Social Protection Reform Project
中国-欧盟社会保障改革项目

Panel Discussion Report

Investment strategies of social insurance funds and risk control methodologies

Ministry of Finance, P. R. China

Tuesday, November 21st, 2017

Beijing, Renmin University, Qiushi Building, Meeting Room No.320

INTRODUCTION

On 21st November 2017, the EU-China Social Protection Reform Project- Component 2 held a Panel Discussion on the topic "Investment strategies of social insurance funds and risk control methodologies" (topic 2.3.1) in cooperation with the Social Security Department of the Ministry of Finance. The Panel was co-chaired by Mr. Di Donghui (Division Director, Actuarial Division, Social Security Department, MoF) and Mr. Massimo Antichi (EU-China SPRP, Project Leader, Italian Institute of Social Protection). The morning session was dedicated to the presentation of the Chinese context and background (by Prof. Hu Jiye); following was the presentation on the pension fund portfolio management: risk & risk premium, diversification, allocation and governance (by Mr. Davide Cipparrone). In the afternoon session, was presented the pension funds system in Italy: market structure, regulation, and supervision (by Mr. Andrea Canavesio). Finally, in the round table session the discussion was extended to the participation of other Chinese experts and government representatives, which shared their experience and opinions, as well as asked a series of questions to deepen the discussion on the topic. Around 20 participants, including representatives from the Social Security Department of the Ministry of Finance, Project Leader, University of International Business and Economics, Renmin University, China University of Political Science and Law, China Institute of Finance and Capital Market, China Securities Regulatory Commission, and the project team took part in the Panel.

The agenda and list of participants are attached as annexes.

Mr. Di Donghui opened the Panel by welcoming all the distinguished experts and participants, and by introducing the Chinese experts and officials attending the meeting. On behalf of the Social Security Department of MoF, Mr. Di extended his appreciation to the results achieved up to 2017 in the cooperation with the EU-China Social Protection Reform- Component 2. Since the project started, seven fields of research have been addressed, and two overseas training have been carried out, providing valuable support to MoF officials taking part to those activities. According to the project Grant, the SPRP should end in November 2018, however since the Social Security Department of MoF highly benefited and achieved good results thanks to the SPRP cooperation initiative, it is wished to extend the project up to November 2019.

The topic of the Panel is “Investment strategies of social insurance funds and risk control methodologies”. This topic has been discussed in the academia for a long time, while not being profoundly discussed at the policy level. The topic was in the policy agenda of the 18th Party Congress, yet, the MoF gives high importance to the issue of investments of social security funds and risk control methodologies; being a crucial issue for the sustainability of the pension system. Today the project invites experts[1] to discuss how to improve the investment strategies and have a more efficient risk management. The Chinese government on this field is facing various challenges, some of the questions are: How to set the right return rate of investments? How can the government make an assessment on the investment return? How to set our goals? How to improve the investment management and how to supervise the investment management? How to coordinate different departments to improve the supervision? How to improve the current regulation to have more profitable returns? How to expand the investment to the overseas market? Etc.

Mr. Antichi, Project Leader of the EU-China Social Protection Reform Project, and Director at the INPS department of Research and Study, is very pleased to participate to the C2 Panel. He expressed his greetings to the organizers, project team, MoF, Renmin University and all the experts contributing to the project. The SPRP is organized in 3 Components, the first one focusing on the policy development and reform of the social security system (mainly pension system), in cooperation with the NDRC, the second component focusing more on the financial management of social security funds, in cooperation with the MoF, and the third Component focusing on the legal framework and policy for social assistance, in cooperation with the MoCA. The aspect of investment of pension funds and risk control management is extremely relevant for the optimization of funds revenue. The Italian experts Mr. Canavesio and Cipparrone play an important role in Italy supporting the private pension funds investment strategies and risk control management.

Following Mr Antichi welcome speech, Prof. Li Zhen (Moderator of the Panel), briefly introduced the speakers and agenda of the Panel. As mentioned by Mr. Di, the topic of pension funds management is very important, the investment return and risk control of pension insurance fund is related to the responsibility of the government. The solution of its issues has an impact on the sustainability of the pension system. The panel gathered top experts from China and Italy to discuss on this very crucial issue.

Keynote 1: Investment strategies of social insurance funds and risk control methodologies in China **PROF. HU JIYE** (Director, School of Business, Department of Capital Finance, China University of Political Science and Law)

[1] Unfortunately, the UK Expert Mr. Grayson Clarke, could not attend the Panel. His report has contributed to the research progress and has been submitted to MoF.

1. Current Chinese Pension System

Following pilot projects in Shanghai and Guangzhou, the urban pension system was officially launched in 1997 with the announcement of a revised pension policy. While pensions were provided by state-owned enterprises in the previous system, a basic social insurance system took over. The reform started at the provincial level with a view to expanding it to the national level. The public pension system in China comprises an urban and a rural system. The latter was specifically designed for rural areas and differs considerably from the system in place in urban areas. According to 2003 estimates, 54 million people participated, which accounted for 9% of the total rural population. In 2006, a pilot project was launched in rural Beijing to include more people. It aims to include more rural population of over three million people in the formal pension system. By the end of 2016, the number of people with basic old-age insurance coverage for urban and rural residents was 508.47 million, up from 3.75 million at the end of the previous year; the actual number of people receiving benefits was 152.7 million

Rural migrant workers in urban areas, of which there are approximately 150 million, are not generally covered by the urban pension system. Participation is allowed, but not compulsory. Both employers and rural migrant workers, however, are reluctant to join, because participation entails higher labour costs for employers, whilst migrant workers are more interested in immediate wages than in pensions. What's more, their high mobility across regions impedes participation.

<u>The National Social Security Fund</u>

On 1 August 2000, the Central Committee of CPC and the State Council decided to establish National Social Security Fund (NSSF), and set up the National Council for Social Security Fund (SSF) for managing and operating the NSSF's assets. NSSF aims to be a solution to the problem of ageing and serves as a strategic reserve fund accumulated by the central government to support future social security expenditures and other social security needs. NSSF serves as the national social security reserve fund to supplement and adjust the social security spending such as social insurance during the peak time period of the aging of population. The funding sources of NSSF include fiscal allocation from the central government, the transfer of state-owned capital and the fund investment proceeds and capital raised by other methods approved by the State Council. The total assets of NSSF reached RMB 2,042.33 billion at the end of 2016, the average annual return is as high as 8.37% since 2000, with total RMB 822.73billion investment profit.

<u>Occupational Pensions: Enterprise Annuities</u>

Enterprise Annuities were established in 2004. Besides the newly established Enterprise Annuity funds, there are also legacy funds, namely company funds that were established before the Enterprise Annuity legislation was introduced. They are currently managed by local social security agencies, but the government intends to hand the management over to private companies. To make this process easier, the then Ministry of Labour and Social Security introduced a temporary guideline in April 2007 on how legacy funds can be transferred to the private sector. Enterprise Annuities are voluntary occupational plans that are fully-funded defined contribution accounts. They are established as a trust that can take the form of either an internal or external trustee model. Employer contributions are limited to a twelfth of employee salaries, and the combined employer/employee contribution should not exceed a sixth of total wages. To provide Enterprise Annuities to their employees, enterprises must have participated in the basic urban pension system, be financially sound and have collective bargaining mechanisms in place.

<u>Investment regulations</u>

1) At least 20% of assets must be invested in high liquidity money market instruments such as deposits, central bank notes and short-term bond repos;

2) A maximum of 50% of assets can be invested in term deposits, contractual deposits, government bonds, corporate bonds, convertible bonds and securities. At least 20% should be invested in government bonds;

3) A maximum of 30% of assets can be invested in stocks, investment-linked insurance products and equity funds. Investment in equities should not exceed 20%.

Pension benefits and taxation

If enterprises provide Enterprise Annuity plans, there is a tax exemption for employers up to 8.33% of wages. However, tax benefits differ in practice from province to province.

2. Foreign Experience and Chinese Path

The Netherlands

The second pillar's assets of the Netherlands were as large as 178% of its GDP in 2015,11 which ranked the first in the world. China can learn from its quasi-mandatory occupational pension system experience, so as to make China's private pension system more sustainable in the long run.

As in many other European countries, the Dutch pension system consists of three pillars: the state pension (AOW), the supplementary collective pensions, and the private individual pension products that each person can arrange for him-/herself. The first pillar's pension rights are accrued during working life, which is a pay-as-you-go system. Risk sharing, efficiency and collective schemes are key characteristics of the 2nd pillar system. In the Netherlands there is no legal obligation to become a member of a pension fund. But if the social partners decide to provide a pension scheme for their employees, the government can make a pension scheme mandatory for an entire sector or profession.

The United Kingdom

The United Kingdom is one of the few European countries that had not suffered serious pension crisis. The reasons are straightforward: state pensions (both in terms of the replacement ratio and as a proportion of average earnings) are one of the lowest in Europe. The UK has a long-standing funded private pension sector, its population is ageing less rapidly than elsewhere in Europe and its government has, since the beginning of the 1980s, taken measures to prevent pension crisis incurring.

The pillar 0 is the Pension Credit, the first pillar is the state pension scheme, the second pillar is the occupational pension scheme, and the third pillar is the personal pension scheme and the depository pension scheme.

In 2012, a trust-based workplace pension scheme, established by the UK legislation body to support automatic enrolment and ensure that all employers have access to a quality, low-cost pension scheme with which to meet the employer duties. A worker who is not eligible for automatic enrolment can choose to "opt in" to an automatic enrolment scheme. If they do opt in, their employer must still make a contribution. UK's social security funds and occupational pension schemes for public institution employees feature a pays-as-you-go scheme. As an exception, the Local Government Pension Scheme (LGPS) covering local government workers and consisting of 98 separate funds all over the UK is a defined benefit scheme (DB) which has the general objective of being funded at 100% of past and future service liabilities evaluated in triennial actuarial valuations.

Learning from the UK's 2008 pension act, reform of China's second pillar could draw lessons from British auto-enrollment reform, as well as its occupational pension regulation system. The Pension Regulator (TPR) of the UK is a good model for China.

Sweden and Italy

If China reforms its first pillar public pension, the "empty accounts" maybe reformed to notional accounts, by which the experiences from Italy and Sweden would be very useful.

The first non-financial (notional) defined contribution (NDC) pension system was established in Sweden in 1994, and Italy adopted NDC in 1995. NDC is a combination of pay-as-you-go financing and an individual lifetime account. Pensions are granted as life annuities, based on the individual's account balance and his or her birth cohort's life expectancy at retirement.

As to risk control, because NDC cannot make an exception from being influenced by demographic and economic factors, financial problems still exist. When the pension system is threatened by large and long-term financial imbalances, both built-in and ad-hoc measures can be used to respond. However, it is noticeable that the public will be hard to convince when unexpected unfavorable macroeconomic or demographic scenario occur, which will definitely result in negative misperception related to personal benefits.

How China can learn

Based on the experience and lessons of above European countries, China's pension system must reform as soon as possible so as to ensure equality and sustainability, which is also the general target of social security reform set by the 3rd Plenary Session of the 18th CPC Central Committee in 2013. In State Council's Decision on the Reform of the Old-age Insurance System for Government Bodies and Public Institutions, civil servant and public service units will join the existing basic urban pension system, which will make all sector employees in China more equal. As to the sustainability of pension, China still has a long way to go. Allianz published reports of the Pension Sustainability Index (PSI) in 2014 and 2016, which combines various characteristics of pension systems with the factors that influence them to help track and evaluate policy changes made in different countries around the world. In addressing the sustainability of a country's public pension system, the PSI can give an indication of a country's need for reforms to maintain long-term financial sustainability. PSI of China was ranked 45th in all 50 countries in 2014. Two years letter, the situation of China's PSI became even worse. China was ranked 53th in all 54 countries in 2016, the last one is Thailand.

3. Risk Prevention of Pension Fund Investment

The Measures for the Administration of Investment in Basic Pension Insurance Funds (2015) (Abbreviated as MAI), stipulated the scope, the proportion, and the reserve fund of pension fund investment. MAI permits portfolio investment limits on investment proportion in different kinds of assets. In Article 37 (4), the aggregate proportion of investment in national key projects and equities of key enterprises shall not exceed 20% of net asset value of pension funds. It looks like this rule had interrupted the investment in risky portfolio, however, according to Risky Portfolio Theory, only when the investment proportion of single asset far below the whole investment scale, risk will be reduced effectively. Nevertheless, the 20% upper limit is too remote from the so called “far below” standard, thus, Article 37 (4) is not a deviation of Risky Portfolio Theory.

Lastly, Article 55 requires trustees, custody institutions and investment management institutions that manage and operate pension fund assets shall strictly observe the relevant occupational rules and industry rules, and perform their duty of good faith, prudence and diligence. This rule is similar to the Prudent Person Standard in common law system.

The Ineffectiveness in Practicing Prudent Person Principle

The essence of Prudent Person Principle is “exercise like a reasonable investor investing his own property”. This requirement looks reasonable; however it is not logical under Portfolio Theory.

According to the capital assets pricing model (CAPM) theory, although the risky assets market combination is certain, the proportion between the risky and non-risk assets is determined by investors themselves to satisfy their own risk preference. There is no CAPM theoretical limit on this proportion distribution. However, pension fund’s risk preference is determined by pension creditors rather than pension fund investment managers. Pension fund creditors should make their risk preference clear to investment managers. A same portfolio theory will make a huge difference between a RMB100,000 investment and A RMB1 billion portfolio, since risk preferences cannot be the same.

Additionally, pension fund investment manager’s portfolio is an incomplete integrity, and it must be supplemented by pension creditors’ expense. This also contributes to the result that pension fund investment manager cannot act like investing his own property and must settle specific risk preference and assets risk structure together with pension creditors.

As the average rate of return of SSIF is lower than national debt’s, and the high risk of SSIF, CAPM is not applicable to Chinese security market. Actually, no matter China and other country, an overestimate of average rate of return and an underestimate of risk is a common result of CAPM assessment of risky assets value. This is due to unforeseeable crisis in financial market, for example, the 2008 global financial crisis. Because of the use of simple equal calculation rather than compound interest average, an overestimate of average rate of return appears. Especially when there is a huge fluctuation, the overestimate would be severer. Additionally, the CAPM model’s inherent flaw of assumption always leads to the underestimate of risk.

Thus, when the arithmetic average of rate of return is certain, the more fluctuated of actual rate of return, the smaller of compound interest rate. When the compound interest rate of return is certain, the more fluctuated of actual rate of return, the bigger arithmetic average of rate of return. If the compound interest rate of return is fixed, the arithmetic average of rate of return trends to increasing along with the fluctuation of actual rate of return increased. This may be causation for normal result of CAPM test, which said that the relationship between rate of return and risk matches the market.

This also explains why some people eventually lose even though they thought they get more than 50% chance to win when trading in financial market. They always are confident in their judgments, and a tiny mistake would make a huge difference, as an inevitable result of mathematic outcome. The correct way is to fix the cash flow distribution of risky assets and not fix yield distribution in the assumption, then the risky assets’ rate of return covariance would not be certain.

When risky assets’ price earnings ratio and risky assets’ unit revenue systematic risk (Not rate of return’s systematic risk, because there is no price variable in unit revenue, so it could be measured without price. Rate of return cannot be measured without price due to the existence of price variable) are given, we can get the risk preference coefficient of assets market. If the compound interest rate of return is fixed, the arithmetic average of rate of return trends to increasing along with the fluctuation of actual rate of return increased. This may be causation for normal result of CAPM test, which said that the relationship between rate of return and risk matches the market.

According to the calculated risk preference coefficient E, investors can make the decision of whether to enter the market. Government can also figure out if there are economic bubbles based on the risk preference coefficient, so as to take the corresponding macro-control. The revised model illustrates that only when market risk preference, assets future cash flow distribution, and cash flow structural relationship are given, CAPM’s systematic risk cannot not be avoided.

If we can secure the stability of macro-economy, make a good direction of capital market anti-pressure ability, and improve economical structure, the systematic risk of capital market can be reduced effectively. It is not strange that, in the Chinese security market, stock index compound interest average rate of return is lower than that of the national debt. A good investment should be companied with evaluation and prevention of the whole systematic risk.

While using VAR method, we compute the maximum loss under the confidence level of 95% and the proportion of the portfolio risk aversion. The results further prove that the portfolio of NSSF works effectively. Using the VAR method to measure the largest loss of national social security fund investment risk under the confidence level of 95%, and the proportion of the portfolio risk aversion, proves that NSSF's investment portfolio is further effectively.

The risk control effect of NSSF is better, so we can increase the fund assets value-added space on the basis of security. It may be useful to increase investment limit step by step, discuss iteratively, use different methods to measure the risk, and compare with the return, then ensure the low risk of social insurance fund investment in the first place.

To establish the measurement method of market risk preference and risky assets systematic risk, then to provide a quantifiable index for pension fund investment management institutions and regulators, so as to make a contribution to prevent systematic risk.

Learning the risk control effect of NSSF, considering the huge amount of social insurance funds, and active investment, may have a significant impact on capital market, so we can choose the methods is passive investment, that is, to invest in index funds (e.g., Shanghai and Shengzhen 300), at the same time invest regularly, pressed in the stock market volatility on the effects of pension net asset value.

4. Outlook

China's pension reforms are ambitious and necessary given that the preceding system was inadequate for the new economic environment. Taking into account the size of the country and the significant regional differences across the country, implementing the new system is a considerable challenge. This may be the main reason why the government has focused on developing a formal pension system in urban areas in the first place. By comparison, with its very low coverage, the rural pension system has not seen far-reaching reforms.

The reason to coordinating and cooperating with the National Social Security Fund (NSSF) is that a large amount of provincial social insurance fund assets are being managed by NSSF now. As the NSSF have a long history of 17 years investment, it has rich experience in risk control albeit their lows return of 1.76% in 2016.

In an era of Big Data, the importance of social insurance information is becoming increasingly important. In order to coordinating and integrating social insurance information, and to control risk, the pension fund managers should:

- Analyze social insurance fund information sharing system for policy makers and NSSF, in order to design information sharing system for operational authorities and management institutions;
- Analyze social insurance information sharing system for fund managers in order to design information sharing system for multiple authorities and levels;

While the system for the urban areas has been legislated, implementation is ongoing. Reforms aim to tackle two main issues, namely refilling of empty accounts in pillar 1B and the introduction of occupational pensions through the Enterprise Annuity system. China's second pillar covered only 6.4% of companies' employees. Local social insurance fund can draw lessons from the national social security fund investment, and try to use the model and method to expand investment channels appropriately, create more benefits on the basis of ensure the safety.

It is important to build the system of social insurance funds portfolio insurance. At present, there is no law in our country to provide remedial measures for the loss by entrusted investment, so it is time to establish relevant system of social Insurance fund securities investment Insurance, to protect social insurance fund and formulating premium collection standard to perfect the social insurance fund portfolio.

According to the limitations, our future research for social insurance funds solvency risk should base on the actuarial statistics, when analyzing provincial social insurance fund's overall solvency risk, eliminate the applications such as government subsidies, introduce wages, retirement age and replacement rate and other factors. At the same time, in accordance with the requirements of the panel data, extract the provincial social insurance funds income, expenditure and balance data respectively, set up standard panel data model, analyze the provincial social insurance funds solvency risk specifically, find out the provinces' contribution to the overall solvency level of the national social insurance fund.

Keynote 2: Pension fund portfolio management: risk & risk premium, diversification, allocation and governance **MR. DAVIDE CIPPARRONE** (Mangusta Risk Ltd.)

Portfolio management for pension fund

The risk for a pension funds is different from other institutions. Our starting point is considering this specific kind of risk, is not just financial risk but a complex theme. For a pension fund the risk is the chance to have benefits below the target. In finance, risk is the chance to have a return below the expected return target.

For a pension fund the objective is: sustainability, efficiency, and solvency. The financial return is just a tool to get the target.

Looking at the pension fund, there are inflows and outflows, which are benefits and the cost, we also have return and cost related to pension fund activities, all these inflows and outflows are paid by the total assets. We can say the total risk of a pension fund depends on: liabilities (liabilities term structure, forward and maturity); the assets available (quantity and quality); and contributory flows (contributes term structure, forward and maturity).

The evolution of the pension fund depends on the equation: sum of total assets plus portfolio return plus benefits, plus the cost. The assets and return are exposed to the financial risk, benefits and contributions are exposed to the actuarial risk. The actuarial risk: contributions are below the target because we made the wrong hypothesis or something wrong in the market. This has an impact on pension fund sustainability. The first way of financing consists of payments and contributions and from wealth, total assets. The un-funded portion (GAP) must be funded by returns.

There are 3 possible scenarios: decreasing of contributory flows, increasing pensions/benefits, or the portfolio finance loss, that can lead to different worse coverage levels and therefore make interventions necessary to maintain the funding level.

The first way to intervene is to target return on a pension fund that should cover the portion not financed by other active cash flows for the achievement of the objectives, but obviously this determines the exposure to the resulting financial risk.

There are lot of risk, but aiming at the biggest we have financial and actuarial risk, we have same interchanges, we can move a little if we have better actuarial risk, we cannot avoid financial risk, an inconsistent or inefficient investment policy causes an over exposure to actuarial risk. A weak or unbalanced actuarial model causes over-exposure to financial risk.

How to find the right target of a pension fund? All the risks are related to the target we want to achieve. The target should be coherent with the liabilities, when we set the target it means it is able to achieve the adequate service for the members (pay adequate benefits), we need to consider the total risk we are able to bear, if the risk is too high we need to choose a different target. Our target should be ready to fund long term benefits adequate for the members. Time horizon is very relevant for pension funds, and risk management.

Looking at the pension fund management, a pension scheme should consider most wide range of opportunities for investments. Not to say every kind of assets, but it should consider all the possibilities. Every limits and constraints have an impact on the efficiency of the portfolio. The time horizon and the liquidity are very relevant for a pension fund. The investible universe, the limits and the investment horizon must be compatible and consistent with the objectives. Individual investments and investments choices must be assessed as a priority for the contribution to the risk of the pension funds' assets. Performance needs to be constantly evaluated with appropriate procedures to be effective on the portfolio. Short-term choices cannot affect the pursuit of long-term results.

The risk of pension fund is asset liability mismatching, and this dis-alignment of asset and liabilities relies on the fact that we choose the wrong target, a reduction on the contributions, a higher amount of performances. Other reasons can be a liquidity trap, and a big financial loss. To intervene on these 5 scenarios there are 4 ways to manage the risk of the Pension Fund: 1) the asset liability management; 2) the liquidity of the portfolio, 3) the concentrations; and 4) conflict of interest. The first solution is governance, the best way is to invest in governance of the pension funds management, the governance is the most important in the long-term. Make timely and effective operational and management interventions that determine short-term performance without acting in the institutional structure. Pursue long term performance through the evolution and definition of the institutional structure.

The pension funds system in Italy: market structure, regulation, and supervision **MR. ANDREA CANAVESIO** (Mangusta Risk Ltd.)

Private pension plans are mainly defined contribution and can be both occupational and personal. Membership is voluntary, with auto-enrolment for new members of workforce. Occupational plans are set up by collective bargaining between employers' associations and trade unions at several levels. Membership occurs on a collective basis. Personal plans are provided by banks, insurance companies, investment firms and asset management companies. Membership is on an individual basis.

The regulatory framework regarding, with a few exemptions, is the same both for occupational and personal pensions. The supervision is concentrated in an independent specialized authority (Commissione di Vigilanza sui Fondi Pensione, COVIP henceforth).

Pension funds in Italy were introduced in 1993 with the Legislative Decree n.124, in conjunction with a major reform on the 1st pillar. However, pension funds were already available before 1993 for workers in selected firms (mainly in the banking and insurance industries and in major manufacturing firms). These pension funds are both defined contribution and defined benefit (now closed to new members), support occupational pensions and can be organized as autonomous funds or as book reserves. These funds are known as the PRE-EXISTING PENSION FUNDS. Their regulation now overlaps for most aspects with that of pension funds introduced after 1993. Currently, with some exceptions (public employees' pension funds and the so-called OLD PIP), all pension funds are regulated under the 2005 Legislative Decree n.252.

<u>Contractual Pension Funds</u> (Fondi pensione negoziali) Typically set up by collective bargaining and closed to the workers not pertaining to a given economic sector or professional category. They support only occupational pensions.

<u>Pension Funds</u> (Fondi pensione aperti) Promoted by banks, insurance and investment companies, "open" to the general public. They support both occupational and personal pensions.

<u>Personal Retirement Plans Implemented Through Insurance Policies</u> (Piani individuali pensionistici-PIPs) Unit inked policies and traditional life policies promoted by insurance companies with specific characteristics common to all pension funds. They support only personal pensions.

All pension funds operate with a defined contribution regime. The de-fined benefit regime still operates for some residual pre-existing pension funds, closed to new members. Contributions are set on a voluntary basis. For occupational plans, contributions are supplied by employers and employees. The (compulsory) contributions to the severance pay fund (TFR) can also be diverted to pension funds. Firm level or country level labor contracts can set the minimum amount of contribution from employers and employees. For personal pension plans, contributions are provided by members only.

Benefits are distributed as annuities and max 50% could be in lumpsum. Benefit are cashed at the retirement age (at least 5 years of contributions to the fund are needed). Up to 75% of the overall position can be cashed in before retirement age under special circumstances.

These dayst wo new measures are available to cash the benefits before the retirement age. The payment of pension annuities are, in general, entrusted to a life insurance company (annuities could be paid out directly by the pension funds if previously authorized by COVIP).

Fiscal aspects

The ETT (Exempt, Taxed, Taxed) regime applies, not the most com-mon regime in OECD countries. Contributions are tax-deductible up to an upper limit EUR 5,164a year. The limit applies to the sum of employer and employees' contribution, where this applies. Net investment income is taxed at anannual rate of 12,50-20%. Taxes on pension benefits (annuity or lumpsum), net of the amount on which tax has already been paid, are lower than general income taxes: the tax rate is 15%, with a reduction of 0.3% for every year of participation after 15, not beyond a maximum reduction of 6%. Benefits received as cash advance are taxed less favorably (23%).

Participation rates highly vary by regions, particularly according to the level of wealth of each region.

Pension funds investment plans.

Pension funds invest members' contributions in financial and real assets markets. Pension funds can offer 4 different investment lines, named guaran-teed, bond, balanced and equity from the less to the riskier. Members select their preferred investment lines within the menu offered and can also choose a combination of different portfolios.

Investment policies: to build the investment lines, pension funds follow their investment policies. In designing their investment policies, pension funds have to satisfy a number of constraints set by the law: rules set by the 2005 Legislative Decree n.252 and the 2004 Decree of the Ministry of the Treasury n.166 are fully applicable to contractual and open pension funds; some exceptions apply to pre-existing pension funds. With respect to PIPs, investment rules for insurance products do apply. Investment policies are notified to the supervision authorities.

Investment rules

- Invest in cash: no specific limit
- Direct investments in real estate: not allowed
- Securities not traded on regulated markets and FIA <30%
- Borrowing, lending and short telling: not allowed
- Derivative contracts: only if the financial leverage is <1
- Currency exposure 30%
- Investments in single issuer 5%
- Investments in securities issued by the sponsoring employer: single employer funds: 5%, multi-employer funds: 20% industry wide pension funds:30%

Investment management: contractual pension funds

Contractual pension funds are not allowed to directly manage their investments. Investment decisions are delegated to professional managers (banks, insurance companies, investment firms, asset management companies). An agreement must be signed between the governing board of the pension fund and the asset manager outlining the guidelines for the investment of fund assets. Managers are selected according to publicity and transparency rules, following the guidelines provided by COVIP.

Investment management: open and pre-existing pension funds and PIP

Open pension funds are instituted by professional asset managers and by construction are allowed to directly manage their resources. Pre-existing pension find scan directly manage their resources. PIP are instituted by insurance companies, which typically keep the members' resources separate from the rest of company assets.

Management board: set and approve the investment policy; approve and withdraw the mandate of asset managers; supervise on the activity of the investment management function; approve the internal control procedures.

The board selection: created by 2 parties, board members are appointed according to criteria of professional qualification and competence between subjects that have collected an experience of at least 3 years performing the activities.

All pension funds have to make available to potential new members two documents: the Key Information Document (KID) and the Standard Pension Project (SPP). Two further documents have to be made available to members on an yearly basis: one containing both information on the fund and on the position (Periodic communication, PC), the other containing estimates of pension benefits (My supplementary pension, MSP). All documents have to be written in conformity with the scheme provided by COVIP and estimates of pension benefits are computed using a set of parametric assumption provided by COVIP. To further enhance transparency and comparability, all pension funds statutes and regulations have to be compliant with the schemes provided by COVIP.

Round Table

Moderator- Mr. Massimo Antichi (EU-China SPRP, Project Leader, Italian Institute of Social Protection) **Participants: Prof. Li Zhen** (Director, Institute of Social Security Renmin University); **Mr. Yuwei Hu** (Head, Department of International Finance, China Institute of Finance and Capital Market, China Securities Regulatory Commission (CSRC); **Prof. Sun Shouji** (Associate professor, School of Insurance and Economics, University of International Business and Economics).

Li Zhen thanks Mr. Bruni and Mr. Di for organizing the Panel, the three speakers gave excellent presentations and the participants learned a lot. First, she makes some comments on Prof. Hu Jiye presentation. Prof. Hu mentioned that the investment return rate of the national security fund council is 8.7%, according to Li, the current calculation is over estimated, and we should better calculate. Secondly, Prof. Hu mentioned we can learn from the UK and the Netherlands experiences to build the 2nd pillar, Prof Li agrees with his opinion to develop the 2nd and 3rd pillar, however, that the 1st pillar is still not well developed we should focus the attention to the 1st pillar. Prof. Hu made very good suggestions on risk control management and investment strategies. He analyzed the return rate for 3 types of assets, however we know the stock market in China is not mature yet, compared to the western countries. So, the conclusion diverted our common perception, there is no doubt that the suggestions are based on statistics, however in future investment policies we should be based on the stock market in China, in the future it will be more mature and therefore will have less fluctuation.

Regarding Davide presentation, we can learn from foreign experience on how to make a long term balance sheet. We learned a more important concept: the risk in pension fund is a different risk from other funds, then when we consider the risk appetite we should take into account the long term balance sheet. After listening the presentation of today if we can combine prof. Hu and Davide suggestions it would be very good. I think if we consider the public policy investment on the context of balance sheet that would be perfect.

Following Mr. Li there was an exchange of opinions on how to provide incentives to enroll the youngest on the second pillar.

Mr. Hu Yuwei expresses his gratitude to Prof. Li, Mr. Di and Mr. Bruni to have the opportunity to discuss with the foreign experts on the topic. Mr. Hu already participated in MoHRSS previous project on social security. He provided some comments, especially about the relationships of 2nd and 1st pillar. There are many discussions on the social security reform, the 2nd and 3rd pillar are very important, Prof. Li mentioned we should focus first on the 1st pillar. The structure of social security in China is 1st pillar, 2nd pillar occupational, 3rd in evolution, most of the pillars are in the form of DB and PAG, the rest is fully funded.

We need the financial support for the 1st and 2nd pillar, do we have capability to provide the financial support? we need to discuss more on this aspect. EU countries started to carry out pension system reform in 2010 based on the accumulation, the 1st pillar still plays the most important role, the focus is still on the 1st system. The situation is different in Anglo-Saxon countries. China should learn from this gap. The data shows that although assets in 1st pillar increase, the return doesn't see an increase, this is interesting.

Following there was a short discussion on the following issues:

- regulatory commission COVIP, its position, relationship with other financial regulators, coordination with other agencies, etc.

- 2nd pillar: the pension insurance in Italy is related to the income level, however the participation rate is higher in north than south. The experience of regional pension plans in northern Italy (Veneto).

- Financial culture of a country is important for the investment strategy.

- Financial engineering and social engineering. The government should create a financial system, which follows the social system. It is needed to start from the situation you are at, and the social structure you want to get.

Sun Shouji also expresses his positive feedback on the excellent presentations of the experts. He first elaborated on the issue of how to set the target of return of investment rate. In the past we always focus on CPI in terms of investment, previously manly in investment bound. After the 2015 reform, the scope of investment is wider, we can consider income growth rate as a benchmark. Last year the income growth rate was quite high, however with the decrease of economic income growth rate, the return rate will decrease.

In terms of investments previously we invest only on accumulation process, we could invest also in the payment process, so the investor can decide also a hybrid system to invest. Scholars proposed we can issue some longevity bonds to financial institutions to mitigate and share the risk, Mr. Sun also thinks this is a very good point, we can issue specific insurance bonds, this is a good allocation, is part of the financial infrastructure.

Relationship between 1st and second pillar: Italy and UK have very good enrollment, on one hand they are strengthening the 1st pillar, on the other, they are developing the 2nd pillar.

Drawing the conclusion of the meeting, Mr. Di thanks again all the experts and participants for the successful Panel discussion. The six hours presentation and discussion allowed a deeper understanding on the topic and Mr. Di was inspired by the experiences that were shared. After the Panel, the reports will be finalized and submitted to the MoF. Mr. Bruni will lead the working group drafting the reports and policy proposals.

Prepared by Ms. Valentina Pignotti, EU-China Social Protection Reform Project

ANNEX I
PANEL DISCUSSION AGENDA

Component 2

第二部分

Panel Discussion

专家分组座谈

Investment strategies of social insurance funds and risk control methodologies

社会保障基金投资策略及风险控制

Ministry of Finance, P. R. China

中华人民共和国财政部

Tuesday, November 21st, 2017
2017 年 11 月 21 日，星期二
Beijing, Renmin University, Qiushi Building, Meeting Room No.320
北京，中国人民大学求是楼 320 会议室

9:30-10:00	**签到 Registration**
10:00-10:15	欢迎致辞 **邸东辉** (财政部社会保障司制度精算处处长) **马西莫•安帝琦**（中欧社保改革项目主管， 意大利国家社会保障署） Welcome Speeches by **Mr. Di Donghui** (Division Director, Actuarial Division, Social Security Department, MoF) and Mr. **Massimo Antichi** (EU-China SPRP, Project Leader, Italian Institute of Social Protection)
10:15-11:00	主持人: **李珍 教授**（中国人民大学，社会保障研究所所长） Moderator: **Prof. Li Zhen** (Director, Institute of Social Security Renmin University) 主题发言1：中国社会保障基金投资策略及风险控制 发言人：**胡继晔** 教授（中国政法大学-商学院资本金融系主任） Keynote 1: Investment strategies of social insurance funds and risk control methodologies in China Speaker: Prof. **Hu Jiye** (Director, School of Business, Department of Capital Finance, China University of Political Science and Law)
11:00-11:45	主题发言 2：养老基金投资组合管理：风险和风险溢价、分散化、配置和治理 发言人：**大卫德•齐帕尔罗内** 曼古斯塔 风险管理 有限公司 Keynote 2: Pension fund portfolio management: risk & risk premium, diversification, allocation and governance Speaker: Mr. Davide Cipparrone, Mangusta Risk Ltd.
11:45-12:15	问答 Questions & Answers
12:15-14:00	**午餐休息 Lunch Break**
14:00-14:45	主题发言 3：意大利养老基金体系：市场结构、管制和监督 发言人： **安得利亚•卡那维西欧安** 曼古斯塔 风险管理 有限公司 Keynote 3: The pension funds system in Italy: market structure, regulation, and supervision Speaker: Mr. Andrea Canavesio, Mangusta Risk Ltd.

14:45-15:00	**茶歇 Coffee Break**
15:00-16:00	圆桌讨论： **主持人：马西莫•安帝琦**（中欧社保改革项目主管， 意大利国家社会保障署） **李珍 教授**（中国人民大学，社会保障研究所所长） **胡玉玮** (国际金融部总监，研究员， 证监会中证金融研究院) **孙守纪 教授** （对外经济贸易大学） Round Table: **Moderator- Mr. Massimo Antichi** (EU-China SPRP, Project Leader, Italian Institute of Social Protection) **Prof. Li Zhen** (Director, Institute of Social Security Renmin University) **Mr. Yuwei Hu** (Head, Department of International Finance, China Institute of Finance and Capital Market, China Securities Regulatory Commission (CSRC) **Prof. Sun Shouji** (Associate professor, School of Insurance and Economics, University of International Business and Economics)
16:00-16:15	**主持人总结:** **邸东辉** 财政部社会保障司制度精算处处长 **米凯乐·布鲁尼**中欧社保改革项目第二部分欧方常驻专家 Conclusion by **Mr. Di Donghui** (Division Director, Actuarial Division, Social Security Department, MoF) and Mr. **Michele Bruni** (EU-China SPRP C2 Resident Expert)

ANNEX II

LIST OF PARTICIPANTS

List of participants
参会名单

Beijing, November21st, 2017
北京 2017 年 11 月 21 日

No 序号	Name of the participants 姓名	Institution/organization 机构/组织
Ministry of Finance 财政部		
1.	邸东辉 Mr. Di Donghui	财政部社会保障司制度精算处处长 Division Director, Actuarial Division, Social Security Department, MoF
2.	杨良金 Mr. Yang Liangjin	财政部社会保障司制度精算处副处长 Deputy Director, Actuarial Division, Social Security Department, MoF
3.	李岩 Mr. Li Yang	财政部社会保障司制度精算处主任科员,Principal Staff, Actuarial Division, Social Security Department, MoF
Delegation of the European Union, EU-China SPRP Representatives 欧盟驻华代表团、中欧社会保障改革项目办及国际组织代表		
4.	Mrs..Sakura Moretto 马潇坤	Delegation of the European Union TBC 欧盟驻华代表团，合作处 等待
5.	Mr. Massimo Antichi 马西莫•安帝琦	EU-China SPRP, Project Leader, Italian Institute of Social Protection 中欧社保改革项目主管，意大利国家社会保障署
6.	Mr. Michele Bruni 米凯尔·布鲁尼	EU Resident Expert Component 2/Team Leader, EU-CHINA SPRP 中国一欧盟社会保障改革项目第二部分欧方常驻专家 / 项目领导人
7.	Ms. Marzena Breza 马哲娜	EU Resident Expert Component 3, EU-CHINA SPRP 中国一欧盟社会保障改革项目第三部分欧方常驻专家
8.	Ms. Valentina Pignotti 毕若华	Assistant to Component 2 / Team Leader, EU-CHINA SPRP 中国一欧盟社会保障改革项目第二部分 / 项目领导人助理
9.	Mr. Lin Guowang 林国旺	Interpreter, EU-CHINA SPRP 中国一欧盟社会保障改革项目翻译
10.	Mrs. Ma Lan 马岚	Project Assistant，EU-CHINA SPRP 中国一欧盟社会保障改革项目助理
Experts 专家学者		

11.	胡继晔 Prof. Hu Jiye	中国政法大学-商学院资本金融系主任 Director, School of Business, Department of Capital Finance, China University of Political Science and Law
12.	李珍 Prof. Li Zhen	中国人民大学，社会保障研究所所长 Director, Institute of Social Security Renmin University
13.	胡玉玮 Prof. Yuwei Hu	国际金融部总监，研究员，证监会中证金融研究院 Head, Department of International Finance, China Institute of Finance and Capital Market, China Securities Regulatory Commission (CSRC)
14.	孙守纪 Prof. Sun Shouji	对外经济贸易大学 Associate professor, School of Insurance and Economics, University of International Business and Economics
15.	大卫德·齐帕尔罗内 Mr. Davide Cipparrone	曼古斯塔 风险管理 有限公司 Mangusta Risk Ltd.
16.	安得利亚·卡那维西欧安 Mr. Andrea Canavesio	曼古斯塔 风险管理 有限公司 Mangusta Risk Ltd.