

Study on Tax Governance of Data Assets in the Context of Digital Economy

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Abstract: *With the rapid development of the digital economy, data assets have become an important part of enterprises, and the scale of China's digital economy will reach 50.2 trillion yuan in 2022, with the total amount ranking the second in the world, and the proportion of GDP rising to 41.5 per cent, making the digital economy an important engine for stable growth and transformation. In this context, the traditional tax system is difficult to adapt to the rapid change and development of the digital economy, and China's tax policy is facing a major challenge. Based on the current situation that the tax treatment mechanism of data assets in the traditional economic model has been impacted and the phenomenon of tax loss has become increasingly serious, this paper takes today's tax collection and management standards as the starting point, explores the reasons for the mismatch between them and the data assets, and puts forward the conception of the specific application framework and the corresponding suggestions.*

Keywords: Tax Treatment; Digital Economy; Data Assets; Tax Administration.

1. CONFLICTS BETWEEN BUSINESS PRACTICE TRADING PROFITS AND TAX STANDARDS IN THE CONTEXT OF THE DIGITAL ECONOMY

At present, the wave of digital economy is surging, the traditional tax processing mechanism is based on physical assets, while the core of the digital economy is data assets, the whole shows the characteristics of digitisation and platform, so it is difficult to be covered by the traditional tax processing mechanism, and its digital qualities make the tax-related matters hidden, ambiguous and highly mobile, which makes it difficult for tax authorities to carry out the tax levy and taxation of data assets. It is difficult for tax authorities to tax data assets through the original tax standards. Specifically, under the background of digital economy, the following contradictions exist between the tax treatment mechanism of data assets and current business practices[1].

1.1 Digital Economy Challenges and Impacts on Traditional Tax Collection Models

Traditional tax laws are mainly formulated for the physical economy and traditional business models, emphasising the regulation and taxation of material assets and transactions, and often relying on physical existence to determine tax liabilities and the basis of taxation, while the core of the digital economy is information and data, and its business models and transaction forms have a high degree of virtualism, cross-border and intangibility, and can exist independently of physical entities, blurring the physical location of the source of income and the destination of consumption, making it difficult to determine the object and location of taxation, and increasing the difficulty of obtaining and screening tax-related information, making tax agencies face many new problems and challenges. This blurs the physical location of the source of income and the destination of consumption, making it difficult to determine the object and location of taxation, which increases the difficulty of obtaining and screening tax-related information, and makes tax agencies face many new problems and challenges. For example, Internet companies conduct business transactions through cross-border digital transactions, but these transactions do not take place in physical space, and it is difficult for traditional tax collection and management to accurately capture the information and value of these virtual transactions, thus affecting the reasonable collection of taxes; some Internet platforms and online trading platforms set the subject of the transaction outside the country through technical means, causing the tax agency to make an incorrect determination of the taxpayers' resident status, and the determination of the tax subject needs to specify the party that performs the tax obligation and pays the tax, which is the starting point of tax collection and management, and is an inevitable requirement for establishing the tax legal relationship. According to the Individual Income Tax Law of the People's Republic of China, resident individuals have unlimited tax obligations and are required to pay full individual income tax on income derived from within and outside the country, while non-resident individuals are only required to pay individual income tax in China on income derived from within the country, which results in the inability of China's tax authorities to effectively collect tax and easily creates a gap in the tax area[2].

1.2 Cross-Border e-Commerce Tax Disputes

In recent years, cross-border e-commerce has demonstrated strong development vitality and played an important role in stabilising the basic plate of foreign trade and foreign investment and promoting the high-quality development of trade. However, some cross-border e-commerce enterprises have a weak sense of compliance and risk awareness, for example, they make use of the features of the digital economy such as the inability to define the location, intangible assets and virtual business models, and reduce the burden of taxation by transferring profits between different countries and bringing profits to low-tax rate countries. As the business activities of the digital economy are not restricted by national borders, enterprises can avoid taxes by registering subsidiaries in low-tax regions or transferring profits to low-tax regions. This profit-shifting behaviour is known as base erosion and profit shifting (BEPS), and how to effectively tax cross-border e-commerce in the context of the digital economy has become a point of contention[3].

In addition, China's cross-border e-commerce compliance costs have been increasing. As foreign taxes on cross-border e-commerce are mainly collected by platforms or entrusted to third parties, and the cross-border e-commerce tax policies of various countries are constantly changing and adjusting, this has led to an increase in the tax burden of cross-border e-commerce enterprises. For example, the cross-border e-commerce retail import tax has been implemented on cross-border e-commerce imports in recent years, and many countries (regions) are facing the cancellation of the tax exemption on small parcels for consumers[4]. In order to maintain the competitive advantage of their own enterprises, countries have formulated tax policies that favour the protection of their own interests and built new tax barriers, while offshore tariff policies have begun to tighten, and the tax compliance costs for Chinese cross-border e-commerce enterprises have continued to increase. For example, the European Union abolished the threshold for distance sales from July 2021 and terminated the import VAT exemption for imports of less than 22€.

1.3 Difficulty in Assessing the Value of Data Assets

China's tax law and tax treatment are mainly based on the market price of physical assets for tax purposes, and data, as an intangible asset, is relatively difficult to assess and price, and is prone to disputes and uncertainty. Specifically, the digital economy has strengthened the difficulty of data asset assessment from the following four aspects: First, the current legal ownership is vague, and data assets are generally characterised by unclear property rights definition, mainly manifested in the three rights of ownership, use and income of data assets, which leads to the assessment of the rights of data assets for specific purposes, which cannot be better divested of the influence of other rights factors on the target rights. Secondly, it is difficult to reasonably determine the formation cost. In addition to outsourced data assets, the enterprise's own data assets are formed by the enterprise's continuous accumulation in the course of development, and it is difficult to reasonably aggregate the cost of the data assets in the process, which makes it impossible to reasonably and accurately calculate the replacement cost of the data assets in the subsequent appraisal[5]. Thirdly, the income is unstable and difficult to predict. Data assets will generate different income under different application scenarios, and changes in the operation mode and business model will cause changes in the way and amount of income generated by the data assets; at the same time, the income from data assets under different application scenarios needs to be re-analysed and assessed according to the characteristics of the specific business model, and therefore the income from the data assets is not suitable for assessment under the assumption of stability and permanence.

Therefore, the return of data assets is not suitable to be assessed under the assumption of stable continuity. Fourthly, data isolation and privacy protection issues, assessing the value of data assets often requires comprehensive consideration of multiple data sources. However, the reality is that data is usually stored in different systems and organisations in a dispersed manner, making it difficult to integrate and share, which poses a significant challenge to the valuation of data assets. In addition, some data involve privacy and commercial confidentiality, and tax authorities must follow relevant privacy protection regulations when accessing tax-related information, and laws and regulations involving data privacy protection and information security are being strengthened, adding restrictions to information access, and privacy protection issues also make data sharing and integration difficult.

2. REASONS FOR THE EMERGENCE OF CONTRADICTIONS BETWEEN THE PROFITABILITY OF BUSINESS PRACTICE TRADE AND TAX STANDARDS IN THE CONTEXT OF THE DIGITAL ECONOMY

2.1 Information Asymmetry between Tax Collectors and Payers and Difficulties in Collecting Tax-Related

Data

In the context of the digital economy, market boundaries are expanding infinitely, market subjects and transaction processes are becoming more and more hidden, taxable objects and taxable subjects can flow at will in the real space, the field limitations of transaction time and space have been broken, the information asymmetry between tax collectors and taxpayers is intensifying rapidly, and the difficulty of tax collection and management is greatly elevated, and it has led to the emergence of a serious tax burden inequity between digitally-enabled enterprises and traditional enterprises. According to an EU survey, the effective average tax rate of traditional enterprises is as high as 23.2%, while the average tax rate of digital enterprises is only 9.5%.

The digital economy is highly complex, covering many different fields, such as e-commerce, cloud computing, mobile payment, artificial intelligence, etc. These fields have complex technical architectures and business models, and the data flow, transactions and sales processes involved are more complicated, and the tax authorities need to understand their complexity so as to obtain information for tax purposes; however, the rapid evolution of technology and the diversity of business models make it more and more difficult to disclose and obtain the information involved. However, the rapid evolution of technology and the diversity of business models have made the disclosure and acquisition of water-related information increasingly difficult and complex[6]. At the same time, tax-related data in the digital economy are often scattered in various countries and regions, with cross-border and international characteristics, and tax departments need to cross borders to obtain information, facing the challenges of different cultures and languages, and there are differences in tax policies, regulations and information disclosure requirements in different countries and regions, which deepen the difficulties in collecting tax-related data.

2.2 Fragmentation of Taxpaying Entities and Difficulty in Effectively Determining the Identity of Taxpayers

The digital economy, with information and data at its core, has a more flexible and decentralised mode of operation than the traditional real economy, and the subject of transactions presents the characteristics of digitization, concealment and high mobility[7]. With the popularity of digital technology, it is easier for individual entrepreneurs, small and micro enterprises, etc. to enter the market and carry out online business, and these entrepreneurs and enterprises are no longer subject to the physical space and large-scale capital investment in the traditional entity economy, but rely on the Internet and other digital tools to rapidly integrate into the market to form a broad base of tax subjects, which makes the tax subjects present the characteristics of decentralisation, difficult to track and not easy to supervise, and the tax department It is difficult to accurately and clearly define the producer, supplier and consumer of each transaction, which makes it difficult to apply the collection and management method under the traditional economic model, which takes specific taxpayers as the object of collection and management. For example, the traditional retail industry is gradually integrating online sales channels, and the banking industry is cooperating with fintech companies to launch innovative financial services. This integration makes the types of taxpaying subjects more diversified, covering enterprises in a wide range of fields from traditional manufacturing industries to Internet enterprises and fintech companies, etc. Different types of enterprises may have differences in tax regimes, leading to the fragmentation of taxpaying subjects. In addition, the characteristics of the digital economy also bring the challenges of invisibility and transactions without boundaries. Transactions in the digital economy are usually conducted in electronic form, with no physical transaction vouchers, and both parties to the transaction can conduct the transaction anonymously. This makes it difficult for tax authorities to obtain transaction information and determine the identities of the parties to a transaction, and makes it impossible to accurately and effectively supervise and discipline the tax subject, leading to the existence of a number of vacuums and weaknesses in the supervision and determination of the tax subject in the digital economy.

2.3 Blurring of the Boundaries of the Scope of Transactional Business and Difficulty in Characterising Transactional Behaviour

Under the traditional industrial economic model, the elements of the tax system are mainly designed for the single production and operation activities of taxpayers, the business scope of enterprises is relatively fixed in space, the business boundaries of the entities involved in the transaction activities are clear, and the number of employees, the scale of transactions, and the places of production and operation of enterprises match each other. In contrast, the digital economy breaks through the limitations of time and space, making the flow of factors of production more rapid, but also making the business scope of the main body of the business boundary ambiguous, bringing difficulties and challenges to the determination of the scope of taxation[8]. For example, the digitisation of

transactions and services has made it possible for labour to flow across borders at will, and how the cost of labour can be shared equitably and effectively across countries has become a major problem. Owing to differences in the tax regimes of various countries, there are also gaps in the scope of taxation, which makes it difficult to characterize the behaviour of transactions and makes it impossible to effectively tax certain labour transactions that flow across borders.

3. COUNTERMEASURES TO RESOLVE CONFLICTS BETWEEN TRADE PROFITS AND TAX STANDARDS OF BUSINESS PRACTICES IN THE CONTEXT OF DIGITAL ECONOMY

3.1 Enhancing the Digital Capacity of Tax Administrations and Promoting "Tax by Numbers" Technology

In the face of the risks and challenges posed by the digital economy, China's tax authorities must carry out organisational structural reforms, promote "tax by numbers" technology, and strengthen the digital support of information technology, so as to better understand and track the business models and practices of the digital economy, accurately assess the tax liabilities of enterprises, and ensure that the tax standards are in line with the actual operations, so that the problems of difficult identification of tax subjects and difficult access to tax-related information under the digital economy can be effectively solved. This can effectively solve the problems of taxpayers not being easily identified and tax-related information being difficult to obtain in the digital economy.

First, to promote the integration and collection of information systems, tax authorities should improve the integration and use of data, and set up a unified and independent information management platform or a management agency dedicated to tax collection and administration for the digital economy, whose jurisdiction includes all tax collection and administration operations, such as tax registration, tax payment, international tax coordination, etc., so as to be able to better track and analyse taxpayers and tax payment data, and to improve the efficiency and accuracy of tax collection and administration. The platform or organisation should be able to provide the necessary information for the tax administration. The platform or organisation should be able to provide taxpayers with convenient services such as online filing, online tax payment and online enquiry, so as to reduce taxpayers' time and cost of tax preparation and increase their satisfaction, and at the same time improve the work efficiency of the tax authorities. Secondly, promoting intelligent tax assistance tools, which can be developed through the introduction of advanced technologies such as artificial intelligence, big data and machine learning, and the use of artificial intelligence to help tax departments process data and documents in large quantities and with high efficiency, as well as carry out intelligent data analysis and risk assessment. For example, using AI's huge capacity for data, specific regulations and cases are combined, entered and analysed in this regard, in order to improve the tax department's standardisation of taxation in the digital economy and reduce tax risks. Third, promote data sharing and cooperation. In China, tax departments should strengthen data sharing and cooperation with other government departments and agencies to break down information silos and improve their comprehensive understanding of taxpayers and business analysis capabilities, which will help accurately assess taxpayers' tax liabilities and improve the fairness and accuracy of tax collection and payment. In the international community, cooperation among countries should be strengthened to jointly formulate tax standards and rules and share experiences and best practices, so as to better track the tax realisation of profits by multinational enterprises and avoid the use of tax loopholes and tax avoidance by multinational enterprises[9].

3.2 Improving the Tax Avoidance System and Strengthening Tax Collection and Administration

Although China has introduced a series of policies on tax administration in the context of the digital economy, the tax subject in the current tax system is ill-defined, which is prone to erosion of the tax base and transfer of benefits, and is not conducive to the maintenance of tax sovereignty, and there are still a certain degree of loopholes and challenges in tax collection and administration. Therefore China should take more active measures to improve the tax avoidance system and strengthen tax collection and management. To establish a system of anti-avoidance laws and regulations, the Chinese government has already issued a series of anti-avoidance laws and regulations, such as the Law of the People's Republic of China on Enterprise Income Tax, and its implementation has been effective to a certain extent, however, China should also put the revision of the Law of the People's Republic of China on the agenda as soon as possible. The legislative process of anti-avoidance should be upgraded. China's current anti-avoidance legislation can no longer meet the needs of economic development, and the existing legislation can't cope with the challenges posed by new business models to EIT in the context of digital economy. In the face of such a situation, China should refine the existing tax avoidance and anti-avoidance provisions in the EIT law as

soon as possible and add specific measures that are compatible with the development of the digital economy, so as to enhance the level of anti-avoidance legislation[10].

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