

Monthly Economic Report

January 28, 2021

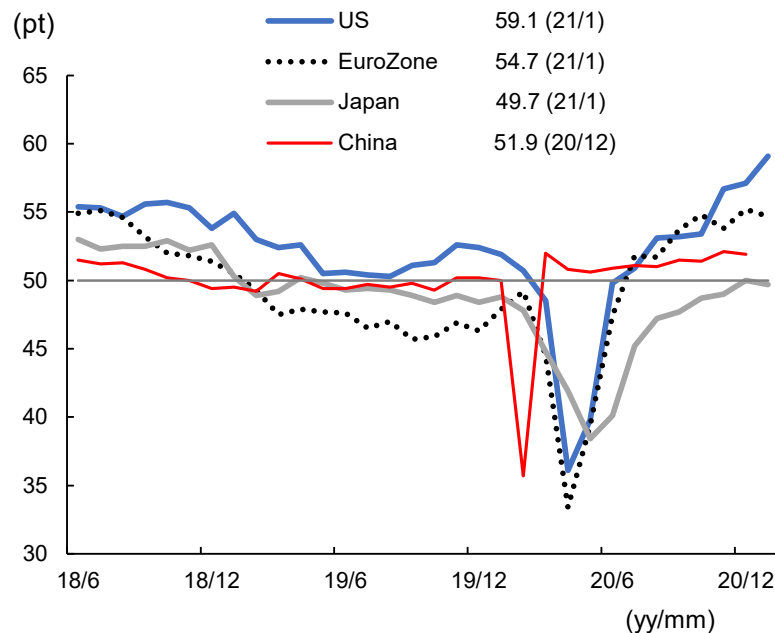
Mizuho Research Institute

MIZUHO

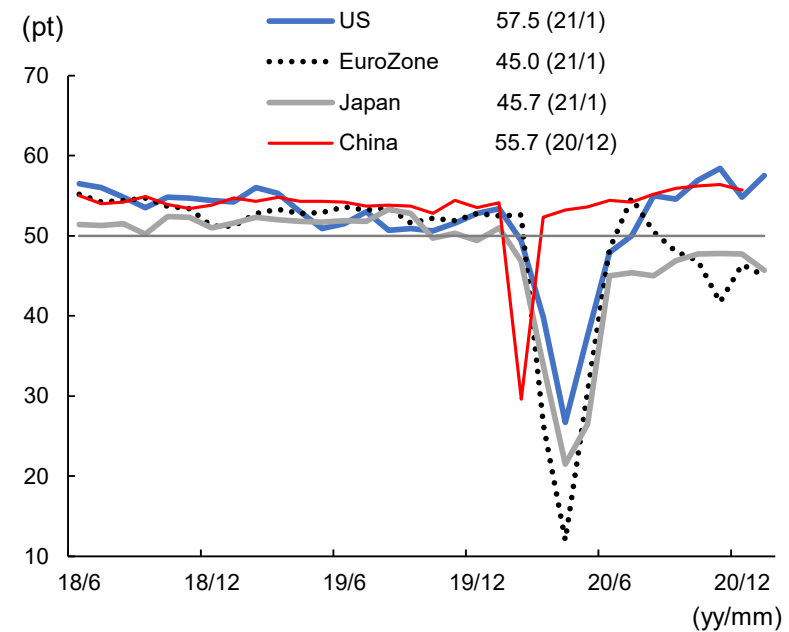

1. Current state of the global economy: the polarization between the economic recoveries in the US and China and the sluggishness in Japan and Europe intensifies

- Both the US and China remain on a recovery path.
 - In the US economy, the manufacturing PMI rose to 59.1 in January. Note also that the non-manufacturing PMI stood at a strong 57.5 despite its vulnerability to Covid-19.
- In contrast, the Japanese and Eurozone economies remain sluggish due to mobility restraints due to the Covid-19 pandemic.
 - In Japan, there is a risk that the declaration of a state of emergency may be extended, serving as a further drag upon economic recovery.

Manufacturing PMI



Non-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 the National Bureau of Statistics of China, Markit Economics

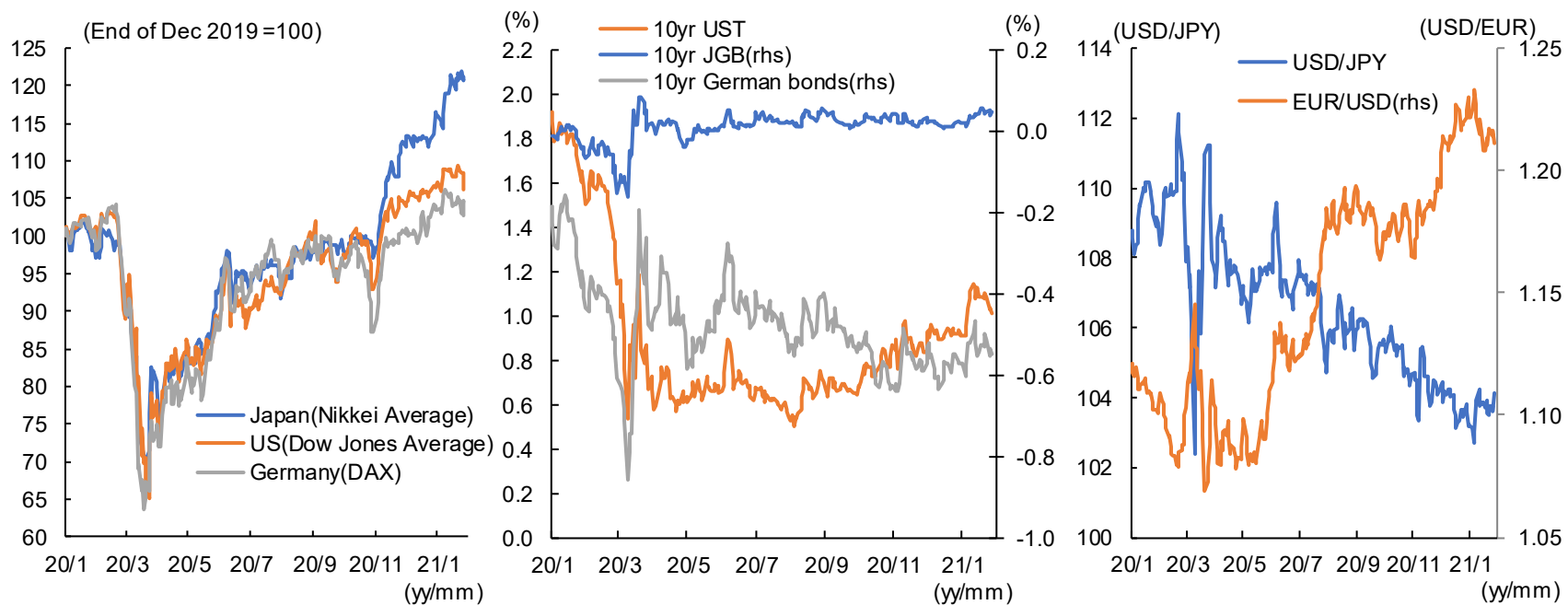
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Source: Made by MHRI based upon the National Bureau of Statistics of China, Markit Economics

Overview of financial markets: even though the “triple blue” election win drove up stock prices and interest rates, momentum fizzled out toward the end of the month

- Given the "triple blue" victory with the Democrat win in the Georgia Senate runoff elections, expectations toward additional economic stimulus measures rose, driving up stock prices and interest rates. However, stock prices took a significant downward turn through the end of the month, triggered by factors such as weak corporate earnings reports.
 - Stock prices temporarily hit record highs in the three major US indexes, while the Nikkei Stock Average rose to its highest level in approximately 30.5 years. However, disappointing earnings results, including those by major US airlines, led to a sharp drop of the stock market. The Dow Jones Average fell into negative territory for the first time since the turn of the new year.
 - The 10yr UST yield rose temporarily to nearly 1.2%, due in part to comments by high-ranking Fed officials on the possibility that quantitative easing would be scaled back later this year. Subsequently, the yield fell to around 1% due to remarks by Fed Chairman Jerome Powell indicating a cautious stance toward scaling back quantitative easing, as well as weaker stock prices.

Major market trends



Note: All indexes show actual results up to January 27.
Source: Made by MHRI based upon Bloomberg

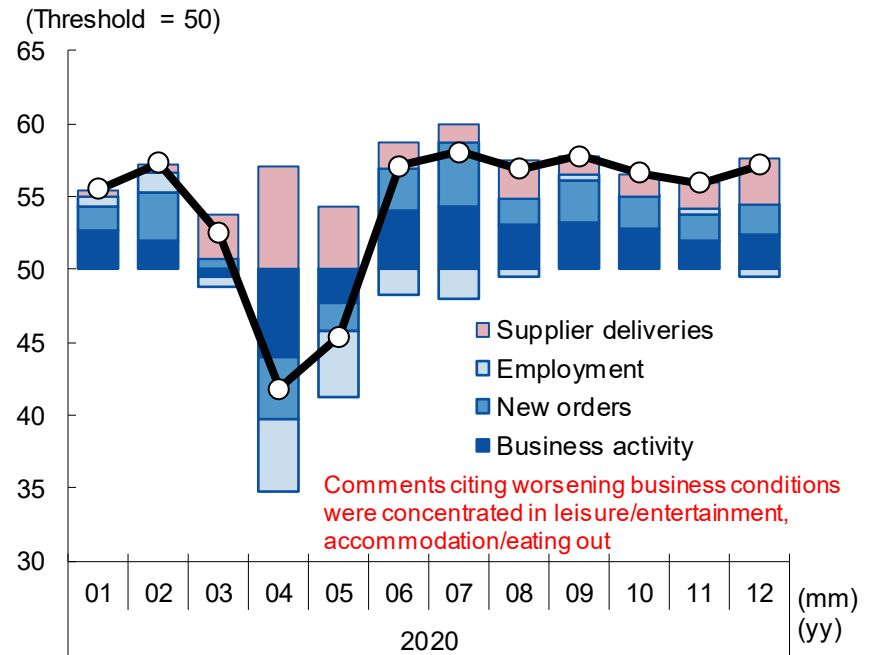
2. (1) US economy: corporate business conditions continue to improve, but bottlenecks in labor and goods pose issues

- While the ISM manufacturing index rose further to 60.7, bottlenecks worsened.
 - Absenteeism, short-term suspension of operations due to sanitization, and difficulties in reinstating or hiring employees are serving as bottlenecks, leading to the rise of procurement costs.
- The ISM non-manufacturing index also stood high at 57.2, reflecting the rise of the supplier deliveries index. Likewise with the manufacturing industry, bottlenecks also pose problems in the non-manufacturing sector.
 - The companies surveyed cited labor shortages in the construction industry due to the housing boom, and shortages of wholesale goods.

ISM manufacturing index



ISM non-manufacturing index



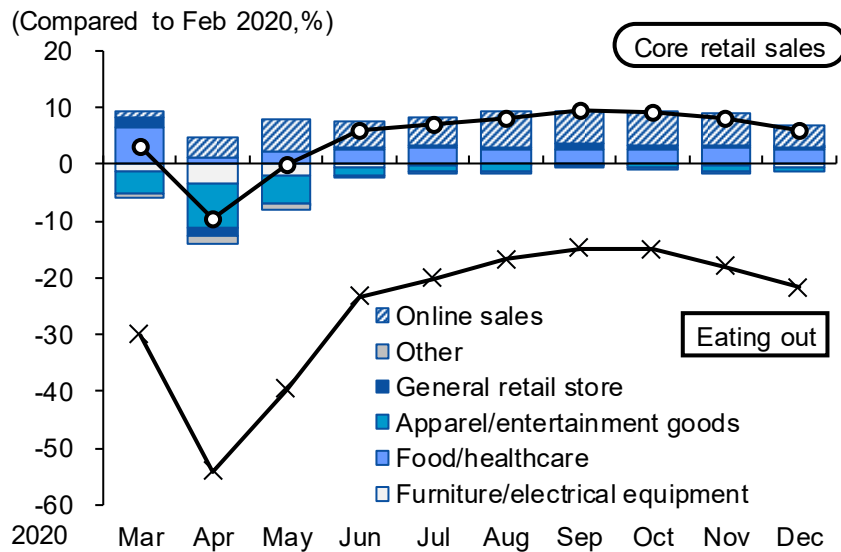
Source: Made by MHRI based upon Institute for Supply Management

Source: Made by MHRI based upon Institute for Supply Management

Consumer spending fell due to the spread of Covid-19 caseloads

- December retail sales fell, decreasing -0.7% m-o-m. In addition to restaurant services, goods consumption at establishments such as roadside stores also decreased.
 - Retail sales decreased from the previous month in many businesses, primarily restaurant services, which are facing tighter restrictions.
- Amid the slowdown of the economic recovery, an additional stimulus package was passed on December 27th. While business restrictions remain in place, consumption is expected to remain on firm footing in early spring, driven mainly by consumption of goods.
 - Consumption is being underpinned by income security measures for households, including stimulus payments of USD 600 per person, and the extension of the USD 300/week additional unemployment benefits.

Retail sales



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

The additional stimulus package

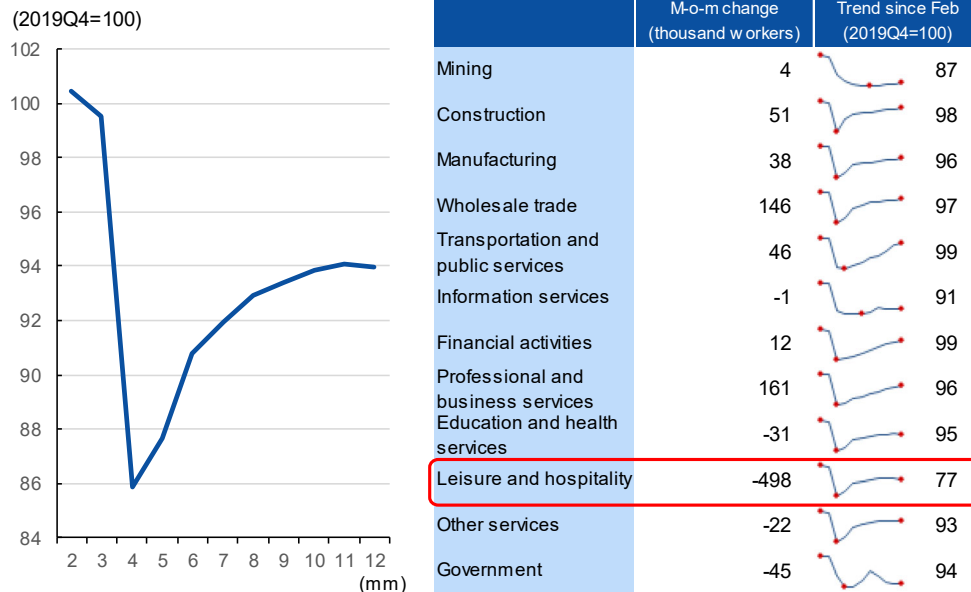
| Key contents | Details |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Total | • USD 878 billion |
| Cash benefits | • USD 166 billion (USD 600 for adults, USD 300 for children) |
| Unemployment benefits | • USD 120 billion (additional USD 300 per week, etc.) until March 14 |
| Other household assistance | <ul style="list-style-type: none"> Rental assistance USD 25 billion Nutrition assistance USD 13 billion Assistance for farmers, telecommunications, etc. USD 20 billion |
| SME support | • USD 325 billion (including PPP, USD 284 billion) |
| Other | <ul style="list-style-type: none"> School funding USD 82 billion Vaccines, testing, etc. USD 69 billion Childcare USD 10 billion Transportation industry support USD 45 billion Community financial institutions USD 12 billion |

Source: Made by MHRI based upon various reports

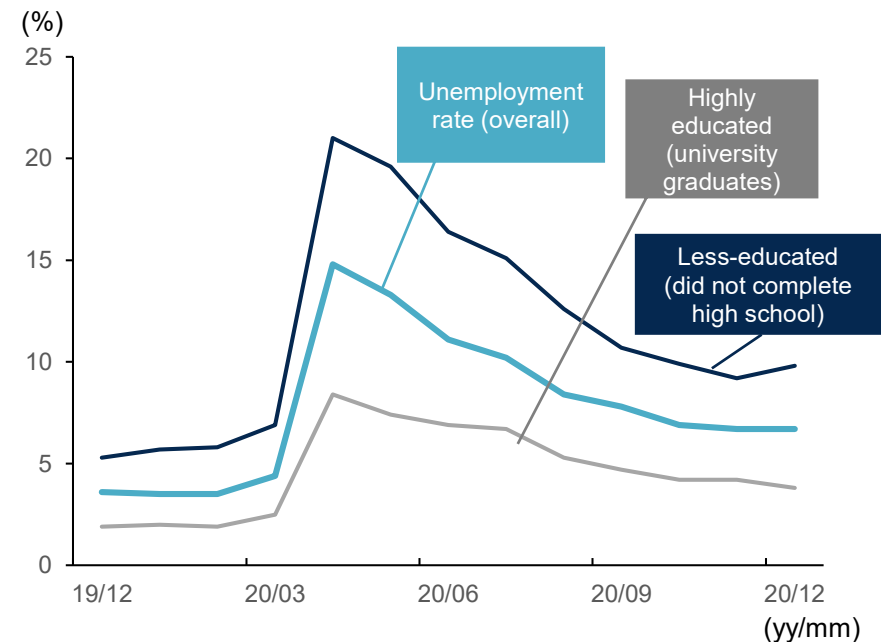
Employment deteriorated due to tightened restrictions, mainly in leisure services

- In December, nonfarm payrolls decreased (-140 thousand m-o-m), falling for the first time since April. However, it should be noted that the decrease was concentrated in certain industries, and that other industries remained firm.
 - This was the result of the adverse effects of tightening restrictions concentrated in leisure and accommodation (especially eating out). In contrast, employment increased in other industries such as retail, professional services, construction and manufacturing.
 - Although the unemployment rate remains unchanged at 6.7%, the unemployment rate rose among less-educated workers (those who have not completed high school education), many of whom are thought to work in low-wage industries such as eating out, and continues to decline among university graduates. The impact of tighter restrictions has tended to be concentrated among lower-income groups.

Trend in the number of employees by industry



Unemployment rate by type of worker (education)



Note: Comparison of workers by level of education is for those aged 25 or above.
Source: Made by MHRI based upon the US Department of Labor

Source: Made by MHRI based upon the US Department of Labor

(2) US monetary policy: FOMC warns of downside risks in the near term, while presenting an improved outlook for later in 2021

- The FOMC statement shifted the focus of downside risks from the medium term (wording dropped) to the near term (supply constraints in the vaccine rollout, new virus strains, ongoing spread of the virus).
- Even though the FOMC presented an improved outlook for the US economy for later this year, the committee remains cautious about the outlook for employment and inflation.
 - Vaccine rollout, measures such as wearing masks, fiscal policy, and the adaptation of households and businesses such as remote working are supporting the recovery.
 - Once again, the FOMC denied speculations on early tapering: “in terms of tapering, it’s just premature.”

Key points of the January FOMC press conference

Virus and vaccines

- We don't know how to model how this new vaccine will roll out.

Inflation

- **Base effects and the economy fully reopening could also create some upward pressure on inflation. We would see that as something likely to be transient and not to be very large. Expect us to not react if we see small and what we would view as very likely to be transient effects on inflation.**
- **Inflation dynamics evolve constantly over time, but they don't change rapidly.**
- It's very unlikely that anything we see now would result in troubling inflation.
- We have not adopted a formula for how much inflation we are willing to tolerate.
- I'm much more worried about falling short of a complete recovery and losing people's careers than about the possibility, which exists, of higher inflation. Frankly, we welcome slightly higher inflation.

Asset purchases

- **In terms of tapering, it's just premature.** We just created the guidance. We want to see substantial further progress toward our goals.
- After the Global Financial Crisis, we raised interest rates, we froze the balance sheet size, and then we shrank the balance sheet size. So there's no reason why we won't be able to do that again.

Financial stability risks and macroprudential policies

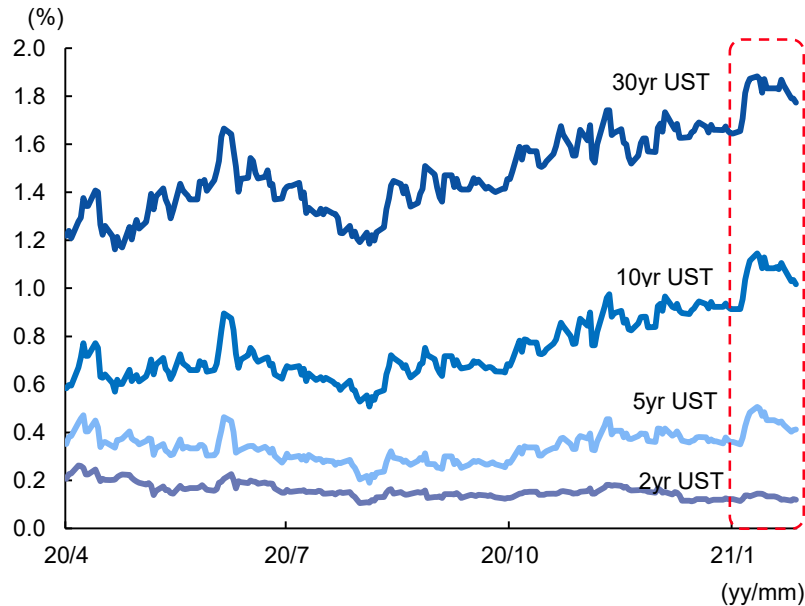
- We don't have jurisdiction and supervision over many areas in the nonbank sector, so we coordinate through the Financial Stability Oversight Council and with other agencies. The outsized economic and financial shock of the pandemic really appeared in the nonbank sector. We are engaged in carefully examining, understanding and thinking about what in the nonbank sector will need to be addressed in the next year or so.
- **What's really been driving asset prices in the last couple of months isn't monetary policy. It's been expectations about vaccines and fiscal policy. The connection between low interest rates and asset values is probably not as tight as people think.**
- We don't rule out adjusting monetary policy to address asset values as a theoretical matter, but we clearly look to macroprudential tools, regulatory tools, supervisory tools, and other kinds of tools.
- **Housing price increases are unlikely to be sustained.**
- You've seen significantly fewer defaults than we expected. There were a lot of downgrades and some defaults at the beginning. The same is true for bank loans.

Source: Made by MHRI based upon FRB and CQ.com

(3) US bond market: 10yr UST yields are forecast to move around 0.9% to 1.2%

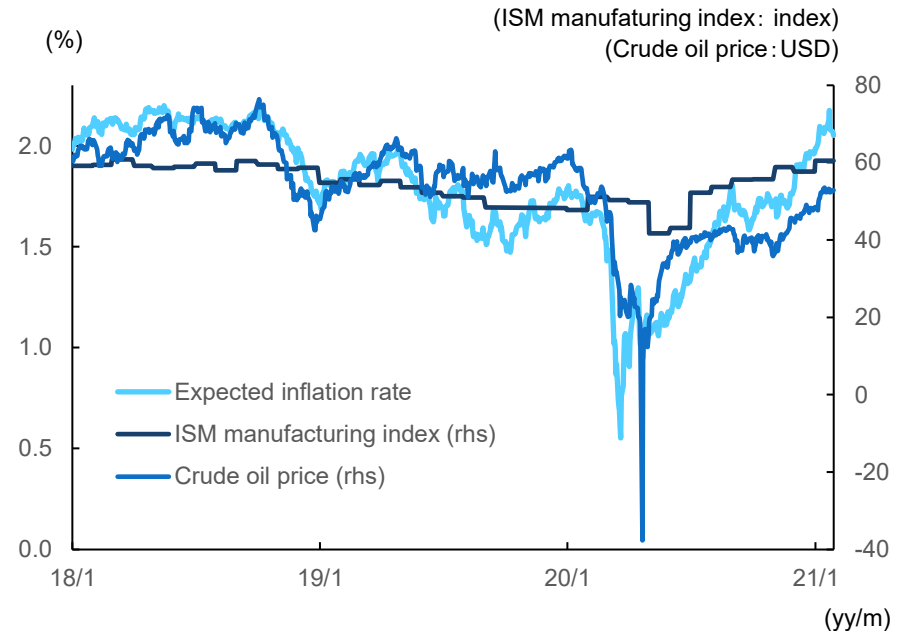
- 10yr UST yields broke above 1.0% at the start of the year reflecting the rise of expectations for increased fiscal spending following the "triple blue" election results.
 - Furthermore, the yield temporarily rose to the 1.1% range. following the announcement of an additional USD 1.9 trillion economic stimulus package by the newly inaugurated President Joe Biden.
- The ISM manufacturing index and crude oil prices rose, reflecting expectations toward economic recovery, and the expected inflation rate also rose above 2%.
 - Even so, Fed Chair Jerome Powell indicated a cautious stance towards raising interest rates and tapering asset purchases (January 27).
 - As a further rise of the 10yr UST yield is unlikely, we forecast the yield to remain around 0.9% to 1.2%.

Trends of UST yields



Source: Made by MHRI based upon Bloomberg, FRB

Trends of expected inflation rate, ISM manufacturing index, and crude oil price



Note: The expected inflation rate is the breakeven inflation rate (10yr)
Source: Made by MHRI based upon Bloomberg

(4) US stock market: even though the market lost momentum despite initial favorable reaction to “triple blue“ results, the market should remain on firm footing

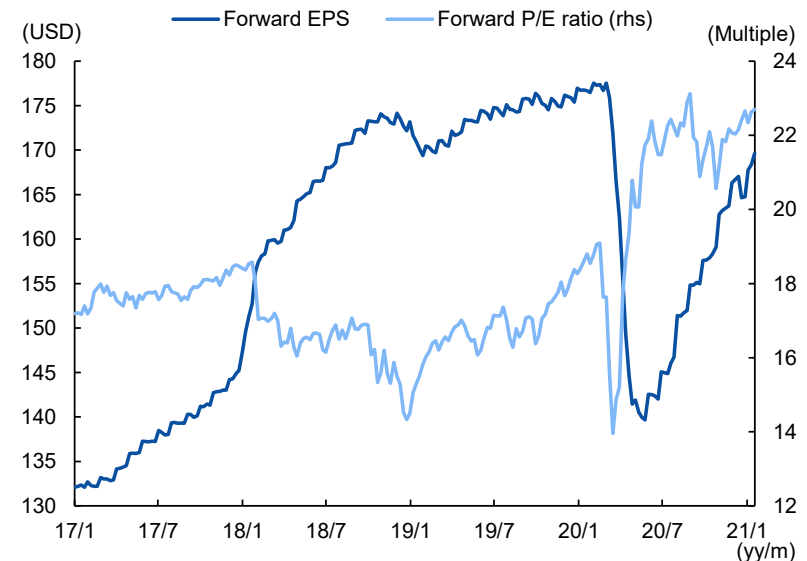
- The Dow Jones average temporarily rose above USD 31,000 at the beginning of the month, reacting favorably to the “triple blue“ election results. However, it recently suffered the largest drop since October 28, 2020 due to losses announced in the earnings results of major US airlines, and risk-off sentiment due to hedge funds’ closing of short positions.
 - In terms of sectors, although stocks sensitive to economic conditions such as energy rose due to expectations toward economic recovery, the rate of price gain gradually slowed.
- Turning to valuation, the forward P/E ratio remains at a high level of 23x. Even considering the low interest rate environment and the upward pressure from technology stocks, there is a strong sense of overvaluation.
- Despite the perception that stocks are overvalued, the market is expected to remain firm, reflecting the improvement of corporate earnings results due to the recovery of the economy.
 - However, there are lingering market adjustment risks, given the persistence of high uncertainties such as the progress of vaccine rollouts and developments related to the economic stimulus measures

S&P 500 Index percentage change in price by sector

| | End of 2020 to Jan/8/2021 | Jan/8/2021 to Jan/15/2021 | Jan/15/2021 to Jan/22/2021 | Jan/22/2021 to Jan/27/2021 | Year-to-date percentage change in price |
|--------------------------|---------------------------------|---------------------------------|----------------------------------|----------------------------------|-----------------------------------------------|
| S&P500 Index | 1.8 | -1.5 | 1.9 | -2.4 | -0.1 |
| Energy | 9.3 | 3.1 | -1.6 | -4.5 | 6.0 |
| General consumer goods | 3.8 | -1.9 | 3.1 | 0.4 | 5.4 |
| Health care | 3.4 | -0.4 | 0.6 | 0.3 | 3.8 |
| Communication services | -0.3 | -3.6 | 5.9 | 1.2 | 3.1 |
| Information technologies | 0.4 | -2.6 | 4.4 | 0.9 | 3.0 |
| Real estate | -2.6 | 1.9 | 1.4 | 2.0 | 2.6 |
| Utilities | -0.6 | 1.1 | -0.2 | 0.9 | 1.1 |
| Materials | 5.7 | -1.6 | -1.2 | -1.9 | 0.8 |
| Capital goods | 1.1 | -0.9 | -0.4 | -1.6 | -1.7 |
| Finance | 4.7 | 0.0 | -1.8 | -4.5 | -1.8 |
| Consumer staples | -1.0 | -2.0 | -0.9 | 1.8 | -2.0 |

Source: Made by MHRI based upon Refinitiv

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

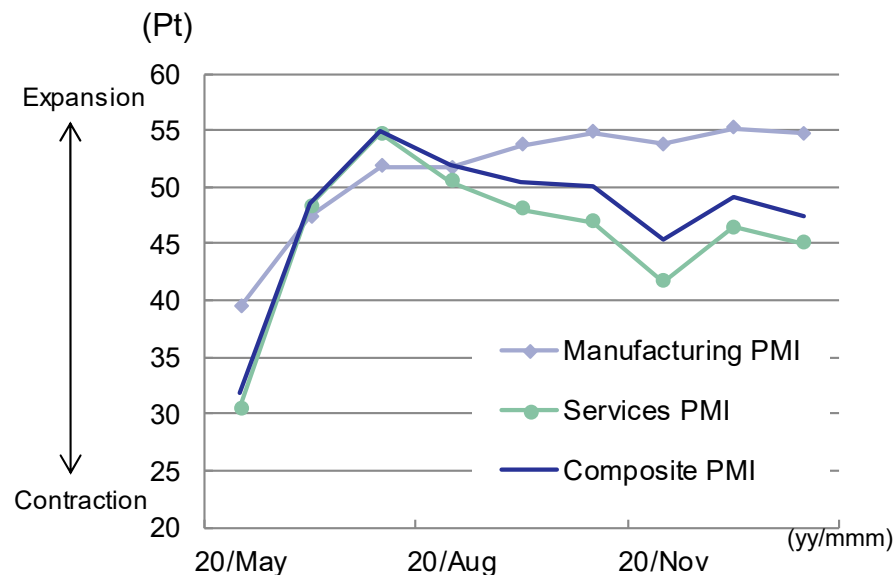


Note: Forward EPS and forward P/E ratios are based on 12-month forecasts
Source: Made by MHRI based upon Refinitiv

3. (1) The Eurozone economy: January PMI fell slightly, and economic stagnation is expected to continue for the time being due to the extension of Covid-19 measures

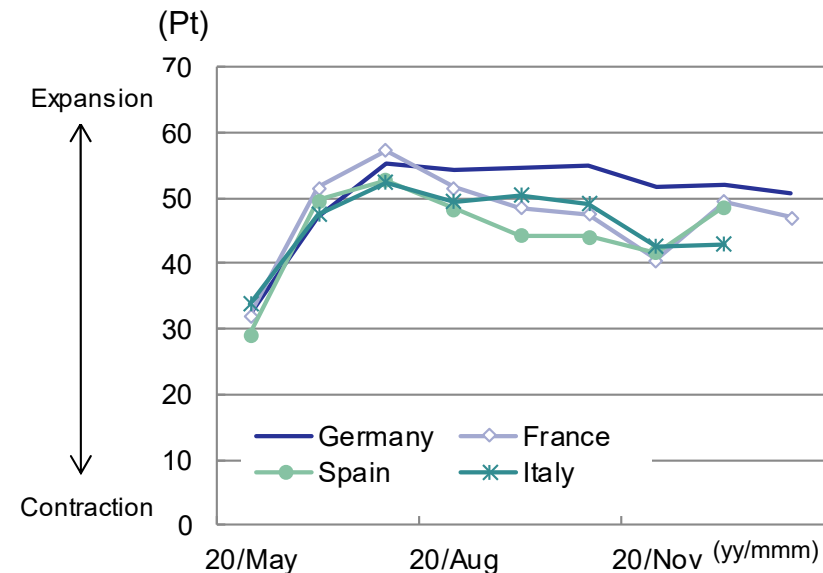
- The Eurozone Purchasing Managers' Index (composite PMI, flash estimate) in January, having a high correlation with GDP, stood at 47.5, marking a slight decline from the previous month (49.1). Both the services PMI and the manufacturing PMI fell slightly due to the extension of the Covid-19 prevention measures and the shortage of parts since the beginning of January.
 - In France, the service industry served as a drag, resulting in the fall of the Composite PMI by -2.5 pt from the previous month to 47.0. Given the number of new Covid-19 caseloads pinned at a high level, the tightening of nighttime curfews (implemented from January 16) are among some of the background factors.
 - In Germany, despite the implementation of a soft lockdown since late December, requiring the closure of all stores other than those carrying daily necessities, the Composite PMI has remained above the expansion/contraction threshold of 50, underpinned by the manufacturing sector.
- The economy is expected to slump, given the maintenance of the reinforced Covid-19 prevention measures and the ongoing impact of reduced automobile production accompanying the shortage of semiconductors.

Eurozone: Manufacturing PMI



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

Major Eurozone countries: Composite PMI



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

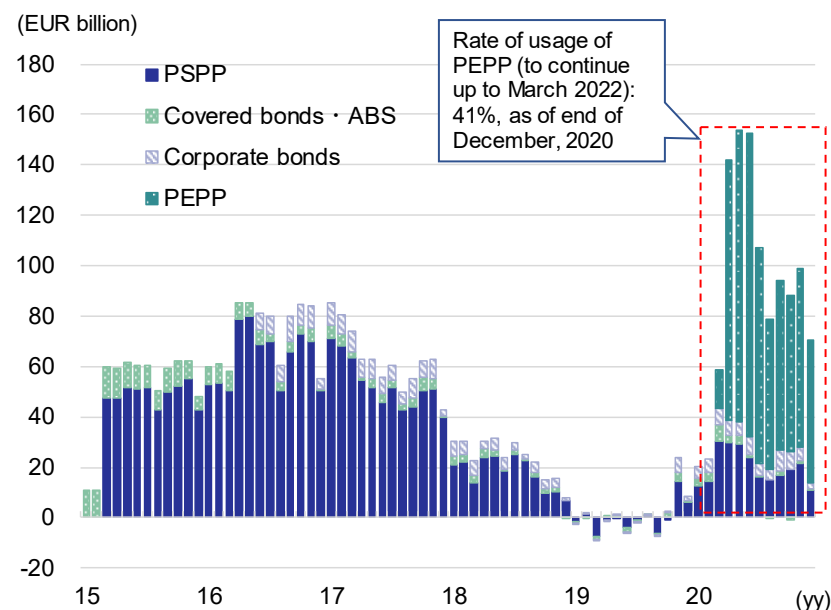
(2) Eurozone monetary policy: the ECB kept monetary policy unchanged, taking a wait-and-see stance with a close eye on “favorable financing conditions”

- The ECB kept its monetary policy stance unchanged at the Governing Council meeting on January 21.
 - The ECB recognizes that economic conditions are broadly in line with the December 2020 macroeconomic projections, but that there is high uncertainty while the risk surrounding the growth outlook remains tilted to the downside.
 - The ECB noted that the Pandemic Emergency Purchase Programme (PEPP) (totaling EUR 1.85 trillion) need not be used in full, but can be recalibrated if necessary. The ECB will base its decision on whether or not "favorable financing conditions" are present for all sectors.
- For the time being, the ECB will keep a close eye upon economic conditions and prices.

Key points of the ECB Policy Board meeting (January 21)

| | |
|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Economic situations | Broadly in line with the December 2020 macroeconomic projections. The risks surrounding the Euro growth outlook remain tilted to the downside but less pronounced. The agreement on future EU-UK relations and the start of vaccination campaigns is encouraging, but lockdown containments and their length, retail sales, and declining mobility continue to be sources of downside risk. |
| Outlook for prices | Although headline inflation is likely to increase in the coming months, supported by current energy price dynamics, and also by the end of the temporary VAT reduction in Germany, underlying price pressures are expected to remain subdued owing to weak demand, notably in the tourism and travel-related sectors. |
| Outlook for exchange rates | On the strength of the euro, we are monitoring very carefully exchange rates, because they have an impact on prices. |
| Pandemic Emergency Purchase Programme (PEPP) | We will continue our purchases under the PEPP with a total envelope of EUR 1.85 trillion, until at least the end of March 2022. The envelope need not be used in full. Equally, the envelope can be recalibrated. |
| Outlook for future policies | Identify whether or not we are in the presence of favourable financing conditions for all sectors such as households, SMEs, corporates, and sovereigns , based on a holistic approach. |

The ECB's outstanding asset purchases



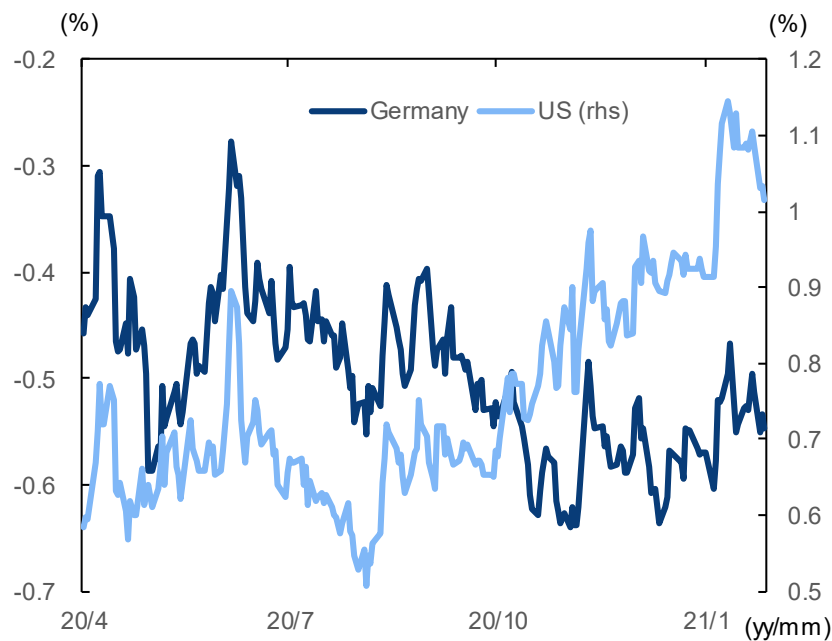
Source: Made by MHRI based upon ECB

Source: Made by MHRI based upon ECB

(3) Eurozone bond market: German 10yr government bond yield expected to trend around -0.6% to -0.4%

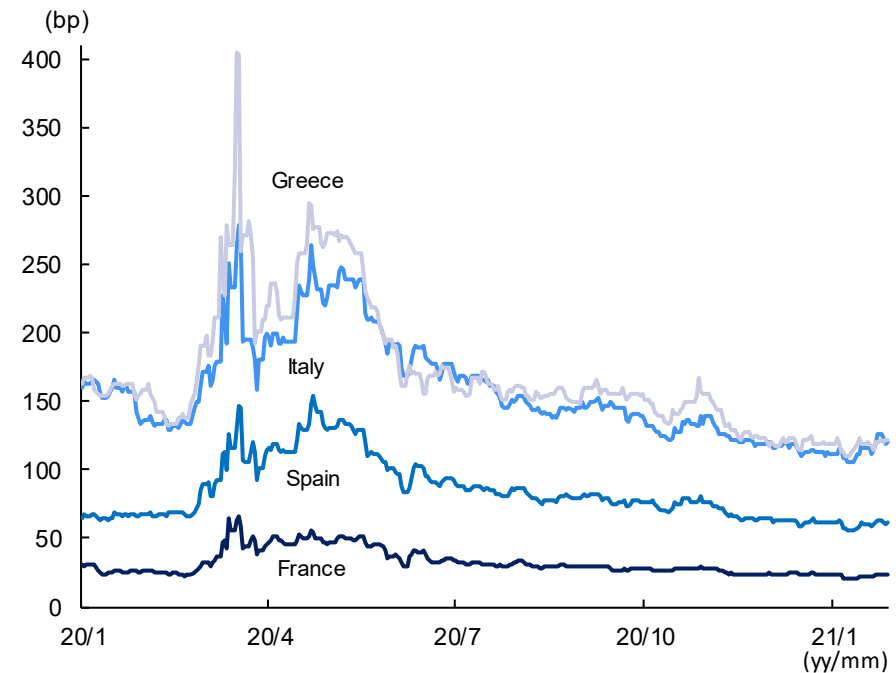
- The yield on 10yr German government bonds rose momentarily to the -0.4% range, reflecting the rise of US long-term interest rates. However, the yield fell back to the -0.5%-range as the extension of the lockdown became inevitable, given the absence of prospects of the containment of Covid-19 infections.
 - The German 10yr government bond yield is expected to remain at around -0.6% to -0.4%, as interest rates are likely to come under downward pressure from continued monetary easing and prolonged restrictions on economic activity.
- Spreads between the German bond yields and other Eurozone yields remain stable amid the continuation monetary easing by the ECB.
 - Even though the political unrest in Italy led to a temporary widening of the spread between German and Italian bond yields, this turned out to be limited.

10yr US and German government bond yields



Source: Made by MHRI based upon Bloomberg

Spreads with German government bonds

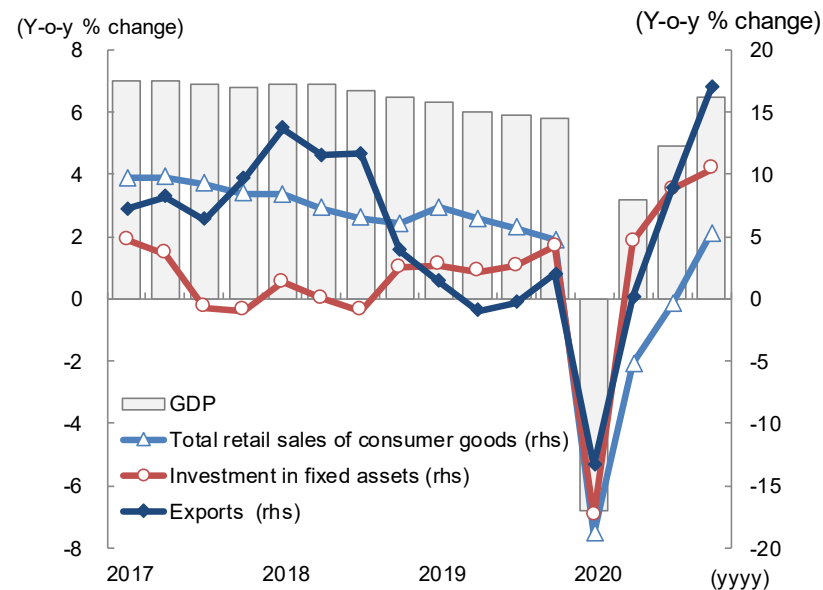


Source: Made by MHRI based upon Bloomberg

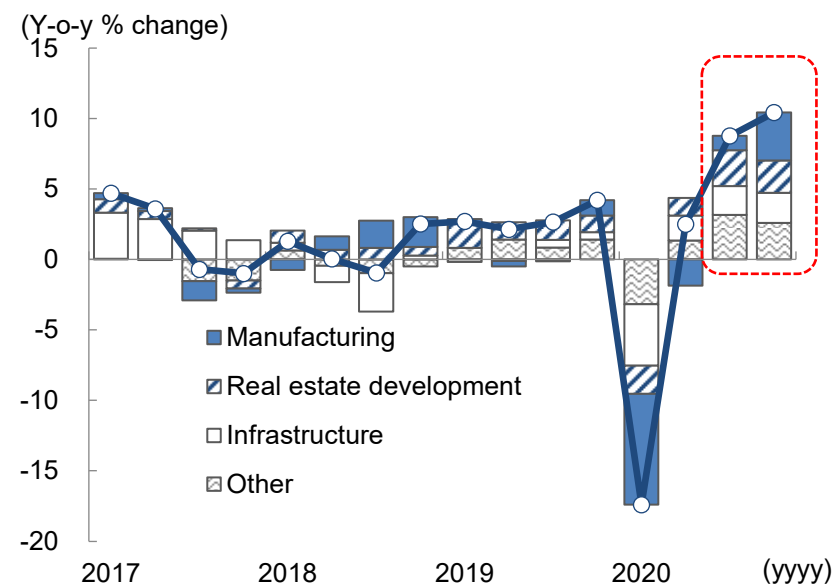
4. (1) The Chinese economy: real GDP growth accelerated in the Oct-Dec quarter; positive growth of +2.3% on a full-year basis

- In the Oct-Dec quarter, China's real GDP grew +6.5% y-o-y (Jul-Sep quarter: + 4.9% y-o-y), accelerating for three quarters in a row. Exports, investment and consumption all accelerated. Full year 2020 growth was +2.3% y-o-y (2019: +6.0% y-o-y), remaining in positive territory, albeit at the lowest level since 1976.
 - Export growth accelerated significantly, underpinned by the gradual recovery of the global economy, as well as firm demand related to remote working.
 - Fixed asset investment accelerated. Although investment related to real estate development slowed slightly, manufacturing investment was firm, driven mainly by telecommunications & electronics and pharmaceuticals.
 - Retail growth edged up to positive territory, driven by strong motor vehicle sales, as well as the improvement of the employment and income environment, and successful containment of Covid-19 caseloads.
- Looking forward, although economic growth in Q1 may stagnate somewhat due to the current resurgence of Covid-19 caseloads, we expect the recovery to continue, driven by investment in high tech and personal consumption.

Real GDP and main indicators



Fixed asset investment (by industry)



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

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.

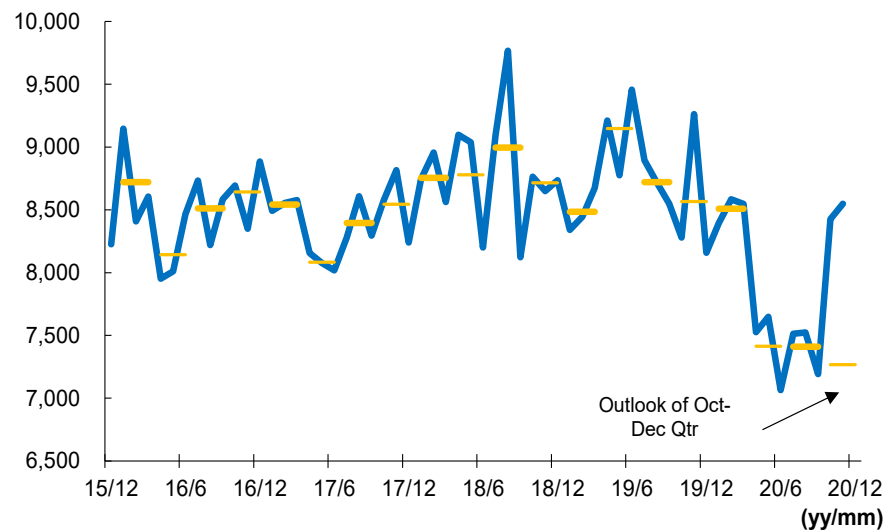
Source: Made by MHRI based upon the National Bureau of Statistics of China, the General Administration of Customs of the National Bureau of Statistics of China, and CEIC data.

5. (1) The Japanese economy: the rise of private-sector machinery orders is temporary; fading pent-up demand puts downward pressure upon the future

- November private-sector machinery orders (excluding orders for ships and those from electric power companies) rose +1.5% m-o-m (October: +17.1% m-o-m), up for the second consecutive month.
- Compared to the Jul-Sep quarter, machinery orders grew a dramatic +14.5% in the period from October and November (Jul-Sep quarter: - 0.1% q-o-q). However, this increase is viewed as temporary.
 - By machinery classification, actual orders for five out of six classes of machinery excluding railroad vehicles, ships, and aircraft, outperformed the Cabinet Office forecast. This appears to reflect the fact that orders that had been postponed by the Covid-19 pandemic in the first half of 2020 materialized in the second half of the year.
 - Among industrial machinery, it appears that transport machines benefitted from a structural increase in demand from logistics facilities reflecting the rise of e-commerce demand. However, this was not strong enough to boost overall demand.
 - Looking forward, in addition to the fading of pent-up demand, the spread of Covid-19 caseloads and the declaration of the state of emergency will serve as negative factors. Machinery and capital investment (on an in-progress basis) is expected to be positive in the Jan-Mar quarter. Even so, there is a high possibility that the increase will pause in the Apr-Jun quarter.

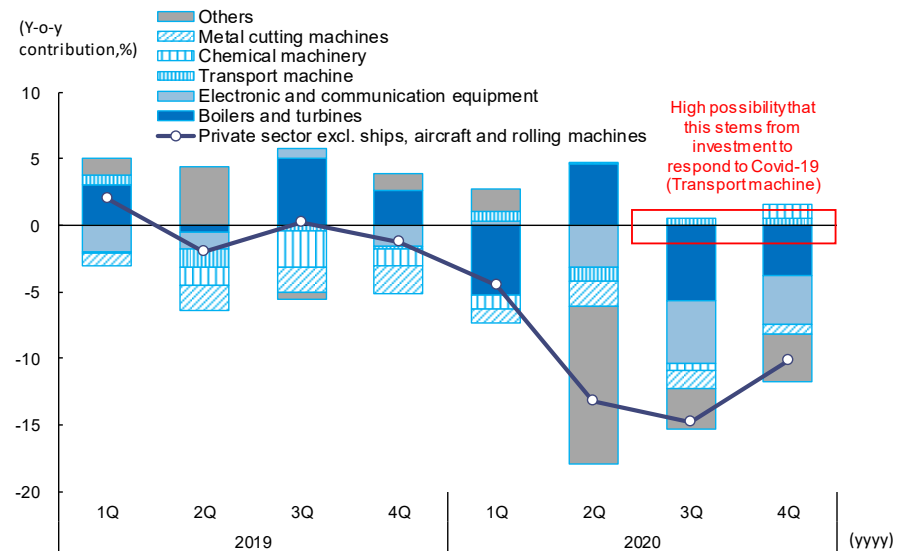
Private-sector machinery orders

(JPY 100 million)



Source: Made by MHRI based upon Cabinet Office, *Machinery Orders*.

Private-sector machinery orders (machinery classification/ original data series)

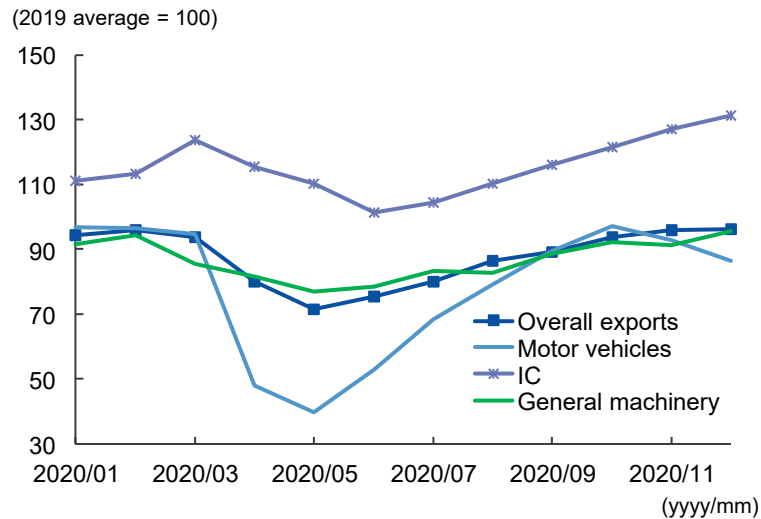


Source: Made by MHRI based upon Cabinet Office, *Machinery Orders*.

Moderate increase of exports expected going forward, mainly in capital goods and IC

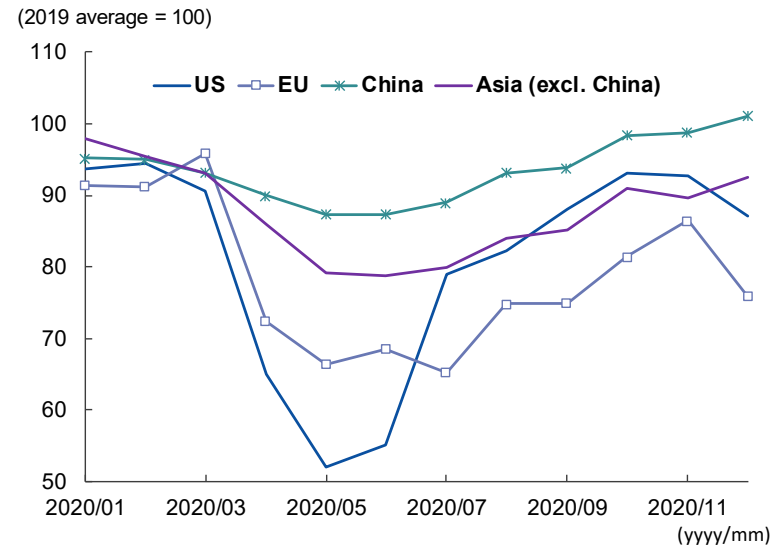
- With respect to exports, despite a pause in recovery of motor vehicles, capital goods and IC increased, serving as new drivers of export growth.
 - The Oct-Dec quarter export volume index stood at +11.9% q-o-q, while the import volume index was +4.0% q-o-q. Given the higher-than-expected growth of exports, the contribution by external demand to quarter-on-quarter real GDP growth in the Oct-Dec quarter is expected to be around +1.2% pt.
 - Exports of motor vehicles have decreased for the second straight month, as movements to restore local inventories have run their course. However, the increase in exports of capital goods and IC manufacturing equipment lifted overall exports.
 - By destination, shipments to China and other Asian countries increased, while shipments to Europe decreased.
- Jan-Mar quarter exports are expected to remain on a gradual upward trend.
 - Although exports of motor vehicles are expected to decline as pent-up demand has run its course and there is a shortage of semiconductors, overall exports are expected to remain on a gradual upward trend, given the continuation of the increase of exports of capital goods and IT-related goods.

Major export items



Note: General machinery is based on nominal amount. Seasonally adjusted by MHRI.
Source: Made by MHRI based upon Ministry of Finance, *Trade Statistics*.

Export volume index by major destination

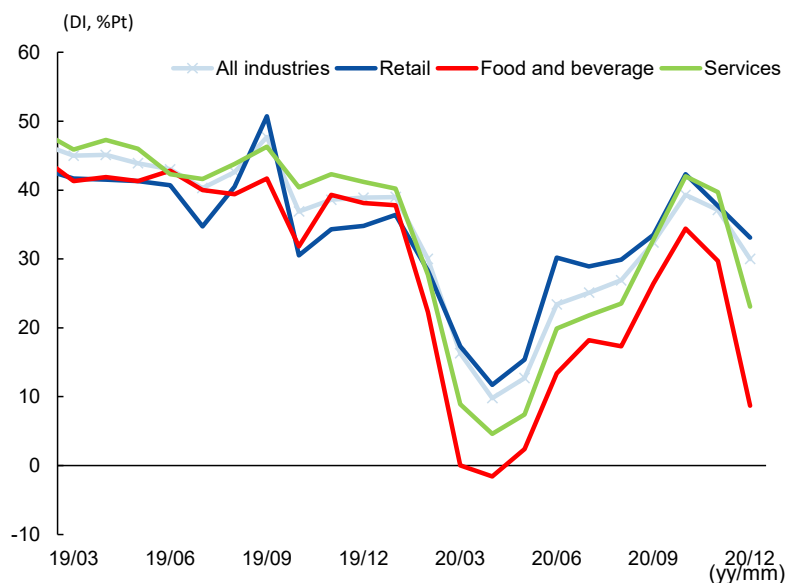


Note: Seasonally adjusted by MHRI.
Source: Made by MHRI based upon Ministry of Finance, *Trade Statistics*.

Business sentiment deteriorated sharply in December, particularly in the food and beverage sector. The outlook worsens due to the declaration of a state of emergency.

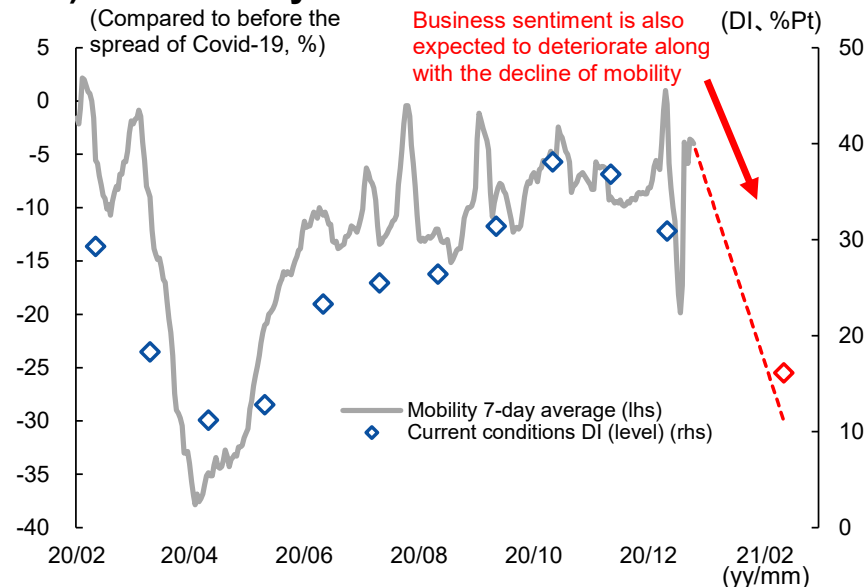
- In the *Economy Watchers Survey*, the DI for current conditions (direction) worsened for the second consecutive month in December (November: 45.6 → December: 35.5).
 - Business sentiment deteriorated mainly in the food and beverage sector and the travel and transportation sector due to the government's request for shortened business hours and the suspension of the Go To Program.
 - The DI for future conditions rose slightly (Nov: 36.5 → Dec: 37.1). Since the declaration of a state of emergency in January was not factored in at the time of this survey (28 comments citing the "state of emergency" (April: 156)), the odds are high that business sentiment will worsen.
- The DI for current conditions (level) deteriorated for the second month in a row (Nov: 37.1 → Dec: 30.0). The DI for the food and beverage sector and the services sector fell sharply, while deterioration in the retail sector was modest. Underpinned by stay-at-home demand, the decline in goods consumption was limited compared to that for services.
- A further deterioration of consumer sentiment is expected in the Jan-Mar quarter along with the declaration of a state of emergency.

Economy Watchers Survey: DI for current conditions (level) (by sector)



Source: Made by MHRI based upon Cabinet Office, *Economy Watchers Survey*.

Economy Watchers Survey: DI for current conditions (level) and mobility

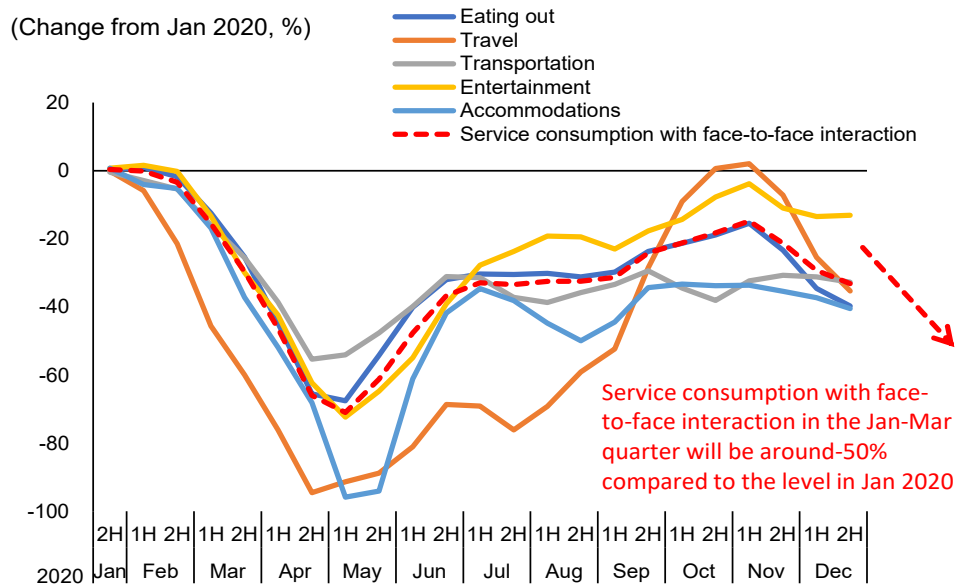


Source: Made by MHRI based upon Cabinet Office, *Economy Watchers Survey* and Google LCC, *Google Mobility*.

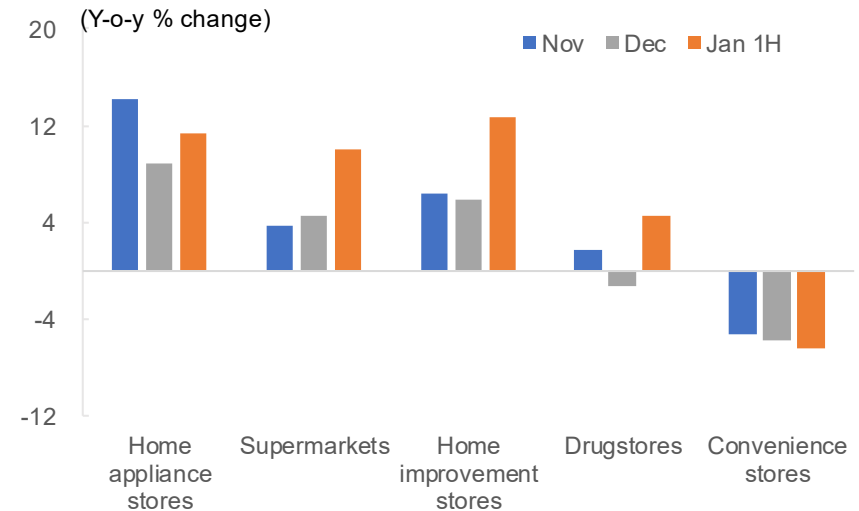
Even though year-end service consumption declined, retail sales turned out strong, mainly in stay-at-home consumption

- Service consumption in the second half of December fell primarily in travel and eating out, reflecting the resurgence of Covid-19 caseloads and suspension of the Go To Travel Program.
 - As of the second half of December, service consumption with face-to-face interactions fell to the level prior to the increase stemming from the Go To Program (first half of September).
 - With the declaration of a state of emergency, it is expected that the level of service consumption with face-to-face Interactions in the Jan-Mar quarter will be about -50% compared to January 2020.
- In contrast, consumption of goods is currently accelerating mainly in stay-at-home consumption such as home appliances, furniture and food.
 - Currently (first half of January), retail sales (POS data) are strong, mainly at home appliance stores, home improvement stores, and supermarkets (for convenience stores, demand around offices may have decreased due to the decline in office attendance). Consumption is polarizing between goods and services.

Service consumption with face-to-face interactions in the second half of December 2020



Trends in retail sales index (POS data)



Note: Simple weekly average on a year-on-year basis. Note that the year-on-year changes in November and December were affected by the post-2019 tax hike slump.
 Source: Made by MHRI based upon Ministry of Economy, Trade and Industry, METI POS retail sales index.

Note: Reference data series. Seasonally adjusted by MHRI (two half-year backward moving average).
 Source: Made by MHRI based upon JCB and Nowcast, JCB Consumption NOW.

(2) BOJ monetary policy: current policy maintained at the BOJ Monetary Policy Meeting in January

- At the Monetary Policy Meeting (MPM) on January 20 and 21, the BOJ decided to maintain its current monetary policy stance.
 - The MPM decided to extend by one year the deadlines for loan disbursements under the Fund-Provisioning Measure to Stimulate Bank Lending and the Fund-Provisioning Measure to Support Strengthening the Foundations for Economic Growth.
- In the BOJ's *Outlook for Economic Activity and Prices (Outlook Report)*, the forecasts for FY2020 were subject to slight downward revisions, while those for FY2021 were revised upward.
- While attention will focus upon the results of the "assessment" at the March meeting, there is the possibility that it may lead to (1) the abolishment of allocated ETF purchase amount, and securing of flexible purchase measures, (2) revival of forward guidance related to the policy interest rate, (3) changes to the Fund-Provisioning Measure to Support Strengthening the Foundations for Economic Growth, (4) a wider allowable range of upward and downward movement for Japanese government bond (JGB) yields, changes in "maturity classification" and purchase amount for JGBs, and (5) review of the three-tier structure of current accounts held by financial institutions at the BOJ.

Bank of Japan *Outlook Report* (January 2021)

| | Real GDP | CPI (all items less fresh food) | |
|--------------------------------|------------------------|---------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| | | | (Reference) Excluding the effects of the consumption tax hike and policies concerning the provision of free education |
| Fiscal 2020 | -5.7 to -5.4 (-5.6) | -0.7 to -0.5 (-0.5) | -0.8 to -0.6 (-0.6) |
| Forecasts made in October 2020 | -5.6 to -5.3 (-5.5) | -0.7 to -0.5 (-0.6) | -0.8 to -0.6 (-0.7) |
| Fiscal 2021 | +3.3 - +4.0 (+3.9) | +0.3 to +0.5 (+0.5) | |
| Forecasts made in October 2020 | +3.0 to +3.8 (+3.6) | +0.2 to +0.6 (+0.4) | |
| Fiscal 2022 | +1.5 to +2.0 (+1.8) | +0.7 to +0.8 (+0.7) | |
| Forecasts made in October 2020 | +1.5 to +1.8 (+1.6) | +0.4 to +0.7 (+0.7) | |

Note: Majority outlook of the Policy Board members. Figures in brackets indicate the medians of the Policy Board members' forecasts.

Source: Made by MHRI based upon the Bank of Japan.

Key opinions on "assessment" decided at the December MPM

- Given that monetary easing will be further prolonged, it is important to conduct an assessment for further effective and sustainable monetary easing, with a view to achieving the price stability target of 2 percent.
- The framework of "Quantitative and Qualitative Monetary Easing (QQE) with Yield Curve Control" has been working well and thus there is no need to change it.
- The Bank should examine the positive and side effects of monetary easing including asset purchases and enhance their sustainability and effectiveness as necessary.
- As for ETFs, active purchases should be maintained for the time being. In addition, under prolonged monetary easing, the Bank should seek room to make flexible adjustments depending on market conditions while taking into consideration the Bank's financial soundness.
- It is necessary for the Bank to enhance sustainability of yield curve control and purchases of assets, such as ETFs, through the flexible conduct and be prepared so that it can respond effectively to possible changes in economic activity and prices as well as financial conditions.
- It is necessary to take into account the possibility that, along with the increase in issuance of JGBs, the amount of interest-rate risk will accumulate and supply-demand conditions will be eased in the bond market. Meanwhile, with a view to simultaneously achieving prolonged monetary easing and financial system stability, it is desirable, in a sense, for the yield curve to become steeper at a moderate pace.

Source: Made by MHRI based upon the Bank of Japan.

(3) Japanese bond market: 10yr JGB yield projected to trend around 0%

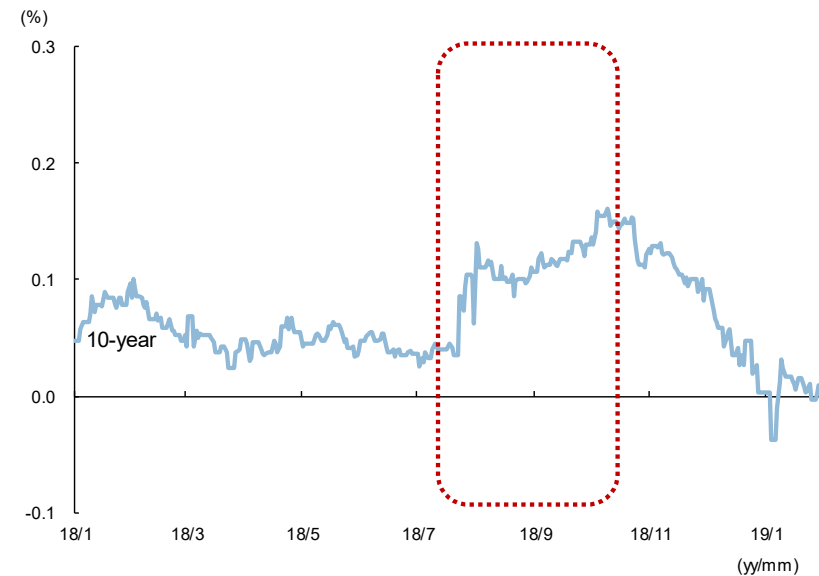
- The yield on 10yr JGBs rose to 0.057% on January 18, reflecting media speculation that the BOJ is considering to reinstate a wider allowable range of upward and downward movement for long-term interest rates, which is currently around $\pm 0.2\%$, as part of its "assessment" of policy.
 - When the allowable range of upward and downward movement was widened to $\pm 0.2\%$ in July 2018, there were some instances when the 10yr JGB yield rose to 0.161%. However, it subsequently fell into negative territory.
- Up to the March Monetary Policy Meeting, there is a possibility that long-term interest rates will rise temporarily and that the breadth of fluctuations will widen due to speculation regarding the "assessment."
 - However, given assumptions on the prolongation of monetary easing, we expect the 10yr JGB yield to remain around 0%.

Trends in JGB yields



Source: Made by MHRI based upon Bloomberg.

Trends in 10yr JGB yield in 2018

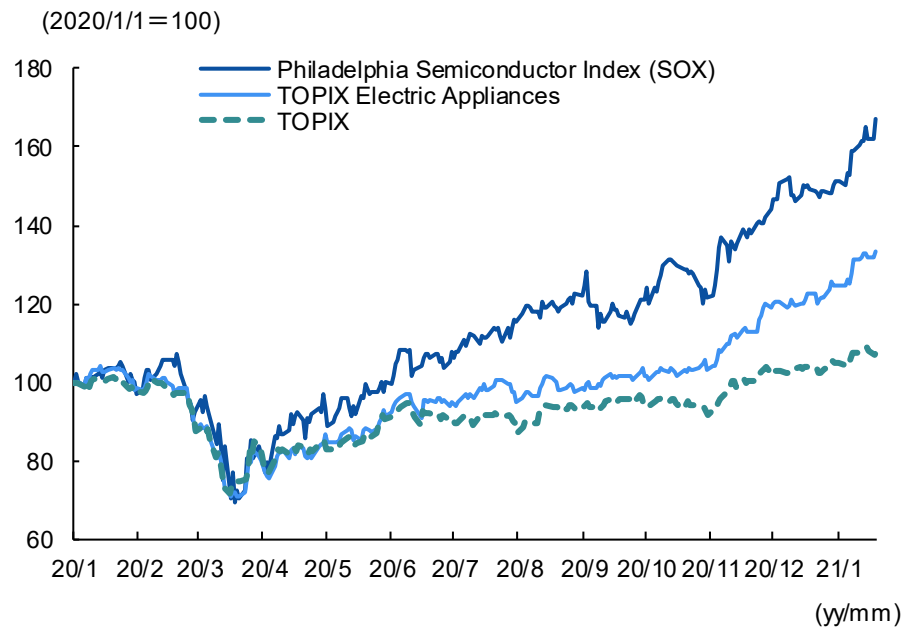


Source: Made by MHRI based upon the Ministry of Finance.

(4) Japanese stock market: the Nikkei stock average breached the 28,000 mark for the first time in approximately 30 years

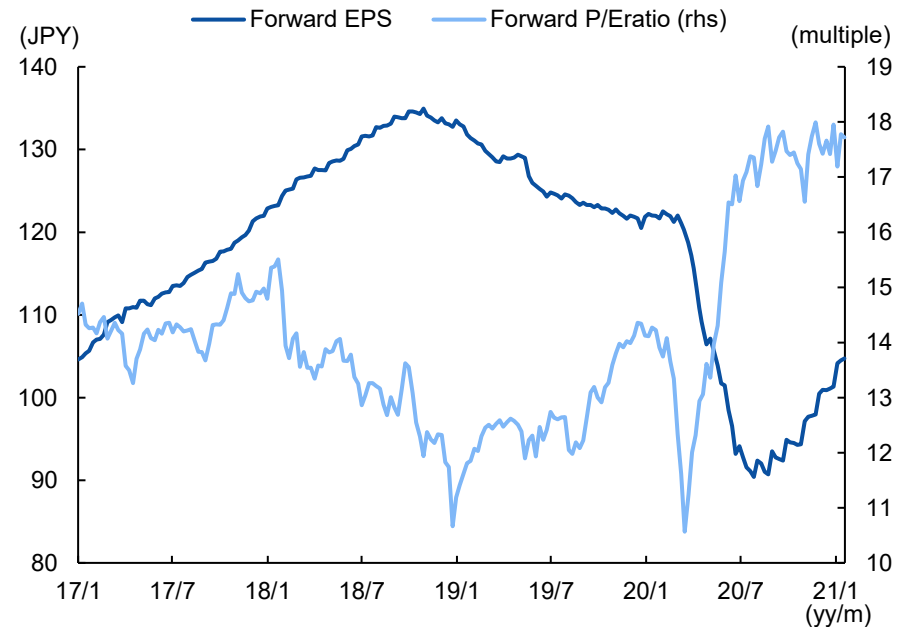
- The Nikkei Stock Average breached the 28,000 mark for the first time in approximately 30 years due to expectations toward US economic stimulus measures.
 - In addition, electrical machinery industry, which accounts for a large share of semiconductor-related stocks, drove Japanese stocks reflecting the tight semiconductor market.
 - Looking at trading in terms of investor, overseas investors continued to be net buyers, primarily in spot trading.
- Despite the mild recovery of forward EPS, it is necessary to pay attention to the risks of downward revisions such as the re-issuance of a declaration of a state of emergency in Japan.
 - Although the forward P/E ratio at 18 indicates over-valuation, the outlook for Japanese stocks is expected to remain firm, reflecting actual demand for semiconductors and other products.

Trends in semiconductor-related stocks and TOPIX



Note: The latest readings are as of January 27.
Source: Made by MHRI based upon Refinitiv and Japan Exchange Group.

TOPIX forward EPS and forward P/E ratio

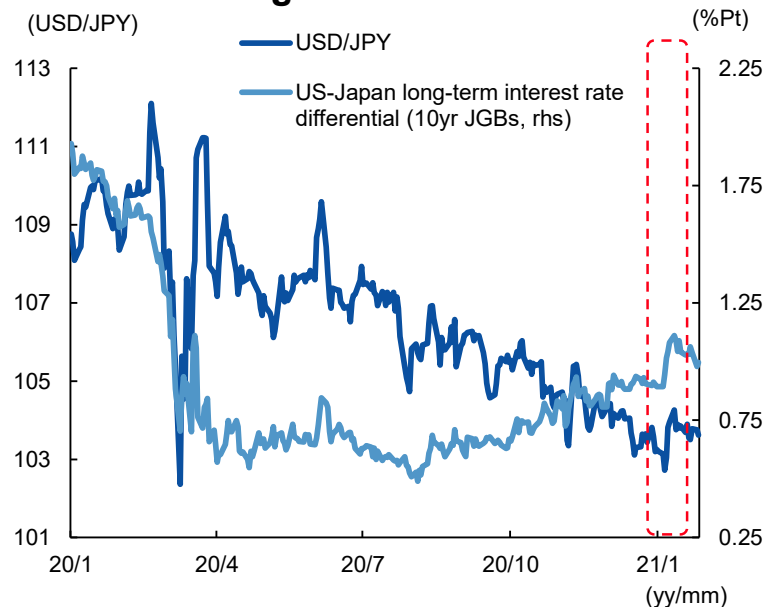


Note: Forward EPS and forward P/E ratios are based on 12-month forecasts.
Source: Made by MHRI based upon Refinitiv.

6. Forex market: the upside of the USD/JPY exchange rate remains heavy and is expected to move in a narrow range around JPY103 to 105 to the dollar

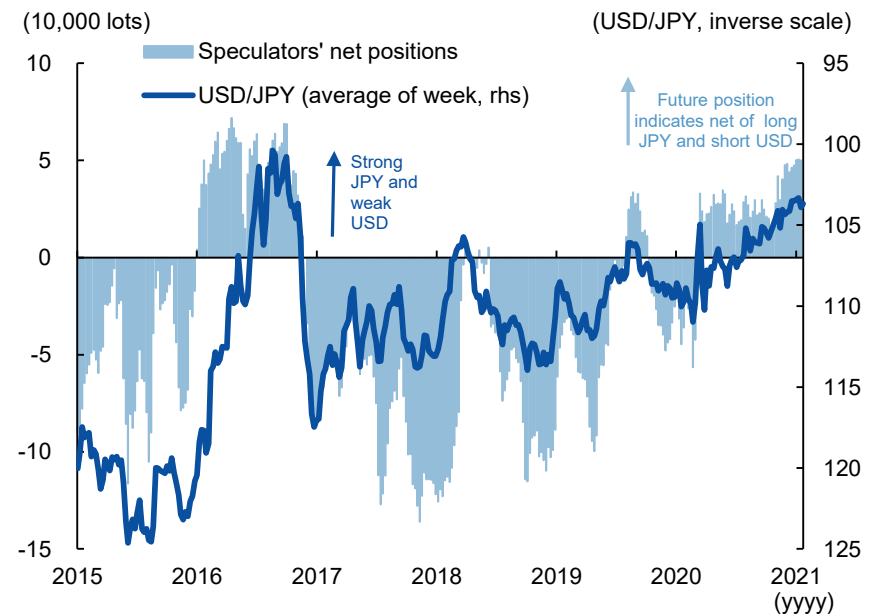
- Risk-on dollar selling progressed at the end of 2020. Although the yen temporarily strengthened against the US dollar to the mid-102yen level, the forex market reversed course to dollar strengthening at the beginning of the year.
 - The Japan-US interest rate differential widened reflecting the rise of US interest rates, serving as dollar-selling pressure against the yen. The USD/JPY exchange rate temporarily strengthened to the mid-104 yen level.
- Looking ahead, given that a further rise of the US long-term interest rate is unlikely, the USD/JPY currency pair should continue to face a heavy upside.
 - Amid the ongoing vaccination rollouts, and risk-on sentiment due to expectations toward the recovery of the US economy, the odds are high that both the US dollar and the yen will be sold, without of a clear direction.
 - Long yen positions among speculators is at its highest level since September 2016 when the dollar moved in a narrow range around 101 yen to 102 yen.
 - ◆ If the depreciation of the dollar gains momentum, the closing of speculative positions (JPY selling) is expected to curb the further appreciation of the yen.

US-Japan interest rate differential and the USD/JPY exchange rate



Source: Made by MHRI based upon Bloomberg.

USD-JPY exchange rate and net positions among speculators



Note: Net position refer to Chicago IMM Currency Futures Non-Commercial Net Position.
Source: Made by MHRI based upon Bloomberg.

7. Outlook on the financial markets

| | | ○Main scenario | | | | | ○Sub-scenario 1 | | | | ○Sub-scenario 2 | | | |
|--------|-------------------------------------------------------------|------------------|------------------|---------------|---------------|---------------|------------------|---------------|---------------|---------------|------------------|---------------|---------------|---------------|
| | | 2020/ Oct-Dec | 2021/ Jan-Mar | Apr-Jun | Jul-Sep | Oct-Dec | 2021/ Jan-Mar | Apr-Jun | Jul-Sep | Oct-Dec | 2021/ Jan-Mar | Apr-Jun | Jul-Sep | Oct-Dec |
| 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 (%) | 0.86 | 1.00 | 1.05 | 1.05 | 1.10 | 1.10 | 1.15 | 1.15 | 1.20 | 1.00 | 0.80 | 0.85 | 0.85 |
| | Dow-Jones Average (USD) | 29,093 | 30,700 | 30,800 | 31,100 | 31,300 | 31,900 | 32,200 | 32,700 | 32,800 | 30,700 | 26,900 | 27,300 | 27,400 |
| Japan | Euroyen TIBOR (3-mo, %) | -0.06 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 |
| | 10-yr JGB yield (%) | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | Nikkei Stock Average (JPY) | 25,203 | 27,800 | 28,100 | 28,200 | 28,400 | 28,600 | 28,900 | 29,300 | 29,700 | 27,800 | 22,900 | 23,000 | 23,000 |
| 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, %) | -0.57 | -0.50 | -0.45 | -0.45 | -0.40 | -0.45 | -0.40 | -0.35 | -0.35 | -0.50 | -0.70 | -0.65 | -0.65 |
| Forex | USD/JPY rate (USD/JPY) | 104 | 105 | 105 | 106 | 107 | 106 | 107 | 108 | 108 | 105 | 105 | 105 | 105 |
| | EUR/USD rate (EUR/USD) | 1.19 | 1.19 | 1.19 | 1.18 | 1.17 | 1.18 | 1.17 | 1.17 | 1.16 | 1.19 | 1.19 | 1.19 | 1.19 |

- Sub-scenario 1 (upside scenario)
 - The vaccine rollout is swiftly completed and restrictions on economic activities are lifted due to herd immunity having been realized as early as the middle of 2021. Long-term interest rates and stock prices rise. The dollar strengthens against the yen.
- Sub-scenario 2 (downside scenario)
 - Due to concerns regarding efficacy and side effects, the vaccine rollout is slow, and restrictions to ensure social distance are prolonged. The pace of global economic recovery remains quite sluggish, long-term interest rates decline, and stock prices fall. The dollar continues to weaken against the yen.

Mizuho Research Institute Ltd.

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