

Research on Trade Risk and Preventive Measures of Domestic Anti-wear Hydraulic Oil Products

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Abstract: With the acceleration of global economic integration, the international trade activities of domestic anti-wear hydraulic oil products continue to increase, and the trade risks of chemical products such as anti-wear hydraulic oil products brought by export are also highlighted. In order to prevent the trade risk of domestic anti-wear hydraulic oil products, this paper puts forward some strategies, such as strengthening market research, implementing diversified market strategy, strengthening communication with international partners and establishing trade risk early warning mechanism, to solve the problems of unstable market demand, price fluctuation, trade barriers and policy risk faced by the trade of domestic anti-wear hydraulic oil products. In order to provide a useful reference for ensuring the stability and sustainable development of China's anti-wear hydraulic oil industry and further enhancing national economic security.

Keywords: Antiwear Hydraulic Oil; Trade Risk; Preventive Measures

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Introduction

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chemical products such as anti-wear hydraulic oil products brought by export are also highlighted. In order to prevent the trade risk of domestic anti-wear hydraulic oil products, this paper puts forward some strategies, such as strengthening market research, implementing diversified market strategy, strengthening communication with international partners, and establishing trade risk early warning mechanism, to solve the problems of unstable market demand, price fluctuation, trade barriers, and policy risk faced by the trade of domestic anti-wear hydraulic oil products. This paper aims to provide a useful reference for ensuring the stability and sustainable development of China's anti-wear hydraulic oil industry and further enhancing national economic security.

1. Significance of Preventing Trade Risks of Domestic Anti-wear Hydraulic Oil Products

1.1 The Inherent Requirements of Macroeconomic Development

From a macroeconomic point of view, the production and trade of hydraulic oil, as an important industrial raw material, is directly related to the economic health of the country. On the one hand, the wide range of applications of hydraulic oil determines its core position in the entire industrial chain. From large-scale machinery manufacturing to precision instruments, to all kinds of equipment in daily life, hydraulic oil plays a key role in it. This effect directly corresponds to the huge output value in the macro-economy, so the production and trade of hydraulic oil can be said to be a "barometer" reflecting the health of a country's industry.

On the other hand, the production and trade of hydraulic oil is not always calm. In this international trade environment full of variables, hydraulic oil trade may face a variety of risks. For example, the disruption of the supply chain in international trade may make the production of hydraulic oil become a bottleneck, affecting the normal operation of downstream industries; the sudden change of international market demand may make a large number of hydraulic oil already produced face backlog, bringing huge economic pressure to enterprises; the instability of the external economic environment, such as

the international economic crisis or economic sanctions imposed by some countries, may have an impact [4] on the export of hydraulic oil.

If these risks are ignored in the trade of domestic hydraulic oil without effective prevention, the consequences may be disastrous, and the industrial production may stop on a large scale because of the supply problem of hydraulic oil, which is undoubtedly a huge blow to China, a big industrial country.

1.2 Guarantee for the Healthy Development of the Industrial Chain

From the industrial point of view, hydraulic oil is not an isolated industrial field; it has deep interaction and dependence with many industrial fields, such as machinery manufacturing, heavy industry, aerospace, and agricultural machinery. This relationship is first reflected in the production supply chain. As a core component, the supply stability of hydraulic oil directly affects the production process and efficiency of related industries. If there are risks in hydraulic oil trade, such as unstable supply and sharp price fluctuations, these related industries will undoubtedly face rising operating costs. For example, in the machinery manufacturing industry, when the supply of hydraulic oil is blocked, not only the production efficiency may be greatly reduced, but also some key production links may even face interruption, resulting in a large number of order delays, which will cause serious losses [5] to the economic benefits of enterprises.

More seriously, persistent trade risks may cause long-term and even irreversible damage to the reputation and brand image of hydraulic oil manufacturers. In today's era of highly transparent information, a small supply chain problem can be magnified and spread rapidly, leading to the loss of consumer confidence in the enterprise. In the long run, not only the market share and profits will be damaged, but also the survival and development of enterprises may face enormous challenges and threats.

1.3 Consideration of National Economic Security

National economic security is also closely related to the trade risk management of hydraulic oil. Hydraulic oil is not only a common raw material in the industrial field, but also plays a vital role in many high-tech fields, and its status can be regarded as a

strategic material. This means that the trade risk of hydraulic oil is not only related to the calculation of economic profit and loss but also to the core security of the national economy.

Hydraulic oil is widely used in aviation, high-speed rail, precision machinery, and other high-tech fields, which makes its supply stability in these fields key to ensuring the safe operation of the industry. In this way, any supply problems or risks in the trade environment of hydraulic oil may be magnified as a major event affecting the economic lifeline of the country. More importantly, the stability and security of the national economy are often closely related to national security. In the context of international relations, hostile forces or competitor countries may seek and use the weak links or potential risks of hydraulic oil trade as a strategic means to interfere with or destroy China's economic stability and development through economic means. For example, by controlling the key supply chain of hydraulic oil or by manipulating the price of hydraulic oil, China's key industries may be impacted, which may further threaten the country's economic security and even overall security.

2. Trade Risks Faced by Domestic Anti-wear Hydraulic Oil Products

2.1 Market Demand Risk

As a product closely linked to the global economic environment, the stability of market demand for anti-wear hydraulic oil is affected by many factors. Fluctuations in the global economic cycle, especially the slowdown or recession of economic growth in major consumer countries, will have a significant impact on the demand for hydraulic oil. During the economic boom, production activities in related industries such as construction, machinery manufacturing, and other hydraulic oil applications accelerate, thus driving the demand for hydraulic oil. On the contrary, in the economic downturn, the production activity of these industries slows down, and the demand for hydraulic oil also declines. In addition, technological progress and innovation may also lead to instability in the market demand for hydraulic oil. With the development of science and technology, some new lubricants or alternative products may be developed and put on

the market. In this case, the original hydraulic oil may face the loss [6] of market share. For example, some efficient and environmentally friendly lubricating oil products may gradually replace traditional hydraulic oil because of their performance advantages, thus affecting the market position of hydraulic oil.

2.2 Price Fluctuation Risk

The price of domestic anti-wear hydraulic oil often fluctuates significantly in the international and domestic markets, which not only affects production and sales but also has a significant impact on the entire supply chain and related industrial chains.

The fluctuation of hydraulic oil price is closely related to the price of its raw materials. Because the production process of hydraulic oil needs to rely on a variety of petrochemical products, these raw materials are affected by oil prices, political environment, supply and demand relations, and other factors in the international market. For example, the sharp fluctuation of international crude oil price often leads to a significant increase or decrease in the cost of hydraulic oil raw materials, and this cost change will be largely passed on to the price [7] of the final product. In addition, the production and trade of hydraulic oil are affected by various economic policies, such as trade barriers, tariffs, exchange rates, etc. These economic policies may undergo significant changes in a short period of time, resulting in fluctuations in the import and export costs of hydraulic oil, thereby affecting its price in the international market. For example, a country suddenly raises the import tariff of hydraulic oil, which may lead to pressure on the export of hydraulic oil in China, making the price difficult to maintain.

2.3 Trade Barriers and Policy Risks

Domestic anti-wear hydraulic oil often encounters various trade barriers and policy restrictions in transnational trade, which bring great uncertainty and risk to the import and export business of China's hydraulic oil. Trade barriers and policy risks are diverse, random, and time-sensitive, which may not only affect the export volume and price of products but also hinder enterprises from developing new markets and businesses.

On the one hand, trade barriers are restrictive measures imposed by countries or regions

on the import of foreign goods in order to protect their industries and economies. Such measures may include high tariffs, quantitative restrictions, import licensing requirements, technical standards, and norms. For example, in order to protect its hydraulic oil industry, a country may set higher tariffs on imported anti-wear hydraulic oil products, which will reduce the competitiveness of our products in the country's market. In addition, some countries may set higher standards for the technology and quality of hydraulic oil for environmental reasons, making it difficult for some of our products to enter these markets. On the other hand, policy risk involves the economic, diplomatic, and policy changes implemented by a country or region in a certain period of time. These policy changes may not be related to the trade of hydraulic oil, but they may have an unintended impact [8] on the import and export of hydraulic oil. For example, a country suddenly restricts its economic and trade exchanges with China due to tense diplomatic relations, or implements austerity policies due to economic crisis, which may lead to the obstruction of China's hydraulic oil exports.

3. Trade Risk Prevention Measures for Domestic Anti-wear Hydraulic Oil Products

3.1 Strengthen Market Research

Facing the changing international economic environment and hydraulic oil market, strengthening market research has become one of the key preventive measures for the trade risk of anti-wear hydraulic oil products. Market research is not only a process of obtaining, analyzing, and interpreting relevant data, but also a comprehensive activity of in-depth exploration, understanding, and forecasting of market dynamics, which provides strong decision support for enterprises and helps them better grasp market opportunities and avoid risks.

Market research needs to focus on the consumer needs of the target market. It is necessary to deeply understand the purchasing habits, quality expectations, and price sensitivity of consumers to gain insight into the real needs of consumers. For example, analyzing the use and performance requirements of hydraulic oil products for different

target markets will help to customize products to meet specific markets. At the same time, relevant enterprises should also establish long-term and stable cooperative relations with various sources of information, such as in-depth cooperation with industry associations, market research institutions, independent analysts, etc., to obtain first-hand market information. These information sources can provide enterprises with valuable information about market trends, competitors' strategies, and potential risks, so that enterprises can adjust their market strategies in time and seize market opportunities.

3.2 Diversified Market Strategy

A diversified market strategy for domestic anti-wear hydraulic oil products enterprises means seeking and utilizing various market opportunities globally to diversify risks and sustain growth. The core of this strategy is to take advantage of the heterogeneity between different markets to ensure that enterprises will not be excessively impacted by the recession or instability of one market.

The implementation of a diversified market strategy first requires enterprises to conduct in-depth research and analysis of each potential market. This includes not only traditional large markets but also emerging markets, market segments, and markets that are not yet fully developed. For example, while demand in Europe and North America is high, some emerging markets in Asia and Africa may have higher growth potential and lower competitive intensity. At the same time, for different markets, enterprises need to formulate differentiated market entry and operation strategies. For example, in some developing markets, price may be a key factor in determining success, while in some mature markets, product quality and service may be more important. In addition, according to the differences in local culture and consumption habits, products may need to be customized and adjusted.

3.3 Strengthen Communication with International Partners

With the accelerated process of globalization, the production and sales of domestic anti-wear hydraulic oil products are no longer limited to the domestic market, which also

means more international transactions and transnational cooperation. In this context, establishing and maintaining a good communication relationship with international partners has become the key to ensuring the smooth progress of trade.

First of all, strengthening communication with partners will help to obtain and understand the changes and needs of the international market in a timely manner. This involves not only product specifications, quality standards, or price information but also information about local consumption trends, policies and regulations, or the economic environment. Only by deeply understanding this information can enterprises formulate strategies that are more in line with market demand and make adjustments quickly when they encounter problems. Secondly, maintaining close communication with partners can build mutual trust. This trust relationship has played an irreplaceable role in dealing with trade disputes, contract execution, or future cooperation projects.

3.4 Establishment of Trade Risk Early Warning Mechanism

The early warning mechanism of trade risk first needs to establish a comprehensive information collection system, which should include all kinds of information related to the trade of hydraulic oil products, such as international oil prices, policies and regulations of relevant countries, supply chain information, and economic indicators of target markets. By monitoring these data in real-time, enterprises can quickly detect any signs that may lead to trade risks. Such an early warning mechanism should also include a scientific analysis model. This model can predict future risks according to the collected information and provide forward-looking strategic recommendations for enterprises. For example, when the model predicts that there may be an imbalance between supply and demand in a target market, enterprises can adjust their production strategies in advance to ensure the stability of supply. In addition, the early warning mechanism also needs to have a timely feedback system. When the mechanism detects a potential risk, it should immediately notify the relevant departments of the enterprise, such as the marketing department, the production department, or the financial department, so that they can take prompt measures to deal with it.

4. Conclusion

With the advance of globalization, the trade activities of domestic anti-wear hydraulic oil products are becoming more frequent, and the hidden risks are gradually highlighted. The risks of any link may have a far-reaching impact on the overall industrial chain. Hydraulic oil products are not only related to economic benefits but also to national economic security and industrial stability, and their trade risks cannot be ignored. Corresponding preventive measures are essential. Only by thoroughly understanding and analyzing these risks can enterprises and government departments be more clear about their own direction and take targeted measures to ensure the stable and healthy development of China's hydraulic oil trade.

References

- [1] Yang Hailong. Rational selection of anti-wear hydraulic oil for equipment hydraulic system in iron and steel enterprises. *Metallurgy and Materials*, 2023, 43(01): 175-177.
- [2] Gao Junbao, Yang Shanjie, Chen Bingyao, etc. Efficient ashless antiwear hydraulic oil. *Light Industry Technology*, 2023, 39(04): 137-139.
- [3] Wang Tianshu. Advantages, disadvantages and development direction of self-produced anti-wear hydraulic oil and imported oil. *Shandong Coal Science and Technology*, 2016(07): 214-215.
- [4] Han Jiayang. Research on the Strategy of Digital Economy to Promote the Transformation and Upgrading of International Trade. *Management and Technology of Small and Medium-sized Enterprises*, 2023(02): 150-152.
- [5] Cai Wenqing. A new path for the transformation and development of international trade under the goal of carbon neutrality. *China Business*, 2022(09): 92-93.
- [6] Li Jianxun. Research and Discussion on International Trade Risk Management and Control of Foreign Trade Enterprises under the New Situation. *Modernization of*

Shopping Malls, 2023(11): 50-52.

- [7] Yu Lingdeng. Trade risk analysis and management exploration of state-owned enterprises from the perspective of group headquarters management and control. *Communications Accounting*, 2023(07): 55-59.
- [8] Zhou Lei, Ning Yu. Research on the Dynamic Avoidance Countermeasures of Foreign Trade Risks of Enterprises under the New Situation of China and the United States — Analysis of the Model of Influencing Factors in Four Fields. *Modern Business*, 2023(14): 82-85.