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RESEARCH ARTICLE

Double Taxation of Commission Fee of International Technology Trade and Corresponding Strategies

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ABSTRACT

With the progress of the times, the increasing degree of economic globalization and the rapid development of the international trade industry, international technology trade has become one of the main forms of international trade. International technology trade is of great significance to the transformation and upgrading of a country's industry and the growth of the national economy, and some problems have arisen while countries pursue technology to trade for the purpose of achieving mutual benefit and winwin situations. The article first explains the problems related to international technology trade and commission fees and then analyzes the current taxation status of international technology trade commission fees, mainly studying some problems of the taxation systems of countries around the world and the repeated collection patterns of developed countries for technology trade commission fees. It also points out a series of problems caused by the double taxation of technology trade commission fees, such as: affecting the normal trade between technology suppliers and recipients, causing the high cost of technology transfer, and making the international technology trade market disorderly. Finally, the solution to the problem of double taxation is given, and at the same time, corresponding countermeasures are proposed for improving the development of international technology trade in China.

KEYWORDS

Double Taxation; Commission Fee; International Technology Trade;

ARTICLE INFORMATION

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1. Introduction

1.1 Overview

1.1.1 Introduction to the concepts related to international technology trade

International technology trade refers to the transfer of certain technologies from one party to another in one country or region of the world by entering into a commercial contract or agreement and receiving a certain fee for the use of the technology, in which - the technology becomes the main content of the transaction. Ordinary acts of commodity exchange must comply with the general laws of goods exchange, but technology products have their own characteristics, and there are significant differences between technology trade and ordinary commodity trade. International trade in technology is a unique industrial category and a special international trade activity. Generally speaking, international trade in technology is much more complex compared to general international trade in products.

The differences between technology products and general trade goods are as follows.

(1) Business objectives can take many forms

The purpose of international technology trade is knowledge without fixed forms and cannot be controlled by standard measures. The purpose of international trade in goods is tangible commodities, the quality of which can be measured by certain standards.

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(2) The rights and responsibilities of the parties to the transaction are different

First, payment or delivery completion does not interfere with the rights and obligations of the parties to an international technology transaction. Due to technology transfer and other technology exchanges, the relationship between the two parties lasts for a period of time. In international commodity trade, the credit and debt relationship between the two parties usually ends with payment and delivery.

Second, as technology developers, technology trade providers aim to develop individual technologies rather than transfer them, while international product trade sellers are product producers primarily for the purpose of selling their products.

Finally, most technology owners are in the same industry, and the technology recipient has the technology and can use the technology production to make the product. In addition to technology transfer, technology suppliers are concerned that the recipient will compete with their own market in terms of technology and goods. Thus, there is both cooperation and market competition. While ownership of ordinary goods is oversold as the trade is completed, the process of technology trading usually transfers no ownership, and the trade relationship ends when both the currency and the goods are liquidated. The process of technology trade must be completed by providing information, absorbing the technology, digesting and putting it into production.

1.2 Technology Trade Contribution Fee Nash Equilibrium

1.2.1 The development process and current situation of international technology trade

Along with the rapid development of the international trade industry, international technology trade has also gradually developed. International technology trade from the emergence to the development of one of the most important forms of international trade for the following two reasons: first, the integration of the global economy and the globalization of science and technology, the development of the third technological revolution in the 1970s greatly accelerated the speed of dissemination of information between countries and regions, the closer relations between countries in the world, breaking the various restrictions between regions and even countries; second, a variety of The establishment of international trade organizations also provides an opportunity for the development of international trade and a more standardized place and guarantee. The development trend of international technology trade at the present stage is.

First of all, with the rapid development of modern science and technology, advanced scientific research results are emerging like a spring. After discovering the huge economic benefits brought by advanced science and technology, developed countries will certainly accelerate the research of more advanced science and technology. And strive to make it into economic benefits. For developing countries, simply learning or spending huge amounts of money on introducing technology will continue to weaken their position in the international community and gradually lose their initiative in international exchanges. In order to break this situation, developing countries have gradually started to develop new technology industries, cultivate knowledge-based talents in high-tech industries, and adjust the industrial structure of their economies. Due to the strategic adjustments made by developing countries, the content, rules and patterns of international technology trade have undergone significant changes.

Secondly, the growth rate of international technology trade is accelerated by the rapid development of the scientific and technological revolution. The life cycle of technology is getting shorter and shorter, old technology is replaced by new technology, and fierce competition is generated in the field of science and technology. The number of multinational companies that are the object of international technology trade increased from 37,000 in the early 1990s to more than 60,000 in 2000, and the number of foreign institutions of multinational companies also increased from 240,000 to 320,000. The current technology exports of OECD member countries account for a quarter of the total trade exports of member countries, and the value of their exports is nearly \$1 trillion. The number is high, the growth rate is high, and the speed is unprecedented.

Finally, the content of international technology trade is often the development, use, and transfer of software or technology. In the current economic era in which we live, the information technology industry has formed a fast-growing industrial chain. More than two-thirds of China's gross domestic product is related to the IT industry. Today, exports and imports of IT products often account for a growing market share of the total exports and imports of capitalist countries. The volume of transactions related to the IT industry has increased significantly with the growing demand for IT in manufacturing, operational and market needs. Today, not only is the size of international direct investment operations increasing, but the structure is also being restructured beyond the processing and manufacturing industries. International technology trade in the service sector differs from processing and manufacturing. The content of technology trade in the service industry is mainly "expertise-based" expertise, i.e. business process work experience and business process expertise. Management methods and service offerings are given. In fact, with the growing demand for information technology in manufacturing, operations and market needs, the volume of trade in related information technology industries has increased significantly.

2. Analysis of the problem of commission fee of international technology trade

The international technology transaction fee is also known as the technology transfer price, and the technology transfer price is the amount that the technology beneficiary is willing to pay to obtain a license for the technology. It is the royalty accepted by the licensee and expressed in monetary terms. The price of the technology can be set according to the economic benefits obtained from the use of the technology - the greater the economic benefits generated by the technology, the higher the price; conversely, the smaller the economic benefits generated by the technology, the lower the price. The price of the technology basically includes direct costs incurred in the technology transfer transaction (labor exchange, material preparation, etc.) and indirect costs (e.g. sunk costs related to technology development).

In addition, the technology transfer fee is a lump sum that the technology beneficiary must pay to the transferor in order to acquire the transferor's technology. The three main payment methods are lump sum, commission payment, and introductory plus commission fee: lump sum means that the total price is determined when the technology recipient and supplier sign the contract. This payment method eliminates the dependence on the technology provider and can help the technology recipient effectively avoid exchange rate risks, with the disadvantage that a lump sum has to be paid to cover various economic and project risks: commission fee payment refers to the fee charged by the technology provider based on the sales or revenues generated after the technology is put into production - the advantage of this method is that the licensee bears less risk and the financial pressure will be less heavy compared to the lump sum, while the factors affecting the fee mainly include participation fee. The third payment method is a combination of the first two payment methods.

One point to note here is that the different payment methods for technology trade royalties have an impact on international trade while also taking into account the differences in the rates charged by each industry. According to many data from the United Nations Trade and Development Organization, the current technology trade fee rates are about 0.5% to 10% of the net selling price of a product, with most products ranging from 2% to 6%.

3. Current status of taxation of commission fees for international technology trade

3.1 Analysis of the current tax system in the world

American statesman Benjamin Franklin said that only death and taxes are inevitable in the world. The current U.S. tax code is one of the most complex tax systems in the world, with a divided tax system. Among the items taxed by federal, state and local governments, property taxes are the most numerous, accounting for 75% - indicating that the U.S. tax system suffers from problems such as fee changes and very high tax rates. From the perspective of each country's tax system, taxes can be broadly divided into income taxes, property taxes, and sales taxes (e.g., VAT, customs duties). The country where the technology provider is located (country of residence) requires the licensee under the technology trade to pay income tax in the country of residence according to the jurisdiction of the resident. By jurisdiction called jurisdiction of the state of origin, it means that the relevant state must exercise the right to tax income derived from its territory - the state exercises jurisdiction in such a way that income is taxable if it arises in the territory, whether it is a citizen or a foreigner. Resident jurisdiction is established on the basis of the individual principle; in other words, the state is obliged to exercise power to tax income earned by residents (both natural and legal persons) subject to the tax law. Most countries in the world exercise both resident (personal) and geographical (territorial) jurisdiction, and so does our country!

3.2 Repeated Collection Patterns of Technology Trade Contribution Fees in Developed Countries

Double taxation of royalties from technology trade in developed countries is mainly manifested in the fact that certain income or certain property is taxed more than once at the same time. In international technology trade, the problem of double taxation is mainly caused by different tax jurisdictions. This means that more than one government will tax the same cross-border taxpayers for the same period of time, depending on their respective tax jurisdictions under the same tax category. As opposed to the technology licensor, the government would legally reserve the right to tax the legitimate income of domestic and foreign residents under the jurisdictional principle.

4. Contribution fee double taxation on the development of international technology trade constraint situation 4.1 Affecting the normal trade and national economic interests of the technology supplier and recipient parties

The double taxation of the technology trade commission fee will lead to a reduction in the actual benefits of technology transfer from the technology provider, and sometimes, this tax needs to be paid by the technology licensee, and the licensee will raise the price of the relevant products in order to compensate for their losses, which will eventually be borne by the final consumer. In addition, if the technology supplyee's technology introduction costs increase, followed by a corresponding increase in foreign exchange outflow, once more than the technology supplyee can afford, then the transfer will fail, for the technology provider of a country will inevitably reduce its competitiveness in the international technology market, reducing foreign exchange earnings; for the technology supplyee, the main problem is to lead to the deterioration of its balance of payments. This problem affects the

normal trade between countries and has a great impact on the national economy of either party. Therefore, double taxation is a major problem that must be solved in the international technology trade.

4.2 Double levy of commission fee leads to the high cost of technology transfer

Under normal circumstances, if a U.S. company transfers certain technology to a Chinese company through a license and receives a technology royalty of \$1 million, and the Chinese income tax rate is 20%, and the U.S. income tax rate is 48%, the technology royalty received by the licensor, net of taxes, is \$320,000 - in which case, the licensor is inevitably forced to raise the technology royalty price in order to maintain the technology transfer revenue. If taxes are considered only in the U.S., the licensor will receive an actual royalty of \$520,000, and in order to keep the actual revenue at \$520,000, its estimate would have to be increased from \$1 million to 52/32 = \$1.62 million. This example shows that after the double taxation, the technology licensor's offer goes up directly by \$625,000 compared to the previous one, and this amount then needs to be borne by the technology licensee, directly harming the economic interests of that party as well as the legitimate rights and interests of the technology licensee's country.

4.3 Breach of contractual spirit leads to chaos in international markets

The spirit of contract can be understood as a moral concept, which is the universal spiritual essence of the development of Western civilization. The word "contract" is derived from the Latin language, which means to buy and sell in Latin. Its essence is the core concept of an arbitrary contract. Frankly speaking, the concept of morality is an idea that exists in the marketplace. It can be understood as a fundamental criterion for the continuity of economic society, as well as the spiritual essence of randomness, fairness and honesty.

The ethical concept itself has four main elements: the spirit of freedom of contract, the spirit of fairness in contract, the spirit of faithfulness in contract, and the spirit of salvation in the contract. The spirit of freedom in the contract is a specific element of the moral concept. The spirit of freedom of contract, which is the core of civil rights in Western countries, is always present in economic freedom.

The connotation of the spirit of contract can also be understood as a spirit of the contract, which is the spirit of trust between parties based on freedom and equality. If so, the issue of double taxation is one of the manifestations of the violation of the spirit of the contract. Its negative effects include the following points: First, it allows technology license providers to increase their offers and harm the interests of license users. Second, it negatively affects the budget and revenue of technology licensors. Third, it causes some confusion in the international technology market.

5. Coping with Double Taxation/Analysis of Strategies to Improve the Development of International Technology Trade in China

5.1Applying Nash Equilibrium Theory to Resolve Related Disputes

Nash equilibrium theory can be understood as a strategy composition that motivates each participant's strategy to best reflect another participant's strategy. Because Nash equilibria are sets of responses, each participant's response is the best response to the responses of the other participants. Each participant's individual strategies are sets of strategies, and by its very nature, a Nash equilibrium is a noncooperative game in which both parties must make necessary concessions in order to reach cooperation, and the point of concessions made by both parties is the Nash equilibrium point.

Any participant can act individually in pursuit of higher efficiency, and from an economic point of view, the so-called equilibrium is for a combination of participant strategies, and no participant will benefit from a change in strategy. Then, at this moment, participants give up or stop changing their strategies. In short, a strategy composition in which all participants do not change their strategies can be called a prisoner's dilemma.

According to the Nash equilibrium theory, we find that cooperation is a strategy that favors oneself, and the premise of cooperation is that one party wants the other party to respond in its own way. In international business negotiations, both parties can adopt this theory in order to reach a common purpose and willingness, and through repeated communication and negotiation, they can choose a price that both parties are willing to pay and get a win-win situation. This model of international business negotiation can be used to solve the problem of double taxation of commission fees in the international technology trade. And it plays an important role.

5.2 Improve technology trade contracts

Although the taxation systems of different countries are different, the rules of taxation of technology royalties are also different, and the problem of double taxation may arise in actual operation; both parties of international technology trade must properly deal with taxation issues. We fully understand that there must be differences and discrepancies between the laws, regulations and practices of the two countries in certain aspects, which is a reality that cannot be ignored at all, and certain disputes should be

agreed upon and clearly expressed in the contract before the parties communicate and negotiate and formally sign the contract. There are seven clear and specific provisions on taxes and fees in international agreements and practices and technology transfer agreements. In practice, the following points should be noted.

First, the tax legislation must clearly distinguish between the tax liability of the technology-exporting and technology-importing countries and designate the taxpayers in both countries. Normally, all taxes related to the performance of the contract imposed by the technology exporter and the importing country on the technology supplier are borne by the technology supplier. All taxes related to the performance of the contract imposed by the technology-importing country on the technology-importing country and all taxes technology beneficiaries must be paid by the technology beneficiary.

The second is to enter into tax and fee clauses with technology suppliers that have not yet entered into double taxation agreements with our country. For example, if a U.S. company transfers a technology to an enterprise in China, and the technology installation fee is \$1 million, and China levies a tax of 20%, then a U.S. company receives an after-tax technology transfer fee of $100-100 \times 20\%$ = \$800,000. Then the U.S. government should tax its own domestic enterprises for \$800,000 instead of \$1 million so as to avoid the problem of double taxation.

5.3 Adding a restrictive provision for taxation of commission fees

In the 1980s, the United Nations adopted and implemented a set of rules and principles to control "restrictive business practices". Business interests refer to individual acts of companies, including the abuse of sales influence for market manipulation, especially in relation to import and export trade of any country in the world, and socio-economic development that has a long history or is likely to have an adverse effect. Acts that have the same practical effect as agreements or other engagements between companies in written or unwritten form are called binding international trade conventions. "Such binding international trade conventions are considered to be binding provisions. Thus, a binding provision includes the following points.

- (1)The provision is limited to international trade in technology and does not include trade in services.
- (2) This provision is rational, and the effects of sales market manipulation do not include effective market competition, such as non-local restrictions on sales markets or market competition.
- (3)The establishment of laws and regulations prohibit this requirement and can be developed in the international ratification of restrictive agreements law, but not strictly prohibited regulations are non-binding provisions.

The main expression of such provisions is that all countries have the same mentality in the regulation of laws and regulations and the control of binding regulations on commercial services, but the scope of binding regulations varies.

The current rapid development of the world economy and the increasingly close ties between countries around the world inevitably give rise to a number of problems when conducting economic activities between countries and regions. In this paper, the issue of double taxation of international trade commission fee is discussed, and after the research on the technical trade commission fee, the tax system of each country and the analysis of the strategy to cope with double taxation, some uncertainties may be received in the practical application. However, the countermeasures and means proposed in the article can still play a certain role in the pursuit of mutual benefit and win-win with developed countries or regions in technology trade while being able to better protect the legitimate rights and interests of our country and enterprises, for some potential problems that have not yet occurred to provide countermeasures. For us to better cope with economic globalization and the international economic problems that continue to arise will play some role.

6. Conclusion

This study mainly analyzes the problem of double taxation of royalty fees in international technology trade and gives corresponding solutions. The study finds that there is a certain degree of double taxation of royalty fees in all countries in the world. After that, countries should adopt different coping strategies according to their actual conditions.

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