1. Current state of the global economy: rising concerns regarding the risk of a “second wave of Covid-19 infections”

- There is a possibility that the rate of real GDP growth in the Apr-Jun quarter will fall (-30% q-o-q p.a.) in the US that there will be a further decline occurred in Europe.
  - The odds are high that Japan, US and the Eurozone growth will stay in negative territory for the second consecutive quarter in the Apr-Jun quarter due to restrictions on economic activities in April and May.

- The economy is picking up, given the easing of the city blockade. In China, GDP growth stood at 3.2% y-o-y in the Apr-Jun quarter, recovering from the Jan-Mar quarter (-6.8% y-o-y).

- However, the spread of Covid-19 infections are accelerating in emerging market (EM) countries, and there is a risk that adverse effects on the economy and financial markets will intensify in the future.
  - Even in developed market (DM) countries, where the spread of the disease had once been coming to an end, the number of new infections increased again in some areas. The risk of a second wave is increasing.

### Manufacturing PMI

- **US**: 49.8 (20/6)
- **Eurozone**: 47.4 (20/6)
- **Japan**: 40.1 (20/6)
- **China**: 50.9 (20/6)

**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.

### OECD composite leading indicator

- **US**: 95.7 (20/6)
- **Eurozone**: 97.2 (20/6)
- **Japan**: 98.2 (20/6)
- **China**: 99.3 (20/6)

**Source:** Made by MHRI based upon the OECD.
Overview of financial markets: stocks fluctuate due to concerns about a second wave of Covid-19 infections

- Although economic indicators have been improving due to the resumption of economic activities in the US and Europe, the top side of the stock market has been heavy due to concerns about a second wave of Covid-19 infections. Yields on 10-yr government bonds in Japan, the US and Germany were flat due to favorable auctions and other factors. The strength of the euro is persisting in the forex market.

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
2. (1) US economy: although business conditions improve, note the risk of a downturn due to the resurgence of Covid-19 infections

- The ISM index for June rose sharply to 52.6 for manufacturers and 57.1 for non-manufacturers, rising above the 50 threshold.
  - The index for new orders and production (business activity) rose sharply. Export orders in the manufacturing sector continued to fall below 50.
  - The employment index was low for both manufacturers and non-manufacturers. Business sites and plants resumed operations, but the allocation of workers was limited, suggesting stagnation in operating rates.
- Real personal consumption rose 8.0% m-o-m in May. Although the improvement in service consumption was limited, goods consumption recovered to the level before the spread of Covid-19 infections (compared to February 2020: 98.9%).
  - Motor vehicle sales in June stood at 13.15 million units a year, up for the second consecutive month, indicating a recovery in demand for goods.
  - Meanwhile, an increasing number of states have tightened their business regulations in response to the spread Covid-19 infections. There are risks of another downturn in demand.

**ISM Manufacturing index**

**ISM non-manufacturing PMI**

Source: Made by MHRI based upon Institute for Supply Management
In June, nonfarm payrolls rose 4.8 million from the previous month. On the other hand, the pace of improvement has recently slowed.

- Improvements in employment accelerated, especially in the leisure and accommodation services sector. The unemployment rate improved to 11.1% and the U-6 alternative unemployment rate improved to 18.0%.
  - Hourly wages declined 1.2% m-o-m. The main causes were the changes to employment structures accompanying the implementation and lifting of lockdowns.
  - It was decided that the application period for Paycheck Protection Program (PPP) loans, which supported the recovery of employment, will be extended to August 8.

- On the other hand, the number of new jobless applications and the number of people receiving unemployment benefits remained high. In the background is the re-expansion of Covid-19 infections.
  - The number of continuous benefit payments continued to increase, including to self-employed persons.
  - Given an additional 600 dollars/week in unemployment benefits, families without jobs have ample cash reserves. While the additional benefits will expire at the end of July, they are likely to be extended as the government is pressed to deal with the spread of Covid-19 infections.

### Nonfarm payrolls

<table>
<thead>
<tr>
<th>Industry</th>
<th>Change since Feb 2019Q4=100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining</td>
<td>-10</td>
</tr>
<tr>
<td>Construction</td>
<td>158</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>356</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>807</td>
</tr>
<tr>
<td>Transportation and public services</td>
<td>96</td>
</tr>
<tr>
<td>Information services</td>
<td>9</td>
</tr>
<tr>
<td>Financial activities</td>
<td>32</td>
</tr>
<tr>
<td>Professional and business services</td>
<td>306</td>
</tr>
<tr>
<td>Education and health services</td>
<td>568</td>
</tr>
<tr>
<td>Leisure and hospitality</td>
<td>2,088</td>
</tr>
<tr>
<td>Other services</td>
<td>357</td>
</tr>
<tr>
<td>Government</td>
<td>33</td>
</tr>
</tbody>
</table>

Source: Made by MHRI based upon the US Department of Labor
On the back of the recovery in the functioning of the financial markets, the amount of liquidity support outstanding has been declining. Asset purchases increased, and there was a slight increase of credit easing measures.

According to the June FOMC Minutes (July1), there were discussions on the outcome-based forward guidance (FWG), asset purchases, and YCT (Yield Cap or Targets).
- Many participants indicated support for outcome-based FWG. There were slightly divided views on which of prices or unemployment is a better indicator.
- While recognizing the effects of asset purchases, low neutral interest rates and term premiums would likely serve as new constraints that did not exist after the Global Financial Crisis.
- Many participants questioned the effectiveness and cost of the YCT.

FRB asset portfolios

(1 billion USD)

Credit easing
Liquidity support
Asset purchases

Note: The vertical axis is changes from the end of Feb 2020.
Liquidity support = Primary Credit, PDCF, Repo, overseas central bank swaps, MMFL II
Credit easing measures = CPFF II, TALF II, Corporate Credit, Main Street, PPP, Muni LF

FOMC minutes

[Forward guidance (FWG)]
- The participants generally indicated support for outcome-based FWG
  - Among them, a number of participants spoke favorably of FWG tied to inflation outcomes
    - Assumption of a temporary overshoot
    - Reinforcement of credibility for the symmetric inflation objective
    - Preventing a premature withdrawal of monetary policy accommodation
  - A couple of participants signaled a preference for forward guidance tied to the unemployment rate, noting that it would be more credible to focus on labor market outcomes that have been achieved in the recent past.
    - Result of achieving full employment
    - Given how high the unemployment rate currently is, such guidance would clearly signal a high degree of accommodation for an extended period
  - A few others suggested that calendar-based guidance might be at least as effective as outcome-based guidance
    - Effective when the FOMC used it in 2011 and 2012
    - The predicted substantial uncertainty is an issue for outcome-based FWG

[YCT]
- Many participants remarked that as long as the FOMC’s FWG remained credible, it was not clear that there would be a need for the adoption of a YCT policy
- Some participants raised concerns about the connection between balance sheet management (size and composition) and outcome-based FWG
- A number of participants commented on additional challenges associated with YCT policies focused on the longer portion of the yield curve, including how these policies might interact with large-scale asset purchase programs and the extent of additional accommodation in the current environment of very low interest rates
- A couple of participants remarked that an appropriately designed YCT policy that focused on the short-to-medium part of the yield curve could help prevent expectations from changing prematurely

Source: Made by MHRI based upon the FRB
(3) US bond market: 10yr UST yields expected to move around 0.6% to 0.9%

- The 10yr UST yield is moving at a level around 0.65% to 0.7% due to a sharp rise in number of newly infected persons and the stock market correction.
- Despite improvements in economic indicators, 10yr UST yields are expected to move around 0.6% to 0.9% amid concerns regarding a temporary suspension in the reopening of the economy in areas subject to a resurgence of Covid-19 infections.
  - Although the expected inflation rate is gradually recovering, nominal interest rates are stably low.

**Trends of the US long-term interest rate and the price of crude oil**

**Expected inflation rate and term premium**

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 P/E ratio remains high against a backdrop of historically low interest rates, the upside will be heavy

- Although strong economic indicators and expectations toward progress in development of a Covid-19 vaccine served to boost market sentiment, the S&P index was moved within a narrow range due to the resurgence of Covid-19 infections.
  - Growth stocks, such as IT and general consumer goods, are continuing to rise. In particular, the NASDAQ Composite Index renewed record highs.
- Historically-low long-term interest rates due to global monetary easing provided support, and the forward P/E ratio remained high at 22x.
- Looking forward, although the P/E ratio will remain high due to the persistently low interest rate environment, the upside is expected to prove heavy for some time, as concerns regarding the stagnation of economic activities accompanying the spread of infections will serve as a drag.

S&P500 index and major sectors

S&P 500 Index forward P/E ratio and forward EPS
3. (1) The Eurozone economy: disparities in recoveries by industry. The pace of recovery of fragile services is sluggish

- There are disparities in the state of recovery in business conditions depending on the type of industry.
  - Despite the continuation of a relatively strong recovery of motor vehicle production, given the easing of supply restraints due to the lifting of lockdown measures, note a delay in recovery of fragile services such as eating and drinking, accommodations, and travel.
  - Looking forward, the recovery of fragile services should remain slow, and the recovery of motor vehicle production should remain sluggish due to demand constraints within and outside of the Eurozone (despite forecasts of a temporary acceleration due to subsidies, etc.)

Eurozone: Business conditions by industry (DI)

- Eurozone: Manufacturing industry orders and inventory DI

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

Note: DI at zero is the expansion/contraction threshold
Source: Made by MHRI based upon the European Commission
(2) Eurozone monetary policy: while the ECB will take a wait-and-see stance for the time being, note that asset purchases are progressing at a fast pace

- Following the expansion of asset purchases at the ECB policy meeting on June 4, the ECB is at the stage of assessing the impact of its policy measures.
  - In an interview with the Financial Times of the UK (7/7), ECB President Christine Lagarde commented that “a bit of time” is needed to assess the effectiveness of its policy measures.
- The ECB’s asset purchase program is progressing at a faster pace than expected.
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  - In June, the EBC purchased EUR152 billion in assets. The odds are high that the Asset Purchase Programme (APP) will reach the total of its planned purchases by around October. Attention is gathering on whether there will be a decision in advance on an expansion of the APP.
  - Huge amounts of purchases are also progressing under the Pandemic Emergency Purchase Programme (PEPP). Quite possibly, this may be having a larger-than-expected impact upon the demand-supply balance of government bonds.

Main points of ECB President Christine Lagarde’s interview with the Financial Times (July 7)

| About the outlook on future policies | it’s very uncertain. It’s going to take a while before we have a solid response from the economic terrain, if you will, to really assess the effectiveness of what we do, as well as the prospects of what will happen. But we have done so much that we have quite a bit of time to assess that (the future economic data) carefully. |
| About the outlook on prices | That’s a really difficult question because we are seeing disinflationary forces at the moment. I think there are many economists who argue that there is more of that and potential deflationary risk. But I’d rather talk about disinflationary forces in the short term, and then total uncertainty as to the medium-to-longer term. |
| About climate change | I want to explore every avenue available in order to combat climate change. We have this price stability mandate that climate change actually has an impact on price stability. If we fail to measure externalities, if we fail to anticipate drought, if we fail to anticipate variations of prices of food, of energy, of services, then we are not doing our job. |
| About concerns regarding financing of ECB government bond purchases | There are many, many investors out there to buy sovereign debts at the moment. We are seeing it on a regular basis. The ECB is not the only game in town. |

Source: Made by MHRI based upon the ECB

Trends in amount of ECB asset purchases

Source: Made by MHRI based upon the ECB
(3) Eurozone bond market: German 10yr government bond yield expected to trend around -0.5% to -0.3%

- The yield on German 10yr government bonds is fluctuating around the lower-half of the 0.4% range due to concerns regarding a second wave of Covid-19 infections and stock market correction.
  - Spreads between Southern European government bonds and yields on German 10yr government bonds are stabilizing, reflecting the ECB’s decision to increase the scale of the Pandemic Emergency Purchase Programme (PEPP) by EUR 600 billion to a total of EUR 1.35 trillion and extend the PEPP period to at least June 2021.

- Given the focus of attention on concerns regarding the resurgence of Covid-19 infections amid the resumption of economic activity, yields on German 10yr government bonds are expected to trend around -0.5% to -0.3%.

**German long-term interest rate and Eurozone short-term interest rate**

**Spread versus German government bond (10yr)**
4. The Chinese economy: real GDP turns positive in the Apr-Jun quarter, driven by investment in infrastructure and real estate

- The rate of real GDP growth stood at +3.2% y-o-y in the Apr-Jun quarter, climbing into positive territory from -6.8% y-o-y in the previous quarter. Investment, consumption, and external demand all bottomed out in the Jan-Mar quarter. Investment in infrastructure and real estate development served as the drivers of the recovery.
  - The breadth of the decline of manufacturing industry investment also narrowed considerably. There were improvements in communication and electronic equipment, medicine, and infrastructure-related iron & steel which were boosted by one-off demand.
  - Exports recovered, rising into positive territory, driven mainly by textiles (demand for masks, etc.) as well as communication and electronic equipment exports to developed market (DM) countries.
  - Even though the pace of recovery in personal consumption has been relatively slow due to the slump in services consumption, consumption of goods picked up mainly in motor vehicles and household electric appliances.

GDP and main indicators

Real fixed asset investment (breakdown by industry)

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 and the General Administration of Customs of China

Note: Converted into real terms by PPI (construction materials)
Source: Made by MHRI based upon the National Bureau of Statistics of China
5. (1) The Japanese economy: production bottomed out in May. Note a dramatic rebound of motor vehicle output in production plan

- In May, industrial production fell -8.4% m-o-m (April: -9.8% m-o-m). Output of transport equipment (motor vehicles) fell sharply.
  - Amid the slump of consumption and exports to Europe and the US, transport equipment fell sharply (-19.4% m-o-m, -52.2% compared to the level in January 2019).
  - The breadth of the output cut in transport equipment production is wider than that at the time of the 2008 Global Financial Crisis. The breadth of output cuts in other industries have been smaller. In particular, the decline was relatively benign in IT-related industries such as electronic parts & devices and information & communication equipment against the backdrop of factors such as 5G-related investment and expansion of remote working.

- June and July production plans recovered. As a result, output in the Apr-Jun quarter and Jul-Sep quarter would be -15.6% q-o-q and +10.0% respectively.
  - Transport equipment staged a dramatic rebound in June (+26.0% m-o-m) and July (+34.5%). Note the high possibility of declines in capital goods, etc.

Comparison of breadth of decline after the 2008 Global Financial Crisis

Industrial production index and forecast index

<table>
<thead>
<tr>
<th>By industry</th>
<th>Actual</th>
<th>Plan 2020/05</th>
<th>Plan 2020/06</th>
<th>Plan 2020/07</th>
<th>Plan 20/Q2</th>
<th>Plan 20/Q3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining and manufacturing</td>
<td>-8.4</td>
<td>5.7</td>
<td>9.2</td>
<td>-15.6</td>
<td>10.0</td>
<td></td>
</tr>
<tr>
<td>Iron &amp; steel, non-ferrous metals</td>
<td>-13.8</td>
<td>-3.1</td>
<td>2.3</td>
<td>-26.8</td>
<td>-4.9</td>
<td></td>
</tr>
<tr>
<td>Fabricated metals</td>
<td>-10.4</td>
<td>3.2</td>
<td>0.5</td>
<td>-14.5</td>
<td>-1.1</td>
<td></td>
</tr>
<tr>
<td>Production machinery</td>
<td>-12.0</td>
<td>13.4</td>
<td>-2.2</td>
<td>-8.7</td>
<td>1.7</td>
<td></td>
</tr>
<tr>
<td>General purpose/commercial machinery</td>
<td>-8.9</td>
<td>-1.3</td>
<td>0.7</td>
<td>-15.9</td>
<td>-3.3</td>
<td></td>
</tr>
<tr>
<td>Electronic parts/devices</td>
<td>-8.6</td>
<td>0.2</td>
<td>8.9</td>
<td>-7.7</td>
<td>5.7</td>
<td></td>
</tr>
<tr>
<td>Electrical machinery</td>
<td>-5.6</td>
<td>11.3</td>
<td>5.6</td>
<td>-10.6</td>
<td>11.2</td>
<td></td>
</tr>
<tr>
<td>Information &amp; communication equipment</td>
<td>-7.4</td>
<td>-4.1</td>
<td>17.9</td>
<td>-4.9</td>
<td>11.6</td>
<td></td>
</tr>
<tr>
<td>Transport equipment</td>
<td>-19.4</td>
<td>26.0</td>
<td>34.5</td>
<td>-41.5</td>
<td>45.2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>By good</th>
<th>Actual</th>
<th>Plan 2020/05</th>
<th>Plan 2020/06</th>
<th>Plan 2020/07</th>
<th>Plan 20/Q2</th>
<th>Plan 20/Q3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital goods (excluding transport equipment)</td>
<td>-7.7</td>
<td>5.0</td>
<td>0.1</td>
<td>-9.1</td>
<td>0.6</td>
<td></td>
</tr>
</tbody>
</table>

Note: “The global financial crisis” refers to the rate of growth from the bottom of various industries and goods at Aug 2008 after the 2008 Global Financial Crisis. “Coronavirus” refers to the rate of growth of May 2020 compared to Jan 2020. Source: Made by MHRI based upon Ministry of Economy, Trade and Industry, Indices of Industrial Production

Note: 2Q and 3Q of 2020 are calculated based upon the forecast indexes for June and July and the assumption that August and September will level out. Source: Made by MHRI based upon Ministry of Economy, Trade and Industry
The pace of recovery of exports is weak in contrast to the firm recovery of imports. The contribution by external demand fell deep into negative territory.

- Even though the export volume index took an upturn in June (+3.0% m-o-m), the results turned out to be lackluster (Apr-Jun quarter: -21.1% q-o-q).
  - Although motor vehicle exports, mainly to China, picked up, capital goods exports remained sluggish. Growth in exports of semiconductor and other information-related products also slowed.
  - On the other hand, the import volume index remained flat in June. Imports of materials increased due to the resumption of domestic economic activities, and PCs remained strong due to remote working demand.
- The contribution of external demand in the Apr-Jun quarter is likely to be significantly negative due to the weakness of overseas economies and the strength of imports affected by special demand stemming from remote working needs.
  - The contribution by external demand for the Apr-Jun GDP growth rate is estimated to be minus 3% or more, serving as a greater drag than at the time of the Global Financial Crisis.

**Export-import volume indexes**

![Graph showing export-import volume indexes](image)

*Note: Seasonally adjusted by MHRI
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)**

![Graph showing Q-o-q change](image)

*Note: The contribution of net exports for the Apr-Jun quarter is calculated using export-import volume indexes of the *Trade Statistics*
Source: Made by MHRI based on Ministry of Finance, *Trade Statistics*
Although new car sales rose a dramatic +30.5% m-o-m in June (May: -19.4% m-o-m), the level is still low.

- Given delivery delays mainly for popular models, new car sales are expected to recover further in the summer.

- Consumption of services picked up in June, mainly in dining out, leisure, and transportation, reflecting the relaxation of restrictions on travel, etc. across prefectures.

- Although personal consumption is expected to grow strongly in the Jul-Sep quarter in a reaction to the sharp fall, the recovery in the second half of the fiscal year is expected to be slow due to the deterioration of the employment and income environment, the limited recovery in dining out, travel, and leisure because of the need to prevent Covid-19 infections, and cautious household behavior stemming from concerns regarding a second wave of infections.

Motor vehicle sales (seasonally adjusted)

June consumption indicators by industry

Source: Made by MHRI based upon JCB and Nowcast, JCB Consumption NOW.
There is a high level of employed persons not at work. The unemployment rate will likely rise over the summer

- The unemployment rate rose to 2.9% in May (April: 2.6%). In addition to the fact that a portion of the number of employed persons (including employed persons not at work) as of April became unemployed, a portion of those not in the labor force in April resumed looking for jobs and were counted as unemployed.

- The number of employed persons not at work (original data), which surged to 5.97 million in April, decreased to 4.23 million. By industry, the number of employed persons not at work decreased considerably in wholesaling and retailing (900 thousand→490 thousand), lifestyle-related and leisure (540 thousand→340 thousand), and manufacturing (570 thousand→370 thousand), but the number of employed persons not at work is still high in accommodations and eating and drinking services (1.05 million→790 thousand people).

- Since June, the majority of employed persons not at work returned to their workplaces along with the resumption of business activities. However, it is inevitable that some of them, especially those in the accommodations and eating and drinking services, will become unemployed.

### Trends of employed persons not at work

#### Flow of employed persons not at work in May

<table>
<thead>
<tr>
<th>Category</th>
<th>As of April</th>
<th>As of May</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodations and eating and drinking</td>
<td>1.05 million</td>
<td>0.79 million</td>
</tr>
<tr>
<td>Wholesale and retail</td>
<td>0.57 million</td>
<td>0.43 million</td>
</tr>
<tr>
<td>Education and learning support</td>
<td>0.32 million</td>
<td>0.18 million</td>
</tr>
<tr>
<td>Living-related and personal services and entertainment</td>
<td>0.57 million</td>
<td>0.43 million</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>0.57 million</td>
<td>0.43 million</td>
</tr>
</tbody>
</table>

**Note:**
- Original data, actual count
- Source: Made by MHRI based upon Ministry of Internal Affairs and Communications, Labour Force Survey

**Flow Diagram:**

- **Employed persons**
  - 1.65 million
- **Employed persons not at work**
  - -1.74 million
- **Unemployed persons**
  - +90 thousand
- **Population not in labor force**
  - -320 thousand

**Note:**
- Original data basis. Estimates by MHRI. The flow is on a net basis.
- Source: Made by MHRI based upon Ministry of Internal Affairs and Communications, Labour Force Survey
(2) Monetary policy: policy unchanged at the July MPM. Large downside risks in the outlook on the economy and prices

- The BOJ left policy unchanged at the Monetary Policy Meeting (MPM) on July 14-15. Referring to the “three monetary easing measures”, the BOJ took the stance of ascertaining the effects of the policy measures.

- In the BOJ Outlook for Economic Activity and Prices (the “Outlook Report”), the outlook for the FY2020 growth rate was lowered. With regard to the risk balance, most Policy Board members viewed that risks to both economic activity and prices are skewed to the downside. Quite possibly, outlooks on the economy and prices will be revised down further in future Outlook Reports.

- As in April, "developments in the financial system" were cited as risks to economic activity. The BOJ is monitoring the risk that the deterioration in the real economy will affect financial system stability. There is a rising need for policy management with awareness of the side effects of financial intermediation functions.

### BOJ Outlook Report (July 2020)

#### (Y-o-y % change)

<table>
<thead>
<tr>
<th>yyyy/m</th>
<th>Real GDP</th>
<th>CPI (all items less fresh food)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal 2020</td>
<td>-5.7 to -4.5 [4.7]</td>
<td>-0.6 to -0.4 [0.5]</td>
</tr>
<tr>
<td>Forecasts made in April 2020</td>
<td>-5.0 to -3.0</td>
<td>-0.7 to -0.3</td>
</tr>
<tr>
<td>Fiscal 2021</td>
<td>+3.0 to +4.0 [+3.3]</td>
<td>+0.2 to +0.5 [+0.3]</td>
</tr>
<tr>
<td>Forecasts made in April 2020</td>
<td>+2.8 to +3.9</td>
<td>0.0 to +0.7</td>
</tr>
<tr>
<td>Fiscal 2022</td>
<td>+1.3 to +1.6 [+1.5]</td>
<td>+0.5 to +0.8 [+0.7]</td>
</tr>
<tr>
<td>Forecasts made in April 2020</td>
<td>+0.8 to +1.6</td>
<td>+0.4 to +1.0</td>
</tr>
</tbody>
</table>

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

### BOJ Outlook Report: risks to economic activity and prices

<table>
<thead>
<tr>
<th>yyyy/m</th>
<th>Risks to Economic Activity</th>
<th>Risks to Prices</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020/7</td>
<td>1. Impact of Covid-19 on domestic and overseas economies</td>
<td>1. Uncertainties over firms’ price-setting behavior</td>
</tr>
<tr>
<td></td>
<td>2. Firms' and households' medium- to long-term growth expectations</td>
<td>2. Future developments in foreign exchange rates and international commodity prices</td>
</tr>
<tr>
<td></td>
<td>3. Developments in the financial system</td>
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<td>2020/4</td>
<td>1. Impact of the spread of Covid-19 on domestic and overseas economies</td>
<td>1. Economic risk factors being actualized</td>
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<td>2. Firms' and households' medium- to long-term growth expectations</td>
<td>2. Future developments in foreign exchange rates and international commodity prices</td>
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<td>3. Developments in the financial system</td>
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<td>2020/1</td>
<td>1. Developments in overseas economies</td>
<td>1. Mid- to long-term expectations of companies and households price increase trends</td>
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<td>2. the effects of the consumption tax hike conducted in October 2019</td>
<td>2. Response level of prices to gap between macro supply and demand</td>
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<td>3. Firms' and households' medium- to long-term growth expectations</td>
<td>3. Future forex fluctuations and future developments in foreign exchange rates and international commodity prices</td>
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<td>4. Fiscal sustainability in the medium term</td>
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Source: Made by MHRI based upon the Bank of Japan
(3) Japanese bond market: 10yr JGB yield forecast to trend around 0%

- The 10yr JGB yield moved around 0%. In the medium- and long-term zones, yields are expected to remain around 0% for the time being, supported in terms of the supply-demand balance by the BOJ's purchases.

- Interest rates rose in the super long-term zone amid growing concerns regarding the issuance of additional JGBs from July, leading to a steepening of the yield curve.
  - In terms of trading volume by investor, demand by regional financial institutions served as support, while city banks' net selling positions intensified.

### JGB yields

![Graph showing JGB yields over time](image)

Source: Made by MHRI based upon Bloomberg

### Trading volume in super long-term JGBs by type of investor (Quarterly)

![Bar chart showing trading volume](image)

Source: Made by MHRI based upon Japan Securities Dealers Association
The Nikkei Stock Average moved within a narrow average around the 22,000 level. The resurgence of Covid-19 infections mainly in the Tokyo metropolitan area served as a drag upon stock prices.

In addition to the shift of foreign investors from net sellers to net buyers, domestic individual investors turned out to be net buyers for the fifth week in a row.

Given the forward EPS continuing to follow a downward track, the forward P/E ratio at 17 indicates a strong sense of overvaluation.

Looking forward, caution toward a second wave of Covid-19 infections and a circumspect view of corporate earnings should cap the upside, keeping the pace of rise slow.

Trading trends (by investment entity) and the Nikkei Stock Average

TOPIX forward EPS and 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 for the current and following year.

Source: Made by MHRI based upon Refinitiv
6. Forex market: The USD/JPY exchange rate expected to move around JPY107

- The US dollar temporarily strengthened to JPY108.16, reacting favorably to the improvement of US economic data such as the June ISM manufacturing index. However, the US dollar is capped, trading around JPY107, due to concerns regarding the resurgence of Covid-19 infections mainly in the US.
  - Since mid-June, the US dollar has been moving within a narrow range (weekly) less than JPY2. Currently, the implied volatility is also following a downward trend.

- Looking forward, we expect the USD/JPY exchange rate to continue to move around the current level.
  - Amid rising uncertainties, the nominal effective exchange rates of both the US dollar and Japanese yen should remain on an uptrend.
  - Given concerns regarding the resurgence of Covid-19 infections, we expect that the highly uncertain economic environment will persist. The USD and JPY, which are perceived as relatively safe currencies, will both continue to be bought, thus keeping the USD/JPY exchange rate more or less static.

**USD/JPY week range and implied volatility**

![Graph showing USD/JPY week range and implied volatility](image1)

**The USD and JPY nominal effective exchange rate and the uncertainty index**

![Graph showing USD and JPY nominal effective exchange rate and the uncertainty index](image2)

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

Note: The nominal effective exchange rate is the BIS Effective exchange rate (Broad)
Source: Made by MHRI based upon Economic Policy Uncertainty, Bloomberg
7. Crude oil market trends: the pace of recovery is sluggish due to the time needed to reduce excess inventories

- The excess supply in the crude oil supply-demand balance was resolved in June.
  - Even though the OPEC Plus plans to narrow the breadth of output cuts from 9.7 million barrels to 7.7 million barrels a day from August, it appears that an oil glut may be avoided going forward since demand is recovering due to the resumption of economic activity.

- However, since the process of eliminating the crude oil glut is expected to take over a year, the WTI will still be around the mid-USD40/bbl level even at the end of 2020.
  - Concerns regarding a second wave of Covid-19 infections and the high level of excess inventories are serving to hamper the recovery of the crude oil market. Furthermore, considering the possibility that the OPEC Plus may ease output cuts at a faster pace than initially announced, the price of crude oil (WTI) could remain at the USD40/bbl level even after the turn of the year in 2021.
8. Outlook on the financial markets

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<td><strong>US</strong></td>
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<td>Federal funds rate</td>
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<td>(End-of-quarter, %)</td>
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<td>10-yr UST bond yield</td>
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<td>(%)</td>
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<td>Dow Jones Average</td>
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<td>26,100</td>
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<td>Euroyen TIBOR (3-mo, %)</td>
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<td>ECB deposit facility rate (End of quarter, %)</td>
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- **Sub-scenario 1 (upside scenario)**

- **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.
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