JPY100 level. Given mounting concerns over a possible second wave of COVID-19 infections, keep a close eye upon the appreciation of the yen stemming from the acceleration of risk-off sentiment.

USD/JPY week range and implied volatility



Note: Implied volatility for the three-month, at-the-money (ATM) end-of-the week value
Source: Made by MHRI based upon Bloomberg

Correlation between USD/JPY and Japan-US interest rate differential/TOPIX



Source: Made by MHRI based upon Bloomberg

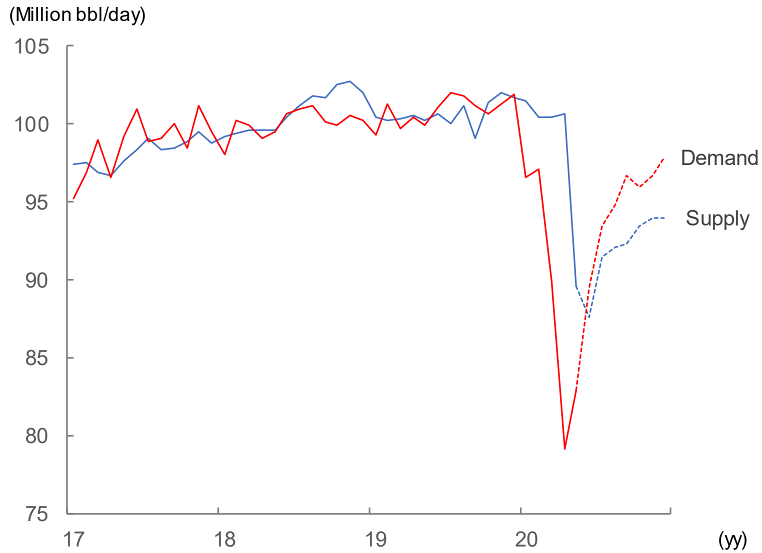
7. Crude oil market trends: expectations toward improvement of supply-demand serve as upside factor for the crude oil market

- Crude oil prices rose moderately against the backdrop of expectations about a recovery of demand following the resumption of economic activity as well as the improvement of supply-demand due to coordinated output cuts.
  - OPEC Plus decided to keep the scope of its output cuts of 9.7 million barrels a day for July, the same as for May-June. OPEC Plus also agreed to raise the compliance rate for output cuts.
- In the event OPEC Plus maintains its coordinated output cuts, the crude oil glut will be resolved.
  - US crude oil output dropped by 2.50 million barrels a day. Expectations toward a tightening of supply-demand from the summer onward helped push up the crude oil market.
- However, views that it will take until the end of 2021 to resolve the excess crude oil inventory accumulated due to shocks stemming from COVID-19 served to dampen the rise of the crude oil market.
  - The possibility that the US will raise output or that OPEC Plus' compliance rate will decline are factors capping the upside of crude oil prices.

Crude oil price forecast (WTI)

Source: Made by MHRI based upon Bloomberg

Crude oil supply-demand



Note: The dotted lines show the EIA forecasts for June 2020 onward.
Source: Made by MHRI based upon Bloomberg

MIZUHO

8. Outlook on the financial markets

		○Main scenario					○Sub-scenario 1				○Sub-scenario 2			
		2020 Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	2021 Jan-Mar	2020 Apr-Jun	Jul-Sep	Oct-Dec	2021 Jan-Mar	2020 Apr-Jun	Jul-Sep	Oct-Dec	2021 Jan-Mar
US	Federal funds rate (End-of-quarter, %)	0.00～0.25	0.00 ～0.25	0.00 ～0.25	0.00 ～0.25	0.00 ～0.25	0.00～ 0.25	0.00～ 0.25	0.00～ 0.25	0.00～ 0.25	0.00～ 0.25	0.00～ 0.25	0.00～ 0.25	0.00～ 0.25
	10-yr UST bond yield (%)	1.38	0.66	0.65	0.70	0.80	0.70	0.85	0.90	1.00	0.60	0.70	0.50	0.50
	Dow Jones Average (USD)	26,679	24,500	24,200	24,400	24,500	24,500	26,100	26,700	27,300	24,500	23,000	20,700	19,600
Japan	Euroyen TIBOR (3-mo, %)	0.02	-0.03	-0.05	-0.05	-0.05	0.02	0.03	0.03	0.04	0.02	0.02	0.02	0.02
	10-yr JGB yield (%)	-0.04	-0.02	-0.05	0.00	0.00	0.00	0.00	0.05	0.05	-0.10	-0.05	-0.10	-0.10
	Nikkei Stock Average (JPY)	21,932	20,600	20,200	20,300	20,400	20,600	21,600	22,000	22,400	20,600	19,000	17,100	16,200
Europe	ECB deposit facility rate (End of quarter, %)	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50
	10-yr government bond yield (German government bonds, %)	-0.41	-0.46	-0.45	-0.40	-0.35	-0.40	-0.35	-0.30	-0.25	-0.45	-0.45	-0.55	-0.55
Forex	USD/JPY rate (USD/JPY)	109	107	107	108	109	107	109	109	110	107	107	105	107
	EUR/USD rate (EUR/USD)	1.10	1.10	1.10	1.11	1.12	1.10	1.11	1.12	1.12	1.10	1.11	1.08	1.10

- Sub-scenario 1 (upside scenario)
  - Early containment of the COVID-19 pandemic. The absence of a second wave leads to an upturn of the global economy. Long-term interest rates and stock prices rise. The dollar strengthens against the yen.
- Sub-scenario 2 (downside scenario)
  - Despite a temporary global economic recovery due to the restart of economic activities around the world, a second wave of COVID-19 arises in the Oct-Dec quarter of 2020. Measures to prevent the spread of COVID-19 infections leads to a global economic slowdown. Both long-term interest rates and stock prices fall. The dollar weakens against the yen.