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Article

# Based on the investigations of two enterprises, a study on the progress and problems of unified social insurance collection in Baotou City, China was conducted

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**Abstract:** To improve the administrative management system of social security and enhance the administrative management and service capabilities of social security, the "unified social insurance collection" policy emerged. To understand the implementation effect of "unified social insurance collection" and the problems faced during the policy promotion, this paper takes two enterprises as the research objects and analyzes the implementation situation of "unified social insurance collection" in Baotou City through field interviews, literature research and case studies. The results show that the unified social insurance model effectively solves the problems existing in the traditional "five insurances collected separately", such as low participation rate, significant disparity in insurance types, and selective participation. However, there are still many problems in the current process of unified social insurance collection in Baotou City, such as low efficiency of information transmission among departments, poor data sharing and interaction, blurred departmental rights and responsibilities, and weak willingness for departmental communication. Therefore, based on the theory of collaborative governance and the SFIC model, we propose specific optimization paths to improve the collection management level of social insurance fees.

**Keywords:** Social Insurance; Unified Collection Model; Collaborative Governance; SFIC Model

## 1. Introduction

Social insurance, as a public product, has both the characteristics of social security and the commonalities of a product [1-2]. Implementing the collection of social insurance is an important measure in the reform of social security system, which is conducive to the standardization and intensification of social security management, improving the level of social security, and achieving fairness and sustainability of social security [3-5]. Baotou City, as an important city in Inner Mongolia Autonomous Region, the collection of social insurance in this city has significant and far-reaching significance for ensuring the basic livelihood of residents and maintaining social stability [6-7]. However, in the practical process, the collection of social insurance in Baotou still has many problems, which have affected the healthy development of the social security system.

Firstly, the base of payment is unreasonable. The base of payment for social insurance is an important factor determining the amount of payment by individuals and enterprises. However, in the actual collection process, some enterprises and individuals have maliciously underreported or low-reported income, resulting in an unreasonable base of payment, which affects the accumulation and utilization efficiency of social insurance funds [8-10]. Secondly, the enforcement of collection is ineffective. The collection of social insurance fees is uniformly carried out by the tax department, while the social security institution is responsible for the registration of participation and the recording of rights and interests.

However, in the actual collection process, the enforcement in some places is insufficient, leading to some enterprises and individuals evading the payment of social insurance fees, seriously damaging the fairness and effectiveness of the social security system [11-13]. Thirdly, the collection process is cumbersome. Currently, the collection process of social insurance fees is cumbersome, requiring enterprises and individuals to provide a large amount of materials and information, and going through numerous procedures, which consumes time and energy [14-15]. This not only increases the cost of collection, but also reduces the efficiency of collection, affecting the implementation and execution of the social security system [16-17]. Therefore, exploring the establishment of a scientific unified social insurance collection mechanism to ensure the smooth implementation of unified social insurance collection work is of great practical significance for Baotou to deepen the reform of social security system and improve the social security system.

However, with the passage of time and the continuous changes of policies, the unified collection of social insurance in Baotou may face a series of progress and problems. Therefore, this study aims to investigate the progress of the unified collection of social insurance in Baotou and analyze the existing problems. Specifically, by conducting surveys of two companies and collecting and analyzing relevant data, the progress of unified social insurance in Baotou in recent years is revealed, including the evolution of policies and the changes of collection institutions. Based on the research results, practical solutions and improvement measures are proposed to address the problems and challenges existing in the unified collection of social insurance in Baotou, in order to promote the improvement and optimization of social insurance collection work.

## 2. Core Concepts and Theoretical Foundations

### *2.1. Core Concepts*

#### 2.1.1. Social Security

Social security is a system arrangement where the government or the state plays the leading role. According to legal provisions, it uses the mechanism of redistributing national income to provide necessary economic support to citizens when they temporarily or permanently lose their ability to work, or when they fall into financial difficulties due to various risks. This ensures that their basic survival needs are met. [18] The connotation of social security is not fixed but evolves dynamically with historical development and social changes. The formation of modern social security systems is closely linked to the industrialization process. Given the significant differences in population structure, economic foundation, and political system among countries, the specific composition of social security systems varies in different countries and at different stages of development. However, their common goal is to meet the diverse living needs of society members by establishing multi-level protection programs. The social security system includes components such as social insurance, social assistance, public welfare, and preferential resettlement. Among them, social insurance is the central link of this system.

#### 2.1.2. Social Insurance and Its Collection Model

Social insurance is the cornerstone of modern social security system and the main source of funds for the social security system. Social insurance is a product of industrial society, regulated by national legislation, and established for workers as a compulsory social security system. It includes projects such as old-age insurance, medical insurance, work-related injury insurance, unemployment insurance, and maternity insurance, and is the main component of the social security system in various countries. With the advancement of the integration of maternity insurance and basic medical insurance, some viewpoints suggest that China's social insurance presents a "four-insurance" pattern, but its essence remains the five major types of insurance.

The collection model of social insurance fees in China can be divided into three categories based on the different collection entities:

(1) Collection by social insurance agencies

Under this model, the registration, assessment, and collection of social insurance fees are all handled by social insurance agencies. From the implementation of the social insurance system until the 1990s, most regions in China basically adopted this model. The advantages of this model are: it can fully leverage the rich working experience and knowledge reserves of the social insurance department, facilitating detailed management of each link; at the same time, the social insurance department has a systematic advantage in data management and query, and can provide more comprehensive and high-quality services, fully safeguarding the rights and interests of insured individuals. The disadvantages are: because social insurance agencies are not the legally designated administrative law enforcement entities, the rigidity of departmental law enforcement is insufficient, and the intensity and strength of collection are lacking, resulting in serious evasion of social insurance fees by enterprises and low collection efficiency.

(2) Social Security (Medical Insurance) Verification and Tax Collection

Under this model, the registration and verification procedures for the social insurance of employers still take place at the social security agency, while the collection process is transferred to the tax department. This reflects the "separate revenue and expenditure" principle. This model is mainly designed to optimize public management efficiency, enhance the security requirements of social insurance funds, and facilitate a smooth transition to a fully responsible tax collection model. The "Social Security (Medical Insurance) Verification and Tax Collection on Behalf of the State" model has the following advantages: it retains some responsibilities of the social insurance agency while leveraging the characteristics of the tax authorities' collection work, which is beneficial for the management and operation of social insurance funds. However, this model also has several drawbacks: there is a high difficulty in departmental collaboration and communication, increased management costs, and more restrictions imposed by the tax authorities, which negatively affect work enthusiasm.

(3) Full responsibility of tax authorities for collection

Under this model, all the processes related to the determination, collection, and deposit management of the social insurance of the employer are transferred to the tax authorities. The employer no longer needs to go to the social insurance agency to determine the contribution base and the amount to be paid. The advantages of this model are that the full responsibility of tax authorities for collection helps to gradually establish a unified, efficient social insurance fee collection and management system, a convenient service system, and a powerful information system. The disadvantages are that as the collection power and scope of the tax authorities gradually expand, it also means that the responsibilities of the tax authorities increase and the risks increase. To better undertake this major responsibility, it is necessary to gradually improve the system framework, information equipment, and talent training system.

## *2.2. Theoretical Foundation*

### 2.2.1. Theory of Information Asymmetry

The theory of information asymmetry refers to the situation where individuals in social and economic activities possess different amounts of information. Some members have information that others do not have, which leads to information asymmetry. When the tax department uniformly collects social insurance fees, there are differences between the personnel in the tax department's department responsible for social security and those in the front-line window positions responsible for social insurance fees, as well as between the window business acceptance personnel of the social security and medical insurance departments and the insured employers and individual insured persons. There are also differences in information communication between the tax department, the social security department, and the medical insurance department and the insured employers and individual insured persons. This results in information being out of sync, which affects the collection efficiency and increases management costs.

Applying the theory of information asymmetry to the collection process of social insurance fees can reduce problems arising from information asymmetry, thereby significantly improving the collection efficiency. Starting from the theory of information asymmetry, we study the current situation, existing problems, and causes of the unified collection of social insurance fees by the tax department, and specifically study solutions to these problems. This is conducive to optimizing the collection process of social insurance fees, improving the efficiency of the tax department's unified collection of social insurance fees, and thereby promoting the healthy development of the social insurance fee collection system.

### 2.2.2. Collaborative Governance Theory

The collaborative governance theory is an emerging discipline that has gradually formed and developed based on numerous scientific researches since the 1970s. It is generated by the intersection of the collaborative theory in natural sciences and the governance theory in social sciences. The collaborative governance theory refers to the situation where resources and risks are scientifically allocated to each subsystem within the same organizational framework system. The subsystems interact, cooperate with each other, and influence each other, forming an orderly and regular structure that collectively constitutes a whole. This not only enables each department to fully exert its own characteristics and advantages in completing the overall task, but also improves the efficiency of completing the task. The entire collection process of social insurance fees involves multiple government departments. Only when each department cooperates with each other and trusts each other can the collection of social insurance fees be carried out smoothly. When this theory is applied to the collection management of social insurance fees, it can fully utilize the advantages of each department, further strengthen communication and collaboration among departments, form synergy, and ensure that the collection of social insurance fees operates in a favorable environment.

The core characteristics of the collaborative governance theory are shown in Figure 1. In governance practice, the government is confronted with multiple challenges such as legitimacy constraints, complexity of policy processes, and institutional diversity. Its role has shifted from an all-powerful controller to one of the system participants. At the same time, various social organizations seek autonomous governance space, strive to break free from the constraints of traditional hierarchical systems, and emphasize self-management and responsibility assumption. This characteristic of autonomy not only embodies the essential attribute of self-organization, but also provides an organizational foundation for the realization of system functions. It is worth noting that, although self-organized coordination is becoming increasingly important, the role of the government in the allocation of power resources and institutional supply remains indispensable. Finally, rule construction is the central link of collaborative governance. Collaborative governance is essentially a collective action process, and its effectiveness largely depends on the formulation of common behavioral norms recognized by all parties. These rule systems not only provide institutional guarantees for governance performance but also influence the balance of the governance structure. During the rule formation process, although the dominant position of the government may be relatively weakened, its role as the ultimate decision-maker remains crucial. The competition and cooperative relationships among various organizational entities constitute the dynamic game field for rule formulation.

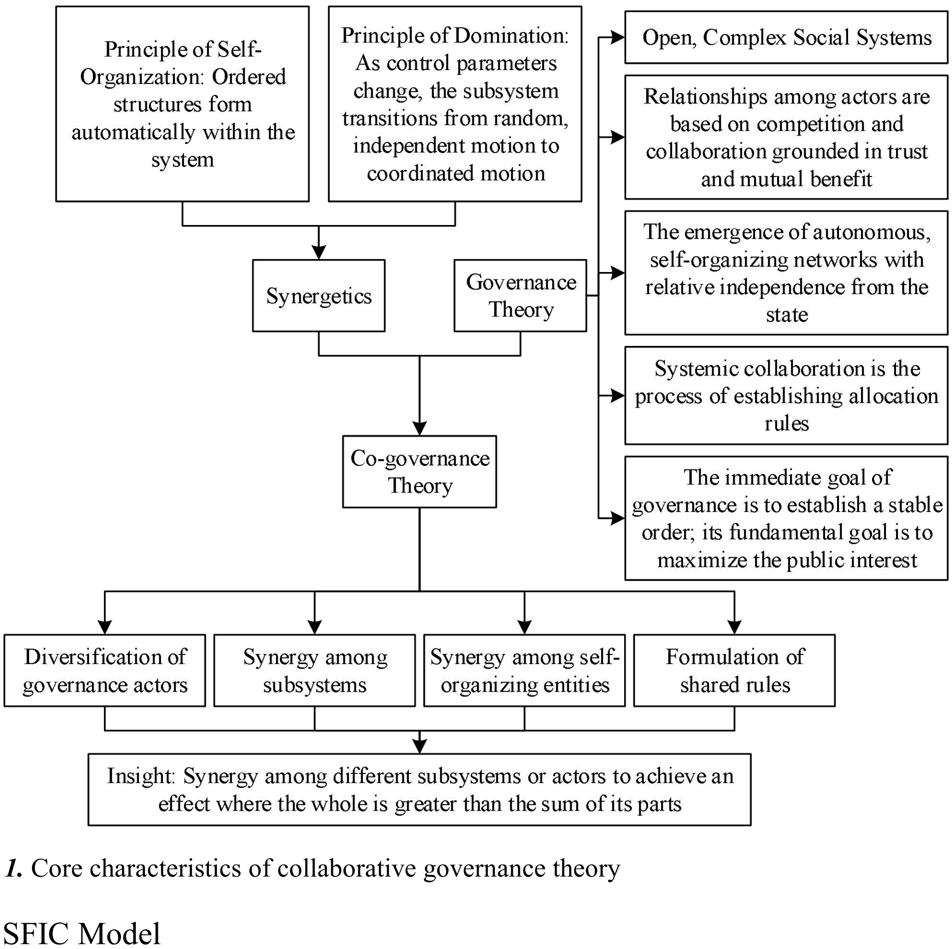


***Figure 1.*** Core characteristics of collaborative governance theory

### 2.2.3. SFIC Model

The collaborative collection and management of social insurance fees is a complex and diverse issue. It can be analyzed and studied by leveraging the relatively mature collaborative governance theory models. Currently, the collaborative governance theories mainly include the Bryson model, the six-dimensional collaborative model, the public-private collaboration operation model, and the SFIC model, etc. Among them, the SFIC model is the most widely used. The analysis framework of the SFIC model is shown in Figure 2.

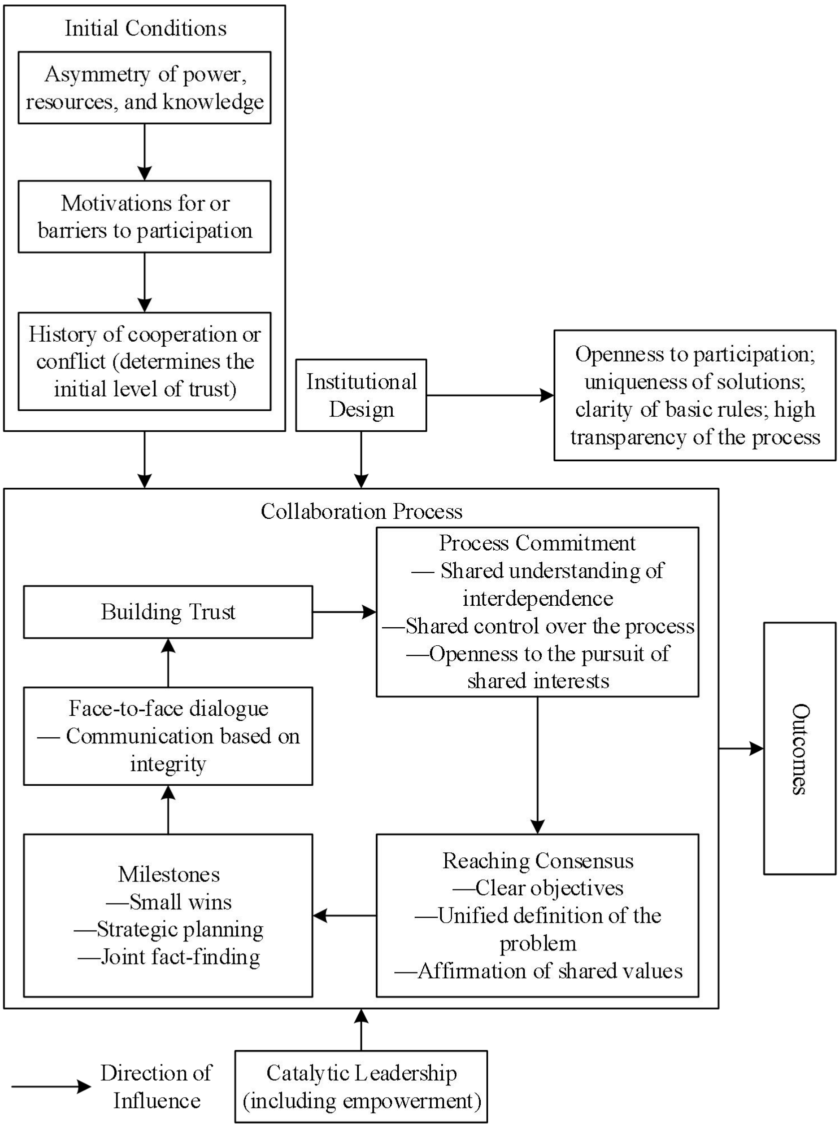


***Figure 2.*** SFIC model

This study selects the SFIC model and conducts a deep analysis on the topic of the collaborative collection and management of social insurance fees. The basic condition (S) is the foundation for the implementation of collaborative governance. For the collaborative collection and management of social insurance fees, it is crucial to understand the interests and resource conditions of each participating entity. Only by clarifying the initial allocation of the tax department, social security agencies, and other parties can a better plan be made for the subsequent collaborative path. The catalytic leadership (F) is an important driving force for the collaborative process. Leadership plays a crucial role in setting and maintaining behavioral norms, building a trust system, promoting dialogue and communication, and exploring common interests. In the collaborative collection and management of social insurance fees, a strong leadership entity is needed to break down departmental barriers and coordinate the actions of all parties. The institutional design (I) is the core component of the collaborative collection and management of social insurance fees and is the key to ensuring the sustainability of collaborative governance. In the collaborative collection and management of social insurance fees, clear rules and mechanisms can regulate the behavior of each department. The above three factors jointly act on the collaborative process (C). For the collaborative collection and management of social insurance fees, effective communication and information sharing are important links to achieve collaboration, and joint action is the direct means to achieve the collection goals. Through supervision and evaluation, the collaborative strategies can be adjusted in a timely manner to ensure the quality and efficiency of the collection work.

## 3. Research Design

### *3.1. Sample Selection*

This study selected two enterprises in Baotou City as the survey subjects. Before the implementation of the unified social security collection policy, all state-owned enterprises and public institutions had to pay all five types of social security, and there was no issue of selective participation. The implementation of this policy had no impact on state-owned enterprises. The implementation of this policy had a greater impact on private enterprises, so private enterprises were chosen as a more representative sample. The reason for selecting these two enterprises was that Enterprise A was larger in scale, while Enterprise B was smaller. This comparison could better reflect the implementation of the policy in different enterprises. This is because the scale of the enterprise to some extent affects the implementation of the policy. To obtain more comprehensive research data, we selected companies of different scales and with representative characteristics, covering a wide range of industries. We chose companies with different employee groups, such as different occupations, years of service, salary levels, etc., to obtain data from different perspectives and experiences.

### *3.2. Data Collection Methods*

This study utilized a database to access a wide range of references, searching for the keywords "social insurance" and "unified social insurance", screening and introducing the journals and papers that introduced the series of policies for unified social insurance. It also completed the preliminary compilation of background information, organization and materials collection, and evaluated the availability of the research data. Companies A and B were selected because they largely represent the general private enterprise environment in Baotou City. By comparing large listed companies with small listed companies, it can better illustrate the views of various companies in Baotou City on the unified collection policy of social insurance.

The data collection for this study was accomplished through the following steps:

(1) Interview outline: Design an outline for company interviews, including managers, human resources directors, employees, etc. The outline should contain topics and questions related to the research questions to obtain their viewpoints, experiences and opinions.

(2) Document analysis: Through an internship at the local labor security department, obtain social security payment records, policy documents, company systems and other relevant documents from the two companies and conduct analysis. Record and organize the important information in these documents.

(3) Interviews: Invite HR directors to enter Company A and arrange face-to-face interviews with relevant personnel. Visit Company B proactively to understand the situation and conduct face-to-face interviews.

(4) Data recording and organization: Record data during interviews using notes, and compare the data from the national statistics bureau database and the local labor security department database with the data from the interviews to ensure the authenticity of the interview data.

### *3.3. Data Analysis Methods*

For the data collected through the case study method, the qualitative data analysis method was adopted. Firstly, this study conducted a word-by-word content analysis of the interview transcripts to determine the key themes and insights. Then, this study classified and organized the relevant topics through thematic analysis to capture the core issues, challenges, and solutions of social security collection and management. Horizontal and vertical comparative analyses were also conducted based on the patterns and regularities in the case data to identify commonalities and differences among different enterprises.

For the data collected through on-site interviews, this study conducted qualitative data analysis. Qualitative data analysis involved content analysis of the interviews to identify important viewpoints, perspectives, and experiences. This study employed qualitative data analysis methods such as thematic analysis and content analysis to extract and organize the key themes and patterns in the interview data.

This study adopted a series of measures to ensure the reliability and validity of the data. Firstly, the data was cross-validated by comparing the results obtained from different data sources and data collection methods to confirm consistency and credibility. For example, after obtaining the participation data of two companies, the actual participation data of the two companies was entered into the internal database of the Ministry of Labor and Social Security. Next, the data was carefully checked and verified to ensure accuracy and consistency.

## 4. Results and Analysis

### *4.1. The issue of "separate collection of five types of insurance"*

The mode before the unified collection of the five types of social insurance in Baotou City is shown in Figure 3. Among them, the old-age insurance and work-related injury insurance are under the jurisdiction of the Social Security Bureau, the medical insurance and maternity insurance are under the jurisdiction of the Medical Security Bureau, and the unemployment insurance is under the jurisdiction of the Employment Service Bureau. The mode where the five major insurance types are separately managed, with funds and collection handled by different departments has led to many problems.

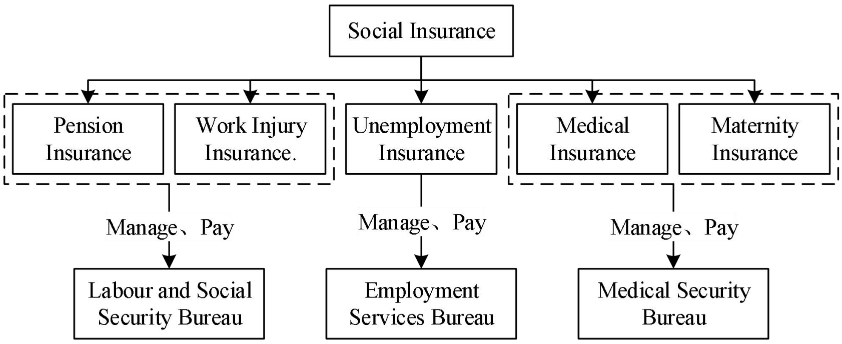


***Figure 3.*** Social Insurance Agency

(1) The gap in insurance participation rates among the five major types is significant.

Among the five major types of social insurance, the participation rates are often related to "income". Pension insurance has a relatively stable future income and a considerable monthly income, resulting in a higher participation rate. In contrast, insurance policies such as maternity insurance and unemployment insurance have relatively lower risks. Due to the uncertainty of future returns and the relative uncertainty of return levels, as well as the lower enthusiasm of the participating units and individuals, they often have selective participation [19].

Table 1 shows the current situation before the unified collection of social insurance in Baotou City in 2009. By the end of 2008, the number of participants in basic old-age insurance for employees in Baotou City was 507,000, the number of participants in basic medical insurance was 677,000, the number of participants in maternity insurance was 342,000, the number of participants in unemployment insurance was 414,000, and the number of participants in work-related injury insurance was 341,000.

***Table 1.*** Population coverage and participation in the five types of social insurance in Baotou

| **Insurance type** | **Number of people who should be covered by social insurance/ million** | **Actual number of social insurance participants/ million** | **Participation rate /%** |
|---|---|---|---|
| Employee pension insurance | 119.2 | 50.7 | 42.5 |
| Employee medical insurance | 127.1 | 67.7 | 53.2 |
| Unemployment insurance | 119.2 | 41.4 | 34.7 |
| Worker's injury insurance | 119.2 | 34.1 | 28.6 |
| Maternity insurance | 127.1 | 34.2 | 26.9 |

Source: Statistical Bureau of Baotou City

(2) Problems in Information System Construction, Data Exchange and Sharing

The operating systems for various social insurance agents handling five major types of insurance are not well-developed. The structure of the information system platform is not unified, being relatively independent and having inconsistent levels. The information connection is inaccurate and communication is not timely, making it impossible to share information. This has led to frequent errors in social security work. For instance, funeral expenses and accidental pensions are paid simultaneously to the families of accidents. Such problems are often not discovered until much later, making it difficult to recover funds that should not have been paid and resulting in waste of social security funds [20].

(3) Selective Payment Issues

Public institutions and state-owned enterprises often choose to pay all five types of insurance premiums simultaneously, while some private enterprises often choose selective payment, often for the purpose of reducing company expenses and increasing short-term profits, which harms the protection rights of employees. This has brought many potential problems. For example, some enterprises often "ignore" maternity insurance for women. Some migrant workers, after entering the city, have weak awareness of their own rights and interests. Enterprises, in order to reduce expenses, often refuse to insure them.

(4) Dispersed Social Insurance Management System and Complicated Enrollment Procedures

Various insurances establish their own insurance information databases, resulting in a lack of information connection between different departments, which easily leads to duplicate and missing information of insured personnel, low management efficiency, and inability to promptly reflect the participation status of employees. Due to the numerous problems in the decentralized collection of social security, all provinces across the country have been exploring the possibility of unified collection.

## *4.2. Policy Effects of Unified Collection of Social Insurance*

The unified collection of social insurance refers to the fact that the five major insurance types - old-age insurance, urban employee basic medical insurance, unemployment insurance, work-related injury insurance, and maternity insurance - can be handled by the employing unit at one window. The five types of insurance to be paid can be collected in one bill. The unified collection model of social insurance has changed the previous situation where social insurance was managed separately, allowing the scattered social insurance management institutions to start integration, achieving unified registration, unified verification, unified collection, unified review, and unified punishment for the five types of insurance. The implementation of the unified collection model of the five types of social insurance can effectively prevent the phenomenon of participating units selectively participating and infringing upon the rights and interests of employees.

(1) Simplified the process for employing units to participate in social insurance

After the Baotou Approval Center was established in 2009, the five types of insurance were uniformly transferred to the approval center. Employing units no longer needed to go to several places to participate in insurance; they only needed to submit one set of proof documents to handle the matter. The unified collection model of social insurance changed the previous practice of separating the social insurance process. It unified the five types of insurance with the social insurance department or the tax department for collection, adopting a processing model of "one window, one bill, one-time collection, one platform". It simplified the procedures for insured personnel to apply for social insurance, greatly facilitating the work of employing units and insured personnel, and improving the work efficiency of employing units.

(2) Effectively stopped the problem of selective participation by participating units

For employees who signed labor contracts and were registered, when handling social insurance, they must simultaneously handle and pay the five main insurances. Then the problem of selective participation was effectively solved. The comparison results of the insured personnel's participation situations of enterprises A and B before and after the unified collection of social insurance are shown in Tables 2 and 3 respectively. Among them, enterprise A had a total of 521 employees, and there were still 18 employees who were not insured, among whom 5 were company executives and shareholders, who had reached the legal retirement age, so they only paid medical insurance, and the remaining 13 were company trainees and did not participate in social insurance. The four insured personnel of enterprise B all participated in the five types of social insurance. These two enterprises to a certain extent eliminated the problem of selective participation.

***Table 2.*** Insurance Participation of Enterprise A Before and after the unified collection

| Insurance type | 2022 Year (Total: 521) | | 2008 Year (Total: 1227) | |
|---|---|---|---|---|
| | N | % | N | % |
| Employee pension insurance | 503 | 96.5 | 1117 | 91.0 |
| Employee medical insurance | 508 | 97.5 | 1120 | 91.3 |
| Unemployment insurance | 503 | 96.5 | 1117 | 91.0 |
| Worker's injury insurance | 503 | 96.5 | 1117 | 91.0 |
| Maternity insurance | 503 | 96.5 | 865 | 70.5 |

Source: Labour and Social Security Bureau of Baotou City.

***Table 3.*** Insurance Participation of Enterprise B Before and after the unified collection

| Insurance type | 2022 Year (Total: 18) | | 2008 Year (Total: 18) | |
|---|---|---|---|---|
| | N | % | N | % |
| Employee pension insurance | 4 | 22.2 | 4 | 22.2 |
| Employee medical insurance | 4 | 22.2 | 4 | 22.2 |
| Unemployment insurance | 4 | 22.2 | 0 | 0 |
| Worker's injury insurance | 4 | 22.2 | 0 | 0 |
| Maternity insurance | 4 | 22.2 | 0 | 0 |

Source: Labour and Social Security Bureau of Baotou City.

(3) The participation rate of social insurance has significantly increased

Since the unified collection of social insurance began, the insured units have participated in the insurance scheme out of the consideration of short-term profits of the enterprises. Moreover, when recruiting employees, the insured units need to handle five types of insurance simultaneously. The participation rate of social insurance has significantly increased. Among them, the participation rate of the five types of social insurance in Enterprise A has been improved to a certain extent. Figure 4 presents the comparison results of the participation rates of the five major insurance types before and after the unified collection of social insurance in Baotou City. Among them, the participation rate of the endowment insurance has increased the most (37.2%), followed by the medical insurance with 13.8%. Although the unemployment insurance has also increased, it has only increased by 0.4%, and the effect is not obvious.

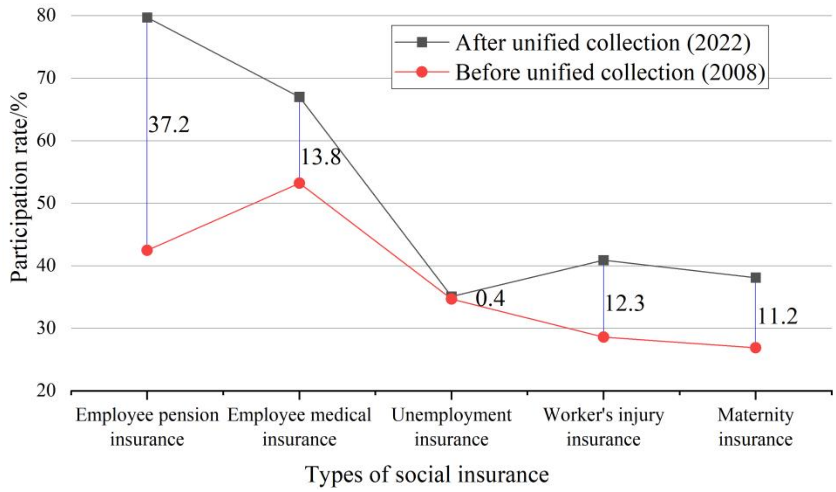


***Figure 4.*** Comparison Results of Participation Rates of the Five Major Insurance Types

(4) Continuous improvement of social insurance premium levels

Baotou City has transferred the collection work of the five major types of insurance to the tax department, and has entrusted the tax department to supervise the collection of social insurance premiums. Compared with the social security department, the tax department has stronger execution and auditing powers, better understanding of the information of insured enterprises, and stronger independence. The social security department, on the other hand, has more dispersed rights and is more difficult to manage. Therefore, the collection of social insurance premiums by the tax department is far more scientific and rigorous than that by the social security department.

## *4.3. Issues Concerning the Unified Collection Model of Social Insurance*

This article, based on actual interview records, reveals that the current unified social insurance collection model in Baotou City still has many problems and has much room for improvement. The following are some of the interview records for your reference.

Li XX, staff member of the tax department:

*There is poor communication with other departments and the work pressure is high. For instance, the task of clearing outstanding fees is extremely difficult. The requirements from above are strict, and there are many issues to consider. The pressure on the grassroots level is extremely high. The only way is to repeatedly visit the courts and banks.*

Huang XX, a staff member of the tax department:

*In the past, we had no experience in this area. We were very lacking in knowledge about social* *security and medical insurance. The other departments were the same. We didn't have much understanding of each other. Therefore, for the same issue, different departments considered it from their own interests, which led to differences and affected the efficiency of unified collection, increasing the cost of collaboration.*

Peng XX, Tax department staff:

*Although the unified social insurance collection is led by the tax bureau, the human resources and social security departments, as well as the medical insurance department, all have their own ideas. Their experience in collecting social insurance fees is more extensive than ours. Regarding the issues we raised, they have their own opinions. Sometimes they hold different views, and sometimes it is difficult to reach a unified conclusion.*

Zhou XX, staff member of the tax department:

*During the process of unified collection of social insurance fees, I believe there is a problem of incomplete laws and regulations, which poses risks to tax enforcement and cross-departmental collaboration.*

Li XX, a staff member of the tax department:

*The functions of each department are different, the functional requirements of the business systems are also different, and the developers of the information systems are also different. There are significant differences in data format standards, data storage methods, and database types. Therefore, when data is being integrated, problems often arise.*

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Based on the comprehensive interview records, we have identified the following problems with the current unified collection model of social insurance in Baotou City:

(1) Low efficiency of information transmission among departments

Since the tax authorities took over the collection of social insurance fees, the social insurance fee collection management system in Baotou City was upgraded to the "Social Security Three System", which operates independently of the "Golden Tax III System". Although this system has the ability for large-scale data transmission and query, it fails to provide detailed query of individual employee's contribution details and the necessary associated information for corresponding business processing. Moreover, in the "Social Security Three System", the tax authorities can only view the enterprise declaration details and net deposit information, but cannot detail query the individual contribution details of insured employees and the arrival status of the social security and medical insurance systems. This structural defect not only causes information asymmetry between the tax and contribution parties, but also increases the workload of grassroots tax personnel.

(2) Inefficient data sharing and interaction

The real-time transmission and exchange of data among the tax, medical insurance, social security, and bank departments have not established standardized data interaction interfaces, resulting in the persistence of information silos. Additionally, the software of the social security, medical insurance, and other departments covers numerous comprehensive systems such as the pension insurance management system, the urban and rural residents' pension insurance business system, and the social security data sharing platform. Due to differences in development enterprises, function positioning, and development priorities, and the inability to update the data in real time, there are problems such as data flow lag and inability to conduct real-time reconciliation. The integration and collaborative operation of business systems still need further optimization.

(3) Blurred departmental responsibility boundaries

In the social insurance fee collection system, due to the multi-department co-management pattern formed by historical evolution, there are significant overlapping responsibilities and blurred boundaries among the tax, social security, medical insurance, and finance departments. In the practice of unified social insurance fee collection in Baotou City, the insufficient cross-departmental collaboration is manifested in the fragmentation of departmental responsibilities. Although the current policy documents have clearly defined the responsibility boundaries of the tax, medical insurance, and other departments, and each department strictly follows the institutional norms in performing their duties during social insurance fee collection, there are still "institutional vacuum areas" in the actual business chain, where the policy does not cover the dynamic connection links in the collection process.

(4) Weak departmental communication willingness

In the process of unified social insurance collection in Baotou City, the problems of weak departmental communication willingness are mainly manifested in the passivity of collaboration between the tax and social security departments, and the tendency of departments to avoid risks. According to the requirements of the social insurance unified collection system reform deployment, Baotou City has established a social insurance unified collection model reform coordination mechanism, but there are still obvious shortcomings in actual operation. Although this mechanism has clarified the departmental responsibility divisions, it has not been accompanied by the establishment of a dedicated coordination institution for overall management, resulting in cross-departmental collaboration remaining at a superficial level of procedural connection. Moreover, when there is a responsibility overlap, departments often adopt passive avoidance strategies for tasks not explicitly stipulated by the policy, leading to a situation of "each doing their own thing".

### *4.4. Optimization Path Based on the Collaborative Collection Model*

In response to the problems existing in the unified social insurance collection in Baotou City, this paper, based on the theory of collaborative governance and the SFIC model, proposes the following optimization paths.

(1) Establish a collaborative collection operation mechanism for social insurance fees

Establishing a collaborative collection operation mechanism for social insurance fees can not only solve the collaborative dilemma of "inconsistent rights, responsibilities and benefits" among departments, reduce institutional transaction costs, but also guide the tax, human resources and medical insurance departments to actively share data and jointly handle risks, enhancing cross-departmental response capabilities. In addition, it can stimulate the motivation of grassroots personnel to optimize services, form a virtuous cycle of "policy implementation - service innovation - efficiency improvement", and ultimately build a sustainable collaborative governance mechanism.

(2) Strengthen internal personnel allocation support

Sufficient human resources is the key to achieving results in any public affairs collaborative governance. The reform of social insurance fee collection responsibilities is at a critical stage, and it requires strong human resource support. In terms of personnel allocation, it is necessary to fully manage according to the job responsibility system. On the one hand, through job rotation and personnel allocation methods, some experienced and capable personnel with strong abilities are drawn from other relatively less burdened departments to enrich the social insurance non-tax unit. At the same time, actively seek support from the organization and personnel departments, recruit a batch of professionals with relevant specialties, such as social security, finance, computer, etc., to meet the diversified needs of the work and enrich the social insurance fee collection team, providing stable social insurance collection forces for later reform.

(3) Build an integrated information sharing platform

With the optimization and adjustment of government department functions, the construction of cross-departmental collaborative mechanisms and information interconnection have become an inevitable trend. In this context, building a cross-departmental collaborative platform covering the entire process of social insurance fee collection has become an urgent task. In response to the problems of complex departmental information systems, scattered functions and poor data circulation in the current social insurance fee collection process, it is necessary to break through the barriers of information islands and establish an integrated comprehensive information sharing platform covering social security, medical insurance, tax, finance and financial departments. By integrating the database resources of each department, optimizing the data exchange mechanism for social insurance fees, achieving real-time query, immediate processing and dynamic tracking of collection business, the data application efficiency can be significantly improved. Through continuous data governance and feedback mechanisms, the value of data elements can be deeply mined, forming a full-chain closed-loop management.

## 5. Conclusion

Since the implementation of the "unified collection of social insurance" system, this system has played a significant role in promoting the stable and rapid development of Chinese society, improving the socialist system of China, and constructing economic reform. In principle, it has avoided the problem of employers' selective participation in insurance. Although the unified collection model of social insurance has brought many successes, its implementation also faces many urgent problems that need to be solved, including low efficiency of information transmission among departments, poor data sharing and interaction, blurred departmental authority and responsibility boundaries, and weak willingness for departmental communication. Unified collection of social insurance is an important measure to improve management efficiency, expand coverage, and protect the rights and interests of employees. Although it is currently being implemented slowly, the unified tax system will be the future development direction and will definitely provide comprehensive coverage and promotion.

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