

Original Paper

Ideas and Measures for Promoting Modernization of Tax
Administration in the New Era in the Context of Smart Tax
Construction

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Abstract

The practice of China's tax modernization construction has accumulated rich experience for the modernization of tax collection and management, while the new era, accelerating the modernization construction with Chinese characteristics, has put forward new requirements of the times for the modernization of tax collection and management. The Opinions on Further Deepening the Reform of Tax Collection and Administration of the Central Office and the State Office pointed out that it is necessary to comprehensively push forward the digital upgrading and intelligent transformation of tax collection and administration, and to holistically and integrally improve the effectiveness of tax governance. The State Administration of Taxation has also repeatedly requested that the construction of smart tax supported by tax big data should be pushed forward to provide more powerful data support for the modernization of tax collection and management. This paper takes smart tax construction as the research background, analyzes the problems of modernization of tax collection and administration in the new period, and on this basis puts forward the suggestions of optimizing system design, strengthening tax governance by numbers, transforming the way of tax management and service, and perfecting the mechanism of talent cultivation, etc., in an attempt to explore the path of development of modernization of tax collection and administration.

Keywords

Smart tax, Tax collection and management, Modernization of tax administration, Big data

1. Background of Smart Tax Construction

The Twentieth National Congress of the CPC pointed out that Chinese-style modernization is a modernization with a huge population, common prosperity for all people, coordination between material and spiritual civilization, harmonious coexistence between human beings and nature, and a path of peaceful development. This is a further crystallization of the long history of socialist modernization, and a guide to action in all fields towards the second hundred years of struggle. Taxation has a fundamental, pillar and guaranteeing role in national governance, and in the construction of Chinese-style modernization, it cannot be detached from the role of taxation, and the modernization of taxation is used to help realize Chinese-style modernization. General Secretary Xi emphasized, "We should accelerate the construction of the digital economy, digital society and digital government, promote the digitalization and optimization of all fields, and shape new competitive advantages." This important assertion provides an important theoretical support and practical guideline for accelerating the construction of smart tax, realizing the convergence and connection of internal and external tax data, and the organic connectivity between online and offline, driving the innovation of the tax data governance system and business changes, and promoting the modernization of taxation to serve the Chinese-style modernization.

In 2021, the Opinions on Further Deepening the Reform of Tax Collection and Administration (hereinafter referred to as "Opinions") of the Central and State Offices of the People's Republic of China put forward the need to comprehensively push forward the digitalization, upgrading and intelligent transformation of tax collection and administration, and to make the task of intelligent tax construction one of the objectives of the tax department in deepening the reform of tax collection and administration during the period of the "14th Five-Year Plan". It is necessary to make full use of modern information technology such as big data, cloud computing, artificial intelligence and mobile internet to drive innovation and business changes in tax enforcement, service and supervision systems, further optimize the organizational system and resource allocation, realize the in-depth integration of the system and the comprehensive upgrading of tax law enforcement, service, supervision and the intelligent application of big data, and promote the sharing and application of information related to taxes and fees, so that taxes can be better brought into play in their fundamental, pillar and safeguard roles, and promote the development of tax administration, pillar and safeguard role of taxation, and promote the modernization of the national governance system and governance capacity.

2. The Significance of Smart Tax Construction

2.1 *Helping to Realize the Importance of Taxation in National Governance*

With the arrival of the era of big data, the external situation and internal conditions faced by tax work have changed, and the General Administration has elevated the application of big data to carry out tax work to a strategic level. The Opinions of the Office of the Central Government and the State Council put forward the digital upgrading and intelligent transformation of tax collection and management,

highlighting the leading role of digital intelligence. It can be foreseen that smart tax will become more important and useful in better playing the fundamental, pillar and safeguarding role of tax in national governance.

2.2 Contributing to the High-quality Promotion of Tax Modernization in the New Era

Tax modernization is an important part of the modernization of the national governance system and governance capacity. The construction of the smart tax system helps to improve the precision and transparency of tax collection and management, strengthen the analysis and application of tax data, promote the innovation and improvement of the tax system, and make the tax system more fair and effective. Smart tax applications can simplify the tax payment process, reduce the tax burden of enterprises, improve their competitiveness and attract more domestic and foreign investments. This has a positive effect on promoting the high-quality development of China's economy.

2.3 Helping to Crack the Bottleneck of Tax Development

China's tax system has made great achievements since the reform and opening up, but it also faces some problems and challenges, such as insufficiently fine tax collection and management and tax leakage problems. The construction of a smart tax system can help supervisory authorities better monitor the tax situation and reduce the risk of tax leakage, thus increasing state revenue and supporting the development of social undertakings.

2.4 Helping to Guarantee the Security of Tax Management

Tax administration needs to be based on big data, based on risk analysis, and committed to letting the data speak, so as to prevent and eliminate risks, put forward specific suggestions for plugging leakages, and realize the continuous improvement of the quality of levy management. The self-checking and continuous improvement mechanism embedded in risk management can expose the established but not easy to detect data governance problems, and will also bring about the prosperous development of big data. It is foreseeable that the combination of smart tax and tax management relying on big data can realize the improvement of tax work from quantitative change to qualitative change, and lead to a fundamental transformation of the concept of tax collection and management and the way of collection and management.

3. Problems in the Modernization of Tax Collection and Administration

Smart tax is the organic integration of modern information technology and tax collection and management, using modern information technology as an upgrading and transformation tool, continuously improving the digital upgrading and intelligent transformation of tax collection and management, and improving taxpayers' tax experience, so that the tax plays a role in effectively regulating the economy and guiding the market, and provides a solid foundation for the realization of high-quality economic development. However, at present, the modernization of tax collection and administration still has some deficiencies in the aspects of institutional setup, data collection, technology drive and talent support, which to a certain extent has constrained the development of

modernization of tax collection and administration.

3.1 Internal Institutions Are Not Adapted to the Development of Tax Collection and Administration Modernization

Modernization of tax administration is an ideal of tax governance that emphasizes change and development, innovation and improvement, and creation of breakthroughs. At present, the internal institutions of tax authorities cannot adapt to the development of smart tax, which is manifested in three specific ways: Firstly, at the organizational level, there exists an organ culture of "responding to changes with no changes", and the adjustment and change of the management mode and service mode lag behind the needs of the development of economic and social patterns. The digital economy is developing vigorously, the traditional business logic has been broken, and new economic forms are emerging one after another, which has caused a greater impact on the established tax order, but the tax management mode and service mode, tax system and collection and management policies have not been synchronized to make corresponding adjustments, which to a large extent affects the effectiveness of tax governance. Secondly, at the institutional level, the starting point of all institutional design and rule-setting is to serve taxpayers, but in the implementation of specific policies and systems at the grass-roots level, many of them are administratively oriented, and the tendency to make breakthroughs and innovations on the basis of the original organizational system is not yet obvious. Third, at the technological level, the trend of "technology adapting to the needs of existing management" is generally manifested, while the phenomenon of "technology leading to breakthroughs in the governance model" is seldom seen. Many existing technologies are optimized under the existing administrative framework, regardless of whether the management mode is scientific and the service mode is reasonable.

3.2 Insufficient Data Thinking to Promote Modernization of Tax Collection and Administration

First, big data thinking still needs to be improved. Tax authorities at all levels, especially the grassroots tax authorities, big data thinking is still obviously insufficient, data mobility is poor, and the ability to apply data still needs to be improved. In the internal work of the tax authorities, all kinds of reports and accounts are still prevalent, and all kinds of data collected and generated in the work are retained in the departments and individuals, lacking unified storage and management, with poor mobility, and the value of the data has not been effectively released. The awareness and ability of tax cadres at all levels to fully utilize big data and informatization means to think about and promote various tasks are still insufficient. Higher-level tax authorities need to continue to optimize their initiatives to coordinate all kinds of tasks through big data, reduce the duplication and multiple issuance of tasks, and reduce the workload of the grassroots as well as the disturbance to taxpayers. Second, the pattern of common governance of taxes and fees still needs to be improved. Although the governments at all levels, the General Administration of Taxation and the provincial tax bureaus have issued various systems to clarify the tax collaboration and tax data sharing obligations of various departments, at present, from the point of view of the existing practice, subject to conditions such as the mechanism of

compartmentalization, the caliber of data specification and the sharing technology platform, the cross-sectoral tax data elements are still faced with many barriers such as the difficulty of sharing, consensus and co-rule, and there is greater room for improvement in the level of data sharing and exchanges between the tax department and other departments. The level of data sharing and exchange between the tax authorities and other departments has much room for improvement.

3.3 Insufficient Technology-driven Support for Modernized Tax Administration Applications

With the merger of tax organizations, system adjustment and business integration, especially after the completion of the transfer of responsibilities for the collection and administration of social security fees and non-tax revenues, the completion of the third phase of the Golden Tax System and the completion of the National Natural Person Tax Administration Information System (ITS), all kinds of tax-related information have increased geometrically. At present, the tax department has mastered the relevant massive information of tens of millions of enterprise taxpayers and hundreds of millions of natural persons, but the corresponding supporting algorithmic models, classification databases and data application construction are still insufficient to support the utilization of a large amount of tax and fee data. First, there is a lack of perfect intelligent algorithmic models externally. Although the General Administration has explored the implementation of a cloud platform, and tax bureaus around the world have also incorporated modeling methods such as neural networks and machine learning into personalized software, the construction of most indicator models is still in the traditional construction of independent indicators. Second, there is a lack of internal support for a categorized database that integrates data, intelligence and monitoring. There is no unified standard and integrated support for data acquisition, source management of various types of data into the system, data format and collection caliber, and the ability to guarantee the authenticity and integrity of data needs to be strengthened, which all add disadvantages to the modernized management of tax collection and administration. Third, the third-party data exchange platform is imperfect. In recent years, the construction of big data platforms at different levels has brought new opportunities, but there are also some deficiencies. Take Yibin City on-line "comprehensive tax big data sharing platform" as an example, the purpose of its construction is to establish and improve the city's third-party tax-related information sharing and exchange mechanism, to break the interdepartmental data "silo", but in the current operation, the "platform" of the "platform" of the "platform" is not perfect. However, in view of the current operation, the data information collection and storage capacity of the "platform", the depth mining of tax data and the level of utilization of tripartite data are still relatively low, and it is not possible to realize the information access, automatic cleaning, intelligent matching, quality analysis and tracking and feedback of the third-party data.

3.4 Insufficient Tax Personnel to Meet the Needs of Modernization of Tax Collection and Administration

The aging of the personnel organization, combined with the actual situation that the cadres will face the age and retirement peak in the next few years as well as a large number of newly recruited young

cadres, the growth in the scale of talents in the tax system cannot keep pace with the development trend of adapting to the needs of modernization of tax collection at the new stage of development. With the development of smart tax, the quality of talents needs to be newly improved. While continuing to improve the quality and ability of existing talents, especially the political quality, we will focus on cultivating strategic talents, leading talents, professional backbones, and post masters who specialize in different directions, safeguard different aspects, and are distributed at different levels, so as to further cultivate high-quality talents in line with the needs of tax reform and development, such as social security and non-taxation, tax inspection, large enterprise management, risk management, tax management, tax management, and tax management, as well as the development of tax system. inspection, large enterprise management, risk management, tax and fee analysis, big data application and other talents. Secondly, there should be new improvements in talent management, insisting on both breaking and establishing the system, and continuously improving the system and mechanism of talent cultivation. Based on the construction of a credible identity system, it will realize the "one-member" collection of tax talent information and the "intelligent" application of result data, so as to provide references for tax bureaus at all levels in selecting and employing talents, and to better promote the full utilization of talents and the best use of talents.

4. Measures to Promote the Modernization of Tax Collection and Administration by Intelligent Taxation

Putting tax administration modernization in the context of smart tax, empowering tax modernization with smart tax, grasping such key elements as digital, and rationally applying cutting-edge technologies such as big data and system-driven to solve the problems, so as to provide impetus for advancing the change of the theory of tax administration and the further development of tax administration modernization.

4.1 Strengthening Tax Reform and Adapting to Development Trends

With the rapid development of the global economy and the increasing popularization of information technology, the tax system must also adapt to the requirements of the new era. The traditional tax system has many shortcomings in adapting to the complex needs of modernization of tax collection and management. For this reason, it is necessary to strengthen the reform of the tax system to make it more modern and adaptable in order to improve tax effectiveness and fairness.

First, the construction of a modernized tax system should be strengthened. Strengthen the tax law and regulation system. Establish a sound system of laws and regulations, clarify tax policies, and safeguard the implementation of the tax law; at the same time, strengthen the publicity and explanation of the tax law to raise taxpayers' awareness of tax payment; optimize the tax structure, and promote the upgrading of the economic structure by adjusting the tax structure to realize the green tax structure mainly based on the consumption tax and the resource tax, etc., and to promote sustainable development; promote the modernization of the tax levy and administration, introduce modern information technology, and build

a digitized tax management system, improve collection and management efficiency and precision, and reduce collection and management costs. Second, strengthening top-level design. Accelerate the revision and improvement of the Law of the People's Republic of China on Tax Collection and Administration to include social insurance premiums and non-tax revenues, clarify the rights and responsibilities of tax departments and other government departments in the collection and administration of taxes and fees, and make it clear that the tax departments have the right to obtain tax data in accordance with the law, and at the same time, stipulate that other government departments such as Customs, social security, health care insurance, banks, land, housing, civil affairs, public security, market supervision, and other government departments, as well as third-party payment platforms for withholding taxes and fees, have the obligation to collaborate in the administration of taxes and fees. platforms have the obligation to collaborate in the governance of taxes and fees, providing a favorable legal environment for efficient linkage of tax and fee data and collaborative governance. Third, the implementation of digital tax administration reform. Using artificial intelligence, big data and other technologies, intelligent classification and management of taxpayers is carried out to achieve accurate tax collection and improve taxpayer satisfaction; a digital tax platform is constructed to create a comprehensive digital tax platform to achieve centralized management, sharing and analysis of tax information, and to improve the efficiency and accuracy of tax collection and management; risk prevention and control is strengthened, and big data analysis is used to strengthen the risk assessment and prevention and control of taxpayers, to timely detection of and response to potential violations of the law. Fourth, establish a top-level design for the common governance of taxes and fees. In order to realize the common governance of taxes and fees, the government needs to carry out the top-level design of the tax and fee system. Formulate a national tax and fee policy framework. The government should establish a national tax and fee policy framework that specifies the overall objectives and principles of tax and fee policies to ensure that all levels of government have a unified guiding direction when formulating tax and fee policies. Establish a multi-level government cooperation mechanism. The government should establish a collaboration mechanism between all levels of government, including the central government, local governments and local governments, to ensure coordination and consistency of tax and fee policies. Establishment of a tax and fee reform agency. The government may consider establishing a specialized tax and fee reform agency responsible for formulating and promoting tax and fee reform programs to ensure the flexibility, timeliness and stability of tax and fee policies.

4.2 Strengthening Tax Administration by Numbers and Realizing Two-wheel Drive

Ruling taxes by numbers is an inevitable trend of modernizing tax collection and management, and also the foothold of smart tax construction. Establishing a sound tax data sharing platform, realizing real-time sharing of tax data among governments at all levels, making full use of big data technology, innovating the application of smart tax, realizing data-based tax collection and management, and forming a digitalization of tax collection and management driven by both technology and system is an

important way to promote the development of modernization of tax collection and management by smart tax.

First, innovate the application of smart tax. Explore the establishment of ten scenarios for the use of the management system, "unmanned" management of individual industrial and commercial households, and the risk monitoring and early warning system for tax and fee services, and build and improve the five-in-one featured handheld service platform of "knowing, checking, questioning, handling, and evaluating" to realize the real-time information receiving and querying of the APP terminal, small programs, and other mobile phones, and to realize the real-time information receiving and querying of the APP terminal and small programs. It has realized real-time information receiving and querying on APP terminal and small program, explored connecting data of internal and external networks, and promoted the application of palm data query management based on "Internet+data management", and constructed a levy management service mode matching and suitable for in-depth application of data by taking the smart tax application as a handheld. Secondly, it is to smooth the data acquisition guarantee and obtain taxpayer data through multiple channels. It establishes an information exchange and sharing mechanism with external units, accesses the Golden Tax III system with the help of big data management, cloud computing and other means, synchronously captures online tax-related information, jointly conducts data analysis, realizes seamless docking of data collection, collection, processing, analysis, sharing, opening and other links, and jointly implements tax source management for taxpayers. Laws, regulations and systems on external exchange and data sharing for external information management of taxes have been established to curb false reporting of information by some taxpayers and truly break the data and information barriers of "information islands". Thirdly, the potential value of tax and fee data should be deeply explored. Various kinds of valuable data collected and generated in tax work are incorporated into the provincial tax big data platform for unified management. Organize all kinds of index models and algorithms, and do a good job of data scanning and task scheduling, so as to avoid duplication of construction, waste of resources, and inconsistency of caliber. The data resources will be turned into diversified decision-making support "products" to provide strong support for macroeconomic regulation and control, meso-industry or regional development, and micro-enterprise business decision-making, etc., so as to fully release the value of tax data as an aid to politics and business. Fourth, relying on tax big data to do a good job of task coordination. At a higher level, we will carry out the first response to tasks, provide perfect data empowerment for the grassroots, explore the application of automation tools, and automatically push tasks and information to all levels and taxpayers, so as to change the traditional practice of pushing all kinds of tasks to the grassroots to prioritize and push them to be handled by taxpayers on their own, and return power to taxpayers so as to practically alleviate the burden of the grassroots, reduce the risk of taxpayers' involvement in taxes, promote the effective implementation of all kinds of preferential policies, and improve the quality of completion of all kinds of tasks. This will effectively reduce the burden on the grassroots, reduce the tax-related risks of taxpayers, promote the effective implementation of various preferential policies,

and improve the quality of various tasks. Fifth, big data accurate identification. The use of big data technology, through graphics, statements and other ways, from a macro and micro point of view, the risk of tax and fee intelligent identification, analysis and early warning, through the data to guide the tax authorities in the initial stage of the risk that is to intervene in the prevention of tax and fee "accurate supervision", timely prevention and resolution of risks.

4.3 Changing the Mode of Tax Collection and Management and Upgrading the Level of Service

Moving from the traditional way of "managing households" to the modern way of "managing affairs" is also a change in the modernization of tax collection and management. Relying on the construction of smart tax, through the establishment of the "one-household" management mechanism, the full implementation of the new electricity bureau, the promotion of the electronic bill system, the optimization of the system design and other initiatives, the construction of a personalized and refined tax collection and management service system will improve the efficiency and effectiveness of tax collection and management, promote tax compliance, enhance taxpayers' satisfaction, achieve stable growth in tax revenue, and make a greater contribution to the country's economic development and social progress. First, "one-household" management improves supervision. By applying systematic thinking and grid-based management, using cloud platforms and big data, we mobilize the resources of all levels and departments to realize the whole-chain closed-loop management of each link and enhance the efficiency of the existing system. Centered on taxpayers and taxpayers, the information scattered in different systems and business modules is pooled and integrated in accordance with the "one-household" approach, and taxpayers with different risks are managed in a hierarchical manner. Low-risk taxpayers are mainly prompted and reminded, medium-risk taxpayers are mainly assessed, and high-risk taxpayers are subject to tax audits. Through the "one-household" supervisory approach, risk prevention and control barriers are effectively built for the construction of smart tax, and a solid foundation is provided for promoting the modernization of tax collection and management. Second, the new electricity bureau is fully implemented. The New Electricity Bureau can provide more convenient online services, enabling taxpayers to access tax information and submit tax returns anytime, anywhere, and reducing the cost of taxpayers' time and energy. In addition, the promotion of the e-ticket system is also one of the key steps to enhance the level of specialized services. The use of the e-bill system can greatly simplify the tax filing process and reduce the workload of taxpayers. Taxpayers can easily view and download relevant invoices and vouchers through the e-invoice system, and no longer need to manually organize and store paper invoices. The e-ticket system also improves data accuracy and traceability, helping to reduce errors and fraud and enhance tax protection. Third, it optimizes system design. Optimization of systems and processes ensures that the needs of taxpayers can be better met. This includes streamlining the tax filing process, improving the user-friendliness of websites and mobile applications, and enhancing online customer service and counseling services. By continuously improving the design of the system, it is possible to increase service efficiency, provide more convenient and high-quality services, and enhance taxpayer satisfaction. Fourthly, the level of tax

protection will be enhanced. Supervision of tax compliance has been strengthened to ensure that taxpayers fulfill their tax obligations in accordance with the law. At the same time, active measures are taken to combat tax evasion and tax evasion and to improve the stability and predictability of tax collection. By enhancing the level of tax protection, not only can the country's fiscal stability be better maintained, but also more stable and sustainable public services can be provided, increasing taxpayers' trust and satisfaction.

4.4 Strengthening the Construction of Talents and Creating an "Iron Army" of Digital Intelligence

In the future, the digital transformation of tax administration has become a general trend, and how tax personnel can quickly adapt to the new ecology of intelligent taxation in order to improve the effectiveness of tax administration is a problem that needs to be solved urgently. In this regard, it is urgent to improve the digitalization level of the existing tax personnel on the basis of the expansion of the digital tax talent team, to create a high-precision digital tax administration "iron army". The first is to carry out comprehensive training on big data theory and practice, strengthen the awareness of big data at all levels, popularize the basic skills of big data, and cultivate and equip composite big data talents for each department. The second is to strengthen collaboration with universities and departments, so that big data talents in the tax department can extensively participate in various theoretical research, project construction, and competitions, and comprehensively improve their comprehensive capabilities. Thirdly, certain inclination will be given to technical civil servants in terms of job grade promotion and treatment, so as to attract high-level big data talents to enter the tax system.

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