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International Experience Reference for Tax Collection and Administration of Enterprise Digital Assets

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Abstract: With the rapid development of the digital economy, enterprise digital assets have become increasingly important globally. These assets include but are not limited to software, databases, digital content, online services, and various forms of intellectual property. However, as enterprise digital assets grow, the complexity of tax collection and administration has also increased. To better manage and tax these intangible assets, many countries have begun to explore and implement a series of measures. This paper aims to draw on international experience in the tax collection and administration of enterprise digital assets to provide references for the formulation and implementation of relevant tax policies in China.

1. Introduction

In the era of the digital economy, enterprise digital assets have become an important driving force for economic growth. These assets are not only highly liquid and reproducible but also often cross national borders, posing unprecedented challenges to tax collection and administration. Therefore, learning from international experience and constructing a tax collection and administration system adapted to the characteristics of the digital economy is particularly important.

2. Digital Asset Tax Policies in the United States

2.1 Federal-level Regulations

Federal-level regulations undoubtedly play a pivotal role in the tax collection and administration of enterprise digital assets. Taking the United States as an example, the federal government has formulated a series of detailed regulations for the tax collection and administration of digital assets to address the growing challenges of the digital economy. These regulations cover not only traditional income tax and capital gains tax but also put forward specific tax treatment requirements for emerging digital assets such as cryptocurrencies. In the Notice on Virtual Currency issued by the Internal Revenue Service (IRS) in 2014, it is clearly stated that virtual currencies (such as Bitcoin) should be regarded as property rather than currency. This means that when individuals or enterprises generate profits through transactions, mining, or accepting digital assets as a means of payment, the gains must be taxed in accordance with the rules of property transfer. This provision lays a legal foundation for the tax collection and administration of digital assets and reflects the federal

government's rigorous attitude toward digital asset taxation. In specific implementation, federal-level regulations require taxpayers to accurately record all transactions related to digital assets, including purchases, sales, exchanges, and donations. These records not only help ensure the accuracy and fairness of taxation but also provide effective regulatory means for tax authorities. According to IRS data, in recent years, with the popularity of digital assets, the number of tax returns involving digital assets has significantly increased, further highlighting the importance of federal-level regulations in the tax collection and administration of digital assets[1].

2.2 State-level Tax Regulations

In the United States, state-level tax regulations play a crucial role in the tax collection and administration of enterprise digital assets. Each state formulates diversified regulations on digital asset taxation based on its economic situation, legal traditions, and tax policy orientation. Take California, an economic hub of the United States, as an example. It implements relatively strict tax policies on the trading and holding of digital assets, especially cryptocurrencies. California's tax law stipulates that gains from cryptocurrency transactions shall be regarded as capital gains or losses, included in individual or corporate income tax, and subject to a dual taxation system at the federal and state levels. This provision not only reflects California's emphasis on digital asset taxation but also reflects its balanced consideration of maintaining tax fairness and promoting the healthy development of the digital economy. In specific implementation, the California Franchise Tax Board (FTB) has issued a series of guiding documents, clarifying the tax treatment principles for cryptocurrency transactions, including how to calculate capital gains and how to report transaction records. In addition, California has also passed legislation requiring digital currency trading platforms to report user transaction information to the tax authority to enhance tax transparency and information exchange and effectively combat tax avoidance through digital assets. It is worth noting that California's practice is not an isolated case. Other economically developed states such as New York and Texas are also actively exploring digital asset tax policies suitable for their states.[2] For example, New York has introduced a "BitLicense" system to strictly regulate digital currency enterprises, accompanied by corresponding tax policies, aiming to protect investors' interests, prevent illegal financial activities, and ensure tax revenue. The diversity of these state-level tax regulations not only reflects the flexibility of state tax autonomy under the U.S. federal system but also provides valuable reference experience for other countries worldwide[2].

3. The EU's Digital Service Tax Framework

3.1 Proposals for Digital Service Tax

The proposal for digital service tax, as an important issue in the international community regarding the tax collection and administration of digital assets in recent years, has aroused widespread attention and discussion. The EU took the lead in this field, and the proposed digital service tax framework aims to address the challenges faced by the traditional tax system in the digital economy era. The core of the proposal is to levy a specific tax based on the digital service revenue of large multinational internet enterprises, especially those with a significant digital footprint in the European market but relatively few physical presences. This measure aims to ensure that these enterprises contribute corresponding taxes for their economic activities in Europe, thereby maintaining tax fairness and fiscal stability[3].

The specific implementation of the EU's digital service tax proposal is expected to have a profound impact on the financial structure of affected enterprises. Take tech giants such as Google, Amazon, and Facebook as examples. These companies have a huge user base in Europe and obtain

huge revenues through advertising, online sales, data services, etc., but they often have a relatively small physical operation scale in Europe, thus avoiding a large amount of taxes. The introduction of digital service tax means that these enterprises need to pay a certain proportion of taxes according to their digital service revenue in the European market. According to preliminary estimates by the EU, this tax can bring tens of billions of euros in additional tax revenue to EU member states every year. In the process of implementing the digital service tax, there are certain implementation differences among EU member states, which mainly stem from the differences in national economic conditions, the development level of the digital industry, and the understanding of the digital service tax. However, it is precisely this difference that provides valuable practical experience and lessons for the international community. Some countries, such as France, have taken the lead in implementing similar digital service taxes. Although facing the threat of trade retaliation from the United States, they still insist that this is a necessary maintenance of tax fairness in the digital economy era. In addition, the implementation effect of the digital service tax proposal also needs to be evaluated through specific analysis models. For example, a tax impact assessment model can be used to simulate the impact of different tax rates and tax base settings on fiscal revenue, corporate tax burden, consumer prices, etc. This quantitative analysis helps policymakers more accurately grasp the advantages and disadvantages of the digital service tax and how to find a balance between maintaining tax fairness and promoting the development of the digital economy. At the same time, the implementation of the digital service tax also needs to consider its impact on the international tax system to ensure that it will not trigger large-scale tax competition and capital outflows, thereby maintaining the stability of the global tax order[4].

3.2 Implementation Differences among Member States

In discussing the global practice of tax collection and administration of enterprise digital assets, significant implementation differences exist among member states, which are mainly reflected in the formulation and execution of specific policies. Taking the EU's digital service tax framework as an example, the proposal aims to levy taxes on the digital service revenue of large multinational internet companies to make up for the shortcomings of the traditional tax system in the digital economy era. However, member states have shown obvious differences in implementing this framework. As a pioneer, France took the lead in levying a digital service tax in 2019, targeting enterprises with global annual revenues of more than 750 million euros and digital service revenues of more than 25 million euros in France, with a tax rate of 3%. In contrast, although Germany also actively responded to the EU's call, it was more cautious in specific tax rates and taxation scope. Its digital service tax bill was not passed until 2021, targeting enterprises with global annual revenues of more than 5 billion euros and digital service revenues of more than 50 million euros in Germany, with a tax rate of 3%. This implementation difference reflects the different considerations of member states in balancing their own fiscal needs and the interests of multinational enterprises[5].

Further analysis shows that the differences in the implementation of digital asset tax policies among member states are also reflected in the treatment of specific industries. Take Singapore as an example. The country has taken a relatively open attitude toward the tax treatment of cryptocurrencies, treating them as property rather than currency for taxation, which has attracted many cryptocurrency enterprises and investors to a certain extent. The Singapore government believes that by providing tax incentives and a friendly regulatory environment, it can promote the innovation and development of the blockchain and digital currency industries. In contrast, EU member states appear more conservative in their treatment of cryptocurrencies, and most countries have not yet reached a consensus on the tax treatment of cryptocurrencies, resulting in enterprises facing different tax treatments in different member states, increasing the complexity of cross-border

operations.

In addition, the differences in the implementation of digital asset tax policies among member states are also affected by international tax cooperation and competition. The OECD's BEPS action plan aims to combat base erosion and profit shifting through international cooperation and provide a fair framework for global digital economy taxation. However, in practice, member states often weigh their own interests, leading to uncertainties in the formulation and implementation of international tax rules.

To sum up, the implementation differences of member states in the tax collection and administration practice of enterprise digital assets are mainly reflected in the formulation and execution of specific policies, the treatment of specific industries, and international tax cooperation and competition.[4] These differences not only reflect the different considerations of member states in balancing their own fiscal needs and the interests of multinational enterprises but also reveal the complexity and challenges in the process of constructing the global digital economy tax system. Therefore, in the future, when promoting the improvement of the global digital economy tax system, more attention needs to be paid to communication and coordination among member states to achieve a more fair, transparent, and efficient tax collection and administration.

4. Singapore and Switzerland's innovative tax systems

4.1 Tax Treatment of Cryptocurrencies

In recent years, the rapid advancement of blockchain technology and the expanding cryptocurrency market have made it increasingly urgent for governments and tax authorities worldwide to establish effective taxation frameworks for these emerging digital assets. Singapore and Switzerland have demonstrated progressive approaches in this domain, offering valuable reference models for other jurisdictions.

The Singaporean government has adopted a clear and flexible approach toward the taxation of cryptocurrencies. According to guidelines issued by the Inland Revenue Authority of Singapore (IRAS), cryptocurrencies are classified as property rather than legal tender, with capital gains from their trading subject to taxation. This classification not only acknowledges the unique attributes of cryptocurrencies but also ensures that the tax system remains adaptable and equitable. Furthermore, Singapore actively promotes innovation through targeted tax incentives, such as tax exemptions and research and development grants for eligible blockchain startups, thereby fostering sustainable growth in the cryptocurrency ecosystem and related sectors[6].

Switzerland, recognized as a global financial hub, has also exhibited forward-thinking and innovative practices in cryptocurrency taxation. The Swiss Federal Tax Administration (FTA) treats cryptocurrencies as tradable financial assets, imposing capital gains tax on profits derived from transactions involving them. Additionally, Switzerland has updated its legal framework to provide clarity for cryptocurrency exchanges and wallet service providers, enhancing market stability and investor protection. These progressive tax policies have attracted numerous cryptocurrency enterprises and investors, reinforcing Switzerland’s leadership position in blockchain technology.

4.2 Attracting Innovative Enterprises through Tax Incentives

Within the evolving landscape of global digital asset taxation, tax incentives have emerged as a crucial tool for attracting innovative enterprises. The Singaporean government recognizes that innovation is a key driver of economic growth in the digital era. Consequently, it has implemented a favorable tax regime for digital assets, which includes transparent regulatory guidance and reduced tax uncertainty for businesses. Through various fiscal incentives—such as reduced corporate

income tax rates and R&D subsidies—Singapore has successfully drawn a significant number of technology startups and multinational corporations' R&D centers. According to data from the Singapore Economic Development Board, this supportive tax environment has contributed substantially to economic expansion and job creation in recent years.

Similarly, Switzerland leverages its innovative tax framework to attract global talent and enterprises. The country offers clear tax guidance for cryptocurrency-related activities and encourages companies to establish headquarters or R&D facilities within its jurisdiction through preferential tax treatments and funding support for innovation projects. These strategic tax policies not only facilitate the growth of the digital asset industry but also strengthen Switzerland's competitive edge in the global digital economy.

The effectiveness of tax incentives in attracting innovative enterprises stems from the fact that such entities often face substantial R&D expenditures and market uncertainties. By reducing financial burdens and improving risk resilience, tax incentives create a more conducive environment for innovation. Moreover, these measures signal strong governmental support for entrepreneurship and technological advancement, thereby boosting business confidence. From an economic standpoint, tax incentives function as a form of public subsidy for innovation, encouraging increased investment in R&D and driving industrial transformation and technological progress.

5. Tax Collection and Administration of Enterprise Digital Assets in China

5.1 Legislative Construction of Digital Asset Tax Collection and Administration

In terms of value-added tax (VAT), the current Provisional Regulations on Value-Added Tax in China do not specifically regulate the VAT collection requirements for enterprise digital assets. However, the Notice of the Ministry of Finance and the State Taxation Administration on Comprehensively Promoting the Pilot Project of Replacing Business Tax with Value-Added Tax (Caishui [2016] No. 36) issued in 2016 stipulates the collection of VAT on some modern service industries, including information technology services, which can be regarded as an indirect specification for the VAT collection of enterprise digital assets. However, with the rapid development of the digital economy, the forms and transaction methods of enterprise digital assets are increasingly diversified, and the existing VAT regulations are insufficient to cope with these new situations. For this reason, China's tax authorities have begun to study and improve the VAT collection policies for enterprise digital assets. On the one hand, it is necessary to clearly define the scope and classification of enterprise digital assets to more accurately apply VAT regulations; on the other hand, it is also necessary to consider the characteristics and development trends of the digital economy and formulate tax policies that can not only protect the national tax interests but also promote the development of the digital economy. In addition, in the process of legislative construction, it is also necessary to fully learn from international experience, strengthen exchanges and cooperation with other countries in digital economy taxation, and jointly address the challenges and problems in the process of constructing the global digital economy tax system. Through these efforts, China will be able to establish a more perfect, fair, and transparent tax collection and administration system for enterprise digital assets, providing a strong institutional guarantee for the development of the digital economy.

In terms of corporate income tax, the Corporate Income Tax Law of China and its relevant implementation rules also do not directly contain specific provisions on the income tax of enterprise digital assets. However, in practice, the income generated by enterprise digital assets is often classified as intangible asset transfer income, technical service income, etc., and corporate income tax is levied according to these categories. However, with the increasing complexity and innovation

of digital assets, the existing income tax regulations also have certain difficulties in defining the nature of digital asset income and the tax basis. For this reason, China's tax authorities are also actively exploring and improving the income tax policies for enterprise digital assets. On the one hand, it is necessary to clarify the confirmation and measurement standards for enterprise digital asset income to ensure the accuracy and fairness of tax collection and administration; on the other hand, it is also necessary to fully consider the innovation and flexibility of the digital economy and formulate tax policies that can not only encourage enterprise technological innovation but also protect national tax interests. In addition, in the legislative process, attention should also be paid to the stability and predictability of tax policies to provide a stable legal environment for the long-term development of enterprise digital assets. Through these measures, China will be able to further improve the income tax collection and administration system for enterprise digital assets and promote the coordinated development of the digital economy and the tax system.

5.2 Transaction Tracking and Tax Source Management of Digital Assets

In 2021, the Shanghai Data Exchange (SDE) was officially established to support and accompany natural persons, legal persons, and unincorporated organizations in engaging in data transactions on the SDE. In August 2022, the SDE established the first domestic digital transaction center and issued the Administrative Specifications for the Digital Asset Sector of Shanghai Data Exchange (Trial) as the standard for the standardized operation of the industry; China's first data trading market will be listed on the Shanghai Exchange in June 2024. The Shanghai Digital Transaction Center can integrate the digital asset transaction data of natural persons, legal persons, and unincorporated organizations to assist tax authorities in levying taxes on them. The "China Digital Asset Trading Platform" was officially launched in January 2023. It is the first domestic platform to integrate digital asset information, assist users in digital asset trading, track the entire transaction process, and ensure transaction security. In accordance with relevant tax regulations, enterprises should carry out tax registration and tax declaration in accordance with the law. To this end, after completing the transaction, enterprises need to handle individual income tax registration, fill in personal information, declare to the competent tax authority, and pay taxes.

6. Conclusion

To conclude, the international experience in tax administration of corporate digital assets offers invaluable insights. The meticulous segmentation of digital asset taxation at both federal and state levels in the U.S., alongside the divergent implementations of digital service taxes among EU member states, exemplifies how nations adopt flexible strategies and deliberate approaches when confronting digital economic challenges.

For China's legislative construction in tax administration of corporate digital assets, such international practices should be fully leveraged—balancing tax fairness and efficiency while accommodating the unique traits and innovative vitality of the digital economy. This domain represents a complex yet critical issue, fundamentally linked to the perfection of the national tax system and the sound development of the digital economy.

Through in-depth analysis of global experiences and integration with China's practical context, there lies the prospect of establishing a more scientific, rational, and era-adaptive tax administration framework for digital assets.

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