1. Current state of the global economy: ongoing slowdown

- The global economy has continued to decelerate since the second half of 2018. But by the end of last year, there were signs that business sentiment was bottoming out by the end of last year.
  - The rates of growth in GDP for major countries in the Oct-Dec quarter of 2019 indicated an end to the decline in China, yet declines in Europe and Japan, which was also affected by the consumption tax hike. Domestic demand slowed in the US, even though growth was on a par with the previous quarter.
  - However, there was a recovery in the global PMI, an indicator of corporate business sentiment. Even the manufacturing sector, which had suffered a pronounced decline, has exceeded 50 for three straight months.

**Quarterly GDP growth rates for Japan, US, Eurozone, China**

(Q-o-q % change, annualized) (Y-o-y % change)

**Global PMI**

Note: The Purchasing Managers’ Index (PMI) is an index created from surveys of private sector companies. The reading of 50 in the PMI is the “expansion contraction” threshold

Source: Made by MHRI based upon statistics of relevant countries and regions

Source: Made by MHRI based upon Markit
The financial markets are becoming increasingly concerned about the novel coronavirus (COVID-19). US stocks, which had been trading at high levels, have plummeted on fears concerning the spread of the infected regions and impact on corporate earnings. The Nikkei 225 Average has dropped below 23,000 points. The yen temporarily depreciated against the dollar to the JPY 112-level in response to firm US economic indicators, but subsequently returned to the JPY 110 yen-level.

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: Oct-Dec quarter of 2019 grew +2.1% q-o-q p.a.

- The rate of US real GDP growth in the Oct-Dec quarter of 2019 was +2.1% q-o-q p.a., flat on the Jul-Sep quarter.
  - Personal consumption slowed to +1.8% q-o-q p.a. (c.f., +3.2% q-o-q p.a. in Jul-Sep quarter). Low interest rates fostered a firm increase in residential investment of +5.8% q-o-q p.a..
  - Capital investment was -1.5% q-o-q p.a., deteriorating for the third consecutive quarter. There was deterioration in drilling-related investment (due to the price of crude oil), construction of commercial facilities, and machinery investment.

- Exports also fell due to the downturn in overseas economies and there was a substantial decline in imports attributed to additional tariffs. The contribution from exports improved.

Real GDP growth rate

![Real GDP growth rate chart]

Source: Made by MHRI based upon US Department of Commerce
Recovery in sentiment for both manufacturers and nonmanufacturers. However, note downside risks in the short term.

- The January ISM Manufacturing Index recovered to above 50 for the first time in six months (50.9). There were improvements in a wide range of areas such as new orders, production and export orders. Uncertainty was partially alleviated by the US-China trade agreement and orderly Brexit, etc. This contributed to the improvement in business sentiment.

- The January ISM Nonmanufacturing Index rose for the second straight month to 55.5, with a recent recovery.

- Business conditions will be weighed down by the impact of the novel coronavirus (COVID-19) in the Jan-Mar quarter of 2020. While the outlook is uncertain, we currently forecast the impact to fade as early as Q2.

**ISM Manufacturing Index**

Source: Made by MHRI based upon US Institute for Supply Management

**ISM Nonmanufacturing Index**

Source: Made by MHRI based upon US Institute for Supply Management
Signs of improvement in propensity for capital investment along with the improvement of business conditions

- The downtrend in the corporate capital investment outlook since the beginning of 2018 is coming to an end. The outlook for nonmanufacturers has turned upwards.
- Core capital goods shipments and new orders remain flat. At the moment, there are still no signs of recovery.
  - Capital investment should follow a recovery through the second half of 2020 along with the improvement of business conditions.

Corporate capital investment outlook (6 months ahead)

![Graph showing corporate capital investment outlook for manufacturing and nonmanufacturing industries.]

Note: The average of the capital investment outlook (3-month moving average) in the surveys by the US Federal Reserve Banks in the Federal Reserve districts.
Source: Made by MHRI based upon US Federal Reserve Banks in the Federal Reserve districts

Core capital goods shipments and new orders

![Graph showing core capital goods shipments and new orders from Jan-14 to Jan-20.]

Source: Made by MHRI based upon US Department of Commerce
January employment data showed that the firm pace of expansion in employment continues. The data revealed the expansion of the labor market.

- January nonfarm payrolls rose substantially, by +225 thousand m-o-m.
  - There was a sharp increase in the construction sector of +44 thousand m-o-m, amid the mild winter. Growth was firm, even after deducting the construction sector, at +181 thousand m-o-m.
  - The service sector was firm particularly in what remain key areas of education, medical services, leisure, and entertainment.
  - The Bureau of Labor Statistics of the US Department of Labor revised the annual figures. There was no evidence of a major change in employment momentum.

- The unemployment rate rose slightly to 3.6%, but the labor participation rate rose 63.4% (+0.2 pt m-o-m). The results indicate an expansion of the labor market.

### Nonfarm payrolls

(M-o-m change, 10 thousand people)

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

### Unemployment rate

Source: Made by MHRI based upon the Bureau of Labor Statistics, US Department of Labor
Consumer sentiment serves as support, despite a recent sense of slowdown in consumption

- Consumer sentiment-related indicators remain firm.
  - The Index of Consumer Expectations of the University of Michigan (February preliminary) noted two major factors of uncertainty: the COVID-19 and the presidential election; 7% of responses cited concerns about the impact of COVID-19, while only 10% cited concerns about the presidential election.

- There is a sense of a slowdown in consumption due to the downward revision of October and November figures. We forecast a gradual recovery in consumption, given that consumer sentiment has not deteriorated.

### Consumer sentiment-related indicators

- **Conference Board**
  - February: 130.7

- **University of Michigan (rhs)**
  - February (preliminary): 100.9

### Real personal consumption

- **Goods**
- **Services**

Source: Made by MHRI based upon the Conference Board and the University of Michigan

Source: Made by MHRI based upon US Department of Commerce
The pace of wage growth is gradually slowing down. Inflation pressures are limited.

- The rate of increase in the Core PCE deflator is close to 1.5%.
- There has been a recent decline in sectors that carry large weightings such as living expenses and medical expenses.

Inflation-rate related indicators

US monetary policy: interest rate unchanged. Monitor the impact of COVID-19 in the short term

- The January FOMC indicated its strong commitment to the achievement of the inflation target, through the amendment of its statement, that it would not overlook the inflation rate falling below the 2% target (Chair Powell explained such intent in the press conference following the FOMC). The hurdles to a rate hike are high.

- However, concerns were raised in the Monetary Policy Report that “the coronavirus, however, could lead to disruptions in China that spill over to the rest of the global economy”.
  - While there has been a substantial decline in imports from China due to US tariffs on China, there is still a high level of dependence on China mainly for consumer goods and capital goods.

### Summary of the January 2020 FOMC

[Statement]
- Household spending downwardly revised from a “strong” to “rising at a moderate pace”
- The current stance of monetary policy is to support inflation returning to the objective, suggesting a stance not to condone declines at close to the objective (explained at the press conference)

[Chair Powell’s Press Conference]
- We expect to continue offering repos at least up until April (the tax season)
- We expect that the underlying level of reserves will durably reach ample levels sometime in the second quarter of this year. As we get close to that point, we intend to slow the pace of purchases and transition to a program of smaller reserve management purchases
- We need reserves at all times to be no lower than they were in early September—and, I would say, around $1½ trillion. So, most of the time, reserves will be moving in a range substantially higher than that but not going below $1½ trillion.
- All of these technical measures are designed to support the efficient and effective implementation of monetary policy and are not intended to represent a change in the stance of monetary policy
- Our commitment to 2 percent not being a ceiling to inflation
- I expect that we will conclude the review and announce our conclusions (on framework review) around the middle of the year.
- Concerned about the impact that the new coronavirus will have on other economies around the world such as China
- I would say, now there are grounds for what I would call “cautious optimism” about the outlook now for the global economy (such as supportive financial conditions, the easing of trade tensions, rebound of high-tech manufacturing industry and manufacturing PMIs)

### US imports by end use

<table>
<thead>
<tr>
<th></th>
<th>China</th>
<th>World</th>
<th>China’s share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>4.6</td>
<td>150.5</td>
<td>3.1</td>
</tr>
<tr>
<td>Industrial materials</td>
<td>41.8</td>
<td>517.7</td>
<td>8.1</td>
</tr>
<tr>
<td>Capital goods</td>
<td>155.8</td>
<td>676.9</td>
<td>23.0</td>
</tr>
<tr>
<td>Motor vehicles</td>
<td>17.7</td>
<td>376.1</td>
<td>4.7</td>
</tr>
<tr>
<td>Consumer goods</td>
<td>223.7</td>
<td>653.5</td>
<td>34.2</td>
</tr>
<tr>
<td>Other</td>
<td>8.5</td>
<td>119.6</td>
<td>7.1</td>
</tr>
</tbody>
</table>

(Units: USD billion, %)

Note: Actual imports in 2019. Categories of end use calculated by MHRI
Source: Made by MHRI
(3) US bond market: long-term US interest rates to move at mid 1%-level for a while

- 10-year US Treasury yields fell to the 1.3%-level due to concerns about the spread of the novel coronavirus (COVID-19).
  - The expected inflation rate has fallen because of the decline in the price of crude oil.
  - Market participants are factoring in two rate cuts in the current year.
- The rise of US long-term interest rates is unlikely amid concerns about the negative impact of COVID-19 upon the real economy.

**US long-term interest rate and expected inflation rate (10-year)**

![Graph showing the relationship between crude oil price, 10-year US Treasury yields, and expected inflation rate from January 19 to January 20.](image)

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

**Number of interest rate cuts (forecast by market participants)**

![Bar chart showing the number of interest rate cuts from March 20 to January 21.](image)

Note: Calculated from the FF futures rate. Anticipating 25bp each time. As of February 24
Source: Made by MHRI based upon Bloomberg
Stocks have recently fallen due to concerns about the spread of COVID-19 infections. The correction is also attributed to the sense that the market is overvalued with a forward P/E ratio of about 19x.

More than 80% of corporate earnings have been finalized. Earnings have increased year-on-year, exceeding analysts’ forecasts.

There has been a rise in IT and telecommunications services, while consumer goods have also been strong. The results underscore the strength of the IT industry and the US economy.

We expect the market to fluctuate, reflecting news associated with the spread of COVID-19.

Earnings trends of issues composing the S&P 500 Index

<table>
<thead>
<tr>
<th>Sector</th>
<th>Rise</th>
<th>No surprise</th>
<th>Fall</th>
<th>Reported issues</th>
<th>Share of market capitalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>General consumer goods</td>
<td>74%</td>
<td>10%</td>
<td>17%</td>
<td>42 / 63</td>
<td>9.9%</td>
</tr>
<tr>
<td>Consumer staples</td>
<td>70%</td>
<td>22%</td>
<td>7%</td>
<td>27 / 33</td>
<td>7.1%</td>
</tr>
<tr>
<td>Energy</td>
<td>61%</td>
<td>-</td>
<td>39%</td>
<td>18 / 28</td>
<td>3.7%</td>
</tr>
<tr>
<td>Financials</td>
<td>66%</td>
<td>9%</td>
<td>25%</td>
<td>64 / 66</td>
<td>12.4%</td>
</tr>
<tr>
<td>Healthcare</td>
<td>81%</td>
<td>12%</td>
<td>8%</td>
<td>52 / 60</td>
<td>13.8%</td>
</tr>
<tr>
<td>Capital goods</td>
<td>65%</td>
<td>11%</td>
<td>24%</td>
<td>66 / 70</td>
<td>8.9%</td>
</tr>
<tr>
<td>Materials</td>
<td>64%</td>
<td>4%</td>
<td>32%</td>
<td>25 / 28</td>
<td>2.5%</td>
</tr>
<tr>
<td>Real estate</td>
<td>52%</td>
<td>26%</td>
<td>22%</td>
<td>23 / 31</td>
<td>3.1%</td>
</tr>
<tr>
<td>Information technology</td>
<td>85%</td>
<td>2%</td>
<td>13%</td>
<td>61 / 71</td>
<td>24.6%</td>
</tr>
<tr>
<td>Communication services</td>
<td>79%</td>
<td>5%</td>
<td>16%</td>
<td>19 / 22</td>
<td>10.5%</td>
</tr>
<tr>
<td>Utilities</td>
<td>69%</td>
<td>8%</td>
<td>23%</td>
<td>13 / 28</td>
<td>3.5%</td>
</tr>
<tr>
<td>S&amp;P500</td>
<td>71.2%</td>
<td>9.5%</td>
<td>19.3%</td>
<td>410</td>
<td></td>
</tr>
</tbody>
</table>

Source: Made by MHRI based upon Refinitiv

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

Note: The forward EPS and forward P/E ratio are for 12 months ahead
Source: Made by MHRI based upon Refinitiv
3. The Eurozone economy: Oct-Dec quarter GDP of only +0.1% q-o-q

- Eurozone real GDP growth rate stood at +0.1% q-o-q in the Oct-Dec quarter of 2019, the lowest growth since the Jan-Mar quarter of 2013.
  - The growth rate turned negative in France at -0.1% q-o-q and Italy at -0.3% q-o-q, mainly due to the decline in inventory and capital investment.
  - Spain maintained a growth rate on par with the previous quarter of +0.5% q-o-q (c.f., +0.4% q-o-q) as the decline in capital investment was offset by the increase in net exports.
- The Purchasing Managers’ Index (composite PMI), which has a high correlation with GDP, continues to hover just above the expansion/contraction threshold of 50.
  - While the business sentiment in the manufacturing sector is beginning to show signs of bottoming out, weak conditions persist. We expect the Eurozone economy to take some time before it emerges out from low growth.

### Eurozone real GDP growth rate

- **Inventories/errors**
- **Net exports**
- **Gross fixed capital formation**
- **Government consumption expenditure**
- **Household consumption expenditure**

**Note:** The q-o-q rate of growth in real GDP and the contribution by demand component
**Source:** Made by MHRI based upon Eurostat

### Eurozone PMI

**Note:** PMI of 50 is the expansion/contraction threshold
**Source:** Made by MHRI based upon Markit and Bloomberg
Slowdown in exports behind the slump in production, particularly of intermediate goods

- Eurozone exports and industrial production growth has continued to fall.
  - December exports to outside the Eurozone were +1.5% y-o-y (c.f., +1.1% y-o-y in November), on a par with the rate in October.
    - Exports to the UK contributed -0.9%pt y-o-y to the overall growth. The increase in exports associated with the prospect of a no-deal Brexit policy at the end of October continues to wane.
    - December intra-Eurozone exports were -1.6% y-o-y, the seventh straight month of negative growth y-o-y.
  - December industrial production in the Eurozone stood at -3.5% y-o-y (c.f., -1.7% y-o-y in November), the fourteenth month of growth below the previous year.

Exports of goods inside and outside the Eurozone

Industrial production in the Eurozone

Note: Contribution to y-o-y growth rate in industrial production for capital goods and intermediate goods
Source: Made by MHRI based upon Eurostat
Personal consumption remains firm, but there are signs of weakness ahead

- The December 2019 Eurozone unemployment rate fell 0.1% pt from the previous month to 7.4%, the lowest level in 11 years and 7 months.
- Eurozone compensation per employee for the Jul-Sep quarter of 2019 remained firm at +2.1% y-o-y.
- The January Eurozone consumer confidence indicator was flat from the previous month.
  - Although the Eurozone consumer confidence indicator is underpinned by Germany, ongoing downward pressures from Spain leads to our view that consumer spending will weaken slightly going forward.

Eurozone compensation per employee

![Graph showing Eurozone compensation per employee with data points from 2013 to 2019 for Eurozone average, Mining and manufacturing sector, and Social services.

Eurozone consumer confidence indicator

![Graph showing Eurozone consumer confidence indicator with data points from 2013 to 2020 for France, Italy, Germany, Spain, and Eurozone average. The x-axis represents years (2013-2020), and the y-axis represents the confidence indicator values. The red line represents the Eurozone average, with other lines for individual countries and the Eurozone average. The zero line is the expansion/contraction threshold.

Note: Zero is the expansion/contraction threshold. Source: Made by MHRI based upon the European Commission.
Eurozone core inflation to remain flat at close to 1%

- The January 2020 Eurozone inflation rate stood at +1.4% y-o-y, up 0.1% pt from the previous month (c.f., +1.3% y-o-y in December), reflecting higher energy prices.
  - The core inflation rate, which excludes volatile items such as energy and food, stood at +1.1% y-o-y, slowing to the level of 3 months earlier.
    - The service price, which had been at high levels since November 2019, stood at +1.5% y-o-y in January, mainly due to the 0.3% pt decline from the previous month (+1.8% y-o-y).
  - Although the December 2019 wholesale price index ex. energy (+0.5% y-o-y) rose 0.2% pt from the previous month, it remained at the level in August and lacked strength.

### Eurozone CPI (y-o-y % change)

![Graph of Eurozone CPI](image)

**Source:** Made by MHRI based upon Eurostat

### Eurozone wholesale prices (y-o-y % change)

![Graph of Eurozone wholesale prices](image)

**Source:** Made by MHRI based upon Eurostat
ECB policy unchanged. Wait-and-see stance despite concerns regarding COVID-19

- The ECB kept monetary policy unchanged at its January 23 Governing Council meeting and formally announced a review of the ECB’s monetary policy strategy.
  - ECB President Christine Lagarde expressed concerns about the spread of the novel coronavirus (COVID-19) in a public hearing at the European Parliament (February 3) stating that “it is a renewed cause for concern”. The impact on monetary policy should be limited for now.

- The focus of discussion in the review of the ECB’s monetary policy strategy will be on the definition of price stability.
  - ECB Governing Council Member and Chief Economist Philip Lane commented that one idea would be to place more weight on housing prices (Financial Times, January 27).

ECB policy rates and core inflation rate

Key points in comments made by ECB Governing Council Member Philip Lane (FT Interview)

<table>
<thead>
<tr>
<th>Why inflation does not rise in the Eurozone</th>
<th>The Eurozone has suffered two major macro shocks (the Lehman shock and the European debt crisis) and the effects persist.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dichotomy of price rises</td>
<td>Wages are going up, and services prices, which are sensitive to wage rises, are going up. The problem is that the price of goods is not rising. The dichotomy between goods and inflation is a global issue.</td>
</tr>
<tr>
<td>Why is there no global rise in the price of manufacturers?</td>
<td>Wages are also rising in the manufacturing sector, but companies find it difficult to pass these increases onto prices. The global value chains of manufacturers have been integrated and cost structures have become a lot more common.</td>
</tr>
<tr>
<td>Outlook for inflation</td>
<td>There cannot be a permanent disconnect between labour costs and prices... This issue is a change in people’s inflation expectations due to prolonged slump in prices will ultimately mean that inflation rates fall. This is the same whether the inflation rate is high or low.</td>
</tr>
<tr>
<td>Inflation target</td>
<td>I think we at the ECB agree that there should be more weight on housing... If owner-occupied housing were included in the inflation index, the inflation rate could rise by 20 to 30 basis points.</td>
</tr>
</tbody>
</table>

Note: Extracted and summarized by MHRI from an interview with the Financial Times on January 27, 2020
Source: Made by MHRI based upon ECB
10-year German bond yields to fluctuate at around -0.3% to -0.4%

- German long-term yields dipped to as low as -0.5% due to heightened risk averse moves in response to the novel coronavirus (COVID-19).
  - Speculation on interest rate cuts which had been fading through the end of last year are resurging.
  - Yields fell to negative levels on all maturities of German government bonds for the first time in about 4 months.
- Given weak fundamentals, we expect the German long-term interest rate to move around -0.3% to -0.4%.

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

Yields on German government bonds

Source: Made by MHRI based upon Bloomberg
The number of patients with pneumonia caused by the outbreak of the novel coronavirus (COVID-19) in Wuhan City, Hubei Province has surged since late January. We forecast a sharp economic slowdown.

- The Chinese government has implemented large-scale measures to prevent the spread of infections such as the suspension of public transport and city blockades. The strong prevention measures will cause major contraction in economic activity in the Jan-Mar quarter. The fall of personal consumption and postponement of investment will be inevitable.

- The quantity of coal consumed in the generation of electricity, which tends to track industrial production, has remained low even in regions other than Hubei Province, where production resumed from February 10. This suggests a substantial drop in industrial production.

The Chinese government’s stance is to stabilize the economy through fiscal and monetary policy measures to deal with the negative impact from the spread of COVID-19.

### Number of cases of pneumonia due to the novel coronavirus (COVID-19)

![Graph showing the number of cases of pneumonia due to the novel coronavirus (COVID-19)](image)

*Note: As of February 24, 2020
Source: Made by MHRI based upon the National Health Commission, China*

### Quantity of coal consumed in the generation of electricity around the Chinese New Year holiday

![Graph showing the quantity of coal consumed in the generation of electricity around the Chinese New Year holiday](image)

*Note: Quantity of coal consumed at big six power companies (Huaneng Power, Zhejiang Energy Group, Shanghai Electric Power, GD Power, Datang International Power, Guangdong Energy Group)
Source: Made by MHRI based upon wind*
The yuan weakened due to concerns about the spread of COVID-19. PBoC cuts rates

- The yuan weakened along with the deterioration in risk sentiment along with the spread of the novel coronavirus (COVID-19).
  - The yuan plummeted on February 3, the first day after the end of the Chinese New Year holiday (January 24 to February 2). However, the forex market stabilized when the People’s Bank of China (PBoC) supported the economy with monetary easing such as large-scale liquidity supply. The yuan has recently been trading at close to RMB7.0/USD.
  - Amid the absence of signs that COVID-19 infections are subsiding, the yuan will continue to swayed by media reports about the spread of infections, etc.

- The PBoC has strengthened its accommodative monetary policy with successive cuts to policy interest rates due to the spread of COVID-19.
  - Apart from cutting the (7-day and 14-day) reverse repo rates on February 3, it cut the MLF interest rate for the first time in about 3 months on February 17.
  - The Loan Prime Rate (LPR), announced on February 20, fell due to successive cuts to policy interest rates.
  - Apart from further cuts to the MLF interest rate, we forecast monetary easing measures such as cuts to the reserve deposit rate.

The RMB/USD exchange rate

![Graph showing the RMB/USD exchange rate](source: Made by MHRI based upon Bloomberg)

LPR, MLF rates and reverse repo rates

![Graph showing LPR, MLF rates, and reverse repo rates](source: Made by MHRI based upon Bloomberg)

Note: LPR is the average of the prime rates of 18 major banks. MLF is the medium-term lending facility of the People’s Bank of China.
EM financial markets: downward pressure due to the growing impact of COVID-19

- EM stocks, which had followed firm footing on the back of factors such as the US-China trade agreement, fell sharply in late January due to the spread of novel coronavirus (COVID-19) infections. Since then, they have staged a minor rebound.
  - Even though Chinese stocks fell as much as 10% from the beginning of the year, they are nearing levels prior to the fall, reflecting the recent stabilization in number of new COVID-19 infections.

- Given the intensification of a risk-averse stance due to the impact of COVID-19, EM currencies such as those of Brazil, Thailand and South Africa are weakening.
  - In particular, note that the Turkish lira is weakening, due in part to the geopolitical risks in Syria and the impact of successive interest rate cuts.

- As the impact of COVID-19 starts to emerge in the real economy, EM stocks and currencies will tend to come under downward pressures for some time.

**EM stocks and Chinese/Hong Kong stocks**

**Percentage change of EM currencies against the USD**

- EM stocks are based upon the MSCI Emerging index. Chinese stocks are based on the Shanghai Composite Index, and Hong Kong stocks are based on the Hang Seng Index.
- Source: Made by MHRI based upon Refinitiv and MSCI.
- Note: Positive levels indicate the rate of rise in EM currencies against USD. Negative levels indicate the rate of decline in EM currencies against the USD.
- Source: Made by MHRI based upon Refinitiv.
5. (1) The Japanese economy: Oct-Dec qtr growth was weak despite measures to deal with the consumption tax hike. Possibility of a recession

- Oct-Dec quarter real GDP growth fell into negative territory (-1.6% q-o-q, -6.3% p.a.)
  - This was on a par with the results at the time of the previous consumption tax hike (Apr-Jun quarter of 2014: -1.9% q-o-q). Despite one-off factors such as the impact of large typhoons in October that served to push down growth, the Japanese economy should be assessed as weak, considering that large-scale measures were taken to deal with the consumption tax hike.
  - The slowdown in the manufacturing sector due to lower exports is exerting downward pressure on domestic employment and income conditions, as well as having an impact on consumption.

- The assessment of business conditions in the Indexes of Business Conditions remains at “worsening”. Since a recovery after the consumption tax hike could not be confirmed, there is a high possibility that Japan has slipped into a recession.

Real GDP (quarterly)

Source: Made by MHRI based upon Cabinet Office, National Accounts

Indexes of Business Conditions

Note: If the case of a recession, the odds are high that the peak would be October 2018
Source: Made by MHRI based upon Cabinet Office, Indexes of Business Conditions
Exports: weak, mainly due to weak motor vehicle exports. Exports to bottom out only from the second half of 2020

- US-bound motor vehicle exports are the main factor behind the recent softening of exports. Even though overall exports should bottom from the second half of 2020 onward, the pace of recovery will be moderate.
  - The impact of the novel coronavirus (COVID-19) will weigh on exports in the first half of 2020 with exports bottoming from the second half of 2020 or later.
  - The recent sluggishness in US-bound exports is fostered by a shift to local production and is likely to pause from the turn of the year in 2020. However, we expect that motor vehicle exports will be flat in 2020 amid the stagnant growth of the global motor vehicle market. It is highly likely that the pace of recovery in IT-related goods and capital goods will also be moderate due to the stagnant demand for motor vehicles. We forecast only a moderate recovery in exports sometime from the second half of 2020 onward.

Real exports by major goods (quarterly, s.a.)

Volume of motor vehicle exports by major destination

Note: Capital goods (ex. ships) series calculated by MHRI.
Source: Made by MHRI based upon BOJ, Developments in Real Exports and Real Imports

Note: Seasonally-adjusted by MHRI. 3-month moving average.
Source: Made by MHRI based upon Ministry of Finance, Trade Statistics
Capital investment: despite the rise of adjustment pressures, a serious drop is unlikely due to boost by structural investment demand

- The capital stock cycle suggests the rise of adjustment pressures. However, investment is underpinned by structural boosts.
  - Even in terms of the decomposition of contribution by period components, overall capital investment is being supported by sustained investment demand (trend components and long-term components).
    - Investment is underpinned by demand for labor-savings investments, amid serious labor shortages and demand to renew buildings with long useful economic lives.
- Although growth will be weak through FY2020, there will be support from structural investment demand and we do not anticipate a serious adjustment.

**Capital stock cycle**

![Graph showing capital stock cycle](image)

**Note:** The bold dark blue line shows the period of Abenomics (2013-2019). Calculated by MHRI using Preliminary Quarterly Estimates of Net Capital Stocks of Fixed Assets up until the Jul-Sep quarter of 2019.

**Source:** Made by MHRI based upon Cabinet Office, National Accounts, Preliminary Quarterly Estimates of Net Capital Stocks of Fixed Assets

**Real growth in capital investment (decomposition of contribution by components)**

![Graph showing real growth in capital investment](image)

**Note:** The amount of capital investment is adjusted for seasonal factors. The average up until the Second Preliminary Quarterly Estimates of GDP for the Jul-Sep quarter of 2019. Decomposed into short-term components (up to 4 years, temporary policy impact and statistical noise), medium-term components (4 to 11 years, economic cycle and facility replacement cycle, investment for inbound measures) and long-term components (11 to 25 years, facilities with long useful economic lives and building renewal cycle).

**Source:** Made by MHRI based upon Cabinet Office, Preliminary Quarterly Estimates of GDP
Capital investment: flat in FY2020 due to weak construction investment, with overall increase in FY2021

- We forecast overall investment to be weak in FY2020 with flat machinery investment, weak construction investment and an increase in intellectual property investment. We forecast an overall increase in FY2021 due to recoveries in machinery investment and construction investment fostered by recovery in the domestic and international economies, and progress in redevelopment projects.

- Construction companies have large levels of construction projects on hand. A large volume of offices are scheduled to come online in 2023, and there are currently many unfinished redevelopment projects, which should be completed from around the second half of FY2020.

- Construction investment should pick up again from FY2021 onward.

Outlook on capital investment in FY2020 and FY2021

<table>
<thead>
<tr>
<th></th>
<th>FY2020</th>
<th>FY2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machinery</td>
<td>Flat due to sluggish growth in domestic and external demand</td>
<td>Recovery reflecting the rebound in domestic and external demand</td>
</tr>
<tr>
<td>Construction</td>
<td>Weak due to pre-Olympic pause in construction and slumping factories, etc.</td>
<td>Recovery mainly in urban renewal projects</td>
</tr>
<tr>
<td>Intellectual Property</td>
<td>Moderate increase in software R&amp;D</td>
<td>Ongoing increase in software R&amp;D</td>
</tr>
<tr>
<td>Total</td>
<td>Flat</td>
<td>Increase</td>
</tr>
</tbody>
</table>

Source: Made by MHRI

Construction projects on hand (private non-residential, seasonally-adjusted)

Note: Seasonally-adjusted by MHRI
Source: Made by MHRI based upon Ministry of Land, Infrastructure, Transport and Tourism, Current Survey on Construction Statistics
Personal consumption: sluggish in FY2020 due to weak employment and income conditions, with a moderate recovery in FY2021

- Employment and income conditions will be weak in FY2020. Despite a gradual recovery in FY2021, growth should remain moderate.
  - In FY2020, we forecast heightened caution concerning employment, particularly in the manufacturing sector. Wage growth will be sluggish due to weak corporate earnings. We forecast real wage incomes to be weak. In FY2021, even though employment and income conditions should pick up due to the recovery of production activity, the growth will be moderate.

- The underlying trend of personal consumption will be sluggish due to weak employment and income conditions even though there will be the impact from new car models in early 2020 and a fading of the negative impact of the consumption tax hike. While we anticipate personal consumption to pick up in FY2021 amid the recovery in employment and income conditions, we expect only moderate growth.

Outlook on employment, wages and prices (FY2019, FY2020)

<table>
<thead>
<tr>
<th>FY2019</th>
<th>Y-o-y change</th>
<th>FY2020</th>
<th>Y-o-y change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No. of employees</strong></td>
<td></td>
<td><strong>Y-o-y change</strong></td>
<td></td>
</tr>
<tr>
<td>Growth in the number of employees slows down. Despite increase in the non-manufacturing sector, growth in the manufacturing sector flattens out</td>
<td>+1.1%</td>
<td>The global economy fall short of a recovery and manufacturers are cautious about employment. Growth in number of employees will slow even further</td>
<td>+0.6%</td>
</tr>
<tr>
<td><strong>Nominal wages</strong></td>
<td></td>
<td><strong>Y-o-y change</strong></td>
<td></td>
</tr>
<tr>
<td>Growth in scheduled cash earnings flattens out, and lower production leads to lower scheduled cash earnings. Special earnings also declines due to weak corporate earnings</td>
<td>+0.5%</td>
<td>Stagnant earnings make employers cautious about wage hikes, leading to the stagnant growth of scheduled cash earnings. The decline of working hours leads to the ongoing fall of non-scheduled cash earnings. Given the fall of bonuses as well, wage growth slows down even further</td>
<td>+0.3%</td>
</tr>
<tr>
<td><strong>Prices</strong></td>
<td></td>
<td><strong>Y-o-y change</strong></td>
<td></td>
</tr>
<tr>
<td>Growth in prices following the consumption tax hike flattens out</td>
<td>+0.7%</td>
<td>Growth in prices expected to be flat in FY2020 as well</td>
<td>+0.8%</td>
</tr>
</tbody>
</table>

Source: Made by MHRI

Outlook on real personal consumption

Source: Made by MHRI based upon Cabinet Office, Preliminary Quarterly Estimates of GDP
In January, the core CPI (Ku-area of Tokyo) stood at +0.7% y-o-y, recording a contraction of growth. The BOJ-style core CPI flattened out at +0.9% y-o-y.

Compared to the time of the previous consumption tax hike, “price hikes” have been constrained because of reduced tax rates, the steeper fall of gasoline prices, and increase in price competition accompanying the reward points redemption system. The suppression of prices of items that are purchased frequently by households will most likely suppress price levels of familiar goods.

The BOJ-style core CPI (y-o-y change) is forecast to remain, flat reflecting the sluggish growth of consumption. The core CPI is also forecast to remain flat y-o-y due to the global market slump stemming from concerns regarding a global economic slowdown along with the spread of novel coronavirus (COVID-19) infections.

Ku-area of Tokyo CPI (y-o-y) excluding institutional factors

Note: The values since October 2019 are estimated with the exclusion of institutional factors (consumption tax hike, free education)
Source: Made by MHRI based upon Ministry of Internal Affairs and Communications, Consumer Price Index, and published materials

Rate of rise of CPI (including consumption tax) for frequently-purchased items

Note: “Frequently-purchased items” refer to items purchased at least 15 times a year. Excludes highly volatile fresh foods. Includes white bread, salad, fresh milk and gasoline
Source: Made by MHRI based upon Ministry of Internal Affairs and Communications, Consumer Price Index
(2) Japanese monetary policy: maintain current monetary policy stance while monitoring impact of COVID-19

- We expect the BOJ to maintain current policy while monitoring the trends in the novel coronavirus (COVID-19). The stance will be to avoid additional easing by stressing the impact of the policy mix for fiscal and monetary policies.
  - The analysis in the January Outlook Report was that low interest rates have the merit of containing the crowding out from the government’s fiscal spending.

- Seiji Adachi has been tapped to replace Policy Board Member Yutaka Harada when his term of office ends as of the end of March. Although Mr. Adachi is a reflationist who advocates massive spending to reflate the economy, he has a negative view of the impact of negative interest rates. The focus will be on whether or not there will be a change in future discussions at BOJ Policy Board meetings concerning the side effects of prolonged low interest rates.

Impact of the policy mix (BOJ Outlook Report January 2020)

Source: Made by MHRI based upon Bank of Japan, Outlook Report (January 2020)

Comments by Seiji Adachi concerning monetary policy

**On cutting negative interest rates (October 31, 2019)**
- As for cutting negative rates further, the likelihood is low that it would result in another strengthening of the yen similar to the path taken in 2016, but its effectiveness would be severely limited.
- If financial institutions start buying super-long term bonds under the assumption that their profit environment will further deteriorate, there’s a risk that super-long term yields such as those on 20-year bonds would sharply decline.

**On ETF purchases (October 31, 2019)**
- Under the current environment where the labor market recovery is continuing, it may be better to add to quantitative easing by means such as raising the ETF purchasing target, even if it isn’t by much.

Source: Made by MHRI based upon Bloomberg
(3) Japanese bond market: 10-year JGB yields of about -0.05%

- The yield on 10-year JGBs is hovering around -0.05% due risk-avoidance in connection with the novel coronavirus (COVID-19). Over the short term, yields are susceptible to downward pressures. As the situation calms down, interest rates should gradually rise and move around 0%.

- The BOJ has implemented initiatives to induce a steepening of super long-term JGB yields by adjusting demand and supply such as by reducing its outright purchases of JGBs. However, given the high demand for super long-term JGBs from institutional investors and others, its impact should be limited over the medium to long term.

Trends in JGB yields

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

Source: Made by MHRI based upon Bloomberg
Even though the Japanese stock market is being underpinned by speculation concerning the supply of funds by China and strong corporate earnings in the US, they have fallen recently due to concerns surrounding the spread of the novel coronavirus (COVID-19). The Nikkei average fell below JPY23,000.

We forecast ongoing weakness. The value chain will follow a downward trend until it becomes possible to factor in the fall of COVID-19 infections. We also expect corporate earnings to decline because of China’s economic slowdown.

Foreign investors are likely to sell given their geopolitical vulnerability to China's impact. Japanese stocks will likely underperform against foreign stocks.

Foreign investor trading trends

TOPIX forward P/E ratio and Chinese PMI
6. Forex market: USD/JPY market to fluctuate around 110 yen

- Although the yen lost ground to the 112 yen-level to the US dollar due to factors such as strong US economic indicators and reports of a takeover of a US company by a Japanese retailer, the yen regained ground to the 110 yen-level due to financial market risk aversion reflecting concerns regarding the novel coronavirus (COVID-19).

- Although risk averse movements reflecting concerns about COVID-19 serve as upward pressures on the yen, the strength of the US economy and concerns regarding the spread of COVID-19 infections set forth a sharp contrast with the weakness of the Japanese economy, thereby exerting upward pressures on the US dollar. For the time being, the US dollar will fluctuate around 110 yen to the dollar.

- Given the weakness of the Eurozone economy, the euro will tend to weaken against the US dollar.

The USD/JPY exchange rate

The EUR/USD exchange rate and speculators’ net positions

Source: Made by MHRI based upon Bloomberg
7. The crude oil market: demand and supply concerns due to COVID-19. OPEC-Plus continue to reduce production

- The price of crude oil (WTI) dipped temporarily below USD50 at the beginning of February, reflecting the spread of novel coronavirus (COVID-19) infections.
  - In the crude oil market where an oversupply is expected, COVID-19 will serve as a downside risk upon demand, thereby leading to a further easing of supply-demand.

- The WTI crude oil price is forecast to trade at the lower end of the USD50-level in the first half of 2020, due in part to concerns about a delay in the global economic recovery.
  - Given the possibility of OPEC-Plus' decision on the continuation /reinforcement of output cuts at its meeting in March, this could serve as a factor to boost the crude oil market from mid-2020 even if the economy bottoms out. Even so, as the momentum for the economic recovery is weak, we forecast that prices will be capped at the lower end of the USD60-level.

- On the other hand, attention needs to be paid to US-Iran relations. Although developed market (DM) countries have abundant crude oil inventories, there are concerns that a decline in crude oil exports could cause a resurge of crude oil prices.

Crude oil prices (WTI crude oil futures)

Outlook for crude oil prices (WTI crude oil futures)
8. Outlook on the financial markets

- **Sub-scenario 1 (upside scenario)**
  - Long-term interest rates and stock prices rise on the rise of expectations toward interest rates driven by the acceleration of US economic recovery. The dollar continues to strengthen against the yen.

- **Sub-scenario 2 (downside scenario)**
  - Global economic slowdown, including Europe and the US, due to tariff hikes accompanying US protectionist policy. Both long-term interest rates and stock prices fall. The dollar continues to weaken against the yen.

<table>
<thead>
<tr>
<th></th>
<th>Main Scenario</th>
<th>Sub-scenario 1</th>
<th>Sub-scenario 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal funds rate (End-of-period, %)</td>
<td>1.50~ 1.75</td>
<td>1.50~ 1.75</td>
<td>1.50~ 1.75</td>
</tr>
<tr>
<td>10Y US Treasury yield (%)</td>
<td>1.65</td>
<td>1.60</td>
<td>1.70</td>
</tr>
<tr>
<td>Dow Jones Average (USD)</td>
<td>27,567</td>
<td>28,600</td>
<td>28,000</td>
</tr>
<tr>
<td>Euroyen TIBOR (3-mo, %)</td>
<td>0.01</td>
<td>0.04</td>
<td>0.05</td>
</tr>
<tr>
<td>10Y JGB yield (%)</td>
<td>-0.09</td>
<td>-0.04</td>
<td>-0.05</td>
</tr>
<tr>
<td>Nikkei 225 Average (JPY)</td>
<td>23,045</td>
<td>23,100</td>
<td>22,600</td>
</tr>
<tr>
<td><strong>Japan</strong></td>
<td></td>
<td>2020/ Jan-Mar</td>
<td>2020/ Jan-Mar</td>
</tr>
<tr>
<td>ECB deposit facility rate (End-of-period, %)</td>
<td>-0.50</td>
<td>-0.50</td>
<td>-0.50</td>
</tr>
<tr>
<td>10Y government bond yield (German government bonds, %)</td>
<td>-0.35</td>
<td>-0.36</td>
<td>-0.40</td>
</tr>
<tr>
<td><strong>Europe</strong></td>
<td></td>
<td>2020/ Jan-Mar</td>
<td>2020/ Jan-Mar</td>
</tr>
<tr>
<td>USD/JPY rate</td>
<td>109</td>
<td>110</td>
<td>107</td>
</tr>
<tr>
<td>EUR/USD rate</td>
<td>1.11</td>
<td>1.10</td>
<td>1.10</td>
</tr>
</tbody>
</table>