



Social Protection Reform Project
中国欧盟社会保护改革项目

Component 1

**POLICY REFORMS FOR
SOCIAL PROTECTION
AND EMPLOYMENT PROMOTION
IN CHINA**
**Main Findings &
Recommendations**

Beijing, July 2019 v.1

INTRODUCTION

From December 2014 until November 2019, the EU-China Social Protection reform project Component One SPRP C1 reviewed, with its main partner, the Department for Employment, Income distribution and Consumption of the National Development and reform Commission NDRC a number of critical issues for the future of China's social protection and employment promotion system.

For each of the 5 years of the project, activities conducted by SPRP C1 addressed one specific aspect of social protection and employment reform, thus focusing its interventions. The year 2015 was mostly devoted to the fundamentals of the pension system in China; 2016 reviewed the issue of its sustainability; in 2017, the relevance and social efficiency of a reformed system was at the core of research conducted; in 2018 the issue at stake was the role of social protection reform in upholding societal changes while in 2019, for the final year of the Project, the issue of planning for reform, which corresponds to the core mandate of NDRC, formed the golden thread for SPRP C1 activities.

Whereas all SPRP C1 outputs are readily available from their compendium entitled *Memorabilia*¹ included yearly compilation of policy recommendations² submitted to NDRC by Chinese experts working on selected topics with in the background relevant EU experience³, it was considered still potentially useful to group in a shorter documents the main features of these recommendations, presented not chronologically, but according to main framework issues.

The following chapters will therefore present⁴ policy proposals submitted to NDRC on behalf of SPRP C1, classified according to the following divisions: main principles for a pension reform; relations between social protection and employment promotion; sustainability issues; evaluation process.

Table on page 4 below summarizes this approach, providing precise references for each of the topics to be addressed.

JV Gruat, 5 July 2019 v.1

¹ English only – <https://www.euchinasprp.eu/en/horizontal-en/project-memorabilia-en>

² https://www.euchinasprp.eu/en/horizontal-en/project-memorabilia-en#_Toc521934024

³ In total 24 reports were produced that contained specific reform proposals for China. Two of them were authored by foreigners while the other “non-Chinese” reports published by SPRP C1 analysed European situation for subsequent perusal by Chinese experts and decision makers.

⁴ This compilation publication should not be construed in any manner as replacing or substituting the full text of the original reports or related recommendations. Those are part of the *Project Memorabilia* – accessible from its items 3.1.8.2 and 3.1.8.1 respectively. Full texts of reports and recommendations may also be consulted from the Project website, under Component One dedicated page. In both cases, reports and documents are presented in a simple chronological order.

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Breakdown of recommendations by sources

Chapter	Report / Theme	Author	Year
1. MAIN PRINCIPLES	Social Insurance Administration Service System	Tian ZH	2015
	Public Sector Pension Reform	Zhang YH	2015
	Combination of social pooling and individual accounts techniques in pension schemes for employees	Song XW	2015
	Multi-tiered design of pension system	Dong KY	2015
	Parametric reforms of pension system	Zhou H	2017
	Proposal for a Reformed Structure of the Chinese Pension System for Urban Employees	Gruat JV	2018
2. SOCIAL PROTECTION & EMPLOYMENT	Strategy of integrating social security system in urban and rural context	Wang ZY	2015
	Monitoring interaction between employment promotion and social protection policies	Zhang JW	2016
	Quality-Oriented Development & Capacity Building for the Labour Force	Yang WG	2018
	Universal Pension System: Chinese Situation and Prospects	Qiu CJ	2018
	Employment and Social Security Issues under the Background of Population Movement	Jin WG	2018
	Planning for Employment promotion	Yang WG	2019
3. SUSTAINABILITY	Sustainability of pension schemes (contributions and government subsidies)	Zheng BW	2016
	Ageing population and possible strategy of dealing with this situation	Dong KY	2016
	Relationship between socio-economic development and the redistribution function of social security	Li S	2016
	Active Ageing Index for China	Zaidi A	2018
	Policies and Tools for Redistribution of Primary Income	Li S	2018
	Relationship between socio-economic development and the redistribution function of social security –parametric reform	Li S	2017
4. EVALUATION	Contributing to the Elaboration of the XIIith National Five-Year Plan (2016-2020)	Tian ZH	2015
	National policy evaluation technique in the area of social protection – employment promotion	Yue JL	2017
	National policy evaluation technique in the area of social protection – social security	Zheng GC	2017
	Gender issues in employment and social protection	Yue JL, Lin Y	2018
	Planning for multilayer social protection	Zhou H	2019
	Planning for social security reform	Song XW	2019

I – Main Principles

Beyond submitting proposals concerning the consolidation of the reform of the public pension reform which had just came into effect when the Project started its activities⁵, and the continued improvements in the overall management of the social insurance system⁶, fundamental research conducted on the basic principles to be applied for a successful pension reform system focused on 3 elements, namely:

- Parametric reform, which relates to the elements within the system which modification may have a substantial effect on the latter⁷;
- The respective parts to be allotted to solidarity and to contributions yield within the basic pension system⁸;
- The interest in supplementing basic public pension insurance by supplementary and voluntary pension coverage, in order to ensure better levels for overall pension replacement rate and improve overall system sustainability⁹.

Finally, on the basis of all previous project works and of important research otherwise conducted, it was possible for the project Resident Expert to formulate a comprehensive proposal for the reform of the pension system for salaried employees that could be submitted to competent authorities¹⁰ ‘¹¹.

The sections to follow reproduce the main conclusions reached and reform proposals formulated under each of the above-listed headings.

⁵ Zhang Yinghua, Public Sector Pension reform, C1 SPRP Assessment reports vol. I, 2015

⁶ Tian Zhonghe, Social Insurance Administration Service System, C1 SPRP Assessment reports vol. I, 2015

⁷ Zhou Hong, Parametric reforms of pension systems, C1 SPRP Assessment reports vol. III, 2017

⁸ Song Xiaowu, Combination of social pooling and individual accounts techniques in pension schemes for employees, C1 SPRP Assessment reports vol. I, 2015

⁹ Dong Keyong, Multi-tier design of pension system, C1 SPRP Assessment reports vol. I, 2015

¹⁰ In addition to NDRC, the Proposal was notably submitted to CASS, to MoHRSS, to the Chinese Association of Social insurance and to the Chinese Association of Social security.

¹¹ Gruat Jean-Victor, Proposal for a Reformed structure of the Chinese Pension System for Urban employees, C1 SPRP Assessment reports vol. IV, 2018

1. Social Insurance Administration

The situation analysis highlighted the following elements, selected as particularly relevant for shaping NDRC contribution to the XIII five-year plan for the subject of pension reform, including related managerial issues.

From the onset of the 12th Five Year Plan period, a social security system covering urban and rural residents has been tentatively established in China, with expanding coverage, growing participants, and enhanced the social security. Significant stride has been made in the undertaking of social security, which laid a solid foundation for the development of social security during the 13th Five Year Plan period.

Further progress and reform now need to focus on:

- enhancing the governance of China's social security system and its pension system in particular;
- improving China's legal and regulatory framework of social security, its management and servicing system;
- improving communication and training of employers and employees;
- improving the contribution base and compliance, upgrading the actuarial system, modelling, and enhancing social security research.

In view of the main concerns identified in the situation analysis, the following appeared to be the most relevant European Best practices examples for the topic under consideration.

Improving management and servicing system

New scientific tools for managing social security administrations and networks (e.g. performance agreements): Belgium, etc.

Systematic use of electronic data to improve administrative performance and for strategic policy support: Belgium, Spain, etc.

Improve actuarial system, modelling, enhance social security research

Best practices identified by European working groups on actuarial modelling: EPC's Subgroup on Pensions

Actuarial expertise and pension modelling: Belgium, Czech Republic, France, etc.

Economic and budgetary projections: Spain, etc.

Improve communication towards employers and employees

Communication strategy to increase pension awareness: Poland, Spain, Estonia, Ireland, Sweden, etc.

Improve contribution base compliance

Improvement of contribution base and the monitoring of compliance: France, Belgium, etc.

Anti-fraud strategy based on data-mining: Belgium, etc.

2. Public sector pension reform

The situation analysis highlighted the following elements, to be addressed in further deepening and fine-tuning of the reform.

The public sector pension reform in 2015 established a two-pillar mandatory social insurance pension system for China's public sector, with a basic pension pillar and an occupational DC pension pillar similar to the Urban employees' pension system.

The new civil service sector pension faced two potential risks. The first is financial sustainability risk, mainly because the pension divisor of the new public sector pension system is too low. The second risk is the lack of persistent contribution abilities in some local governments. As a result, expenditures of local governments will have to depend largely on central government transfer payments.

The following reform proposals were tabled for discussion during the second panel discussion meeting (public sector pension reform):

- The need to set a reasonable contribution base.
- The implementation of measures to facilitate the mobility of employees between different public sector employers and between private and public sector employers.
- The implementation of measures to improve the sustainability of the new public sector system:
 - i. Implementation of long-term actuarial technology
 - ii. Enlarge investment capacity of pension fund
 - iii. Enlarge the social pooling
 - iv. Encourage deferred retirement
- The need to improve investment performance of the pension fund:
 - i. Keep fiduciary independent from government
 - ii. Evaluate investment performance
 - iii. Establish personal limited investment option for occupational pension funds
 - iv. Set guaranteed return rates

3. Parametric pension reform

Most of the reform policies of EU members are about parameters, such as:

First, later retirement is the preferred policy for most countries. 26 out of the 28 member states (including the UK) have increased the retirement age. However, the specific ways to increase the retirement age are different: there are nine countries that link the retirement age to life expectancy; two member states narrowing the difference of the retirement age for men and women; four members correlate the pensionable age with life expectancy, and one nation takes the legal retirement age as the actual retirement age. In most countries, these approaches are not one-step, but gradual and take many years.

Second, early retirement is limited. The main measures include providing incentives to later retirement, modifying the calculation of pension benefits, etc. In the case of limiting early retirement, it also focuses on whether people could receive an invalidity pension, thus the reform also includes a disability guarantee. Some countries' policies have focused on increasing the minimum pension to strengthen social protection for the most vulnerable.

Third, contribution period and the contribution rate are adjusted. The Malta government, for example, has risen the contribution period of pension benefits from 40 to 41 years. In Bulgaria, the contribution period would also be increased to 40 years for men and 37 years for women.

Fourth, the calculation and indexation of pension benefits. Some countries have built a more flexible pension system, embracing the economy and population indices into the formula. Patterns of indexation in different countries are different, with the Finnish government freezing the pension index to limit the growth of public debt. The UK introduced a more extensive universal pension in 2016, to help reduce the gender gap in pension incomes. Some countries restrain people from receiving more pension by lengthening working life; some countries encourage additional pension savings in order to improve the retirement income; some countries correlate the pension system reform with incentives in the labour market, in order to improve the employment of the elderly; while others have made a more extensively positive strategy for the elderly.

Fifth, through various publicity education and training, public awareness towards the necessity of parametric reform is enhanced.

Sixth, minimum pension is guaranteed. In the whole process of reform, guaranteeing the minimum pension is a policy option that cannot be ignored. Many countries have initiated the minimum pension schemes to prevent vulnerable groups from falling into poverty due to public pension reform.

The EU Social Protection Committee stressed that the pension reform of EU countries was mainly focused on the long-term fiscal sustainability. However, pension reform should not be isolated from sustainable development and pension adequacy ratio. Economic and social and political risks relevant to the elderly low-income replacement need full attention. At the same time, such issues as poverty as a result of rapidly growing aging population and gender gap in the field of pension should also be addressed. It is an effective policy choice to adjust the pension system in accordance with the economic situation, and associate the retirement age with life expectancy. There are other tools available to increase the effective retirement age and promote longer working years. A policy combination that embodies the characteristics of the state pension system is the most appropriate.

As it can be seen from the reform practice of public pension in EU countries, parametric reform is an important means of pension reform. Some countries mainly adopt the method of parametric reform; whereas other countries use parametric and structural reforms alternately and complementarily. There are similarities and differences in reform of different countries, and their effects vary. With regard to the effects of parametric reform, currently the assessment is not widely available. There are several noteworthy points:

(i) Public pension deficits could be reduced, with the sustainability of pension being improved

By some estimates, after the implementation of parametric reform, most countries have reduced the expenditure of public pension in ways that could be accepted by the people or in an imperceptible way. Thus the financial pressure of pension could be relieved. EU researches show that although there are various measures taken by member states, pension spending in all the 28 states have been under control. By 2060, public pension spending in all member states would not be higher than in that of 2013. Most member states are expected to cut pension expenditure.

While reducing spending, reforms also play a prominent role in generating the revenue: the contribution period could be prolonged by increasing the retirement age or other financial incentives to postpone retirement, which will directly lead to an increase of pension income; a higher contribution rate will also help generate revenue. The reforms, for example, would give France an additional contribution of 0.6% points of GDP. In the long run (in 2040), the fiscal situation of French pension will be improved by about 1.5% of GDP.

(ii) "Adequacy" means a lot for the public pension systems

In addition to "sustainability", Europe has used such indicators as "adequacy" to judge the pension system. In addition to the pension replacement rate, "sufficiency" also takes into account the income distribution during retirees' lifetime, poverty risk and poverty rate, intergenerational differences and gender differences among retirees. Although pension system in France, for instance, has notoriously poor sustainability, it has always done well in "sufficiency". A study by the OECD indicates that in 2015, the poverty risk of the elderly in France is at 7.9%, well below the average of 18% in the EU and also below the average (13.6%) of all French citizens. Of course, there is an "intergenerational gap" between retirees and working employees relative to the "adequacy" of French pension.

(iii) It is unfavourable for the low-incomers and the early retirees in the labour market

After the parametric reform, people mainly make up for the reduction of pension due to postponing the retirement age and increasing the contribution period through prolonging their career. As a result, if you cannot hold out until the last of the career, the amount of pension basically is doomed to fall. Generally, parametric reforms have the greatest negative impact on low-incomers and early retirees. Take a lifetime as a whole, if a Frenchman leaves work at the age of 50, the average pension will be reduced by 6.6% due to the reform of 2010. But the impact is almost zero for high earners. Therefore, the reform has widened the income gap of retirees to some extent, increasing the poverty risk of some retirees.

(iv) The employment rate and unemployment rate of the elderly are increased, with the poverty risk of poverty the elderly being on the rise

Increasing retirement age and the contribution years for a full pension exert a certain degree of negative impact on the elderly employees. On the one hand, increasing the retirement age by two years helps improve the employment rate of the elderly. On the other hand, it will be harder for the elderly to keep a career life

until retirement, and it will be harder to find a job than the time prior to the reform. In France, for example, the result of the reform in 2010 is that the elderly who have already worked between the ages of 58 and 60 will continue to keep their jobs, while the unemployed at this age will continue to stay unemployed. Accordingly, the costs of unemployment insurance and old age assistance in the country have also been increased. Researches show that out of the 14 billion€ saved thanks to the reform in 2010, 15% has been used in a variety of additional aid.

(v) The social contribution burden of enterprises is increased

Although the parametric reform could bypass the politically sensitive area, usually the contribution base and rate would be enhanced, coupled with higher retirement age, these measures are not conducive to the improvement of employment environment, as they add more social contribution burden on enterprises, especially for the small and medium-sized ones.

(vi) The space for structural reform of the pension system is expanded

With the gradual implementation of parametric reform, public pension will shrink in the future. In addition, the parametric reform has an increasingly more stringent requirements on the contribution period of full pension qualification, which will inevitably cause "binary" division of old-age security: on the one hand, employees with stable jobs can access to relatively good security; on the other hand, contract, temporary and hourly workers or other kinds of informal workers could fail to be fully guaranteed, as a result of a lack of contribution years, an interrupt of contribution or an income too low. The elderly who have lost their jobs and are unable to return to work will also suffer. As public pension cannot provide sufficient security protection, more and more people will seek to a pension plan with a fund system, in order to supplement the decrease in the level of public security. Finally, the multi-layer multi-pillar pension security system has been formed.

(vii) The dispute over the modes of reform is not yet over

Parametric reform will also give rise to various new problems. For instance, the introduction of scores is considered as equal treatment, but how to determine the score has become a new problem. Moreover, early retirees at the age of 63 are less likely to receive a lower pension, because there is no computational actuarial factor. Meanwhile, a more flexible labour market and a general employment environment with low wage could create economic insecurity for quite a large group. Therefore, the government must also provide some kind of subsidy for the lowest income group, meaning that a more solid and popular safety net should be woven under the welfare net. But has the reform returned to the original point? So the debate over the strengths and weaknesses of structural reform and parametric reform is far from over.

The analysis of European parametric reforms thus provides some enlightenment to public pension reform in China

First, European countries have taken small steps to take parametric reform in order to tackle such problems as fiscal unsustainability and pension inadequacy of public pension as the population is aging. Along with the slowing development of Europe's economy in the 1990s, parametric pension reforms have become a policy option for a number of European countries. In the wake of the 2008 financial crisis, countries need to reduce their government debts, and control the over-rapid growth of pension expenditure, thus the parametric pension reform is more widely valued. Parametric reform, as the main policy option of reforming the pension system, or as the supporting policy of structural reform, has played a crucial role.

While drawing lessons from European experience, China should not only pay attention to the theories, policies and methods of structural reform, but also attach importance to the guiding ideology, strategy selection and concrete operation methods of parametric reform. Through introducing some calculation factors determined by a democratic process, parametric reform could help the pension system realize an automatic adjustment, reduce government intervention, and avoid the government's directly confrontation towards social conflicts, so as to make the reform into a kind of technical work.

Second, the parametric reform of pension can be focused on both the contribution and the expenditure.

1. From the contribution stage, there are some entry points:

(1) Adjust the contribution base.

What is the contribution base of pension? Is it the minimum income standard? Is it a full income including welfare? Or the average social wage? These are the key points of parametric reforms, which require political decision-making and uniform standards. A number of European countries are now extending their contribution scope to welfare earnings.

(2) Raise the contribution rate.

As tax systems in European countries are relatively perfect, the income tax has been on the high side, continuing to improve the contribution rate will bring enterprises and individuals extra burden. Therefore, enhancing the contribution rate is not a good policy option, and difficult to get through under the condition of European social democracy. However, it does mean that increasing the contribution rate is not a line of thinking. Because in addition to directly raising the contribution rate, the amount of contributions could also be increased by means parametric adjustments, such as extending contribution period.

(3) Increase the retirement age.

As the population is aging, this option is inevitable, but it is not easy to implement. In the 1960s and 1970s, lowering the retirement age is adopted as a policy in Europe, making "enjoying healthy old age" a social right. In order to change this situation, reasonable logic and social recognition are required. The EU has recommended Finland's approach, which dynamically associates the retirement age with life expectancy in indexation. With a longer life expectancy, working life would be prolonged correspondingly. In theory, with a shortened life expectancy, working years could also be reduced. Thus increasing of the retirement age could rest on a reasonable basis. Increasing the retirement age, of course, means longer contribution years and more accumulation of pension. Meanwhile it could avoid sensitive social opinion and solve long-term social strategic problems with technical solutions.

(4) In addition to increasing the retirement age, limiting early retirement or encouraging later retirement is also a popular option for reform.

France and many other countries have opted for a policy of severely punishing early retirement. Some countries choose supportive policies, such as recognizing "double identities", which encourages people who have reached retirement age to continue working and at the same time receive labour payment and a proportion (20%) of pension. This would link the pension system to the labour market, which helps increase pension income while reducing pension costs.

2. From the expenditure stage, the main topics are focused on the calculation of pension benefits:

(1) Which parameters are linked to the pension?

Are they linked with contribution, in order to reflect the principle of more pay for more work? Or are they linked to a wage index that allows retirees to share the growth of social wealth? Or are they tied to the price index to control the over-rapid growth of pension? In general, the left-wing parties in Europe argue that pension should be linked to the wage index; whereas the right-wing parties hold that pension should be linked to price index. Different policy options reflect different political ideas, or argue that social members share economic growth and prosperity, or strive to achieve fiscal sustainability. Therefore, political choices are required before policy choices.

(2) Should pension benefits calculate personal income for the last 5 years?

Or the average personal income in the last 10 or 25 years? Countries have different policy choices according to their own national conditions, but the current trend is generally to calculate the income for the last five years to 10 years or beyond. Given that the average person's income increases with seniority, the longer the calculation period is, the lower the pension benefits will eventually be calculated.

(3) Introduce the sustainable computing factor or "score".

For instance, while calculating the pension benefits, Germany has particularly calculated the "income score", years of working/contribution, pension current value, sustainability factor, category factor, actuarial factor, etc. It has included a lot of elements into calculation factors, to meticulously reflect a variety of policy choice through parameters.

Third, parametric reforms in European countries could influence each other and learn from each other, meanwhile they have their own characteristics and trade-offs. Moreover, most countries choose a number of parametric reforms, thus forming different policy combination. The EU argues that the different combination of parametric reforms adopted by member states is justified as long as the reforms are broadly directed towards a healthier and more sustainable pension system. Therefore, China could also consider multi-pronged reform when implementing reforms.

Fourth, according to preliminary estimates, the parametric reforms of pension in European countries have mostly reached the basic goal of controlling the increase of public pension. According to the 2016 German pension insurance report, the pension deficits would be controlled within 1.5%, while maintaining the contribution rate of pension unchanged as 18.7% from 2016 to 2020. However, reducing the pension expenditure is not the only goal of reform, nor its original purpose. The establishment of public pension system in Europe is to reduce the poverty of old age and realize the balanced development of society.

Therefore, while the EU countries are preventing waste and abuse of the pension system, they have never forgotten to take measures to avoid the old-age poverty. The policy choice of parametric reform is not merely to curb the growth of future expenditure, but also to suggest that the adequacy of the pension is as important as its fiscal balance. The measures of parametric reform in this regard are varied, including equality between men and women and the convergence of the nominal and real pension system. European countries are also paying close attention the social poverty rate while assessing pension reform. Preliminary tracking shows that the average poverty rate in European countries is generally declining after the reforms. Therefore, China should not ignore the effects of reform on society when drawing a lesson from Europe, as it can consider the introduction of social balance factor (or index), which could help enable the reforms to cut spending, and to balance the gap between the rich and the poor.

Fifth, some European countries, such as Sweden and Italy, begin to try out "personal notional account". This is a sort of pension accounting reform, with the main purpose being to balance the intergenerational conflicts, and likely to solve the new problems caused by flexible employment. Since the discussion in this regard has just begun, this report would not introduce or comment on the system.

Finally, although the parametric pension reforms in Europe have been implemented for many years, as a conscious and systematic reform action, it is still in its infancy. Its ultimate effects and various roles need to be further observed. Thus, it is recommended to continue the study.

Technical addendum

The project C1 technical team drew the list below of parametric reforms that could be envisaged for the Chinese pension scheme for Urban employees.

1. Contribution rate

Currently 28%: 20% employer + 8% employee

Adjusted rates by 1-8 percentage point downwards, effect on the level of pension replacement and the financial sustainability of the fund

2. Qualifying period

The current system provides a minimum qualifying period of 15 years of contributions

The estimated contribution period is 22-30 years, the impact on the level of pension treatment and the replacement rate

3. Retirement age

Calculate the impact of delayed retirement on pension treatment and redistribution

From 2022 onwards

Option 1: ordinary female workers every 3 years to extend by 1 year, female cadres, men every 4 years to extend by 1 year.

Option 2: ordinary female workers every 2 years to extend by 1 year, female cadres, men every 3 years to extend by 1 year.

4. Interest rate on Personal accounts

Calculate the impact of interest rates on personal account on the accumulation of pension benefits

Option 1: Average annual wage growth of urban non-private units in the previous year * 80%

Option 2: Average annual wage growth of urban non-private units in the previous year * 60%

5. Computation of benefits

Benefit formula

Full basic pension: payment of 30 (or 35) years, to reach the retirement age, can receive full pension 40-50%

Every one year not full career, treatment deduction 1 or 2 percentage points.

6. Benefit adjustment

Estimated impact of pension adjustment index on the change and redistribution of pensions

Option 1: Benefit Adjustment Index = Average wage growth rate of urban non-private sector workers in the previous year * 60%

Option 2: Benefit adjustment index = last year GDP growth rate * 50% + last year, urban non-private sector workers in the average wage growth rate * 30%

Option 3: Benefit Adjustment Index = Average wage growth rate of urban non-private sector workers in the previous year * 100%

4. Strengthening solidarity vs. Reflecting past contributions

In order to further improve the basic old-age insurance system, solidarity mechanisms should be reinforced, while the size of individual accounts cannot be expanded to the detriment of the pooled part of the system. With regard to the personal accounts, the main question remains whether they should remain funded (“real”) or become “notional”. While the first option might seem preferable and conditions should be created to gradually reinforce the funded individual pension accounts, there may be some practical problems that may justify small NDC accounts, a second option.

To maintain the current pension structure for urban workers, including the repartition of funding (20/8), while improving and modernizing the individual accounts system, for which two options were identified with a preference for the first one:

1. Reinforcing the funding of the individual accounts, or
2. Replacing the funded individual accounts with notional individual accounts, in line with the NDC model.

The “comprehensive proposal” – see below, section 6 – goes a step further in addressing these concerns.

5. Multi-tier pension system

In its current set-up the Urban employees' pension system has difficulties in coping with the challenge of China's ageing crisis. Hence the reform proposals for the establishment of China's three-pillar pension model. In Mr. Dong's view, on the basis of combination of social pooling and individual accounts, the separation of existing social pool and personal accounts are to be converted into first and second pillar. To accelerate the enterprise annuity system (3rd pillar) while achieving a fair system, organizations and institutions should be subject to mandatory occupational pension system, while annuity coverage rate is only about 7% currently.

The main proposal is to merge the second tier individual accounts with the second pillar occupational pension plans that are currently underdeveloped in China. The second pillar would become mandatory and tax subsidized. The first pillar's basic pension would be reserved for social pooling. It is also suggested to further develop the third pillar as these are more individual and flexible and could thus provide a solution for covering freelance workers etc. that could not be covered by the second pillar. The development of the third pillar would be supported by tax incentives.

The comprehensive proposal presented in the next paragraph goes a step further in exploring this direction.

6. A comprehensive pension reform proposal

The Proposal was elaborated after carefully reviewing the assessment reports and pension reform proposals respectively submitted by Chinese experts under the framework of Component One programmes of activities 2015 to 2018 – as well as the most recent works produced under Component 2 auspices in 2018 concerning pensions financing and contributory patterns.

The Proposal intends at responding to the expectation that the protection under the pension system for urban employees be diversified between basic public protection and a segregated second pillar, while reinforcing the attractiveness of the system, ensuring its sustainability and resulting in pension benefits that are both equitable (fair to the most vulnerable) and efficient (fair to the contributors).

It is proposed to develop a reformed pension system for Urban employees where the amounts in existing individual accounts – mostly virtual – would be allocated to a revised formula for the basic pension while the future individual contributions for pensions would go to a second pillar started from the date of the reform and managed by specific financial institutions. This second pillar would include assets already accumulated under Entreprise annuity funds arrangements, whenever appropriate.

The overall cost of the system would be kept at an acceptable level, thanks to improvements in compliance expected from Ministry of Finance future involvement in contributions collection. The reform could be implemented rapidly and be easy to understand by all those concerned.

Of course, the Proposal represents only the broad contents of a future reform. Should this be considered by Chinese authorities as worth elaborating further, a number of additional researches would have to be conducted, hopefully through an extended collaboration between European and Chinese partners.

In English and Chinese versions, the Proposal was submitted in June 2018 to a number of Chinese and European experts for peer review. It was introduced to participants in the XIVth Annual Meeting of the Chinese Social Security Association (Dalian, 15-16 September 2018).

II – Social Security Protection and Employment Promotion

Employment and social protection are the two sides of active life – and often described as conflicting with each other¹². When addressing this issues, which is crucial for shaping the economic and social future of the Chinese society, research activities conducted under the project Component 1 focused on the following areas:

- The Chinese labour market is characterised, among other features, by a high mobility of workers from rural areas (internal “migrant workers”) whereas the said market – as well as de facto the social security system – is not unified (influence of “pooling areas” and of the citizen registration scheme “hukou”). Reports were therefore produced on the Strategy of integrating social security system in urban and rural context¹³ as well as on the Employment and social security issues under the background of Population movement¹⁴.
- Another key issue is that of generating enough employment under decent work conditions for ensuring reasonable perspectives of economic affluence for the current and future active population, hence research conducted on the building up of the labour force^{15/16}.
- Finally, researchers explored more in detail the relationship between social security protection and employment promotion¹⁷, with notably in view the possibility to evolve towards universal basic old-age social protection¹⁸ as a means to progress in the direction of more unified urban and rural social and economic conditions.

The sections to follow reproduce the main conclusions reached and reform proposals formulated under each of the above-listed headings.

¹² See notably Jean-Yves Hocquet, Social Protection and Employment: Partnership or Rivalry, C1 SPRP Assessment reports vol. II, 2016 and the proceedings of the Component One 2016 High level event on Perspectives of Employment Policy and Social Security Reform in China and in Europe between 2016 and 2020.

¹³ Wang Zeying Strategy of integrating social security system in urban and rural context also through the portability of social insurance, C1 SPRP Assessment reports vol. I, 2015

¹⁴ Jin Weigang, Employment and social security issues under the background of Population movement, C1 SPRP Assessment reports vol. IV, 2018

¹⁵ Yang Weiguo, Quality-oriented development and capacity building for the labour force, C1 SPRP Assessment reports vol. IV, 2018

¹⁶ Yang Weiguo, Planning for Employment promotion, C1 SPRP Assessment reports vol. V, 2019

¹⁷ Zhang Juwei, Monitoring interaction between employment promotion and social protection policies, C1 SPRP Assessment reports vol. II, 2016

¹⁸ Qi Chuanjun, Universal pension systems: Chinese situation and prospects, C1 SPRP Assessment reports vol. IV, 2018

1. Strategy of integrating social security system in urban and rural context

The situation analysis highlighted the following elements to be considered under reform strategies for the integration of rural and urban pension schemes. There are a number of elements in China's pension system that complicate the portability of pension rights. Furthermore, there are prominent contradictions and problems regarding the system and mechanism of operation management service. The management system is not smooth because of various inconsistencies, while service capability and infrastructure is inadequate. Procedures need to be made more efficient and standardized. The use of information technology in the pension insurance system needs to be improved.

2. Population Movement

Population movement has been a continuous phenomenon in China since the beginning of industrialization and urbanization. Three groups of people constitute the majority of mobility: rural migrant workers, urban employees and retirees, among whom rural migrant workers take up the defining proportion. In 2017, the total amount of rural migrant workers has reached 286.52 million, becoming the definite majority of industry workers in China; thus, the research focuses on this group of population when studying the mobility issues in China.

The general trends for the mobility of migrant workers have the following features: firstly, the total number of migrant workers is still increasing but the growth rate is slowing down; secondly, the average distance of mobility is shortening – 96.4% of the new generation of migrant workers are mostly moving within their home provinces; thirdly, the educational level for migrant workers is increasing slowly, which is mainly manifested by the increasing number of people with high school diploma; fourthly, more and more migrant workers are working in service industry; and lastly, there has been steady growth in average monthly income for migrant workers.

There are of course several areas which are still impairing the smooth migration in the field of employment and social protection. Firstly, due to restrictions on population inflow in some megacities, migrant workers are entitled with very limited access to public service as compared with registered residents including healthcare and housing. Secondly, there has been limited employment protection and legislative support for migrant workers. Thirdly, migrant workers are lacking the satisfying professional competence for current urban development. Fourthly, the impact of rural land system reform is to a certain extent blocking the mobility from rural to urban areas.

From the perspective of social protection, problems occur in three aspects. Firstly, the efficiency of social insurance management is not high so that sometimes the transfer and continue are difficulty. Secondly, low level of data management is affecting the smooth transfer among schemes. Thirdly, there are still obstacles in cross-region transfer of basic medical insurance due to huge economic discrepancy in different regions.

In Europe, positive impacts brought by migrating workers on social and economic development are as followed: in the long term, occupational migrants help boost economy and cope with challenges in population structure both at present and in the future; low skilled migrant workers meet the demand for such division of labour while bringing no harm to local wage level and employment rate; migrants have brought minor positive impact towards hosting country's public finances; in time of crisis, labour force mobility at a larger scale help reduce mismatching of human resources and improve allocation of labour.

Negative impacts are also evident: firstly, the outflow of most qualified workers can impair economic performance and influence slightly the production rate of the outflow countries; secondly, large quantity of outflow of labour force may bring decrease in the number of tax payers, bringing challenge to the payment of governmental loan; thirdly, dispatched workers may have a limited negative impact on social stability.

The EU highly values the institutional principles to promote mobility within the EU and member states. The principle of free movement for workers guarantees that all EU residents and their family members are

entitled to freedom to move, work, and reside within all member states. No discrimination should be borne upon EU residents no matter which member state they choose to work and reside in, including wage, working condition, working safety, vocational training, housing, social benefit, the right to join the union, etc. The aggregation of benefit in social protection and coordination within EU member states makes sure that EU residents who are employed by a certain member state are entitled to all social benefit of that country regardless of their nationality. Moreover, the social benefit one receives in one country can be accumulated if he / she moves to another country according to certain methodology of accounting.

On the whole, the EU has already achieved free movement and equal treatment of labour force in the system. However, population mobility still faces some practical problems, such as legal and managerial issues, housing costs and possibilities, gender differences, Pension portability, language barriers, identification of professional qualifications, etc. To tackle these issues, measures are taken including effective integration of policy management and coordination mechanisms, and cooperation and support for the protection of the rights of migrants.

A framework of policy recommendations is presented at the third part of the research. On macro level, four aspects are to be improved: firstly, to improve financial system to support population movement including the upgrading of transfer payment system and taxation, reforming resource pricing mechanism, and shaping an environmental compensation system; secondly, to adapt a moderated migrant policy to gradually remove the institutional barrier for population mobility; thirdly, to speed up the rural collective property right system reform; and fourthly, to enhance administration and public service for migrant population.

On more detailed policy level, suggestions are made to improve employment policy as well as social protection policy for migrant workers. Public administration should strive for equality and justice for all residential population in terms of employment opportunity, employment public services and relevant subsidies. Employment protection and legal support should play a more active role for migrant workers. Vocational training for migrant workers should be strengthened. Rural-urban coordination of employment and unification of labour market should be taken into consideration. Special attention should be given to second and third generation of migrant workers. Social protection policy for migrant workers needs to focus on the overall coordination and policy convergence for transfer among different medical and pension schemes as well as the expansion of coverage to include and attract migrant workers into the social protection system.

3. Quality considerations

The new development philosophy can be seen as China's response to the issue of high-quality development which is brought about in specific social and economic context. China's economy has shifted from a high-speed growth stage to a medium-high development stage and is at a critical stage of transforming its growth model, optimizing the economic structure, changing its growth drivers. On social level, major contradiction lies between unbalanced and inadequate development and the people's ever-growing needs for a better life. The implementation of the new development philosophy will gradually build a modern economic system and improve the quality and efficiency of development in order to meet the growing needs of the people and realize balanced and all-round development among regions, industries and different social groups.

Coming from the previous discussion, the research tries to provide a tentative definition for high quality development in China with the following connotations:

- Development with innovation: support the development of the modern economic system through the development of an innovation system, including, firstly, digital economy and sharing economy based on Internet and digital technology and secondly, the application of artificial intelligence based on industrial robots and computerization and automation.
- Development through coordination: in terms of development pattern, at the macro level, China should promote balanced development of its central, western and eastern regions; at the intermediate level, efforts should be made to promote the simultaneous development of the old industrial bases in northeast China, the Beijing-Tianjin-Hebei region, the Yangtze River economic belt and the border areas; at the micro level, coordinated development of cities and towns of different sizes should be encouraged through the formation of urban agglomerations.
- Development through green model: on the basis of meeting the requirements of sustainable development, it is necessary to achieve coordination between high-quality supply and green demand, optimize industrial production capacity through supply-side reform, allocate existing resources, cultivate green skills and achieve low-carbon development and high efficiency.
- Development through opening-up: upholding and deepening reform and opening-up will help promote the transformation and upgrading of China's economy through market liberalization. It's an important guarantee of high-quality development in the future; meanwhile, open development should also mean greater openness in the domestic market.
- Development through sharing: firstly, countries share the benefits of economic exchanges; secondly, all members of society share the benefits of national economic development.

The life expectancy of the Chinese labour force is low at the current stage. The mental health status of Chinese workforce is not ideal, causing many workplace problems. The education attainment of China's workforce is not up to the requirement of high-quality development. The gender difference in secondary education attainment is evident, and the enrolment rate is low as a whole. The education attainment of migrant workers is low and progress in this aspect is slow. The skills of the workforce cannot meet the requirements of high-quality development. The low proportion of technical specialists makes it difficult to

meet the requirements of economic transformation. Low total labour productivity affects the development of key industries. The vocational training for workers cannot meet the requirements of high-quality input and output, and the development of training institutions is slow. The enrolment rate of training programs is falling. The training content is not compatible with regional planning.

Moreover, there is a lack of complete legal system which can serve the basis and incentive for providing groups with employment difficulties with assistance in terms of employment promotion and educational improvement. At a time when local governments' fiscal power is closely linked to their administrative authorities, local governments can hardly provide sufficient financial support for large-scale and systematic improvement of workforce quality. Yet, the lack of participation by social capitals cannot effectively fill up the gap. The existing policies haven't paid enough attention to the skills and comprehensive quality of the workforce in the manufacturing industry and the real economy. There is a lack of corresponding development policies as supporting measures.

A comparative study of best practices in EU and its selected member states is conducted by the research to shed light on some possible solutions for the improvement of China's workforce quality. The EU strives to improve workforce quality from four aspects: first and foremost, lifelong learning strategy, then there is strategic emphasis on the training for young people, thirdly, vocational training system, and lastly, innovation strategy. Denmark also provides valuable examples in ensuring the overall quality of its population through education and lifelong learning initiatives, ICT infrastructure construction, and advocate for work / life balance. Poland's effort in improving its workforce quality is featured by the government-led action plans to achieve balanced regional development. In Belgium, the government is working closely with private sectors to come up with the optimized vocational training public service system. Germany is also a well-established model in the field of vocational training assistance, employment service, and relevant social welfare system for workforce.

Following human capital lifecycle theory, the research tries to come up with a policy structure for systematically improving workforce quality which entails the following aspects:

- Improve food supply in rural areas; pay close attention to the nutritional wellbeing of poor rural residents, especially that of "left-behind" children. Further improve the medical and health care service in rural areas; raise awareness on mental health among rural labour. Adopt prevention and control measures targeting specific occupational diseases to improve the effectiveness of policy measures; let the market play a role in encouraging service industry employees to receive psychological health counselling and therapy service purchased by the government.
- Further extend compulsory education to 12 years old by including high school education. Gradually ease access to higher education and produce students that can meet the demand of the labour market, cut through the professional education and the ordinary higher education system, the society education and national education are also involved.
- Rely on market forces to resolve the mismatch between skills learned and skills needed. Companies should help design and guide the internship experience of students. Efforts should be made to improve the feedback mechanism for companies to evaluate interns. The government should make overall plans and strike a balance among the development of schools, students and companies. In its cooperation and responsibility-sharing with schools and companies, the government should make sure that contracts

between students and enterprises and the partnership agreements between schools and enterprises are honoured.

- The legislation should include detailed stipulations on the duration, types and funding sources of training in each industry to protect the right of workers to training. The law clarifies responsibilities and obligations by stipulating that such trainings should be funded primarily by public spending in the form of public-private partnership. Focus on training activities in high-tech industries and advanced manufacturing industries; Companies should encourage new employees to “learn on the job”, allowing workers to accumulate experience and improve their skills.
- Vocational trainings should be expanded from the traditional technologies to new and emerging technologies. China should gradually transition away from the government-led training model toward a market-driven, private-sector-led model. It should encourage qualified companies to open vocational colleges and other types of training institutions according to the needs of the market. We can learn from the European Centre for the Development of Vocational Training in setting up vocational training centres that enjoy policy support, formulating and implementing vocational training policies, releasing information on existing education and training policies and monitoring labour market trends.
- New employment models supported by the platform economy, shared economy are more flexible and adaptable to changing market environment; jobs with more flexible hours can be created with the help of the Internet. Find more ways to make more people eligible for employment training and programs on entrepreneurship, and gradually form a skill training system that combines classroom teaching with self-learning and marries hands-on practice with professional guidance and assistance; Open to the public technological and educational resources of platforms such as university laboratories, vocational colleges and science and technology parks via government purchase of public services.
- Improve the infrastructures and form incentive mechanisms to effectively encourage the lifelong learning of workers. Establish a national qualification scheme for lifelong learning and promote the development and implementation of the scheme. Strengthen the regulation of examinations for self-taught students in higher education and establish special channels so that students and other groups in vocational and technical schools will have the opportunity to participate in the college entrance examination again. Workers who want to learn can be rewarded with something similar to an “education voucher” which can be used to further education or training; Make sensible use of resources of higher education institutions, vocational training institutions and private-sector education and training institutions.
- While building a sound legal system governing the labour market, the government should allow the private sector to play a supplementary role in improving the quality, education and skill level of the workforce. More emphasis should be given to market players when it comes to improving labour skills through education and training.

4. Planning for Employment promotion

The 13th FYP and its implementation period of 2016 to 2020 coincide with the most recent and profound endeavour of socio-economic reform in China, which is characterized by four trends. First, employment is regarded as the biggest livelihood of the people and most fundamental support for economic development; secondly, market will play a decisive role in human resources allocation while the government turns to service-oriented functions; thirdly, employment promotion depends more on entrepreneurship and innovation; and lastly, employment promotion devotes more to improvement of quality in both employment and labour force.

A lot has been achieved in the implementation of the 13th FYP in terms of employment promotion. Employment scale grows steadily with accumulative newly-increased urban employment reaching 40.61 million. The structure of employment based on industry is also changing with the rising proportion of service sectors employees taking up 44.6% in first three quarters in 2018 and the proportion of urban employees going up to 56% in 2018. The legal stability of employment is also improving steadily.

Human resource and labour quality are also improving during the last three years. Till 2018, China has 0.16 billion skilled labour population, of which about 29%, 47.9 million in number can be categorized as high-tech labour. More attention has been paid to empowering the job-creation capability of entrepreneurship & innovation start-ups through providing series of policy supports. An outstanding example would be the rise of digital economy including internet retail and network platform economy, which serve as new engines for employment growth.

Series of policies have been designed to promote and refine market regulation and free flow of human resources. The estimated total market value for human resource service has reached 343.6 billion RMB in 2017 with compound annual growth rate as high as 21.9%. And the number of employment in human resources services is over 580 thousand in 2017.

Certain focus groups are examined in depth to grasp the bigger picture of general employment status during the past three years. First group is the active labour force in rural areas. The total number of working population from/in rural areas has reached 0.29 billion, the number is still growing but it is slowing down because of overall population ageing. Over 50% are population born in the 1980s who are in their prime years in labour market; yet the average age of the group is 39.7, showing a structural lack of vitality to some extent. 51.5% of the rural migrant workers are employed in the secondary industry sector while the number of workers engaging in the third industry sector is growing steadily.

The second focus group is the college graduates. The amount of university graduates has reached 7.53 million and the annual growth is slowing down. The overall employment rate for university graduates is steady with 80% of them going to full-time jobs, 3% trying out start-up business, and 10% choosing to engage in further study. More and more young graduates choose to work in mid-China and west China. Education sector and digital economy have attracted more graduates each year.

The last focus group is workers with job placement. In 2016, about 726 thousand workers mostly from heavy industrial enterprises were reassigned by government because of strategic remodelling and upgrading of productivity, 55.8% of whom are either placed with jobs in service sector within the same enterprise or considered eligible for internal early retirement plan. An estimation is that around 180 million

workers will need to be re-employed by 2020 and most of them are from steel and coal industry. Numerous policies were made by local government to solve workers' employment due to adjusting of excess production capacity of heavy industry.

There are of course unsettled aspects in employment policy that are prominent and calling for actions. First and foremost, structural dilemmas are still persistent because of the mismatching of the demand end and the supply end of labour market. On one hand, labour demand gap has sharply expanded since 2016 and peaked in 2017 (107 million); High Tech talent is in short and its demand ratio is above 2.0. On the other hand, unemployment issues remain acute although registered unemployment rate is far below 5% (3.8%) and keep

Secondly, the emerging digital economy, network platforms in particular, are challenging the classical definition of employment relationship with new patterns of employment which is exerting impact on the whole employment security system. Rather than simply emphasizing the job-creation capacity of platform economy, much more attention should be paid on institutional and technical adjustment on social protection schemes to protect the platform employees and to regulate platform operators. Based on a preliminary analysis of 158 judicial cases on disputes around employment relationship, the employees are usually legally unsupported by legislation. Most network platforms tend to deny the existence of a formal employment relationship with their employees by asserting a partnership instead.

Thirdly, there is still big demand for skilled labour to be fulfilled. The overall labour quality is still at a relative low level, poor educated workers are majority and only 10%-20% receive vocational training. The percentage of working population who have got university degree and above only counts for 11.9%. Moreover, the discrepancy of labour quality between urban and rural areas is also getting bigger.

Fourthly, public service in the field of employment support is still lacking in general. As a matter of fact, the scale of public service in employment is getting smaller each year; and the type of service that is provided mainly focuses on short-term employment training and preliminary and intermediate qualification training. High level professional and qualification training are still very much lagging behind.

When looking at possible frameworks for proposals as what should be included in the 14th FYP in the field of employment promotion, it is essential to consider the new trends and emerging circumstances for social and economic development so that the proposals would provide matching responses. The most prominent background for the near future lies in the fast growth of digital economy. The research team also provides a prediction of some new trends in employment promotion: firstly, employment policies are redefined as political measures for macro management instead of micro public policies; secondly, industries that contribute to employment promotion is shifting from construction/manufacturing to service sector; thirdly, rapid change is happening to the demographic structure in China, which may trigger social issues of population ageing, labour supply decline, and overall low participation in labour market. The estimation is that by 2049 the amount of working age population will shrink to 0.8 billion; working age population aged from 45-64 will account for more than 45% in 2045; labour market participation is estimated to decrease dramatically from nearly 85% to 75%, especially for women to 65%.

Another lens through which proposals can be drawn is through observations of initiatives and advocates coming from international organizations. First and foremost, we can see that the focus on digital economy has become a global one, with predictions of both the positive and negative impact on employment; secondly, inadequate wage growth and the income polarization are worsening at a global scale; thirdly,

population ageing has also become a global challenge for employment policy; and the issues of social safety net and gender equality in employment are still prominent.

On the basis of the analysis and observation, several policy suggestions can be drawn as potential proposals for inclusion into the 14th FYP in terms of employment promotion which can be categorized into three layers. The first layer is the overarching framework for employment promotion policy. The fundamental principle lies on the emphasis that there should be a comprehensive mechanism to ensure the employment balance in short term and labour market development in long term. The 14th FYP should try to incorporate the dimension of employment protection into the “supply-market-demand” policy triangle. More attention should be paid on the connection between employment and digital economy.

The second layer of policy suggestions is the concrete items to be considered to include in the 14th FYP which are as followed:

- The management of unemployment should be restructured and reclassified according to the nature of unemployment, which are structural unemployment, frictional unemployment and cyclical unemployment. Different nature of unemployment calls for different measures to be taken including human capital investment, market re-allocation, and macro control mechanisms.
- Improve the overall labour quality by: seeking the potential of individual employees, supporting the transformation of rural labour force, encouraging human capital investment and accumulation on both public and individual level, and introducing channels of inflow for international talents.
- Ensure fluidity within the labour market by enhancing the efficiency and efficacy of human resource allocation by market itself.
- Establishing social protection system for non-formal and flexible employment by designing special protocols for flexible participation in insurance schemes and payment, and by strengthening supervision of employers.
- Emphasis on employment support and public services in vocational and professional training.
- To cope with demographic ageing, it is crucial to build a safety net for the elderly with social protection and other mechanisms where the potential of the elderly as human resources can be optimized.
- Family should be regarded as a social unit when designing employment promotion and protection policies.

The third layer of policy suggestions refers to the operational level of employment promotion with two principles. The principle of coordination points out the importance of a collaborative framework among different governmental bodies under which employment promotion policy can be implemented in the most efficient manner. The governmental bodies including macro-level monitoring organizations, statistics and data providers should be involved more profoundly in employment promotion. The principle of accuracy asks for a more scientific evaluation mechanism, a refined classification management, and more precise intervention procedures.

5. Interaction between social protection and employment protection

The situation analysis concluded that the rapid increase of retirees has resulted in decrease of replacement rate of the urban employee basic pension insurance in spite of the rapid expansion of coverage of the insurance. It is true that expansion of the coverage will help maintain the replacement rate not decline further in a short run, but it is actually an issue of financing to maintain a stable replacement in a long run. However, the contribution rate of the pension insurance is already the highest in the world, and the solution will not be possible to find through expansion of coverage. China's state owned assets are a solid source for ensuring balance to pension funds. The contribution of the state-owned assets into building up of pension funds will be characteristic of the Chinese public pension insurance system.

6. Universal pension protection

The assessment of the Chinese situation focussed on how to improve the basic old-age insurance scheme for Urban and Rural residents – BOIFURR.

The negative limitation of Hukou system should be eliminated in the institutional design of the BOIFURR scheme. Hukou system is a special institutional arrangement in China. It had released positive effects in the history. However, in the modern era where people have the right to move freely and labour force needs to move freely for better allocating resources, negative effects of the Hukou system become more and more obvious.

Therefore, when a social scheme is being designed, the limitation of Hukou system should be avoided. The institutional design mentioned above can be an example, in which the limitation of the Hukou system is prevented. When designing a social scheme, policy maker should take into account the protection on vulnerable group, which represents the moral consciousness of the society. The BOIFURR scheme should be improved in order to enable all the vulnerable people to enjoy pension rights, as every other person does.

In addition, as mentioned above, individual account should be converted into tax-deferred commercial old-age insurance (voluntary). But the tax deferral is provided to formal employees, while residents in urban and rural areas can receive governmental subsidies. In this case, government should provide more subsidies to vulnerable groups, such as disabled people losing employability, and to special groups, such as pregnant women and women taking care of new babies.

The management of a social scheme should be simplified in order to make the scheme as more effective as possible. An improved BOIFURR scheme should have simplified framework, in which subsidies are from the central government while administration is the charge of provincial/local authorities. The procedure of provincial or local administration should be largely simplified, reducing pressure on local authorities and having a transparent administration. Of course, it is also in need of building up a digitalized system for individual's information in order to reduce moral hazard of administrators to the lowest level.

It is also important to optimize BOIFURR's relation with other pension schemes, for which the key is the understanding the trend of socio-economic development. We usually expect to have a single social scheme or policy to solve all the problems. But this is impossible in the modern world. After WWII, when most countries introduced Western pension schemes, contributory Bismarck model was chosen as the major component, with the expectation that the whole labour force can be formalized following the development of economy, and therefore the system can cover all the employees. However, the reality is that many developing countries had to return to non-contributory model in the beginning years of the 20th century. Therefore, it is not realistic to integrate the BOIFURR and the BOI for Urban Employees. But this doesn't mean that the two schemes have no any relation with each other. At least the benefit of BOIFURR should not be too high since it is a pure welfare scheme. Otherwise, it would pose impact on the BOI for Urban Employees.

III – Sustainability Issues

The C1 programme of research activities addressed thoroughly the issue of sustainability of the Chinese pension system, from a variety of perspectives, which are:

- The fact that the Chinese pension system is called upon to function in an economic environment less affluent than in previous years, hence the question of the affordability of contribution levies and Government subsidies¹⁹.
- The influence of demographic evolution, which the rapid ageing of the Chinese society, on the design of the social protection system²⁰, and ways of combatting this phenomenon through the promotion of active ageing²¹.
- The actual efficiency of redistribution mechanisms for ensuring reduction in income inequalities, through a series of reports dealing with respectively the Relationship between socio-economic development and the redistribution function of social security²²; the Redistributive effects of envisaged parametric reforms²³; and, the Policy and tools for redistribution of primary income^{24/25}.

The sections to follow reproduce the main conclusions reached and reform proposals formulated under each of the above-listed headings.

¹⁹ Zheng Bingwen, Sustainability of pension schemes (contributions and government subsidies), C1 SPRP Assessment reports vol. II, 2016

²⁰ Dong Keyong, Ageing population and possible strategy of dealing with this situation, C1 SPRP Assessment reports vol. II, 2016

²¹ Zaidi Asghar, Active Ageing Index for China, C1 SPRP Assessment reports vol. IV, 2018

²² Li Shi, Relationship between socio-economic development and the redistribution function of social security, C1 SPRP Assessment reports vol. II, 2016

²³ Li Shi, Redistributive effects of Parametric reforms, C1 SPRP Assessment reports, vol. III, 2017

²⁴ Li Shi, Policies and Tools for Redistribution of Primary Income, C1 SPRP Assessment reports vol. IV, 2018

²⁵ A comparative analysis of the situation prevailing in Europe in terms of redistribution of primary income was also conducted under C1 SPRP auspices – see Jean-Yves Hocquet, Policy and regulations for income distribution-European perspective –Income inequality: a wide scope of action, C1 SPRP Assessment reports vol. IV, 2018

1. Contributions and Government subsidies

Although the urban basic old age insurance system has made great contribution to reforming the economic system and constructing the harmonious society, the problems of the fairness and sustainability of old age insurance system are increasingly prominent. Currently, urban old age insurance system is in the period when pension benefits are increasing rapidly and the financial subsidies are in the largest amount, which has increased from 54.4 billion Yuan in 2005 to 471.6 billion Yuan in 2014. At the same time, China's urban old age insurance is still in the enormous pressure on how to adjust system parameter, reform the structure of the system and to establish some sub systems.

At present, there are six main problems existing in the financial sustainability of pension system.

First, the income ability of the system is low. Due to the negative incentive, the principle of "pay more and gain more" has not been established in the system, then the contributions and benefits disconnected with each other, resulting in the problems of real contribution rates lower than statutory contribution rates and smaller real contribution bases.

Second, the automatic balance mechanism to resist the aging is absent. The automatic adjustment mechanism has not been set up in the social pooling system financing on the pay-as-you-go basis. And the pension divisor in the individual account system has not adjusted dynamically with the increasing life expectancy.

Third, due to the low pooling level, the sustainability of social pooling is increasingly highlighted. Low pooling level results in the large amount of financial subsidies do not help to promote the establishment of pension fund investment system.

Fourth, the design of individual account system is birth defects. The individual account system cannot live without government transfer. Social Insurance Law has provided that the assets in the account can be inherited. Thus, the people who live longer than life expectancy can receive the benefits until they die. Moreover, it is difficult to fully fund individual accounts. The scale of empty account has expanded to 3095.5 billion Yuan at the end of 2013, and the real account has increased to only 415.4 billion Yuan. The goal of partial funded pension system has not been achieved.

The fifth is that the management system is not ordered, which affects the financial capacity of the system. The Interim Regulation on the Collection and Payment of Social Insurance Premiums in 1999 has provided that the tax authorities should collect the social insurance premium directly or by the social insurance agencies. Due to coexisting of double system, the contribution incomes cannot reach its designated position. Besides, the social insurance agencies are administrated by the local administrators, which reduce the efficiency of the system.

The sixth is that workers put excessive reliance on the basic old age insurance managed by the government. The retirement income coming from the market share is too low. The multi-level old age insurance system has not been set up.

In order to establish a more fair and sustainable basic pension system, it needs to be reformed as follows:

- i. Reduce the contribution rate of old age insurance and establish the reasonable contribution base. The contribution base should be public and under the supervision of employees.
- ii. Advance the implementation of national pooling to enhance the portability.
- iii. Enhance the financial sustainability of basic pension system via the principle of actuarial balance. The measures include: develop a more dynamic and scientific pension divisor, and establish a normal and reasonable pension adjustment mechanism; all of these measures will promote a more scientific and more sustainable basic pension system.
- iv. Improve individual account, which helps to promote the incentive mechanism. It is suggested to expand the scale of individual accounts and promote the new form of hybrid social pooling and individual accounts.
- v. Introduce the role of market mechanism and pay more attention to second and third pillars. It should set up a more independent investment institution to improve the investment performance of pension fund.
- vi. Make full use of the role of the second and third pillars via preferential tax policies and open up investment options limited until now.

2. Demographic Ageing

In the 21st century, China is becoming an aging population society in an all-round way, which will bring a series of challenges to its development. On the one hand, aging has profound influences on many factors of economic development, such as labour market supply, capital accumulation, national savings, national income distribution and economic development potential, etc. On the other hand, the increasing of aging will increase the pressure on the social development; the demand of pension, medical and nursing assistance will increase and it will be difficult to balance the supply.

In full attention to the series of challenges brought from aging, we should see that ageing would also bring some opportunities at the same time. Ageing can increase the "consumer" population in the process of economic development, thus it can effectively expand domestic demand. In addition, it will bring some opportunities, such as developing elderly human resources to supplement the labour supply, developing the pension industry to upgrade industrial structure and improving the pension system to perfect the capital market. All of these can not only bring benefits for the elderly, but also can form a new economy growth point.

Overall, challenges and opportunities coexist in the aging process, it needs to be discussed in depth and comprehensively. Despite the negative impact of aging may not be completely eliminated, responding to it timely and effectively can maximally limit its negative impact. Recently, Xi Jinping, General Secretary, gave important instructions on strengthening old-age employment, he stressed that effectively cope with the population aging in China, is a matter of national development of the Country and of well-being of the Chinese citizens. It should be based on the short and long-term perspective, strengthening the top-level design, improving fertility, employment, pension and other major policies and systems, in order to make timely, scientific and comprehensive response. There are problems of aging, which interweave each other, and there is still a lack of clear train of thought dealing with ageing at present.

Orientations proposed for reform are the following:

1. The strategy of economic development dealing with population aging.
 - 1.1 Developing elderly human resources to replenish the labour supply
 - 1.2 Enhancing the investment on research and development (R&D) to improve labour productivity
 - 1.3 Developing the aging industry vigorously to promote the transformation of economy structure
 - 1.4 Perfecting the income distribution pattern to increase the effective consumption demand of the elderly
2. The strategy of social policy reform dealing with population aging.
 - 2.1 Postponing the retirement age timely to alleviate the pressure of the pension fund
 - 2.2 Reforming the pension system to enhance the risk resistance ability of the elderly
 - 2.3 Perfecting the health care service system to realize the goal of healthy aging
 - 2.4 Exploring long-term care insurance system and paying attention to the care needs of the elderly
3. The strategy of aging service development dealing with population aging.
 - 3.1 Innovating the way of supporting to meet the demand of aging service
 - 3.2 Encouraging social forces to participate in aging services in order to improve the service supply effectively
 - 3.3 Attaching great importance to the construction of the human resources for aging services to raise the professionalization
 - 3.4 Constructing better living environment suitable for the elderly to improve the comfort level of the elderly

3. Active Ageing Index

The Active Ageing Index, AAI, was developed initially only for 28 the European Union (EU) member States during the 2012 European Year on Active Ageing and Solidarity between Generations . Since then, it has been extended into several non-EU countries offering an approach to measure and monitor the concept of active and healthy ageing among populations of older persons.

The strength of the AAI approach is in the selection of a dashboard of multidimensional indicators of active and healthy ageing which are then aggregated into composite measures around policy domains. The calculations are carried out at the country level, with a breakdown between older men and women aged 55 or more. The AAI provides a monitoring and benchmarking instrument on positive paradigms of ageing that is complementary to policy frameworks such as the Madrid International Plan of Action on Ageing (MIPAA).

The report calculates for the first time the Active Ageing Index for China. It reviews data sources in China and assesses their potential relevance and applicability for developing the AAI for China that is comparable (as much as possible) to the AAI for EU countries. This research work is funded by the EU-China Social Protection Reform Project , during 2018. It is an extension of the research commissioned by United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) , during 2017.

The research offers critical policy relevant insights for China given its rapidly ageing society. Since the strength of the AAI is in its comparative analysis of multiple countries, we have also undertaken work towards the construction of the AAI for South Korea, another East Asian country where the speed of ageing is considerable. The AAI results for China have been compared with South Korea as well as with the average across the EU countries to better appreciate the situation in China, for mutual learning and to point to strengths and weaknesses of its policies in the pursuit of active and healthy ageing.

The AAI score for China is 37.8, which is higher than that of Korea (35.4) and the EU average (33.9). If considered in the ranking together with Korea and 28 EU countries, China is 7th out of these 30 countries. On the whole, we can see that China does very well in terms of active and healthy ageing of its older population.

When disaggregated by sex, the Chinese male population would rank 4th, and its female population would rank 9th. There is thus a need for a greater examination of the AAI for female population in China, so that the gender differentiation in the active ageing experiences in China can be better understood. Note that a similar gender difference also exists in Korea and in the EU countries, especially in the Southern European countries.

The high ranking of China is mainly due to the high rate of labour force participation in China. Even though the employment rate is lower for older age groups, in China, in the population aged 70-74, still about 34.2% of male population and 31.7% of female population are working. It is a unique phenomenon in China, as many continue working on their lands till late in their lives. The other domains, 'social participation', 'independent, healthy and secure living' and 'the capacity and enabling environment' would rank China as 10th ,25th and 17th, respectively.

This analysis provides for an enhanced understanding to Chinese authorities of the active ageing experiences of its older population, and mutual learning from Europe in the Chinese economic and social

contexts. The Chinese performance on the AAI is revealed to be strong in terms of employment, healthy life expectancy, physical exercise, and mental well-being. However, in several areas China's comparative position to the EU AAI average has been low, such as in terms of older persons' internet access, levels of lifelong learning, and on income deprivation. Comparison with another East Asian country, South Korea, indicates some notable differences in active ageing, such as high engagement in providing care to children/grandchildren and older persons in China, but levels of a relatively high unmet needs of medical and dental care amongst the elderly.

The analysis has indicated that the AAI in its current form is more suited to the needs, priorities and datasets of the EU countries, unsurprisingly since it was first developed with the EU countries in mind. However, the AAI for China offers some useful insights, especially in view of the unavailability of alternative metrics. As expertise around the AAI is becoming more attuned to the broader data compliance and adoption of positive approaches in addressing challenges of a rapidly ageing developing world, a new updated global version of the AAI is required, to offer a robust and functional set of metrics for age-disaggregated evidence and policy making on ageing.

4. Redistribution function of social security

The assessment of the situation led to the following conclusions:

- (1) In the past forty years of reform and opening up, China made great achievements in terms of economic growth, but social security and welfare system did not play an effective role in narrowing income inequality.
- (2) China has initially established a social security and welfare system covering the whole population, especially the pension and health care system covering the whole population. However, since the current social security system is fragmented, the system implements different systems for people with different employment status within a city, lack of cohesion and coordination between different groups.
- (3) The results of this study show that the social security and welfare system, especially the old-age insurance system, has a positive impact on narrowing the income gap, but the impact is not very significant.
- (4) The EU countries have greatly reduced income inequality through social security and welfare systems. In addition, the EU's public service equalization level is high, but also to reduce the inequality of income distribution. In this regard, China has a lot to learn from the experiences of the EU countries.

The related policy recommendations are as follows:

- the social security contributions need to increase the progressivity of payment and the payment must be linked to actual income level. In the pension system, the reform of civil servant pension insurance system should be accelerated, merged as soon as possible into the enterprise workers and public institutions staff pension insurance system.
- to reform the existing fragmentation of the social security system, to establish a unified national social security system as soon as possible. Reducing the differences in social security benefits for different groups of people. The current Dibao program needs to improve targeting, also needs to improve its low premium level.
- increase the number of welfare programs for poor people and low-income groups, such as subsidies for children from low-income families.
- the simulation analysis of social security and welfare system should be encouraged, especially the effect of income redistribution is simulated and analysed, which provides scientific basis for policy making.

5. Effects of Parametric reform on redistribution

The reform of the pension system in China needs to pay attention to the following main parameters:

First, the coverage of the insurance, that is, the coverage rate. Coverage is the starting point of analyzing the redistribution effect of pension system and determines the size of its redistribution effect. There is no doubt that the greater the coverage, the larger the size of the pension fund collected, the more conducive to narrowing the income gap.

Simulation 1: Urban pension to achieve full coverage.

If full coverage would be achieved, the inequality of disposable income would decline, but the decline is not so significant. The results show that the Gini coefficient of disposable income changes from 0.40540 to 0.40536 if those not participated in the system are assumed to make contribution to the urban worker's pension system. If those are assumed to make contribution to the urban resident's pension system, the Gini coefficient of disposable income would decline from 0.40536 to 0.40480. The decline is not significant.

In China, majority of urban workers are covered by the urban worker's pension insurance, and their income is relatively high. The low-income groups, such as temporary workers and self-employed, contribute to the pension in the form of taxation, but do not participate in the system because of "too high" contribution fees. In other words, the fragmentation of the urban pension system undoubtedly leads to low effect on income distribution.

The income base for contribution. From the 2005 Pension Reform Agenda it is not difficult to see that the pension contribution is based on the wage level of workers, that is, the higher wage is, the higher contribution. It should be taken into account that high-income earners pay more to the system, but in general, the average life expectancy of high-income earners is higher than the low-income earners, which will weaken the progressive effect of pension contribution. In general, the income base for contribution has the upper limit and the lower limit. If the upper limit is higher, that is, the higher the income of workers, and the lower the lower limit is, the pension system can produce a strong progressive effect on the income gap.

Simulation 2: Contribution fully in accordance with the income base

We assume such a scenario in which workers participate in urban worker's pension insurance make contribution to the system in accordance with the stipulation. The Gini coefficient of disposable income changes from 0.4054 to 0.3973, falling by less than 1 percentage point when the urban workers make contribution following the stipulated income base.

It is important to note that about 33% of the workers aged 20-59 participating in the urban worker's pension insurance with wage income less than 60% of the provincial average wage, while only 4% of them with wage income higher than three times of the average income. In this case, the actual contribution rate for the low-income workers is higher than 8%. In the face of the high rate of contributions, many workers with economic difficult will give up their participation, causing them to be excluded from the pension insurance. In other words, the existing system is to impose a lower (actual) contribution rate on high-income earners and a higher (actual) rates for low-income earners, resulting in reverse redistribution of the system.

Third, the pension contribution rate. Contribution rate is the core of the pension system, having a direct impact on the pension level. The results show that due to the current income base there is regressive effect.

Simulation 3: the contribution rate reduced to 6%.

Simulation 4: different contribution rates for various income groups.

As for the inequality of the disposable income of all sampled workers before and after adjustments of contribution rate, it can be seen that the Gini coefficient of disposable income decreased from 0.4054 to 0.3993 after reducing the contribution rate, but the decrease was not significant. However, the Gini coefficient of disposable income decreased from 0.4054 to 0.3368, by about 7 percentage points , if a lower contribution rate is applied to the low-income group and a higher rate to the high income group. Fourth, reduce differential of pension distribution. The results above show that the distribution of pensions among urban retirees is less fair, and the pension levels of retirees in different sectors vary widely, and the pensions are tilted to a few rich retirees.

Simulation 5: Reduce pension income inequality - setting upper and lower limits.

Simulation 6: Adjustment of pension income: uniform standards.

Before and after the adjustments. It can be seen that the Gini coefficient of disposable income decreases from 0.4054 to 0.4012 when the upper and lower limits are set, the decrease is not significant. But if we further reduce the upper limit by 10%, the Gini coefficient drops to 0.3978. Further, if we only increase the lower limit by percentage (such as 5% or 10% or 15%), there is little impact on the overall income gap. This result shows that the vertical imbalance in the distribution of pensions, especially the pension more distributed to a small number of rich people, increases pension inequality among pensioners and income inequality among all people as well.

Fifth, the pension adjustment mechanism. It should be noted that both inflation and real wage growth will affect pension income. First, if the pension income is fixed, the slight inflation will make it decreased in real value. In order to avoid the redistribution effect of inflation, the pension income will be considered to be attached with inflation in all countries. However, this adjustment mechanism relies on accurate inflation data. Another consideration for adjustment is the growth rate of real wage. Adjusting pension based on post-tax real wage growth can ensure that retirees share the fruits of economic development with their incumbents, while adjusting pension with inflation ensures that retirees maintain their basic standard of living. But this adjustment mechanism will bring huge financial pressure, may also deepen the intergenerational imbalance, and deteriorate fiscal balance of the pension system.

Simulation 7: Adjustment of the annual growth rate of pension income: controlling upper growth.

Simulation 8: Adjustment of the annual growth rate of pension income: different pension adjustment mechanism for differential groups.

It can be seen that the Gini coefficient of disposable income decreases from 0.4054 to 0.4048 (0.4046) when controlling the upper growth, while the decrease is not significant. Then if we further apply different pension adjustment mechanism for the rich and poor, the Gini coefficient drops to 0.4047, implying that there is little impact on the overall income gap. This result further indicates that the vertical imbalance in

the distribution of pensions increases pension inequality at first. Then even though we adjust the pension growth mechanism, there is little impact on its redistribution effect.

Simulation analysis of urban pension system parameters reform in China

Parameter reform 1: Change in the contribution rate

As mentioned above, the contribution rate is the core of the pension system. The results above also show that the existing pension system caused low-income workers to pay actually the higher rate than the high-income ones, generating a regressive redistribution.

Simulation of Urban Pension System Reform 1: Downgrade Contribution Rate.

When the contribution rate is reduced by 2 percentage points to 6%, the Gini coefficient decreases from 0.4054 to 0.3993; when the contribution rate is reduced to 5%, the Gini coefficient decreases to 0.4003; when the contribution rate drops 4 points to 4%, the Gini coefficient decreases to 0.4014. In other words, in the short term, the decline in contribution rate can make a positive redistribution effect. However, it should also be noted that as the contribution rate continues to decline, the Gini coefficient of income distribution does not decrease. It is not difficult to understand that with the decline in personal pension contributions, although the current disposable income has increased, but then the individual accounts of the pension will be reduced accordingly, and then pension income of retirees also declined. Therefore, the decline in the contribution rate in short-term can play a positive redistribution effect, but in the long run it may widen the income gap between generations.

Parameter reform 2: Postponing retirement age

As we all know, in recent years, China's aging trend is grim. According to the forecast, by 2025 the number of elderly people over 60 years old in China will be 291 million, and the elderly population aged 65 and over was 195 million. By 2040, elderly people over age 60 were 398 million (Du Peng et al., 2015).

Simulation of Parameter Reform 2: Extension of retirement age.

It can be seen that with the extension of retirement age, the redistribution effect of pension is declining. If retirement age is extended by one year, the Gini coefficient of income inequality rises to 0.4068. And when the retirement age is extended by five years, the Gini of income distribution rises to 0.4187, by about 3 percentage points. In other words, with the extension of the retirement age, the system becomes more disequalising.

Redistributive effects of the pension system in Rural China

Generally, the effect of redistribution of the pension system in rural China just makes the Gini coefficient of income gap of rural residents narrowed by 2.1%, which is much smaller than that in urban areas.

In general, it is quite clear that the pension system has a role in narrowing the income gap for migrant workers, but its role is very limited. However, the pension insurance helps to narrow the income gap, making it fell by 0.09%. Pension income has a positive role in income redistribution and makes the Gini coefficient of the income gap narrowed by about 1.98%. Also, similar to the situation of urban residents, retired pension has the most important redistributive effect.

6. Redistribution of Primary income

There are two measures taken by the government to exert influence on income redistribution: the first one is progressive taxation of personal income tax, consumption tax, and VAT; the second one is public transfer policy including public education, healthcare and housing subsidy.

Taxation constitutes a key element for state finance. Chinese tax system plays an important role in income redistribution among high income group and low income group as well as resolving income discrepancy among different regions through the following two ways: firstly, direct taxation transfer which is imposing taxes upon high income group while increasing subsidies to the low-income group; secondly, indirect taxation of levying taxes on the goods purchased by high-income consumers while providing subsidies for some goods purchased by low-income consumers. The division of direct and indirect taxes is characterized by their transferability: direct taxes include personal income tax and property tax; indirect taxes include VAT, consumption tax, and certain types of business tax.

The current status of China's taxation system bears two features: firstly, revenue of indirect taxes takes fairly large proportion of total tax revenue, while the proportion of direct taxes is much smaller; secondly, the proportion of the VAT is quite large whereas the proportion of personal income tax is quite marginal (5%). A comparison with other countries on the redistributive effect of taxation shows that:

- Firstly, the personal income tax system in developed countries turns out to be progressive, and the proportion of personal income tax of total tax revenue is quite large, the percentage of which is 40% in the US, 28% in the UK, 19% in France, and 24% on average in OECD countries. By contrast, in China, although the personal income tax helps to narrow the income gap, but its role is very limited.
- Secondly, the direct tax system in developed countries includes not only personal income tax, but also a tax on property "by reason of its ownership", such as real estate property tax. By contrast, Chinese direct tax refers to taxes imposed upon a person.
- Thirdly, the redistributive effect of tax system is much larger in developed countries. Estimation indicates that the change in Gini coefficient attributed to personal income taxes in OECD countries is around 0.03 while the figure is 0.0013 in China. The larger redistributive effect of personal income tax system in OECD countries is driven by the decreasing tax burden among the low-income group.

The second part of the research deals with the redistributive effect of social protection system in China. Social protection schemes affect income redistribution in two ways: contributions in pension system, medical insurance, etc. and public transfers such as pension benefit, dibao, and certain types of public subsidies. An international comparative study shows the following conclusions:

- The proportion of spending on social security program is much higher in developed countries than in China (40% vs 12%)
- The current social security system in developed countries has already covered the whole population while in China, the current social security system is fragmented and do not achieve full coverage. System fragmentation is still prevailing in the field of social protection
- The social security system plays an important role in reducing the income gap in developed countries, whereas its redistributive effect is much smaller in China, even counter-active.

- Pension system in developed countries balances equality and efficiency whereas pension system in China is still suffering from system fragmentation, urban-rural gap, implicit debt, and deficit personal account.
- With the function of social security system, the Gini coefficient of the national income inequality in the US fell 50%, while in China it only makes the national income gap narrowed by 13%, with discrepancy of 22% in urban areas and 17% in rural areas.

Next the analysis tries to find out the redistributive effect of contribution to social protection and that of public and private transfers. Social protection contributions are seen as generally regressive in that they increase income inequality; for example, contribution to medical insurance increase income inequality by 0.3%. If we look at income in the form of transfers, we can see that public transfers decrease the Gini coefficient of market income by 8%, among which pension benefit income contributes 6.5%. Private transfer is also a powerful redistributive tool which brings down the Gini coefficient by 6%.

If comparing the situation in urban and rural China, we can find out that contribution to social protection schemes tends to widen income inequality in both urban and rural areas. Pension benefit serves as the major source of income for elderly people in urban areas which helps narrow the income inequality in urban areas by 20%. However, in rural areas, private transfers, which are made of transfers from family members who work in urban areas and other types of subsidies, are the prior tool for income redistribution. Referring to the data in 2012 and 2016, the same conclusion can be made that contribution to social protection schemes widens income inequality to a certain extent while public transfers narrows income inequality.

The conclusions of the research are as followed:

- China's indirect tax system is regressive, while personal income tax is progressive. Thus, indirect taxes increase the national income inequality
- Although the progressive taxes such as personal income tax weakens the regressive effect of indirect tax. However, due to their small scale, its role in narrowing the income gap is very limited
- The regressive effect of indirect tax is larger in rural areas, and it has a larger effect of expanding income inequality in rural China
- Social security system can help to narrow the income gap
- In particular, the social security contribution plays a role in increasing the income gap
- By contrast, a variety of social security and welfare programs with public transfer income has played a role in narrowing income gap, which is derived from the role of pension benefit

The policy recommendations from this research are as follows:

- First of all, further reform the personal income tax system to increase its role in income redistribution
- Second, increase the sources (sorts) and proportion of direct taxes
- Third, unify the urban and rural system to change the fragmented social security system
- Fourth, further improve the coverage, and achieve the goal of equally protecting all the disadvantaged people
- Fifth, increase the progressive effect of contribution to social protection schemes.

IV – Evaluation Process

In China, the evaluation process related to social protection and employment promotion needs to translate into the contents of five-years economic and social development plans, for which elaboration NDRC is the leading institution.

Research works conducted under the C1 SPRP framework initiated in 2015 first focused on the proposed contents for the XIIIth Five-year Plan²⁶. Approaching the mid-term point of the 13-5, research was then conducted on the evaluation of the process both for social security²⁷ and for employment issues²⁸.

With the period for the XIVth Five-year Plan approaching, the Project devoted research works to the contents to be proposed for inclusion under social security protection²⁹ with a special focus on multi-tier social protection³⁰.

Finally, and as part of its contribution to evaluating the fields for desirable improvements under the Chinese economic, social and societal context, the project put forward specific proposal concerning the situation of women under social protection and employment promotion mechanisms, based on research conducted in two Provinces^{31/32}.

The sections to follow reproduce the main conclusions reached and reform proposals formulated under each of the above-listed headings.

²⁶ Tian Zhonghe, Contributing to the Elaboration of the XIIIth National Five Year Plan (2016-2020), C1 SPRP Assessment reports vol. I, 2015

²⁷ Zheng Gongcheng, National policy evaluation technique in the area of social protection – social security, C1 SPRP Assessment reports vol. III, 2017

²⁸ Yue Jinglun aka Ngok Kinglun, National policy evaluation technique in the area of social protection – employment promotion, C1 SPRP Assessment reports vol. III, 2017

²⁹ Song Xiaowu, Planning for social security reform, C1 SPRP Assessment reports vol. V, 2019

³⁰ Zhou Hong, Planning for multi-tier pension protection, C1 SPRP Assessment reports vol. V, 2019

³¹ Ngok King-Lun aka Yue Jinglun, A Research Report on The Situation of Female Employment and Social Protection Policy in China(Guangdong Province); Lin Yi, Research on Gender Equality in the Reform of Employment and Social Security in Chengdu and Luzhou, Sichuan Province, P. R. China, C1 SPRP Assessment reports, vol. V, 2019

³² A comparative study on European situation concerning gender issues in employment and social protection was also produced under C1 SPRP auspices – Lakmad Yasmina, Main concerns with Gender Equality In Employment and Social Protection - European Perspective, C1 SPRP Assessment reports, vol. V, 2019

1. Contribution to the XIIIth 5-Year Plan

The following reform proposals suggested for inclusion into NDRC contribution to the XIII five-year plan were identified:

1. Improve policy for self-employed labourer and flexible employment to participate in social security and pay;
2. Fully implement operation rules for basic old-age insurance fund investment;
3. Establish system of providing allowance for the sick and the disabled;
4. Introduce policy on compensating family members of the deceased;
5. Fully implement reform on old-age insurance system in government organizations and institutions;
6. Introduce national coordinating program;
7. Improve the mechanism for employees and residents to normally adjust basic pension;
8. Announce the scheme of gradually delay retirement age;
9. Implement the plan of register everyone for social insurance;
10. Research and formulate “Old-Age Insurance Act” ;
11. Research to extend the payment period;
12. Research to implement the scheme of delaying retirement age;
13. Improve multi-layer old-age insurance system;
14. Research on methods to enrich old-age insurance fund from multi channels;
15. Research on the use of social security strategic reserve fund.

The above was used as a basis by NDRC to finalize its contribution on pension reform to be included in the draft XIII five-year Plan.

2. Social security evaluation

China's social security system has been undergoing a comprehensive and profound overhaul since the mid-1980s, transforming from being state and work unit (danwei) based towards an institutional setting independent from work units with their respective distinctive boundaries. This shift is phrased as from state-work units based protection to state-society based protection . Social security, once provided exclusively to urban population, now brings benefits to the whole population. Overall, China's social security and economic development have achieved positive interaction and joint progress over the latest three decades, yet there remain problems that need to be addressed by deepening the reform on the basis of objective evaluation.

1. The institutional framework has taken its initial shape, yet it is still under further construction. As of today, the framework of China's social security system is in place while all the schemes are playing their due roles; yet some basic elements of the system, including its structure and positioning, multi-layer structure, administrative system, operating mechanism, as well as the legislation, remain to be constructed and consolidated.

2. Universal coverage has been essentially attained, yet the equity of the system needs to be promoted. More than 97% of China's population is covered by health insurance, basically achieving the intended goal of establishing universal health insurance coverage. The pension scheme benefits all elderly across the country and monthly pensions are accessible to all the elderly population. Social assistance also extends to all the eligible population. Elderly care services and services for persons with disability are also developing rapidly. China's social security system has become a fundamental way as well as an institutional guarantee for all people to share the fruits of national development; however, the benefit gaps among regions, between urban and rural areas, and among groups, remain wide.

3. The responsibility of the government is highlighted, but its boundary remains blurred. Also, the mechanism for the sharing of responsibilities between central and local governments need to be clarified.

4. The benefit level of Chinese social security is on the rise, yet the mechanisms for coordinated development and standardized indexation of benefits are absent.

5. China's social security system is shifting from long-term experimental reform to a new stage towards a mature and fully-formed system.

Major Evaluation of China's old-age pension

The old-age pension scheme is the mainstay of China' social security system, thus the key to evaluating China's social security system is to evaluate its old-age pension. Four major indicators can be used for the evaluation of Chinese pension schemes: coverage rate, replacement rate, equity and sustainability.

INDICATOR 1: COVERAGE RATE.

China' pension system coverage has been constantly extending since 1998; especially in 2009, the government launched the government-partial-funded pension scheme for rural residents, which further extended to non-salaried urban population in the 16-59 age group in 2011 and achieved full basic pension coverage in 2012, which means all the elderly can receive monthly pensions in varying amounts. However

the pension scheme for employees still has a larger space for coverage extension, mainly among migrant employees.

INDICATOR 2: REPLACEMENT RATE.

The apparently declining replacement rate does not reveal the real level of pension payouts, as the contribution base across the country is broadly below the average wage. The replacement rate, calculated on the share of average pension in per capita net income of rural residents, ranges from 10%-13%, being relatively low.

INDICATOR 3: EQUITY.

The regionally segmented pension schemes give rise to inequity and the large disparity among regions and groups.

INDICATOR 4: CONTRIBUTION RATE.

This indicator shows the burden of contributing on the working population. The per capita contribution of urban employees' pension scheme was increasing over time, while the average contribution rate was declining.

INDICATOR 5: SUSTAINABILITY.

Whether a pension system is sustainable can largely be judged from three aspects: First, pension fund balance; second, construction of multi-layer pension scheme; third, space to adjust the relevant parameters.

(1) Balance of pension fund for urban employees. Its growing trend indicates that the fund balance was increasing, and sustainability was strengthened. In addition, China has put in place the National Social Security Fund - the strategic reserve fund, which has amounted to 2 trillion CNY.

(2) The underdeveloped multi-layer pension system. In 2011, the average replacement rates of public pension and private pension in OECD countries were 42.2% and 30.4%, respectively, while the replacement rate of enterprise annuity schemes in China was only 5%. It is obvious that the second and third layers of pension system still have huge potential to be scaled up in China.

(3) Parameters influencing the pension system. In terms of coverage rate, contribution base, contribution rate, length of contributions, replacement rate, retirement age, and fiscal responsibility, China still has plenty of room for changes. To be more specific: (i) more than 100 million migrant workers are not yet covered by the employees' pension system; (ii) contribution bases in different region only amount to 70% of the local average wage, leaving room for adjustment in the real contribution rate; (iii)The current minimum length of contribution of 15 years is overly short and thus must be extended; (iv) the replacement rate calculated with the real contribution wage according stands at 67%, being still high; (v) the average retirement age is now only 54 years old, and thus can be extended for considerable years; (vi) government subsidies accounts for about 16% of the total fund revenue.

The above shows that there is great room for adjustments in China's pension system. As long as the appropriate regulatory measures are taken, the sustainability of the pension system can surely be enhanced.

3. Evaluation of Employment policies

The Chinese Communist Party and the government highly value employment. In the long run, the principle of “jobs first” will not change and the employment policies will “seek for progress while emphasizing stability”.

At the top, there should be proactive policy design and coordination among different departments at the national level, particularly between economic, industrial and employment policy-makers. Labour and employment cannot be separated from economic and industrial development.

In terms of concrete policy measures, three types of coordination should be taken into consideration.

First, the employment policies shall emphasize the long-term development, but also stabilize short- to medium-term employment.

The second is the balance between industrial and social upgrading. The essence of employment policies is to guarantee livelihood, so the human-based principle is a confirmation of the value of human and human labour.

Third, while stabilizing the numbers of jobs, the governments should also improve the quality of work on the basis of social security schemes.

Last but not the least, there should be more flexibility between the central plan and local policy implementation. Employment is no doubt the responsibility of the State, but the local governments can be entitled with more flexibility. Huge gaps exist among different regions and between urban and rural areas in China, although the policies have tried to address this problem in a long time.

4. Planning for social security reform

The research deals with the evaluation of social protection policies in the 13th FYP and the preliminary framework of proposals for the 14th FYP. The evaluation part is rather general and brief and the major focus is put on the proposals for the 14th FYP. There are altogether 8 sections under the proposals of social protection, but only 7 of them will be elaborated at the presentation because the one on urban-rural coordination is still under development.

The first section focuses on the evaluation of progress made during the implementation of the 13th FYP in terms of social protection and a general account of the potential risks, problems to be dealt with, as well as socio-economic context for the design of the 14th FYP. The following 6 sections are the detailed proposals for inclusion into the 14th FYP including national coordination of basic pension scheme, postponement of retirement age, multi-pillar social protection system, health care service system for the elderly, children welfare, and housing provident fund.

Great progress has been made during the 13th FYP in terms of social protection. The coverage of population under social protection schemes are expanding steadily. The population covered by medical insurance is over 1.3 billion, and the number is reaching 1 billion for coverage of basic pension scheme in China. A lot of reform measures are also under effective implementation including the transfer of state-owned capital to enhance social security system, market-oriented investment of pension funds, basic medical insurance as strategic purchaser, and pilot for long term care insurance.

There are of course emerging challenges to be taken into consideration for social protection policy in the 14th FYP. The first one is demographic ageing which will inevitably pose a huge impact on social protection system. It is estimated that China will step into the era of deep ageing society in 2026 with the percentage of population over 65 years old reaching 14%. On the other end of the line, the risk of low fertility trap is becoming more and more evident as the total fertility rate stays low even after adjustment of fertility policy in 2015. When looking at the primary distribution of social income, the Gini coefficient is still hovering at a high level which shows the income distribution inequality is not getting better. Moreover, the macroeconomic environment is facing downward pressure, which will influence the financial capacity of social protection and bring unfavorable possibility of unemployment issues. As was mentioned by Mr. Bai earlier, the thriving of digital economy and network platforms quickly bring new form of employment with increasing flexibility and informality. All these factors will have a huge impact on the priorities of social protection policies in the next FYP.

The research then goes into detail on the proposals to be included in the 14th FYP. The first one concerns with the national pooling mechanism of basic pension scheme. The pension scheme at present is deeply fragmented in that there are huge discrepancies among different regions in China. As is quite perceivable, the support ratio of retired population by active labour population varies drastically in different parts of China (1.26:1 in Hei Longjiang Province while 6.71:1 in Guangdong) but the current pooling system lacks the redistributive capacity to unease the imbalance. Policies around social protection including contribution rate are not unified in most provinces with a very low level of coordination. As a result, the funding for pension at some regions depends heavily on public financial subsidy when expenditure exceeding revenue based on contribution. On top of these, the ambiguity of administrative function between central and local government poses an overarching problem in terms of management. To tackle the above-mentioned issues, Mr. Song proposes several measures to be taken to achieve national pooling

including the establishment of Central adjustment funds which takes up 3.5% of the pension contribution revenue at provincial level and the scale is about 600 billion.

The second proposal to be included in the 14th FYP deals with the issue of postponing the retirement age. The average life expectancy has grown substantially during the past 70 years in China from under 60 in the 1950s to around 70 at present; the number is even higher in large cities like Beijing. Meanwhile, the number of newly-increased labour force is lowering each year. Thus it is reasonable to reconsider the retirement age to adapt to the changes in demographic structure which will exert great impact on the social and economic development in China. There has been resistance to postponement of retirement age from people engaging in hard labour employment – therefore, another term called flexible retirement can be justified in this regard but of course the general mentality is towards postponing the retirement age.

The third proposal focuses on the construction of multi-tier social protection system. The social protection system in China has been and still is governmental-oriented with very little involvement and participation from the private sector. For instance the current number in the enterprise annuity scheme is only over 20 million people, which is very little compared with the basic pension scheme. Policies have been put forward to promote enterprise annuity during the XII Plan but the effect is very limited. One of the reasons is that enterprises are already burdened by the contribution to basic pension scheme and are reluctant to pay for extra schemes. The report will try to propose measures to adjust proportions in first pillar and second pillar to seek a better balance.

The fourth proposal discusses how to build a comprehensive health care service system for the elderly. The current basic pension scheme has a rather broad coverage, but problem remains that most elderly do not have access to satisfactory health care service even if they have the money. The proposal points out that the health care service for the elderly should be home based with intense community support and institutional supplement, to be combined with medical care. It is also proposed that the private sector are highly encouraged to engage in the service industry, which is anticipated to provide more than 50% of beds in old-age service institutions. This topic is also connected on the discussion of long-term care insurance but the proposal decides that the focal point be put on the establishment of health care service system not only because it is more pressing but also because it already tackles the core issue for long-term care insurance.

The fifth proposal is dedicated to the discussion of child welfare, which has been largely neglected in the past in China's social protection system. Mr. Song would propose to put child welfare to a much prominent position in social protection system as a response to the rapid demographic ageing and societal transformation. It is estimated that there are around 9 million "left-behind children" in China – children or adolescents whose parents are constantly absent in their childhood life – the number would go up to 50 to 60 million if calculated under different criteria. This would not only cause developmental issues for the children or adolescents themselves but also social issues for the society as a whole. The measures to be taken include more public financial support, increasing civil society participation, establishment of child allowance, improving urban MAF systems and refinement of public administrative system.

The sixth proposal is about housing provident fund and how to lessen the burden for enterprises as well as low income group in this regard. As a matter of fact the collection of public housing fund in China has a regressive impact on social equality. The essential reform target lies in the establishment of a housing security bank which functions as the professional administration body to monitor and manage the housing fund.

5. Planning for multi-tier pension protection

The basic logic of the research is as follows: firstly, the report tries to illustrate the significance and purpose of studying the European experiences in the field of their social protection system, and secondly, the tentative findings and conclusions achieved so far. The reason for conducting the research is historically evident since China has learnt great deal of social security experiences from outside world including EU countries, and with the deepening of its institutional reform, China not only needs to know how but also why. The general approach of the research is designed as a result of thorough discussion among the project office and the research team on the basis of available academic resources, relevance to the Chinese context and countries of interest to NDRC. Therefore, six countries are selected namely Germany, the UK, Italy, France, Netherland, and Spain, whose social security systems are under examination.

Germany

The general observation is that in the last two decades, the market mechanisms have been obviously strengthened in the German social protection system, however, it does not necessarily relate to the “retreat of the state” or the “welfare retrenchment”, rather, the state has changed its role, function and organizational pattern, reshaping the nexus between state and market. The welfare state has changed its role of direct provider/supplier of public goods to a new regulatory agency.

The multi-pillar of old age protection in Germany consists of four layers: a statutory pension insurance scheme, the Riester Pension, company pension schemes and the basic security for old age and people with reduced earning capacity. Among the different layers, the Riester Pension scheme stands out as a unique type of social protection for the elderly. The Riester Pension is a state-subsidized and privately funded pension provision. Unlike the prototype of the multi-pillar model proposed by the World Bank, the Riester Pension involves a state-promoted but voluntary private pension scheme that differs from the pillar of a mandatory funded pension. All employees are entitled to participate in the Riester Pension; however, they are not legally obligated to be insured in this funded pension scheme. From the angle of “compulsory” insurance, the Riester Pension scheme significantly differs from the statutory pension insurance scheme in Germany.

However, the Riester Pension is highly regulated by the state. The payment of the Riester Pension shall only be allowed to commence after the age of 60. Early payment of the Riester Pension is not allowed. During the pension payment stage, prior pension contributions and the additional state subsidies paid into the Riester Pension accounts (as a minimum amount of Riester Pensions) shall be guaranteed. The Riester Pension contracts shall be fully gender neutral. Financial institutes will ensure a lifelong pension payment for Riester clients. Riester investors will be regularly informed by financial providers about the investment portfolio, the structure of the investment funds and the possible risks of the investment. The Riester Pension contracts and the capital contained within it cannot be pledged, and they are not subject to insolvency.

The critics towards the Riester Pension are twofold: firstly, the Riester pension may have a marginal effect on low-income individuals and families as well as on households without any regular income since they do not have the necessary financial resources to pay the extra Riester contributions. Consequently, the Riester pension may favour the middle or upper-middle classes. Secondly, the question of “pension justice” has thus arisen since those who engage in atypical and irregular employment in the labour market are actually

excluded from the Riester pension. Old age-poverty is preprogramed and many retired people in Germany are increasingly exposed to risk of poverty in their old age.

The most intriguing observation of German pension reform concerns the blurring of boundaries between state and market. Unlike the drastic market-oriented pension reforms in new emerging markets, and unlike the welfare market sector in the Anglo-Saxon and Anglo-American world, the German pension market is a heavily regulated welfare sector. Comprehensive and rigorous public laws, strongly shaped by the tradition of state regulation over the market prevalent in the German model of a “social market economy”, have set the line of demarcation for safe and responsible investment. This structure has profoundly shaped an intermediary sphere that links market mechanisms to a public policy field.

Rigorous administration and heavy regulation through the welfare state has resulted in an emergent hybrid welfare sector, which engages multiple stakeholders: a supervisory agency, consumer protection agencies and financial actors. This new form of hybridized sector has been labelled a “regulatory welfare state”, social policy regulation or a “welfare market” by German scholars signifying a fundamental semantic and structural transition from the conventional welfare state. The transition from a providential welfare state to a regulatory welfare state mirrors a fundamental reconfiguration of the nexus between state and market rather than a simple social-technological type of reform.

United Kingdom

For the UK, the report takes a historical perspective. After World War II, the UK established what was called the Beveridge Model for its social security system. With the refining of the model and wealth accumulation of economic development, national insurance payment standards and payment levels as well as the coverage of different protection schemes continued to increase, and a unified management body was established with the merging of the Ministry of National Health and the Ministry of Social Security. The state bears 50-60% of the social protection system.

This social welfare institution was cast aside by Ms. Thatcher’s government when the Oil Crisis hit Europe. The state-oriented system was quickly transformed by a series of reform measures including reduction of social welfare expenditures, government fiscal expenditure, and emerging emphasis of individual obligations and responsibilities. The Social Security Law was introduced in 1986 which changed the welfare “normality” to welfare “selectivity” with privatization and marketization – the level of pension benefits was reduced, sickness and unemployment short-term allowances associated with income were also cancelled.

This logic of state withdrawing from social protection provision has been retained by the subsequent governments ever since the 1970s. The advocacy for “the third way” proposed by Anthony Giddens in the 1990s shifted the social protection system from demand-side management to the supply side, with the focus on improving human capital with “education, education and education”, who also advocated that the government should be “providing work for able workers, providing protection for those who cannot” “making work profitable”. Individual accountability was emphasized by the Brown government and the Cameron government since the 2010s. Responsibility is mainly reflected in the fact that every British who has the ability to work should go to work. The Pension Reform Law abolished the basic pension and the second state pension and merged into a unified public pension. The minimum qualification period in the full field was extended to 35 years.

Current pension system in the UK is composed of three components. Public pensions – a low-level pay-as-you-go system with a replacement rate of 22.1% in 2016, an occupational Pension - NEST which employees “automatically join”, and the private pensions whose coverage is relatively high at 43%, and the voluntary private pension replacement rate is 30%. The social assistance system is highly correlated with encouraging employment.

The New State Pension began in April 2017, which combines the State Basic Pension and the Additional State Pension into a new pension with equal treatment. Based on income, work conditions and other factors, the payment standards for four different groups of people are designed. It is a comprehensive protection plan, a payment port, corresponding to a package of insurance and allowance projects.

The eligibility requirements have been further tightened. The minimum period of “qualifying years” is more than 10 years. There is no early retirement policy. Only when the legal retirement age is reached benefits can be collected. The full new national pension must be paid for over 35 years, and the direct equal proportion of accounting for people who contribute less than 35 years. When accounting for the effective number of years of payment, it will take care of the interests of vulnerable people or special groups who are sick, disabled, unemployed, pregnant, caring for children or responsible for care, and give preferential treatment as a payment.

Italy

Compared to other European welfare states, Italy's social security system is quite unique. Firstly, Italy's public pensions occupy an absolute dominant position; the proportion of supplementary pensions is small. Secondly, there is a serious group imbalance in unemployment income protection. Thirdly, social assistance is only focused on old age. Family plays important role in coping with individuals' unemployment and poverty. Fourthly, the National Health Service System is under the principle of salvation.

The pension system in Italy at present is characterized with an immature three-pillar structure. The first pillar consists of non-contributory old-age assistance and compulsory PAYG pension plan; pension expense accounts to 2/3 of total social expenditure in Italy which is the highest among EU member states. The second pillar is the total accumulated occupational pension which is based on voluntary participation of individuals; different ratios of occupational pension exist in different industries, much of which is from the TFR – severance pay. The third pillar is the individual pension scheme where people join open fund voluntarily or participate in PIP – Individual pension plan.

The reforms of the Italian social security system is characterized with institutional learning from the EU level while at the same time still maintained much legacy from its own institutions; it is an ongoing process constantly adjusting to the changes of economic and social situations; the tendency of reform is to strengthen the role of the market and personal responsibility, to moderately reduce the state's burden, and to look for a more balanced structure of social expenditure.

The social security reform in Italy has exerted positive impact in several aspects. Firstly, the financial sustainability of public pensions has been enhanced to some extent as a result of strengthening individual's responsibilities and stringent regulations on pension-drawing. Secondly, the imbalance of social assistance and unemployment insurance has been corrected to some extent. Thirdly, the imbalance of income security has been corrected by establishing unemployment relief scheme in 2015 and “Citizen's Basic Income” scheme in 2019.

There are also unsettled issues brought about by the reform. Firstly, the redistributive role of public pensions has been greatly weakened, and the lack of supplementary pensions will worsen the problem of old age poverty. Secondly, under the current pension system, workers' occupational stability and continuity, and life span become important factors which have much impact on the pensionable income. The counter measures on raising the retirement age and payment period will worsen the problem of income inequality, especially for flexible employment and self-employment groups facing the risk of living standard worsening sharply after retirement. The reform of Italian National Health Service system tends to localize the administrative and fiscal authority. Regions play more and more direct and important roles in health policy. This means the deterioration of regional imbalances in health service supply.

France

The structure of social protection system in France consists of three parts: social security which includes schemes of retirement insurance, medical-maternity insurance, occupational injuries and diseases insurance, and family benefit; unemployment insurance, and social aid.

The main characteristics of French social protection system can be summarized as followed: it is mainly a PAYG system with no compulsory funding and the State plays a key role in provision and management; a health care scheme with universal coverage is in place; the benefits and allowances for families are very generous; unemployment support is strong both financially and technically; and the social aid system is also very well organized. The strength of the social protection system in France is evident: with the State taking over the main responsibility, the aspect of solidarity and universalism in social protection has been achieved to a large extent, which has provided the majority of the population with a social safety net in a comprehensive, generous and effective manner.

The challenges brought by this model are also typical enough: France is among the highest spenders in the OECD in terms of social spending which is the cause for huge public deficit; the consideration of fairness outweighs efficiency, which makes the social protection system more socially sustainable than financially sustainable; structural reform on social protection has been difficult to put forward due to the veto power of the trade union.

Nevertheless, there have been some tendencies and orientations for systematic reform of social protection in France. Reform measures in the field of pension have been focused on parametric adjustment because of the general resistance for a structural reform; the issue of financial sustainability has been addressed to some extent, however, polarization of pension benefit becomes evident, the social aid expenditure increases, and the issue of intergeneration equity stands out.

Other debates brought about by social protection reform in France includes cutting of non-means-tested allowances and increase of mean-tested allowances for family benefits; the shift from unemployment compensation to employment incentives in unemployment protection; and the roadmap towards a unified and simplified pension scheme where same rules apply to all employees no matter the social sectors they are in. To sum up, the main problem for France at present is to seek the balance between adequacy and sustainability for its social protection system.

The Netherlands

The Netherlands hold a mixed structure for its social protection system as a result of its socio-economic background, which can be seen on three different levels: schemes based on citizenship, schemes based on

employment status, and social assistance. With the emergence of an ageing population, increased participation of women in labour market, and the development of non-standard employment, new challenges for social protection occur and priorities have to be reconsidered.

Seen from the perspectives of social investment, the welfare state should carry three functions in terms of social protection. Firstly, it must provide labour market capacity for those who are able to take part in employment of any kind, i.e., the state must ensure a stable level of labour market participation rate; secondly, it must strive to invest in human resources so as to maximize its human capital; and thirdly, it must provide countermeasures to buffer against systemic social risks.

There are two lines of reform measures in the social protection system in Netherlands, namely welfare reform and workfare reform. For welfare system reform, the basic protection such as pension scheme and medical care have been strengthened by measures such as sustaining the universal flat-rate public pension schemes, extending coverage of the occupational pension schemes and expanding the basic medical care insurance and long-term care insurance to cover the whole population. The welfare system reform has resulted in significant rise of social and public expenditure, which can be potentially challenging for financial sustainability.

For work-based social protection, the main logic of reform is to promote individual responsibility in social protection and to encourage able work force to take part in labour market. For instance, the reform in pension scheme for employees is trying to put stronger limitation towards early retirement; the benefit of unemployment insurance is set at a lower level and the number of years for receiving unemployment insurance is shortened; on top of that, employment promotion measures are incorporated into the scheme as well. The criteria for receiving disease and disability allowances are also more strict as Netherlands redefines its categorization for illness and disability; child care has been developed and included into the national social protection system.

As the state takes the main responsibility of providing basic social safety net for its people, resources from the market are also mobilized to provide supplementary income or services alongside. In some field, the management of social security schemes is based on market competition.

Spain

The social protection system in Spain is constructed as a collaborative effort by several administrative entities including the Ministry of Employment and Social Security, the Institute of Elderly and Social Services, Ministry of Health, Social Services and Equality MSSSI and other autonomous communities. These entities are responsible for different schemes in social protection including contributory benefits such as retirement pensions, invalidity benefits, maternity benefits; non contributory disability pensions, non contributory retirement pensions, system for autonomy and the care of dependency, and other services and economic benefits such as residential care, child protection, minimum integration income, aids for victims of domestic violence, etc.

Just like other EU member states, the social protection system in Spain is established upon solidarity principle which takes the main form of PAYG mechanism under social and political agreements. The basic non-contributory schemes are mostly financed by the government while contributory and professional benefit schemes are financed by employers and employees. To cope with the potential risks posed by changes in socio-economic development, the objective for reform lies in the maintenance of a mandatory

PAYG public pension system for all employees which is financially sustainable. The funding requirements and the adequacy of benefits are assessed by using revenue's and expenditure's projections in the medium and long term.

The recent reform measures in social protection in Spain has been focused on postponing retirement age and the requirements for early retirement are being tightened gradually. Moreover, an annual increase in the accrual rate will be applied for employees who retain their employment status after legal retirement age. The accrual rate is +2% for people with career length below 25 years, which goes up to +2.75% for people with career length between 25 and 37 years and +4% for people with career length over 37 years.

Now the difficulty is how to make a bridge between these special designs of pension schemes and what can be called the general scheme which provides more adequate support and better standard of living. It took decades in Europe to find a way of ensuring comparable level of protection for different groups of people, and it had a cost. With the current proportions of GDP allocated to social protection, it is quite unlikely that China can afford a high level protection for those who really need them. In terms of social protection provision, the advanced countries in Europe are earmarking at most 1/3 of the GDP to the field of social protection. So it is a choice, one which ILO refers to as the "price for social peace". Maybe in China, the policy makers should think about the option of putting more resources in social protection – it is not easy, but China has done things much more difficult than this.

6. Gender considerations in Employment and Social protection

Sichuan Assessment

Main Policy recommendations

The data analysis of female employment and social security in Chengdu and Luzhou reflects not only the features in Chengdu and Luzhou themselves, but also the common problems in the whole country. It is necessary to give constructive policy suggestions to the government from the overall concept.

- 1 Actively guide and support female employment, and build a benign relationship between employment and social security
- 2 Accelerate the structural reform of old-age insurance system to promote gender equality in the urban and rural system
- 3 Optimize parameter reform of old-age insurance system to promote the equalization of retirement age between men and women
- 4 Building a female compensation mechanism in social security system
- 5 Building a female interest distribution mechanism in social security system

Guangdong Assessment

Policy recommendations

(A) Of the main system of policy recommendations

First, the establishment of general system of public pension. The establishment of general public pension system, for all residents, men and women to provide the same basic old-age security. Second, reduce the urban workers' pension insurance system access threshold. Third, reduce the requirements for pension eligibility Fourth, the expansion of female migrant workers maternity insurance coverage. Fifth, learn from the experience of developed countries.

(B) Policy recommendations for the transfer of pension rights

First, the realization of basic pension national co-ordination. Second, the use of "sub-calculation, unified release" principle of pension. Third, strengthen the construction of social security information system.

The "urban and rural old-age insurance system convergence" proposal

First, to allow migrant workers, especially women migrant workers choose to participate in the household registration workers' pension insurance

Second, to participate in urban workers' pension insurance payment of less than 15 years of migrant workers, the same can enjoy the basic pension benefits

(C) To speed up the establishment of women's flexible retirement system

(D) The establishment of statistical data by sex collection and reporting

(E) To strengthen policy advocacy

Overall recommendations³³

1. The two national reports by prof. Ngok Kinglun and prof. Lin Yi and the European overview by Ms. Yasmina Lakmad largely coincided on a number of key aspects related to gender considerations in employment and social protection, thus allowing for the following concluding points.
2. There is no such thing as gender neutrality in employment and social protection. To be socially efficient, social protection has to address the factors affecting negatively gender equality also at an early stage, including through education and employment promotion measures.
3. The specifics of female employment and working conditions have to be further analysed, so that related discrimination maybe be actually combatted.
4. The situation of female migrant workers requires particular attention, including concerning the conditions under which return to the place of origin take place.
5. Old-age pension insurance should take into account the negative effects of women's actual participation in the labour market on their capacity to accrue sufficient rights over their active lives.
6. Social protection of the elder generations should be carefully monitored, to avoid deprivation and poverty for women, who are more likely than men to be in a vulnerable position.
7. The particular contribution of women to social and economic development should be fully recognized, notably when it comes to the acquisition of pension rights.
8. Advocacy campaigns should help in raising awareness among women about their social protection entitlements, and the possibilities for their individual economic and social empowerment.
9. Statistics, and their analysis, should systematically include gender components in all aspects of employment and social protection.
10. The project should advocate the inclusion as a cross-cutting issue of gender related considerations in future technical cooperation endeavors between Europe and China in the employment, social protection and income distribution areas.

³³ From International workshop on Gender considerations in Employment and Social protection, Chengdu, 21 January 2019, Chairperson's conclusions.