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Japan's Economy: Monthly Outlook (Mar 2021)

Post-state-of-emergency economic outlook / additional economic measures expected in the future

Economic Research Dept.
Keiji Kanda
Akane Yamaguchi
Munehisa Tamura
Megumi Wada

Summary

- Looking at consumer turn-out, the most recent state of emergency appears to have been effective against the spread of COVID-19 to a certain degree. The effect on real GDP was around -2.2 tril yen, and is estimated to have fallen significantly below the decline of -3.8 tril yen experienced during the previous state of emergency issued April-May 2020. The outlook for the real GDP growth rate for the Jan-Mar period of 2021 is -5.1% q/q annualized. Exports, which fell dramatically during the previous state of emergency, are expected to provide underlying support this time around. Meanwhile, the outlook for the GDP growth rate during the Apr-Jun period of 2021 is +4.8% due to the restart of economic activity and improvements in the external environment.

- The government is implementing "comprehensive measures" to prevent further spread of infections after the state of emergency is lifted. However, recently there has been an increasing number of regions in which the number of new infections has stopped declining, or in which the number of new infections has begun increasing again. If consumer turn-out recovers rapidly after the lifting of the state of emergency, and the highly infectious mutant strain begins to spread between now and the end of April, explosions in infections could occur three times during FY2021. Moreover, if the pace of vaccination is slow, the outlook for the FY2021 real GDP growth rate could deteriorate by -0.7% in comparison to our main scenario which predicts growth of +3.7% in comparison with the previous year.

- Once we have moved into FY2021, the debate regarding the first preliminary budget will begin. The GDP gap, which is often used as a reference in considering the scale of fiscal expenditure, is expected to be approximately -28 tril yen in the Jan-Mar period of 2021. There is a shortage of demand which is caused by the decline in personal consumption, and household savings are rapidly accumulating. Hence the situation does not call for large-scale payment of benefits. Most industries, including the manufacturing industry, have returned to a normal level of economic activity, while the tourism, eating & drinking, and entertainment industries remain in a difficult situation, and hence should be given priority when it comes to economic support. Meanwhile, vaccination in Japan has not only started later than in other countries, but has been making slow progress. It would therefore be a good idea to devote some fiscal expenditure to providing backup in order to quicken the pace of vaccination.

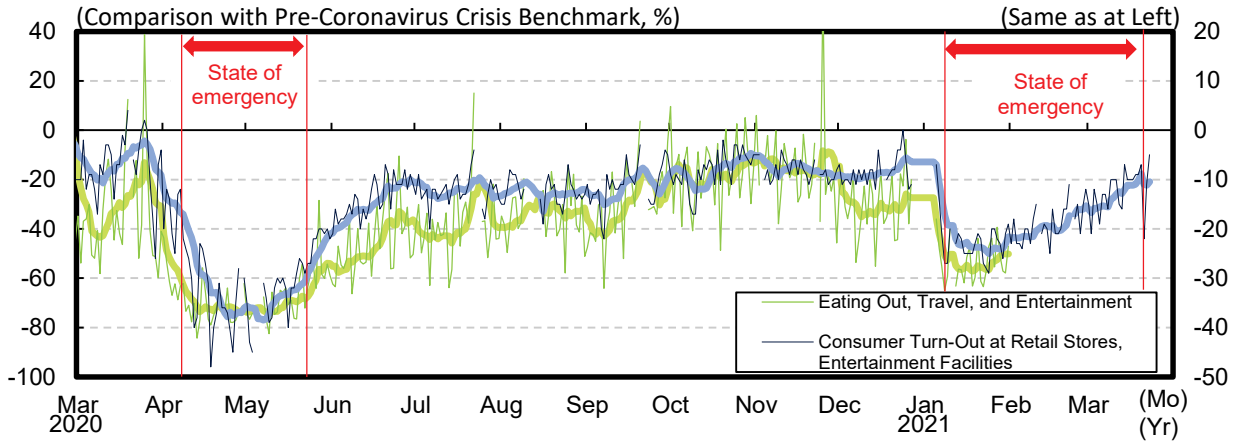
1. Post-State-of-Emergency Economic Outlook

Two-and-a-half-month-long state of emergency pushed real GDP down by around 2.2 tril yen

The state of emergency reissued at the beginning of January 2021 was lifted completely on March 21. Prime Minister Yoshihide Suga held a press conference on the 18th of the same month and stated that the number of new COVID-19 infections and the hospital bed occupancy rate have met the criteria for cancellation. Meanwhile, the prime minister also indicated that comprehensive measures to prevent further spread of infections should also be implemented due to concerns that there could be a resurgence in infections after the lifting of the state of emergency. The comprehensive measures are made up of five key elements, including a request to shorten hours of operation at restaurants and bars (closing by 9 PM) in four prefectures, prevention of the spread of the mutant strain, and strengthening of the medical care system.

Consumer turn-out at retail stores and entertainment facilities[1] during the recent state of emergency declined considerably, and consumption of services holding risk of spreading the infection was suppressed, though not as much as during the previous state of emergency which was in effect during the months of April and May 2020 (Chart 1). Consumer turn-out declined most notably in Tokyo, where it was 80% of what it had been before the pandemic as of the beginning of January, falling to around 60% of normal at retail stores and entertainment facilities after the reissuance of the state of emergency. Moving into February a moderate growth trend in consumer turn-out was observed, reaching over 70% of normal by the middle of March. Considering these trends in consumer turn-out, the most recent state of emergency appears to have been effective against the spread of COVID-19 to a certain degree.

Consumer Turn-Out at Retail Stores & Entertainment Facilities Nationwide (as of March 19), and Eating Out, Travel, and Entertainment Related Consumption **Chart 1**



Source: Ministry of Internal Affairs and Communications, Google COVID-19 Community Mobility Reports; compiled by DIR.
Note: The benchmark is the median value per day of the week between January 3 and February 6, 2020. The bold line indicates the 7-day moving average. Eating out, travel and entertainment consumption is the total of eating out, transportation, and cultural & entertainment services. Data from holidays occurring on weekdays, the Obon holiday (August 10-14, 2020), and year-end/Japanese New Year (December 28, 2020 to January 4, 2021) are not included.

Chart 2 presents the details of what the most recent state of emergency covered, and compares the economic effects with those of the last time a state of emergency was declared. The effect of the previous state of emergency on real GDP is estimated to have been around -3.8 tril yen[2], while the effect of the most recent state of emergency is estimated at around -2.2 tril yen. Our estimate made use of official

[1] Daily consumer turn-out at retailers and entertainment facilities according to Google Maps location information data. Shopping centers, restaurants and bars, amusement parks, and movie theaters are included, but stores selling daily necessities, such as super markets, fresh produce markets, and drugstores, are not included.
[2] For more detail on the estimation method see the DIR report by Keiji Kanda and Akane Yamaguchi dated 30 July 2020, *Japan's Economy: Monthly Outlook (July 2020)*. It should be noted, however, that the results of the estimate differ from this report since it was recalculated using the Synthetic Consumption Index and revised GDP results.

statistics, POS data, individual company information, and industry statistics published at the time of writing this report. If we remove the effects of the temporary suspension of the Go To Travel Campaign, the effect on the economy comes to around -1.2 tril yen.

Negative effects on the economy due to the reissuance of the state of emergency were mitigated by limiting the number of prefectures subject to the declaration to a maximum of eleven, while in addition, economic activity was moderately restrained by focusing on bars & restaurants, etc. Over 80% of the amount by which consumption was suppressed during the previous state of emergency was in services. The movement of goods was stagnant as well due to the closure of retail stores and factory shutdowns. However, this time around, no supply-side disruptions as were experienced during the previous state of emergency occurred, and the effects on the consumption of goods appears to have been limited. Moreover, online consumption has expanded steadily in a wide range of age groups, and companies have also worked on electronic commerce support to alleviate the decline in personal consumption.

Summary of Declaration of State of Emergency, and Effect on Japan's Economy **Chart 2**

	This Time	Last Spring
Period	January 8 - March 21 2021	April 7 - May 25 2020
Regions Affected	At first affected 4 prefectures, and then was extended to 11 prefectures.Lifted in stages between February and March.	At first affected 7 prefectures, then was extended to entire nation.
Influence on Business	・Business hours shortened centering on restaurants and bars, with closing by 8 PM. ・Events limited to a maximum of 5,000 persons, or a 50% decrease in attendees.	Restaurants and bars, hotels and other lodgings, and entertainment facilities requested to close temporarily or shorten hours.
Influence on Education	No school closings.	All schools closed by most local governments. (Implementation beginning in March.)
Others	Temporary suspension of Go To Campaigns.	
Effect on Real GDP	Around -2.2 tril yen (-1.2 tril yen when Go To Travel Campaign excluded)	Around -3.8 tril yen

Source: Cabinet Office, Bank of Japan, and Various Media Outlets; compiled by DIR.
Note: The effect of the temporary suspension of the Go To Travel Campaign comes to around -0.4 tril yen per month.

Outlook for real GDP growth in Jan-Mar period is -5.1% q/q annualized, with Apr-Jun period at +4.8%

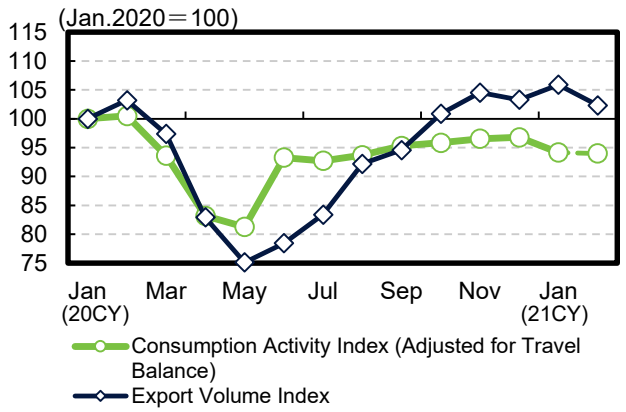
The outlook for the real GDP growth rate for the Jan-Mar period of 2021 is -5.1% q/q annualized. The downturn is expected to be superficial in comparison to the Apr-Jun period of 2020, including the period when the first state of emergency was in force, when the economy took a plunge of -29.3%. In addition to the effect of the reissuance of the state of emergency on personal consumption remaining relatively minor, there is a good possibility that exports, which fell dramatically during the previous state of emergency, will actually provide underlying support for the economy this time around (Chart 3). The export volume index according to the Trade Statistics published by the Ministry of Finance has continued to mark time since the end of the year 2020 while showing a few ups and downs. The average value for January and February 2021 exceeded the level recorded during the Oct-Dec period of 2020 by 1.2%. The month of March recorded a temporary decline due to Chinese New Year celebrations and the deep freeze in the US, but considering the fact that a rebound in comparison to the previous month's downturn can easily occur, exports of goods are expected to come in on the positive side during the Jan-Mar period.

The outlook for the real GDP growth rate during the Apr-Jun period is +4.8% q/q annualized due to the restart of economic activity and improvement in the external environment. After the previous state of emergency was lifted, pent up demand occurred in the area of durables and other goods, pushing up the

growth rate for the Jul-Sep period. However, during the most recent state of emergency, suppression of consumption of goods was limited, hence pent up demand is not expected to occur again. On the other hand, according to the DIR expert on the US economy, the outlook for the real GDP growth rate in 2021, which was originally at +5.7% in comparison to the previous year, was revised upwards to +7.4% in view of 1.9 tril dlrs in additional economic measures. Furthermore, the favorable future of the US economy has been reflected on the financial markets, with growth in yields on US treasury bills. Meanwhile, the yen has weakened further against the dollar due to the widening differential in US-Japan interest rates (Chart 4).

Consumption Activity Index & Export Volume Index

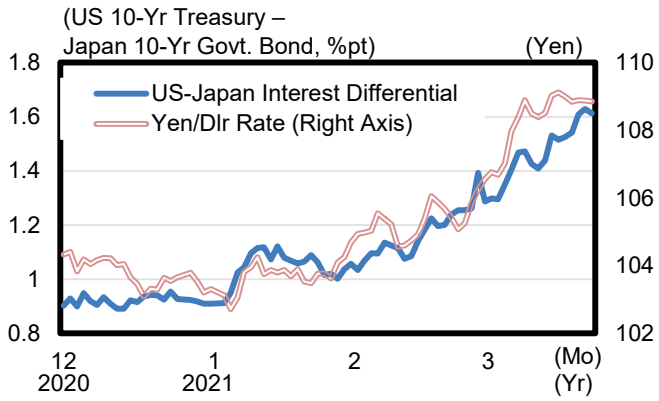
Chart 3



Source: Bank of Japan, Ministry of Finance, Cabinet Office; compiled by DIR.
Note: All figures are seasonally adjusted. Most recent value of Consumption Activity Index estimated by DIR.

US-Japan Interest Rate Differential & Dlr/Yen Rate

Chart 4



Source: Haver Analytics; compiled by DIR.

In recent years, it has become more difficult to observe the connection between the weak yen and growth in export volume (referred to as “the J-curve effect”). This phenomenon tends to lead to growth in corporate earnings centering on the manufacturing industry. According to the Bank of Japan’s Tankan survey (December 2020), average of predicted exchange rates of all enterprises for overall businesses for the latter half of 2020 was 106.55 yen / dollar. According to the Cabinet Office's Annual Survey of Corporate Behavior, the break-even yen/dlr rate for exporting companies in FY2019 was 100.2 yen / dlr for listed companies (106.2 yen / dlr for Medium-sized and SMEs). The recent yen/dlr rate has exceeded this in the extent of yen depreciation, and is seen as a factor providing a boost not only for exports, but capital expenditure and employee compensation as well. Using the DIR macro model, we estimated that continued yen depreciation of 5 yen against the dollar would push FY2021 real GDP up by 0.16%pt.

Yield on the US 10-year treasury bill is now in negative territory on a real basis after deducting the expected inflation rate. This means that an accommodative financial environment is being maintained. However, if normalization of economic activity progresses rapidly due to dissemination of the COVID-19 vaccine, coupled with large-scale fiscal and monetary policy, the economy could overheat, and growth in yield on US treasury bills could become excessive. It will be necessary to pay close attention to the future response of policy-makers and the impact of rising US interest rates on the emerging nations.

2. Risk of Explosive Spread of Infections Remains Even After Lifting of State of Emergency

Number of new infections increasing in most regions

The government is implementing "comprehensive measures" to prevent further spread of infections after the state of emergency is lifted. However, recently there has been an increasing number of regions in which the number of new infections has stopped declining, or in which the number of new infections has begun increasing again. The number of new infections in 29 prefectures including Tokyo, Osaka and Miyagi exceeded the previous week during the week of March 16-22. Considering the fact that change in the number of serious cases and the hospital bed occupancy rate lags just behind the number of new infections, as well as the fact that the highly infectious mutant strain is beginning to spread, it is not unlikely that the pace of growth in the number of new infections will accelerate in the Apr-Jun period, and the medical care provision system will be under stress, forcing the government to issue state of emergency for the third time.

FY2021 real GDP could fall into negative range if mutant strain spreads and vaccination lags

The effective reproduction number, which indicates how many people are infected by one infected person, tends to lag behind turn-out at retail stores and entertainment facilities as was mentioned earlier in this report by about two weeks. Chart 5 shows the results of our estimate of the infection situation and its economic impact in 2021 using an estimation formula that explains the effective reproduction number in Tokyo based on turn-out and temperature at retail stores and entertainment facilities two weeks ago. For details on the estimation method see the DIR report by Keiji Kanda, Akane Yamaguchi, Yutaro Suzuki and Taisei Watanabe dated 26 February 2021, *Japan's Economy: Monthly Outlook (Feb 2021)*.

The main scenario, which is consistent with our economic outlook, assumes a gradual recovery in consumer turn-out after the state of emergency is lifted. Meanwhile, for considerations regarding the pace of vaccination we refer to research by Fujii and Nakata (2021)[3]. Vaccination is expected to accelerate to 1.6 million people per week by the last week of June (the number of people who have completed two vaccinations nationwide; 160,000 people in Tokyo), and as of the end of FY2021, about half of all people will be vaccinated. It is said that the inoculation will be completed twice. The number of new infections in Tokyo in the main scenario will continue to decline gradually, and is expected to remain at around 180 per day (7-day moving average) in July. This is worse than the latest estimated results announced on March 5 in the DIR report, and is affected by the fact that consumer turn-out recovered at a faster pace than expected between the beginning and the middle of March.

The next two scenarios presented in Chart 5 assume that consumer turn-out grows rapidly after the lifting of the state of emergency and that the highly infectious mutant strain begins to spread. According to the results of a survey conducted by the Imperial College of London[4] published at the end of 2020, the spread of the mutant strain of COVID-19 first observed in the UK could increase the effective reproduction number by 0.4 – 0.7. Here we assume that the effective reproduction number starts growing at the beginning of March 2021, increasing by 0.55 as of the end of April. This makes it easy for an explosion in infections to occur, and in order to bring the spread of infections under control, measures as strict as those used in the spring of 2020 will be required.

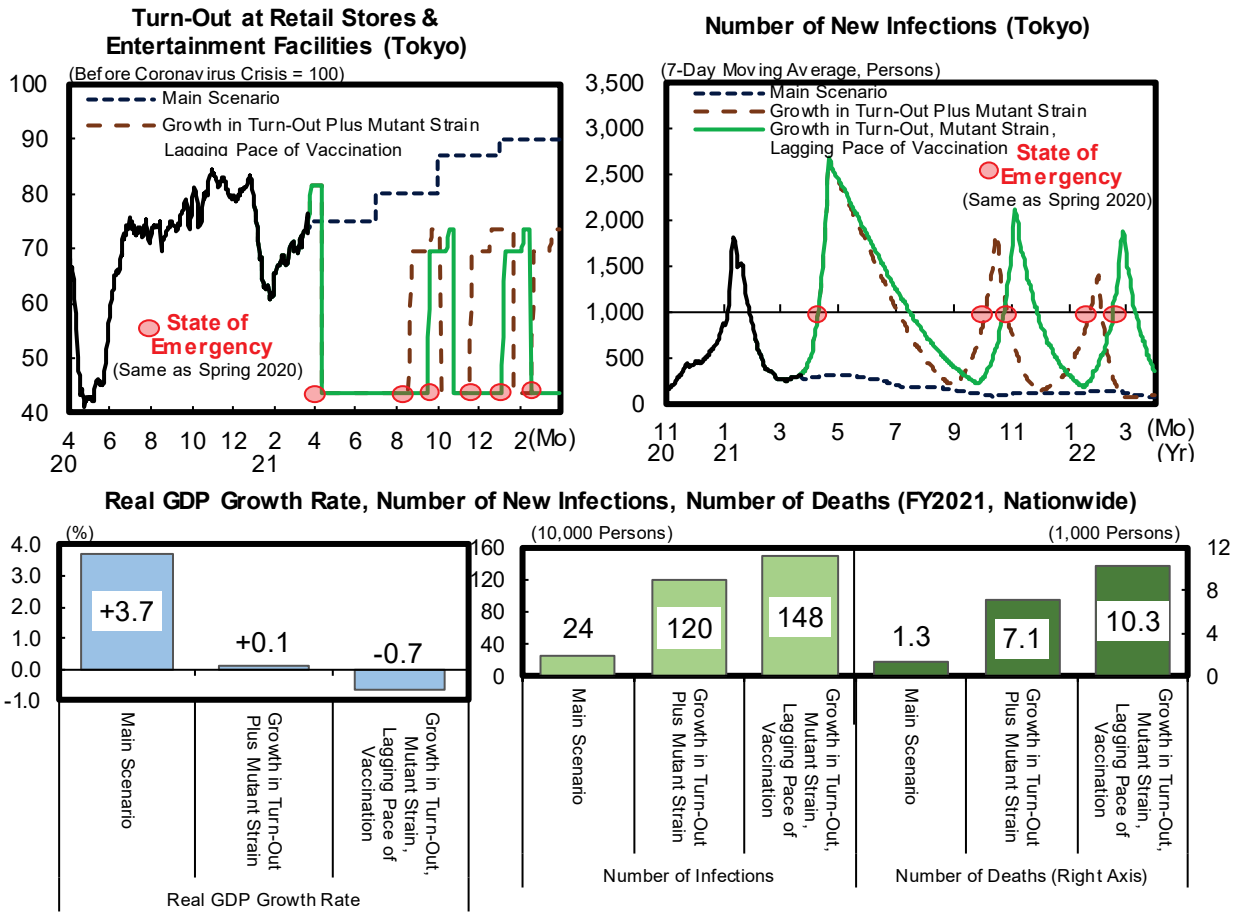
The upper right portion of Chart 5 indicates that even if the pace of vaccination proceeds as described in the main scenario, if the mutant strain begins to spread, explosions in infections could still occur as

[3] "Covid-19 and Output in Japan", RIETI Discussion Paper Series 21-E-004, by Daisuke Fujii & Taisuke Nakata (January 21, 2021).
[4] Volz, Eri et al. (2020) "Report 42 - Transmission of SARS-CoV-2 Lineage B.1.1.7 in England: insights from linking epidemiological and genetic data" Faculty of Medicine Imperial College London.(Accessed 23 March 2021)

much as three times during FY2021. While a state of emergency is in effect, strict measures of the sort implemented in the spring of 2020 will likely be required. Moreover, if vaccination proceeds at a pace half that assumed by the main scenario, the outlook for the real GDP growth rate in FY2021 will deteriorate, falling to -0.7% in comparison to the main scenario's +3.7% in comparison with the previous year. This would mean that Japan's economy would record negative growth for the second year in a row. The number of infections nationwide during FY2021 is expected to grow to around 1,480,000, with the number of deaths growing to around 10,000. The number of suicides caused by financial hardship is also expected to grow considerably[5]. The spread of the highly infectious mutant strain of COVID-19 will also continue to require close attention.

[5] If we assume that the unemployment rate has risen by 1%pt between 1998 – 2019, then we can see a correlation with growth in suicides caused by economic difficulties and daily life problems, which have grown by around 1,800. Using this as the basis of our estimate, we see suicides due to financial hardship growing by around 3,700 if the highly infectious mutant strain of COVID-19 spreads and the pace of vaccination lags.

Situation of Infections if Mutant Strain Spreads, and Influence on Economy — Chart 5



Source: Ministry of Health, Labour and Welfare, Tokyo Metropolitan Government, CEIC, Google, Japan Meteorological Agency, Bank of Japan, Cabinet Office; compiled by DIR.

Notes: 1) Turn-out at retail stores and entertainment facilities expressed as a 7-day moving average. The benchmark is the median value per day of the week between January 3 and February 6, 2020. Data from holidays occurring on weekdays, the Obon holiday (August 10-14, 2020), and year-end/Japanese New Year (December 28, 2020 to January 4, 2021) are not included.

2) The number of new infections was calculated after estimating effective reproduction number. We use a simple equation introduced by Toyo Keizai Inc. for effective reproduction number (Supervised by Professor Hiroshi Nishiura, Kyoto University Graduate School of Medicine):
Effective reproduction number = (number of new positives during last 7-days/number of new positives during the previous 7-days) (mean generation time 5-days/ report interval 7-days).
The equation for estimating the effective reproduction number used in the right side of the chart is as follows. We used daily temperature from 2020 for the temperature data portion of the estimate:
log (effective reproduction number) = 1.63 x log (turn-out at retail stores and entertainment facilities (-14)) – 0.04 x log (average temperature (-14)) – 6.90 The estimation period was between September 1, 2020 and March 22, 2021. Variable and constant terms all had significance of 1%. The coefficient of determination was 0.66.

3) As for assumptions regarding vaccination, according to our main scenario, the number of people vaccinated will gradually increase beginning in April, and then starting in the last week of June, 160,000 people per week will be vaccinated (or 1.6 million people per week nationwide). According to our other scenario in which the pace of vaccination lags, 80,000 people per week will be vaccinated starting in the last week of June (or 800,000 people per week nationwide). Fewer people will be likely to become infected with COVID-19 due to vaccination. Therefore, we estimate that the number of infections will also decline.

4) According to the scenario which assumes the mutant strain of COVID-19 will begin to spread, the effective reproduction number will begin to increase from the beginning of March, and as of the end of April will have risen by 0.55. According to the results of a survey conducted by the Imperial College of London published at the end of 2020, the spread of the mutant strain of COVID-19 could increase the effective reproduction number by 0.4 – 0.7.

5) The real GDP growth rate per each scenario was estimated after first estimating the rate of deviation of consumption from the main scenario. Considering the relationship between consumption and consumer turn-out at retail stores and entertainment facilities, as well as trends in the service industry according to the consumption activity index, we performed our estimate after converting the data into a GDP-based amount. As for the number of infections nationwide, considering the relationship to the recent number of infections in Tokyo, we estimated this number by quadrupling the number of infections in Tokyo. We based our estimate of the death rate on the 0.96% recorded between June and August of 2020, and assumed the cumulative death rate of persons under the age of 50 would decline to 0.07% as vaccination of the elderly progresses. (Based on reference materials submitted by Professor Nishiura at the 11th meeting of the COVID-19 advisory board of Ministry of Health, Labour and Welfare.)

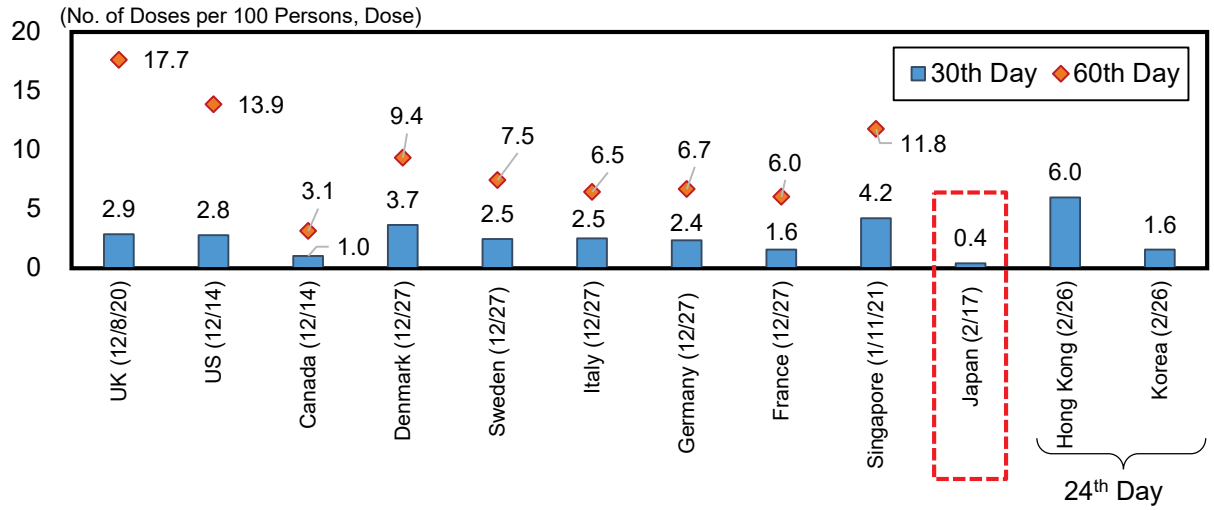
Vaccination in Japan has not only started later than in other countries, but has been making slow progress

As was mentioned earlier, our main scenario assumes that by the end of FY2021, approximately half of Japan's population will have been vaccinated. However, the fact is that there is great uncertainty regarding the pace at which vaccination will progress. Any number of things could go wrong, including a global shortage of supplies of the vaccine causing delays in shipment to Japan, lack of progress in preparations for the vaccination of large numbers of people, and the possibility that the effect of the vaccine will not last, so that the number of inoculations required increases. In addition, some people may worry about the safety of the vaccine and its adverse events, leading to large numbers of people refusing to be vaccinated.

Vaccination in Japan began on February 17, two months later than in the US and Europe. According to the Oxford University database, Japan also performs unfavorably in an international comparison in the pace of vaccination since its start (Chart 6). Japan has administered 0.4 doses per 100 people as of the 30th day since the start of vaccination, while in comparison, the number has been larger in the US and Europe at around 2.5 doses. Even Canada, with a relatively slow pace of vaccination, has administered 1.0 doses per 100 people. One can observe a few countries and regions here and there in Asia which like Japan have been slow to start vaccination, but once it has started, the pace of vaccination has considerably exceeded that seen in Japan. For example, Korea started vaccinations on February 26, and on the 24th day since its start, the number of doses administered has reached 1.3 per 100 people. Even considering the fact that Japan's population is large and the first vaccinations were limited to medical workers, thereby slowing down progress, it seems that there is a lot of room for improvement in the pace of vaccination.

If vaccination proceeds at a pace half that assumed by the main scenario as illustrated in Chart 5 (in other words a vaccination rate of around 25% of the population as of the end of FY2021), then upward pressure on the effective reproduction number due to the recovery in consumer turn-out will exceed the suppression effect from dissemination of the vaccine. As a result, another state of emergency will likely have to be issued around the end of FY2021. It is therefore desirable for the government to take advantage of the success stories of countries that have been ahead in vaccination and to take immediate steps to dispel public anxiety and raise the vaccination rate by disclosing information on adverse events and providing detailed information.

Number of Doses Administered per 100 Persons as of 30th & 60th Days after Start of VaccinationChart 6



Source: Oxford University "Our World in Data"; compiled by DIR.
Note: Dates accompanying country name denote date that vaccination was started. In cases where data for the 30th and 60th days has not been published, we used the most recent value in our estimate.

3. Additional Economic Measures Expected as New Budget Debate Begins in April

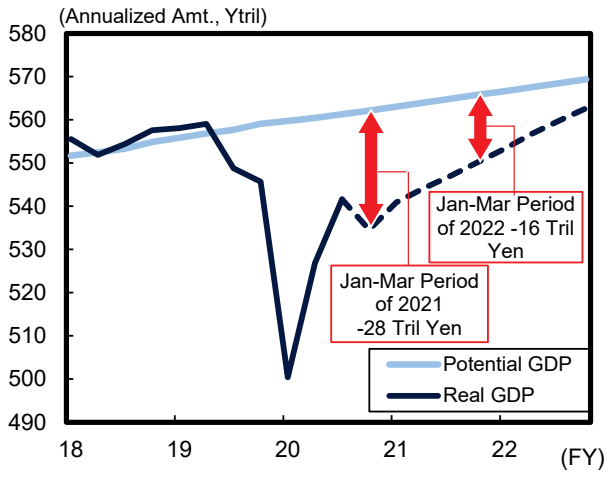
The GDP gap, used as a reference on the most recent set of additional economic measures, is at approximately -28 tril yen for the Jan-Mar period of 2021

At a press conference held on March 18, Prime Minister Suga stated "we will also provide tailored assistance to the greatest possible extent even after the declaration is lifted, including liquidity support, Employment Adjustment Subsidies, and the like." "…we will urgently compile financial response measures to assist with business continuity for dining and drinking establishments and others that have shouldered a great deal of employment until now." Prior to this, on the 16th, emergency support measures for people in need were compiled. Utilizing a reserve fund of about 0.5 tril yen, benefits for low-income child-rearing households including two parents, expansion of employment support for non-regular employees, and support for NPOs working to prevent loneliness and isolation were strengthened.

With the risk of an explosion in infections continuing, it is expected that the business environment will be tough for the time being due to the influence of measures to prevent the spread of infection in the tourism, eating & drinking, and entertainment industries. In the United States, the Biden administration will implement an additional 1.9 tril dlrs in economic measures centering on cash benefits of up to 1,400 dlrs per capita. Under these circumstances, in FY2021, debate on the first supplementary budget will begin, partly due to the general election of members of the House of Representatives whose term will expire in October.

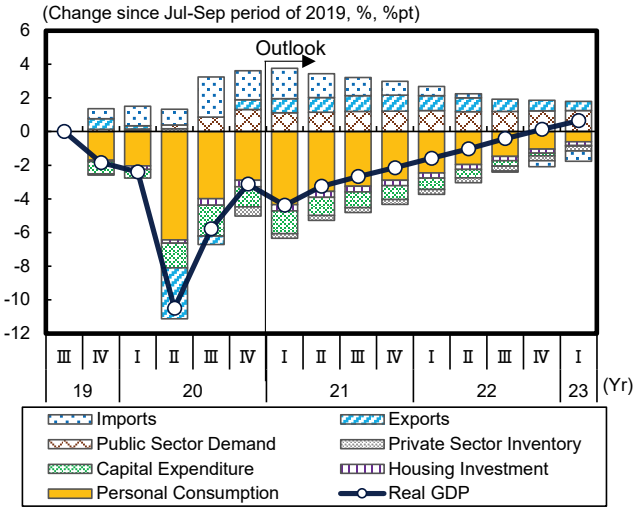
In considering the scale of additional fiscal expenditure, the GDP gap will likely be used as a reference. Based on the idea of a 15-month budget (the third supplementary budget for FY2020 and the initial budget for FY2021 are integrated), Comprehensive Economic Measures to Secure People's Lives and Livelihoods toward Relief and Hope, passed by the cabinet on December 8, 2020, will include fiscal expenditure of about 40 tril yen[6] in view of the fact that the GDP gap for the Jul-Sep period of 2020 was -34 tril yen (estimated by the Cabinet Office) on an annual basis. Based on our outlook, the output gap during the Jan-Mar period of 2021 is expected to be about -28 tril yen, and in the Jan-Mar period of 2022 about -16 tril yen. This is one guideline that we can use (Chart 7). The main reason for the shortage of demand is sluggish personal consumption. Recovery in personal consumption is expected to affect the improvement of the GDP gap (Chart 8).

Outlook for GDP Gap **Chart 7**



Source: Cabinet Office; compiled by DIR.
Note: Figures after Jan-Mar period of 2021 estimated by DIR.

Deviation from Real GDP, Jul-Sep Period 2019 **Chart 8**



Source: Cabinet Office; compiled by DIR.

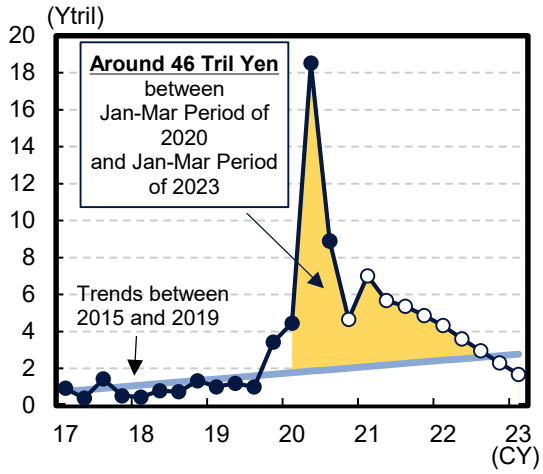
[6] According to an article in the Nippon Keizai Shimbun dated December 4, 2020.

Economic support measures should focus on households and businesses which are particularly affected by the coronavirus crisis

The GDP gap indicates that Japan's economy is still midway on the road to recovery, and the need for additional economic measures is still a great. However, the amount of the GDP gap which is often referred to is annualized, and the idea that the scale of fiscal spending can be decided based on making up for the shortage in demand for a particular period in annualized terms is controversial. Total fiscal expenditure for economic measures compiled from April to June 2020 was about 121 tril yen (scale of the operation totals around 234 tril yen), but the GDP gap is still widening. It is necessary to pay attention not only to the amount of the GDP gap but also to its contents, to grasp the rapidly changing economic situation, and to prioritize support for households and businesses in difficult circumstances.

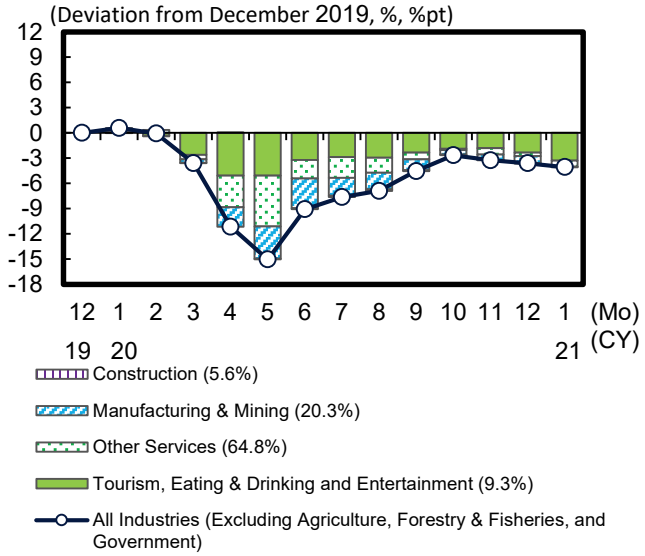
Chart 8 indicates that behind the shortage in demand lies stagnant personal consumption, but this does not necessarily mean that large-scale payment of benefits along the lines of the 100,000 yen per person distributed in 2020 is necessary again. Though employee compensation has no doubt declined, the practice of self-restraint in the consumption of services such as eating out and travel on top of the special fixed benefit paid in 2020 means that household savings are accumulating at a pace far exceeding that of the period before the spread of COVID-19 (Chart 9). The tendency of households to devote a certain percentage of disposable income to savings has been observed previously. However, surplus savings exceeding this past trend are estimated to have reached around 29 tril yen in 2020[7]. Surplus savings are expected to continue growing in the future, with around 17 tril yen expected to be added on top of the current amount between now and the Jan-Mar period of 2023.

Outlook for Household Savings (Flowchart) Chart 9



Source: Cabinet Office; compiled by DIR.
Note: Figures all seasonally adjusted. Circles on the right side of the chart which are not colored in are DIR estimates. Amount of savings = disposable income – household final consumption expenditure.

Trends in Economic Activity Index (All Industries) Chart 10



Source: Ministry of Economy, Trade and Industry, Ministry of Land, Infrastructure, Transport and Tourism, Ministry of Internal Affairs and Communications; compiled by DIR.
Notes: 1) Tourism, Eating & Drinking and Entertainment includes accommodations, eating & drinking services, passenger transport, living related and personal services, and entertainment.
2) Figures in parenthesis denote weight of value-added productivity for that industry based on the input-output table for the year 2015.

Looking at the amount of savings (surplus amount) of working households in 2020 by age group of head of household from the Ministry of Internal Affairs and Communications Family Income and Expenditure Survey, we can see that it has increased from the previous year in all income categories. In particular, it

[7] Disposable income during the Oct-Dec period of 2020 estimated by DIR.

increased in households where the head of household is age 60 or older. Looking at household members and annual income category (quintile), the amount of savings generally increased. The rate of increase in savings was particularly high in the group with the lowest annual income. This is because households with lower incomes were more affected by the increase in income from the special fixed benefit.

However, this is merely a portrait of the average Japanese household. The economic environment is still likely to be harsh for people in industries that are severely affected by measures to prevent the spread of infection. The movement of goods has already normalized as of the fall of 2020, with the world trade volume having exceeded the level seen before the pandemic began, and economic activity in the manufacturing industry and the service industries not so heavily influenced by the measures to prevent the spread of infection have also just about recovered to the level seen before the spread of infection began. On the other hand, the economic activity level in January 2021 in the tourism, eating & drinking, and entertainment industries (accommodations, eating & drinking services, passenger transport, living related and personal services, and entertainment) was 36% lower than in December 2019 before the pandemic hit.

Chart 10 presents a factor analysis of the activity index by industry (all industries excluding agriculture, forestry & fisheries, and government). The rate of deviation from the December 2019 index is shown on the monthly line graph. January 2021 is at around -4%. Most of this downturn is in the tourism, eating & drinking, and entertainment industries, which accounted for less than 10% of value-added productivity in 2015. If demand in these industries is stimulated on a large scale, it will only promote the spread of infection, hence it is difficult to survive the coronavirus crisis through corporate efforts alone, such as expanding sales channels and reducing business costs. It will be necessary to provide ample support to businesses in these industries and their employees until there are clear signs that the pandemic is on the way to being brought under control.

For example, in addition to the special measures for employment adjustment subsidies (hereinafter referred to as employment subsidies), which will be described later, the amount in subsidies for shortening business hours will be reviewed according to the scale and form of the business establishment and the economy of each region. Special factors must be taken into consideration, such as the risk of infection in operating businesses in the entertainment industry. On the other hand, the Go To Travel Campaign, in which a budget of about 1.3 tril yen was added to the comprehensive economic measures compiled at the end of 2020, may be restarted depending on how the infection situation develops. Assuming the program is resumed, travel may be limited to weekdays and to specific regions, with a reduction in the subsidy rate for travel on holidays and for popular tourist destinations in order to diversify demand. A mechanism will have to be incorporated by which the program can be quickly suspended temporarily in case the infection situation worsens.

Employment subsidies, which have contributed to keeping the unemployment rate down, must be extended, as well as upgraded and fine-tuned

One of the most effective support policies implemented by the government after COVID-19 began to spread is the special measures for employment subsidies, which have been expanded several times. According to the Cabinet Office report, "Japan's Economy 2012-2013", it is estimated that the expansion of employment payments implemented during the global financial crisis of 2008 kept the unemployment rate down from April to December in 2009 by 0.4-0.8%pt. Calculating the unemployment rate suppression effect during the coronavirus crisis with reference to this method, it appears that unemployment was reduced by 2.0-2.4%pt from April to December 2020 (Chart 11-1)[8]. This calculation

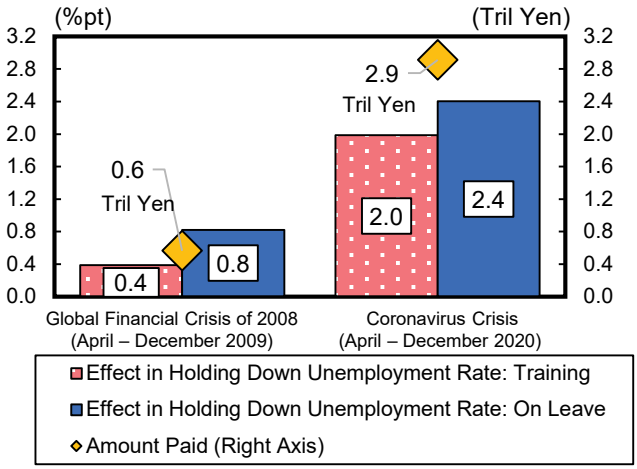
[8] Calculations were based on a sample survey of employment payments conducted by the Ministry of Health, Labour and Welfare assuming that it takes two months from implementation of work leave to payment decision (Ministry of Health, Labour and Welfare "Document 5: Secretariat Explanatory Material" (November 16, 2020). Estimates were made based on the results of the 2nd Employment Policy Study Group handouts). The reason for using the period April-December 2009

estimates the number of workers who would have been unemployed if it weren't for employment subsidies[9], divided by labor force population. It is necessary to take these results with a certain grain of salt, but hypothetically speaking, if the employment subsidies had not functioned sufficiently after the spread of COVID-19, the unemployment rate could have risen temporarily to over 5%. It is therefore fair to say that this measure stopped the deterioration of the employment environment on a scale far larger than that during the global financial crisis of 2008.

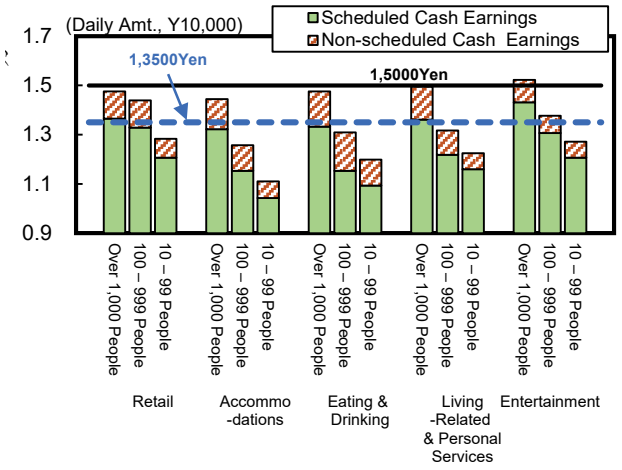
Payments of the employment subsidy have already exceeded 3 tril yen, and it would be difficult to maintain the program as it is now with current funding. It is conceivable that a budget could be secured as an additional economic measure, but on the other hand, as mentioned above, the degree of recovery of the business environment after the pandemic began is different for each industry, and it is necessary to provide uniform support regardless of the industry. In the future, it will be important to adjust employment measures in a more sustainable manner, such as by fine-tuning the program.

In connection with this, the government's New Employment and Training Package, released on February 12, 2021, maintains employment subsidies for regions and companies that require it through May and June unless the employment situation deteriorates significantly, while steering policy in the direction of a gradual reduction in special measures, and maintaining limited support. The upper limit of daily payment is expected to be lowered from 15,000 yen to 13,500 yen. Even after the reduction, the regular salary of many employees working in the personal services industry (including overtime salary for companies with less than 1,000 employees) is expected to be generally covered (Chart 11-2). In addition, regarding the payment of various benefits, it will be necessary to adjust the system based on the actual economic situation.

Effect of Employment Subsidies on Holding Down the Unemployment Rate, and Amount of Payments
Chart 11-1



Average Salary of General Worker by Industry & Number of Employees (2019)
Chart 11-2



Source: Ministry of Health, Labour and Welfare, Ministry of Internal Affairs and Communications, Cabinet Office; compiled by DIR.
Note: The Effect in Holding Down Unemployment Rate as shown in the left side of the chart is the number of workers receiving payments of employment subsidies throughout the period divided by labor force population during the period. The assumption is that it takes two months from implementation of work leave to payment decision. Hence, the benefit for April – December 2009 has a payment decision period of June 2009 – February 2010, and the April – December 2020 benefit has a payment decision period of June 2020 – February 2021. On Leave means that employees took leave only, while Training means that workers received training and education during their time on leave. Data includes the effects of both the SME Emergency Employment Stability Subsidy of April – December 2009 and the Emergency Employment Stability Subsidy of April – December 2020. The chart on the right assumes that the regular wage is for one 8-hour day.

for the period of the global financial crisis of 2008 is that the cumulative payment decision amount from June 2009 to February 2010 is the largest among the nine months under the expansion measures.

[9] The estimate calculates the number of workers who could continue to take leave for the full nine months due to payment of the employment subsidy. In reality, it is important to note that it is not always the case that a particular worker will continue to take leave for the full nine months, and even if no employment subsidy is paid, the company may not necessarily dismiss workers.

Organization and set-up for performing vaccinations should be provided with strong support

In the Comprehensive Economic Measures to Secure People's Lives and Livelihoods towards Relief and Hope compiled at the end of 2020, it states that "for vaccines, the highest priority is to confirm the safety and efficacy of all vaccines by the first half of next year. We are trying to secure the quantity that can be provided to the people. At that time, we will subsidize the expenses required for system development such as local public organization and bear the national expenses for vaccination so that people who want it can receive the vaccine without delay. We will make every effort to improve the inoculation system."

However, as shown in Chart 6 (on Pg. 8), vaccination in Japan has been delayed not only in the start time but also in the pace of vaccination compared to other countries. When he took office on January 20, US President Joe Biden announced that he would aim for 100 million vaccinations by the end of April, 100 days after the inauguration of the administration, but he achieved this goal in just 58 days. Meanwhile, Prime Minister Suga has only said that he plans to secure 100 million vaccines by the end of June. He has indicated that he will do everything in his power to facilitate large-scale vaccination, but has not stated a specific target for the number of vaccinations. There is a lot of room to further accelerate the pace of vaccination financially as well, while reviewing the operational aspects and promoting the securing of human resources for vaccination.

Once the infection has subsided, the shortage of demand in the economy as a whole will shrink rapidly, and economic support measures for tourism, food and entertainment will be nearing an end. In that sense, promotion of vaccination not only protects the lives of the people, but can also be said to be the greatest economic measure. We hope that additional economic measures, which are expected to be debated beginning in FY2021, will be considered from this perspective.

Japan's Economic Outlook No. 208 (March 9, 2021) **Chart 12**

		2020			2021				2022				2023	FY2020	FY2021	FY2022
		Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar			
Real GDP	Q/q %; annualized	-29.3	22.8	11.7	-5.1	4.8	2.4	2.2	2.3	2.3	2.5	2.2	2.1			
	Y/y	-10.3	-5.8	-1.4	-2.1	8.1	3.3	1.0	3.0	2.3	2.3	2.3	2.3	-4.9	3.7	2.3
Private spending	Q/q %; annualized	-29.5	22.0	9.0	-10.7	6.4	2.4	2.7	3.4	3.8	3.8	3.4	3.3	-6.3	2.7	3.4
Private housing investment	Q/q %; annualized	2.0	-20.9	0.2	1.6	1.7	1.7	2.0	2.4	2.6	2.6	2.4	2.0	-7.3	0.0	2.4
Capex	Q/q %; annualized	-21.5	-9.2	18.2	-4.3	7.4	4.1	3.2	3.6	4.5	4.5	3.6	3.2	-6.8	4.0	3.9
Government final consumption	Q/q %; annualized	1.0	12.1	7.6	-3.6	0.6	0.6	0.4	0.4	-1.4	0.4	0.4	0.4	3.4	1.2	-0.0
Public investment	Q/q %; annualized	9.3	3.8	6.1	0.2	0.2	0.4	0.4	0.6	0.6	0.2	0.2	0.2	4.6	1.0	0.4
Exports	Q/q %; annualized	-52.9	33.2	52.4	4.5	9.5	9.6	5.6	5.0	4.9	4.5	4.1	3.6	-10.9	13.3	5.0
Imports	Q/q %; annualized	5.1	-29.0	17.0	-1.6	9.3	8.2	5.8	6.6	6.8	6.9	6.1	5.7	-6.7	4.4	6.6
Nominal GDP	Q/q %; annualized	-28.2	23.7	9.6	-5.4	6.0	3.3	2.7	2.9	2.9	3.3	3.0	3.0	-4.2	4.0	3.0
GDP deflator	Y/y	1.4	1.2	0.3	0.1	-0.2	-0.0	0.5	0.7	0.7	0.6	0.7	0.8	0.7	0.3	0.7
Industrial production	Q/q	-16.9	8.8	6.3	1.6	2.6	2.6	2.2	1.8	1.5	1.5	1.2	1.2	-9.8	13.0	6.8
Core CPI	Y/y	-0.1	-0.2	-0.9	-0.6	-0.0	0.8	1.3	0.8	1.0	0.6	0.7	0.9	-0.5	0.7	0.8
Unemployment rate	%	2.7	3.0	3.0	2.9	2.9	2.8	2.8	2.7	2.7	2.6	2.6	2.5	2.9	2.8	2.6
Trade balance (goods, services)	Y tril; annualized	-5.9	4.9	9.8	8.1	8.4	9.2	9.2	8.8	8.6	8.4	8.0	7.7	4.2	8.9	8.2
Current account balance	Y tril; annualized	8.9	16.6	25.1	24.7	24.3	24.4	24.7	24.4	24.0	23.4	23.0	22.5	18.9	24.6	23.3
Major assumptions																
Crude oil price (WTI futures)	$/bbl	28.0	40.9	42.7	58.7	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	42.6	65.0	65.0
Exchange rate	Yen/$	107.6	106.1	104.5	105.7	108.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0	106.0	108.0	108.0

Source: Compiled by DIR.
Note: GDP through Oct-Dec 2020: actual; thereafter: DIR estimates.