



Pension Insurance Legal System Reform in an Aging Society: Policy Effects and Legal Protection

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Abstract. China is experiencing a rapid development of population aging, posing significant challenges to the sustainable development of its pension insurance system. This study focuses on China's pension insurance legal system reform, analyzing current issues such as system fragmentation, pension fund sustainability risks, and inadequate legal framework. The research finds that effective pension insurance system reform requires coordinated advancement in both policy-making and legal protection: at the policy level, emphasis should be placed on expanding coverage, optimizing fund management, and elevating the coordination level; at the legal level, it is necessary to accelerate pension insurance legislation, improve supporting regulations, and strengthen rights protection mechanisms. The study suggests promoting coordinated development between the pension insurance system and socio-economic progress through measures such as establishing unified pension insurance law, improving the multi-tiered pension insurance system, and enhancing fund supervision systems, thereby better addressing the challenges of population aging.

Keywords: Population Aging; Pension Insurance System; System Reform; Fund Supervision

1 Introduction

The pension insurance system is a crucial institutional arrangement for maintaining social equity and justice and securing the basic livelihood of the elderly population[1]. Currently, the world faces unprecedented challenges from population aging. According to United Nations projections, by 2050, the population aged 60 and above will reach 2.1 billion, accounting for 22% of the global population[2]. In China, the aging situation is even more severe, with projections indicating that by 2035, the population aged 60 and above will exceed 400 million, accounting for over 30% of the total population[3]. Population aging not only brings direct challenges such as increased pension payment pressure and rising dependency ratios but also profoundly affects economic growth, labor supply, and social service demands. While developed countries' pension insurance systems have matured through long-term development,

they still require continuous adjustment to address new challenges brought by demographic changes[4][5]. Developing countries generally face issues such as insufficient coverage, weak fund sustainability, and inadequate legal protection systems[6][7]. International experience shows that pension insurance system reform needs to advance simultaneously in both policy effectiveness and legal protection dimensions. Particularly under the new economic normal, how to ensure the sustainable development of the pension insurance system and how to balance economic efficiency with social equity have become urgent issues to resolve. Meanwhile, with the deepening of economic globalization and increased population mobility, pension insurance system reform must fully consider international trends and strengthen international integration.

Pension insurance system reform in China is a complex systematic project requiring comprehensive consideration of factors such as demographic structure changes, economic development levels, and social security needs[8]. Since the State Council issued the "Decision on Enterprise Employee Pension Insurance System Reform" in 1991, China's pension insurance system has undergone profound changes, evolving from unit-based protection to social protection, and from combined accounts to a multi-tiered protection system[9]. However, China's current pension insurance system still faces numerous challenges: system fragmentation is prominent, coordination levels need improvement; fund sustainability risks are increasing, investment management efficiency needs enhancement; and the legal system remains inadequate, with rights protection mechanisms requiring strengthening. Given the urgency and complexity of pension insurance system reform, it is necessary to conduct in-depth research on policy effectiveness and legal protection issues to provide theoretical support and practical guidance for system optimization. As China's urbanization accelerates and industrial structure adjustment deepens, pension insurance system reform must adapt to new development trends, particularly focusing on pension security issues for groups such as migrant workers and flexibly employed individuals. Furthermore, in the digital economy era, pension insurance system reform must fully utilize modern information technology to improve management efficiency and optimize service levels.

2 Current Status and Challenges of the Pension Insurance System

2.1 Impact of Population Aging on the Pension Insurance System

Population aging has become a global trend, posing significant challenges to the sustainable development of pension insurance systems. Population aging is a social phenomenon caused by increased life expectancy and declining birth rates, primarily manifested as an imbalance between elderly and young populations, leading to a continuous rise in the proportion of elderly population. According to international standards, a society enters the aging stage when the population aged 65 and above exceeds 7% of the total population, or when those aged 60 and above exceed 10%; it

enters deep aging when the elderly population reaches 14%; and super-aging when it reaches 20%. This demographic structural change directly affects the dependency ratio of pension insurance systems, increasing fund payment pressure. Research shows that the rise in elderly dependency ratios will lead to a continuous increase in pension expenditure as a proportion of GDP, challenging fiscal sustainability[10]. Meanwhile, the decline in working-age population also affects pension insurance premium collection, potentially impacting fund balance. Additionally, population aging brings increased demand for elderly care services and pension benefit level adjustments, requiring responses through system reform and legal protection. Under the context of population aging, pension insurance system reform must fully consider the long-term impact of demographic structural changes and make corresponding adjustments in system design and legal regulation.

2.2 Pension Insurance Fund Balance Issues

The balance of pension insurance funds is a core challenge for sustainable system operation. As shown in Figure 1, China's urban and rural residents' basic pension insurance fund revenue and expenditure from 2018 to the first half of 2024 shows clear trends. From the revenue perspective, fund income generally increased from about 370 billion yuan in 2018 to approximately 600 billion yuan in 2023, but showed a significant decline in the first half of 2024. This revenue fluctuation is mainly influenced by multiple factors including changes in the economic environment, employment status adjustments, and demographic structural transitions. From the expenditure perspective, fund expenditure has shown steady growth, increasing from about 280 billion yuan in 2018 to approximately 450 billion yuan in 2023, followed by a synchronized decline in the first half of 2024. The expenditure growth is primarily due to the continuous increase in benefit recipients and gradual improvement in benefit levels[11]. Notably, although the scale of revenue and expenditure continues to expand, the revenue-expenditure gap shows a gradually narrowing trend, reflecting increasing pressure on fund operations. Resolving fund balance issues requires multiple approaches, including expanding the contribution base, optimizing premium rate structures, strengthening collection management, improving benefit adjustment mechanisms, and increasing fund investment returns. It is particularly important to establish and improve fund early warning mechanisms, strengthen actuarial balance, and ensure sustainable system operation. At the legal level, it is necessary to clarify various responsibilities, standardize fund operations, strengthen supervision and management, and provide institutional guarantees for fund balance. Establishing a unified fund management system and achieving provincial or even national coordination helps enhance fund risk resistance capacity and promote inter-regional mutual assistance.

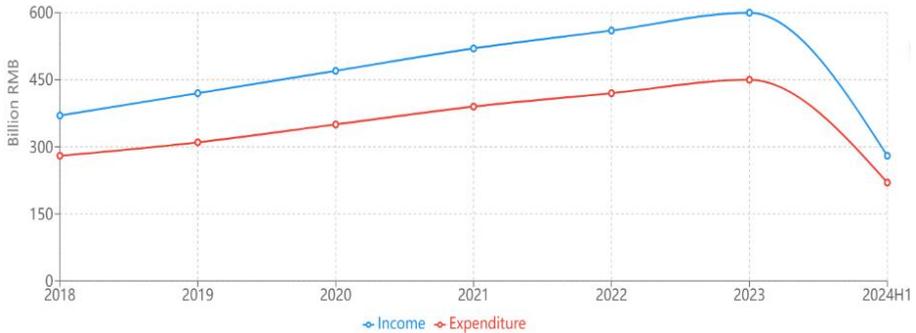


Fig. 1. Revenue and Expenditure Status of China's Urban-Rural Residents' Basic Pension Insurance Fund (2018-2024 H1)

2.3 Deficiencies in the Legal System

China's current pension insurance legal system has prominent issues such as system imperfection and insufficient enforcement. From a legal hierarchy perspective, China has not yet issued a unified pension insurance law, with existing regulations mainly consisting of administrative regulations and departmental rules, resulting in low legal status and difficulty in providing strong legal protection for system operation. Regarding rights and obligations provisions, existing legal clauses are too principled and lack specific implementation rules. Particularly in terms of rights protection for groups such as migrant workers and flexibly employed individuals, relevant provisions are unclear and rights protection mechanisms are inadequate. The supervisory system has obvious gaps, with imperfect cross-regional supervisory cooperation mechanisms and relatively singular supervisory means, making it difficult to effectively address risks in pension insurance fund security and benefit payment. Research shows that a perfect legal system plays an important role in ensuring effective operation of the pension insurance system[12]. From practical experience, many issues in China's pension insurance system reform, such as coordination level improvement, fund investment management, and rights protection, require legislative regulation and protection. It is recommended to accelerate the pension insurance legislation process and construct a legal system led by pension insurance law and supported by related regulations and policies.

3 Analysis of Pension Insurance System Reform Policy Effects

3.1 Analysis of System Coverage Expansion Effects

Through recent reform practices, China's pension insurance coverage has continuously expanded, but still faces significant challenges in coordinating urban and rural development. As of 2023, China's basic pension insurance participants exceeded 1 billion, but participation rates show clear differences between urban and rural areas and across regions. Eastern developed regions generally have higher participation

rates than central and western regions, and urban workers' participation quality is significantly better than urban and rural residents. Particularly for groups such as migrant workers, flexibly employed individuals, and new form employment practitioners, participation rates are relatively low. Research finds that main factors affecting participation rates include unstable income levels, high mobility, and unbalanced regional development[13]. Various regions have actively explored coverage expansion, such as conducting special campaigns for enterprise pension insurance expansion, improving participation policies for flexible employment, and advancing occupational injury protection pilots for new business format practitioners. Meanwhile, pension insurance relationship transfer and continuation policies continue to improve, but still face issues such as complex procedures and inadequate information sharing in practical operation. It is recommended to further optimize system design, lower participation thresholds, simplify procedures, strengthen operational service capacity, implement various support policies, promote participation by more groups, and gradually achieve universal participation. Additionally, it is necessary to accelerate the advancement of provincial and national coordination of pension insurance and establish a more equitable and sustainable system.

3.2 Practical Effects of Fund Operation Efficiency Improvement

The improvement in China's pension insurance fund operation efficiency is reflected in multiple dimensions but still has significant room for enhancement. As shown in Figure 2, in terms of fund investment, since the launch of basic pension insurance fund investment operations in 2015, positive results have been achieved through entrusting professional institutions such as the National Social Security Fund Council with investment management. As of 2023, the national social security fund's pension fund investment scale exceeded 1.9 trillion yuan, maintaining reasonable cumulative investment returns. In terms of operational services, China actively promotes the "Internet + Pension Insurance" service model, building a nationally unified social insurance public service platform, achieving "online, mobile, and one-time" processing for multiple services. Meanwhile, risk control mechanisms continue to improve through the establishment of fund early warning monitoring and investment risk assessment systems. However, China's pension insurance fund operation still faces many challenges: fund investment management's market-oriented degree needs improvement, investment channels are relatively singular; provincial coordination has not been fully realized, coordination levels are low; information system integration and data sharing mechanisms need deepening; and fund supervision and risk control systems need strengthening. A perfect fund management mechanism is significant for enhancing pension insurance system effectiveness[14]. It is recommended to further broaden investment channels, enhance investment management professionalization, accelerate national pension insurance coordination, improve risk control mechanisms, and establish and improve fund supervision systems.

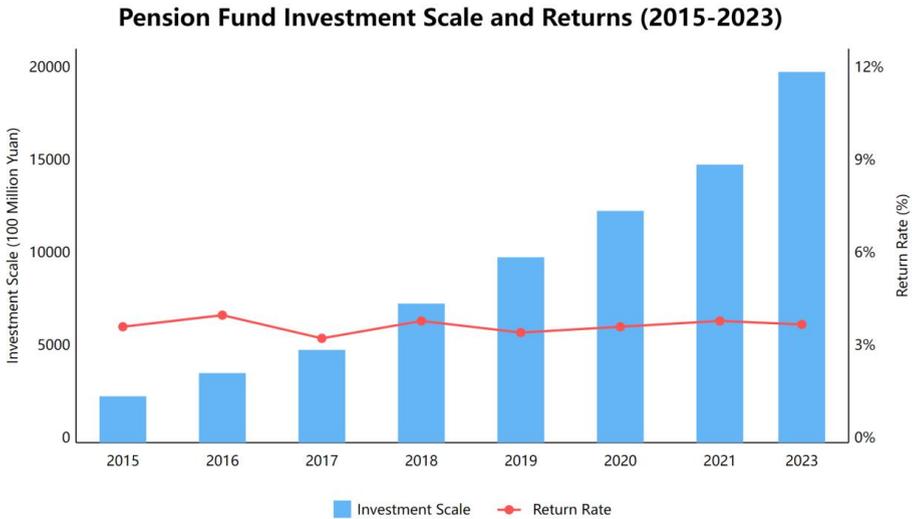


Fig. 2. Investment Scale and Returns of Pension Insurance Fund (2015-2023)

3.3 Optimization of Fund Investment Management

China's pension benefit adjustment mechanism establishment and improvement has undergone years of exploration, achieving positive progress but still facing many challenges. Since 2005, enterprise retirees' basic pensions have been adjusted for 19 consecutive years, reflecting the national determination to protect and improve people's livelihood. However, significant regional and group differences remain in China's pension benefit levels. Large gaps exist between urban-rural residents' basic pension levels and enterprise workers' pensions, and pension levels show clear differentiation across regions. China's pension replacement rate shows an overall declining trend, and pension benefits in some regions and groups cannot meet basic living needs[8]. The pension benefit adjustment mechanism still needs improvement in terms of scientific nature and sustainability, particularly in establishing adjustment mechanisms adapted to economic development levels and price changes. Meanwhile, varying coordination levels across regions and non-unified benefit calculation and adjustment standards increase system operation complexity. It is recommended to improve pension benefit determination and adjustment mechanisms, establish more scientific benefit adjustment formulas, reasonably determine adjustment frequency and magnitude, strengthen policy support for disadvantaged groups, and promote the formation of a more equitable and sustainable benefit protection system. It is also necessary to accelerate provincial and national coordination of pension insurance, gradually narrow regional benefit gaps, and improve the coordination level and protection level of the pension insurance system.

4 Improvement of Pension Insurance Legal Protection System

4.1 Improving and Perfecting the Legal System

As shown in Figure 3, China's pension insurance legal system needs to construct a multi-level, multi-dimensional protection system. The current primary task is to accelerate the formulation of a unified pension insurance law to provide basic legal compliance for system operation. This basic law should clearly stipulate core content such as pension insurance's nature and positioning, coverage scope, rights and obligations, fund management, and supervision mechanisms. Meanwhile, it should pay attention to connection with higher-level laws such as the Social Insurance Law and coordination with related laws such as the Labor Law and Civil Code. A unified basic law has fundamental significance for regulating pension insurance system operation and protecting participants' rights[9]. Particularly in the key period of deepening China's pension insurance system reform, it is more necessary to establish reform direction, regulate reform process, and protect reform achievements through legislation. It is recommended that in the legislative process, local legislative experience should be fully referenced, various opinions should be widely sought, and the scientific nature and operability of legislation should be improved.

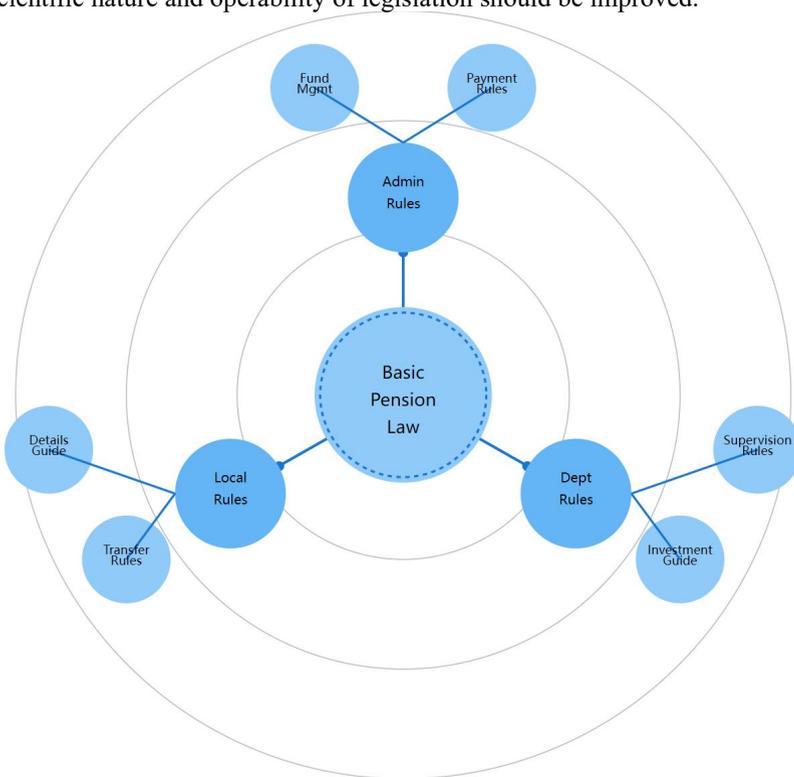


Fig. 3. China's Pension Insurance Legal System Structure

Under the leadership of the basic law, it is necessary to formulate and improve a series of supporting regulations and rules to form a layered and coordinated legal norm system. These supporting regulations should include specific system norms such as pension insurance fund management measures, pension insurance relationship transfer and continuation measures, and pension insurance benefit payment management provisions. Meanwhile, local regulation formulation work should be strengthened, allowing regions to formulate more targeted implementation rules based on actual conditions. Special attention should be paid to coordination between legal norms to avoid legal application conflicts. Additionally, it is necessary to establish legal evaluation and cleanup mechanisms, regularly evaluate current legal norms, and timely clean up and revise provisions that do not adapt to practical needs. In this process, full consideration should be given to the phased characteristics of China's pension insurance system reform, reserving space for system development. A perfect legal system has important guiding and regulatory significance for advancing pension insurance system reform[15].

4.2 Strengthening Rights Protection Mechanisms

Pension insurance rights protection mechanisms need comprehensive innovation and optimization at the institutional level. The primary task is to improve benefit determination and payment protection mechanisms, clearly stipulating pension benefit composition elements, calculation methods, and adjustment rules through legislation. It is necessary to establish and improve fund safety supervision systems, strengthen fund investment operation risk control, and ensure fund safety and integrity. Meanwhile, rights remedy mechanisms should be innovated, rights protection channels expanded, and rights protection costs reduced. Research shows that effective rights protection mechanisms have important significance for improving system credibility and enhancing participants' sense of gain. Particular attention should be paid to rights protection for special groups such as migrant workers and flexibly employed individuals, establishing targeted protection measures. Information disclosure systems also need improvement to protect participants' right to know and supervise.

In specific system design, a multi-level rights protection system should be established. First, administrative remedy systems should be improved, enhancing administrative reconsideration and administrative litigation procedures to improve administrative dispute resolution efficiency. Second, judicial protection mechanisms should be innovated, exploring the establishment of specialized social security courts to provide professional judicial services. Third, diversified dispute resolution mechanisms should be developed, promoting alternative dispute resolution methods such as mediation and arbitration. Meanwhile, preventive measures for rights protection should be strengthened, establishing and improving early warning mechanisms and rapid response mechanisms for pension insurance rights damage. Special attention should be paid to using modern information technology to enhance the intelligence level of rights protection. Diversified rights protection mechanisms

are more conducive to meeting different groups' rights protection needs and improving rights protection effectiveness.

4.3 Optimizing Supervision and Enforcement Systems

China's pension insurance supervision and enforcement system needs to transform from dispersed supervision to collaborative supervision. Current focus should be on resolving issues such as overlapping supervisory responsibilities, insufficient information sharing, and non-unified enforcement standards. First, responsibilities of supervisory departments at various levels should be clarified to establish a supervision system with clear rights and responsibilities. Second, supervisory information sharing should be strengthened, establishing a nationally unified supervisory information platform to achieve interconnection and interoperability of supervisory data. Third, supervisory methods should be innovated, fully utilizing modern technological means such as big data and artificial intelligence to enhance supervisory capacity. Effective supervision and management have important significance for risk prevention and system stability maintenance. Particularly in the context of increasingly market-oriented pension insurance fund investment, it is more necessary to establish professional and refined supervision systems. Meanwhile, cross-department and cross-regional supervisory cooperation should be strengthened to form supervisory synergy.

In specific enforcement aspects, efforts should be made to improve the standardization and effectiveness of supervisory enforcement. First, enforcement standards should be unified, detailed enforcement procedures formulated, and enforcement behavior standardized. Second, enforcement team building should be strengthened, improving enforcement personnel's professional quality and enforcement capacity. Third, enforcement responsibility systems should be improved, establishing and improving accountability mechanisms. Meanwhile, attention should be paid to playing the role of social supervision, constructing a comprehensive supervision system combining government supervision, industry self-discipline, and social supervision. Reporting reward systems should be established to encourage public participation in supervision. Additionally, international exchange and cooperation need strengthening to learn from international advanced experience and improve supervision levels. A supervision system with multiple subject participation is more conducive to forming all-round supervision networks and improving supervision effectiveness.

5 Conclusions

Pension insurance system reform is a complex systematic project requiring coordinated advancement in both policy effects and legal protection dimensions. Through analyzing challenges faced by the pension insurance system under population aging background, this study discussed main directions and specific measures of system reform. The research finds that effective pension insurance

system reform needs to handle well the relationship between system sustainability and protection levels, balancing various stakeholder interests. At the policy level, attention should be paid to system inclusiveness and universality, enhancing system effectiveness through measures such as expanding coverage, constructing multi-level protection systems, and optimizing fund management. At the legal level, efforts should be made to accelerate legal system improvement, strengthen rights protection, optimize supervision and enforcement, and provide strong support for system reform. Future reform should pay more attention to system coordination and systematization, strengthen policy innovation and rule of law construction, and promote coordinated development between pension insurance system and socio-economic progress. Meanwhile, international experience should be fully referenced while based on national conditions to explore pension insurance system reform paths with Chinese characteristics. In advancing reform, special attention should be paid to risk prevention and control to ensure stable system operation and sustainable development.

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