Monthly Economic Report

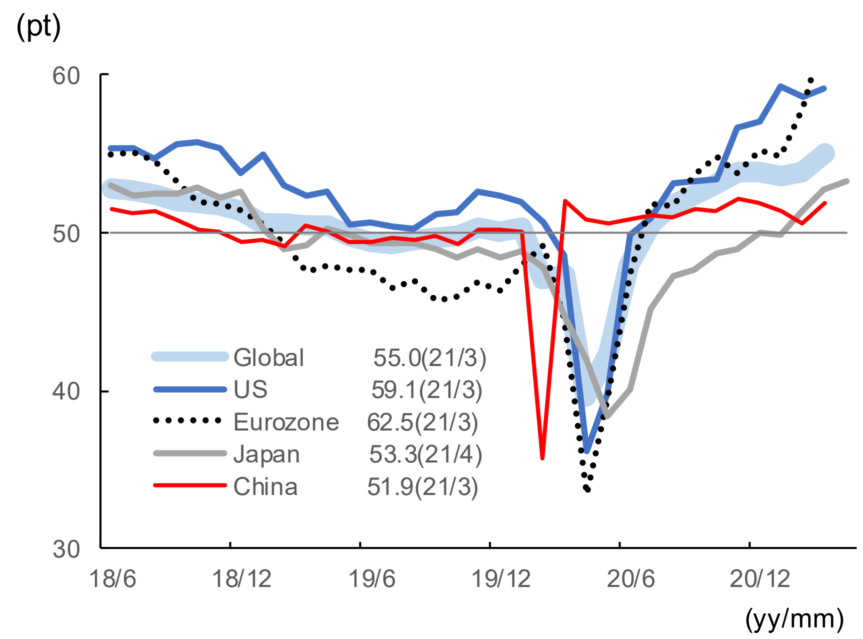
April 26, 2021

Mizuho Research & Technologies, Ltd.

1. Current state of the global economy: the US economy is continuing to serve as the driver of recovery

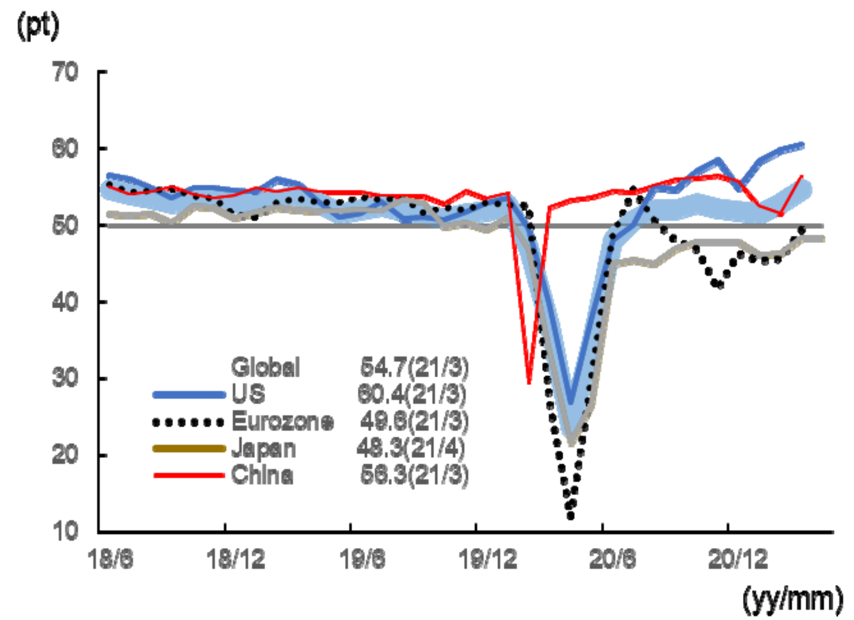
- The global economy is following a recovery, primarily in the manufacturing sector. In particular, the US economy is continuing to follow firm footing.
  - ■ In the US, the March ISM manufacturing Index reached its highest level since 1983. The ISM non-manufacturing index also reached its highest reading since 1997 when records were first kept.
- In Japan and the Eurozone, the nonmanufacturing PMI rose close to 50 in March due to the relaxation of mobility restrictions.
- Likewise in China, the PMI rose in both the manufacturing and nonmanufacturing sectors in March, despite the impact of the Chinese New Year in February. China's economy is continuing to follow an expansion.

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 MHRT based upon Markit Economics, the National Bureau of Statistics of China.

Nonmanufacturing PMI



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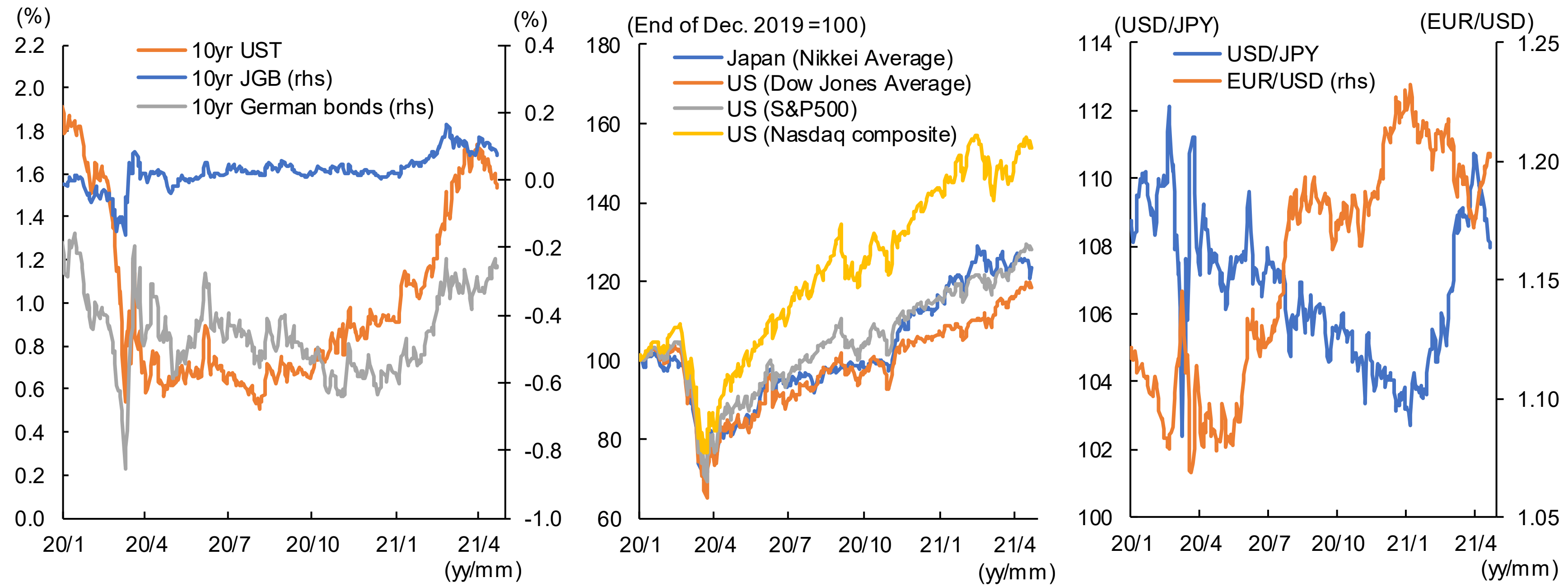
Source: Made by MHRT based upon Markit Economics, the National Bureau of Statistics of China.

Overview of financial markets: the US stock market rises and the US dollar weakens, reflecting the fall of US long-term interest rates

- US long-term interest rates fell amid the focus of attention that US monetary policy will remain accommodative for a prolonged period. Stock market rise and US dollar weakening expected, reflecting the fall of US interest rates.
  - The long-term US interest rate fell to the 1.5% range, amid the reaffirmation that the Fed will remain cautious regarding the tapering of monetary easing, based upon the March FOMC minutes and Fed Chair Jerome Powell's comments.
  - US stocks remain firm, reflecting the fall of US long-term interest rates and robust economic indicators and corporate earnings results. In contrast, while the Nikkei Average recovered to the JPY 30,000 level in early April, the market softened in the second half of the month, temporarily falling below JPY 29,000, reacting negatively to the spread of Covid-19 caseloads in Japan.
  - The US dollar weakened against the yen and the euro, reflecting narrowing interest rate differentials due to the fall of US long-term interest rates. The yen strengthened to the JPY 107/USD level.

Major market trends

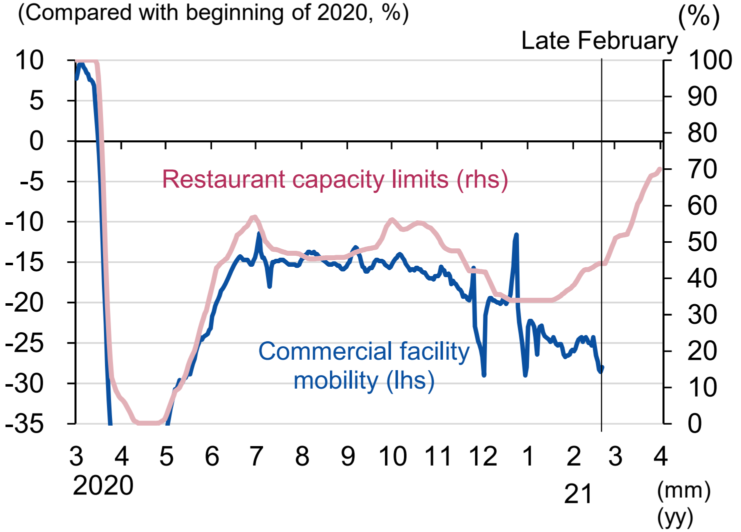


Note: All indexes show actual results up to April 22.
Source: Made by MHRT based upon Bloomberg.

2. (1) US economy: economic activity progresses rapidly towards normalization

- Commercial facility mobility has improved significantly since late February given the relaxation of mobility restrictions.
  - Amid with the ebb of consumers' cautious attitude reflecting the rollout of vaccines, it appears that the rapid recovery of the movement of people is leading to the acceleration of consumption.
- Some states have effectively lifted or significantly relaxed Covid-19-related restrictions without waiting for the achievement of herd immunity.
  - At present, these developments are limited to some states with Republican Party Governors (about 20% in terms of consumption weight). However, in view of factors including the statement by the Governor of Illinois (Democratic Party), movements to ease restrictions may accelerate along with the progress of vaccine rollouts.
    - Illinois Governor (March 18): “the entire state must reach a 70% first dose vaccination rate for residents 65 and over [and] a 50% vaccination rate for residents age 16 and over."

Trend of restaurant capacity restrictions and commercial facility mobility



Note: Restaurant capacity limit is a weighted average of the upper limits implemented by each state.
Source: Made by MHRT based upon Google, and various state government reports

Easing of restrictions in the US

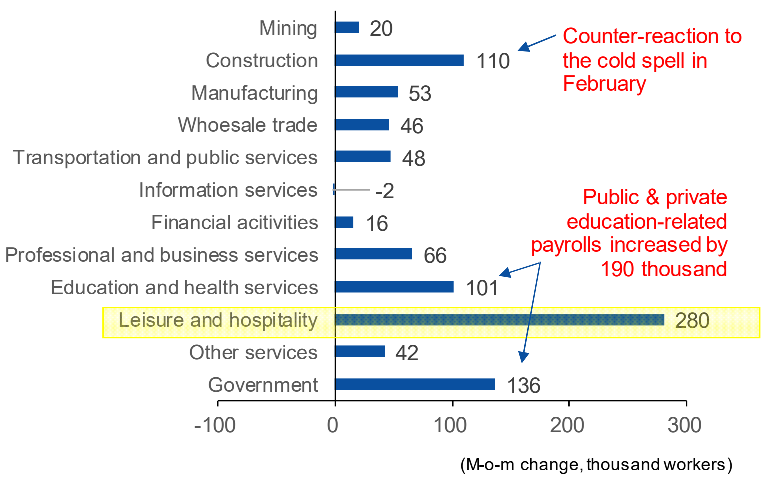
Current state regarding the lifting/easing of restrictions	States that have decided to ease restrictions (dates in parentheses indicate implementation dates)
Removed almost all restrictions: (Consumption weight **10.5%**)	**Texas governor (Mar 10)** “COVID-19 has not disappeared, but it is clear from the recoveries, vaccinations, reduced hospitalizations, and safe practices that Texans are using that state mandates are no longer needed.” Other states included: **Arkansas (Feb 27), Arizona (Mar. 5)**
Lifted capacity limits of restaurants and retail stores: (Consumption weight **6.3%**)	**Connecticut (Mar 19)** "Many of our people – well over 20% – have been vaccinated, the majority of whom are [people] most likely to suffer complications. So we thought ... we can [lift restrictions] safely." Other states included: **Massachusetts (Mar 1) Maryland (Mar. 12), Wyoming (Mar 16)**

Note: In states that "removed almost all restrictions," the restrictions implemented by the state government during the Covid-19 pandemic were lifted, except for a mask mandate in public areas.
Source: Made by MHRT based upon various state governments' and various media reports

In March, payrolls rose a dramatic 916,000 jobs, and the unemployment rate fell to 6.0%, revealing the spread of benefits of relaxing restrictions

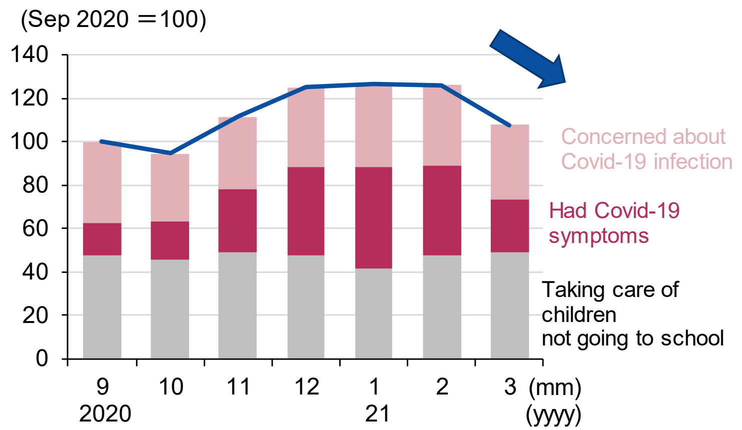
- Payrolls increased in a wide range of industrial sectors, mainly in leisure & hospitality and education-related sectors (public & private) due to the easing of restrictions.
  - The rate of wage rise deteriorated in March (-0.1% m-o-m), probably due to the composite effect accompanying the increase of low-wage employment. On a year-on-year basis, the rate stood at +4.2% y-o-y (deceleration).
  - Even so, when limited to leisure & hospitality, wages grew a strong 1.5% y-o-y, accelerating since December 2020 (average weekly working hours also following an uptrend). It will be necessary to watch closely whether the improvement of labor supply and demand will continue to coexist with the acceleration of wages, from the perspective of its implications on other sectors, and the impact on inflation and interest rates.
- The unemployment rate fell to 6.0% (-0.2% pt m-o-m) along with the improvement of the labor supply-demand balance.
  - The labor force participation rate improved to 61.5% (+0.1% pt m-o-m), given the return to the labor market of those who were not willing to work due to Covid-19 infections or those who were concerned about infections.
  - If face-to-face classroom lessons resume, the number of people who could not work because they were "taking care of children" is expected to decrease.

Trend in employment increase seen per industry



Source: Made by MHRT based upon the US Department of Labor.

Trends of people who do not work for Covid-19 reasons

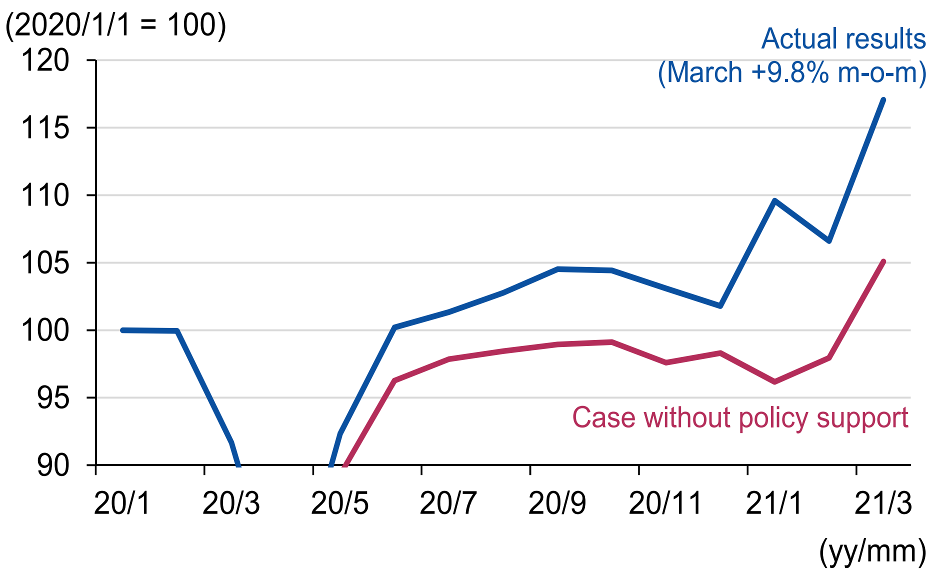


Note: Surveys as of the first half of each month
Source: Made by MHRT based upon the US Department of Commerce

Consumption rose significantly in March. Demand for hospitality services likely to rise further over the summer

- Retail sales surged in March, even when excluding the impact of policy support (benefits of USD 1,400/person, etc.) Improvements in labor income and consumer sentiment served as tailwinds.
  - Apparel (+18.3% m-o-m) and dining out (+13.4% m-o-m) recorded double-digit growth along with the progress of the normalization process. Food increased slightly (+0.7% m-o-m).
  - Credit spending related to accommodations and entertainment services also staged sharp rebounds in March, providing reasons to believe that overall consumption rose significantly in March.
- In the April Beige Book (survey period until April 5), there were numerous comments indicating the increase of travel reservations, etc.
  - The Beige Book indicates that demand for hospitality services will rise further over this summer. Corporate "expectations" as of February have materialized.

Retail sales



Source: Made by MHRT based upon the US Department of Commerce

Comments on hospitality services from the Beige Book

Reserve Bank of New York	February	**Anticipates** a strong rebound in leisure visitors by summer.
	April	Flight bookings are being made longer in advance. Future bookings have also expanded.
Reserve Bank of Boston	February	**Expected** that more widespread vaccine distribution would result in a release of pent-up demand in hospitality in the summer.
	April	Advance hotel bookings for summer stays are up dramatically from their typical April levels, and occupancy rates are on track to break records this summer.
Reserve Bank of Atlanta	February	**Expected** that leisure travel will begin to normalize towards the end of summer.
	April	**Solid bookings in hospitality** for spring and summer.

Note: February comments reflect industry respondents' report as up to Feb 22, April comments reflect industry respondents' report up to April 5.
Source: Made by MHRT based upon FRB

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(2) US monetary policy: March FOMC minutes reconfirms that "changes in the path of policy should be based primarily on observed outcomes rather than forecasts"

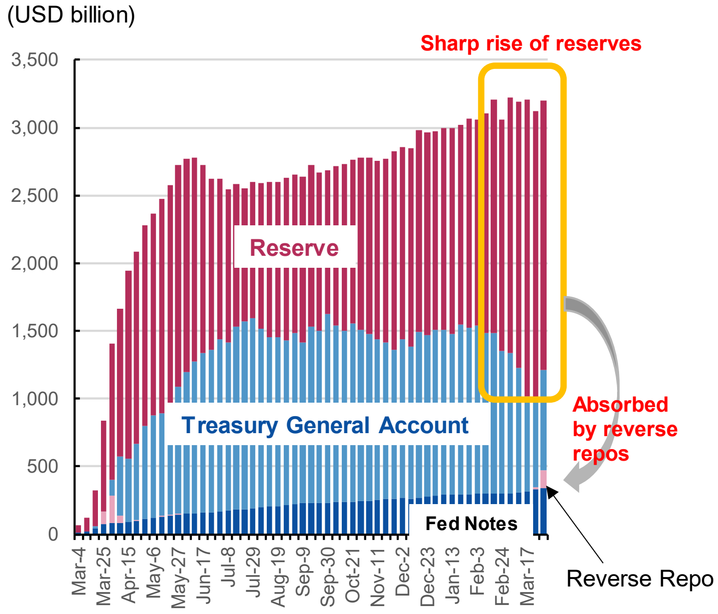
- Even though FOMC participants are taking an optimistic outlook, they will be monitoring economic developments towards achieving their goals.
  - ■ Upside risks: fiscal policy could have a more expansionary effect than anticipated, households could display a greater-than-expected willingness to spend out of accumulated savings, or widespread vaccinations and easing of social distancing could result in a more rapid boost to spending and employment than anticipated.
  - ■ Downside risks: new more-contagious virus strains, obstacles in the vaccine roll-out, social distancing fatigue, stress in the CRE sector, risks associated with the unwinding of mortgage forbearance and eviction moratoriums provided to households.
- Should undue downward pressure on overnight rates emerge, the FRB might implement adjustments to the interest on excess reserves rate or the reverse repo rate at upcoming meetings or even between meetings, which will alleviate the surge in downward pressure on excess reserves due to asset purchases and a drawdown in the balances in the Treasury General Account.

Overview of the minutes of the March FOMC meeting

【Economy】
・While services that typically require close personal contact remained weak, participants expected spending on these services would improve as vaccinations became more widespread, social-distancing measures were relaxed, and the public became less wary of close personal interactions.
・Many participants also pointed to the elevated level of household savings and judged that the release of pent-up demand could boost consumption growth further as social distancing waned.
・District contacts reported that activity in industries such as CRE or leisure, travel, and hospitality had started to improve. Participants noted that business activity had picked up recently and many District contacts were growing increasingly optimistic about business prospects.
・Participants expected strong job gains to continue over coming months and into the medium term. However, they noted that the economy was far from achieving the Committee's broad-based and inclusive goal of maximum employment.
・The pace of recovery in the labor market would depend importantly on: 1) how rapidly those affected by workers' health concerns and additional childcare responsibilities associated with virtual schooling could rejoin the labor force, and 2) the movement of workers across industries and occupations in a restructuring economy or the effects of technological change on the demand for labor.
【Inflation】
・Most participants pointed to supply constraints that could contribute to price increases for some goods in coming months as the economy continued to reopen. After the transitory effects of these factors fade, however, participants anticipated that annual inflation readings would edge down next year.
・Several participants commented that the factors that had contributed to low inflation during the previous expansion could again exert more downward pressure on inflation than expected.

Source: Made by MHRT based upon FRB

The FRB's balance sheet outstanding

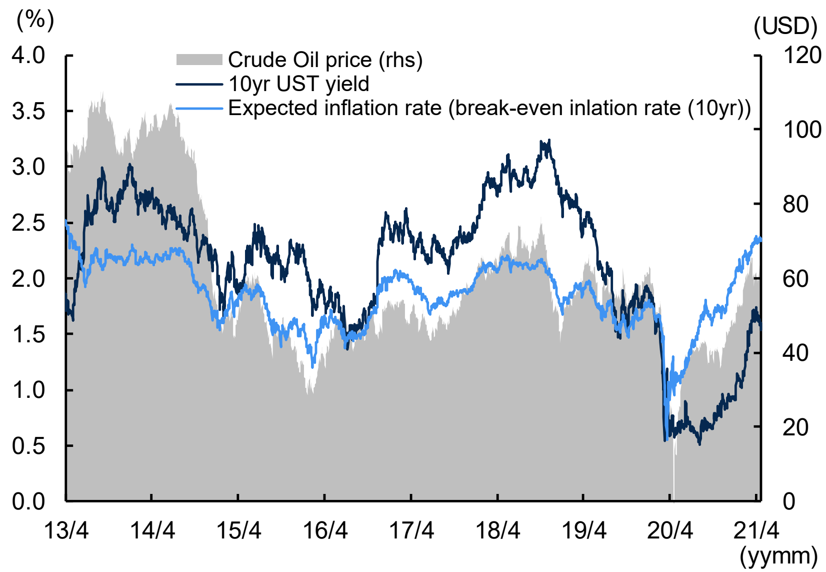


Source: Made by MHRT based upon Federal Reserve Bank of New York

(3) US bond market: the 10yr UST yield is expected to move around 1.5% to 1.9%

- Even though the 10yr UST yield temporarily rose to 1.77% at the end of March, it has currently fallen to the 1.5% range.
  - On the other hand, the expected inflation rate remains high at the 2.3% level, the highest level since May 2013. Crude oil prices remain in the USD 60-range.
- A further decline in 10yr UST yield is unlikely, and is expected to move around 1.5% to 1.9%.
  - While the FRB maintains a cautious stance toward tapering monetary easing, the market is factoring in more than two interest rate hikes two years from now (in 2023).
  - Given expectations toward the full-fledged resumption of economic activities in the US, market expectations toward inflation and normalization of monetary policy will persist.

Expected inflation rate and crude oil prices



Source: Made by MHRT based upon Bloomberg

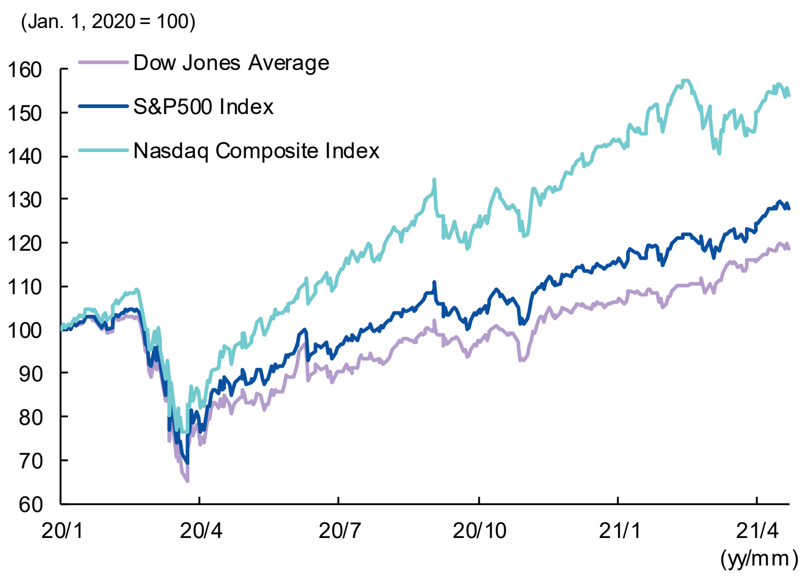
Market pricing-in of interest rate hike

Note: The graph shows rates obtained by subtracting the federal funds rates from the one-month ahead OIS forward rates for a particular number of years ahead. The rise in rates per one rate hike is assumed to be 0.25 percentage points.
Source: Made by MHRT based upon Bloomberg

(4) US stock market: while major US stock indices move in historical highs, we expect the market to follow a moderate uptrend going forward

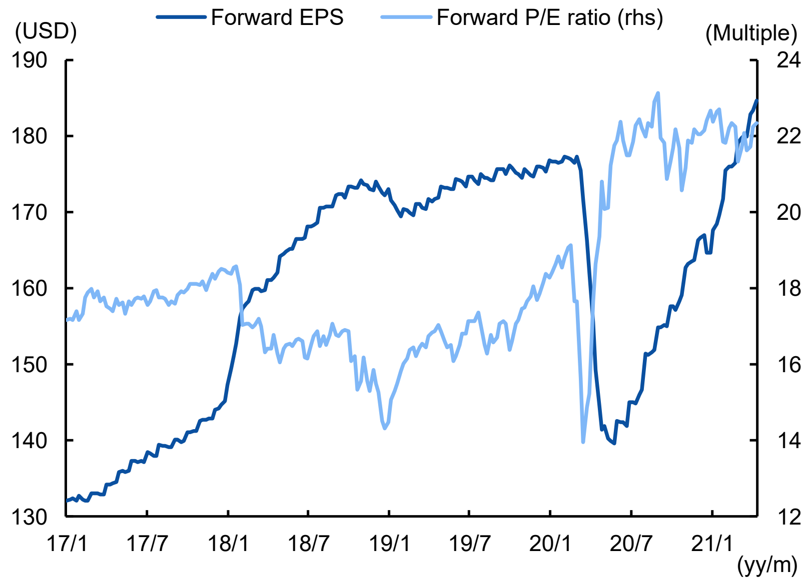
- The Dow Jones average hit a historical high (April 16th), reflecting strong economic indicators and favorable corporate earnings releases, as well as a pause in the rise of long-term US interest rates.
  - In addition to the rise of large technology stocks, reflecting the pause in the surge of US long-term interest rates, stocks sensitive to economic conditions also rose, supported by favorable economic indicators such as the ISM non-manufacturing index and retail sales.
  - Even so, the upside is currently heavy amid the worldwide resurgence of Covid-19 infections.
- In terms of valuation, the S&P 500's forward P/E ratio remains high at 22x, reflecting the pause in rise of interest rates.
- The odds are high that US stocks will rise moderately, against the backdrop of the expansion of corporate earnings and mild rise of interest rates.

Major US stock indices



Source: Made by MHRT based upon Refinitiv

S&P 500 forward EPS and forward P/E ratio

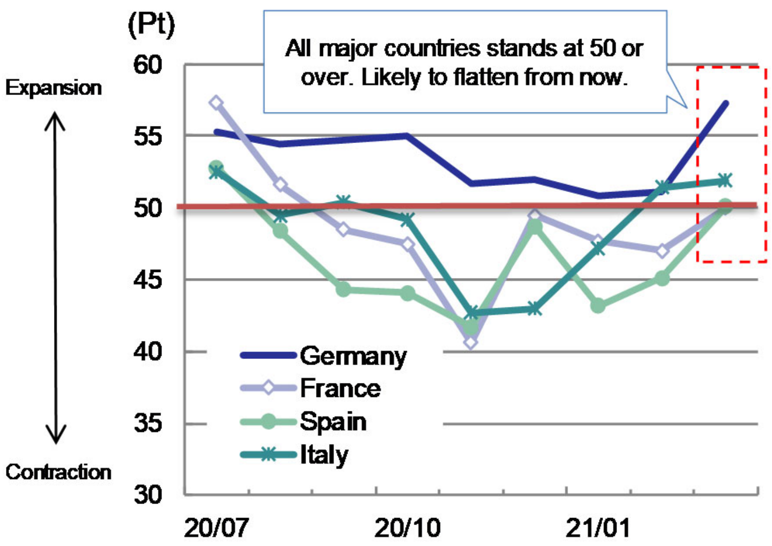


Note: The forward EPS and forward P/E ratio are on a 12-month forward basis.
Source: Made by MHRT based upon Refinitiv

3. (1) The Eurozone economy: March PMI revised upward. The service sector is dire, and the pace of economic recovery is slow

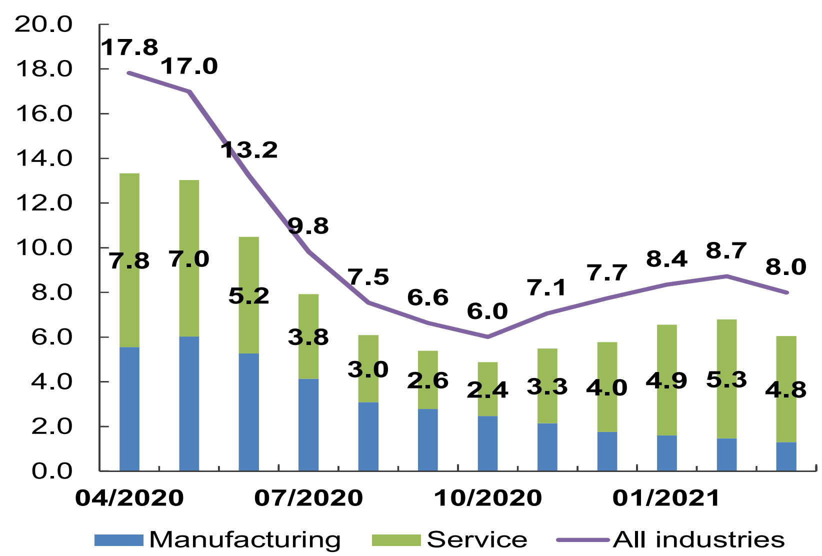
- In March, the Eurozone composite PMI (final estimate) stood at 53.2, up 0.7 Pt from the flash estimate (+4.4 pt from the previous month).
  - ■ The composite PMI rose above 50 in all major Eurozone countries due to the gradual relaxation of containment measures and momentum provided by foreign demand.
- Eurozone economic recovery is expected to slow down again due to the re-implementation of a soft lockdown. The composite PMI will stall around 50 in the Apr-Jun quarter.
- By industry, the service sector remains dire.
  - ■ The number of short-hour workers in the services sector has more or less flattened out, indicating that the improvement in operation rate was limited.
  - ■ In the manufacturing sector, work-hour reductions abated in materials (chemicals / metals), PCs and machinery (indicating improved utilization rate), reflecting the recovery of domestic and overseas capital investment.

Major Eurozone countries: composite PMI



Note: The reading of 50 is the "expansion-contraction" threshold
Source: Made by MHRT based upon IHS Markit

Germany: Percentage of the number of short-hour workers



Note: Total number of workers includes construction and agriculture etc. in addition to manufacturing and service.
Source: Made by MHRT based upon ifo

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(2) Eurozone monetary policy: the ECB is taking a wait-and-see stance. No discussions on the pace of asset purchases

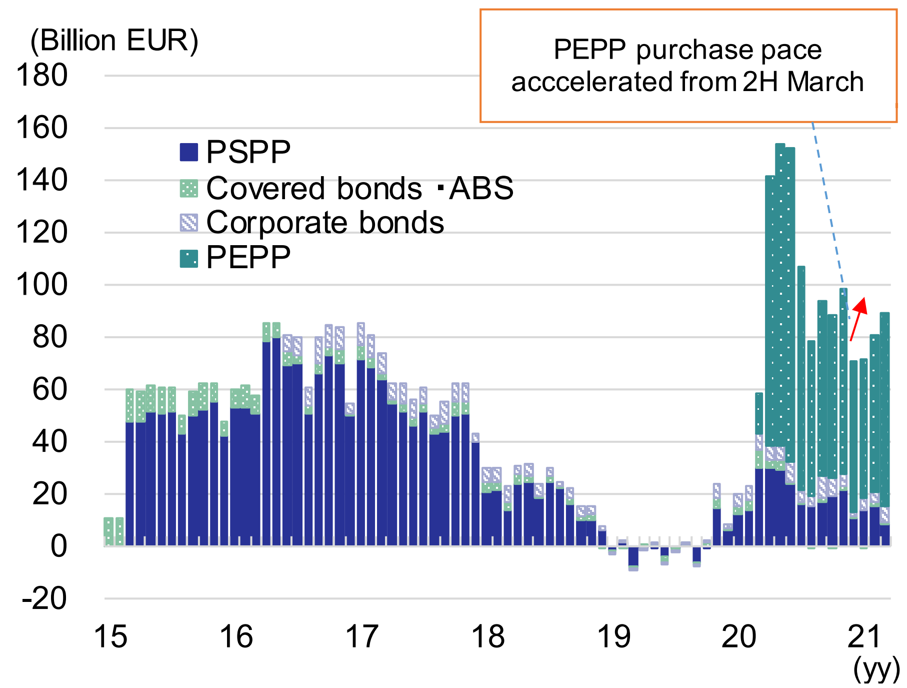
- The ECB maintained an accommodative monetary policy stance at the Governing Council meeting on April 22.
  - The current economic situation and prices are generally in line with its March projections.
- At the next Governing Council (June 10), the pace of asset purchases under the pandemic emergency purchase programme (PEPP) will be discussed again, based on market conditions and the strength of economic recovery in line with such factors as the rollout of vaccines.

Key points of the ECB Governing Council (April 22)

Current economic situation	**In line with projections published in March. While the risks surrounding the euro area growth outlook over the near term continue to be on the downside, medium-term risks remain more balanced. Limits on activity in the services sector, although there are signs of a bottoming-out.**
Outlook for prices	**In line with projections published in March. Inflation has picked up over recent months on account of some idiosyncratic and temporary factors. These factors can be expected to fade out next year.**
Financing conditions	**Remained broadly stable, but risks to wider financing conditions remain. There has been a moderate tightening of credit standards for loans to firms, although less pronounced than in previous survey rounds.**
Pandemic Emergency Purchase Programme (PEPP)	**Significantly increased the pace of purchase since the latter half of March. Did not discuss any phasing out of PEPP because it is simply premature.**

Source: Made by MHRT based upon ECB

Trends in amount of ECB asset purchases

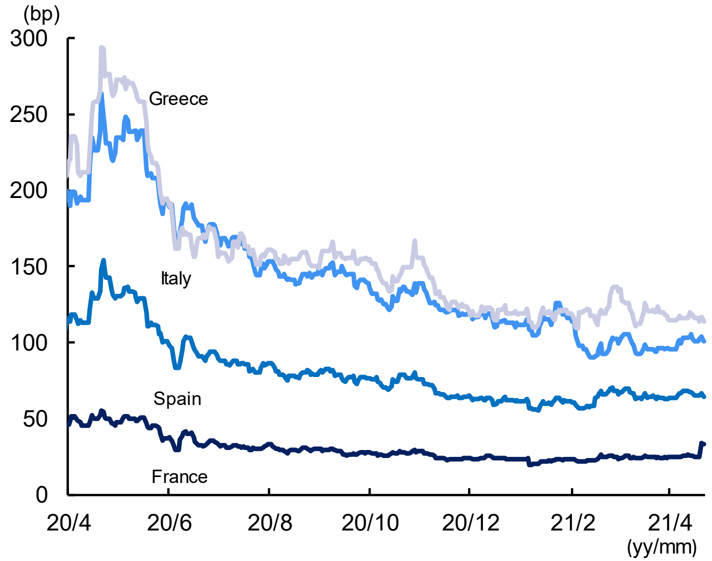


Source: Made by MHRT based upon ECB

(3) Eurozone bond market: German 10yr government bond expected to move around -0.5% to -0.2%

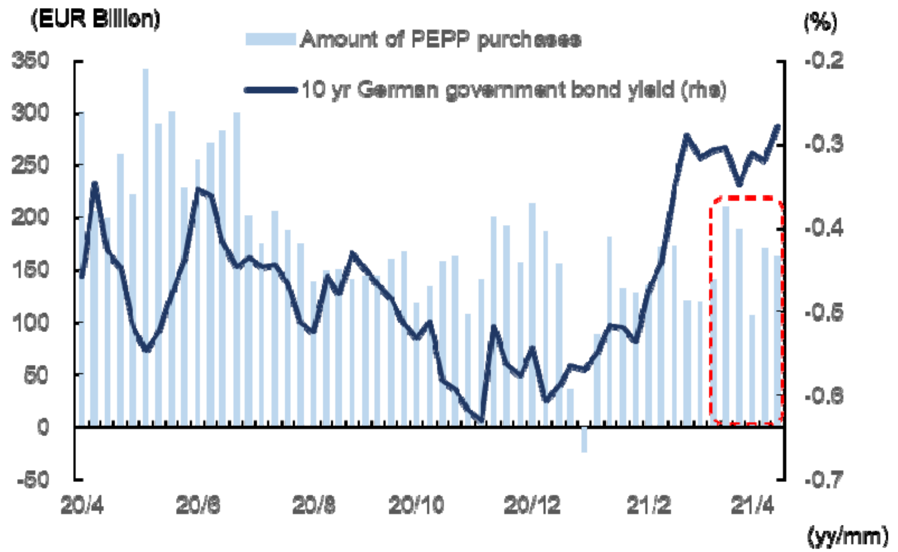
- As the Eurozone countries tighten restrictions on economic activity due to the resurgence of Covid-19 infections, each of the respective countries' spreads versus German government bonds remain at low levels.
  - 10yr Italian government bond spreads to German 10yr government bonds widened, reflecting media reports that Italy will borrow another EUR 40 billion to address the Covid-19 pandemic.
- A further rise of the German 10yr government bond yield is expected to be limited, and should move around -0.5% to -0.2%.
  - As decided by the ECB Governing Council (March 11), the pace of asset purchases under the PEPP has accelerated since late March, serving to curb the rise of the yield on German 10yr government bonds.
  - The ECB will most likely continue to suppress the excessive rise of interest rates amid lingering concerns regarding the delay in vaccine rollouts and resurgence of Covid-19 infections in Europe.

Spread versus German government bonds



Note: Graph shows the spread of yields between 10yr government bonds in each country and German 10yr government bonds.
Source: Made by MHRT based upon Bloomberg

Trend of PEPP purchase amount and German 10yr government bond yields



Note: The "Amount of PEPP purchases" refers to the weekly net purchase amount, less the redemption amount up to April 16.
The German 10yr government bond yield refers to the weekly average (up to April 16).
Source: Made by MHRT based upon Bloomberg

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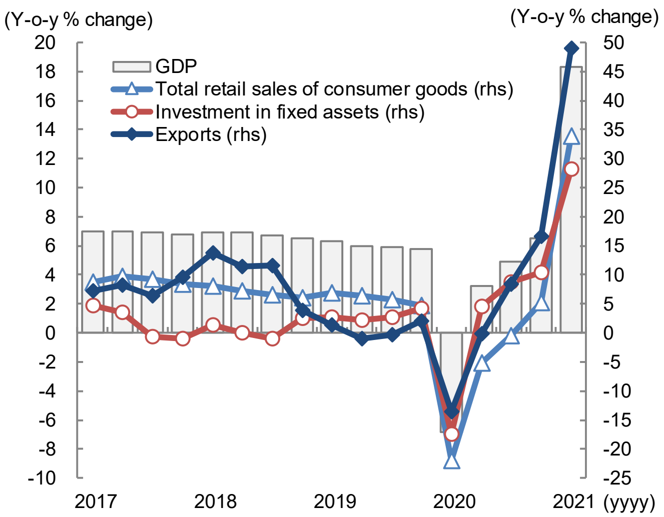
4. (1) Chinese economy: real GDP staged a strong reactionary rebound in the Jan-Mar quarter, also recording positive growth on a q-o-q basis

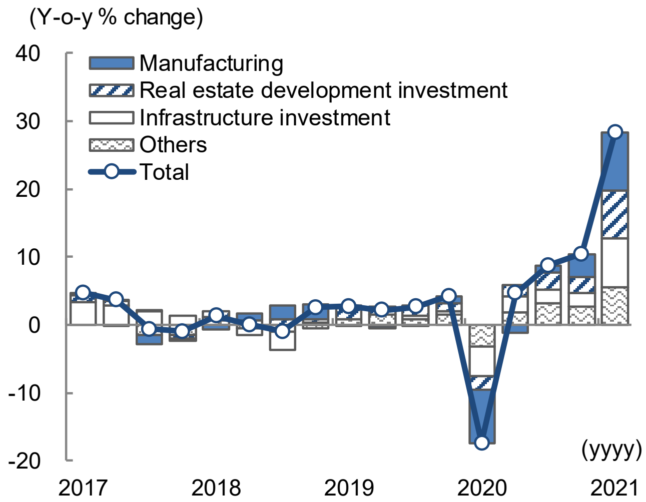
- In the Jan-Mar quarter of 2021, China's real GDP grew a strong +18.3% y-o-y (previous quarter: +6.5% y-o-y) in a rebound from the previous year. This is mostly in line with MHRT's forecast (+18.4%). The rate of growth on a quarter-on-quarter basis (+0.6% q-o-q) also indicates the continuation of an economic recovery.
  - The mobility restrictions during the Chinese New Year served as a driver of exports. This reflects the recovery of the global economy in addition to the strong demand for telecommunications and electronic equipment.
  - As for investment, in addition to the resurgence of real estate development, infrastructure investment continued to provide support. The manufacturing sector was also strong, driven by high tech such as communications.
  - Retail sales is continuing to recover, reflecting the improvement of employment and income conditions. Service consumption also improved, revealing that the negative impact stemming from the resurgence of Covid-19 infections is limited.
- The economic recovery is projected to continue, driven by the manufacturing industry centered on the high tech sector and personal consumption which is following a recovery trend.

Real GDP and main indicators



Note: Fixed asset investment is converted into real terms by PPI (construction materials), and total retail sales of consumer goods are converted into real terms by the retail price index. Exports are in nominal terms denominated in USD.
Source: Made by MHRT based upon the National Bureau of Statistics of China, the General Administration of Customs of the National Bureau of Statistics of China, and CEIC data.

Fixed asset investment (by industry)

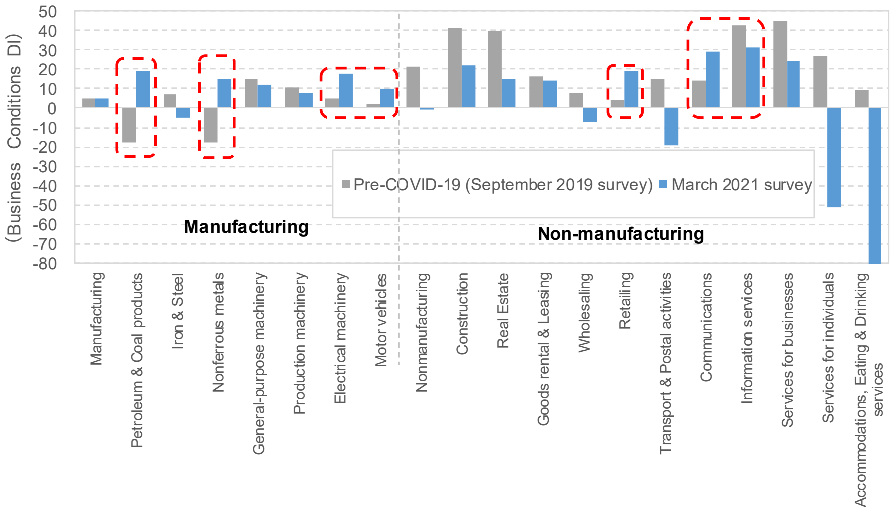


Note: Converted into real terms by PPI (construction materials).
Source: Made by MHRT based upon the National Bureau of Statistics of China and CEIC data.

5. (1) The Japanese economy: according to the BOJ *Tankan*, business conditions in the manufacturing industry have recovered to pre-Covid-19 levels

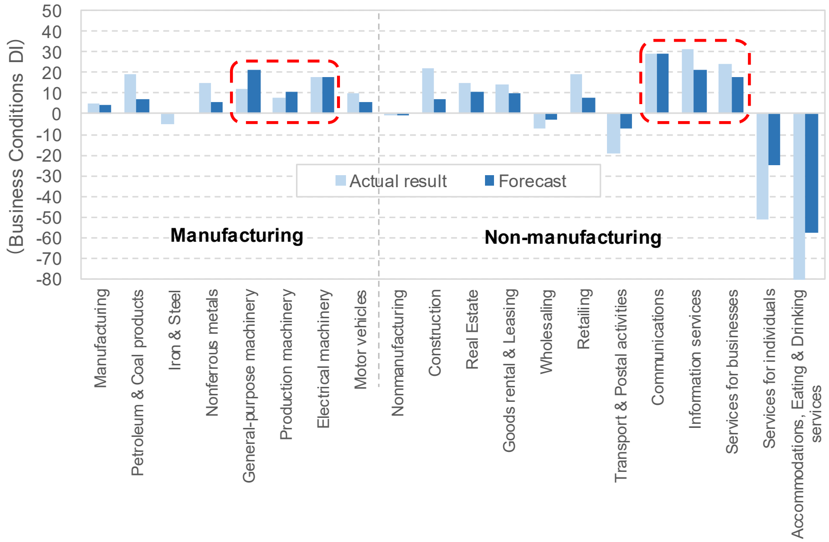
- The business conditions DI among large manufacturers improved to +5% Pt (December survey: -10% Pt), recovering to the level prior to the Covid-19 pandemic (September 2019).
  - Among manufacturers, business conditions among nonferrous metals and electrical machinery industries surpass pre-Covid-19 levels, reflecting the recovery of US and China capital investment and Japan's domestic IT investment.
- Even though the business conditions DI for large non-manufacturers improved to -1% Pt (December survey: -5% Pt), it still falls far below pre-Covid-19 levels (September 2019: +21% Pt).
  - Business conditions slumped among services for individuals (-51% Pt), accommodations, eating and drinking services (-81% Pt), and transport and postal activities (-19% Pt).
  - On the other hand, the DI among communications (+29% Pt) and retail sales (+19% Pt) surpassed pre-Covid-19 levels, revealing a clear polarization among industries.
  - Forecasts also improved, mainly in capital goods-related (general-purpose machinery / production machinery) and information-related (electric machinery, information services) sectors.

Business conditions DI (large enterprises, current condition): pre-Covid-19 vs most recent conditions



Source: Made by MHRT based upon Bank of Japan, *Short-Term Economic Survey of Enterprises in Japan (Tankan)*

Business conditions DI (large enterprises, forecast)

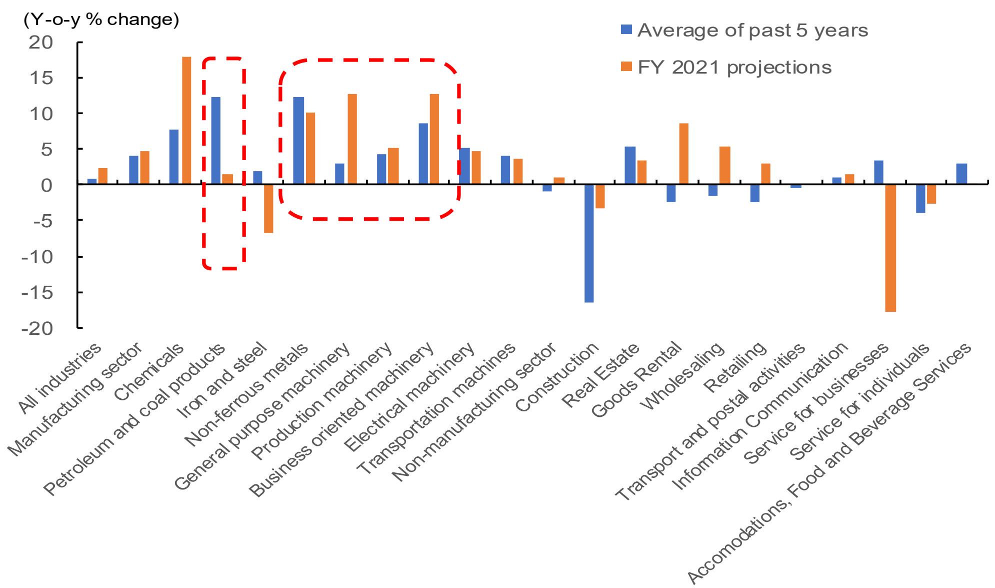


Source: Made by MHRT based upon Bank of Japan, *Short-Term Economic Survey of Enterprises in Japan (Tankan)*

FY2021 capital investment projections rose sharply, mainly in the production machinery and chemical sectors

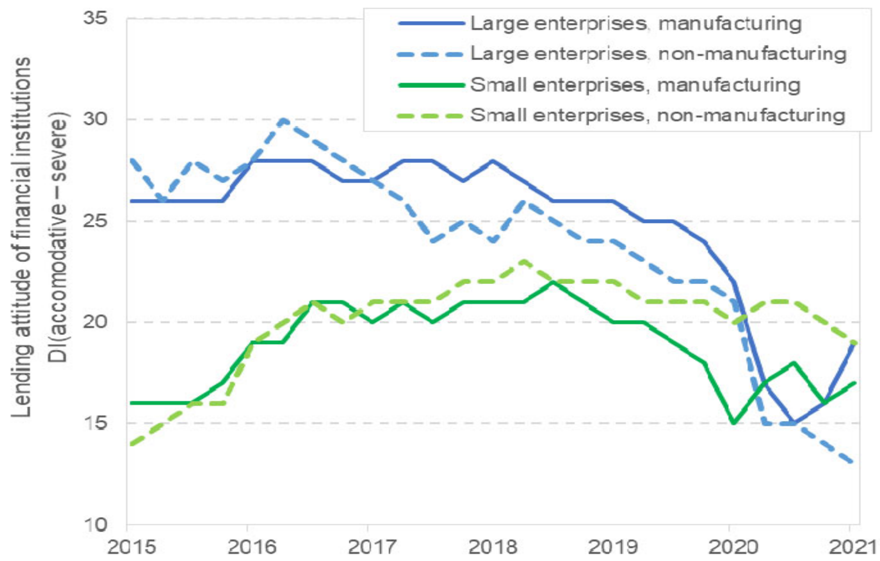
- It now looks certain that capital investment in FY2021 will pick up mainly among manufacturers.
  - FY2021 capital investment projections (including software, excluding land) rose +2.4% y-o-y. In particular, projections among manufacturers are bullish (+4.6% y-o-y). Enterprises in industries such as chemicals, nonferrous metals, general-purpose and business-oriented machinery increased investment, reflecting the strength of semiconductors and capital goods. Capital investment projections also rose sharply among non-manufacturers (+1.1 y-o-y) in comparison with the previous year, lifted by goods rental and the wholesaling / retailing sectors.
  - Software investment projections rose +6.0% y-o-y, reflecting demand to address teleworking arrangements and expansion of electronic commerce, and investment for non-contact operations.
  - Lending attitudes of financial institutions have deteriorated slightly toward both large and small enterprises in non-manufacturing sector. Given the fourth wave of Covid-19 infections, the stagnation of investment should persist among services for individuals and accommodations, and the situation remains unchanged that these sectors will continue to need financial support.

Capital investment projections (incl. software, excl. land)



Source: Made by MHRT based upon Bank of Japan, *Short-Term Economic Survey of Enterprises in Japan (Tankan)*

Financial institutions' lending attitude

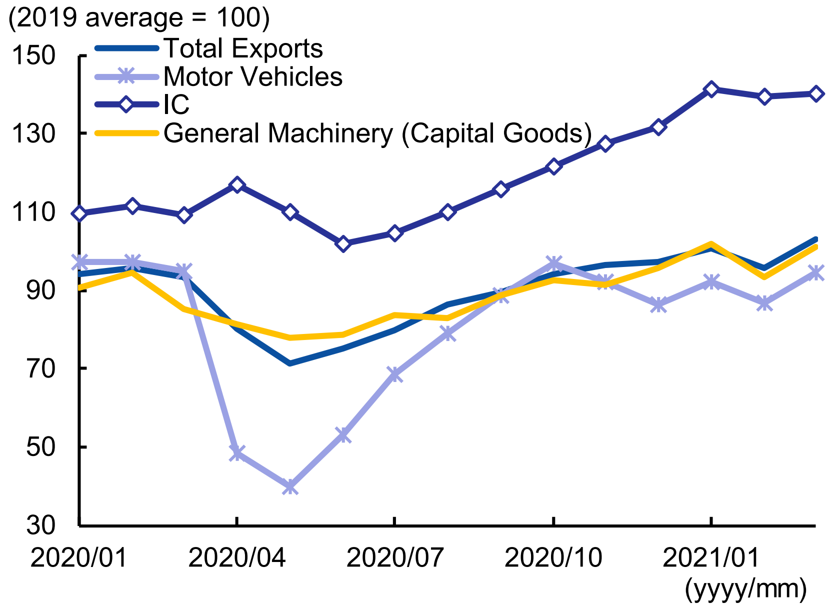


Source: Made by MHRT based upon Bank of Japan, *Short-Term Economic Survey of Enterprises in Japan (Tankan)*

March exports increased. Even though forecasts dipped at one point, they have started to rise again

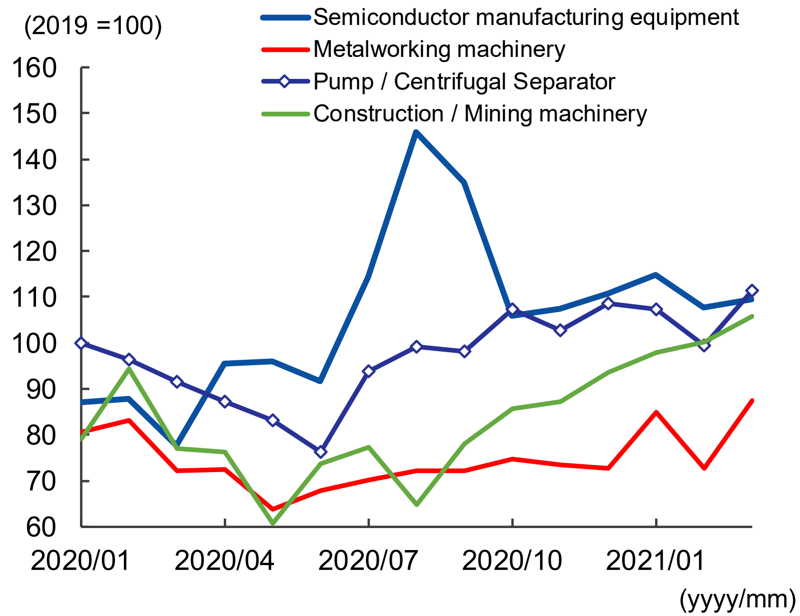
- The export volume index for March stood at +7.5% m-o-m, rising for the first time in two months. In addition to the rise of ICs and general machinery (capital goods), motor vehicles rose, serving to lift overall exports, as the negative impact of the previous month's earthquake upon motor vehicles faded.
  - In terms of capital goods by major item, semiconductor manufacturing equipment remained high, reflecting strong online-related demand. In addition to the rise of construction machinery due to the expansion of capital and housing investment in the US and China, the increase of pumps, centrifuges, etc., served as the driver of total capital goods exports.
- Looking forward, even though the fall of motor vehicle exports due to the semiconductor shortage will serve as downward pressures, exports should return to a gradual uptrend driven by information-related goods and capital goods.

Export trends by major items



Note: General machinery is on a value basis. Other items are seasonally adjusted by MHRT (only for those on a quantity basis).
Source: Made by MHRT based upon Ministry of Finance, *Trade Statistics*

Export trends of major general machinery (capital goods)

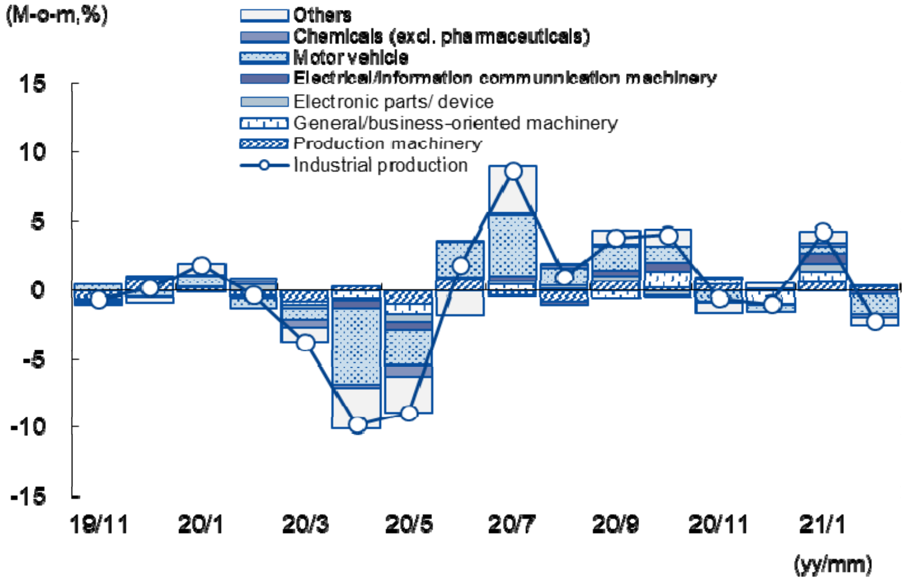


Note: Semiconductor manufacturing equipment is on a quantity basis. Other items are seasonally adjusted by MHRT (only for those on a value basis).
Source: Made by MHRT based upon Ministry of Finance, *Trade Statistics*

Despite a decline due to the earthquake, production continued to recover in the Jan-Mar quarter. Note the risk of a decline in motor vehicle production in the Apr-Jun quarter

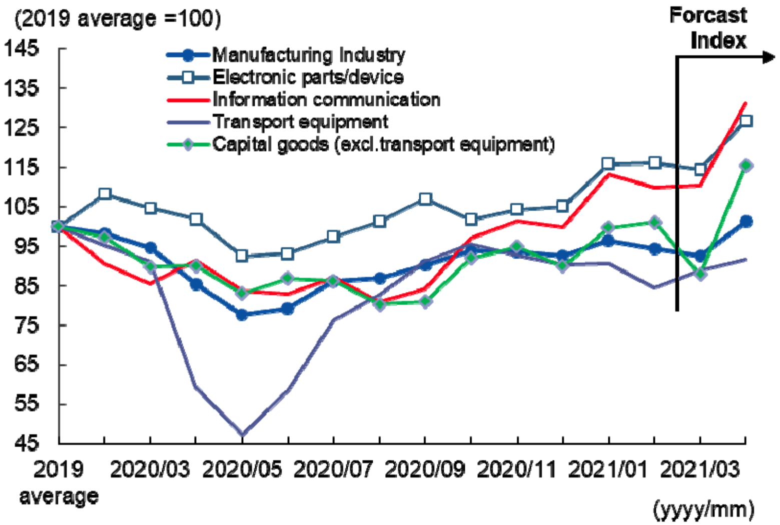
- Industrial production stood at -2.1% m-o-m in February (January: +4.3% m-o-m), recording a decline for the first time in two months.
  - The procurement of motor vehicle parts was affected negatively by the earthquake off the coast of Fukushima (February 13), leading to the fall of motor vehicle production (-8.8% m-o-m), thus serving as a drag upon overall industrial production.
- Industrial production continued to follow a recovery during the Jan-Mar quarter. In the Apr-Jun quarter, it will be necessary to monitor the downside risk stemming from motor vehicle production.
  - Industrial production should remain positive at +1.3% q-o-q in the Jan-Mar quarter. Despite a slowdown from the Oct-Dec quarter (+6.4% q-o-q), electronic parts / device and capital goods will continue to drive the recovery, reflecting the strength of the semiconductor market and robust equipment and housing investment in the US and China.
  - As for the Apr-Jun quarter, there are risks that motor vehicle production will drop significantly during the period from May to June in view of concerns that the plant fire at Renesas Electronics on March 19 will lead to tighter supply constraints on automotive semiconductors. It will be necessary to keep a close watch upon releases on production volume by motor vehicle manufacturers.

Industrial production (contribution by industries)



Source: Made by MHRT based upon Ministry of Economy, Trade and Industry, *Indices of Industrial Production*

Industrial production (trends by major industries/goods)

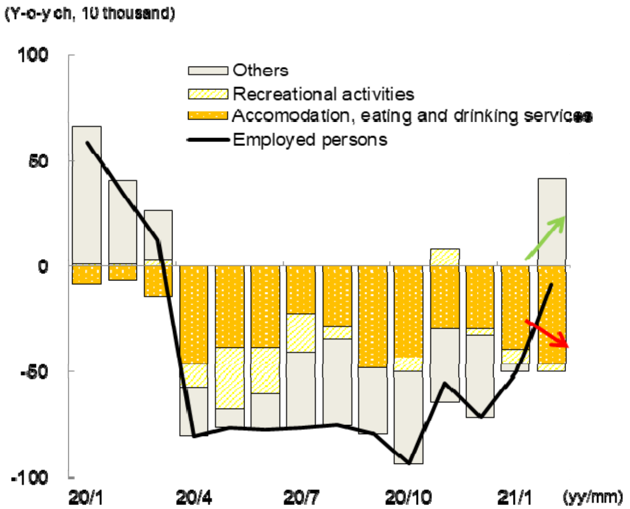


Source: Made by MHRT based upon Ministry of Economy, Trade and Industry, *Indices of Industrial Production*

Even though the unemployment rate remains flat, a wide gap persists between services requiring face-to-face interactions and other sectors

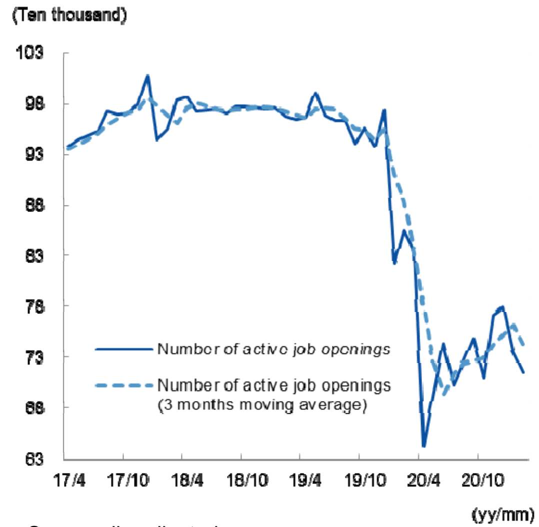
- The unemployment rate remained flat from the previous month at 2.9% in February. The active job openings-to-applicants ratio fell to 1.09 for the first time in five months.
  - Even though the number of unemployed persons also leveled off, the breakdown reveals an increase in people leaving work on an involuntary basis (+30,000 m-o-m), providing reasons to believe that the situation has not necessarily improved.
  - The number of employed persons remained more or less flat at +30,000 from the previous month. Even so, the year-on-year change remained in negative territory (January -500 thousand → February -450 thousand). By industry, the number of employed persons in education, learning support and scientific research, professional and technical services increased, while the breadth of the decline in number of employed persons in accommodation, eating and drinking services widened. The negative impact of the Covid-19 pandemic continues to be concentrated in services requiring face-to-face interactions.
  - The number of new job openings fell (-2.8% m-o-m), decreasing for the second month in a row. New job openings continued to fall sharply on a year-on-year basis in accommodation, eating and drinking services, and recreational activities.
  - Looking forward, despite expectations of an improvement in manufacturing, etc., we forecast that the unemployment rate will remain pinned at a high level of 3% or so until mid-FY2021, due to a cautious hiring stance and decrease of jobs in services requiring face-to-face interactions, reflecting factors such as the continuation of reduced working hours.

Trends in number of workers by industry



Note: Unadjusted data
Source: Made by MHRT based upon Ministry of Internal Affairs and Communications, *Labour Force Survey*

Trends in active job openings



Note: Seasonally adjusted
Source: Made by MHRT based upon Ministry of Health, Labour and Welfare, *Employment Referrals for General Workers*

(2) BOJ monetary policy: the BOJ will likely maintain the current monetary easing framework over the long term

- The results of the key "assessment" at the March Monetary Policy Meeting (MPM) are (1) securing further room to cut policy interest rates while considering the impact on the functioning of financial intermediation, (2) making clear that the range of 10-year JGB yield fluctuations would be between around plus and minus 0.25% from the target level, and (3) seek greater flexibility to purchase ETFs and J-REITs.
- For the time being, we expect that the current monetary easing framework will be maintained.
  - This is to encourage flexible interest rate fluctuations in the market within the acceptable range of fluctuations of plus and minus 0.25%. The policy stance of maintaining the yield curve at a low level remains unchanged.

YCC and Purchases of ETFs and /J-REITs

Conduct of Yield Curve Control (YCC)

- BOJ will establish the Interest Scheme to Promote Lending
- BOJ will make clear that the range of 10-year Japanese government bond (JGB) yield fluctuations would be between around plus and minus 0.25 percent from the target level
- BOJ will introduce "fixed-rate purchase operations for consecutive days," through which it will conduct the fixed-rate purchase operations consecutively for a certain period of time.
- BOJ will, for the time being, conduct yield curve control with a priority on stabilizing the entire yield curve at a low level

Purchase of ETFs and J-REITs

- BOJ will purchase ETFs and J-REITs as necessary and maintain the upper limits of about 12 trillion yen and about 180 billion yen, respectively, even after Covid-19 subsides.
- BOJ will only purchase ETFs tracking the Tokyo Stock Price Index (TOPIX).

Source: Made by MHRT based upon the Bank of Japan

Key opinions on the “assessment” at the March MPM

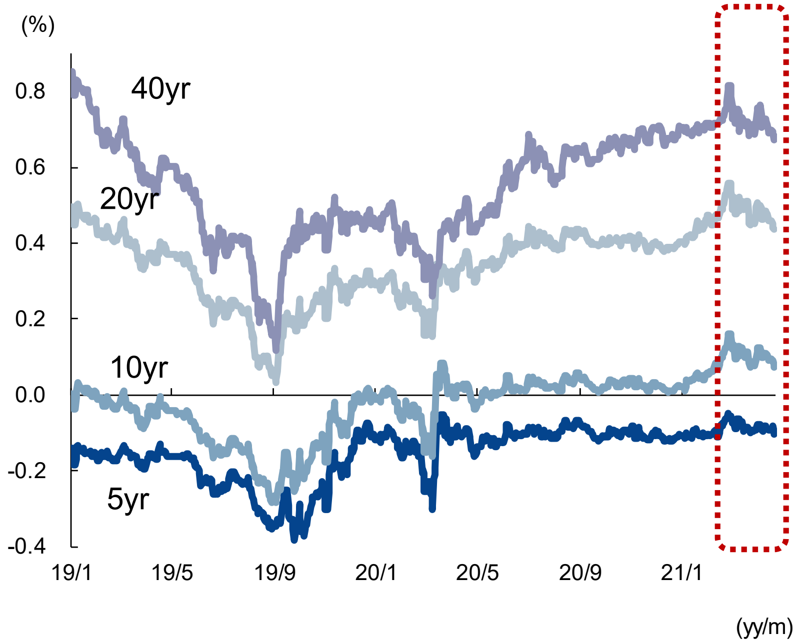
- It is appropriate for the Bank to continue with powerful monetary easing under the framework of Quantitative and Qualitative Monetary Easing (QQE) with Yield Curve Control, with a view to achieving the price stability target.
- The analyses of the policy effects made in the assessment show that the current monetary easing should be continued for a long time.
- It is desirable that this policy framework continue to be the basic guideline for the Bank’s monetary easing for a few years to come.
- It is necessary to maintain highly accommodative financial conditions for a long period. At the same time, under the commitment to conducting monetary easing into the future, it is important to maintain the current policy framework in a more stable manner.
- It is appropriate for the time being to conduct yield curve control with a priority on stabilizing the entire yield curve at a low level.

Source: Made by MHRT based upon the Bank of Japan

(3) Japanese bond market: the 10yr JGB yield is projected to trend around 0.10%

- While the 10yr JGB yield rose to 0.13% toward the end of February reflecting the announcement of the planned purchase amount of JGBs in April, it fell to 0.07% due the subsequent decline of US interest rates.
- The 10yr JGB yield is are projected to trend around 0.10%.
  - The reduction in the planned purchase amount of JGBs serves as a measure to encourage flexible interest rate fluctuations in the market, while the BOJ's policy to stabilize the yield curve at a low level remains unchanged. The reduction of purchases will only have a limited impact.

Trends in JGB yields



Source: Made by MHRT based upon Bloomberg

Planned purchases of JGBs in April

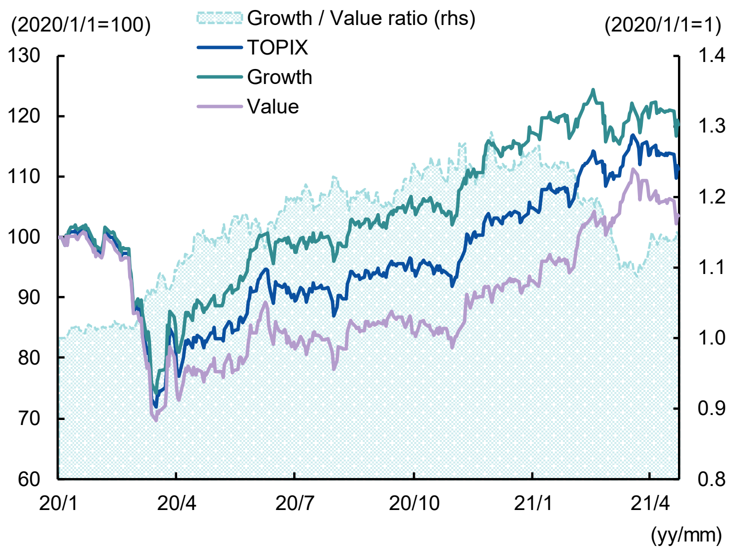
	Amount purchased in March (JPY 100 million)	Purchase amount planned in April (JPY100 million)	Amount of purchase (change from March) (JPY 100 million)
1 year or less	2,000	1,500	- 500
Longer than 1 year, up to 3 years	20,000	19,000	- 1,000
Longer than 3 years, up to 5 years	18,500	18,000	- 500
Longer than 5 years, up to 10 years	21,000	18,000	- 3,000
Longer than 10 years, up to 25 years	2,400	2,000	- 400
Longer than 25 years	600	500	- 100
Inflation-indexed bonds	600	600	0

Source: Made by MHRT based upon the Bank of Japan

(4) Japanese stock market: the Nikkei Average fell, reflecting the resurgence of Covid-19 infections. The market is expected to face a heavy topside

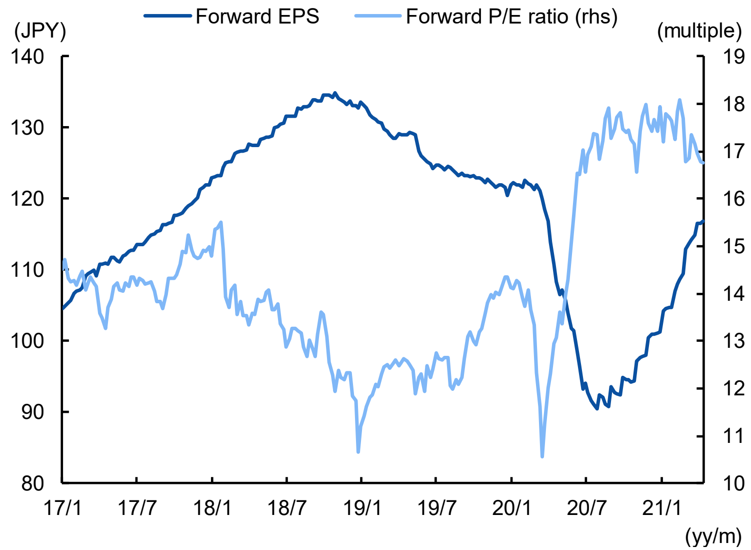
- At one point, the Nikkei Average fell to the 28,500 yen range (April 21), reflecting corporate earnings releases and concerns regarding the resurgence of Covid-19 caseloads.
  - Even though growth stocks followed firm footing at the beginning of the month as the rise of long-term US interest rates subsided, Japanese stocks weakened in the second half of the month due to tighter restrictions along with the resurgence of Covid-19 caseloads and concerns that outlooks will turn bearish reflecting corporate earnings releases.
- The forward P/E ratio fell to the 16x range, for the first time since the end of October 2020. The pace of recovery of the forward EPS also slowed.
- Although the strength of overseas stocks will serve as a positive factor, we expect that Japanese stocks will face a heavy topside, as concerns regarding a downturn in corporate earnings due to tighter restrictions along with the resurgence of domestic Covid-19 caseloads serve as a drag on investor sentiment.

TOPIX growth/value indices



Source: Made by MHRT based upon Refinitiv

TOPIX forward EPS and forward P/E ratio

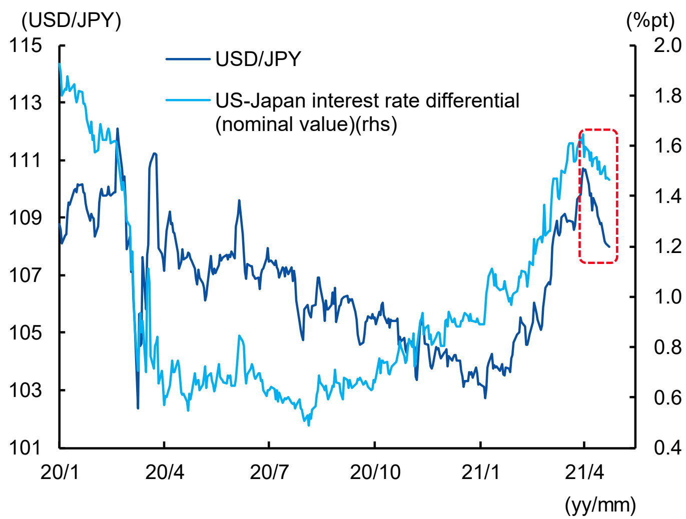


Note: Forward EPS and forward P/E ratios are based on 12-month forecasts.
Source: Made by MHRT based upon Refinitiv

6. Forex market: the USD/JPY exchange rate should follow firm footing, despite a pause in the widening of the Japan-US interest rate differential

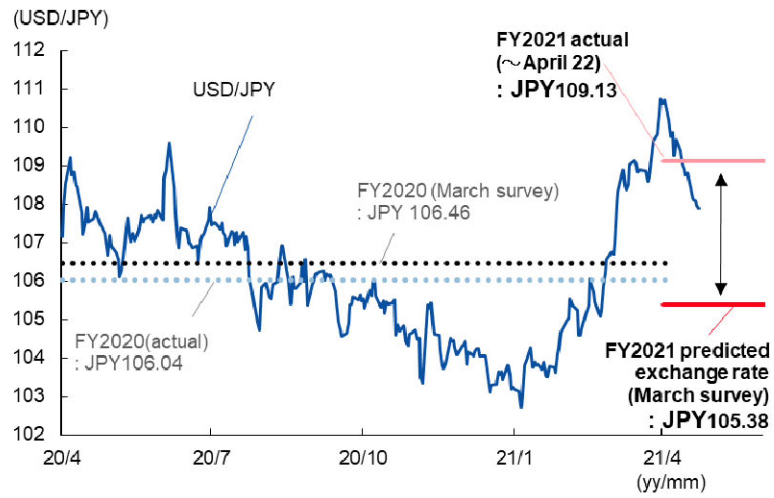
- As for the USD/JPY exchange rate, the year-to-date appreciation of the dollar has come to a temporary halt. The widening of the US-Japan interest rate differential has paused reflecting the fall of US interest rates.
  - While the USD/JPY exchange rate temporarily rose close to JPY 111 at the end of March, it peaked out at this level and fell back to the upper end of the JPY 108-range after the turn of the month in April.
  - This may stem partially from risk-off yen-buying pressures due to the rise of concerns regarding the spread of Covid-19 variants and certain side effects of vaccines.
- Looking forward, the odds are high that the lower bound of the USD/JPY exchange rate will remain firm, given that a further decline of US interest rates is unlikely.
  - Meanwhile, uncertainties regarding Covid-19 should persist for the time being reflecting developments in vaccine rollouts. We expect the USD/JPY exchange rate to move within a narrow range, given a firm lower bound as well as a heavy top side.
  - The yen should remain weak in comparison to the predicted exchange rate among export-oriented corporations in the March *Tankan* survey, and serve as an upside factor for corporate earnings.

USD/JPY rates and Japan-US interest rate differential



Source: Made by MHRT based upon Bloomberg

The actual and predicted exchange rates (FY2021)



Note: Actual rate indicates average of daily NY closing rates of the periods mentioned
Source: Made by MHRT based upon Bloomberg and the Bank of Japan, *Short-Term Economic Survey of Enterprises in Japan (Tankan),*

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7. Outlook on the financial markets

		2021/4/23	2021/05	Apr-Jun	Jul-Sep
Japan	**Interest rate on Policy-Rate balances (End- of-quarter, %)**	-0.10	-0.10	-0.10	-0.10
	Euroyen TIBOR (3-mo, %)	-0.07	-0.10 - 0.05 (-0.05)	-0.07	-0.07
	Interest rate swaps (5yr, %)	-0.01	-0.10 - 0.10 (0.00)	0.00	0.00
	Newly-issued JGBs (10yr, %)	0.07	-0.05 - 0.20 (0.10)	0.10	0.10
	Nikkei Stock Average (JPY)	29,021	26,700 - 30,200 (28,700)	28,900	29,400
US	**Federal funds rate (End- of-quarter, %)**	0.00-0.25	0.00-0.25	0.00-0.25	0.00-0.25
	US treasury bond (10yr, %)	1.56	1.50 - 1.90 (1.75)	1.75	1.75
	Dow Jones Average (USD)	34,043	30,600 - 35,100 (32,600)	32,700	33,000
Eurozone	**ECB deposit facility rate (End- of-quarter, %)**	-0.50	-0.50	-0.50	-0.50
	Long-term government bond (Germany, 10yr, %)	-0.26	-0.50 - -0.20 (-0.35)	-0.35	-0.35
Forex	**USD/JPY rate (USD/JPY)**	107.88	106 to 110 (108)	108	109
	EUR/USD rate (EUR/USD)	1.21	1.17 - 1.22 (1.20)	1.20	1.19

Note: 1. Actual exchange rates are NY closing rates.
2. The policy interest rate guidance target for May 2021 and figures in parentheses below the range are end-of-May rates.
3. The policy interest rate guidance targets for the Apr-Jun and Jul-Sep quarters are closing rates, and others are averages of the relevant periods.
Source: Made by MHRT based upon Bloomberg