

Eurasian Dynamism and U.S. Diplomacy: A Study of Supply Chains for Mineral Resources

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How should the United States engage in the increasingly dynamic Eurasian continent? This is a question that the successive U.S. administrations have debated on. The Biden administration, which was inaugurated in January 2021, is also looking for an answer to this question. The overall aim of the U.S.' engagement in Eurasia is to maintain supremacy on a global scale. Specifically, it refers to three phenomena: (1) political/military involvement, (2) competition in values, and (3) economic involvement. In the U.S.-Soviet Cold War and in the strategic competition between the U.S. and China, the three phenomena have been mixed and the U.S. has continued to engage in Eurasia.

In this paper, the U.S.' Eurasian diplomacy is reviewed from the perspective of economic security, which is growing in weight. Economic security is one of the three phenomena mentioned earlier in this paper, (3) economic involvement, but it also overlaps with (1) political and military actions. "(2) competition in values" is also used as a reinforcement for economic security with the expression of "free and open economic practices in accordance with laws". While political/military conflicts and competition of values assume a characteristic of a zero-sum game, economic security has an interdependence on its undercurrent and cannot clearly separate between winners and losers. It is often accompanied by unexpected byproducts, and the country which initiates such a conflict is often hit by unforeseen damage.

In addition, the importance of fossil fuels in the Middle East, which has long been the central point of the Eurasian involvement in U.S. economic security, has fallen, and rare-earth elements are gaining attention in a recent transition period. Rare-earth elements are essential for making wind turbines, therefore foundations to achieve a decarbonized society. Their value is increasing.

With the awareness of a multilayered viewpoint regarding economic security policies, competition over rare-earth elements between the U.S. and China are considered in this paper, and the Eurasian diplomacy of the United States is explored late in this paper.

Positioning of Rare-earth Elements has Changed

There's considerable pace behind the U.S. and China's movements over rare-earth elements.

China has placed rare-earth elements as a strategic resource from early on. In May 2019, President Xi Jinping visited Jiangxi, a source of rare-earth elements, and declared that "we will use our own technology to win the battle". In December 2020, China enforced the Export Control Act to prohibit and restrict overseas use of products and technologies that can be diverted to military uses. In mid-January 2021, it issued a draft ordinance for strengthening control on rare-earth elements. Communist media outlets have reported the possibility of restrictions on rare earth exports to the United States as part of the trade conflict between the United States and China.

When a Chinese ship captain was arrested by the Japan Coast Guard near the Senkaku Islands in September 2010, China began to control the export of rare-earth elements following the incident, it was seen as a retaliation.

Concerns have been raised in the United States over China's control of rare-earth elements exports, and the U.S. government has taken countermeasures with the keyword "building a strong supply chain".

In response to the stagnation of rare earth exports after the arrest of the Chinese ship captain, the Department of Energy under the Obama administration declared diversifying the sources for rare earth elements, and started a conference on rare-earth problems involving the United States, Europe, and Japan. With Japan and Europe, the U.S. filed a suit over China's control on rare-earth exports to the World Trade Organization (WTO) and won the WTO's recognition as China being in breach of the agreements made.

The Trump administration found dependency on Chinese rare-earth elements in precision-guided weapon manufacturing as a problem, and issued presidential decrees in 2017 and 2020 to be less dependent on their rare earth and achieve self-sufficiency. Following the decrees, the Department of Defense proposed support for domestic production in October 2018, and decided to fund a total of \$43.16 million to four rare-earth production companies in the United States in November 2020 and February 2021.

The Department of Commerce also urged domestic companies to produce rare-earth elements for commercial demands such as smart phones in June 2019. The United States is also providing financial support for Denmark's Greenland, which has an abundance of mineral resources including rare-earth elements.

The Biden administration has taken over the former administration's policy to move away from dependence on China over rare-earth elements, and issued a presidential decree to promote diversification of the supply chain of rare-earth elements as well as of semiconductors and medical products on February 24, immediately after his inauguration.

The United States used to produce rare earths domestically. Mountain Pass, a rare earth mine in California, began production in 1952 and had been the world's leading production base until the 1990s. However, the rare-earth elements caused river/soil contamination during separation and refining. In particular, the processing and control of thorium, a separated radioactive material, were serious problems and required huge costs to solve.

In China Deng Xiaoping remarked "Petroleum in Middle East. Rare earth in China", in the 1992 southern tour, and ordered development and production of the strategic resource. Since then, China has made strong efforts in terms of mining, separation, and refining of rare-earth elements and won the cost competition. The United States stopped both mining and production of rare-earth elements in the late 1990s, and as a result, China became more oligopolistic. China accounts for 60% of the world's rare-earth mining, but 80% of separation and refining.

Following the U.S. government's policy on a departure from dependence on China, Mountain Pass resumed mining in 2017 and now accounts for 15% of the world, but the ores are transported to China for refining and separating.

Rare earth has been attracting attention as a military resource essential for the state-of-the-art stealth fighter F35 and radars of unmanned aircraft, but it is also a material for high-performance magnets and indispensable for technologies to achieve a decarbonized society, including wind turbines and electric vehicles.

Rare earths became of a different importance in the course of a universal economic/social shift from the limited use for advanced military weapons to decarbonization. Tim Gould, Head of the Division for Energy Supply Outlooks and Investment, International Energy Agency, stated that the demand for rare earth will increasingly heat up in the future, in a webinar on mineral resources held by the Ministry of Foreign Affairs on February 18, 2021.

The Biden administration has placed climate change as a priority issue and is much more aware of the importance of rare earth, which is essential for decarbonization technology, than the previous administrations. The fact that the rare earth is controlled by China is considered inconvenient by the administration to win the intense competition with China and to achieve a decarbonized society, and it is natural for it to aim for diversification of the rare-earth supply chain and less dependency on China.

President Biden cited strategic partnerships with allies as one of the pillars of his external policy, and is also working with allies including Japan to overcome dependence on China's rare earth. Two Department of State officials attended the aforementioned webinar held by the Ministry of Foreign Affairs of Japan on Indian Pacific initiatives and mineral resources, and one of the two, Anna Shpitsberg, Deputy Assistant Secretary for Energy Transformation, expressed a sense of strong concern over China's oligopoly, saying that most of the processing of rare-earth elements is taking place in one country.

The other presenter, Peter Haas, Acting Assistant Secretary (Bureau of Economic and Business Affairs) expressed his hope for the establishment of a supply chain that reduces dependence on China by means of the "Quad", the four-nation framework involving Japan, Australia, and India.

The U.S. government has launched the Energy Source Government Initiative (ERGI) for volunteer countries and started discussions on the establishment of environment-oriented mining of rare minerals (including rare earths) and strong supply chains. Experts expect the ERGI to be a four-pole framework, where Canada is added to the three poles of Japan, the United States, and Europe, or a six-pole framework with Australia and India added.

The United States does not have a manufacturing facility with high-performance magnets necessary to use rare-earth elements for electric vehicles and wind turbines. For this reason, the rare earths produced in the United States are expected to be fully used domestically for military demands, namely radar of precision weapons.

High-performance magnets made from rare-earth elements necessary for decarbonization technology were originally developed and are manufactured in Japan. One Japanese rare-earth business person believes that the United States is considering a supply chain where it exports rare-earth elements to Japan to have it create high-performance magnets and use them for electric vehicles and wind turbines.

Limitations of economic security policy

Careful consideration should be given to whether China will actually impose a punitive restriction on exports to the United States.

When Arab petroleum exporting countries invoked sanctions to restrict petroleum exports to developed countries including the United States, Europe, and Japan during the fourth Middle East War (1973), alternative energy sources started to be widely used which included the development of North Sea oil fields and more nuclear power generation, and Japan also took thorough energy-saving measures. As a result, the 1980s and 1990s saw a historical oil price drop, and the petroleum-producing countries suffered a financial blow. The vulnerability of being dependent on oil produced in the Middle East eventually led to the Shale revolution in the United States in the 2010s, undermining petroleum-producing countries in the Middle East.

If China, which produces over the half of rare earth in the world, invokes a trade embargo, it may cause multiple side effects and eventually damage China. A trade embargo could lead to a substantial rise in price, making it easier for Japan, the United States, and Europe to select Australia, Canada, Africa, South America, and North Europe as alternative sources. This diversification would be instrumental in fighting back against China's oligopoly. In fact, since exports of rare earth from China have decreased after the arrest of the Chinese ship captain in 2010, Japan has developed high-performance magnets that use much less rare-earth elements in order to minimize the impact. As mentioned earlier, China lost a case in WTO. China's strategy for restricting rare earth exports has not been effective in the long term.

Domestic and foreign rare-earth experts believe that China is well aware of the "resource curse" and will not invoke a trade embargo. Although China's rare earth exports declined sharply in 2020, experts believe that the reason for this is not a countermeasure against the United States and Japan, but the expanding production of electric vehicles and wind turbines in China.

What can be gathered from these circumstances is the effects and limitations of economic security. Even if a country imposes punitive restrictions such as sanctions, the affected countries would choose alternative sources and diversify their supply chain, and the nation imposing such restrictions would likely be hard hit without getting its intended result.

Limitations of economic security policies are seen in various measures of the United States against China. When the Trump administration banned the export of semiconductor technology to specific

Chinese companies including Huawei, China started to work on domestic technology production. China has also retaliated against the United States with similar measures, such as additional tariffs in response to the U.S.' increased duties on Chinese products, and creating a list similar to the Entity List. U.S. financial sanctions that prohibit settlement in dollars are expected to slowly help expand non-dollar settlements in China, Russia, and other neighboring countries, consequently weakening the dollar's power.

Economic security policies can be effective if an imposing country has overwhelming economic force and technical capabilities far ahead of others, but will be offset by countermeasures if great powers are confronted with each other. The United States and China, the world largest and the second largest economies have basically continued friendly relations for half a century and their economies have been connected. As such, it is certainly difficult to implement full-fledged economic security policies, such as complete decoupling.

Restrained, Passive Involvement in Eurasia

In this last chapter, the U.S.' Eurasian diplomacy is reviewed.

Since the early stage of the Cold War, the United States has had a number of footholds in the edge of the Eurasian continent by establishing the North Atlantic Treaty Organization (NATO), U.S.-Japan alliance, U.S.-South Korea, and quasi-alliance with Israel and Saudi Arabia. However, those were restrained, passive involvements for the purposes of preventing the Soviet communist bloc from going south, facilitating smooth distribution of petroleum energy, and ensuring the security of allies. U.S. troops were deployed in Afghanistan and Central Asia shortly after the September 11 attacks, but the country did not take root in Eurasia. This was also pointed out in "The New Continentalism" (written by Kent E. Calder and translation supervised by Hiroki Sugita, 2013) and "Super Continent" (same author and translation supervisor, 2019).

The U.S.' restrained approach towards the Eurasian continent is probably on the grounds of the traditional isolationism in the American people and of the lack of willingness and ability of the U.S., a maritime country, to engage deeply in the Eurasian continent. I suspect there was a sense of remoteness and awe for Eurasia, which has different history, cultures, and religions.

The restrained approach towards Eurasia is likely to continue under the Biden administration.

As the "post-9/11 order" is about to end, the United States is withdrawing U.S. forces from Iraq, Afghanistan, and Syria in the Middle East. The value of fossil energy from the Persian Gulf states declined under the call to action to achieve a decarbonized society. The revival of the nuclear agreement with Iran, which the Biden administration is trying to achieve, is aimed at removing factors of turbulence in the Middle East and reducing the U.S. military's footprint there.

With regard to its attitude toward Europe, although hostile relations with Russia continue, it is symbolized that the Obama administration's response to the Ukrainian crisis was extremely restrained.

Overall, the United States does not have the ability to reverse the consolidation of European countries turning away from the Unified States, and will be satisfied with a strengthened alliance between the United States and the United Kingdom after Brexit.

It is only China that the United States is making a serious effort for in terms of competition and engagement within the Eurasian continent. As competition with the Belt and Road Initiative, which is for improving connectivity with the other regions in the Eurasian continent and creating a huge land area in which China can enjoy supremacy, the United States is creating a framework based on ideas centered on oceans such as the "Free and Open Indo-Pacific" and "Quad", and strengthening cooperation with the periphery of the continent.

The U.S. competition with China has a strong emphasis on economic security as well as military security and values. The "Free and Open Indo-Pacific" and "Quad" frameworks are also aimed at harmonizing security with economic cooperation. For that purpose, the BUILD Act was established on a bipartisan fashion in 2018 and the U.S. International Development Finance Corp (USIDFC) was founded. The aim is to strengthen ties through infrastructure investment in developing countries in the Indian Pacific region and through promotion of private-sector development projects.

In terms of conventional forces the United States is inferior to China in this region. The United States' partner countries, including Japan, India, Australia, South Korea, and Southeast Asian countries, are not hoping for political and military tension with China. India has emphasized its desire to use the Quad as an economic cooperation framework to create a strategic value chain. As such, in the competition with China, the main focus of the Eurasia engagement by the United States, the U.S. speaks of economic connections. This includes its intent of participating without provoking China by placing economic development in the foreground rather than military security.

Looking at these economic security approaches to the Eurasian continent by the United States, the movement to stay away from dependence on rare-earth elements from China is part of them.

Time will be needed to see what kinds of outcomes will be produced from the restrained approaches taken by the U.S.

It should be carefully observed whether Mongolia, which has a shared foundation of "democracy", will be added to the U.S.' approaches to maritime countries. Since the Iraq War, which set "promotion of democratization" as its cause, approaches accompanying the concept of values seem to have become obsolete, but the Biden administration has put human rights as the cause of diplomacy for the first time since the Iraq War era. Mongolia is also a producer of strategic resources, namely rare-earth elements, and will be the key to predicting the depth of Eurasian diplomacy by the United States.

[Reference] The seminar hosted by the Ministry of Foreign Affairs mentioned in this paper is "Free, Open Indo-Pacific and the Current Situation on Energy and Mineral Resources". [Seminar on Energy Security in Asia 2020 | Ministry of Foreign Affairs \(mofa.go.jp\)](#)