

## **Under The Background of Aging Population, Britain, Japan and South Korea Pension Fund System Analysis and its Enlightenment to China**

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### **Abstract**

With the constant improvement of the population average life expectancy, the pension personal account will face a growing risk, improvement of the pension fund system is crucial, this article from system design, the preferential tax, legal protection, operation mechanism, and fund supervision five aspects to the current situation of the endowment insurance fund system of China is analyzed, then take example by Britain, Japan and South Korea relevant experience in the system of pension fund management experience, improve the system of endowment insurance fund in China.

**Keyword:** population aging, pension fund system, experience reference

### **1. Introduction**

With the economic development, the progress of science and technology, medical and health level and transformation of the life-style, the population of birth and death rates are falling, but the average life expectancy of extend continuously, the trend of population aging is inevitable. It is commonly believed in the world, when a country or a region, constituting 10% of the total population of elderly people aged 60 or 65 years old or older, constituting 7% of the population means that the population of the country or region in the aging society <sup>[1]</sup>. In 2000, the 65 - year - old has reached 7%, the proportion of older people declared officially entered the aging society in China. At present, China has entered into an aging population and rapid development phase, by the end of 2012 China 60 years of age or older population has reached 194 million, 2020 by 243 million, 2025, will exceed 300 million<sup>[2]</sup>. In 2006, according to the national working committee on aging of population aging in China development trend forecast shows: by 2050, China's elderly population will exceed 400 million, aging level to more than 30%, among them, more than 80 years old and older population will reach 94.48 million, accounting for 21.78% of the elderly population. Between 2051 and 2100, the elderly population scale will be stable in 3-400 million, the aging level basically stable at around 31%, 80 years old and elderly accounted for the proportion of elderly population will remain at 25% to 30%, into a period of aging.

An aging population brings to the social old-age security problems of heavy pressure. Longevity risk is one of the more tremendous risks, it belongs to the macro risk, but with the endowment insurance system design is also inseparable. Population aging makes the endowment insurance fund is the financial crisis, pose a serious challenge to the current endowment insurance system.

Rising life expectancy to make pension spending increases, individuals and pension plans do not cover the thereby may be in a closed position, longevity risk thus generated. At present, most of the world's countries have established the basic old-age insurance system or the universality of the basic pension system, Personal longevity risk can by joining countries to provide basic old-age insurance system to pass on part of the risk to the government, at the same time can also by buying commercial pension insurance, savings, or other suitable financing way to transfer risk. Pension safeguard product longevity risk faced by institutions and government are polymerized longevity risk, not through the law of large number to evade. From the perspective of the endowment insurance system, polymerized longevity risk is due to the population average life expectancy of growing and the adjustment of the pension plan is relatively lagging behind. Polymerized longevity risk crisis not only affect the occupational pension plan or private annuity insurance market, can also affect the balance of the public pension system, and increase the financial burden of the national pension.

This article from the system design, the preferential tax and legal protection, operation mechanism, fund supervision system of pension fund in China present situation analysis, draw lessons from foreign experience in this a few, draw some enlightenment to perfect our system of endowment insurance, at the same time deal with aging and longevity risk caused by an aging population.

## **2. The Current Situation of China's Endowment Insurance System**

### **2.1 System Design**

In the design of the system, while the introduction of personal accounts, we carry out the implementation of pay-as-you-go and fund accumulation model. In theory, it can not only through the pay-as-you-go current pension, and can be implemented by means of fund is the transfer of the generation and generation. However, in actual operation, there are many problems: one is the balance of payments, assets be offset liabilities. Another problem is the risk of personal accounts <sup>[3]</sup>. The pension system's total energy touches all aspects of sensitive nerves because it involves a wide reform. Although many countries are facing such problems, but especially in China. A similar reform in any country will make the implicit debt under the explicit part of the original system, thus faced with how to solve the problem of restructuring costs.

### **2.2 Tax Preference**

On taxation, the nation implements preferential tax policies on pensions; enterprises and individuals allow to deduct the pension tax that will be paid before taxes. If enterprises raise capital by issuing bonds to purchase the bonds of pension funds, the earning that bonds obtained can be deducted in pre-tax, without subjecting to income tax. This will not only avoids double taxation, obtains the benefits of deferred tax, but also reduces personal marginal tax rates during work time.

Although China has taken tax preference, the current preferential policies is still relatively limited. Like the payment of the account of personal pension expense can be raised in the row in pre-tax, but the expense of purchasing annuity insurance are not clearly defined that can be deducted from individuals' taxable income. Although in *The Notice of Supplementary Insurance on Corporate Income Tax Issues* which issued in June 2009 by the Ministry of Finance stipulates that the enterprise pay part in the supplementary pension can be deducted before corporate income tax by the norm that not exceed 5% of workers' wages the total, which increase by 1% than before, the taxation is still in a low level, lacking of adequate attraction, and difficult to play an effective incentive. The tax status of Chinese enterprise annuity can be described as: taxes in the front-end but actually do not pay; taxes are exempted in the middle-end and back-end but with no description. In practice, the middle- end and back-end almost do not have taxation, which has become a routine. Professor Bingwen Zheng defined our model as non-standard "vague TEE" <sup>[4]</sup>. Ambiguous tax laws go against guiding people to build their own pension insurance on the policy through commercial insurance, and hinder the insurance companies' deeper development of pension meaningful life insurance. Besides, it is not conducive for providing the necessary policy environment to realize the multi-level reform of the pension system goal.

### **2.3 Legal Protection**

About the pension fund system of legal protection, China started relatively late. The first law on the social security law "Social Security Act" on October 28, 2010 was passed, which ended previous the operation to maintain the facts of social security through rules and regulations. It also highlights the lack of social security legal protection in our country.

### **2.4 Operating Mechanism**

At present, there are no specific investment operating company that is responsible for the investment operations of pension funds, in addition to a small number of pension funds fund on behalf of the Chinese social security fund management, and the other large amounts of money are controlled by the local governments. The problem of pension appreciation and preservation is worrying. The pension investment income is less than 2% in many areas. It is not only failed to rise in value, but because of inflation and devaluation, it further aggravated due to the problem of pension longevity risk.

## **2.5 Fund Supervision**

On the fund regulation, the lack of corresponding legal regulation and only some corresponding laws and regulations, the weakness of practice in our country, the status of the illegal embezzlement, theft of funds from time to time was exposed, the lack of a unified regulatory supervision fund assume legal responsibility.

### ***3. The Developed Countries to the Pension Funds Management Mode***

To better deal with an aging population, economic and social change, and the challenge of globalization. Some developed countries have changed their pension fund system to ease the pressure of population aging, to cope with the longevity risk that exists in the pension system. We designed the system from below, tax incentives, legal protection, operation mechanism, fund regulation on pension reform in five areas of English, Japanese; Korean and so on three national pension system reform is analyzed.

#### **3.1 System Design**

System is the fundamental guarantee. The British pension system is already quite complete, it provide the development of the old-age security with constant power. In the design of system, it upholds the principle of fairness of Beveridge, to be responsible for universal. Program participants can participate in the pension plan was associated with income according to their own needs. They can also participate in occupational pension scheme provided by the employer and can also choose to establish a personal account to participate in a personal pension plan. In order to control risk, the policy allowed to participate in DC -based occupational pension schemes of nationals "exit agreement " national income related programs. Bylaws allow "only employee pensions in occupational pension plan when they can get the equivalent of national income programs in the association may obtain a guaranteed minimum pension agreement before they can quit ." <sup>[5]</sup> In order to ensure that citizens can get adequate old-age security after retirement.

Japan's pension system is associated with income. On the way to raise pensions, to ease the financial pressure, Japan carry out compulsory payment system, such as they impose special insurance according to the premium of 1% from bonuses and force students over the age of 20 to join the National Fund. Korea established pension system is associated with the tax system.

#### **3.2 Tax Preference**

The rapid development of the British private pension insurance and government tax preferential policies are inseparable. Policy: to participate in the occupational pensions and personal pension plan of employees and their employers pay the national basic pension when you can enjoy tax benefits. And preferential policies designed to be very clever, incentives are more flexible. These preferences are not directly returned to the employee, but put my occupational pension or personal pension plans. The British government adopt the EET mode of occupational pension plan, namely capture expends tax and investment stage, the stage of tax. This is a commonly used model of international avoid double taxation <sup>[6]</sup>.

South Korea raise pension funds through taxes, company employee pension is from the employer and employee 4.5% , respectively, according to the monthly wage ( the original format is wrong ) tax, self-employed and farmers in accordance with the 9% of pre-tax monthly income tax. The state offers a third of the subsidy to self-employed person and farmers of income less than 7700 <sup>[7]</sup>.

#### **3.3 Legal Protection**

To the smooth implementation of pension plan, pension plan participants' interests, England has successively introduced some of the social security act. For the first time in the Social Security Act of 1986 introduced a personal pension plan and occupational pension plans. The Social Security Act of 1995 pension funds management of occupational pension plan has carried on the full range of specifications, making the management of pension funds have laws to abide by. In order to reduce administrative costs, it launched "depository pension plans." in 1999. These bills legally and effectively maintained the pension plan participants related interests, and safeguarded the legitimacy of the pension insurance agency. Moreover, the regulation of pension funds has clear legal provisions. In practice, there are laws to abide by and high performance.

### 3.4 Operating System

Japan established the pension fund use in 2001. Because Japan is a very mature society at this time, more perfect credit system, the financial market is relatively mature, and through "the government focus on the basic decision-making and supervision of pension funds by private investment management" mode to reduce the principal-agent problem<sup>[8]</sup>. Japanese Ministry of Health is responsible for developing the basic pension investment strategy and regulatory work. The company is responsible for developing the use of pension funds and pension investment plan, which will meet the qualified pension assets entrusted to the fund management investment company. Investment operations are to be responsible for specific work<sup>[9]</sup>.

South Korea established an independent national pension company in 1988. It took "the government focused on the administration, the national pension company's own investment management" business model, effectively reducing the annuity fund company's principal-agent risk. South Korea plans to Budget Department are responsible for formulating development strategies of pension funds. The National Board of Health and Welfare Fund Management is responsible for administrative supervision of the fund. The Fund Management Committee is responsible for fund investment decision-making and strategy and the fund performance evaluation, a new non-profit independent corporate body "National Pension Management Corporation" is specifically to be responsible for pension fund investment operation<sup>[10]</sup>.

### 3.5 Fund Supervision

Any establishment of a market should have a necessary regulatory system. England was on the provisions of the Pension Authority, the Pension Protection Fund Committee, Pension Investigation Commissioner for pension funds management, which is also constitute the current pension regulatory system. The Pension Authority is responsibility for collecting information, publishing a notice providing guidance. The Pension Protection Fund Committee is responsible for compensating for the members involved when employer bankruptcy and lack of plan assets. While The Pension Investigation Commissioner is responsible for investigating complaints in writing, determining disputed facts or legal disputes. The company accountable for each sector, a clear division of labor.

## 4. Implications

### 4.1 Operating System Design and Operation

In order to get more effectively raise pension funds, developed countries have established a pension fund operations, specifically responsible for pension fund investment and operation management. In general, the annual investment rate of more developed economies of countries in which pension funds can reach 10%. Because the implementation of China's current urban pension insurance at the provincial level, except for a small number of pension funds fund on behalf of the Chinese social security fund management, and the other large amounts of money are controlled by the local governments. The problem of pension appreciation and preservation is worrying. The pension investment income is less than 2% in many areas. It is not only failed to rise in value, but because of inflation and devaluation, it further aggravated due to the problem of pension longevity risk. Our country needs to set up a central government under the direct supervision of pension fund managers to operate independently, co-ordinating the use of pension funds. The agency will mainly invest in government bonds, securities and the stock markets. Thus, on the one hand it can make pension funds more fully enjoy the fruits of China's rapid economic growth, on the other hand it can also be better to accumulate the capital needed for economic growth and prevent aging depth may lead to the risk of longevity and declining saving rate.

### 4.2 Provides Tax Incentives

Nowadays the establishment of enterprise annuity is given priority to with monopoly industries and large state-owned enterprises. These enterprises themselves have obtained a higher state pension insurance and welfare benefits. It will certainly be subject to criticism by the world if in providing further tax preferences. However, it is fantasy to attract the majority of small and medium enterprises to participate in enterprise annuity plans because of the absence of tax incentives and established EET model. We should start from the collected data, quantitative analysis and the data to formulate practical tax preferences.

### 4.3 Strengthen Supervision

Supervision of pension funds is a complex project, it needs the coordination of many sided, multiple departments to cooperate and mutual supervision with each other. Relevant departments perform their duties to ensure the stable operation of the enterprise annuity.

Human resources and social security department is responsible for policy formulation and daily administration. Finance departments are in accordance with the financial regulations to supervision, audit and punishment for account management, debt management, fund raising, management and payment processes. Tax department is responsible for corporate annuity rates and payout ratio to ensure all the necessary funds. The auditing department is responsible for the enterprise annuity in capital raising, using, management, and distribution and operation process in the presence of violations, discipline. All the regulators adopt some feasible measures to enhance the transparency of the regulatory authorities and reduce information asymmetry. Formulate a long-term effective mechanism for longevity risk at the same time. The insurance regulators should speed up the revision of the relevant actuarial methods and reduce the risk of loss caused by unreasonable actuarial methods.

#### **4.4 Strengthen Cooperation between the Risk Body**

Strengthen cooperation between the risk body to jointly cope with longevity risk. The basic endowment insurance adhere to fair values, which is enforced by the policy of national unity. Individual, enterprises and country share the responsibility. Personal savings endowment insurance is guided by the state macro and voluntary participation. It balance the differences between individuals, manifests the efficiency orientation, reflecting the efficiency orientation. Enterprise supplementary endowment insurance is guided by the state and decided by the enterprise internal. According to economic capacity, supplementary endowment insurance balances the difference between both units. Insurance industry including reinsurance industry needs to actively develop the corresponding product and create the market demand to attract investors. Government pensions agency needs to strengthen cooperation with the insurance industry, including longevity risk identification, data sharing, mortality prediction and risk management, etc. Only the interests of all parties to work together, the growing longevity risk can be expected to alleviate and solve.

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