

## Section 3

# US ECONOMY AIMING AT A STABLE GROWTH PATH FROM RECOVERY<sup>1)</sup>

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## 1. Introduction

The COVID-19 pandemic, which has caused more than 3.55 million deaths worldwide and more than 590,000 in the US alone, is still rampant all over the world and has not settled down yet. In the US, however, the once out-of-control surge of COVID-19 is rapidly subsiding thanks to the mandatory wearing of face masks and the incredible speed of the vaccine roll out by President Biden who took office on January 20, 2021. As of June 2, 2021, about 41% of adults over the age of 18 have completed the full two doses and about 61% have received at least one dose, and the total number of vaccinations has reached 297 million. As a result, the number of newly infected people, which once exceeded 200,000 per day, has now decreased to 20,672 (two-week average) and the declining trend is continuing. With the decline in infection cases, people's economic activities are becoming active and the expectation for normalization is rising.

The first feature of the COVID-19 recession in the US is that it is a combined recession caused by an infectious disease. Above all in such a case, the infectious disease (COVID-19) itself has the greatest impact on the economy, but there are interactions between the spread of the disease and people's behaviors, which in turn produce the combined economic outcomes. Unless the infectious disease subsides, a full-fledged economic recovery cannot be expected. If the impact of COVID-19 were temporary, the adverse effects on the economy may have been similar to those of natural disasters, such as a hurricane, but the adverse effects are different from natural disasters in that they are not a one-shot phenomenon but a series of results that interact with human activities.

The second feature of the COVID-19 recession is the size of its impact. It is the worst recession for the US economy since World War II with an impact as massive as the Global Financial Crisis (GFC) in 2008. However, the major difference from the GFC is that the starting point of the recession was an enormous decrease in autonomous consumption, which had an immediate impact on the entire economy.

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1) I would like to thank Prof. Kazuhiko Nishina and Dr. Karavasilev Yani for their helpful advice on this report. However, any possible remaining errors are my own.

This report provides an overview of the impact so far of the still ongoing COVID-19 pandemic on the US economy, and of how the US government and the Federal Reserve Board of Governors (FRB) have been responding and how the US is trying to rebuild its economy.

The organization of this report is as follows. The next section 2 provides an overview of the impact of COVID-19 on the US economy and its features. Section 3 briefly explains the American Rescue Plan (ARP; \$1.9 Trillion Stimulus Package), the Infrastructure Plan, and the American Family Plan (AFP) by the US government as well as the expansionary monetary policies by the FRB. Section 4 describes the current state of the US economy as a combined result of the impact of COVID-19 and the policies by the US government and the FRB. Section 5 introduces the hot debate over the scale of the current policies adopted by the government and the FRB. The last section 6 explains the outlook for the Biden administration's policies and their impact on the Japanese economy.

## 2. Impact of COVID-19 on the US economy

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First, in order to understand the scale and nature of the COVID-19 pandemic, let's compare the current COVID-19 recession with the previous GFC.

### 2-1. Comparison of the COVID-19 Recession with the Global Financial Crisis in 2008

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#### (1) Production

Figure 1-3-1 shows the monthly production index data during the COVID-19 recession and the GFC. While there might be a few different views on when the GFC began, Figure 1-3-1 sets the starting date of the GFC as December 1, 2007, when production began to decline after the housing bubble burst. The starting date of the COVID-19 pandemic is set to February 1, 2020, just before the wide spread of COVID-19 in the US. The graph compares the production time line for the COVID-19 recession with that for GFC.

First of all, Figure 1-3-1 shows that production plunged in both recessions, to slightly higher than 80% of the level just before these incidents. They are the two worst recessions in the US since World War II.

Secondly the bottom of GFC was 19 months after its starting month, while the bottom of the COVID-19 recession was in April 2020, only 2 months after its starting month. GFC was triggered by the burst of the housing bubble in the summer of 2006, leading to a turmoil in financial markets, which in turn widely spread to the real economy by September 2008. The impact of the turmoil in the financial markets on the real economy was so devastating that it took more than

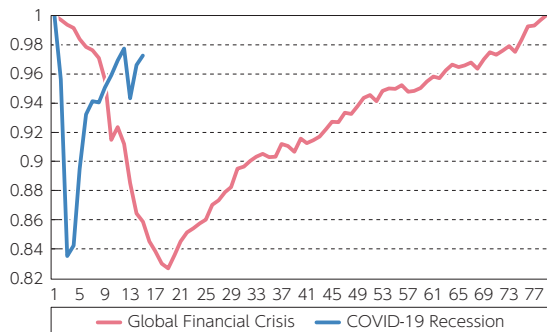


Figure 1-3-1

## Global Financial Crisis and the COVID-19 Recession: Production

Source: Federal Reserve Bank of St. Louis

six and a half years for production level to fully return to normal.

In contrast, production experienced a sharp and significant drop in the COVID-19 recession immediately after the wide spread of the disease, but it soon recovered to 94% of the pre-pandemic level and to 97% by April 2021, 1 year and 2 months after the start of the recession. Of course, this rapid recovery is, as described later, mainly attributable to the fiscal and monetary policies implemented by the government and the FRB.

## (2) Unemployment rate

Figure 1-3-2 uses monthly index data to make a comparison on unemployment rates between the COVID-19 recession and GFC. Comparing the size and depth of economic damage, the unemployment rate spiked in April 2020 to 14.8% in the COVID-19 recession, just 2 months after February 2020 when COVID-19 began to spread widely. Although 14.8% is much higher than the worst unemployment rate of 10.0% in GFC, it rapidly recovered to 6.1% in April 2021.

The COVID-19 pandemic brought about not only an increase in unemployment, but also a reduction in labor force participation, an increase in temporary leave from work, and a decrease in working hours. Such trends are most notable in socially vulnerable populations (Bloom et al.(2021)).

## 2-2. Long-term effects<sup>2)</sup>

In addition to the short-run impacts on the current economy, including on production and the unemployment rate, the long-run impacts of the COVID-19 pandemic cannot be overlooked. Unlike ongoing short-term effects, however,

2) Much of this subsection relies on Arthi and Parman (2021).

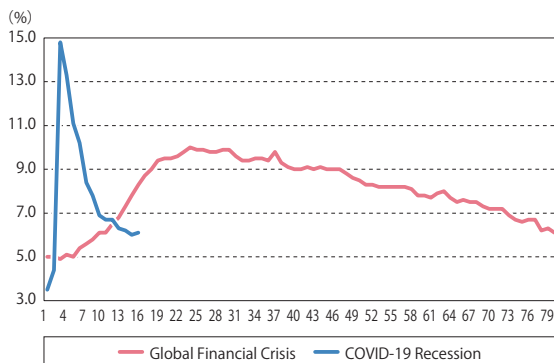


Figure 1-3-2

### Global Financial Crisis and the COVID-19 Recession: Unemployment Rate

Source: Federal Reserve Bank of St. Louis

it is difficult to identify the long-term effects, since objective and clear evidence is hard to obtain now. For this, Arthi and Parman (2021) adopted a historical approach and considered long-term effects. Recognizing that the COVID-19 pandemic is an extremely severe infectious disaster that caused an economic depression, they discussed the long-term effects of the COVID-19 pandemic on health, the labor force, and human capital by obtaining insights into the pandemic from history on the 1918 Spanish Flu pandemic, and the 1930s Great Depression. The former provides the information on the nature of a devastating infectious disease, and the latter its impacts on the economy, respectively. The following outlines the issues relating to long-term effects in line with the discussion by Arthi and Parman (2021).

The authors discussed the long-term effects of infectious diseases by dividing them into (1) direct effects on health and (2) the corresponding economic effects (indirect effects).

#### (1) Direct effects on health

First, it is natural that reducing the death toll from infectious diseases is a top priority issue. It is known that the elderly and those with underlying disease are prone to death. From the past cases, infectious diseases are also known to have a large adverse impact on health, including morbidity and mortality. They adversely affect low-income people and other socially vulnerable populations, mainly women and racial minorities. The spread of infectious diseases also reduces the number of marriages and live births, further affecting the population and its composition in the country. It is statistically known that those who were

infected but survived also suffered from various adverse effects in their subsequent lives.

The 1918 Spanish Flu pandemic is known to have caused reductions in high school completion rates, wages, and socioeconomic status, alongside increases in the probability of living in poverty, the receipt of welfare payments, the likelihood of incarceration, miscarriages, stillbirths, and infant mortality rates. It is also known that those who were exposed to the Spanish flu pandemic in their mother's womb are likely to have suffered from various health problems later in life compared with other generations, ranging from basic functional limitations, such as hearing, speaking, lifting, and walking, to increased probability of experiencing diabetes and strokes. In Japan, it reduced boys' and girls' heights by 0.28 cm and 0.14 cm, respectively.

In the case of the COVID-19 pandemic, it has been reported that in addition to the impact on physical health, there is an increased risk of mental health disorders due to limited interactions with other people.

## (2) Economic effects (indirect effects)

Those who were in their mother's womb during a pandemic suffer a great socioeconomic handicap even after they grow up. A decrease in household income has direct economic adverse effects, lowering their college completion rates and lifetime earnings, and raising their rates of later-life poverty. These adverse effects are more pronounced in poorer areas.

Other problems arising from the economic impacts are the long-term adverse effects on labor markets and human capital acquisition. In the Great Depression, it was markedly the less-educated workers, who entered the labor market in the 1930s, and those born in areas adversely affected by the depression that incurred the larger reduction in their incomes. It has also been reported that many younger workers reluctantly accepted the jobs that they otherwise might not have accepted in better economic times because of their current dire need for work, or competition with older workers, or both of these factors.

So far, we have discussed the long-term effects of infectious diseases by dividing them for convenience into (1) the direct effects on health and (2) the economic effects (indirect effects). However, in reality, there are some aspects in which health problems cannot be separated from economic problems. Infectious diseases have adverse effects on all people, but how and to what extent such effects will emerge are different, and they tend to be stronger among socioeconomically vulnerable populations. The reason why socioeconomic status matters is because it is closely related to occupation, living standards, and access to medical care. As a result, it is said that the adverse effects of infectious

diseases are not uniform across a society, and even exacerbate existing socio-economic disparities. It has also been reported in the media that COVID-19 has caused greater damage to socioeconomically vulnerable populations.

The following points are important as the implications for policies from a long-term perspective. Infectious diseases create long-term adverse effects on both health and economic aspects (human capital formation), which is highly costly in the long run. The sooner the human capital investment is made, the more productive it will become. Therefore, it suggests that implementing government relief measures now, such as cash transfers, can create larger long-term benefits in terms of costs-benefits from a long-term perspective.

In the next subsection, we will review what measures the US government and the FRB have taken for the above-mentioned serious pandemic disaster.

### 3. Fiscal and monetary policies by the government and the FRB

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COVID-19 affects both production and spending in the economy at the same time. If people stop traveling or going out for meetings, it will decrease travel-related consumption, accommodation use, restaurant- and transportation-related sales, etc., to reduce total economic spending (or demand).

If COVID-19 infections break out in a factory or a production supply chain, production may be disrupted. If disruption spreads widely, supply will decrease in the entire economy. Thus, COVID-19 can logically reduce both aggregate demand and aggregate supply. However, when observing the real economy, we see the impact on aggregate supply has been limited up until today, while a decrease in aggregate demand has had a significant impact.

If a decrease in autonomous spending is left unattended, it will cause a negative chain reaction of declining consumption, generating negative multiplier effects that further curtail aggregate spending and incomes. Therefore, stopping this negative chain reaction by taking all possible fiscal and monetary policy measures is a top priority issue. When COVID-19 began to spread widely in February 2020, the then Trump administration and the FRB immediately increased government spending and implemented monetary easing policies. These policies are standard economic policies taught in modern macroeconomics.

#### 3-1. Expansionary fiscal policy 1: American Rescue Plan (ARP; Biden's \$1.9 Trillion Stimulus Package)

Regarding fiscal policies, after a series of rescue packages by the former Trump administration, the ARP proposed by the new President Biden amounting to about

USD 1.9 trillion was approved by Congress in March 2021. The additional measures by the Biden administration focused mainly on household support and consisted of cash transfers of USD 400 billion, unemployment benefits of USD 250 billion, COVID-19 measures of USD 400 billion, and other items of USD 850 billion.

Despite the lack of cooperation from the Republican Party, President Biden's USD 1.9 trillion COVID-19 rescue plan was approved and implemented in May 2021 with the support of the Democratic Party, which has voting majorities in both the upper and lower houses of the US Congress.

### 3-2. Expansionary fiscal policy 2: Infrastructure Plan and American Families Plan

On March 31, 2021, President Biden proposed a plan for infrastructure development and job creation (hereinafter, the "Infrastructure Plan") worth USD 2.3 trillion over eight years. The plan is to invest in infrastructure such as roads, bridges, and schools to boost productivity. The program is to be financed by raising corporate tax from 21% to 28% over 15 years.

On April 28, 2021, President Biden made his first policy address after taking office at a joint session of Congress, where he presented another USD 1.8 trillion, 10-year American Families Plan (AFP). This AFP together with the above USD 2.3 (or 2.2) trillion Infrastructure Plan announced on March 31 makes a total of USD 4.1 trillion government spending and tax cuts.

The Infrastructure Plan consists of four pillars: (1) the improvement of transportation networks such as roads, bridges, ports, railways, and airports, (2) the improvement of water and sewage, public schools, childcare facilities, public facilities such as community colleges, and buildings ("infrastructure" is defined in a broader sense than the conventional one, including high-speed broadband and clean energy development such as solar power generation), (3) systems development to support people with disabilities and the elderly, and (4) support for technological innovation, the domestic manufacturing industry, etc., to create high-quality domestic employment opportunities. Through the above-mentioned large-scale infrastructure development over eight years, the plan aims for a high economic growth rate by creating high-quality domestic employment opportunities and raising the level of the domestic middle class.

The AFP addresses the following four challenges: (1) providing various programs to support access to a good education, such as education support for children (three and four years old) and two years of free community college, (2) providing access to quality and affordable childcare, (3) providing up to 12 weeks of paid leave for family-related leave and medical leave, and (4) extending tax credits under the USD 1.9 trillion ARP that passed Congress in March.

Biden wants to finance the Infrastructure Plan with a corporate tax increase over 15 years and a part of the AFP with a tax increase for high income earners, respectively. Additional spending for the Internal Revenue Service Agency is also proposed to eradicate tax evasion and to increase revenue. The Biden administration is currently discussing the Infrastructure Plan with the Republican Party in Congress to pass a bipartisan bill.

These policies have at least the following two major objectives; one is the improvement of productivity through infrastructure development, while the other is the creation of high-quality domestic jobs. The trickle-down theory (or trickle-down economics: a theory that claims that if the rich get richer, the benefits will trickle down to everyone else) in the previous policies did not work because it only increased the profits of giant companies like GAFAM (Google, Amazon, Facebook, Apple), whose huge profits boosted only the wealth of a few capitalists, and the income of the middle class was taken by foreign countries such as China. These are some observations lying behind the above new policies.

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### 3-3. Expansionary monetary policies

The FRB also implemented expansionary monetary policies one after another. On March 3, 2020, immediately after the wide spread of COVID-19, the FRB lowered the federal fund rate (FFR) (i.e., money market rate) by 0.5% to a range from 1.00% to 1.25%, and on March 15, it further cut it by 1.00% to a range from 0.00% to 0.25%. The FRB decided to purchase US Treasuries worth at least USD 500 billion and mortgage-backed securities (MBS) worth USD 200 billion per month and launched a new quantitative easing policy. On March 23 of the following week, the FRB introduced various programs to provide abundant liquidity, including an emergency liquidity supply program to maintain the stability of financial markets, as the liquidity of the entire economy was expected to contract rapidly if left unattended. As of May 2021, the FRB is continuing a policy to lead the money market rate to almost 0% and to supply a large amount of high-powered money to the economy through a quantitative easing policy to fight against the recession.

So far, we have explained the impact of COVID-19 on the economy and the measures taken by the government and the central bank to address this impact. In the next subsection, we will explain the resulting state of the US economy as of May 2021.



## 4. Current state of the US economy

### (1) Production

Figure 1-3-3 shows the production index from January 2000 to April 2021. The production level rebounded sharply from the decline in March and April 2020, partly due to the effects of the bold and seamless expansionary fiscal and monetary policies started immediately after the wide spread of COVID-19. But since February 2021, the pace of recovery has somewhat slowed down.

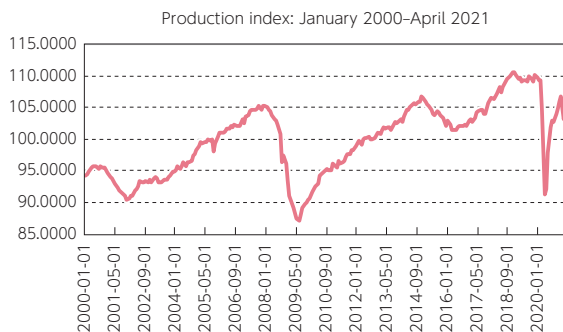


Figure 1-3-3

Production index: January 2000–April 2021

Source: Federal Reserve Bank of St. Louis

Unlike natural disasters such as hurricanes, floods, earthquakes, and wildfires, the economic impact of the infectious disease is not transient, but persistent. If people in society protect themselves using defensive measures such as social distancing, mask wearing, and vaccinations, the negative impacts on the economy will be reduced. But if economic activities are resumed with insufficient protection, the infection will spread again and the impact could be significant. The figures on production activity represent the results of the conflict between the COVID-19 pandemic and human society. The slowdown in the recovery after February 2021 is taken to be largely due to the counterattack by the infection. Since progress is being made in the vaccination roll out, the recovery trend is expected to strengthen after May 2021.

### (2) Unemployment rate

Similarly to the production index, the unemployment rate hit a peak of 14.8% in April 2020, the worst in the post-war period, and then quickly recovered to 6.1% as of April 2021 due to the successful expansionary fiscal and monetary policies. However, there still remains a considerable gap to reach 3.5% in February 2020,

the rate before the spread of COVID-19.

### (3) Prices

For the consumer price index (CPI) in April 2021, the headline CPI increased by 4.2% and the core CPI, excluding food and energy, by 3.0% compared to the same month of the previous year, both significantly exceeding the target of 2%. However, all of these indices have risen sharply since March 2021, partly reflecting the impact of the sharp decline in the indices in the same month in the previous year due to the rapid spread of COVID-19. The FRB is maintaining its policy stance of continuing monetary easing, judging that the price increase of more than 2% in recent months is only transient. The expansionary monetary policy by the FRB has been effective in raising housing prices, stock prices, commodity prices, and personal consumption, and depreciating the US dollar, which shows that expansionary monetary policy strongly supports the real economy from a financial perspective.

The above is an overview of the current state of the US economy. It seems that the most important factor in the outlook is still whether or not COVID-19 can be completely contained.

## 5. Are fiscal and monetary policies too expansionary?<sup>3)</sup>

As seen above, the expansionary fiscal and monetary policies taken after the surge in COVID-19 cases have helped prevent a sharp economic downturn. This achievement by the government and the FRB cannot be denied. However, some economists have warned the government and the FRB about continuing the fiscal and monetary policies even now for more than a year from the wide spread of COVID-19. One such economist is Lawrence H. Summers, a professor at Harvard University, who advised the president on economic policies during the Clinton and Obama administrations. For example, he criticized the USD 1.9 trillion ARP, which was enacted by the Biden administration, for being too large a budget and that it could overheat the economy, leading to excessive inflation in the future<sup>4)</sup>. He also expressed his concerns about the possibility of excessive inflation in the future, arguing against the FRB's explanation that the current surge in inflation is only transient.

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3) I would like to thank Kazuhiko Nishina for drawing attention to Krugman's editorial (2021b) for this section.

4) Barry Eichengreen (2021), a professor at the University of California, Berkeley, also wrote that concerns about economic overheating due to excessive government spending could not be dispelled.

On the other hand, Paul Krugman, a professor at Princeton University, is one of the economists who support the government's and the FRB's view. His take is that the economy has recovered significantly, as seen from indicators such as the production index and the unemployment rate, but the labor market is still far from full employment. Hence the current expansionary fiscal and monetary policies should be continued for the time being. In response to Summers' claim that the budget size of the USD 1.9 trillion ARP package is too large, Krugman argues, using [Figure 1-3-4](#), that if it turns out to be too large, monetary policy may be tightened at the appropriate timing.

[Figure 1-3-4](#) reproduces the figure drawn by Krugman published in the New York Times. It is assumed that the US economy is currently at the point P where the IS curve 1 intersects with the ZLB (zero lower bound) line. There is an output gap between the actual GDP and the potential GDP at the full employment level.

The FRB can usually stimulate the economy by lowering interest rates during a recession, but there is a limit to how low it can go; namely, the "zero lower bound (ZLB)." The ZLB does not necessarily mean that the interest rate has the lower bound exactly at 0%, but rather it means that the interest rate is bounded at some value close to zero. If the ZLB is not low enough for the real economy, the economy is stuck in a liquidity trap. In such a case, the interest rate cannot be lowered below the ZLB by an expansionary monetary policy. However, an expansionary fiscal policy is still effective in achieving full employment. The IS curve 2 in [Figure 1-3-4](#) shows a case where the fiscal stimulus is excessive and the policy goes too far. Krugman explains that if the output gap (the difference between potential GDP and real GDP) disappears as shown in the figure, the FRB should use monetary policy to curb economic overheating, adding that the US economy has a track record of successful monetary tighten-

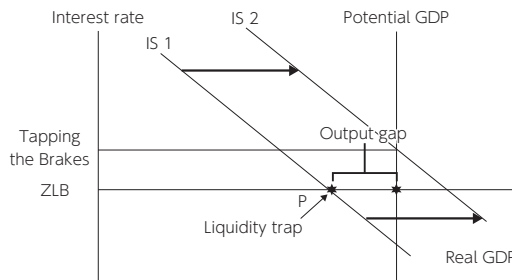


Figure 1-3-4

When an Expansionary fiscal policy Goes Too Far

ing in the mid-1980s and mid-90s without causing dangerous recessions.

## 6. Outlook for the US economy and its implications for the Japanese economy

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Finally, in this subsection, I would like to discuss the outlook for the US economy and its impact on the Japanese economy.

### 6-1. Recovery from the COVID-19 recession

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In response to a recent media question, President Biden declared that “America is back.” The Biden administration, which started on January 20, 2021, has made a good start so far. Immediately after taking office, President Biden succeeded in greatly suppressing COVID-19, which had been out of control, by procuring sufficient vaccines and guiding people to get vaccinated, as well as by making it mandatory for 100 days for people to wear face masks.

The fight against COVID-19 is the most important factor for the US economy in the short run. President Biden has set a goal of administering at least one vaccine shot to 70% of Americans by July 4. If the US government firmly maintains a direction of suppressing COVID-19 to completely control the pandemic in the future, there are currently no other major factors that would hinder the future growth of the US economy<sup>5)</sup>. In that case, a gradual recovery from the deep recession will continue. On the other hand, if the control of COVID-19 is delayed for some reason, the future economic recovery will also be delayed. Considering that the government and the FRB have firmly implemented counter-pandemic measures, we can fully expect that they will take promising measures to address the pandemic in the future as well.

The recovery of the US economy is also extremely important for the Japanese economy. First, the US economy and its policies have a significant and immediate impact on the Japanese economy through stock prices, exchange rates, and interest rates. Also in the real economy, the US is not just Japan’s second-largest trading partner. Since the US is the world’s largest economy, its economic recovery will lead to a global economic recovery, which in turn indirectly improves the Japanese economy through its trade volumes and overseas business activities. Due to these reasons, the US’s early exit from the COVID-19 pandemic is vitally important for the Japanese economy as well.

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5) However, it is necessary to pay close attention to the recent surge in housing prices.

## 6-2. Medium- to long-term issues

For the medium to long term, the Biden administration announced a USD 2.3 trillion Infrastructure Plan in March 2021 and USD 1.8 trillion American Family Plan in April 2021. With regards to the Infrastructure Plan, as of May, the Democratic Party is seeking a compromise with the Republican Party. The Infrastructure Plan is based on the ideas of orthodox economics. It aims to improve productivity and income for the middle class by developing infrastructure, including renovations of old bridges and roads, and securing employment for the middle class. The plan is to get the budget balanced in multiple years, as it will take 15 years to cover the cost of the 8 years of spending<sup>6)</sup>. The policies are designed to help the recovery from the current recession, as spending comes first in the short run.

Only 4 months have passed since the Biden administration took office in January (as of the time of writing this report in May 2021), but the launch of the new administration is having an extremely large impact on the world economy, including the Japanese economy. President Biden had consistently insisted on aiming for a clean energy society even before the presidential election. President Biden has decided to return to the Paris Agreement on the first day of his inauguration, while the former President Trump repeatedly defended the fossil fuel industry in which the US has a comparative advantage and withdrew from the Paris Agreement immediately after taking office. President Biden says he plans to switch from fossil fuels to new clean energy sources, creating new industries and jobs in the process.

In Europe, the trend towards clean energy has already progressed. This trend is now further accelerated worldwide by the start of the Biden administration. Global warming countermeasures and conversion to clean energy sources will change the regulations on exhaust gas emissions in each country, which will in turn change the rules of competition for the development of new world-class technologies. It is a shift in competition rules under which companies compete with each other in making good products at competitive prices. The shift in competition rules will have a broad impact on the automobile industry, the financial industry, and the energy industry, including electric power.

This new trend is now widely and deeply affecting Japanese society. It has been reported that six related laws, including the revised Industrial Competi-

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6) Krugman (2021a) calls for an increase in government spending funded by deficit financing for the post-pandemic US economy. His policy prescription differs from the Biden administration's Infrastructure Plan in that it does not presuppose a fiscal balance.

tiveness Enhancement Act that promotes corporate efforts to combat climate change, were passed and enacted in the House of Councilors plenary session on June 9, 2021. These new trends are expected to continue and even intensify in Japan as well, at least as long as the Democratic Party takes the initiative in the US.

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