Section 5 Industrial policy and the international economic order

In recent years, against the backdrop of social and economic changes brought by digitalization and the need for the green transition and enhancement of supply chain resilience, there is growing interest, in and outside Japan, in industrial policies intended to leverage the changes to achieve domestic economic development and innovation and create industrial clusters and jobs. On the other hand, it was already pointed out in the past that some industrial policies could create negative externalities internationally, and discussions have repeatedly been held on that point. Indeed, the WTO Agreements and other trade rules have addressed some such industrial policies. Meanwhile, the fact that the globalization in the post-Cold War period has expanded and deepened while involving not only Western countries but a broader range of countries has posed new challenges, such as market-distorting measures, non-commercial behavior by state-owned enterprises (SOEs), and weaponization of economic dependencies, which were previously not apparent. However, discussions on the relationship between those developments related to industrial policies and the rules-based international economic order have not necessarily deepened.

This section will first look at the historical background to and academic arguments over the relationship between industrial policy and trade, and the relationship between industrial policy and trade rules. Then, in light of the evolution of new industrial policies and the trends in the industrial policies of the United States and the EU, we will consider the role of industrial policies intended to address economic and social challenges in recent years. Finally, we will discuss the prospects for the relationship between industrial policies and trade rules from the perspective of the rules-based international economic order.

1. Historical background to industrial policy and trade

Since the establishment of modern states, many countries, including the United States and European countries, implemented their respective industrial policies during the process of industrial development, achieving successful results in some cases and suffering failures in others. After the end of World War II, when a free market economy was institutionalized in the Western countries, the argument grew that industrial policies tended to lead to inefficient market interventions by governments. However, in developed countries before the 1970s, various industrial policies, particularly in strategic manufacturing industries, such as the aerospace and defense industries, were implemented. The United States, for example, implemented industrial policies mainly in the defense and space industries. While specific technological breakthroughs were attributable to the diffusion of private-sector technologies, as in the case of Silicon Valley, active policy support by the government for fund procurement and other purposes also played a significant role. In Europe as well, there were moves to implement industrial policies through government-to-government cooperation at that time. Under an industrial policy initiative, Airbus was established as a consortium of French and German companies, which would be later joined by Spain and the United Kingdom, and the European countries jointly implemented the industrial policy and strengthened industrial competitiveness in the region. This move developed into a long-running U.S.-European trade conflict over civil aircraft.

In the 1980s, following the Latin American debt crisis, the neoliberal approach of minimizing the role of government to limit it to responding to "market failure" and refraining from industrial policies emerged. International organizations, as represented by the World Bank and the International Monetary Fund (IMF), supported the "Washington Consensus," which advocated economic policy management based on market fundamentalism, small government, sound finance, deregulation, and trade and investment liberalization and required developing countries to follow those principles. There was an argument that during the process of high economic growth in Japan and East Asian emerging countries, called the East Asian miracle, governments played an active role that complemented the market. However, the argument failed to replace the Washington Consensus.[160]

After the end of the Cold War, while globalization supported by the Washington Consensus advanced, there was growing awareness that market-distorting industrial policies were undermining the fair international competitive environment as trade and investment relationships with former socialist countries and emerging countries expanded. However, after the global financial crisis in 2008, there were moves among various countries to return to industrial policies.[161] On the academic front, too, criticism of the neoliberal stance of treating the government and the market as a dichotomy led to arguments that these two should be regarded as mutually complementary and that the government should also play a role in the response to failure to increasing market failures and the shaping of markets. Recently, against the backdrop of social and economic changes brought by digitalization and the need for the green transition and enhancement of supply chain resilience, many countries are following the trend of launching active industrial policies.

2. Traditional arguments over industrial policy and trade

Various definitions have been assigned to industrial policy from viewpoints such as its objective, target, means, benefits and negative side effects.[162] While governments implement industrial policy in the general sense of the term, that is, policy explicitly intended to develop an industry, policies proclaiming other objectives, such as ones related to the environment, product safety, and national security, have direct effects on industries in some cases. Typical industrial policies are targeted at specific industries and seek to change resource allocations within or across industries. However, policies for promoting science and technology that are not targeted at specific industries may also have strong effects on industrial development. Subsidies, tax systems, business regulations, and tariffs are often used as direct means of industrial policy, but soft measures like the development of general market rules under competition policy and dialogue with industries may also be regarded as industrial policies in some cases. Analysis of the effects of industrial policy in the narrow sense of the term focuses on whether or not a specific industrial policy has achieved its numerical goal, but it is not easy to identify the effects in many cases, so there is another approach—placing emphasis on structural or indirect effects. Although what negative side effects an industrial policy could have on trade, for example, is an

[160] Birdsall et al. (1993)
[161] Ambashi (2022)
[162] As an example of popular definition, the OECD (2024) defines industrial policy broadly, as "interventions intended to improve structurally the performance of the domestic business sector."

important point of argument, it is difficult to make a definitive decision as to which measures should be the subject of arguments over the effects on trade. This difficulty of making a clear distinction over what should be regarded as industrial policies is one factor complicating arguments over industrial policies. Here, we will look at an overview of arguments over industrial policies without being constrained by any particular definition of industrial policy.[163]

As a justification for industrial policy, many experts cite the correction of "market failure." Market failure refers to a situation where efficient resource allocation is not achieved in the market due to factors such as externalities (e.g., external diseconomies, such as environmental problems), information asymmetry, and coordination failure.[164] Ito et al. defined industrial policy as "a policy that is implemented in order to raise the level of economic welfare of the economy when some problem or other related to resource allocation or income distribution occurs under free competition because of a deficiency inherent in a competitive market mechanism—that is, market failure" and as "the totality of policies that seek to achieve that policy objective by intervening in resource allocation across industries or sectors or in industrial organizations of a specific industry." In short, Ito et al. regarded market failure as the central policy subject.[165] Stiglitz et al. stated that "the justification for industrial policy has always been well grounded in economic theory, in particular in the theories of market failure."[166]

There are various arguments over the types of industrial policy that are justified by market failure, but here, we will explain the theory of infant industry protection and strategic trade policy, both of which are closely related to trade.[167]

Infant industry protection refers to an industrial policy intended to develop a new domestic industry whose established equivalent (incumbent industry) already exists abroad into a well-established one through temporary protection measures. The theory of infant industry protection gains particular importance when the principle of "economies of scale" (or "cost-decreasing") is working in the targeted industry in some way or other. When a certain country has succeeded in developing a protected industry into a well-established one, a virtuous circle arises—that is, the better the principle of economies of scale works in the country, the lower the expansion of production push down prices, creating more demand and resulting in a further expansion of production.

Here, we will explain the outline of that mechanism as a model. Let us assume the case of a small country that is about to create an infant industry characterized by "decreasing production cost," which refers to a progressive decline in the average cost per unit due to the expansion of production volume, works well. The product that would be made by the new industry is assumed to be constantly available from a foreign incumbent industry for import at Price P* (Figure II-1-5-1). If the small country is to create its equivalent of the foreign incumbent industry starting from the position of having no domestic

163 Ambashi (2022) collected various definitions of industrial policy.

164 Coordination failure refers to the realization of inefficient equilibrium due to a lack of the coordination that is essential from the viewpoint of increasing the economic welfare of consumers.

165 Ito, et al. (1988)

166 Stiglitz et al. (2013).

167 Ambashi (2022) explained theories behind industrial policies that are based on information sharing, policies for curbing excessive competition and market entry, industrial policies related to research and development, and other industrial policies, in addition to infant industry protection theory and strategic trade policy.

production capacity and totally depending on imports for the supply of the product, it cannot enjoy the benefits of decreasing cost unless domestic production volume surpasses a certain threshold. As small-volume production is relatively costly, if the price is to be lowered to Price P*, which is the international price, production volume needs to be increased to X2 or higher. Put another way, if domestic production volume has been increased to X2 or higher, the price of the domestic product falls to Price* or lower, making it possible to domestically sell the domestic product as a substitute for the import. The greatest problem would be whether any domestic company can increase production volume to X2 or higher. It may be difficult for individual companies to start production while it is not necessarily clear whether sufficient sales volume to justify a production volume higher than X2 can be expected. Here lies the possibility that the government may be able to contribute to the development of a domestic industry through industrial policy. For example, if the price can be lowered below Price P* through a production subsidy, domestic sales become possible. If imports of foreign products are restricted or prohibited, domestic production volume can be increased to a level sufficient to meet domestic demand. As production volume increases further, the price will fall further due to the principle of decreasing cost (increasing return) that characterizes this industry, and the industry will therefore be able to keep going autonomously after the temporary industry protection is terminated.

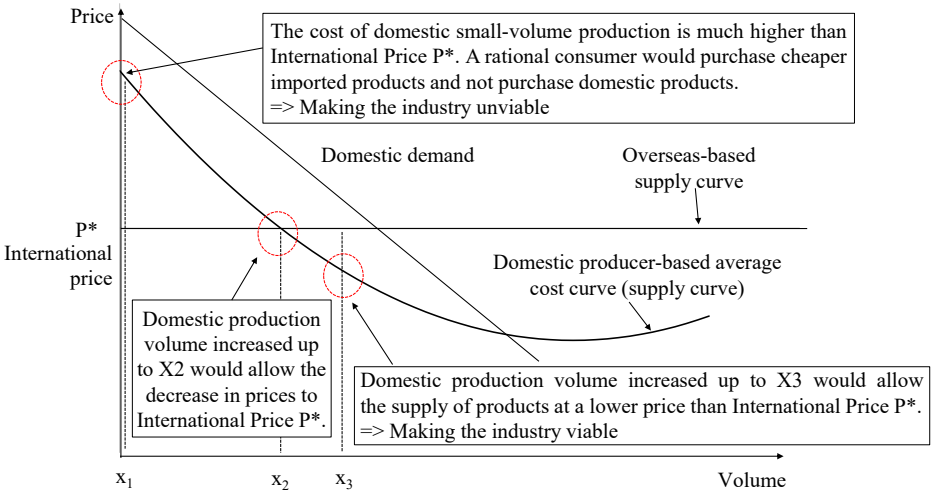
However, if the adoption of the temporary protection measures by the government of the small country is to be justified from the perspective of the country's economic welfare, meeting the following two standards is considered to be necessary: that as a result of the protection measure, private companies become profitable (the Mill standard); and that the profit that can be realized through the policy intervention outweighs the social cost (the Bastable standard).[168] Meanwhile, this kind of policy draws criticism for tending to end in failure due to factors such as inefficiency of government intervention, rent-seeking (pursuit of individuals' profits), a lack of technical knowhow and distortion of private-sector incentives.

How infant industry protection policy affects trade and international income distribution is also a very important point of argument. Once economies of scale have been established, the policy may reduce the producer surplus through intensified international competition in the short term, or it may deprive a third country's equivalent to the infant industry of growth opportunities or destroy the industrial fundamentals through rapid expansion of exports to that country.[169] A policy with those effects, called a beggar-thy-neighbor policy, may cause negative political and economic consequences, such as retaliatory measures by foreign governments.

[168] Ito, et al. (1988)

[169] Watanabe and Kajitani also mentioned this point. In the past, during the period of the Japan-U.S. trade conflict, it was pointed out in reference materials that analyzed Japan's industrial policy (Komiya et. al, eds. [1984]).

Figure II-1-5-1. Case where the average cost decreases



Source: This figure is compiled by METI based on Ito et al. (1988) with additional explanations.

Strategic trade policy refers to industrial and trade policy implemented by a country in order to protect and develop a domestic industry, particularly an advanced technology industry, when the following factors exist: (i) economies of scale, (ii) external economy effects due to accumulation of technologies, and (iii) importance for the country's economic growth and living standards.[170] The market of an advanced technology industry is oligopolistic, so market failure may occur because of price control exercised by an early mover. In that case, the government argues that the monopoly rent (extra profit in excess of the profit that can be earned in a competitive market) held by foreign companies with price controlling power can be transferred to domestic companies by enhancing their competitiveness in the international market through policy. To do that, the government is supposed to resort to measures such as providing subsidies to domestic companies, employing a managed trade approach to protect industries or demanding that trade partner countries increase imports.[171] On the other hand, doubt was raised over the legitimacy and effectiveness of strategic trade policy, which drew criticism for producing negative side effects, such as trade conflict risk.[172]

The policy implemented by the United States during the Japan-U.S. trade conflicts in the 1980s and later is considered to be a typical example of strategic trade policy.[173] At that time, amid the expansion of Japan's trade surplus with the United States, the U.S. government employed a managed trade approach towards Japan in the automobile industry and advanced technology industries, such as semiconductors. In 1981, President Reagan announced a relief measure for the automobile industry and called for Japan to introduce voluntary restrictions on automobile exports to the United States. The voluntary restrictions announced by Japan in the same year were removed in 1994, and in the meantime, Japanese companies proceeded with local production of automobiles and increased FDIs in the United

[170] Economic Planning Agency (1993)
[171] Ambashi (2022)
[172] Economic Planning Agency (1993)
[173] The history of Japan-U.S. trade conflicts dates as far back as the conflict over textile products in the 1950s, but the conflicts mentioned in this paragraph are those that occurred in the 1980s and later.

States. As for the Japan-U.S. semiconductor conflict, in 1986, the Japan-U.S. Semiconductor Agreement was concluded. The agreement called for measures to expand U.S. access to the Japanese market and prevent dumping. In 1987, the United States launched sanctions against Japan for violating the agreement, imposing a 100% tariff on Japanese personal computers. In response, Japan, seeking to have the sanctions removed, continued bilateral consultations, and in 1991, the Japan-U.S. Semiconductor Agreement was partially amended and its period was extended. In 1989, the Japan-U.S. Strategic Impediments Initiative was started, and under the initiative, Japan faced demands that it expand consumption, rationalize the distribution structure, and correct exclusionary trade practices.[174] Afterwards, the U.S. strategic trade policy faded away due to the contributions made by the expansion of Japanese FDIs in the United States to the U.S. economy and jobs, improved market access and the stagnation of the Japanese economy. Moreover, because of the advance of globalization following the end of the Cold War, the protectionist aspect of strategic trade policy has come to be viewed in a negative light, and in effect, strategic trade policy has been excluded from policy discussions among developed countries.

3. Industrial policy and trade rules

There was strong awareness about the relationship between industrial policy and WTO Agreements and other trade rules during the postwar process of developing trade rules. One of the main objectives of the GATT was to restrict border measures and hold negotiations over the reduction of tariffs based on the most-favored-nation principle in order to deter discriminatory border measures intended to protect industries. Moreover, during the successive negotiation rounds, not only border measures concerning imports and exports but also certain domestic measures that have effects on trade (known as behind-the-border issues) have come to be covered by trade rules. This approach to trade rules is intended to prevent fair trade relationships from being undermined by measures such as subsidies for domestic industries, trade-related investment restrictions, regulatory standards concerning product safety, domestic regulation of services industries, intellectual property rights systems, and government procurement. The approach does not necessarily deny governments' rights to implement industrial policy domestically.[175] Typically, trade rules are applied to the provision of industrial subsidies contingent on the expansion of exports and trade-restrictive product standards that cannot be justified by policy objectives, such as securing safety, for example. In addition, the WTO's monitoring and reviewing functions—enhancing transparency over governments' policies and ensuring mutual monitoring through the mechanism for reviewing governments' trade policies and multilateral discussions at standing committees—have been strengthened in order to improve predictability concerning the effects of governments' policies on trade, including industrial policies

[174] Economic and Social Research Institute, Cabinet Office (2011)

[175] For an overview of rules under the WTO Agreements in individual sectors, see Ministry of Economy, Trade and Industry (2024a), Part II, the chapters on subsidies/countervailing measures, trade-related investment measures, standards and conformity assessment systems, trade in services, protection of intellectual property, and government procurement.

After the end of the Cold War, many former socialist countries, emerging countries, and developing countries, which were at different stages of economic development, and which had different industrial structures, different political and economic systems, and different backgrounds to industrial policy, acceded to the WTO. In the meantime, new trade-related challenges were pointed out, including the damage done to competitive neutrality by market-distorting industrial subsidies and actions taken by SOEs due to non-commercial motives. In response to such new challenges related to industrial policy and fair trade relationships, efforts to address them have been made under the CPTPP and other FTAs and EPAs, and discussions have been held at the G7 and other international forums, as the development of trade rules at the WTO has come to an impasse. Recently, the relationship between industrial policy and trade has also been analyzed in academic research.

Below, let us look back at the history of discussions held on the provision of industrial subsidies, which is a major industrial policy tool and whose relationship with fair trade has been most frequently discussed.

(1) Effects of industrial subsidies and trade rules

(A) Academic research concerning the trade-promoting effect of industrial subsidies

Research has made it clear that among industrial policy measures, industrial subsidies in particular, which represent the provision of economic incentives, have the effect of promoting trade. Navarra, in a study using data on subsidies provided by the U.S. federal government, showed that industrial subsidies increased exports in directly subsidized industries and also led indirectly to increases in exports in downstream industries.[176] Meanwhile, a study by Rotunno et al. showed that industrial subsidies promoted both exports and imports.[177] What is important in this respect is that, regardless of whether an industrial subsidy is intended to promote exports, the resulting effect is to promote trade. As to whether industrial subsidies have realized policy objectives, such as innovation, the findings of empirical research vary from one study to another because the results differ depending on the specific requirements for granting subsidies and other factors. Many analyses have indicated that industrial subsidies only generated quantitative effects, rather than qualitative effects.

Regarding empirical research concerning the effects of industrial subsidies on trade, one problem pointed out is that a lack of well-developed, comprehensive, and comparable datasets on industrial subsidies in countries around the world is hindering research activity. According to the OECD, one factor behind the difficulty of developing datasets is the presence of disparities between governments in the approach to information disclosure concerning industrial subsidies, and another is the limited scope of disclosed information. For example, many governments refrain from disclosing detailed information, such as the names of government organizations that provide subsidies and other support, forms of support, recipients, and the financial value of support. Even when disclosure is made, the information disclosed is in aggregate form in many cases. Moreover, in some cases, the extent to which the value of support announced by governments has been paid to recipient companies may not be disclosed.[178]

[176] Navarra (2023)
[177] Rotunno and Ruta (2024)
[178] OECD (2023)

(B) Rules on industrial subsidies under the WTO Agreements

Among the WTO Agreements, the Agreement on Subsidies and Countervailing Measures (hereinafter the "Subsidies Agreement"), which is included in the Multilateral Agreements on Trade in Goods (Annex 1A), provides for rules on industrial subsidies for goods (except for services). A subsidy, as defined under this agreement, is a financial contribution made by a government or any public body whereby a benefit is conferred to the recipient company. The definition of a subsidy includes not only financial assistance but also tax concessions and the provision of goods and services at low prices. The Subsidies Agreement prohibits member countries from granting subsidies that could be an impeding factor for free trade. Prohibited subsidies are subsidies contingent upon export (export subsidies) and subsidies contingent upon the preferential treatment of domestic goods over imported goods (local content subsidies). Even a subsidy that does not fall under either of these categories is deemed to be a specific subsidy if access to the subsidy is limited to certain companies or industries. In that case, if other member countries suffer injury in terms of trade, they may take measures such as imposing countervailing duties[179] and filing a complaint with the WTO.

Regarding specific subsidies, the Subsidies Agreement obligates member countries to submit notifications from the viewpoint of ensuring transparency. The information subject to notification includes the form of a subsidy (e.g., grant, loan, tax concession, etc.), the amount of subsidy per unit of the subsidized and exported product, and the purpose of a subsidy. On the other hand, failure to fulfill the obligation is not subject to penalty, and as a result, in practice, this obligation is not necessarily honored. Therefore, it has been pointed out that the notification system is not functioning sufficiently.

(C) Rules on industrial subsidies and SOEs under EPAs

Roughly since the time when the Doha Round of negotiations of the WTO failed to be concluded at the WTO Ministerial Conference in 2008, initiatives to incorporate high-level rules to address the new challenges into EPAs have gained momentum. In particular, rules on market-distorting industrial subsidies and actions taken by SOEs due to non-commercial motives have been incorporated into trade agreements to which Japan is a party, such as the CPTPP and the Japan-EU EPA.[180]

The CPTPP includes a chapter on SOEs that obligates SOEs to ensure non-discriminatory treatment and act in accordance with commercial considerations. It also includes effective rules on subsidies that prohibit member countries from causing adverse effects to trade through non-commercial assistance to SOEs. The Japan-EU EPA also obligates SOEs to ensure non-discriminatory treatment and act in accordance with commercial considerations. The chapter on subsidies specifies two forms of subsidy subject to prohibition, that is, debt guarantees without any limitation as to the amount or duration and subsidies for restructuring enterprises that have not prepared credible restructuring plans, while there is no prohibitive provision against those forms of subsidy under the WTO Agreements.

[179] When the export of a product for which a specific subsidy is provided causes injury, such as the deterioration of the conditions of a domestic industry of an importing country, the importing country may impose countervailing duties on the product based on its own investigation.

[180] For detailed information, see Ministry of Economy, Trade and Industry (2024a), Part III, Chapter 10 "State-Owned Enterprises, Subsidies."

(D) Discussions at international forums

At the First Trilateral Meeting of the Trade Ministers of Japan, the United States and the European Union, which was held in December 2017, the main agenda item was jointly addressing market-distorting measures taken by third countries and discussions were held on matters such as reinforcing rules for industrial subsidies and state-owned enterprises (SOEs), forced technology transfer, market-oriented conditions, and e-commerce. The underlying thread of the meeting was the perception that industrial subsidies and actions taken by SOEs, which are not being appropriately governed under the existing WTO Agreements, are undermining fair trade relationships, so the discussions were held mainly with the development of rules at the WTO in mind as a challenge.

Since then, this challenge has come to be discussed at G7 and G20 meetings as well. At the G7 Summit and G20 Summit in 2016, the perception that subsidies provided by governments and government-affiliated organizations were producing market-distorting effects was affirmed. Later, in ministerial statements issued at G7 and G20 trade ministers' meetings, the need to strengthen international rules on industrial subsidies was affirmed. Cited below are references to rules on subsidies made by some of the G7 and G20 ministerial statements.

The ministerial statement issued at the G20 Ministerial Meeting on Trade and Digital Economy that was held in Japan in June 2019 stated: "Many members affirm the need to strengthen international rules on industrial subsidies and welcome ongoing international efforts to improve trade rules affecting agriculture."[181] This stance toward subsidies was retained in the statement issued at the G20 Trade and Investment Ministerial Meeting that was held in Italy in October 2021.

The ministerial statement issued at the G7 Trade Ministers' Meeting in Osaka-Sakai, held in October 2023, stated: "On industrial subsidies, we reviewed and recognized gaps between the current WTO rules and recent developments, as well as the challenges of addressing related issues of nonmarket policies and practices, including the fundamental lack of transparency of measures taken by some countries, while recognizing that subsidies in some circumstances can be a tool to achieve legitimate public policy objectives. Based on this gap analysis, we share the need for further discussion on suitable means to more effectively address, including under the WTO Agreement on Subsidies and Countervailing Measures, the opaque and trade-distortive subsidies provided by SOEs, including investment funds controlled in substance by the State. We recognize the fundamental importance of transparency as a basis for effective multilateral subsidy rules, meaningful policy deliberations, and fair competition, and underscore the importance of all WTO members' continuous efforts to ensure transparency both at the WTO through subsidies notification and domestically by making information on subsidy programs publicly available. We are prepared to explore ways to improve compliance with transparency obligations by all WTO members."[182]

At the WTO's 13th Ministerial Conference (MC13), held at the end of February 2024, ministerial dialogue on trade and sustainable development, including trade and industrial policy and policy space

[181] Ministry of Foreign Affairs, "G20 Ministerial Statement on Trade and Digital Economy." https://www.mofa.go.jp/files/000486596.pdf (as viewed on March 31, 2025)

[182] Ministry of Economy, Trade and Industry, "G7 Trade Ministers' Statement," October 29, 2023. https://www.meti.go.jp/press/2023/10/20231029001/20231029001-a.pdf (as viewed on March 31, 2025)

for industrial development was held, and on that occasion, many member countries, including Japan, argued that a forum of discussion on trade and industrial policy should be created at the WTO. Because of opposition from some member countries, this argument was not included in the ministerial declaration. However, at the WTO as well, many members recognize the new challenges related to the relationship between trade and industrial policy.

(E) Recent academic arguments

With respect to the argument that the existing WTO Agreements and dispute settlement proceedings are unable to fully address the challenges related to modern industrial policy, academic reviews have been conducted. Bown pointed out the possibility that industrial policy measures, such as industrial subsidies provided by China, whose economic size is huge and which is closely connected with other countries through trade and supply chains, may be creating negative international externality by working to impoverish neighboring countries. Bown went on to point out that at least some of the trade frictions in recent years have been caused by the United States' discontent at the multilateral trading system's failure to curb the negative externality that is attributable to China.

As factors that make it difficult to identify the scale and impact of industrial subsidies provided by China, Bown cited the point that subsidies that could affect foreign economies do not necessarily fit the existing definition of a subsidy under the Subsidies Agreement of the WTO as well as a lack of transparency over flows of funds between the Chinese government and companies. If the Chinese government provides large amounts of opaque subsidies that can evade the definition of a subsidy under the Subsidies Agreement to domestic companies, the United States and other trade partner countries will be more likely to implement trade remedies at higher tariff rates on a wider range of imported products. Third-country companies may be caught up in the effects of such trade remedies as they are forced to lower export prices due to competition with China, and this situation will put additional stress on the international trading system.

As an example of negative international externality created by a Chinese industrial subsidy, Bown cited the case of the shipbuilding industry. According to Bown, while the industrial subsidy provided by China to the shipbuilding industry made small contributions to the expansion of global production of vessels, its main impact appeared in the form of China's expansion of its market share, that is, snatching shares from the ROK and Japan.

As for the reasons for the WTO's failure to function sufficiently with respect to the problems associated with Chinese industrial subsidies, Bown pointed to the need for companies that have suffered damage to file a complaint and submit evidence if dispute settlement proceedings are to be launched and cited the possibility that those companies may hesitate about filing a complaint due to fears over possible retaliation by China. Another reason cited by Bown is that WTO litigation is too slow a process to prevent the negative economic effects of a Chinese industrial subsidy, given that the subsidized Chinese industry is likely to become well-established before any evidence of the effects is prepared.[183]

[183] Bown (2024)

4. Arguments over new industrial policy

After the Washington Consensus era, since around the 2010s, there have been new developments in arguments over industrial policy. The arguments have leant toward the idea that it is necessary to expand the scope of industrial policy for reasons such as that governments have been unable to appropriately respond to market failure and that market failure is proliferating. In addition, there is also an argument that industrial policy should not only respond to market failure but also cover the creation and shaping of markets.

Among the important points of argument are: that the government and the market should be regarded as mutually complementary, rather than as a dichotomy; that although response to market failure continues to be a necessary condition for industrial policy, other objectives may be covered by industrial policy; and that not only targeting, which seeks to develop specific industries, but also a horizontal policy approach[184] should be regarded as a means of industrial policy. According to the OECD, industrial policy's other objectives include green technology innovation, national security, and correction of regional inequalities.[185] Enhancement of supply chain resilience, which was explained in detail in Part II, Chapter 1, Section 4, may also be included among the objectives of new industrial policy.[186]

Aiginger and Rodrik, in their paper "Rebirth of Industrial Policy and an Agenda for the Twenty-First Century," expanded the scope of industrial policy beyond correcting market failure to responding to economic and social challenges, including the shaping of markets, sustainability, and responsible globalization. As for means of industrial policy, they argued that the policy approach should shift from one featuring top-down targeting using subsidies and other incentives to one centered on sustainable cooperation between the public and private sectors. Their research is also distinctive in that it regards industrial policy as a search process in unknown territory and incorporates elements such as trial and error and possibility of failure into industrial policy.[187]

Mazzucato, in her book "Mission Economy," argued that the "mission-oriented" approach, that is, the approach of resolving important social challenges under cooperation between the public and private sectors, is urgently required. Mazzucato asserted that in order to realize that approach, it is necessary to rethink the role of governments. As five myths that undermine the mission-oriented approach, she cited the following ideas: (i) Businesses create value and take risks; governments only de-risk and facilitate; (ii) The purpose of government is to fix market failures; (iii) Government needs to run like a business; (iv) Outsourcing saves taxpayer money and lowers risk; and (v) Governments shouldn't pick winners

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[184] Vertical industrial policy is one targeted at specific companies or industries, while horizontal industrial policy is one that seeks to achieve economic revitalization by developing the institutional environment surrounding companies.

[185] OECD (2024)

[186] Aggarwal and Reddie (2020) mentioned that economic statecraft, that is, the approach of exercising influence on other countries through economic means, rather than military means, can be observed in industrial, trade and regulatory policies intended to strengthen strategically critical economic sectors. They went on to argue that new economic statecraft should not be limited to the traditional approach centered on economic coercion but include all economic means that may be used by governments in order to secure their countries' strategic positions.

[187] Aiginger and Rodrik (2020)

(technologies, industries and companies that are likely to become important and successful). Dismissing all those myths, Mazzucato pointed out the fact that in countries that achieved economic growth through innovation, governments have acted as an important partner of companies and taken on the risks that companies cannot fully assume. As achievements of such active innovation activity by governments, she cited the advance of innovative technologies such as what has now developed into the internet, nanotechnology, biotechnology, and clean energy and the creation of relevant markets and industries. She argued that if governments enhance their own abilities, create value and shape markets together with stakeholders, including companies, an inclusive, sustainable, innovation-driven capitalism will be rebuilt.[188]

This argument has drawn various questions and counterarguments, and at the moment, a wide academic consensus has not been established on the objectives and means of, and conditions for that approach. For example, Mingardi criticized Mazzucato's argument as lacking in evidence and giving preference to cases that suit its own convenience.[189] However, amid receding practical and academic support for the Washington Consensus, it is noteworthy that there are earnest arguments over new industrial policy and the theoretical basis.

After the general meeting of the Industrial Structure Council in 2021, the Ministry of Economy, Trade and Industry immediately started to strengthen new industrial policy under what is called the New Direction of Economic and Industrial Policies initiative while taking into consideration global trends, including academic arguments like the above.[190]

5. New industrial policies of the United States and the EU

In recent years, both the United States and the EU have formulated and implemented new industrial policies intended to respond to the modern economic and social challenges and achieve industrial development at the same time. We will look at an overview of those new industrial policies and the ideas behind those policies.

(1) United States

The Biden administration of the United States enacted several major laws, including the Infrastructure Investment and Jobs Act (enacted in November 2021), which focuses mainly on the repair of aged infrastructure and the expansion of clean energy-related infrastructure, the Inflation Reduction Act (enacted in August 2022), which provides incentives, including tax credits, for the introduction of technologies essential to climate change measures, and the CHIPS and Science Act (enacted in August 2022), whose pillars are support for semiconductor production and science and technology-related budgets.

Regarding industrial policies launched by the Biden administration, Jake Sullivan, the national security advisor to the president, mentioned details in a speech concerning the New Washington

188 Mazzucato (2021)
189 Mingardi (2021)
190 Ministry of Economy, Trade and Industry, "SHIRYOU 2: KEIZAI SANGYOU SEISAKU NO SHIN KIJIKU–ARATANA SANGYOU SEISAKU ENO CHOUSEN" (material at the 28th general meeting of the Industrial Structure Council), June 2021, https://www.meti.go.jp/shingikai/sankoshin/sokai/pdf/028_02_00.pdf (as viewed on May 14, 2025)

Consensus that he delivered at the Brookings Institution in April 2023. At the beginning of the speech, Sullivan stated as follows: "A financial crisis shook the middle class. A pandemic exposed the fragility of our supply chains. A changing climate threatened lives and livelihoods. Russia's invasion of Ukraine underscored the risks of overdependence. So this moment demands that we forge a new consensus." He defined the industrial and innovation strategy that the United States was promoting together with partners in and outside the country as "one that invests in the sources of our own economic and technological strength, that promotes diversified and resilient global supply chains, that sets high standards for everything from labor and the environment to trusted technology and good governance, and that deploys capital to deliver on public goods like climate and health." He went on to point out the four challenges faced by the United States since before the inauguration of the Biden administration and made policy proposals for addressing the challenges in five areas (Table II-1-5-2). First, he emphasized the need for a modern industrial policy. He argued as follows: "A modern American industrial strategy identifies specific sectors that are foundational to economic growth, strategic from a national security perspective, and where private industry on its own isn't poised to make the investments needed to secure our national ambitions."[191]

Table II-1-5-2. Outline of the new Washington consensus

Four challenges faced by the U.S. before the inauguration of the Biden administration
[i] Hollowed-out industrial base in the U.S.
[ii] Geopolitical and security competition
[iii] Climate crisis and energy transition
[iv] Inequality and its damage to democracy
Five steps to solve these challenges
[i] Laying a new foundation in the U.S. with a modern industrial strategy
[ii] Establishing a strong, resilient, and leading-edge techno-industrial base, working with the like-minded partners of the U.S.
[iii] Moving beyond traditional trade deals to innovative new international economic partnerships
[iv] Mobilizing trillions in investment into emerging economies
[v] Protecting U.S. foundational technologies and ensuring that next-generation technologies work for, not against, U.S. democracies and security

Source: The U.S. White House website.

This idea is strongly reflected in the Infrastructure Investment and Jobs Act, the Inflation Reduction Act, and the CHIPS and Science Act. While those three laws pour large amount of funds into clean energy and semiconductors, which constitute the wellspring of competitiveness, it also enhances supply chain resilience and strengthens national security at the same time. Specifically, the Infrastructure Investment and Jobs Act requires that all steel and industrial products, and construction materials used in infrastructure projects of the federal government be manufactured in the United States. Meanwhile, in the EV tax credit program (tax credit for purchases of clean vehicles) under the Inflation Reduction Act, meeting the following three requirements is the prerequisite for receiving the maximum tax credit:

[191] White House, "Remarks by National Security Advisor Jake Sullivan on Renewing American Economic Leadership at the Brookings Institution," April 27, 2023, https://bidenwhitehouse.archives.gov/briefing-room/speeches-remarks/2023/04/27/remarks-by-national-security-advisor-jake-sullivan-on-renewing-american-economic-leadership-at-the-brookings-institution/ (as viewed on March 31, 2025)

the final assembly of the vehicles is conducted in North America; that a threshold percentage of battery components are manufactured or assembled in North America; and that the vehicles contain a threshold percentage of critical minerals extracted or processed in the United States or in a country with which the United States has a free trade agreement, or recycled in North America. The CHIPS and Science Act contains a clause for national security guardrails, which imposes restrictions on the expansion of semiconductor production capacity by subsidy recipients in countries of concern (e.g., China, Russia, North Korea, and Iran) and joint research with companies of concern and requires the return of subsidies if those restrictions have been violated.

As for the future U.S. industrial policy under the Trump administration, there is a high level of uncertainty, as the basic concept, specific objectives and means of the existing policy may be changed significantly, President Trump, who took office in January 2025, signed an executive order titled "Unleashing American Energy " on his first day in office, suspended the provision of funds appropriated under the Infrastructure Investment and Jobs Act and the Inflation Reduction Act, and started a 90-day review.[192]

(2) EU

In January 2023, European Commission President Von der Leyen delivered a speech at the Annual Meeting of the World Economic Forum (Davos Meeting) and announced the Green Deal Industrial Plan, which aims to strengthen the competitiveness of net zero technologies and products. In the speech, she asserted that "to get ahead of the competition (in the clean energy market), we need to keep investing and strengthening our industrial base and making Europe more investment and innovation-friendly." In February of the same year, the European Commission published a policy document describing the details of the plan.

In March 2023, based on the Green Deal Industrial Plan, the European Commission announced proposals for the Net-Zero Industry Act and the Critical Raw Materials Act. The Net-Zero Industry Act (enacted in June 2024), which aims to increase production capacity for net-zero technologies within the EU area, supports companies by developing a regulatory environment and speeding up the permission and approval processes. Among the net-zero technologies eligible for support are renewable energy, storage batteries, electrolyzers for hydrogen production, and carbon capture and sink (CCS) technology. Meanwhile, the Critical Raw Materials Act (enacted in May 2024) promotes the extraction, processing and recycling in the EU area of "strategic raw materials," which are indispensable to critical technologies, including green and digital technologies, and over which there is a potential supply risk.

The Green Deal Industrial Plan includes a deregulation measure to facilitate the provision of subsidies by member countries. In March 2023, based on the plan, the European Commission adopted the Temporary Crisis and Transition Framework, which relaxes the EU regulation on state aid as a temporary measure to be in place until the end of 2025. The adoption of this framework has made it possible for member countries to provide financial aid for companies' production activity related to net-zero technologies with certain upper limits in percentage terms imposed on the amount of aid. Moreover,

[192] White House, "Unleashing American Energy," January 20, 2025, https://www.whitehouse.gov/presidential-actions/2025/01/unleashing-american-energy/ (as viewed on March 31, 2025)

in cases where there is the risk that a company may transfer investment related to such production activity out of the EU area, member countries can raise the upper limits on the amount of aid and provide the company with the same amount of aid as the amount that it would receive in a non-EU location to which the investment may be transferred. In short, if the conditions prescribed under the framework are met, member countries can provide aid equivalent to incentives under the Inflation Reduction Act of the United States, for example.

In September 2024, former European Central Bank President Draghi announced the Draghi report, formally titled "Future of European Competitiveness," prepared on commission from European Commission President Von der Leyen in the preceding year. The report summarized a new industrial strategy for overcoming the challenges faced by the EU. The report identified the following three challenges faced by the EU: (i) closing the innovation gap with the United States and China; (ii) energy concerns and competition with China in the area of decarbonization technology; and (iii) growing geopolitical risks and dependencies on other countries for the supply of critical products. As a factor impeding the resolution of those challenges, the report cited a lack of coordination between the policies being implemented by the EU and member countries and pointed out as follows: "Industrial strategies today—as seen in the US and China—combine multiple policies, ranging from fiscal policies to encourage domestic production, to trade policies to penalise anti-competitive behaviour, to foreign economic policies to secure supply chains." In order to realize new industrial policy, the report proposed annual investment of up to 800 billion euros in strategic sectors and collaboration between industrial, competition and trade policies.

In January 2025, based on the proposals in the Draghi Report, the European Commission announced a policy package called "competitiveness compass." This is comprised of three pillars—(i) closing the innovation gap, (ii) a roadmap for decarbonization and enhancement of competitiveness, and (iii) reducing excessive dependencies and increasing security—and calls for cross-sectoral initiatives such as simplifying regulations, removing barriers in the EU market, and financing.[193]

Until now, the EU has positioned competition policy as something opposite to industrial policy from the viewpoint of developing a single EU market by curbing competition in terms of industry policy between member countries. For example, the EU regulation on state aid regulates state aid for specific companies or specific products in ways that prevent the aid from distorting competition in the single market.[194] This approach has had constraining effects on industrial policies implemented by the EU and member countries. However, the policy change by the EU in recent years has led to a new development—that is, the EU is promoting collaboration between industrial, competition, trade and other relevant policies in order to advance industrial strategy.

[193] European Commission, "An EU Compass to regain competitiveness and secure sustainable prosperity," January 29, 2025, https://ec.europa.eu/commission/presscorner/detail/en/ip_25_339 (as viewed on March 31, 2025)

[194] Delegation of the European Union to Japan, "EU NO KYOUSOU SEISAKU NI TUITE OSHIETE KUDASAI," November 9, 2021, https://eumag.jp/questions/f1121/ (as viewed on March 31, 2025)

6. New industrial policy and the rules-based international economic order

Above, we looked first at an overview of the historical background to and academic arguments over industrial policy and trade and the development of trade rules and then at arguments over new industrial policy and new trends in the industrial policies of the United States and the EU. Recently, following the period of neoliberalism that came after the end of the Cold War, the role of industrial policy has been undergoing rethinking. In particular, it is distinctive that industrial policy is intended to respond to social and economic challenges, including social and economic changes brought by digitalization, the green transition, and enhancement of supply chain resiliency and achieve industrial development at the same time. With respect to those challenges, which require a significant transformation of social and economic structures, active implementation of necessary industrial policies by governments in cooperation with the private sector and enhancement of predictability for private-sector companies is considered to contribute to reconciling social and economic goals with enhancement of industrial competitiveness.

On the other hand, as described in Part II, Chapter 1, Section 1, it should be kept in mind that behind the attention paid to industrial policy in recent years is the fact that inequalities across and within countries have amplified voices of discontent with globalization, cultivating a social environment supportive of protectionist trade policies. From the perspective of trade rules, new challenges that have been mentioned since around 2010, such as market-distorting industrial subsidies and non-commercial behavior by SOEs, and weaponization of economic dependencies, have remained not sufficiently addressed because of the impasse in rule-making and continued to undermine trust in trade rules. There have also been calls for enhancing transparency and improving mutual monitoring through the notification of trade-related measures taken by countries based on the WTO Agreements and multilateral deliberations. On the academic front, while Bown et al. identified points of argument concerning negative externalities against trade and investment that some industrial policies may generate, further development of arguments is necessary in order to forge international consensus.

As argued in the past, if a certain country's industrial policy is recognized as a beggar-thy-neighbor policy or a strategic trade policy, it could provoke a retaliatory industrial policy or intensify a trade conflict, reducing economic welfare for all countries and serving no one's interests. New industrial policy, if it evolves in that direction, could have a significant negative impact on the response to the green transition and other global challenges.

Under these circumstances, when formulating and implementing active industrial policies that may lead to the achievement of social and economic goals, it is important to forge shared perspectives and secure transparency and predictability through multilayered economic diplomacy under the rules-based international economic order. It is also necessary to forge consensus on the future of trade rules through practical discussions on the objectives, means and effects of industrial policy among the authorities across countries. In particular, challenges such as market-distorting measures, non-commercial behavior by SOEs, and weaponization of economic dependencies must be dealt with in order to strengthen and rebuild the international economic order. For Japan, in light of the importance of value of predictable trade and investment relationships, it is important to strengthen the rules-based international economic order by fostering trust and building up international cooperation, including efforts to secure transparency over countries' policies and constructive policy discussions.