

Research on the Present Situation, Problems and Countermeasures of Chinese Rare Earth Export

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Abstract: China has become the world's rare earth reserves, production, export and consumption of rare earth powers of the first, in the international "monopoly" of rare earth products on the market has the absolute position of advantage resources, at the same time in the meet the basic demand of domestic more exports in many developed countries such as America, Japan, Australia, Europe, but rare earth products export has many problems, such as export products structure level is low, the severe loss of export pricing power, smuggling, etc. By studying China's rare earth's position in the world market, and global reserves, production and trade of rare earth resources present situation, to promote the rational use of rare earth resources in China, rare earth export trade good and enhance the competitiveness of the international market, rapid development in the international arena enjoy higher initiative and voice has strategic significance.

Keywords: Export trade; SWOT; Non-tariff barriers to trade

1. Introduction

Since the 21st century, China's rare earth industry has had many firsts in the world: The output is the first, the industrial reserves are the first, and the export volume is the first. In rare earth trade, China has always had a relatively high market share. However, China does not have pricing power in international rare earth trade. Prices have been low for a long time, The oligopolistic position of total export volume and output has not brought market power and high trade benefits to Chinese rare earth products. On the contrary, the importing countries are constantly pushing down the price of products, which has a serious negative impact on China's rare earth industry and even the national economy. Therefore, the problem of the lack of pricing power of rare earth has become the focus of attention. In January and May 2015, China cancelled export quotas and tariffs on rare earths in accordance with WTO official requirements. Export licenses are under management. The rare earth industry is moving toward free trade. The development of China's rare earth industry is facing a huge crisis.

2. An Analysis of the Current Situation of China's Rare Earth Export Trade and Policy

2.1. Current situation of Chinese rare earth exports

At present, all countries in the world that can provide various types of rare earth products are only China. Chi-

na has become the world's largest supplier of rare earth commodities. The export trade volume of rare earth industry is the first in the world. Rare earth exports account for 84.3 % of the world market share. The export of rare earths is mainly primary products. More than 90 % of rare earth concentrates are supplied to the world. The vast majority of medium-and heavy rare earth in the world comes from unique ion adsorbed rare earth mines in southern China;

Exports in 2008-2016 were 7.6 trillion US dollars, 4 trillion US dollars, 9.98 trillion US dollars, 21.9 trillion US dollars, 12.6 trillion US dollars, 6.5 trillion US dollars, 5 trillion US dollars, 4.5 trillion US dollars, and trillion US dollars, respectively; The average export prices were US\$ 50,000, US\$ 40,000, US\$ 60,000, US\$ 280,000, US\$ 120,000, US\$ 60,000, US\$ 49,000, US\$ 40,000, and US\$ 30,000, respectively.

2.2. SWOT analysis of Chinese rare earth internal and external markets

After the abolition of the rare earth quota system, export qualification administration and export tariffs in accordance with the requirements of the 2015 WTO, After China's rare earth industry exports entered the post-tariff quota era, the export of rare earths has not improved. For example, lack of matching pricing power, Not perfect price control mechanism, Industry trade process tradition, Export management market chaos and many other issues, As a result, the rare earth industry is facing great challenges and crisis. The objective factors of domestic and

foreign market competition are analyzed using SWOT below. In order to target is to find out the problems and reasons to take precise countermeasures.

2.2.1. Analysis of rare earth advantages

China is rich in rare earth resources. The reserves, production and export volume are the highest in the world. And exports have a monopoly. Meet 80 % of world demand for rare earths.

All countries in the world know the strategic position of rare earth resources. It is widely used in aerospace, communications, nuclear power, metallurgy, permanent magnetic materials, new energy materials and other fields. It is a strategic resource for the National reserve military and research and development of high-tech products. That's why rare earths are known as industrial gold.

2.2.2. Analysis of rare earth disadvantage

Low science and technology content, low product value added, serious loss of resources, lack of international pricing power. China lacks high-tech processing. Take the low-end product line of the industrial chain. Long-term export of primary products, Is a typical Raw material orientation export, Profits are extremely low. The industry lacks proper planning and top-level design, The market is chaotic, the company is independent and blindly exploited.

2.2.3. Analysis of rare earth opportunities

The Chinese economy has developed rapidly. In new materials, New consumption point, new consumption structure emerges. The domestic consumption structure has been optimized and upgraded. The field of new materials has developed rapidly. Reorganization and reform of the rare earth industry; Will make the enterprise change the previous extensive business model, We will speed up product upgrading.

2.2.4. Rare earth threat analysis

The rare earth quota will be abolished in 2015. Foreign countries are actively studying rare earth technology research and development. And looking for alternative products, The gap in rare earth technology between countries will widen. The United States, Japan and other developed countries are aware of the rare earth crisis. Cooperate actively, speed up the survey, We will establish a long-term and complete safety factor for rare earth industries and reduce external dependence. Other countries have also seized a fierce share of the rare earth market.

2.2.5. Conclusion of rare earth SWOT analysis

Through the analysis of the internal and external factors in the rare earth market, China is at a critical stage in the

transformation and upgrading of its rare earth industry. Therefore, the best defense strategy is adopted.

3. Analysis on the Problems and Causes of Rare Earth in China

3.1. Disorder in mining and serious outflow of rare earth resources

Global rare-earth supplies have long depended on China. In the next 15 to 30 years, China's rare earth resources will be depleted by the increasing demand for rare earths at home and abroad and by the rapid growth of mining speed and scale. And the time to become a rare-earth importer may come earlier. This will inevitably pose a threat and constraint to China's economic and national development and safety. There has been no significant improvement in resource utilization. Excessive exploitation of rare earth resources will lead to soil erosion, environmental degradation, and ecological destruction; Due to the lack of funds for rare earth enterprises, Lack of high-tech support, the deterioration of the natural environment has been exacerbated.

3.2. Supply and demand imbalance, lack of pricing power in international markets

Prices of Chinese rare earth products have long been controlled by foreign businesses. Foreign companies use price strategies to control Chinese rare earths. When the price of Chinese rare earths goes up, When the price of rare earths drops, It will cause Chinese rare earths to appear in the international market as "cabbage prices" and "buyer's market". Foreign buyers are big, and we're over 100 companies, There is vicious competition among Chinese export enterprises. The market's imbalance between demand and supply, It is the root cause of market price chaos.

3.3. Without scientific and technological support, the rare earth industry is at the lower reaches of the industrial chain.

China is a big rare earth country. But a country where rare earth technology is weak, Rare earth products for deep processing and reprocessing technologies, Autonomous R&D capabilities lag far behind those of developed countries. The United States, Japan, Europe and other developed countries have mastered the core and key technologies of rare earth high-tech materials. Monopolize a range of patents, The development of rare earth industry is controlled by the advantages of its patent technology. Patents not only represent technology, And it means markets and interests. Chinese companies lack proprietary technology. There is no right to deep processing or finishing. We can not share the high value-added benefits of processing products in the rare earth industry.

3.4. Lack of regulation and rampant export smuggling

Rare earths are a global strategic resource. Global demand is huge, mining costs are low and transaction prices are high. In order to obtain profits, enterprises do not hesitate to take risks to smuggle exports. In particular, the black rare earth industry is also the biggest problem for the sustainable development of the domestic rare earth industry. The domestic black chain rare earth is illegally mined in large quantities, We seriously disrupted the market order for rare earth trade. And eventually led to a large number of overcapacity in the industry price rise is not high. The huge economic benefits of black rare earths, So many companies are desperate. High profits from low-cost mining, It provides a source for smuggling exports of black rare earths. If the government does not crack down on illegal supply of black rare earths, We can not allow the rare earth industry to develop healthily.

4. Countermeasures and Suggestions for Chinese Rare Earth Export

4.1. We will restrict mining and establish a legal and regulatory system for all rare earth industries.

The State shall establish and improve laws and regulations concerning production and export licenses for rare earth enterprises. Implementation of a mining licensing system, Illegal mining and over-mining are prohibited, We will severely punish those who violate the rare earth legal system. If the circumstances are serious, the mining qualification shall be revoked.

4.2. We will implement supply-side reforms and improve the pricing mechanism for rare earth markets.

One of the most important reasons for the loss of pricing power is that the rare earth market in China is dominated by each other. These enterprises lack inter-industry cooperation and communication. Technical power is not being renewed, Low export prices for primary products produced, It is difficult to safeguard its commercial interests. To integrate the rare earth industry, the government should guide and promote the intensive development of the rare earth industry. Large groups and small and medium-sized enterprises should make full use of the market. In the policy environment, we should supplement the competitive advantage and survival of the same market. The development and formation of economies of scale has also helped to reduce average costs, Improve the overall competitiveness of the entire industry.

4.3. We will strengthen supervision over enterprises and severely punish smuggling.

The government should adopt policy policies and administrative measures. The illegal exploitation of rare earth and black industrial chains is severely punished. Rectify-

ing domestic rare earth enterprises, banning play companies, and standardizing and integrating the rare earth industry, Promote its merger and integration, raise the concentration of rare earth industry, reduce vicious competition, And severely crack down on the black rare earth industry chain, so as to improve the supply elasticity of rare earth. We will speed up the transformation and upgrading of enterprises to green production and sustainable production. We will clearly define the output of enterprises 'student licenses and increase technical input so that enterprises can change from high input and low output to low input and high output. We will establish a blacklist credit system for enterprises. We will crack down on enterprises that violate the rules governing trade, circulation and marketing. Let the strength of strong, good credit, technology, green enterprises lead the innovation development.

4.4. Increasing scientific and technological inputs, increasing the technology content and value added of products

China should increase its investment in rare earth application technologies and improve its capacity for deep processing of rare earths.

The manufacture of high value added products encourages the export of refined products rather than the export of cheap raw materials. In view of the backwardness of China's rare earth mining technology, it is necessary to increase investment in scientific and technological research. We will pay attention to personnel training, improve human resources management, and help China's rare earth industry meet international standards. China should also support and encourage rare earth enterprises to upgrade their production facilities in a timely manner through scientific and technological innovation. We will introduce advanced technology from abroad to encourage green and sustainable production. The recycling of resources improves the efficiency of utilization and the development of pollution-free production and smelting processes. Focusing on independent research and development, Pay attention to variety diversification and quality optimization. The export of rare earth raw material processing products or semi-finished products will replace the export of rare earth raw minerals, thus improving the status of rare earth in the international market and laying a solid foundation for the voice of rare earth exports.

5. conclusion

Chinese reserves of rare earths have fallen considerably. But the remaining rare earth reserves are still considerable. As science and technology play an increasingly important role in promoting world economic development, The high-tech industry has received more and more attention. In the absence of good alternatives, demand for

rare earths is unlikely to decline significantly. Therefore, China can maintain the monopoly of supply in the short term.

China will reverse the low price increase of rare earth exports in the international market. The first is to increase the investment in innovative R&D and actively promote the development of high-tech industries. We will make the field of new materials more important than the traditional one, and drive the price of rare earths up with new demand structures. Let rare earth get rid of cabbage price, reflect its value as an important resource. We will continue to promote the integration of the rare earth industry, crack down on irregular industrial chains, improve the mining order of rare earth mines, curb the supply of black rare earth, control the supply of rare earth, and achieve high-end rare earth industries. Finally, it is necessary to grasp the policy orientation, abide by the provisions of the World Trade Organization, formulate reasonable policies to control the output of rare earth, and grasp the price of rare earth.

References

- [1] Ling Li. Research on China's Export Management System of Rare Earth Resources in the Post-Tariff Quota Era . University of International Economics and Trade, 2017.
- [2] Lihongjia, Wanghongyu, Yan Zhanyu. International Public Goods Supply: Economic Diplomacy Strategy of China's Rare Earth Industry. North-East Asia Forum, 2017, 26(02): 82-93 +128.
- [3] Zhouming, Liu Xianglin. Analysis of China's rare earth production, trade and reserves. Foreign Trade, 2017(03): 57-60.
- [4] Pan Yue. Impact of China's rare earth industry policy on rare earth exports. China Management Informatization, 2016, 19(14): 127-128.
- [5] Li Yanan. The present situation of China's rare earth industry and suggestions for countermeasures. Enterprise Technology Development, 2014, 33(30): 108-109.
- [6] Luohanfang.zhong's Analysis of the Status of Rare Earth Trade. China High-tech Zone, 2018(04): 201 +242.
- [7] Dufenglian, Wangyuan, Lu Yang. Theoretical analysis and realistic observation of China's rare earth export control policy. Rare Earth, 2014, 35(02): 112-118.