# The Research of Transnational Tax Income under Electronic commerce Environment

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**Abstract.** While e-commerce promotes the global economic and trade development, two characteristics which are invisibility of digital products trade and the limitless of transnational trade, makes multinational tax income fall into confusion. It impacts tax jurisdiction of general transnational incomes, asserting of permanent institution, cognizance of the nature of income, and leads transnational incomes more tax evasion and avoidance. Our recommendation are strengthening the jurisdiction of boundary, upgrading the division standard of transnational e-commerce income, adjusting the range of turnover tax, advancing the construction of levies information, enhancing international cooperation and coordination, to schedule multinational tax income which is under e-commerce environment.

**Keywords:** E-commerce; Multinational income; Tax jurisdiction; Tax policy.

### 1. Introduction

With the accelerated process of globalization and network recently, multinational deal of e-commerce (electronic commerce) growth rapidly. E-commerce have two characteristics, these are invisibility of digital products trade and the limitless of transnational trade. Those characters have proposed the new challenge to the current rule of transnational incomes tax which bases on tangible products trade, then makes income tax of multinational fall into confusion, leading to the international tax avoidance, tax duplication among the countries and substantial increase of international disputes under e-commerce environment. Transnational taxation has attracted national scholars and government. Since Arthur J. Cordell from Canada proposed to impose the "bit tax" to e-commerce in 1994, whether and how to tax of e-commerce has been a hot issue of academic research. For maintain National interests, governments have adopted taken different tax measures to e-commerce respectively. The USA, as the country of the quickest of global network, e-commerce to be most developed and mainly on income tax, thought levy tax on e-commerce unfavorable to fast development, advocates to exempt from tariffs of the invisible products of the network trade; wouldn't impose domestically "the taxes of network enters" (Internet Access Taxes). European Union and other countries which e-commerce develops scale is inferior to USA and take the transaction tax as main body, object to e-commerce duty-free, and began to impose the value-added tax to purchase the commodity or labor service in European Union through the network to the residents of member state in 1998. "European Union's e-commerce value-added tax order" implemented from July 1, 2003, further expands the taxation range of the value-added tax to the countries except European Union. This is the first large range will levy tax revenue of e-commerce and put in the implementation motion between country and country.

As inputs the great nation of e-commerce and take transaction tax as main body of China, we should take transnational taxation of e-commerce seriously. Otherwise, will cause to the tax revenue massive outflows in electronic commerce international trade process. This essay will analyze the adverse effect of e-commerce to transnational income tax and then put forward the concrete countermeasure of transnational income tax that adapts to the needs of e-commerce development of our country. Moreover, it can be in the favorable position with international tax competition under the e-commerce environment.

#### 2. Transnational Taxation Faces the Difficult Problem in E-Commerce Environments

#### 2.1 International Tax Jurisdiction Conflicts Aggravating

(1)The jurisdiction of boundary is impacted because the trade has no location. Traditional jurisdiction of source place adapts geographical boundary line of various countries as norm. Precinct is the definite physics space with the clear geographical border. However, under the environment of e-commerce, the cyberspace is a global system so that is unable to divide it into a lot of fields like physics space. Moreover, national boundaries which are on the polity or geography do not exist. Furthermore, the cyberspace cannot see but the parts that can be seen are only its outside equipment, such as the computer terminal and telephone wire [1]. However, this is absolutely not appearances and geographical range signs of the cyberspace. As a concrete online trade activity, trade place, providing service and the using place of products is difficult to judge so that the address of the other side has more incomprehensiveness. Therefore, e-commerce has no location to embarrass the jurisdiction of boundary.

(2) Circulation has limitless so that jurisdiction of inhabitant is influenced. The premise for a country to enforce taxation is to confirm resident identity of taxpayer. According to the legislative of various countries, cognizance of natural person's identity mainly depends on standard and residence standard. Under e-commerce condition, the fictitious cyberspace does not store the concept of habitation and the residence time does not according any scale standards. This situation impact the judgment standards which bases on nationality. Moreover, the affirmation standard of resident's identity has standard of registered places and real management organization. All of these standards bases on entity of artificial person. The tangible organization is the guarantee for confirming the position of this organization and then confirms resident's identity of the artificial person. However, the tangible organization is not an essential condition under e-commerce environment. The important sign for ensure the real control centre is the place of the conference board of directors or the shareholders' meeting and conference centre of decision in the past, but the legal person's member, such as the director, shareholder, manager still can communicate by Internet and modern information communication technology at any time, even they are at a distance. Therefore, e-commerce make principle of legal person's jurisdiction of inhabitant loses the objective foundation of existence [2].

## 2.2 The Permanent Institution is Difficult to Assert Because Of Fictitious Management

The permanent institution is a main basis of confirming the source place of incomes. According to the current principle of the international tax, the country where the revenue come from only can exercise the right of taxation to the operating income of the multinational permanent institution. The permanent institution means the immovably operating location that an enterprise uses to go on all or some business in a country. However, e-commerce makes transnational trade does not need to be support by current permanent institution and corporations also do not need to directly provide the most products or the labor service. The multinational corporation can complete the whole course of trade on Internet that only needs a website and the software that can be engaged in the relevant trade. The taxpayer's management address is difficult to confirm and the place of taxation is difficult to be control, so affirmance of permanent institution will produce a great deal of potential disputes.

### 2.3 Products Digitization Lead the Nature of Income to be Difficult to Divide

The country which levies turnover tax has clear divided sales of the tangible goods, offering of the dutiable service and transfer of the chartered right, at the same time, implements different tax policies. In the international tax treaty, the qualitative classification of the transnational income is important for confirming the division and ascription of precinct and taxation right. Electronic Commerce create an online fictitious market that uses exchanged information as medium to show the digital signals of the products and service and transmit them online in the form of digitizing. Digitized information can be duplicated and downloaded easily, so some tangible goods which sold by traditional way can be sold to the customer by downloading on the Internet, namely online sales. The physical carrier and sales' quantity of the products do not exist at this moment. This situation broke the traditional selling conception and then confused the circumscription of tangible goods, invisible labor service and chartered right so that makes taxation office to be difficult to confirm whether an income come from

sales or provide other non-taxation items. Moreover, this income imposes value-added tax from selling goods or imposes sales tax according to the non-taxation items. This confused boundary is mixed up taxation disposal in practice. For example, the tax authority imposes the value-added tax according to the traditional bookstore's sales amount when it sells the books, in contrast consumers can realize to buy the book through downloading the content of the books in online bookstore. The tax authority can impose the value-added tax to regard this kind of behavior as the tangible goods to sell and also can impose sales tax as using the invisible chartered right. Therefore, this behavior of offering digital information makes taxation to fall into a dilemma.

# 2.4 Transnational Incomes Leads More Tax Evasion and Avoidance Because does not Use Voucher

Current tax management and assessment set up on the basis of tangible paper evidences, such as invoice, account book, etc., examination not leaving to paper evidences, such as invoice, account book and accounting statement. Whereas, E-commerce trade makes tax management lose the paper foundation. First of all, e-commerce uses electronic form instead of paper evidences to record operating behavior. Traditional card, account, form and ticket can be filled in electronic form and the electronic voucher can be revised easily without any evidence so that taxation office have not the way to know the content and quality of trade[1]. This character makes enterprises evade taxes easier. Secondly, the development of Internet's trade has stimulated the perfection of the payment system. The common forms of electronic money are credit card, electronic check and digitized currency. The non-traceable characteristic of electronic money also makes already invisible goods and account add another protective screen and then increases the difficulty to follow the way of offering goods and the source of payment for goods, so transnational tax evasion becomes more concealment [3]. Thirdly, because Internet is open, it does not limit pass in and out a country so that does not need the paper procedure for importing and exporting. This characteristic makes some transnational e-commerce can finish but need not through customs. As a result, it is difficult to discern and confirm the transnational e-commerce income by tax authority, so the imports and exports tax which is levied by customs must be corroded seriously.

#### 3. The Tax Reform Orientations of Transnational E-Commerce Incomes in China

#### 3.1 Strengthen the Jurisdiction of Boundary

The transnational e-commerce trade will increase with the enlargement of the number of online trade. If taxation offices give up levying tax, it must lead plentiful tax to lose. The particularity of e-commerce has determined that the choice of taxation right should be different from the form of traditional trade. Due to relatively uncultured and weak information industry and technological foundation, China will be in the position of the net importer of e-commerce during a quite long period. Therefore, on the distributive issue of the transnational income tax of the e-commerce, China should insist on emphasizing the advantaged tax jurisdiction of boundary to the net importer of e-commerce, at the same time considered jurisdiction of inhabitant. The government should actively cooperate with relevant country and then adopt the specific tax rate distribution to coordinate the tax revenue profit distribution relation between the residence country and the original country of revenue [2]. This method cannot only prevent the loss of taxes effectively and reduce the dispute of international tax jurisdiction, but also safeguard the national benefit at the same time.

#### 3.2 Widen the Meaning of "Permanent Establishment"

E-commerce confused geographical boundary of various countries so that permanent establishment which is regarded as the main judgmental standard of jurisdiction of boundary cannot be ensured. Therefore, the relative departments should break through the traditional definition methods which use a certain regular or tangible physics entity as the permanent establishment under e-commerce environment. Furthermore, relative department can consider the material and continual economic relation between electronic commercial activity and the country and then judges the profit which is obtained in China whether carry out the jurisdiction of boundary. According the website which is set by suppliers whether has the same or similar function of permanent establishment with the traditional physical forms, the relative department can adopt the principle of "the function equates " to judge whether this website creates the permanent establishment. If the e-commerce website of suppliers has function of settling a bargain and finishing the trade and this supplier often uses this kind of function to realize the trade, it can be asserted that this supplier forms substantive existence in the revenue original country [3]. If this existence responds to the request of numbers and times, it can be regarded as the permanent establishment and exercise the income jurisdiction of boundary.

# **3.3 Upgrade the Division Standard of Transnational E-commerce Income and Adjust the Scope of Turnover Tax**

To Classify Again of Transnational E-commerce Income. According to the collection practices of China, aim at the characteristic and operation form of e-commerce and with the principle of "valuating quality more than the form", relative department upgrade the understanding and definition of the concept of operating profit, labor service income and income chartered right. According to the different characteristics of trade's mark, the transnational trade form can be divided into the virtual goods, digitized goods and online service in e-commerce trade. Those three kinds of transnational transaction forms can be divided into the following three kinds of incomes: (1) Operating profit. The operating profit is the income of selling the entity goods. The sales of goods usually levy the sales tax or value-added tax in the destination and also can levy the tariffs to imports [3]. (2) Labor service income. The remuneration income of the service which offered immediately online is called labor service income. The income of offering labor service which comes from churchyard could be withheld by payer. (3) Income of chartered right fees. Chartered right fees refer to the incomes that provide intangible assets to other users. The digitized goods rely on the technology of computers to transform the literature, number value, picture and sound into the digital coding of binary scale. According to form of the goods, the digitized goods are the intangible assets. The income which is paid by intangible assets is usually withheld taxes by payers and then payers need not levy income tax, tariff and sales tax again. According to the judgment of the source place of the income chartered right fees, it generally regards the place of using assets as the source place of the income.

To Adjust the Range of Turnover Tax. E-commerce confused the quality of income. Because it is unable to judge that the digitized products are the tangible goods or the intangible assets, labor service offered online are labor service of the value-added tax or the labor service of the sales tax, it is unable to confirm its suitable tax category. Therefore, regulation the range of turnover tax and then collects the behaviors of selling tangible property, intangible assets and real estate into the range of value-added tax and conclude all labors which is provide by payers into the range of sales tax may be the best way to solute the confirming issues which caused by the uncertainty of the e-commerce trading object. In addition, for balancing distribution of the balanced regions, taxation office can draw lessons from the reverse taxation method of value-added tax of European Union or the taxation theory in the sales laces. No matter the goods and labor are serviced by online trade or from line transaction, every customer who through internet sells goods or offer labor service through Internet should pay taxes by the customer who buys labor service or the goods. The purchase place is ensured as the taxation place of e-commerce and tax authority is responsible to levy tax.

# **3.4** Advance the Construction of Levies Information and Raise Taxation Rate of the Transnational E-commerce Income

Our country has already implemented the modernized tax collection and management mode which rely on computer network, but the appearance and development of the international e-commerce request this mode in a higher level.

(1) To set up the record system of e-commerce tax. After check in the system of online trade, who engaged in e-commerce must apply for tax of online trade at the mainly tax authority and declare "applying for the network trade tax registration form". The unit or individual must register their internet, website, and the kind of offering service, name of goods and the method and bank account used in the trade to settle account to the local taxation office in time. The tax authority authorizes the only tax registration number to the taxpayer and the digital ID card which regards this registering

number as discern yard. The information, such as the taxpayer's revenue expenditure is in this account and stores in the whole country's network through the bank account. That information is provided to tax authority for query and regards as the basis of levying tax and then achieves the effective control to taxpayer on the net [4]. Let taxpayer move towards the lights from conceal, fictitious network and perform duty of taxpayer according the law.

(2) Perfect the long-range electronic declaring dutiable goods and electronic payment system. long-range electronic declaring dutiable goods means that the taxpayer sends the tax materials to the tax authority directly through Internet and the long-range electronic payment system means the course that the tax authority according to the taxpayer's tax receipts information directly transfer the tax from the bank of deposit or the special tax account number. In order to guarantee that paying by mails can carry out effectively in time, it is best to set the step of levying tax on the stage of settle online bank account and when the tax obligation happens, the bank which paid the payment for goods at the buyer's residence is responsible for withholding tax. This methods do not only benefit to evading taxation, but also be good at shortened the stage and time that tax are held up in transit, thus guarantee that the national tax is in storage with full amount in time. Meanwhile, the bank should transmit the relevant information, such as set up enterprises online bank account, trade situation and the situation of withholding to tax authority in time and perform duty of withholding according to the regulation strictly.

(3) Accelerate the construction of electronic port on the basis of "project of gold channel". The core of the gold channel is divided into two parts. First is the pass system which is in the custom. Second is electronic system which enforces the law in the outside port. On the basis of connected internal department, General Administration of Customs as the main sponsor sets up the electronic port centre which is named as "the electronic law enforcing system in the port ". Utilizing the modern information technology and recurring the national common network, the system can collect the import and export business information flow , funds , electronic bottom account datum which is separately hold by the Ministry of Foreign Trade and Economic Cooperation, customs, industry and commerce, tax, foreign currency and transportation. Then system put those data in a public datum centre so that every administration can verify the network data in the different department and industry. Enterprise can carry out many kinds of imports and exports selling, transport between different port and export tax rebate. At last, the system is expected to stepwise realize the electrification and one-stop service of the information and trade in the international e-commerce.

(4) To make great efforts to realize the information sharing. In order to guarantee that it is implemented that above-mentioned information levy and manage measure, the tax authority must realize that its network can communicate the network of bank, customs, industry and commerce and network marketing person, even the foreign tax organization and strengthen the information sharing. Meanwhile, it need grasp accurately all information material of the transnational e-commerce taxpayers in time. Then the office can realize the effective control and management to the tax revenue of the transnational e-commerce strengthen the check degree to tax revenue and use the Hi-Tech measure, such as information technology to maximize tax.

# **3.5** To Strengthen International Cooperation and Coordination for Preventing Tax Evasion and Avoidance of the Transnational E-commerce strictly

Because e-commerce has broken the national boundaries and region demarcation line, the tax policy of e-commerce is globality and integrality, especially the transnational trade of e-commerce, it is difficult to solve the problem of tax evasion and avoidance by the single country. Therefore, the government should fully use Internet's advanced technology and close cooperate with the tax authority all around the world, understand the transnational taxpayer's information in an all-round way and make tax collection and management, tax assessment have more abundant basis. In the communication of international information, government should especially pay attention the taxpayer to open the website and the trade which passes from this address in the tax haven, in order to prevent the taxpayer use Internet's trade to evade tax.

### 4. Conclusion

The rapid development of e-commerce and the increase of transnational trades do not only bring the rich revenue sources to the world, but also strongly impact international taxation. The potential conflict of tax jurisdiction becomes more acuity so that makes the international tax avoidance problem more prominent. As a net importer of e-commerce, China should consider the national condition and learn foreign experience to adjust the current tax system immediately. Then, government should establish a forward-looking modern tax administration system to suit the drastic international competition under e-commerce environment. Acknowledgements

### References

- [1] Cathryn L. Marsh: The Economic Impact of Electronic Commerce Taxation, Colorado State University the Degree of Doctor of Philosophy, Vol.14 (2001), p.26-29.
- [2] Wu Meng: International Revenue Problem of the E-business, Liaoning Economy, Vol.4 (2007), p.36-37(in Chinese)
- [3] Zhang Xin: Problems and Countermeasures of Tax Collection and Management Under the E-commerce Environment, Modern shopping mall , Vol.19(2014), p.109-111(in Chinese)