

# The Japanese Government's Supply Chain Risk Management



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As the competition between the US and China to gain technological hegemony competition has intensified, the Japanese government has been strengthening its economic security strategy on domestic and international fronts. First, let's examine Japan's supply chain risk management policy from the perspective of its extensive economic security strategy. Based on the Economic Security Promotion Act enacted in May 2022, the Japanese government designated 11 materials, including semiconductors, batteries, and critical minerals, etc., as "critical materials" for maintaining supply chains in December 2022. In March 2024, advanced electronic components (capacitors, high-frequency filters) and certain critical minerals (gallium, germanium, uranium) were added to the list. When designating these items, the government considered the importance of these items to the national economy and industry, level of external dependence, and the possibility of supply chain disruption due to external factors. More precisely, Japan's supply chain risk management policy aims to significantly

expand domestic production facilities for these critical supply chain management items, stimulate the domestic economy, and enhance international competitiveness in these industries. Similar to other major economies such as the US and EU, the Japanese government is demonstrating a strong policy intent to transform the domestic market into a production base for advanced manufacturing, thus responding to the global economic upheaval driven by the US-China tech competition and decoupling from China. For instance, after designating the 11 items as critical supply chain management items in late 2022, the Japanese government has been operating a program that supports approximately one-third of the investment cost for domestic companies investing in facilities to manufacture these items. The government allocated a total of 2.183 trillion yen in budget support programs. Among the 11 critical items, the largest budget allocations are for batteries (827.4 billion yen, 37.9%) and semiconductors (806.2 billion yen, 36.9%), while other items like cloud programs (136.6 billion yen, 6.3%) and critical minerals (105.8 billion yen, 4.8%) receive relatively lower budget shares. Notably, the Ministry of Economy, Trade, and Industry (METI) has been committed to reviving the semiconductor industry by establishing a semiconductor fund and R&D support programs, attracting Taiwan's TSMC foundry to Japan, supporting investment in legacy semiconductor manufacturing facilities, and backing the technological development of the Japanese chipmaker Rapidus, following announcement of the Semiconductor and Digital Industry Strategy in June 2021.

Looking back at Japan's domestic supply chain risk management policies since 2021, there have been significant achievements, such as increased domestic investment in semiconductor manufacturing equipment, integrated circuits, and semiconductor devices. However, some significant issues remain from the perspective of supply chain risk management. First, it is unclear to what extent the Japanese government utilizes data or information related to overseas procurement by Japanese companies when identifying and analyzing supply chain risks. Second, as mentioned earlier, the current policy to manage supply chain risks is heavily focused on strengthening domestic supply chains and supporting domestic investment in advanced industries where Japan's national competitiveness is threatened. Consequently, there is a lack of specific measures for preemptive and post-crisis supply chain risk management.

Next, let's examine Japan's external supply chain risk management policy from the perspective of its economic security strategy. Japan has been actively cooperating in US-led movements to reorganize the global supply chain, as evidenced by President Biden's announcement of the establishment of the Indo-Pacific Economic Framework for Prosperity (IPEF) during his visit to Japan in May 2022. The IPEF Supply Chain Resilience Agreement signed in December 2023 stipulates a crisis response mechanism, including holding emergency meetings within 15 days

upon a member's request during a supply chain crisis to match manufacturers in need of resources with supplying companies and find alternative transportation routes. Japan has high expectations for this crisis response mechanism. However, as of yet only six countries – USA, Japan, Singapore, Fiji, India, and Korea – have ratified the IPEF supply chain agreement, raising skepticism about its effectiveness ahead of the US presidential election in November 2024. Meanwhile, the US' Biden administration launched the Minerals Security Partnership (MSP) in June 2022 to expand and diversify battery supply chains and critical minerals. Since its creation, the MSP has grown to include 14 partner countries and the European Union, and Japan is actively participating in the initiative.

Japan's supply chain risk management policy has achieved noticeable results in bilateral cooperation with the US. In its first meeting held in July 2022, the Japan-US Economic Policy Consultative Committee (the Economic "2+2") agreed on supply chain cooperation in the areas of semiconductors, batteries, and critical minerals. As a follow-up to the Basic Principles on Semiconductor Cooperation and the Economic 2+2 meeting, the METI announced in November 2022 the establishment of Rapidus, an advanced logic semiconductor foundry in Japan. At the second Economic 2+2 meeting held in November 2023, the US and Japan agreed to strengthen cooperation in technology areas such as semiconductors, AI, quantum computing, clean energy, and 5G, and to expand supply chain cooperation in critical minerals, energy security, and food security. In the Japan-US summit held in April 2024, both countries agreed to cooperate in semiconductor procurement to reduce dependency on China. However, it does not appear easy for Japan to carry out a bold transition to a decoupling policy from China. For instance, in July 2023, METI responded to a request from the US Department of Commerce by adding 23 items, including advanced semiconductor manufacturing equipment, to the export control list targeting China. Nevertheless, in July 2024, the US Biden administration warned that if Japanese companies like Tokyo Electron (TEL) continue to supply advanced semiconductor technology to China, it would consider applying the Foreign Direct Product Rule (FDPR) introduced in December 2022 to these companies. This highlights a discord in US-Japan supply chain cooperation.

When considering these developments in Japan's domestic and international supply chain risk management policies, the following potential directions for Korea-Japan cooperation can be expected. The Korean government has held three economic security dialogues with Japan since the Korea-Japan summit in March 2023, discussing supply chain cooperation in semiconductors, batteries, and critical minerals. Although concrete cooperation plans have not yet materialized, the Korean government, like Japan, has been establishing various institutional

frameworks to stabilize and strengthen supply chains, for instance through the enactment of the Act on Special Measures to Strengthen Competitiveness and Stabilize Supply Chain of Materials, Components, and Equipment Industry (June 2023), the Framework Act on Supply Chain Stabilization Support for Economic Security (December 2023), and the Special Act on National Resource Security (January 2024). The semiconductor industry is the most critical area for policy cooperation between Korea and Japan in stabilizing and strengthening supply chains. As both countries have designated the advanced semiconductor industry as a national strategic industry, supply chain cooperation between semiconductor-related companies in Korea and Japan is essential for enhancing the national competitiveness of the semiconductor industry in both countries. The Korean and Japanese governments should build mutual trust through information exchanges on the operation of export control systems and harmonize export control regulations to prevent a recurrence of trade disputes such as when Japan implemented export control measures against Korea in July 2019. The second area where Korea-Japan supply chain cooperation is needed is sharing global supply chain risk management systems and jointly responding to crises. The Korean government has been enhancing its supply chain risk management system by upgrading the Early Warning System (EWS) through the use of AI and establishing manuals for step-by-step crisis response measures and procedures. Given Japan's keen interest in Korea's EWS, there is potential for in-depth cooperation between Korea and Japan in sharing their supply chain risk management systems. Furthermore, Korea and Japan should consider implementing the crisis response mechanism stipulated in the IPEF supply chain agreement as a priority. The third area where Korea-Japan supply chain cooperation is anticipated is in critical minerals. Both countries have identified reducing dependence on specific countries for critical minerals as a strategic task. Korea would benefit from concrete cooperation measures with Japan within multilateral partnerships like the MSP. The MSP is now engaged in 30 projects across upstream mining, midstream processing, and recycling and recovery in Africa, the Asia-Pacific, Europe, and the Americas. Korea and Japan have shared experiences in jointly promoting third-country cooperation projects in energy and resource development since the 2000s. Building on these experiences, both countries should aim for successful outcomes by jointly participating in various MSP projects, establishing a model for Korea-Japan supply chain cooperation. [KIEP](#)