

Study on the Influence of Big Data Tax Collection and Administration on the Stickiness of Corporate Tax Burden

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Abstract

This paper studies the impact of the application of big data in tax collection and management on the stickiness of enterprise tax burden. By analyzing the existing literature, this paper discusses the advantages of big data in the field of tax revenue and its influence on the stickiness of enterprise tax burden. It is found that big data tax collection and management can improve the efficiency of tax management, reduce tax evasion of enterprises, and then reduce the stickiness of corporate tax burden, and promote the fairness and transparency of the tax system. Finally, this paper puts forward suggestions on improving big data tax collection and management in many aspects, so that big data tax collection and management can better reduce the stickiness of corporate tax burden.

Keywords

Big data tax collection and management, Enterprise tax burden stickiness.

1. The Significance of Big Data Tax Collection and Management

1.1. Accurate collection and management

Big data technology can identify and distinguish taxpayer behavior patterns by means of data mining, analysis and prediction, so as to realize highly targeted and more accurate collection and management measures. Through the analysis of massive data, the tax department can better understand the financial situation and behavior characteristics of taxpayers, and carry out targeted collection and management.

1.2. Improve the efficiency of tax collection and administration

The application of big data technology can automate and intelligent the tax collection and administration process, accelerate the speed of data collection, analysis and processing, and improve the efficiency of tax collection and administration. Tax authorities can monitor taxpayers' tax data and behaviors in real time through big data technology, find out abnormal situations in time, make corresponding treatment, and save the cost of tax collection and management and human resources.

1.3. Reduce tax evasion and evasion

The use of big data technology analysis ability, tax authorities can more comprehensively monitor and check the taxpayer tax behavior, timely find potential tax evasion and evasion, strengthen the supervision and management of taxpayers, effectively reduce the occurrence of tax evasion, maintain the order of tax.

2. The Influencing Factor of Corporate Tax Burden Stickiness

2.1. The tax burden of enterprises is directly affected by laws and policies

The tax law provisions and policies of different countries or regions will have an important impact on the tax burden of enterprises. The degree of tax policy, the level of tax rate and the tax relief policies enjoy will directly affect the tax burden of enterprises. In some regions, the government has taken measures such as lowering corporate tax rates and optimizing tax policies to attract corporate investment and development, thus reducing the tax burden of enterprises. On the contrary, in some regions, the government may take measures such as raising tax rates and tightening tax policies, leading to increased corporate tax burdens. Therefore, the stickiness of corporate tax burden largely depends on the tax regulations and policies of the country or region where they are located.

2.2. The enterprise size has a significant impact on the tax burden

In general, the larger the company is, the more resources and capacity it has to cope with the tax burden. Large companies are often able to use economies of scale to reduce production costs and thus reduce tax burdens. By contrast, small businesses often lack the size and resources and face higher tax burdens. Therefore, the size of enterprises is one of the important factors affecting the tax burden.

2.3. The influence of industry attributes on enterprise tax burden

First of all, the characteristics of different industries directly affect the tax burden level of enterprises. High-margin industries, for example, tend to face higher tax rates and therefore more expensive taxes. Second, highly competitive industries often adopt more price-reduction strategies to attract consumers, which could reduce profit margins and thus reduce tax burdens. In general, the attribute of the industry determines the tax burden of the enterprise to a large extent.

2.4. The tax management level and compliance degree of enterprises are one of the important factors affecting the stickiness of tax burden

Efficient tax management can help companies reduce their tax burden. Enterprises should establish a sound financial system and tax risk management system, strictly abide by the tax laws and regulations, and timely and accurately complete the tax declaration and payment work. In addition, enterprises should also strengthen internal audit and risk control to ensure the authenticity and integrity of tax data and avoid the increase in tax burden caused by tax risks. By improving the level of tax management, enterprises can effectively reduce the stickiness of tax burden, and improve their competitiveness and sustainable development ability.

3. The Impact of Big Data Tax Collection and Management on the Stickiness of corporate Tax Burden

3.1. Improve the efficiency and accuracy of tax collection and administration, and reduce the tax risks of enterprises

First of all, big data can help the tax authorities to better monitor the tax behavior of enterprises. Through data analysis and mining, they can find out possible tax evasion, conduct timely punishment and investigation, and effectively reduce the occurrence of tax evasion of enterprises. Secondly, big data can realize the real-time monitoring and information disclosure of corporate tax data, strengthen the recording and collection of tax information, and improve the response speed and disposal capacity of tax collection and administration. In addition, big data can also establish an intelligent tax collection and administration system, automatically

process tax data, reduce human intervention and errors, and improve the accuracy and standardization of tax collection and administration. To partly offset the tax burden pain due to the rising effective tax burden. To sum up, the application of big data in tax collection and management can effectively improve the efficiency and accuracy of tax collection and management, reduce the tax risk of enterprises, and bring new development opportunities and challenges for tax collection and management work.

3.2. Optimize the tax management process, simplify the enterprise tax burden payment procedures, and reduce the cost of tax collection and administration

First of all, big data analysis can more accurately identify the amount of tax payable by enterprises and avoid tax evasion or insufficient tax collection. Secondly, through the intelligent processing of big data technology, the tax declaration and payment process can be automatically completed to reduce human participation and reduce the burden of enterprises. In addition, big data can also help monitor the tax compliance situation of enterprises, find out and correct problems in time, and improve the efficiency and accuracy of tax collection and administration. In general, using big data to optimize the tax management process can reduce the stickiness of corporate tax burden, and promote the standardization and modernization of tax collection and management.

3.3. Realize tax data sharing and coordination, improve the transparency of tax collection and administration, and reduce the tax risks of enterprises

Through big data analysis, different tax-related departments can share the tax information of enterprises, realize information interconnection, improve the efficiency of tax collection and management, and reduce repeated data collection. At the same time, big data technology can realize the comprehensive monitoring of enterprises, timely find out potential tax risks, effectively prevent and crack down on tax evasion behaviors, and improve the accuracy and effectiveness of tax collection and management. Such a practice can not only reduce the tax risk of enterprises, but also reduce the tax burden stickiness of enterprises, and promote the standardization and modernization of tax collection and administration.

4. The Challenge of Big Data Tax Collection and Management

4.1. Tax-related information transmitted through the network platform will have a certain degree of disorder and hidden risks, and the security problem of tax data deserves attention.

With the wide application of big data technology, taxpayers' personal information and financial data are constantly increasing, and how to ensure that these data is not unauthorized access and abuse has become an urgent problem to be solved. At the same time, tax collection and administration departments need to use big data to improve the efficiency of tax collection and administration, and also abide by relevant data protection laws and regulations to ensure that taxpayers' privacy right is not infringed. Therefore, how to effectively protect the data security and privacy in the tax collection and administration in the digital era is one of the important challenges facing the current tax collection and administration.

4.2. The amount of data is huge, and the information involving various fields is complicated, which is difficult to organize and analyze timely and accurately.

The diversity of data makes tax managers need to have broader knowledge and skills to process different sources and types of data. In addition, the rapid update and change of big data also bring pressure to tax collection and administration, requiring managers to update technology

and workflow in time to adapt to new challenges. However, in terms of professional talent team construction, there is a shortage of big data professionals in the tax system, and the proportion of high-quality professionals specializing in big data technology and having related professional experience is relatively low.

4.3. Cross-border data flow has caused difficulties in transnational cooperation and coordination of tax collection and administration.

This challenge is mainly reflected in the differences in the legal systems of different countries, the inconsistency of tax policies and the restrictions of information sharing. In the context of globalization, the data flow brought by the transnational operation of enterprises is more and more frequent. Many enterprises take advantage of the concentration of data centers to avoid tax revenue, which brings great pressure to tax collection and management. To effectively solve this challenge, the tax authorities of various countries need to strengthen cooperation, establish cross-border cooperation mechanisms, share data and information, strengthen the supervision of cross-border data flow, and ensure the effective implementation of tax collection and administration.

5. How to Better Conduct Big Data Tax Collection and Management

5.1. Integrate the data resources of various departments, build an interconnected big data platform for tax revenue.

In this way, the tax authorities can more efficiently monitor and manage the tax situation of taxpayers, improve the level of tax collection and management, reduce the tax leakage phenomenon, and ensure the sustainability and stability of the tax revenue.

5.2. Ensure the security and integrity of tax data

By improving the security level of the data, adopting advanced encryption technology and security protection measures, to ensure that the tax data is not illegally obtained or stolen during the transmission and storage process. Strengthen the management of access to sensitive tax data, take strict authentication and authority control measures, to ensure that only authorized personnel can view and operate relevant data. Establish a sound monitoring and early warning system, monitor the data access and use behavior in real time, detect the abnormal behavior in time and take corresponding risk response measures. Strengthen the data security awareness training of internal employees, improve their awareness of the importance of tax data security, and prevent internal personnel from malicious tampering or leakage of data. Tax authorities should also maintain a keen perception and learning ability of new technologies, and timely update the technical architecture and system platform.

5.3. Promoting cross-departmental data sharing and collaboration can greatly improve the efficiency and accuracy of tax collection and administration.

The establishment of data sharing platform between tax departments and other departments to realize information interconnection is conducive to comprehensive analysis and utilization of data resources of various departments. By integrating the data of finance, human resources, social security, land and other departments, the tax department can more accurately understand the financial status and assets of taxpayers, so as to carry out targeted collection and management work. At the same time, cross-departmental data sharing can also help tax authorities to better detect taxpayers' tax evasion behavior, improve the level of tax collection and management, and maximize the fairness and benefit of tax revenue. In the process of promoting data sharing, various departments need to establish effective information sharing mechanisms and cooperation agreements, clarify the collection, transmission, storage and use of data rules, and ensure data security and privacy protection. In addition, data standardization

and integration capabilities should be strengthened to ensure that data from different departments can be effectively connected and shared. By promoting cross-departmental data sharing and collaboration, break the barriers of tax-related information interaction, smooth the channels of tax-related information, improve the efficiency of tax-related information collection, analysis and sharing, and reduce information asymmetry. The comprehensiveness, timeliness and precision of tax collection and administration will be significantly improved, providing stronger support for the formulation and implementation of tax policies.

6. Conclusion

Through the study and analysis of the influence of big data tax collection and management on the stickiness of enterprise tax burden, this paper finds that the application of big data technology can effectively reduce the stickiness of enterprise tax burden and improve the efficiency and transparency of tax collection and administration. In the future, with the continuous development and improvement of big data technology, the application of big data in tax collection and management will become more extensive and in-depth, which will provide strong support for promoting the reform and innovation of the tax system. We expect that big data technology can better serve tax management, realize the intelligence and modernization of tax collection and management, and make greater contribution to improving the quality and efficiency of tax collection.

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References

- [1] Tao Dongjie, Chen Zhenghong. Digital upgrading of tax collection and administration and the stickiness of corporate tax burden [J]. Fiscal Science, 2023,(04):89-105.
- [2] Li Kaifeng Jing. Research on the application of Big Data in Tax collection and Administration [D]. Shanxi University, 2023.
- [3] Wang Minghui. The challenge of digital economy to China's tax collection and administration and its response [D]. Hebei University of Economics and Business, 2023.
- [4] Fan Qiuju. Intelligent tax collection and management under big data [J]. Tax payment, 2024,18 (09): 16-18.
- [5] Zhang Zhiqiang, Han Fengqin. Study on the influence of Big data tax collection and Administration on corporate tax compliance [J]. Audit and Economic Research, 2023,38 (05): 86-96.