

The Impact of Digital Economy on Tax Collection and Management System and Its Countermeasures

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Abstract: The digital economy has changed the trading mode and value creation means under the traditional economy, which makes industries highly related, creates numerous business models and value growth points, and affects the income sources of taxpayers from many aspects. Faced with the impact of new things, the current tax collection and management system can't keep pace in the process of adapting to the development of digital economy, resulting in many problems, such as vague identification of basic tax elements, lagging invoice system and difficult access to tax-related information, which hinder the improvement of collection and management efficiency. Based on this, by analyzing the impact of the digital economy on the current tax collection and management system, in order to solve the potential contradictions in the tax field, this paper puts forward reasonable countermeasures for tax reform, hoping that the tax collection and management system can meet the new requirements of the development of the digital era.

Keywords: Digital economy, Tax collection and management, Tax policy.

1. Introduction

As a way of productivity change, digital economy plays an important role in promoting industrial structure optimization and development momentum, and becomes a powerful tool for enterprise competitiveness improvement and system innovation. With its unique information transmission and value creation mechanism, the digital economy has broken the running track of the value creation chain under the traditional economy, derived many characteristic industries and new models, and became a new engine and new power to promote the development of the industry. At the same time, however, it should also be noted that the rapid development has a severe impact on the current tax collection and management system, resulting in a realistic dilemma in tax law enforcement. On the one hand, the digital economy has not been included in the scope of tax law, and the lagging collection and management system is difficult to adapt to the development of the new model under the digital economy[1]. The contradiction between the two causes the partial absence of collection and management rules and hinders the realization of tax fairness. On the other hand, the digital economy involves the determination of taxation rules of multinational enterprises. Improper handling will easily lead to chaos of international tax jurisdiction competition and tax loss, which is not conducive to the stability of international tax order[2]. Therefore, how to improve China's tax collection and management system, reasonably deal with the impact of the digital economy and ensure the fairness of taxation has become an urgent task for tax reform.

2. Development Status and Characteristics of Digital Economy

2.1. The development status of digital economy

Digital economy originated from the idea of Don Tapscott, a famous scholar in 1990s. In essence, digital economy is a series of economic activities that integrate, analyze, add value and trade digital resources with digital information as the source of value, virtual platform as the operating carrier and

information technology as the innovative means. With the development of technology and practical application, its connotation has been endowed with new significance and characteristics of the times in the process of extension[3]. At present, digital economy not only includes many theories of economics and information technology, but also is widely used in many fields, such as medical care, education, logistics, etc., giving birth to new models such as platform economy, data economy and sharing economy, which has become a new kinetic energy to promote the transformation and development of the industry[4].

The digital economy has played a stabilizing role in the global economic fluctuation. Under the impact of the COVID-19 epidemic, the global digital economy has been expanding, and it will still be able to create an added value of 32.6 trillion USD against the trend in 2020, showing amazing development resilience. In China, the digital economy has become the key driving force for stable economic development: from 2015 to 2020, the digital economy has been developing rapidly with a high growth rate of 9%, and the added value in 2020 has exceeded 39 trillion yuan. Not only that, the digital economy has become more and more prominent in the national economy, rising from 27% to 38.6% and becoming an important part of China's economic system. From the perspective of composition ratio, digital economy is mainly composed of digital industrialization and industrial digitalization[5]. Different from digital industrialization with information and communication industry as the main body, industrial digitalization pays more attention to the combination of information technology and existing industries, resulting in the "internet plus" business model, which promotes the high integration of digital economy and tertiary industry. At present, the digitalization of industry has occupied a dominant position in the digital economy and has become an inexhaustible motive force to support the development of the digital economy[6].

2.2. Characteristics of Digital Economy

(1) Unreality. With the improvement of virtual platform and online payment mechanism, digital transaction can

reproduce the whole process of traditional transaction, get rid of the time and space limitation of offline physical transaction, and greatly reduce the cost while ensuring security. In addition to the virtual features of platforms and currencies, there is also unreality between trading entities, which can conceal their real identities by switching virtual accounts and changing trading information. This virtual transaction element does not hinder the actual transaction, nor can it cover up the economic essence of income taxation. In addition, this unreality also promotes the development of data mining to accurately match and integrate digital information in different fields to realize information optimization and value creation[7].

(2) The marginal benefit is increasing. Digital economy can excavate the embedded commercial value and form a new way of value creation. On the one hand, information technology innovates traditional industries with high penetration, integrates and optimizes industry resources, and reduces marginal costs; On the other hand, information resources have potential value-added space, and the value-added of information can be realized through information processing and exchange, which makes the marginal revenue gradually show progressive characteristics. Each user is both a consumer in virtual transactions and a producer of digital information[8]. By analyzing the transaction data, we can strengthen our deep understanding of user preferences and consumer psychology, push customized products and services to consumers, and promote the development of the real economy. Under the dual effects of diminishing marginal cost and increasing marginal revenue, the potential revenue has been tapped infinitely, and the industrial chain has gradually become diversified.

3. The Impact of Digital Economy On Tax Collection and Management System

3.1. There are differences in tax jurisdiction judgment

Many intangible products and virtual services are derived from the digital economy, which has long been separated from the material space and realistic relationship that the traditional tax legislation relies on. Although the tax collection and management system has been adjusted many times, it still can't fundamentally deal with the tax risk brought by the digital economy, and there is a deviation in the judgment of tax jurisdiction. Adhering to the principle of territorialism, income tax and turnover tax are taxed according to the source of income and the actual place of consumption, respectively. Under the impact of digital economy, the judgment of tax-paying places by them is gradually blurred. In the enterprise income tax law, the identification of the establishment place of non-resident enterprises is only limited to the physical connection, and has not yet extended to the virtual transaction of "de-materialization"[9]. This also weakens the applicability of "permanent establishment" in international tax agreements, which not only fails to effectively establish the ownership of tax jurisdiction, but also leads to arbitrage behavior of taxpayers using tax difference. For example, multinational enterprises set up permanent offices in countries with low tax rates to make profits, and by virtue of the permanent offices, they pay taxes in the source countries, so as to avoid the high tax burden of their own countries and

achieve the purpose of tax avoidance or even exemption. This kind of tax base erosion will inevitably lead to the competition for tax jurisdiction, and it is difficult to really solve the problem of jurisdiction ownership only by the principle of permanent establishment. In addition, due to the unfixed IP address, it is difficult for tax authorities to track the place where cross-border transactions take place[10]. It is biased to easily determine that the transactions take place completely outside the country according to the place where the transactions take place, and it is impossible to effectively define whether digital transactions should be included in the scope of VAT taxation only based on the principle of "place of consumption".

3.2. Electronic invoices need innovation

Electronic invoice is the product of the tax system adapting to the digital development, and it is favored by both tax collectors and taxpayers because of its obvious features such as equal effectiveness, convenience in issuing and difficulty in tampering. However, electronic invoice itself does not conform to the traditional reimbursement process. Although it can be reimbursed after printing, it increases the risk of repeated reimbursement. Although China's electronic invoice system is excellent in query, anti-counterfeiting and other functions, it has not been unified in information extraction and exchange. Due to the differences of electronic invoice technology and standards among provinces, the methods of invoice decomposition and information extraction are different, which can only ensure the efficiency of tax collection and management in the province, but is not conducive to the effective communication between provincial tax authorities. How to innovate the electronic invoice system and improve the mechanism of invoice deduction, reimbursement and information sharing will become the core of the future reform in the invoice field.

3.3. The definition of taxpayers is vague

The current tax collection and management system is based on the development of the real economy, which can accurately identify the entity taxpayers and control the tax sources within the scope of statistics, traceability and monitoring[11]. Under the impact of digital economy, the wide application of virtual platform makes the boundary between the producer and the consumer gradually blurred, so that both parties to the transaction can conduct transactions with multiple virtual accounts, and even complete real transactions with false identities and addresses. As a result, the tax authorities can't accurately define whether the counterparty belongs to a legal person organization, and then determine the taxpayers of various taxes. Further, with the rise of personal sales modes such as Wechat business and online delivery, it is difficult for tax authorities to define whether there is a highly related interest relationship between personal sales and legal institutions, and it is even more difficult to effectively track and monitor natural person transactions in real time through cooperation with third-party payment platforms, so as to control tax sources.

3.4. Tax-related information is difficult to obtain

With the rise of electronic money and third-party payment platform, paper transactions are gradually replaced by digital circulation symbols, which subverts the supervision mechanism that relies on bank flow and cash inspection in the

traditional economy. More and more digital transactions are implemented and guaranteed through the third-party payment platform, and tax-related information is also stored in the database of the third-party payment platform. It is difficult for the tax authorities to determine the basic tax factors such as tax payment time and tax payment place only by querying the bank transfer records, and it is impossible to grasp the first-hand tax-related information in time. Like paper money, there are risks of profit transfer and underestimation in electronic transactions. It is difficult to determine the real tax payable of taxpayers according to the statistics of bank flow, but it will also increase the taxation cost and reduce the inspection efficiency. In addition, the rise of "online celebrity economy" makes more high-income natural persons become the object of tax source supervision, and the withholding system is difficult to adapt to this trend for a while. If the tax collection and management system can't deal with all kinds of risks caused by asymmetric tax-related information in time, it will not only lead to inefficient collection and management, but also lead to the real dilemma of tax source loss and tax loss.

4. Suggestions on Perfecting the Tax Collection and Management System Under the Digital Economy

4.1. Adhere to the principle of statutory taxation, and improve the jurisdiction judgment rules

The impact of digital economy on jurisdiction lies in the fact that virtual economy doesn't apply the traditional tax rules to the physical judgment of business premises, which leads to the confusion of source and consumption places. Therefore, it is necessary to reshape the legal connotation of source and consumption places on the basis of adhering to the legal principle of taxation. Firstly, the nature, scope and category of digital economy should be clearly defined in the tax law, the economic essence of cross-border transactions should be grasped, and the judgment standard of income and consumption generated in the transaction process should be constructed, so that the digital economy should be included in the law enforcement scope of tax authorities. Secondly, by establishing a new linkage rule and introducing the concept of "virtual permanent establishment", the criterion for determining the source of income tax is reconstructed. The "virtual permanent establishment" regards the website operated by the server in the digital transaction as a permanent establishment in the virtual space, comprehensively considers various factors such as user participation, digitization level and transaction scale, judges whether it constitutes "significant economic existence", and then accurately locates the source of income. Although the digital economy does not involve physical transactions and permanent institutions, it involves many users in the process of value creation, and obtains high profits through digital products and services. As long as the transaction meets the objective conditions of "significant economic existence", the tax authorities can exercise tax jurisdiction according to the judgment of "virtual permanent establishment". Third, improve the tax collection mechanism of turnover tax based on the principle of consumption place, incorporate digital products and services into the tax items and tax bases of turnover tax, and adopt the third-party payment platform withholding system for taxpayers whose consumption place is difficult to determine.

4.2. Apply blockchain technology to innovate the invoice system

As a product of the information revolution, blockchain, with its natural advantages such as high credibility and decentralization, has emerged in the fields of finance and logistics and achieved remarkable results. Shenzhen Taxation Bureau applied blockchain technology to electronic invoice system for the first time, and initially realized the integrated service of electronic invoice application, issuance, reimbursement and tax filing, which became a beneficial exploration for the transformation from "tax management by ticket" to "tax management by number". The information embedded in the blockchain can only be modified with the permission of more than half of the nodes, which perfectly meets the data security requirements of electronic invoices. The new model of "blockchain+electronic invoice" overcomes the disadvantages of electronic invoice reimbursement, unifies the information decomposition standard, changes the VAT deduction link from triple deduction to one-vote deduction, and simplifies the tax refund process. After the transaction is completed, taxpayers can timely issue blockchain electronic invoices to inquire about tax-related information, and tax authorities can also complete real-time collection and timely sharing of tax-related information.

4.3. Use digital technology to strengthen collection and management methods

Judging from the tax collection practice of countries that levy digital service tax (mainly Britain, France and India), the target of digital service tax is usually digital enterprises that mainly provide online social services, online advertising and other businesses and obtain high profits. After their annual income exceeds a certain standard, they will levy a digital tax of about 2%~3% on the excess or specific income. Considering the reality that China's digital economy is not yet mature, rashly levying digital service tax will inevitably lead to excessive tax burden and dampen the development momentum of enterprises. However, we can learn from international experience, clarify the identification and tax payment standards of digital enterprises, strengthen the tax source supervision and tax collection methods by using digital technology, and improve the collection and management mechanism with digital characteristics.

First, establish a tax registration system for digital enterprises, and use big data to improve the quality of tax source registration. Based on the principle of statutory taxation, the digital economy is brought into the scope of the Tax Administration Law, and the tax authorities are given the power to order taxpayers to make tax registration. The big data means are used to screen, classify and analyze the transaction information and economic status of natural persons, clarify the complicated relationship in economic exchanges, and judge the tax status and pay taxes. Secondly, adopting the inherent logic of "cloud computing", tax-related entities are encouraged to install and use new tax declaration software to build a platform for tax-related information collection, analysis and monitoring. This kind of software can not only guide taxpayers to settle tax-related matters through the cloud, but also get the relevant push of tax progress in real time. It is also bound with a third-party payment platform, monitoring the revenue and expenditure records of transactions in real time, and automatically calculating and

withholding the corresponding taxes.

4.4. Establish a digital tax-related information sharing mechanism

Although digital governance means have been applied in reality, it has not fundamentally solved the practical problems such as difficulty in obtaining tax-related information and insufficient cooperation among various parties. With the continuous improvement of digitalization, the requirements for information exchange and sharing between the government, taxpayers and third-party platforms are more stringent, and it is an inevitable trend to establish a digital tax-related information sharing mechanism. First, establish a tax-related information sharing center to promote a new pattern of multi-party co-governance. By strengthening the tripartite contact between the government, taxpayers and tax-related platforms, we will promote the docking and sharing of tax-related information among tax systems, non-tax systems and technical departments, and reduce the actual risks caused by information asymmetry. The information sharing center is responsible for the collection, processing and analysis of tax-related information, tracking the transaction progress and income of taxpayers in real time, and ensuring the effectiveness of tax source monitoring. Second, we should combine withholding with platform supervision mechanism. The online platform can obtain tax-related information of natural persons in time, and have a better understanding of the transaction status of natural persons. It is more convenient to carry out withholding and payment work. The tax authorities only need to recheck the tax deduction work of the platform through the tax-related data of the information sharing center, formulate the punishment standard, hold the withholding agents accountable for their disorderly actions, and improve the inspection efficiency.

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