



Brief Analyses of Technical Barriers to Trade

— Based on the Case of Lighters in Wenzhou

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How to cite this paper: Yuan, X.P. and Zhang, Y.Y. (2018) Brief Analyses of Technical Barriers to Trade—Based on the Case of Lighters in Wenzhou. *Open Access Library Journal*, 5: e4352.

<https://doi.org/10.4236/oalib.1104352>

Received: January 19, 2018

Accepted: February 23, 2018

Published: February 26, 2018

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Abstract

Since China joined the world trade organization, trade friction causes of technical barriers to trade has increased year by year. In recent years, Chinese enterprises face trade disputes continuously increase in number and type, this is the inevitable result of the development of international trade, China export structure and other special factors related to system level. Relevant enterprises should adopt corresponding strategies to deal with different types of trade disputes, and deal with anti-dumping trade disputes. Enterprises should take active action and cooperate with investigation. This paper briefly describes the basic situation of technical barriers to trade. By analyzing an example of Wenzhou lighters, it discusses the threats faced by China's export trade and puts forward several countermeasures.

Subject Areas

Business Analysis, Business Finance and Investment, Development Economics, Environmental Economics, Marketing

Keywords

Technical Barriers to Trade, Export Trade, Countermeasure

1. Introduction

1.1. Research Background & Significance

With the rapid development of economic globalization and trade liberalization, tariffs have fallen from a large number of countries to another country. As a tool for government intervention in trade, the influence of tariffs is becoming weaker and weaker. At the same time, some traditional non-tariff barriers, such as license system and import quota, are increasingly restricted by the international community. When tariff barriers and traditional tariff barriers gradually lose

powerful forces, they are replaced by more concealed technical barriers to trade. Technical barriers to trade, as an important non-tariff barrier, are being widely used in developed countries.

For a developing country, has become an export burden, and even become the goods will eventually stop import barriers outside the territory. Hong Gu (2017) [1] proposed that the main reason is that backward technology and management in developing countries cannot reach the standards and regulations set by developed countries, or even if they can be achieved, huge cost burden will also be added to them. As the largest developing country in the world, the impact of technical barriers to trade on China's foreign trade is increasing. In general, our country's economic development level and technical level are still backward, easily restricted by foreign technical barriers to trade. The survey shows that in 2016, foreign technology trade measures caused losses to Chinese export enterprises to 520 billion yuan, and in China, more than 30% of export enterprises were affected by foreign technology trade measures to varying degrees. After entering twenty-first Century, technical barriers to trade occupy 80% of the whole trade barrier. In the long term, technical trade measures for the upgrading of China enterprises, technological innovation has a certain positive significance; but in the short term, technical trade measures to reflect on China's role in promoting trade and promoting the economic growth, more performance for adverse effects, especially in the tariff cuts under the condition of technical measures has become an important means of alternative tariff barriers. Therefore, it is imperative to further study the technical barriers to trade at the present stage, and put forward some effective strategies to promote the development of China's foreign trade.

1.2. Major Theories

1.2.1. Related Concepts of TBT

Technical barriers to trade (TBT) are kinds of measures that countries using some methods like technical regulations, packaging, testing and conformity assessment procedures to protect the domestic flora and fauna, human being's health and environment. These kinds of methods can improve the requirements of imported products, increase the difficulty of importing, and finally reach the goal of limiting imports. TBT derived from standards and technical regulation, including labeling, special packaging requirements etc. In facts, there are some differences in definition and classification between China and other countries because of different economical and technical levels.

TBT has a narrow and broad sense. The narrow sense of TBT mainly refers to the technical regulations, standards and conformity assessment procedures stipulated in WTO TBT agreement. The generalized TBT also includes inspection and quarantine measures for animals and plants and their products (SPS), packaging and labeling and labeling requirements, green barriers, and information technology barriers. In fact, they often appear in the form of technical regulations, standards and conformity assessment procedures. It should be noted that

only technical barriers beyond reasonable limits will form barriers to trade, while normal barriers will play a positive role in the development of international trade. So the main types of TBT for China are as follow: 1) Technical regulations and standards; 2) Conformity assessment procedures; 3) Requirements of packaging and labeling; 4) Green technology barrier; 5) Information technology barrier; 6) Patent technology barrier.

1.2.2. The Causes of TBT

There are external reasons and internal reasons why China encountered the technical barriers to trade.

From the external causes, the international environment has greatly changed; the competition between developed countries and developing countries is much fiercer. And with the development of economic globalization, it also generated some serious environmental problems. In order to protect the living environment and producing environment, many countries strengthen the restriction of technology. In addition, the improvement of consumers' consciousness of environmental protection, safety is also the important factor to cause the TBT.

From the internal causes, the low production technology level and worsening production environment of our country made the developed countries to challenge quality of our country's production. Besides, Gianluca Orefice (2017) [2] proposed that the degree that labor-intensive products affected by TBT is greater than technology-intensive products' or capital-intensive products'. Technology content of our country's labor and resource intensive products is lower than developed countries, these kinds of products cannot meet the requirements of technology standards of developing countries, thus they encounter TBT.

1.3. The Impacts of TBT on China's Foreign Trade

Under the development of international trade, TBT is becoming more and more important. In fact, TBT is a "double-edged sword", that is to say that it has dual influences on China's foreign trade.

1.3.1. Positive Effects

WTO member countries in the agreement on technical barriers to trade agreed that the technical regulations and standards for trade restriction cannot exceed a certain degree of legal purpose can achieve.

Implementing TBT has positive effects. Environmental barriers and green standards have promoted the implementation of sustainable development objectively. Economic construction and environmental protection are a pair of contradictions in the development process of any country. But the immediate economic benefits often make people choose the way to destroy the environment for economic construction. Especially in some developing countries, because of limited funds, it is impossible to take care of the environmental protection. The implementation of green standards will force Chinese enterprises to reduce environmental pollution in the process of production, and use green production

system to produce green products. This will objectively promote the implementation of China's sustainable development strategy. Similarly, to a certain extent, it will also promote the coordination and balance between the development of the world economy and the protection of the world environment, which is conducive to the development of the world economy and the protection of the whole earth's ecological environment. At the same time, the continuous improvement of quarantine standards and packaging design standards, urges countries to continuously improve the quality and health and safety performance of the products, which is positive for human life safety and health. André Gordon (2015) [3] proposed that especially now the world of animal and plant epidemic (such as foot-and-mouth disease, mad cow disease, wheat dwarf smut, corn bacterial wilt disease) when there is an outbreak, coupled with genetically modified (GMO) security is still not so scientific determination, in international trade, countries formulate related standards and strict implementation of quarantine it is very necessary.

1.3.2. Negative Effects

TBT also has negative effects on international trade. From the implement situation of TBT in international trade, developed countries with technical advantages restrict the import of products of developing countries by developing strict technical standards, technical regulations and certification systems. In the short term, TBT brought much negative effects on our international trade, the main negative effects are as follows: 1) Increasing of market access barriers; 2) Weaken of international competitiveness; 3) Increasing of disputes on international trades.

2. Case Analysis

2.1. Case Description

Wenzhou was called "world kingdom of lighter". In early 2007, there were more than 500 firms in the lighter industry of Wenzhou, which could produce 80 million lighters and occupied 80% of the world share and 98% in China. Wenzou has been the world production center, sale center and information center.

From 1990s on, Wenzhou lighters were exported to America and European countries and broke the world monopoly situation because of the inexpensive and variety products, which is the most important advantages for China to compete with other firms and enter into the market successfully. Finally, firms in Wenzhou cooperated with foreign companies to achieve rapid development.

From March 11, 2007, EU formally implemented "CR" act. The core of this act was that the lighters whose price were lower than 2 Euro, about 15 yuan, must be fitted with insurance lock to prevent children from opening and forbid toy-lighters entering into European market. This act was a kind of technology barrier to trade and made China confronted with a new big challenge.

After the implementation of "CR", the direct effect on Wenzhou is that the

lighters exports were hit. In Wenzhou, it was estimated that about 3000 kinds of lighters were stopped to be produced. It might bring huge loss to China lighter industry finally. In the first half of 2007, the exported volume decreased by 3.9% than the same period of 2006.

TBT also promote the lighter industry development. Faced with “CR”, Wenzhou also took some measures to improve lighters to reach the standard. But from July, the export of Wenzhou was becoming better and recovered gradually from this attack. The total export value reached to \$102 million in 2008, increasing by 20% than 2007.

For firms in Wenzhou, this act asked to install insurance lock would increase the producing cost. This was a serious pressure to export lighters at a relative low price. Also, the patent had been monopolized by foreign firms. Purchase cost and development expenditure were two important factors to lighter firms.

However, Wenzhou firms has developed new lighters with insurance lock and got the approval to enter European market.

2.2. Reasons Analysis

The weakness of export products and trading direction are two important factor that China encountered “CR” act. The products in China are labor-intensive, low value-added and low-tech. The trade partners are developed countries such as European countries, America and Japan which are active to implement technology barrier to trade. Product structure and exporting direction cause that China must be limited by TBT. Two big trade partners of Wenzhou are America and European Union which implemented “CR” to restrict lighters export of China. They took protecting children as a reason to limit export from China.

Lighter firms in Wenzhou understood international standard and regulation slowly and lately and led to asymmetric information between domestic firms and foreign countries. For this act, China did not know this until it was going to be voted, 4 years after it is drafted. This could be a vital reason why China loses this case. If exporters in Wenzhou knew draft of this act and boycotted “CR”, maybe lighters of Wenzhou would not suffer the shock of “CR-Hurricane” so seriously.

Domestic product standards are difficult to conform, because the international standards and the certification system are not perfect. In China, there is about 70% to 80% of the technology standard lower than international standard. There is multi and low standard level. The system is disordered. This led that it is easy to be limited by TBT when Chinese firms export.

Chinese firms attached less importance on TBT and were passive to learn about international standard and technology management. These firms could not effectively grasp the TBT restrictions by trade partners and learned less about international standard and technology management methods. Once encountered TBT, they could only accept passively.

From the macro perspective, the service system is imperfect. Government should offer necessary technical service, guidance and information on technolo-

gy barrier to trade for domestic firms in order to overcome the shortcomings of unfamiliarity with international standard and regulations. Optimizing the export structure is an effective manner to decrease trade disputes. Compared to foreign mature information service system, there is still a big disparity between China with these countries.

From the perspective of implementation side, “CR” is a kind of trade protection for European countries. Because Wenzhou penetrated European market and possessed a majority share. It is a threat that Wenzhou lighter industry brought to Europe. We cannot deny whether the EU planned to squeeze Wenzhou lighters out.

Last but not least, the original intention of TBT is to improve health, security and environment. Although TBT generate some kind of limitation effects on export in the short-term, it can promote export growth, optimize industry structure and enhance competitiveness in a long-run. When the index of TBT are reasonable and exporting countries’ government can offer good institute environment to encourage firms, export volume can obtain sustained growth. TBT is a kind of extrinsic motivation to drive firms to do R&D. So, the EU “CR” act has been a ladder for Wenzhou firms, instead of a barrier. It not only has negative effects on China, but also has a positive impact. It is a double-edged sword for China.

3. Implications

According to the analyses, we can obtain some enlightenment. First, TBT which is formulated by developed countries is helpful for Chinese companies to know the potential space of technical innovation, increase awareness of technology and improve the competence. Then, because of the TBT and high standard of quality control of Chinese government, enterprises would have to choose the equipment and producing devices which are much more efficient. At last, Chinese companies’ technical innovation will shorten the gap between Chinese companies and foreign companies.

Everything needs to be treated dialectically. Although technical barriers to trade have a certain impact on China’s exports, it is also a wake-up call for “made in China”. Faced with different types of trade disputes, Chinese enterprises should take effective measures to deal with them actively, and at the same time, enhance their technological level and product level comprehensively, so as to fundamentally curb other countries’ attempts to make use of trade disputes to hinder the healthy and stable development of China’s economy. In addition, China should also improve its legislation in anti-dumping, countervailing measures and safeguard measures, and establish a complete mechanism of responding to complaints, so as to cultivate relevant legal talents. Only in this way can we turn passivity into initiative in international trade. At the same time in the international trade competition increasingly accumulated modern, Chinese enterprises should not indulge in the low-cost market means, but should be in the

severe form of international economy, adapt to the trend of the transformation and upgrading of industrial structure to improve the domestic product standards, so that the country can in a relatively fair market competition environment to realize the economic take-off.

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