

Summary of the White Paper on International Economy and Trade 2020

Part I. The COVID-19 Crisis and the Global Economy

As a result of the impact of the novel coronavirus pandemic, the world is facing the worst economic crisis in the postwar period. In essence, the economic crisis triggered by the coronavirus pandemic (COVID-19 Crisis) is attributable to the fact that face-to-face interactions have been limited in many countries due to travel and shelter-in-place restrictions imposed in order to contain COVID-19 outbreaks.

Those restrictions have affected the economy on both the supply and demand sides. On the supply side, because of the stagnancy of the movement of people as well as the limits on person-to-person interactions, production activity and logistics operations came to a halt, causing a shortage of goods. Moreover, the restrictions have resulted in disruptions of cross-border supply chains because international division of labor advanced, and the provision of non-essential services, including entertainment and restaurant dining, has been suspended due to lockdowns and voluntary business restraints. On the demand side, as a result of shelter-in-place restrictions, voluntary restraint, and travel restrictions intended to contain COVID-19 outbreaks, demand for services involving face-to-face interactions shrank and demand for durable goods also fell steeply. Furthermore, the supply and demand shocks have had spillover effects on income and employment. As there has been a considerable impact on employment, mainly in face-to-face service industries, the COVID-19 Crisis has raised unemployment rates to the highest levels since the Great Depression in the 1930s. In short, uncertainties over the future course of the pandemic, rising unemployment rates, and sluggish income have caused consumption and investment to decline rapidly, triggering a vicious cycle of economic shocks.

Part II. The COVID-19 Crisis and Globalization

Chapter 1. What the Coronavirus Reveals About the Structures of Our World

- **Supply chain disruptions: Geographical concentration of production, logistics, and human mobility**

The risk of supply disruption materialized in relation to the following supply chain elements: (i) efficient production systems (lean inventories and geographical concentration of production in cost-competitive countries), (ii) flexible logistics combining land, marine and air transportation, and (iii) smooth movement of people. First, it became clear that at the global level, production of vital supplies was geographically concentrated with respect to some products, such as electrical machinery and electronic parts. Regarding auto parts, the geographical concentration of production did not increase at the global level. However, as automobile production involves numerous parts and complex production processes, supply chains have been disrupted due to the suspension of production of some parts.

In short, the attention attracted to the supply chain elements as a result of the coronavirus pandemic, including production systems, logistics and human mobility, has led us to recognize anew both the efficiency and risks of supply chains.
- **Cross-border movement of people, urban concentration of population, expansion of COVID-19 outbreaks, and face-to-face interactions**

Until now, cross-border movement of people has stimulated trade and investment. This relationship has been particularly strong in emerging and developing economies. On the other hand, due to restrictions imposed on cross-border movement of people as a result of the COVID-19 Crisis, trade costs, which had been falling in recent years, have risen and trade and investment have become very stagnant.

One prominent feature of the coronavirus pandemic is that outbreaks expand especially in urban areas, where services industries and people are concentrated and people from various countries mingle with each other. This has led to a rise in communication cost in industries in which face-to-face interactions are important. The impact of the coronavirus pandemic varies from industry to industry, depending on two perspectives: whether face-to-face interactions are necessary and whether at-home work (remote work) is possible. This indicates the importance of evaluating the impact of the coronavirus pandemic from the viewpoint of the evolution of human communication.
- **Increase in trade-restrictive measures**

As demand for personal protective equipment, including face masks and protective gowns, has grown explosively, shortages of medical supplies have become serious in various regions. As a result, some governments have adopted emergency measures focusing on satisfying their domestic needs, such as stockpiling supplies. If necessary supplies are not available in regions where COVID-19 outbreaks are escalating because of the weakening of international cooperation, worldwide containment of outbreaks will become difficult, posing a global risk. To resolve this problem, it is necessary to prepare for crises and cooperate with other countries in emergencies.

Meanwhile, although the U.S.-China trade friction has reduced trade and investment by both countries, exports from Southeast Asia to the United States have increased and China has started to invest in a greater variety of countries, including its neighboring ones. Trade-restrictive measures implemented in this situation, which serve as impediments to efforts to mitigate the impact of the coronavirus pandemic, have reminded us of the importance of ensuring continuous movement of goods. However, distrust of multilateral frameworks is not a symptom unique to the U.S.-China trade

friction, but it is a phenomenon observed globally, for example in the form of Brexit or the malfunctioning of the World Trade Organization's Appellate Body.

- Expanded economic digitization, growing presence of mega platform businesses, and rapid social implementation of innovative technologies associated with the impact of the COVID-19 Crisis

In recent years, digital technology has transformed the economy and society, accelerating the expansion of digital trade, including cross-border e-commerce, and the adoption of IT in social activities. As a result, the industrial structure is shifting from the "value chain model" to the "layer model." The network effect has contributed to the growing presence of mega platform businesses, whose net profits have grown five-fold over the past 10 years (their share increased from 6% to 13%). The expansion of these firms' presence coincides with a decline in industrial dynamism indicated by decreases in new market entry and exit.

During the COVID-19 Crisis, the digitization of the economy and society have accelerated rapidly, as shown by the spread of e-commerce and online communications. Moreover, there are growing needs for digital technology as a means to gather infection and contact-tracing information in order to contain COVID-19 outbreaks or as a means of communication that enables the continuation of business operations while minimizing person-to-person interactions, such as online business meetings, so technological innovation stimulated by the impact of the COVID-19 Crisis and social implementation of new technologies have made progress. As a result, there has been debate on how to strike a balance between privacy and public health.

- "Dollar concentration" and growing risk for emerging and developing economies

As a result of increased concentration of trade and credit transactions in the dollar, particularly in emerging and developing economies, it has become clear that in the event of a crisis, economic risks are concentrated in emerging and developing economies which are dependent on natural resources and tourism and which bear the burden of dollar-denominated debts. Capital flight from emerging and developing economies is a symptom of the "dollar concentration" risk.

One prominent feature of financing in recent years is that a system that facilitates fund flows that do not go through the United States has been developed. In this situation, Asian emerging economies have been building supply chains with a broad supplier base while increasing their exposure to dollar-based credits. It has become clear that as a result, supply chains may fail to function effectively when the growing "dollar concentration" risk undermines smooth payment to suppliers.

Chapter 2. Globalization: Past, Present and Future

- The past, present and future of globalization seen from the viewpoint of the "three unbundlings"

From the viewpoint of unbundling, globalization can be thought of as a progressive reversal of the forcible bundling of production and consumption, a process during which the three key costs of distance—the costs of moving goods, moving ideas (e.g., technological knowhow and data), and moving people—have continued to fall. This process has not proceeded all at once, but rather, various constraints have gradually been overcome.

In the first unbundling (from 1820 to 1990), the Industrial Revolution fostered innovation of transportation, lowering the cost of moving goods and resulting in the separation of production and consumption across national borders. While international division of labor taking advantage of comparative advantages made headway, the cost of moving ideas and people did not fall much. This resulted in industrial concentration in developed economies.

In the second unbundling, the information and communication technology (ICT) revolution in around 1990 lowered the cost of moving ideas (e.g., technological knowhow and data), making offshoring of production feasible. As production processes were dispersed across national borders, international trade in parts increased, promoting the development of global supply chains. As a result, the wage gap between developed economies and emerging and developing economies narrowed.

In the third unbundling from around 2015, the accelerating advance of digitalization has made it possible to work across national borders without physically traveling, by means of digital technology, reducing the cost of moving people. As a result, it has become possible to assign tasks to workers regardless of their physical location. The world was starting to witness the dawn of a new era of virtual work in which remote work, used in combination with robotics, enables workers in one country to provide services in another country without physically traveling, for example. As the coronavirus pandemic broke out during the process of the third unbundling, the digitization of economic and social activities has accelerated.

During the history of the unbundlings, the role of nation states has changed, from upholding free trade to pursuing a welfare state and small government. Going forward, expectations will grow for nation states to play an active role in providing livelihood security, supporting human capital investment and developing digital infrastructure.

- Globalization and unbundling for Japan

In the period from the end of World War II through the second half of the 20th century, the Japanese economy achieved rapid growth while enjoying the benefits of the advance of globalization and free trade amid the deepening of its link with the global economy. In particular, when international division of work was making headway during the process of the second unbundling, Japan contributed to the building of international supply chains, mainly in East Asia, thanks to its network of economic partnership agreements.

In recent years, the primary income balance (securities investment income, dividends, etc.) has underpinned Japan's current account surplus, reflecting a change in how Japanese companies are earning income. The change indicates that Japan has shifted from a trade-based current account surplus to an investment-based current account surplus (from a "trade nation" to an "investment nation") by taking advantage of the continuing high growth of Asia.

- A shift to the third unbundling in the world and challenges for Japan

In the process of the third unbundling, services industries are also expected to face a new situation exemplified by international division of labor and AI-based division of labor. To deal with this situation, it is important to develop social infrastructure technologies such as 5G and AI. Therefore, countries around the world are formulating AI strategies and developing digitization-related institutional frameworks, such as the General Data Protection Regulation (GDPR) in Europe. In Japan, too, in order to deal with the new industrial revolution being driven by the third unbundling, it is important to promote investment in and use of digital technology and infrastructure and develop institutional frameworks. Japan is contributing to international rulemaking concerning data distribution. At the time of the 2019 G20 Summit, Japan exercised leadership in launching the Osaka Track, which promotes such rulemaking under the Data Free Flow with Trust (DFFT) initiative.

At a time when cyberspace is critical for technology and service innovations, it is necessary to introduce an innovative governance method for controlling the risks involved in such technologies and services. Therefore, it is important to promote governance innovation that spurs technology and service innovation and realizes social value at the same time.

Chapter 3. The Way Forward for the World and Japan to Realize Ideal Society

- Upgrading of globalization

The COVID-19 pandemic, which is a global epidemic, cannot be brought under control through measures taken individually by countries. It requires a global response. However, in responding to the pandemic, some countries have taken emergency measures focusing on satisfying their own needs amid growing distrust of existing multilateral frameworks. On the other hand, at the leader and ministerial levels, some actions have been taken to maintain the unifying force of the international community and promote international cooperation. To resolve global challenges by enhancing the unifying force and promote international cooperation, it is essential to upgrade globalization.

- Building resilient supply chains

Amid the globalization of production activity, geographical concentration of production in pursuit of efficiency proceeded, and as a result, the risk of supply disruption emerged during the current crisis. In light of this, it is necessary to build resilient supply chains that can flexibly respond to new crises. To that end, it is necessary to consider shifting supply chains from a model focusing on efficiency to a model that accommodates flexible and timely changes through measures such as promoting public-private cooperation intended to enable flexible response suited to the type of goods in emergencies, diversifying procurement sources, and optimizing inventory levels.

- Acceleration of digitalization and evolution of communication in economy and society

Going forward, we may enter an era in which face-to-face communication is used only when it is absolutely necessary. It is essential to contribute to the evolution of communication by taking advantage of the current crisis as an opportunity for social change in order to promote the use of digital technology, including remote work, and accelerate human capital investment. To contain COVID-19 outbreaks, it is necessary to restrict activities involving face-to-face interactions. This suggests the possibility that in order to overcome constraints on communication, the development and social implementation of digital technology may rapidly accelerate, leading to irreversible social change.

- Toward promoting resolution of global challenges (SDGs)

To deal with pandemics, including the ongoing coronavirus pandemic, and new global crises and risks, such as environmental problems, it is important to achieve the Sustainable Development Goals (SDGs). All actors, including states, companies, NGOs, and individuals, should work together to actively make social investment so that global social challenges can be resolved and global sustainability can be enhanced through promoting international cooperation.

- Creation of new businesses through co-creation with emerging countries in accelerating digitalization of the world

If Japan is to maintain sustainable growth in the future amid the slowdown of the growth of developed economies, it is important to develop and strengthen a mechanism whereby it actively engages with emerging and developing economies and grows together with them. In countries where social infrastructure is underdeveloped, moves by growth companies to

resolve social challenges by using digital technology are accelerating. For example, Asian emerging economies are leapfrogging in digitalization as companies in the region are developing apps for collecting contact-tracing information. It is important for Japan to strategically deploy financial, human, and technological resources and knowhow to Asian emerging countries and promote an Asia Digital Transformation (ADX) initiative, which aims to create new businesses through cooperation with emerging-economy companies.