

Reform and Innovation of Tax Assessment and Tax Inspection Methods

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Abstract: Under the influence of policies, the traditional methods of tax assessment and tax inspection have problems of low accuracy of tax assessment and incomplete tax inspection. Therefore, the reform and innovation of tax assessment and tax inspection are put forward. Change the original audit mode, optimize the intensity of the dissection problem, so as to complete the reform of audit mode and tax assessment; Re-plan the overall tax assessment process, establish a new tax assessment organization system, integrate the original evaluation system standards for group differentiation and comprehensive analysis, realize the tax assessment and tax inspection mode innovation. The experimental data show that the assessment accuracy of the proposed tax assessment method is 30% higher than that of the traditional tax assessment method on average. The overall tax inspection is about 2 times higher than that of traditional tax inspection.

Keywords: Tax assessment; Tax inspection; Reform; Innovation

1. Introduction

In the reform of tax collection and management model in the new era, as an important part of the tax collection and management system, the importance of "tax inspection" has been fully reflected and widely recognized^[1]. At present, under the new situation of establishing a benign interactive management mechanism integrating tax analysis, tax assessment, tax source monitoring and tax inspection, "tax inspection" should adapt to and participate in the establishment and optimization of this tax collection and management mechanism, so as to give further play to its own functions and functions and promote the reform and innovation of tax assessment and tax inspection in China.

2. Reform of Tax Assessment and Tax Inspection Methods

In accordance with the work requirements of the linkage mechanism of "tax analysis, tax source monitoring, tax assessment and tax inspection", how the inspection bureau can change passivity into initiative and improve the pertinence of case selection, effectiveness of case handling and deterrent of investigation and handling; How to strengthen the cooperation and coordination with the collection and management departments, effectively link up the process and realize the information sharing of law enforcement resources; How to improve the joint evaluation and joint inspection, two-way transfer and feedback system, all are new topics that tax inspection faces. In recent years, the practice of the new tax collection and management model shows that tax analysis, tax assessment, tax source monitoring and tax inspection are complementary and inseparable with tax source management.

The establishment of a new mechanism of benign interaction must be based on the internal connection of the four parties, and the connection of the internal connection naturally falls in the link of "tax inspection"^[2]. In order to ensure the effective function of tax inspection in the interactive mechanism, we should focus on the following aspects.

2.1. Reform of auditing mode

Reform the auditing mode and constantly strengthen the auditing inspection, so as to comprehensively understand and master the basic situation of enterprise production and operation. On the basis of fully relying on the linkage mechanism platform and making use of the abnormal information, risk warning and illegal clues reflected by tax source monitoring and tax assessment to conduct targeted selection of cases, change the simple method of checking accounts and tickets, and extend tentacles into various fields that may be related to the case, in an effort to make a "breakthrough". A comprehensive investigation should be made to understand the basic information, including the production, supply and marketing process and human and property of enterprises. These factors of production are the object of enterprise accounting and the basis for proper tax declaration. At the same time, relevant businesses of upstream and downstream enterprises in the industrial chain should be checked to analyze and evaluate the rationality of their economic business and the authenticity of tax declaration, so as to ensure that the inspection is targeted^[3]. For example, in terms of the basic production situation of the enterprise, it is necessary to know whether the main types, quantity, unit price, quota consumption and input/output ratio of raw materials and finished products are reasonable or not, and the

process flow of production mode. In terms of the internal control of accounting, the authenticity, relevance and rationality of the enterprise's production and operation activities and the degree of internal control of accounting shall be comprehensively evaluated and analyzed to understand whether the enterprise's accounting comprehensively, timely and truthfully reflects the production and operation activities, so as to determine the authenticity of the information of accounting books and certificates. In terms of the asset size, structure and changes of the enterprise, it is necessary to know about the mechanical equipment and transport equipment that are directly related to the production of finished products and the realization of sales revenue^[4].

2.2. Optimize the dissection mode

Reform dissection methods and carry out dissecting inspections to comprehensively understand enterprises' tax payment, tax assessment and tax inspection. Faced with the complicated tax economic environment, tax inspection should gradually develop into a diversified and three-dimensional audit-type inspection from the simple inspection on the desk. The content of tax inspection should be expanded and deepened accordingly. It is not only necessary to have a comprehensive understanding of the tax paid by the enterprise under investigation, but also to play a role of mutual reference, supervision and guidance with the tax assessment and inspection of the tax source management department. Therefore, tax inspection basically achieves deep inspection, which plays a positive role in cracking down on and deterring the behavior of tax-related illegal elements, safeguarding the dignity of tax law, and creating a fair and just tax environment. Meanwhile, it also has important reference value for tax assessment, tax analysis and tax source monitoring^[5].

2.3. Reform the inspection methods

Reform the methods of inspection suggestions, constantly improve the suggestions, and promote the transformation of inspection results. In order to standardize the tax order of key industries, improve the control level of tax sources, and enhance the compliance degree of tax laws of taxpayers, the inspection department can respectively sort out the comprehensive inspection Suggestions of different industries and types, and summarize the collection and management omissions found in the process of tax inspection and investigation of major cases in a certain period.

3. Innovation of Tax Assessment and Tax inspection

3.1. Design the overall tax assessment process

Innovate the circulation of tax assessment. The process of tax payment assessment is to realize information flow, workflow circulation, monitoring and management in four links including tax analysis, tax payment assessment, tax inspection and comprehensive management through workflow technology according to the requirements of integrated linkage mechanism. The specific flow chart is shown in figure 1.

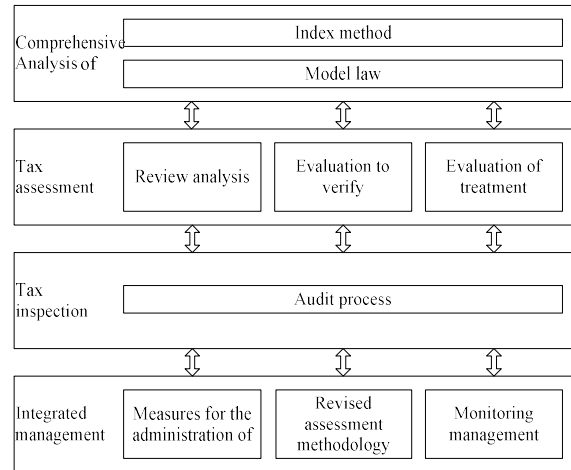


Figure 1. Complete tax assessment flow chart

3.2. Build a new system of tax assessment organization

The organizational system for tax assessment includes the leading group, working group and project group, as shown in figure 2.

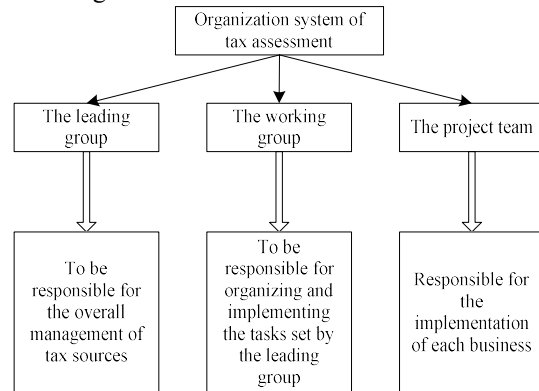


Figure 2. Organization chart of tax assessment

3.2.1. Set up a leadership team

The leading group adopts a functional organizational structure, with the director as the group leader, the leaders of other bureaus as the deputy group leader, and the leaders of related departments as members^[6]. The quarterly systematic review is the main form of the leading group's work in promoting tax source management. For particularly important matters, the lead team will be dep-

loyed at the systematic review meeting. The office of the leading group is located in the office of the municipal bureau. According to the requirements of the integrated linkage mechanism of tax analysis, tax assessment, tax inspection and comprehensive management, it is responsible for the daily work of the leading group of tax source management and the organization and operation of the evaluation meeting.

3.2.2. Organize special working groups

The working group adopts a matrix organizational structure, with a deputy director as the team leader, the person in charge of the relevant department as the deputy team leader, and the director of the relevant department as the member^[7]. To guide and supervise the work of each project team from the aspects of problem analysis, empirical investigation, project approval, tax assessment and tax inspection, department coordination, to the formulation of business management methods, and to evaluate the effect of each project. The working group shall, on the basis of doing a good job in the management of municipal macro tax sources, actively guide the management of grassroots tax sources. The working group shall hold the regular meeting of the project on a monthly basis and the grassroots work dispatch meeting on a quarterly basis to promote the tax source management. The working group's office is located in the municipal administration of levy management.

3.2.3. Set up the project team

The project organization structure is adopted, and the project team is established timely by the working group according to the progress of tax analysis, and the project lead department and project team members are determined^[8]. The project team will meet with each other from time to time, communicate and cooperate with each other to complete the related work of the project. The lead unit of the project team is determined according to the main business involved in the project and the functions of the business office of the municipal bureau. The work of the project team shall be undertaken by the head of the leading department.

3.3. Plan the method of tax assessment and analysis

3.3.1. Comprehensive analysis

First, the taxation department focuses on the overall analysis of tax revenue. The analysis of tax revenue should pay attention to the changes of the total tax revenue and incremental tax revenue and structural changes. Through comprehensive application of various methods, tax categories, classification levels, industries, scale, ownership nature and regions are analyzed and concluded from multiple perspectives such as total amount, growth, increment and tax contribution rate^[9].

Second, the information center is responsible for establishing information analysis templates, providing technical support for data analysis, ensuring data quality, organizing deep data mining, issuing data analysis report on a monthly basis, and conducting regular special data analysis. Sort out and process relevant data according to business department requirements.

Third, the business departments include turnover tax administration office, income tax administration office, international tax administration office, collection administration office, import and export tax administration office, etc. We will focus on the analysis of tax categories and specific industries. We will investigate problems, analyze causes, and put forward Suggestions for "empirical analysis" and relevant measures. The audit bureau or the relevant grassroots bureau shall organize the empirical investigation and analysis according to the "empirical analysis" proposal put forward by the business department. Each department should finish the analysis report in time according to the work requirement.

In order to reduce the fluctuation of economic data in the evaluation process, a standard curve should be set to approach the economic data in the actual evaluation infinitely, so as to ensure the stability of the evaluation of discrete data under the trend of time growth. In this paper, the least square method is used to set a function to specify the trend of the evaluation data. Assuming that t is the data point determined by the evaluation process, the evaluation data is expressed as:

$$S = t \cdot (1 - \lambda) \frac{(1 - \lambda^x)}{id \times k_0} \tag{1}$$

Where, S represents the comprehensive assessment data of the tax assessment system, λ represents the parameters set by the least square method, x represents the infinite power coefficient of the minimum value that is infinitely close, i represents the original value of the assessment index, d represents the node of the dependent variable condition under the influence of assessment factors, and k_0 represents the assessment data trend criterion. The pretreatment result of the evaluation data can be expressed as:

$$W = \alpha \frac{\sum S(l_1 - l_0) \cdot g}{\rho} \tag{2}$$

In the above formula, W represents the pre-processing result of evaluation data, α represents the authority of evaluation data, l_1 represents the maximum value of evaluation target data, l_0 represents the minimum value of evaluation original data, g represents the real value of data node under evaluation rule, and ρ represents the benchmark coefficient of actual evaluation prediction.

3.3.2. Analysis of tax assessment

Each business department is responsible for proposing the special evaluation opinions of tax categories and sectors based on the static analysis and empirical investigation analysis. After the research is approved, the tax administration department will take the lead and jointly organize the implementation. According to the static analysis and empirical investigation analysis, various business departments have established assessment templates for problems and industry characteristics, put forward Suggestions for carrying out systematic tax assessment, and reported to the evaluation committee of the work of the system or the office of the director for research and approval, and then the collection and management department will lead and jointly organize the implementation^[11]. Based on the work deployment of the municipal bureau and the analysis of the unit, the grassroots bureaus shall carefully organize tax assessment for key enterprises or industries, and carry out the work to the leaders, departments, positions and personnel of the sub-administration bureau to ensure the quality of assessment.

3.3.3 Analysis of tax inspection

The inspection department carries out tax inspection according to the important clues found in the analysis and evaluation links as well as the source of the selected cases. At the same time, the management problems found in the audit work were proposed. The municipal inspection

bureau selects cases and organizes an inspection according to the problems or relevant situations transferred in the analysis and assessment process^[12].

3.3.4. Analysis of integrated management

By analyzing, evaluating and auditing the information and situation provided by each link, each business department should timely study the specific measures and relevant work system to strengthen the tax source monitoring and management, and truly form a long-term working mechanism that is both interconnected and complementary^[13].

3.4. Formulating tax assessment management and monitoring mode

The municipal bureau set up a column, through the column to carry out various work deployment, promote open government affairs, accept grassroots supervision, improve work efficiency. The municipal bureau shall conduct special work supervision on the key work contents determined by the system work evaluation meeting or the bureau chief's office to ensure the quality and effectiveness of work^[14].

3.5. Realization of tax assessment

Innovate the specific process of tax assessment, as shown in figure 3.

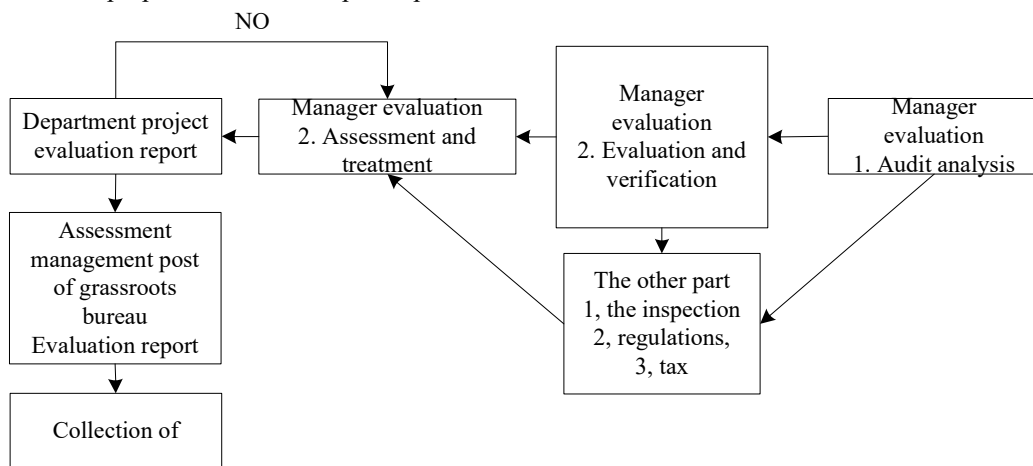


Figure 3. Detailed flow chart of tax assessment

3.5.1. Macro assessment

For those who enter into the evaluation process, the macroscopic evaluation project shall be first established according to the classification standard requirements of the evaluation. The project shall be comprehensively managed and monitored, including the purpose of the evaluation, the description of the evaluation, the requirements of the evaluation, the comprehensive analysis of

the evaluation project and the evaluation report of the evaluation project.

3.5.2. Case assessment

Case assessment is the specific treatment of macro-assessment projects. Taxpayers identified in the macro-assessment projects can complete the tax assessment tasks through the review and analysis, evaluation and verification by the administrator, and evaluation and processing.

3.6. Innovating the way of tax inspection

For the part of comprehensive analysis and tax assessment, tax fraud and false issuance of special VAT invoices shall be immediately transferred to the inspection department for processing^[15]. In the evaluation link, taxpayers whose case meets the evaluation of a certain indicator are automatically transferred from the evaluation link to the inspection link through the system or manual transmission. The inspection department conducts processing according to the inspection requirements through the production system. After processing, the system automatically writes the processing results into the tax assessment system.

4. Experimental Results and Analysis

To verify the practicability of tax assessment and tax inspection, a comparative experiment is designed as follows. In the experimental group and the control group, the computers are respectively equipped with different tax assessment and tax inspection methods. Due to the different operation modes of tax assessment and tax inspection, other experimental conditions should be kept the same, data results should be compared only, and specific changes of relevant experimental data should be recorded.

4.1. Setting of experimental parameters

To ensure the authenticity of the experimental results, relevant experimental parameters can be set according to the following table.

Table 1. Table of experimental parameters

Parameter name	The traditional way	This way
Indicators of tax burden	78	78
Input tax variance ratio	0.58	0.58
Tax liability rate	0.89	0.89
Sales turnover and tax rate are synchronized	84.26/5.3	84.26/5.3
Qualitative indicators	0.95	0.97
Qualitative indicators	0.95	0.97

4.2. Evaluation accuracy comparison test

In the case that the evaluation data are the same, the modified method and the traditional method are respectively used to compare. Guarantee the same experimental data and the same experimental parameters, and it takes 60min. The efficiency of the experimental group and the control group were recorded respectively during this period. The specific experimental comparison results are shown in figure 4.

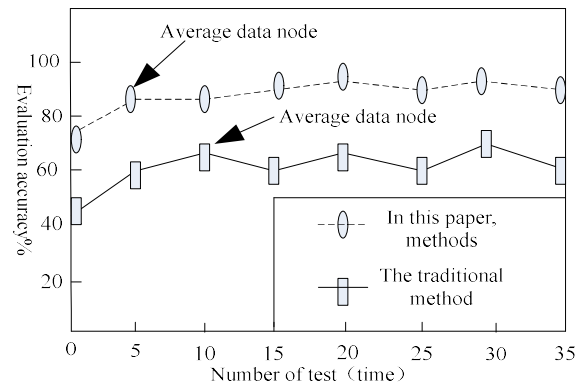


Figure 4. Comparison diagram of experimental results for evaluating accuracy

As can be seen from the analysis figure 4, the average assessment accuracy of the tax assessment method reformed in this paper is around 90%, while the maximum value of traditional tax assessment method is 78% when the test number is 30. The method in this paper is the minimum value when the experiment number is 1, and its evaluation accuracy is 75%. Although the maximum value of the traditional method is 2% higher than the minimum value of the method in this paper, the accuracy of the evaluation of the method in this paper is obviously higher than that of the traditional method in terms of the trend of the image. In addition, the trend of evaluation accuracy is relatively stable, and the difference between fluctuation and fluctuation is relatively small. Therefore, this method is highly effective.

4.3. Tax inspection system integrity comparison test

Compare the number of audit tasks that two tax inspection systems can cover at the same time. In order to ensure the accuracy of data processing, in this test, the information processing method of audit task number is the same, and the audit task is the same. Ksn-789 data processing platform is adopted for recording, and the data results recorded are shown in figure 5.

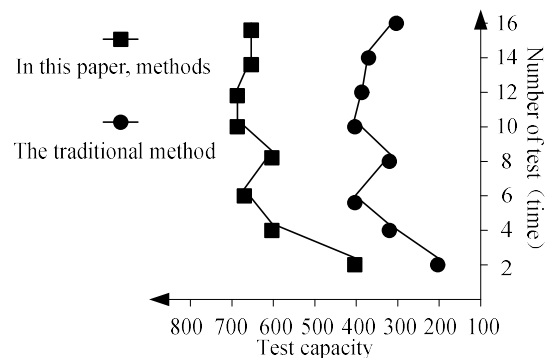


Figure 5. Tax inspection system integrity comparison results

According to the test results, the average number of audit tasks covered by the tax inspection system designed in this paper is about 650, while the number of audit tasks covered by the traditional tax inspection system is about 340. With the increase of test times, the stable interval of the tax inspection system in this paper is about 600 pieces, and that of the traditional tax inspection system is about 330 pieces. Therefore, the tax inspection system in this paper is more complete and more usable.

5. Conclusions

Tax inspection is the last pass for the administration of tax collection. It shoulders the responsibility of maintaining the rigidity of tax law and the order of tax collection, ensuring both parties to fulfill their obligations according to law, preventing the loss of national tax revenue, building a fair, just and honest tax environment, and guiding the improvement of tax compliance of the whole society. Therefore, it is necessary to change and innovate tax assessment and tax inspection methods with the continuous development of society.

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