Introduction of the White Paper on International Economy and Trade 2019

Part II The current global economy and challenges to free trade

■ Chapter 1 Deeper cross-border integration of the global economy

< 11	acreasing economic interdependence among economies>
	As a result of the separation of locations of production and consumption due to declines in trade and communication
	costs, the movement of goods has become free, leading to the development of international division of work in the
	manufacturing industry. In the future, international division of work is expected to proceed further because of declines
	in face-to-face cost due to the use of information technology (IT).
	Between 1995, when the World Trade Organization (WTO) was established, and 2017, global exports of goods and
	services more than tripled. In particular, exports of goods by emerging and developing economies grew rapidly,
	increasing 6.5-fold. As the share of value added in the manufacturing industry in exports is growing in many economies,
	the interconnectedness of the global market is becoming more and more important. A shift to a trade structure centered
	around intermediate goods due to the progress in international division of work has promoted the expansion and
	diversification of trade.
	Overseas subsidiaries of manufacturing companies are operating not only in the manufacturing industry but also in the
	non-manufacturing industry, including professional technology services. However, overseas subsidiaries of Japanese
	manufacturing companies are concentrated in the manufacturing and retail trade industries compared with those of
	manufacturing companies in the United States, the EU and China. While global companies are expanding abroad partly
	through mergers and acquisitions (M&As), companies in major economies increase their accessibility to patented foreign
	technologies through M&As.
	Looking at the dissemination of technologies and knowledge from the viewpoint of the trend in international patent
	applications, we see that such patent applications contribute to the dissemination of technologies to emerging
	economies while being linked with trade and foreign direct investment. At a time when the rapid advance of
	technologies and knowledge is essential, the expansion of networks of companies, including foreign ones, and the
	inflow of technologies and knowledge from abroad are becoming more and more important.
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_	conomic relations of each country/region with the U.S. and China >
Ш	For economies around the world, both the United States and China are major export destination countries. In recent
	years, export dependence on China has increased more than that on the United States. In particular, East Asian
	economies, such as Japan, the Republic of Korea (ROK), Taiwan and the Association of Southeast Asian Nations
	(ASEAN), have been integrated into GVCs connected with China, mainly in the machinery industry. The share of value
	added by these East Asian economies that is exported to the United States via China is growing, so the economies may be
	affected if trade-restrictive measures are imposed by the United States and China on each other.

	The United States and China are strongly interconnected as each other's major export destination countries: in addition to exporting value added by themselves to each other, both directly and indirectly, the United States and China export to each other products integrating intermediate goods imported from each other. On the investment front, for overseas subsidiaries of U.S. multinationals, China is a very important base of activity in terms of sales, profit and creation of value added.
Cl	napter 2 The rise of protectionism and the need to reestablish the international trading
< H	listory of protectionism >
	Currently, the world is facing the third major wave of protectionism since the 20th century, after the ones in the bloc economy era (around 1930) following the Great Depression and the era of the Japan-U.S. trade friction (around 1980). The multilateral trading system, which has been developing while conflicting with protectionism, played a major role in deterring protectionism at the time of the global financial crisis. However, at present, there are concerns that the system may become dysfunctional.
< B	ackgrounds to trade-restrictive measures >
	In developed economies, domestic inequality has tended to widen in recent years. Technological innovations have caused the replacement of middle-skilled workers, a large proportion of whom engage in routine jobs, with technology, contributing to the widening of inequality. On the other hand, as the decline in the number of employees in the trade industries (manufacturing, agriculture/forestry/fisheries, mining, etc.) is conspicuous in developed economies, it is regarded as a factor behind the widening of inequality. This may be the reason why there is skepticism about free trade.
	In some cases, countries have unilaterally invoked trade-restrictive measures in order to redress their trade partner countries' market-distorting policies and practices. One example is the implementation of the U.S. measures in the escalating U.SChina trade friction. In particular, the United States regards China's trade policies and practices as a problem. The government of China is expanding financial support to the priority industries, including the provision of funds through such measures as subsidies, loans, and investments by government-affiliated investment funds, and tax measures. The amount of subsidies provided by the government of China has steadily increased in the past 10 years.
	From the estimation of the interest payment ratio (ratio of interest payments to interest-bearing debts, etc.) of major companies in six of the Chinese industries prioritized for support (secondary batteries, semiconductors, organic electroluminescent (EL) devices, railway carriages, automotive parts, and finished automobiles) based on financial statements, it has become clear that many companies are borrowing loans at interest rates lower than the market rates in China.
	A company positioned as the leader of China's integrated circuit industry is receiving a huge amount of governmental financial support and is achieving rapid growth in a short period of time by repeatedly acquiring companies and making large-scale capital investments.
	Cutting-edge technology sectors, including next-generation communication standard technology, are becoming more and more important not only from the economic viewpoint but also from the security viewpoint. Therefore, those sectors have become a source of national struggles for hegemony, so the competition in those sectors is escalating.
	Data on patent applications by country in specific technology sectors show that China is No. 1 in terms of the number of applications regarding patents related to 5G technology, far ahead of the United States, which is placed second, and the number of applications by China is growing rapidly. On the other hand, in terms of the assessed value of patents, the United States is far ahead of China, whose assessed value of patents is not increasing much relative to the growth in the number of patent applications. Regarding patents related to lithium-ion batteries, China surpassed Japan to

become No. 1 in terms of the number of patent applications in 2015, but in terms of the assessed value of patents, Japan is far ahead of China.
According to a comparison between Japan, the United States and China in terms of patent applications filed with the World Intellectual Property Organization (WIPO) in the 10 priority sectors under the "Made in China 2025" policy in the past five years (2012-2016), China is at a level comparable to the United States in the number of patent applications in the next-generation IT industry in particular, while it is neck and neck with Japan in many sectors. Although China is still far behind Japan and the United States in terms of the assessed value of patents, it is overwhelmingly outpacing the other two countries in terms of the growth rate of both the number of patent applications and the assessed value of patents in all those sectors.
egative impacts caused by trade restrictive measures>
From the perspective of macroeconomics, as the current account depends on the results of economic activities by the main economic agents—government, households, and companies—it is difficult to balance the current account though a tariff hike alone. From the perspective of microeconomics as well, although a tariff hike may temporarily increase the producer surplus of the country that has invoked the measure, it has negative effects on the country as a whole, as the consumer surplus decreases due to a rise in the prices of products subject to the tariff hike.
According to the analysis of the effects of trade-restrictive measures that focuses on the cases of the U.S. safeguard (SG) measure against imported steel in 2002 and the U.S. anti-dumping (AD), countervailing duties (CVD) and SG measures against imported solar cell modules in 2014 to 2018, these measures brought positive effects to U.S. producers through a relative rise in prices of products subject to the measures. However, the measures had negative effects on employment, corporate earnings and stock prices in downstream industries. Moreover, they triggered a chain reaction of retaliatory measures by various economies, not only affecting the economies directly involved but also causing spillover effects across the world.
The tit-for-tat tariff war between the United States and China will have negative effects on each of the countries invoking tariffs, forcing domestic consumers and users to bear an increased procurement cost. Looking at the movements of product prices before and after the invocation of additional tariffs by the United States and China in 2018, the price of pork in China and the price of steel products (hot-rolled coils) in the United States, for example, rose after the imposition of the tariffs on the other country.
There is the risk that trade-restrictive measures may cause more widespread market distortions due to their spillover effects on third countries. For example, as a result of the imposition of tariffs on steel imports into the United States as a measure under Section 232 of the Trade Expansion Act, the value of the United States' imports of the product subject to the measure (flat-rolled products) decreased steeply, diverting the flow of the product to the EU as an alternative market. In order to protect its domestic steel industry, the EU invoked a safeguard against steel imports as a provisional measure in response to an increase in imports that was much higher than the global trend.
As a second example of the spillover effects of trade-restrictive measures on third countries, we can cite the case of additional tariffs imposed by China on imports of soybeans from the United States in retaliation for a U.S. measure implemented under Section 301 of the Trade Act. After the imposition of the additional tariffs, China imported soybeans from Brazil with no regard for seasonality. As a result, the United States' exports of soybeans to China decreased significantly, while Brazil's exports increased steeply. As a result of the effort to meet the unseasonal special demand from China, Brazil's stocks of soybeans have decreased substantially. There are limits to an effort to expand exports with no regard for seasonality. Recently, China's imports of soybeans have decreased, which indicates the possibility that for China, too, the tariff measure against imports of soybeans from the United States may be unsustainable.

< T	the need to reestablish the international trading system >
	With the advance of globalization, countries and regions are establishing complex relationships of interdependence, so
	the rules-based multilateral trading system that is led by the WTO is essential for promoting and expanding free and
	fair trade.
	Recently, not only is there discontent about the current multilateral trading system and concerns about the possibility that the system may become dysfunctional, but concerns are also growing about the emergence of protectionism, which threatens the very survival of the multilateral trading system. In order to achieve stable, sustainable global economic growth by bringing the benefits of global prosperity and growth and job creation to economies around the world, it is an urgent challenge to establish a new international order under international cooperation.
Ch	apter 3 Japan's external economic relations and future challenges
	In 2018, Japan's goods trade expanded in terms of both imports and exports. However, as the growth in the value of imports (9.7%), which was mainly due to a resource price rise, was higher than the growth in the value of exports (4.1%), Japan recorded a trade deficit for the first time in three years (since 2015). The main reason why the growth in exports was weak is presumably that exports of general and electrical machinery decreased in the second half of the year because the semiconductor market was cyclically weak in a contraction phase and because the Chinese economy slowed down.
	A quarter of the production by the Japanese manufacturing industry occurs abroad. In particular, Japanese manufacturing companies have developed GVCs centered around Japan through local subsidiaries in Asia. The majority of exports by Japanese manufacturing companies is bound for overseas affiliates with which they have a capital relationship. Slightly more than 20% of the goods procured by Japanese manufacturing companies' local subsidiaries, including key components, is imported from Japan.
	According to statistics concerning value added, the United States is the largest destination of Japan's exports of value added. While the share of value added created by China (intermediate goods produced in China) in Japan's exports is growing, the share of value added created by Japan (intermediate goods produced in Japan) in China's exports is declining. As for the main flows of value added created by Japan, the value is imported and exported within East Asia (China, the ROK, Taiwan and ASEAN) in some cases and is exported from Japan to the United States and the EU via China, ASEAN, and Mexico in other cases.
	The reduced importance of Japan's presence in ASEAN is more prominent on the trade front than on the investment front. The factors behind that include not only Japanese companies' establishment of local business operations in ASEAN, the growth of local companies, and alternative supply by other countries but also a shift in Japanese companies' business style from exporting goods to earning profits through dividends and royalties. Among other major factors are those related to the growth and changes of ASEAN, such as the expansion of nominal GDP, the progress in regional economic integration, and an increase in foreign direct investment.
	Foreign direct investments by Japan have been made mainly in the manufacturing industry, contributing to an increase in employment in ASEAN and the sophistication of exports from the region. ASEAN is contributing to Japan through the expansion of its consumer market and cooperation in infrastructure projects. The deepening of this mutual relationship is expected to become more important in the future in the global production and consumption markets.
	Asia has a dominant share (around 70%) as a location of overseas operation by Japanese companies. However, as the share of retail trade and services is small, there is presumably room for further growth. In emerging regions other than Asia, such as South and Central America and Africa, where future growth is expected, Japanese companies' more active involvement is also expected.