

Monthly Report of Prospects for Japan's Economy

November 2020

Macro Economic Research Center
Economics Department



The Japan Research Institute, Limited

<https://www.jri.co.jp/english/periodical/>

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The General Situation – Signs of Economic Recovery Have Been Seen

Figure 1-1 Economic Activity

Indices of business conditions continued to rise both in terms of the CI coincident index and the CI leading index.

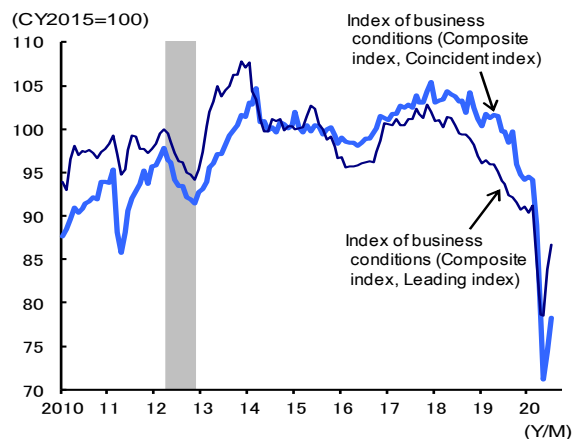


Figure 1-2 The Corporate Sector

The industrial production index saw a rise in a wide range of industries, particularly automobiles.

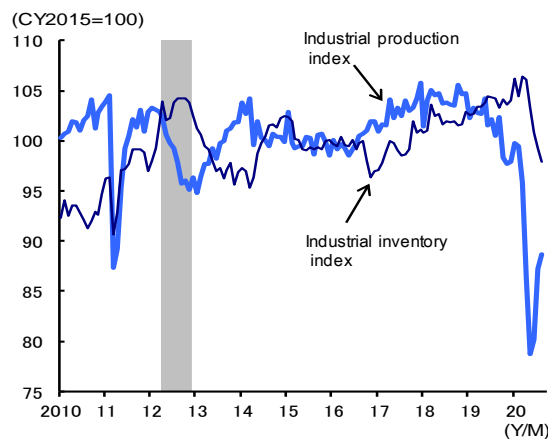


Figure 1-3 Overseas Demand

Exports increased, mainly those to Europe. Imports saw a decrease for crude oil and natural gas.

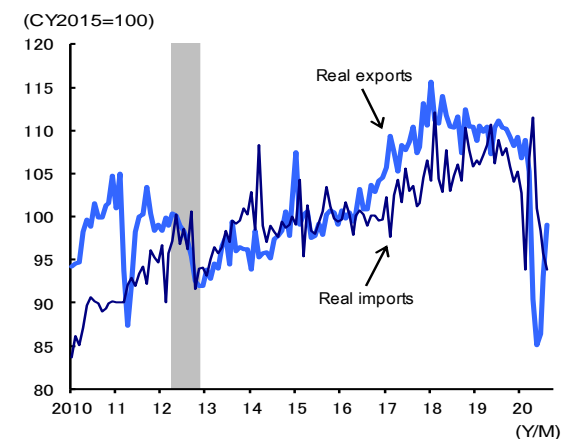
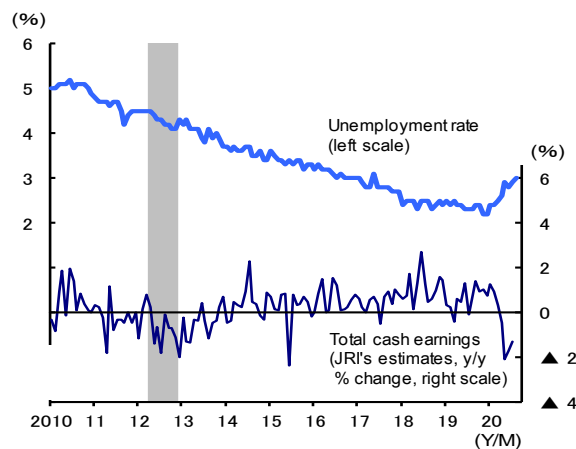


Figure 1-4 Employment and Income

The unemployment rate has been on a rising trend. Nominal wages declined mainly for non-scheduled salaries (overtime pay).



* The shaded area indicates the recession phase.

Figure 1-5 The Household Sector

Ongoing spread of the novel coronavirus infection has been weighing on real household consumption. Housing starts were sluggish.

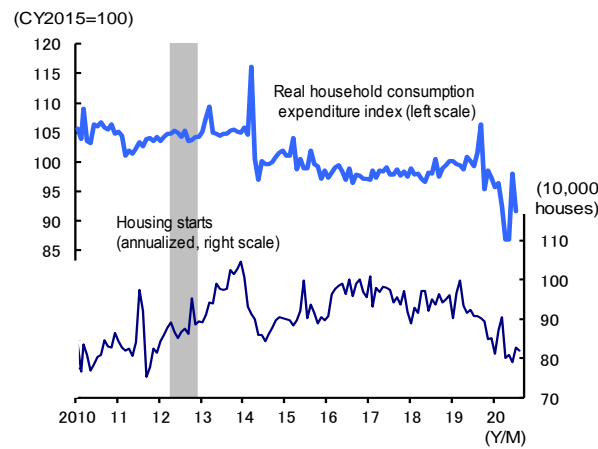
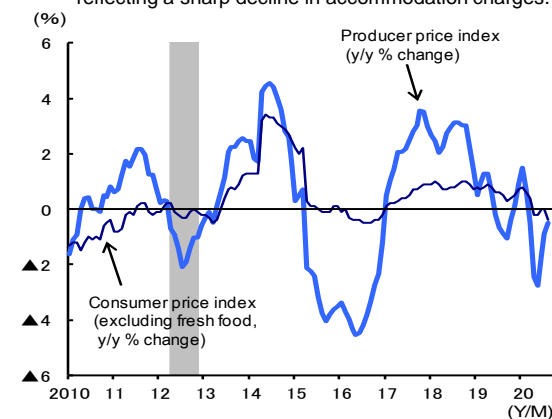


Figure 1-6 Prices

The decline in producer prices for petroleum and coal products slowed. Consumer prices were sluggish, reflecting a sharp decline in accommodation charges.



While Overseas Demand Continued to Pick up, the Pace of Recovery of Domestic Demand Has Slowed

◆ The DI for Business Conditions Improved

In the Bank of Japan's September 2020 Tankan Survey, business conditions DI of large manufacturers rose for the first time in 11 quarters, up 7 % points from the previous survey. On the back of the recovery in demand both in Japan and overseas, the DI improved for automobiles and electric machinery.

Moreover, the DI of large nonmanufacturers rose for the first time in five quarters, up 5% points from the previous quarter. The DI rebounded mainly for consumption related industries, including retail, hotel and food services.

In terms of future outlook, the DI is anticipated to improve from its current level for both manufacturers and nonmanufacturers. That being said, amid uncertainty over when the outbreak of the novel coronavirus will settle down, the improvement in DI for nonmanufacturers will likely remain limited.

◆ External Demand Continued to Pick up

Real exports in August rose 6.8% from the previous month, up for the third

consecutive month. By region, shipments to China remained on an increasing trend, while signs of a rebound were seen for shipments to developed countries.

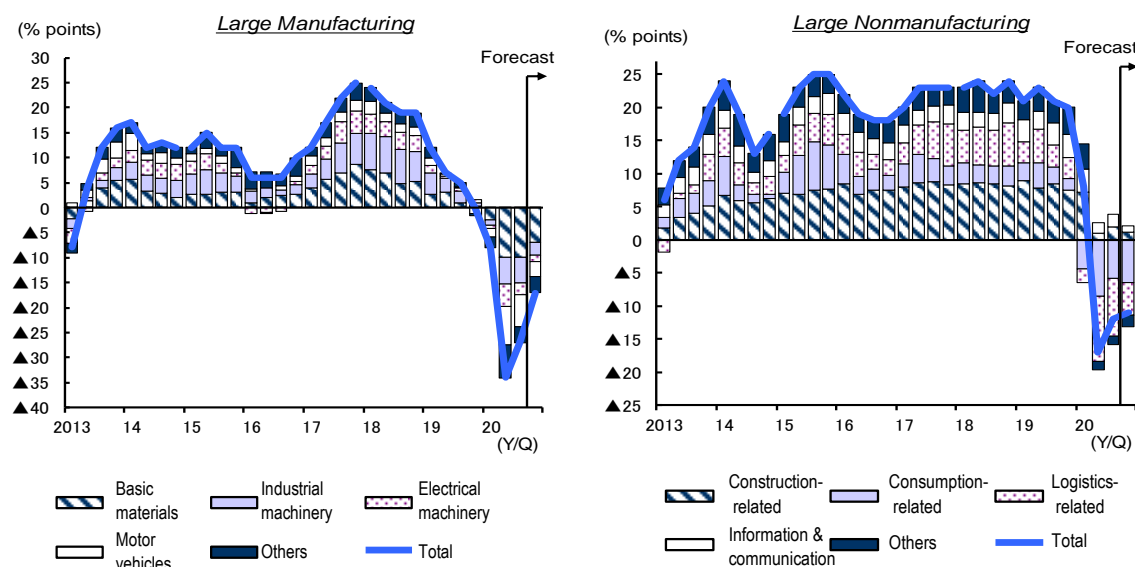
In response to an increase in exports, corporate production activities continued to pick up. The industrial production index for August rose 1.0% from the previous month, up for a third consecutive month. Looking at future production plans, industrial production is forecast to remain on a moderate recovery path, up 5.7% month-over-month in September and up 2.9% month-over-month in October.

◆ The Pace of Recovery of Domestic Demand Slowed

Meanwhile, looking at domestic demand, the recovery of personal consumption came to a halt during the summer. The consumer activity index declined 2.4% month-over-month in July, down for the first time in two months. The recovery of consumption activities has been hampered by the fact that pent-up demand subsequent to the state of emergency period has run its course and that the number of new coronavirus cases started to increase once again.

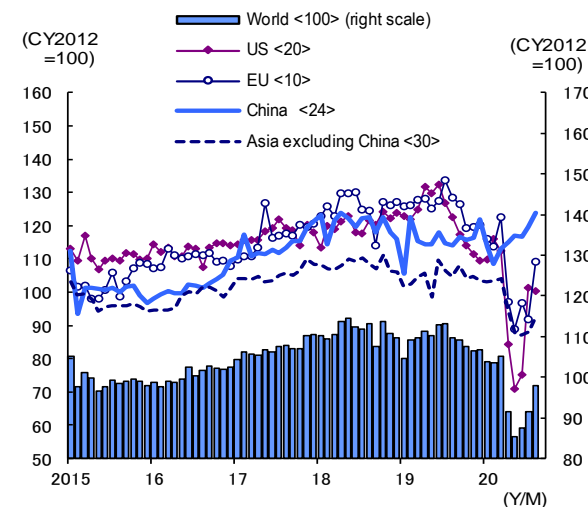
Figure 2-1 Contributions to the Business Conditions Diffusion Index by Industry

<diffusion index of "favorable" minus "unfavorable," and percentage point contribution to total DI points>



Source: The Japan Research Institute, Ltd. based on data of The Bank of Japan, "The Tankan September 2020 Survey".

Figure 2-2 Real Exports by Destination <seasonally adjusted>



Source: The Japan Research Institute, Ltd. based on data of The Ministry of Finance, The Bank of Japan.

Note: Figures in the angled brackets show the shares in total nominal exports in CY2019.

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Exports of Goods Picked up, While Demand Related to Inbound Tourism Remained Virtually Nonexistent

◆ Goods Exports Have Picked up, Mainly for Transportation Machinery

Goods exports in August increased month-over-month for the third consecutive month. By item, shipments of transportation equipment continued to recover sharply on the back of a recovery in global automobile sales, while those of capital goods, electronic parts and devices showed steady recovery.

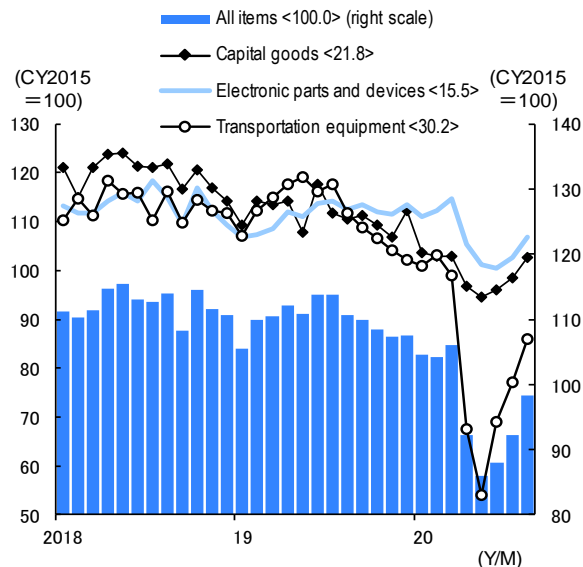
As for future prospects, exports are expected to remain on a recovery trajectory as economic activity around the world resumes in earnest. In fact, looking at the Bank of Japan's September 2020 Tankan Survey, companies assume that overseas supply and demand conditions for products will further improve mainly in transportation machinery and other industries. Having said that, amid the absence of a global economic engine such as China demonstrated at the time of the Lehman Brothers collapse, the pace of recovery of exports on the whole is likely to remain moderate.

◆ Demand Related to Inbound Tourism Was Almost Zero

Amid restrictions on overseas travel around the world, the number of tourists that visited Japan in August fell 99.7% on a year-on-year basis.

While the Japanese government has been easing immigration restrictions by permitting the entry of business travelers and international students from around the world since October, it will not allow tourists to enter the country for the time being. Therefore, demand related to inbound tourism is expected to remain virtually nonexistent even after this autumn. In addition, the pace of recovery is anticipated to be moderate, as people will likely continue to refrain from overseas travel due to concerns over infection risks even if the restrictions on tourists are relaxed. In fact, the International Civil Aviation Organization (ICAO) predicts that the number of passengers around the world will only recover to around 50% of the level prior to the outbreak of the novel coronavirus even by March 2021.

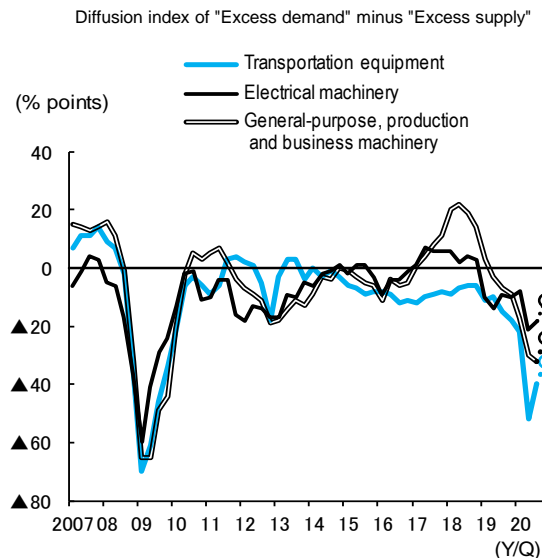
Figure 3-1 Real Exports by Item
<seasonally adjusted>



Source: The Japan Research Institute, Ltd. based on data of The Ministry of Finance, The Bank of Japan.

Note: Figures in the angled brackets show the shares in total nominal exports in CY2019.

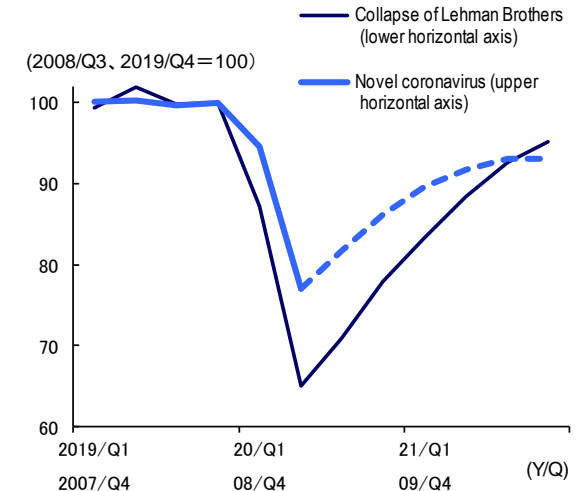
Figure 3-2 Overseas Supply and Demand Conditions for Products
<large enterprises>



Source: The Japan Research Institute, Ltd. based on data of The Bank of Japan.

Note: The latest figures are forecasts.

Figure 3-3 Forecast of Real Exports
<seasonally adjusted>



Source: The Japan Research Institute, Ltd. based on data of The Cabinet Office.

Note: The broken line indicates JRI's forecast.

Business Fixed Investment Has Declined as Corporate Earnings Deteriorate

◆ Corporate Earnings Recorded their Biggest Ever Drop

In the April-June period, sales on an industry-wide basis fell 10.7% from the previous quarter, recording their biggest ever drop since statistics were first recorded. Sales in both manufacturing and nonmanufacturing industries declined substantially due to a sharp drop in domestic and overseas demand caused by the global outbreak of the novel coronavirus. Meanwhile, current profits on an industry-wide basis were down 29.7% from the previous quarter, falling for the fifth consecutive quarter. Industries including food services, accommodation, living-related and entertainment services, and transportation services, all of which had been hit hard by consumers' voluntary restraint on outings, have fallen into the red.

Corporate earnings for the July-September period are expected to pick up on the back of the easing of restrictions on business activities both in Japan and overseas. However, the pace of recovery will likely remain moderate, as the recovery of overseas economies has been slow and measures to prevent coronavirus infection, including avoidance of the "Three Cs (closed places, crowded places and close

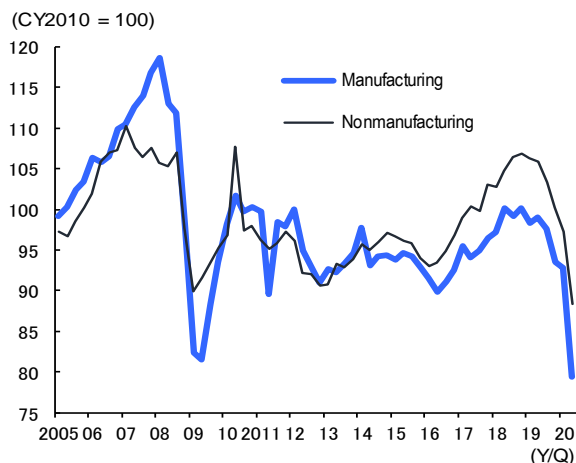
contacts)," will continue to be required in Japan.

◆ Business Fixed Investment Fell Again

The corporate sector has become more cautious about investment due to the deterioration of earnings. In the April-June period, capital investment on an industry-wide basis fell 6.7% from the previous quarter, recording its first decline in two quarters. The FY2020 business fixed investment plan in the Bank of Japan's September 2020 Tankan Survey has also been revised downward, indicating a year-on-year decline. However, as capital investment was partly underpinned by investment aimed at preventing the spread of coronavirus infection, such as investment related to teleworking, the decline has been smaller than when the Lehman Brothers collapse occurred. Software investment in particular has been revised upward.

As for future prospects, business fixed investment is expected to recover moderately, lagging the recovery in corporate earnings, although the prolonged impact of the coronavirus pandemic will likely continue to weigh on the recovery.

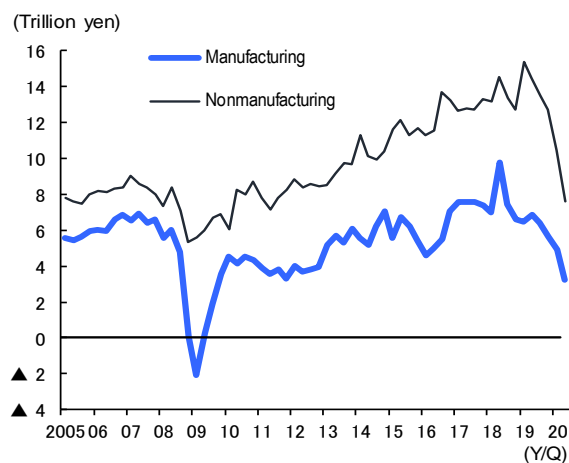
Figure 4-1 Sales Value of Japanese Corporations by Type
<seasonally adjusted>



Source: The Japan Research Institute, Ltd. based on the data of The Ministry of Finance.

Note: All industries except for financial services and insurance.

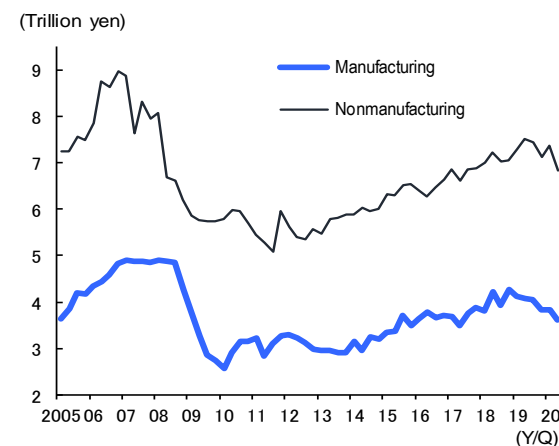
Figure 4-2 Current Profits of Japanese Corporations by Type
<seasonally adjusted>



Source: The Japan Research Institute, Ltd. based on the data of The Ministry of Finance.

Note: All industries except for financial services and insurance.

Figure 4-3 Business Fixed Investment of Japanese Corporations by Type
<seasonally adjusted>



Source: The Japan Research Institute, Ltd. based on the data of The Ministry of Finance.

Note: 1. All industries except for financial services and insurance.

2. Excluding software investment.

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The Unemployment Rate Is Expected to Rise to Nearly 4% in the Future

◆ The Sense of an Excessive Workforce Among Enterprises Has Remained at a High Level

The ratio of active job openings to applicants was 1.04 in August, down 0.45 points from the beginning of the year and reaching its lowest level since January 2014. The opening to applicant breakdown showed that the number of active job openings dropped 20% in the same period, while the number of job seekers increased for four consecutive months since May. Non-regular workers who lost their jobs in the wake of the outbreak of the novel coronavirus recently resumed their job-hunting activities, contributing to the decline in the ratio of active job openings to applicants.

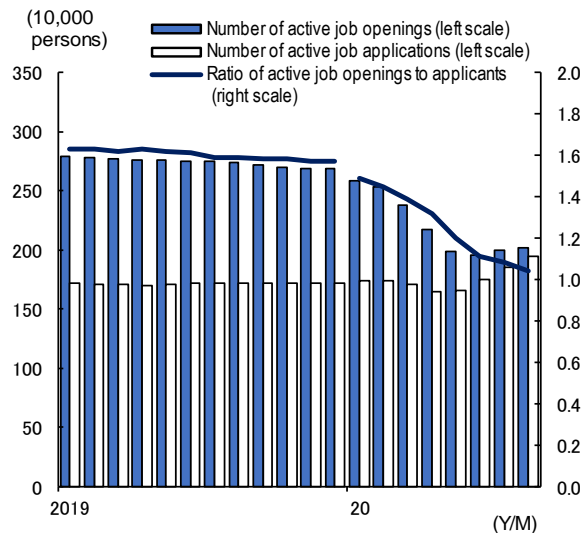
Meanwhile, the number of workers in August decreased 1.3% on a year-on-year basis, but the corporate sector's move to cut back on employment has not kept up with the decline in demand. As a result, the sense of an excessive workforce among enterprises has remained at a high level. The employment conditions DI (all enterprises, all industries) in the BOJ September 2020 Tankan Survey was down 6%,

remaining at its highest level since September 2013 as in the previous survey. Judging from the correlation with the DI, the unemployment rate will likely rise to nearly 4%, its highest level since 2013, between the end of the year and the beginning of next year.

◆ Total Cash Earnings Saw a Decline

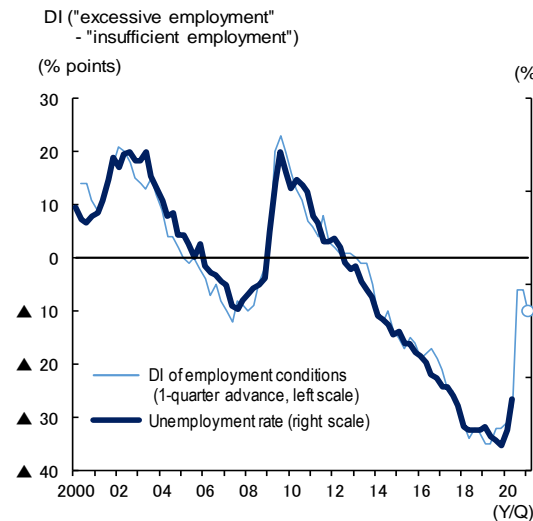
The novel coronavirus has also had ripple effects on wages. Total cash earnings in July plunged 1.3% year-on-year, recording a year-on-year decline for the fourth consecutive month. Against the backdrop of a decline in overtime due to sluggish economic activity, non-scheduled salaries (overtime pay) declined significantly. In addition, special salaries (bonuses) also saw a decrease, reflecting the deterioration in the corporate earnings environment. It is also anticipated that special salaries, mainly winter bonuses, will further decrease, and that downward pressure on scheduled salaries will increase going forward. As a result, the fall in wages is expected to widen once again.

Figure 5-1 Ratio of Active Job Openings to Applicants
<seasonally adjusted>



Source: The Japan Research Institute, Ltd. based on data of The Ministry of Health, Labor and Welfare.

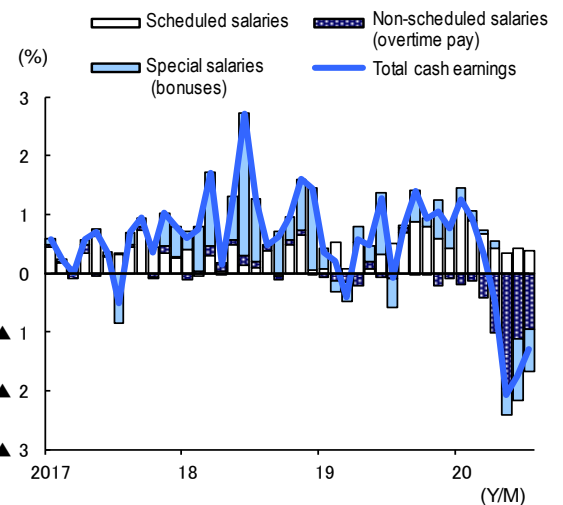
Figure 5-2 Tankan DI of Employment Conditions and Unemployment Rate



Source: The Japan Research Institute, Ltd. based on data of The Bank of Japan, The Ministry of Internal Affairs and Communications.

Note: The latest figure of the DI is a forecast.

Figure 5-3 Contributions to Change Rate of Nominal Wages
<year-on-year % change>



Source: The Japan Research Institute, Ltd. based on data of The Ministry of Health, Labor and Welfare.

Private Consumption Will Likely Remain Sluggish for a Long Period of Time

◆ Recovery of Consumption Has Remained at a Standstill Since the Beginning of the Summer

The recovery of private consumption leveled off during the summer as pent-up demand subsequent to the self-restraint period ran its course and the number of new coronavirus cases started to increase once again. Retail sales in August fell 1.9% year-on-year, down for the sixth consecutive month. Service consumption through credit card settlements in August showed an accelerated decline compared to the previous month.

On the other hand, as national and local governments have shifted gear toward the resumption of economic activities, including easing restrictions on holding events in September, there have been signs that households are becoming more active in their consumption. In fact, in September, the consumer confidence index recovered to its highest level since February 2020. Given this trend, personal consumption is expected to return to a moderate recovery trajectory once again. Having said that, the deterioration in employment and income conditions such as the rise in the

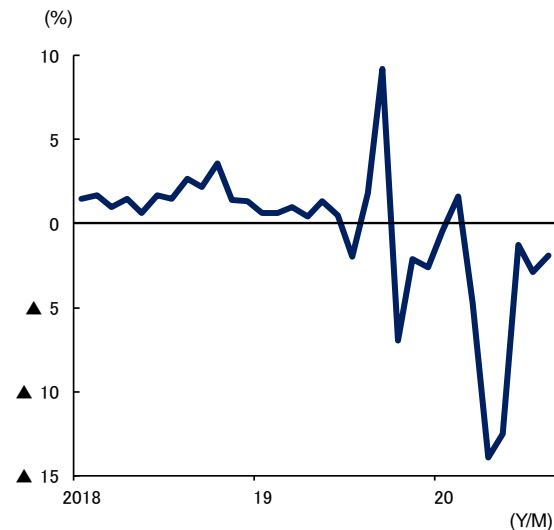
unemployment rate and decline in winter bonuses is anticipated to exert downward pressure on the recovery of consumption. Therefore, private spending is highly likely to remain at a level below that prior to the outbreak of the novel coronavirus even through FY2021.

◆ Housing Investment is Expected to Remain Lackluster for the Foreseeable Future

The number of housing starts in August decreased 1.0% from the previous month, recording its first decline in two months. While the number of housing starts for owner-occupied and rental housing increased, the decline in that for subdivision housing exerted downward pressure on the overall number.

For future prospects, against the backdrop of a more cautious lending approach by financial institutions toward apartment construction projects in addition to weak consumer confidence due to the worsening employment and income environment, housing investment will likely remain lackluster on the whole.

Figure 6-1 Retail Sales Value
<year-on-year % change>



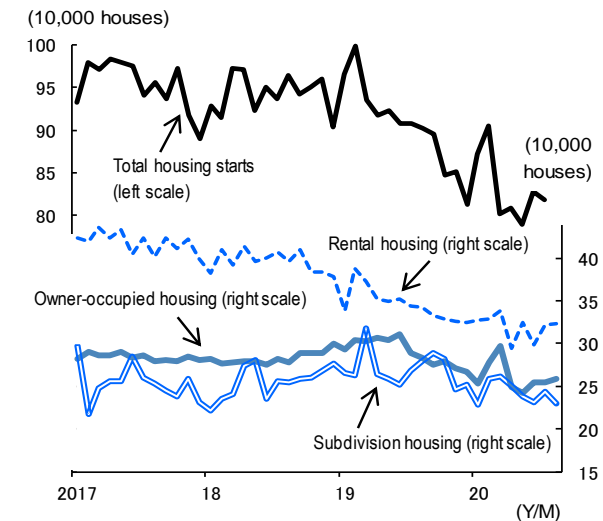
Source: The Japan Research Institute, Ltd. based on data of The Ministry of Economy, Trade and Industry.

Figure 6-2 Consumer Confidence Index
<seasonally adjusted>



Source: The Japan Research Institute, Ltd. based on data of The Cabinet Office.

Figure 6-3 Housing Starts by Type
<annualized, seasonally adjusted>



Source: The Japan Research Institute, Ltd. based on data of The Ministry of Land, Infrastructure, Transport and Tourism.

Topic: Servitization in Manufacturing Is Expected to Accelerate Even in a Post-coronavirus World

◆ Service Revenues in Manufacturing Have Been Expanding

Although net sales in the manufacturing industry have generally remained stable, the income structure has changed significantly. Since the beginning of the 2010s, service revenues in the manufacturing industry have increased rapidly. Looking at the breakdown, revenues in the academic research and professional and technical services led the way. Most such revenues are from the machinery industry, and it is likely that servicing of equipment sold to customers, such as maintenance service, is the main source.

It can be noted that the expansion of services for own products by the machinery industry is due to the increased efficiency and sophistication of services resulting from the widespread use of IoT technologies. IoT technologies, such as sensors and communications, enable manufacturers to remotely collect data from machines that

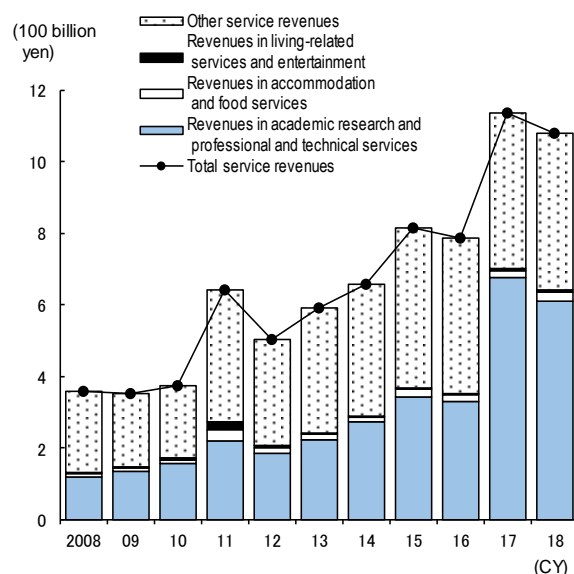
can be operated without visiting customers' factories and provide services such as predictive maintenance and energy-saving operation.

◆ Platform Services Have Emerged

At the moment, there are also moves to further upgrade data-driven services. Specifically, a number of leading companies are working to provide services that aim to optimize a wider range of areas, such as factories, construction sites, and offices, by collecting and utilizing not only data on their own products but also a wide variety of data, by building platforms in cooperation with multiple companies.

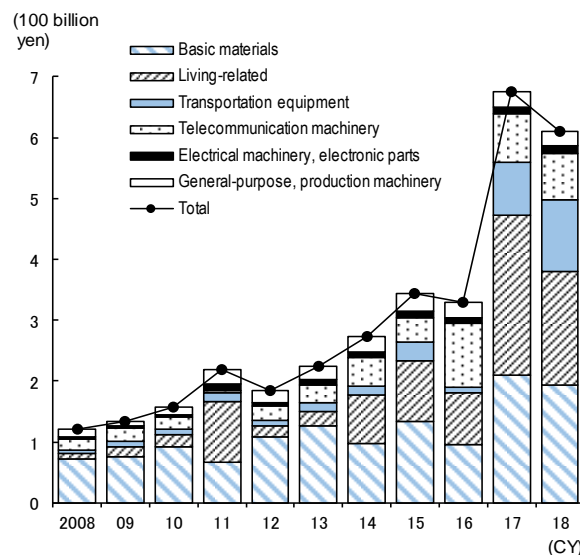
In terms of future prospects, increased demand for remote operations in the wake of the coronavirus outbreak, further development of IoT technologies, and the advent of a recycling-oriented economy are expected to boost servitization in manufacturing.

Figure 7-1 Service Revenues in Manufacturing



Source: The Japan Research Institute, Ltd. based on data of The Ministry of Economy, Trade and Industry.

Figure 7-2 Breakdown of Revenues in Academic Research and Professional and Technical Services



Source: The Japan Research Institute, Ltd. based on data of The Ministry of Economy, Trade and Industry.

Figure 7-3 Examples of Service Revenues in Manufacturing

Examples of revenues in academic research and professional and technical services

Experimental study, Product inspection, Measurement certification business, Survey, Management consultant, Advertisement revenues, Design, Mechanical design, Architectural design, Plant engineering, Plant maintenance, Maintenance and inspection, and so on

Source: The Japan Research Institute, Ltd. based on data of The Ministry of Economy, Trade and Industry.

Prospects for Japan's Economy - Projected Real GDP Change; -5.4% for FY2020 and 3.4% for FY2021

◆ Japan's Economic Activity Will Not Return to Its Pre-coronavirus Level Until After 2022

(1) Economic Recovery Will Be Limited

Looking ahead, as a result of the lifting of the state of emergency, Japan's economic growth rate in the July-September period is likely to be positive, with an annual growth rate of over 10%. However, the pace of economic recovery is expected to remain moderate, recovering only around 40% of the decline in GDP that occurred in the first half of the year, as the spread of the novel coronavirus has not settled down.

Trade activities related to exports will likely take time to rebound, as the resumption of economic activity remains slow in various countries. In addition, demand related to inbound tourism will remain virtually nonexistent for the time being due to ongoing border restrictions in an effort to avoid another novel coronavirus infection wave.

Meanwhile, in terms of domestic demand, measures to prevent coronavirus infections, including restrictions on the entry of customers into retail stores and restaurants and limitations on the number of seats, on top of the lingering tendency toward self-restraint, will continue to exert downward pressure on household consumption for the foreseeable future. It is projected that personal consumption will remain below the level before the coronavirus outbreak for a long period of time, hampered by deteriorating income conditions, such as the rising unemployment rate and the decline in overtime payments and bonuses.

(2) Japan Will See A Negative Growth Rate of Minus 5.4% for FY2020

Due to the foregoing, Japan will likely see negative growth for FY2020 at a rate of minus 5.4%. While the growth rate for FY2021 is expected to turn positive at +3.4%, the pace of recovery will be slow, and it is forecast that economic activity will not recover to the level before the novel coronavirus outbreak until after 2022.

◆ Prices Have Been Declining

(3) In August, core CPI (excluding the impact of the increase in the consumption tax rate and the provision of free education) diminished 0.7% year-on-year, falling further from the previous month. Accommodation charges, which had reflected prices after discounts in line with the commencement of Japan's Go To Travel Campaign, contributed to the decline in core CPI.

As for the future outlook, downward pressure on prices from the viewpoint of supply and demand will likely intensify. Furthermore, as the trend of falling energy prices will likely continue for the foreseeable future, reflecting the year-on-year decline in crude oil prices, core CPI is expected to show a year-on-year decline of about 1% between the end of this year and early next year.

Figure 9 Projections for GDP Growth and Main Indicators of Japan (as of October 5, 2020)

| | (seasonally adjusted, annualised % changes from the previous quarter) | | | | | | | | | (% changes from the previous fiscal year) | | |
|---|---|----------|--------------|---------|--------------|---------|--------|---------|--------------|---|--------------|--------------|
| | CY2020 | | | | CY2021 | | | | CY2022 | FY2019 | FY2020 | FY2021 |
| | 1~3 | 4~6 | 7~9 | 10~12 | 1~3 | 4~6 | 7~9 | 10~12 | 1~3 | (Actual) | (Projection) | (Projection) |
| | (Actual) | (Actual) | (Projection) | | (Projection) | | | | (Projection) | | | |
| Real GDP | ▲ 2.3 | ▲ 28.1 | 16.9 | 6.7 | 3.3 | 1.6 | 2.8 | ▲ 0.0 | 1.0 | 0.0 | ▲ 5.4 | 3.4 |
| Private Consumption Expenditure | ▲ 2.8 | ▲ 28.2 | 18.9 | 3.5 | 3.1 | 1.7 | 2.4 | 0.8 | 1.2 | ▲ 0.5 | ▲ 6.0 | 3.2 |
| Housing Investment | ▲ 15.0 | ▲ 2.0 | ▲ 24.8 | ▲ 7.5 | 28.2 | 14.9 | 7.4 | 6.9 | 4.2 | 0.6 | ▲ 8.9 | 8.2 |
| Business Fixed Investment | 7.0 | ▲ 17.5 | ▲ 1.8 | 16.2 | 2.8 | 2.3 | 2.3 | 1.8 | 1.8 | ▲ 0.3 | ▲ 3.9 | 3.6 |
| Private Inventories (percentage points contribution) | (▲ 0.3) | (1.4) | (▲ 0.7) | (▲ 0.2) | (0.0) | (0.0) | (0.0) | (0.0) | (0.0) | (▲ 0.1) | (0.1) | (▲ 0.1) |
| Government Consumption Expenditure | 0.1 | ▲ 2.3 | 4.8 | 2.5 | 0.0 | 0.2 | 3.5 | ▲ 2.3 | 0.4 | 2.3 | 1.0 | 1.0 |
| Public Investment | ▲ 1.8 | 4.6 | 2.8 | 4.9 | ▲ 1.0 | ▲ 2.1 | ▲ 0.4 | 0.6 | 0.8 | 3.3 | 2.5 | 0.0 |
| Net Exports (percentage points contribution) | (▲ 0.9) | (▲ 10.9) | (6.3) | (2.1) | (0.8) | (0.1) | (0.2) | (▲ 0.4) | (▲ 0.1) | (▲ 0.2) | (▲ 1.6) | (0.7) |
| Exports of Goods and Services | ▲ 19.9 | ▲ 56.0 | 26.2 | 23.7 | 17.2 | 9.5 | 6.1 | ▲ 0.2 | 2.0 | ▲ 2.6 | ▲ 15.2 | 10.9 |
| Imports of Goods and Services | ▲ 15.6 | ▲ 1.9 | ▲ 16.4 | 8.9 | 12.1 | 8.6 | 4.7 | 2.4 | 2.8 | ▲ 1.5 | ▲ 6.1 | 5.7 |
| (Ref.) Domestic Private Demand (percentage points contribution) | (▲ 1.4) | (▲ 19.2) | (8.5) | (4.0) | (2.8) | (1.7) | (1.9) | (0.9) | (1.1) | (▲ 0.4) | (▲ 4.1) | (2.5) |
| (Ref.) Public Demand (percentage points contribution) | (▲ 0.0) | (▲ 0.3) | (1.2) | (0.8) | (▲ 0.1) | (▲ 0.1) | (0.7) | (▲ 0.5) | (0.1) | (0.6) | (0.3) | (0.2) |

| | (% changes from the same quarter of the previous year) | | | | | | | | | (% changes from the previous fiscal year) | | |
|---|--|-------|-------|-------|-------|-------|-------|-----|-----|---|-------|-------|
| | | | | | | | | | | | | |
| Nominal GDP | ▲ 0.9 | ▲ 8.7 | ▲ 5.9 | ▲ 3.3 | ▲ 2.1 | 6.5 | 3.3 | 1.9 | 1.5 | 0.8 | ▲ 5.0 | 3.2 |
| GDP deflator | 0.9 | 1.3 | 0.7 | 0.0 | ▲ 0.2 | ▲ 0.6 | ▲ 0.3 | 0.0 | 0.1 | 0.8 | 0.4 | ▲ 0.2 |
| Consumer Price Index (excluding fresh food) | 0.6 | ▲ 0.1 | ▲ 0.3 | ▲ 1.3 | ▲ 0.8 | 0.1 | 0.2 | 0.8 | 0.7 | 0.6 | ▲ 0.6 | 0.4 |
| (excluding fresh food, consumption tax, education free of charge) | 0.2 | ▲ 0.4 | ▲ 0.6 | ▲ 1.2 | ▲ 0.7 | 0.1 | 0.2 | 0.8 | 0.7 | 0.4 | ▲ 0.7 | 0.4 |
| Unemployment Rate (%) | 2.4 | 2.8 | 3.1 | 3.7 | 3.9 | 3.8 | 3.6 | 3.5 | 3.4 | 2.3 | 3.3 | 3.5 |
| Exchange Rates (JY/US\$) | 109 | 108 | 106 | 106 | 107 | 108 | 108 | 108 | 109 | 109 | 107 | 108 |
| Import Price of Crude Oil (US\$/barrel) | 68 | 31 | 41 | 46 | 48 | 49 | 53 | 59 | 61 | 68 | 41 | 57 |

Source: The Cabinet Office; The Ministry of Internal Affairs and Communications; The Ministry of Economy, Trade and Industry; The Ministry of Finance.

The projection figures are based on those of The Japan Research Institute, Ltd.

Note : "▲" indicates minus.