

Research on Supporting Policies of Multi-pillar Pension System in China

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Abstract—The multi-pillar pension system in China is unbalanced development. This paper analyzes the performance of the system arrangements of PPA and concludes that the system arrangements of PPA have positive effects on pension assets through analyzing the performance of Pension Protection Act (PPA) in the United States on Individual Retirement Accounts (IRAs) and employer sponsored retirement plans. Auto enrollment and TDFs have improved the performances, e.g. the participation rate and the return rate of the second and the third pillars. To improve the balance of the multi-pillar pension system, to increase the performances of DC accounts of Basic Pension Insurance Funds and Occupational Pension in China and to improve the long-term financial sustainability, auto-enrollment and default option should be introduced and such system arrangements including decreasing contribution rate of basic pension and tax incentive should be considered.

Keywords—tax incentive; auto-enrollment; default option; multi-pillar pension system

I. INTRODUCTION

The multi-pillar pension system in China is extremely unbalanced development. Basic pension insurance is the dominant pillar, occupational pension participation rate is low, commercial pension insurance has just started, the replacement rate of retirement treatment is insufficient and financial unsustainable risk exists. How to improve the participation rate of the second and the third pillars, to release the financial pressure of basic pension and to improve the retirement treatment have become urgent problem to be solved.

In this paper, the author attempts to provide some recommendations in constructing multi-pillar pension system and investment strategy model by learning about relative experiences in the United States. This paper can be divided into four parts: literature review, operational performance of multi-pillar pension system in the United States, development situation of pension system in China and recommendations.

II. LITERATURE REVIEW

In this part, the author will review the relative literatures of multi-pillar pension reform and investment strategy of pension funds.

Since 1990s, the Chilean Pension Reform had contributed the success to domestic economy, then the ‘Pension Privatization’ spread around the World as an effective measure to dealing with the population aging problem and the domestic economy difficulties. ‘Pension Privatization’ refers to “the replacement of public pension insurance with individual pension savings accounts managed by the financial industry” [1]. Pension privatization would increase the net FDI inflows by releasing the market-oriented signal [2], and the second pillar would improve the domestic savings rate which would promote domestic economic development. As it reflects the ideology of liberalism, pension privatization may be more acceptable by policy makers. To avoid the giant transitional cost brought by pension privatization, the notional defined contribution (NDC) model can be introduced [35]. In brief, the pension reform depends on political and economic considerations, including aging pressure, financial costs, economic incentives and political preference [4].

Although pension privatization may reduce the pension burden on the government budget, it may also widen income gap and lead the pension funds to be exposed on capital market risk[3]. In fact, the pension privatization had not produced the desired effects as those countries anticipated. However, budgetary pressure increased because of high transition cost [1]. So, to those countries with no danger of solvency in pension system, it is not necessary for them to build a multi-pillar pension system to ensure future retirement benefits.

To those countries exist the difficulty of financial unsustainable on pension system, it is essential to build multi-pillar pension system and provide appropriate investment reward for pension funds to support retirement income. The pension funds that invested in global capital market can avoid systematic risks intrinsic in single country [5]. Investment management institutes should take the accountability for their investment decisions, because their major responsibility is to realize appropriate long-term return rate of investment [6]. The ratio of equities with higher risk declined while the ratio of assets with lower risk increased as the participants aged. Since different participants with different age have different risk aversion, it is necessary to design different investment portfolios to support choices for different participants. As a good model of investment portfolios, the target-date funds

(TDFs, also called 'life-cycle' funds) are "a type of mutual fund that automatically rebalances its asset allocation following a predetermined pattern over time" [7]. In the United States, the policies of auto enrollment to IRAs and default options to life-cycle funds had made great contribution to the increasing of coverage and assets [8].

Pension reform depends on many economic and political factors, and optioning TDFs would help to realize appropriate long-term rewards of pension funds. Then, how about the situation of multi-pillar pension system in China? And what kind of investment mode is appropriate for pension funds in China?

III. INVESTMENT PERFORMANCE OF MULTI-PILLAR PENSION SYSTEM IN THE UNITED STATES

A. *Multi-pillar Pension System in America*

Resources of the retirement income of American households include five legs: Social Security, employer-sponsored pension plans, private savings, homeownership and other assets [9]. Social Security, employer-sponsored pension plans and private pension savings are the three legs of pension system in America.

Social Security refers to the Old-Age, Survivors, and Disability Insurance (OASDI) program, which is compulsory contribution program with the contribution rate of 6.2% (employee) and 6.2% (employer) and prudently invests in national debts. Employer-sponsored retirement plans (the second pillar) are voluntary contribution programs as the supplementary programs for retirement in which the 401(k) plans are prime examples. Private pension savings (the third pillar) refer to the compulsory individual retirement accounts (IRAs) with tax incentive of contribution exemption when individual contribute to IRAs. Both the second and the third pillars are defined contribution (DC) plans which invest with portfolios.

B. *Operational Performance of pension funds after "the Pension Protection Act of 2006"*

Before 2006, the investment portfolios of the DC plans were chosen completely by individual. So, there existed two extremes, absolutely holding equities or absolutely money and securities. And few individuals allocated their assets based on different age and risk appetites, which mean that individuals cannot rationally and effectively allocate their asset accounts to ensue appropriate return with suitable risk [8]. To increase the coverage rate of pension systems (the percentage of retirees who entitled to claim pension was lower than 34%) and to promote the investment return rate with moderate risk, the United States passed "the Pension Protection Act of 2006". The Act provisions include tax exemption when contributing to DC plans and tax when drawing pensions, auto enrollment to IRAs, default options to life-cycle funds and raising contribution ceiling [8].

After that, the participation rate of pension systems increased quickly. The asset of retirement had arisen from 14.6 trillions of dollars in 2005 to 28.2 trillions of dollars in 2017. Due to the issuing of the 2006 Act, the asset of IRAs increased

1.3 trillions of dollars in 2005-07, which was faster than any other two years. [9]

The policy of tax deferral had motivated individual to contribute to DC plans, and the policy of raising the contribution ceiling made it possible to contribute more. Since 2006, the number of household participating in IRAs and the assets in IRAs has grown rapidly. As of 2017, 77million households own IRAs and the employer-sponsored retirement plans, and assets of IRAs and DC plans increased to 16.9 trillions of dollars. And about 61% households participate in the second and third pillars' DC plans enjoying tax deferral. [9]

Default option to life-cycle funds made the investment portfolio and asset allocation more reasonable. The TDFs follows a strategy of predetermined reallocation of assets over time based on a specified target retirement date. The younger of the contributor hold the larger ratio of equity, and the equity ratio reduced as individual became older.

Because most participants do not have the capability to decide how to invest and each individual has inertia in decision-making, the policy of default option to TDFs made the amount of assets investing in TDFs model increased rapidly. Take Mutual Fund Assets for example, the amount of which had increased from 71 billions of dollars in 2005 to 1116 billions of dollars in 2017, which had increased about 16 times in twelve years [9].

According to above analysis, it is clear that the policies of tax deferral, auto enrollment to IRAs, default option to TDFs and raising contribution ceilings have make great contribution to the progress of DC plans.

IV. INVESTMENT SITUATION ON MULTI-PILLAR PENSION SYSTEM IN CHINA

A. *Multi-pillar Pension System in China*

The multi-pillar pension system in China can be categorized into basic pension (the first pillar), supplementary pension (the second pillar) and individual pension savings (the third pillar). The basic pension takes the mode of social pooling combined with individual pension accounts (SP&IPA mode) with the contribution rate of 19% (employer) and 8% (employee) and supports the replacement rate of 50% to individual income which is higher than the level of developed countries.

The supplementary pension can be divided into voluntary enterprise annuity where only few large state-owned enterprises participate with the annual contribution of employer and employee less than 12% of annual gross wages in the enterprise; and compulsory occupational pension plan with mandatory requirement for employees in public agencies and institutions to participate and contribute to the plan with 8% (employer) and 4% (employee) of employee's total income. Both the enterprise annuity and the occupational pension have taken the market-oriented investment strategy investing in domestic markets with equity shares limitation of no more than 30%, and the employee contribution and their investment return can be exempted from individual income tax [10].

The individual pension savings mainly refer to the commercial pension which is a long-term life insurance for the purpose of obtaining annuity pension when participants become old. It should be an important supplementary of retirement income. But, at present, the cumulated amount of the third pillar can be neglected. Since May 1, 2018, some cities started the pilot project of tax deferred commercial pension insurance, the third pillar of pension made a little development.

B. Development Situation of Pension Funds in China

1) Unbalanced development of Multi-pillar pension system

The high contribution rate of basic pension (27%) crowding out the progress of the second and the third pillars. As of 2017, only 5.8% of the contributors in basic pension system participate in enterprise annuity plan [10]. Holdings of the long-term life insurance policy is 0.1 policy per capita, which is much lesser than that of average 1.5 policies per capita in developed countries [11]. Because of population aging combining with the high replacement rate of basic pension system (50%) and low return rate (2%) and the dependence on the only pillar of basic pension, the basic pension system has encountered the risk of financial unsustainable.

In 2017, annual deficit of basic pension funds had emerged in seven provinces in China, and the cumulative balance had become negative in Heilongjiang Province, which means that financial unsustainable risk is imminent. But because of the high total contribution rate of the social security system, it is difficult to maintain financial sustainability by increasing contribution rate. [12]

So, to enlarge the participant rate of the second and the third pillars by policies supporting is an ideal choice. By reducing contribution rate of basic pension to reserve space for the second and third pillars, and by improving investment efficiency to realize effective value-preservation and value-added of pension fund will make the second and the third pillars of pension system effectively undertake complementary functions, which would improve retirement benefits and realize financial sustainability of pension system.

2) Investment Situation of Pension Funds

As of 2017, the accumulated amount of basic pension was over 4.4 trillion Yuan. The pension funds in SP was invested in deposit (the most) and national debts (few) with return rate (2%) lower than CPI before 2016, and the funds in IPA in most provinces take the same investment strategy as in SP, which resulted in the depreciation of pension funds. Fortunately, the State Council issued the Approach of Investment Management of Basic Pension Insurance Funds in August 2015, which provided the legal basis to pension funds investment. Some provinces have authorized the National Council for Social Security Fund (SSF) to invest pension funds in IPA (about 0.1 trillion Yuan) and SP (about 0.6 trillion Yuan) in capital market with higher return rate of 8.44% and 5.23% respectively because of different investment scope [13]. Pension funds in SP can only invest in domestic, but about 20% of pension funds in IPA can be invested overseas combining with SSFs.

As to supplementary pension, the accumulated amount of it was about 1.3 trillion Yuan, which was less than 30% of that of basic pension as of 2017. Only 5% of employer and 5.8% of employees participated in supplementary pension plan [10], far below the level in the United States. The participation rate was too low. The reason is that the first pillar's high contribution rate has crowded out the contribution space of the second pillar. At present, tax deferral policy is the main supporting policy for the second and third pillars, with the contribution ceiling of 4% and 6% of the employee's tax base respectively. The relatively low preferential rate didn't effectively encourage individual to participate in and contribute to occupational pension plan or individual pension insurance plan.

From the perspective of investment, the current investment scope of supplementary pension funds is limited to domestic investment, and the proportion of equity investment should not exceed 30% of pension funds. In 2017, the investment return rate of the enterprise annuity was 5%, and the average annual rate of return from 2007 to 2017 was 7.34% [10]. In the same period, the SSF's annual rate and average rate of return was 9.68% and 8.44% respectively. The reasons why the enterprise annuity investment return rate is relatively low are as follows: (1) adopting a unified investment strategy for all members neglects the difference in risk preference of members at different life cycle stages; (2) investing in domestic and the low equity assets proportion limits the space of diversified investment, which makes it difficult to effectively disperse risk and improve return of investment.

The above analysis suggests that, to realize financial sustainable of pension systems and to promote retirement living standards, the multi-pillar pension system should be developed by expanding the second and the third pillars of pension, and appropriate investment policies should be made to maintain and to increment the value of pension funds and to ensure that the investment return constitutes an important composition of retirement income.

V. RECOMMENDATIONS ON SUPPORTING POLICIES TO DEVELOP MULTI-PILLAR PENSION SYSTEM IN CHINA

According to above analysis and some suggestions from the expert chosen for interviewing, the author attempts to give the policy makers some recommendations to increase participation rate of the second and the third pillars and to promote the long-term investment return rate.

A. Decreasing the Contribution Rate of the Basic Pension System

The contribution rate of public pension was too high to hinder the development of the second pillar and the third pillar. Decreasing the contribution rate of the basic pension system would reduce the burden of enterprises and individuals, which would leave room for the progress of supplementary pension plans.

B. Designing the Incentive Mechanism for Supplementary Pension Plans

Decreasing the contribution rate can only provide the prerequisite for development of supplementary pension plans. It is also need to improve incentives for individuals to

participate. The policy makers should design some incentive methods like tax deferral and high long-term return rate prospect to motivate individuals transferring to supplementary pension plans.

C. Introducing 'Auto Enrollment' in Enterprise Annuity Plan

The enterprise annuity plan for employees in private sector is voluntary while the occupational pension in public sector is compulsory. The same second pillar with most characters alike were divided into different platforms. The former only attracts few large companies to participate and most employees do not be covered. The latter mandates all formal employees to participate, so, it would cover almost all employees. As time passes by, the different platform would produce more unfairness. Introducing 'auto enrollment' in enterprise annuity plan which would be made into quasi-compulsory mechanism would expand the coverage rate of supplementary plans [8].

D. Choosing the Mode of 'Default Options' to Life Cycle Funds

In the United States, "the Pension Protection Act of 2006" introduced the 'default options' to life-cycle funds such as target date funds (TDFs) made the amount of participants in the second and third pillars increased quickly and the assets of the two pillars also gained rapidly progress. The investment mode of Life-cycle Funds with portfolios changing with age is more suitable for pension investment which meets with the law of human life cycle. So, the 'default options' to life-cycle funds also appropriates for Chinese pension funds.

E. Investing in Global Capital Market

To cultivate domestic asset market, to develop the domestic economy and to avoid the global risk, the pension funds only can invest in domestic market according to Regulation on Funds of the Enterprise Annuity in China.

Actually, the pension funds need to be responsible for supporting retirement income, and should not bear the function of bolstering the economy or cultivating the asset market. The pension funds should invest in global market, especially invest in those countries with young population, great growth potential and political stability and invest in those projects with high long-term reward-risk ratio. At the same time, to avoid risk, the government should establish investment management committee and issue regulation law for pension investment to regulate investment by setting alert line, establishing trigger mechanism and carrying on dynamic monitoring.

VI. CONCLUSION

The multi-pillar pension system in China is unbalanced development, and the reasons that cause this problem are as

following: high contribution rate of basic pension; insufficient incentive of tax on pension plans; low return of pension investment and conservative of investment policy. To improve the enthusiasm of enterprises and individuals to participate in the second and third pillar pension schemes, reducing the contribution ratio of the first pillar to release the contribution space for the second and third pillars is a good choice. And by permitting to invest pension funds in global capital market, improving the tax incentives for pension plan, introducing auto-enrollment in enterprise annuity plan and providing multiple portfolios with 'default option' which would differentiate portfolios based on participants' life cycle, the situation of unbalanced development of the multi-pillar pension system will be improved.

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