PROPOSAL FOR A REFORMED STRUCTURE OF THE CHINESE PENSION SYSTEM FOR URBAN EMPLOYEES

EXECUTIVE SUMMARY

The paragraphs to follow submit a proposal for a reformed structure of the Chinese pension scheme for Urban employees. This proposal is being formulated by the Component One Resident Expert of the EU-China Social protection reform project, pursuant to the Project result R.4 (“ National policy framework for a full coverage of old-age insurance system throughout China is consolidated by strengthening the interface of various schemes (…)”).

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 2017 – as well as the most recent works produced under Component 2 auspices in 2018 concerning pensions financing and contributory patterns. The list of project reports which contents were used to develop the proposal is listed in an annex to this Note.

The Proposal basically 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 paragraphs hereafter represent only the broad contents of a future possible 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.

Special thanks go to Chinese and European colleagues who reviewed and commented on previous drafts of this Proposal – thanks in particular to Mr. Fang Lianquan from the Chinese Academy of Social Sciences CASS and to Mr. Karl Birkholz from the Swedish pension scheme Pensionsmyndigheten for their very useful suggestions.

Jean-Victor Gruat,

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BACKGROUND & RECENT DEVELOPMENTS

1. A number of recent decisions affecting the structure of the Chinese social security system may facilitate the identification of a feasible reform for the Chinese pension system for urban employees, which would notably address the following difficult points:
   - A fragmentation of the system acting as a deterrent for registering, and an impediment for labour mobility;
   - An insufficient development of second and third pillar arrangements (supplementary protection, individual protection);
   - A perceived high burden of contribution on basic pension system;
   - A low level of funding for individual accounts (empty accounts);
   - A low and declining replacement rate, a non-systematic indexation of benefits;
   - An apparent uncertain financial sustainability, especially for the issues of regional gap and overall demographic ageing.

2. Among recent developments and statements, the most relevant appear to be as follows:
   - Widespread reduction in employers' contribution rates;
   - Integration of staff from Government and Public institutions in the Urban Employees' pension scheme (under separate section, with newly established supplementary pension scheme);
   - Desirability to promote and develop entreprise annuity schemes or equivalent;
   - Establishment of the Central adjustment fund and efforts made towards national pooling;
   - Earmark part of SOEs shares to contribute to overall pension financing;
   - Search for improved relationship between actual salary and basis for contributions and benefits;
   - Improved interest rate on individual accounts;
   - Search for appropriate indexation mechanism;
   - Entrusting MoF with contributions collection responsibility, integration of national and local network of tax bureaus;
   - Envisaged tax exemption for entreprise annuity funds, second and third pillar arrangements;
   - Postponing legal retirement age;
   - Establishment of a national administration for medical insurance.

SEGREGATING FIRST AND SECOND PILLAR ARRANGEMENTS

3. Reflection towards a comprehensive reform of the pension system for urban employees seems to be inclined towards a more precise delineation between equity (basic protection) and efficiency (link with contributions) considerations in the pension system. More specifically, the simultaneous handling of basic pension and individual accounts appears as questionable, and the advocacy for second and third pillar independent structures is more and more frequent.

4. At the same time, the achievements of the pension system in keeping dozens of millions of former elder workers out of poverty calls for caution in reform, and the preservation of a robust, redistributive basic pension mechanism appears as advisable.

5. A possible scenario for the future might therefore be to keep basic pension arrangements as first pillar, but to transfer the responsibility to handle individual accounts to second-pillar type arrangements via a considerable

extension of entreprise annuities or similar mechanisms[1]. It would be up to individuals to enter into such third pillar arrangements they deem suitable, with or without support from their employers.

6. Otherwise, it seems that the government is inclined to make the individual account in the basic pension system notional (NDC system), since the booking interest has been enhanced in last two years. So, the transfer of the individual account in the first pillar remains hypothetical. One may therefore confront with a situation where two individual accounts are maintained for the same contributors, one notional (basic pension) and one real (entreprise annuity), with different modalities for accruing interest and for computing benefits. This would not a priori be a positive factor towards the simplification, transparency and social acceptability of the system which are otherwise advocated.

7. The transfer of responsibility to collect contributions to Ministry of Finance is expected to dramatically increase compliance, and therefore to generate additional resources making the system more sustainable while lessening the burden on already compliant entreprises. The upgrading of individual accounts into second pillar type arrangements would also, allegedly, enhance the interest of potential contributors for joining the system.

TRANSFERRING EXISTING INDIVIDUAL ACCOUNTS

8. Companies potentially interested in handling second pillar arrangements are notably to be found among those currently handling entreprise annuity funds. Even though amounts are different, be it for number of accounts or for sums involved, the technique basically remains the same.

9. There are however some specific aspects that may render the process less straight forward as it might be expected to be – a few of them being listed below.

   - To take over rights in course of acquisition private Fund managers would request a transfer of corresponding amounts. However, a number of individual accounts are in fact notional (“empty”)[2]
   - If the Government was to compensate for empty accounts, the cost would be of some 4 trillion RMB yuan which is well above the total fiscal subsidies already paid into the public social insurance pension fund over the last twenty years[3]
   - The portion of pension derived from individual accounts is obtained through a division by 139 when retiring at age 60 – while insurance companies would typically apply a divisor of approximately 300[4]. The transfer of individual accounts to Fund managers and private insurance carriers would therefore result in a sharp decline in pension entitlements, whereas replacement rate from individual accounts is already considered as notoriously low.
   - Insurance companies or private pension fund managers would have huge difficulties to guarantee a minimum yield to subscribers – all the more when financial instruments available may be extremely volatile. This factor of individual risk may be acceptable to contributors though, if their future pension income from other sources remains substantial, and not likely to be affected by similar uncertainties (defined benefit).
   - The transfer of up to date individual accounts for some 300 million active contributors[5] will not be an easy operation, given the geographical fragmentation of data and the time needed by host companies to prepare for this transfer.

10. In view of the above, there is a serious risk of delays in implementation of a decided transfer of responsibilities for handling individual accounts to second pillar private institutions, and a possibility of operational difficulties

coupled with disappointment from the public in view of amounts actually paid to those retiring after the reform.

11. Under such circumstances, it might be worth considering an alternative course of action which would escape the pitfalls of the above described scenario, while adhering to the core idea of vigorously promoting second and third pillar initiatives thus clearly delineating the mark between PAYG, defined benefit, basic pension and funded, defined contribution, supplementary pensions.

ANALYSIS OF THE CURRENT PENSION FORMULA

12. According to the provisions currently in force, the benefits paid by the Chinese pension scheme for urban employees are – for those beneficiaries having contributed to the scheme – composed of two elements, one PAYG and defined benefit, and one representing amounts accumulated in individual accounts (real or fictional). The defined benefits component is accumulated at 1% per validated year of the average between the final contributory wage and the local social (average) contributory wage; the defined contribution component represents monthly a fraction of the amount accumulated on the individual account of the beneficiary (including accrued interests) varying with the age at retirement (1/139 at age 60, 1/175 at age 55, 1/190 at age 50).

13. Contribution rates are normally of 20% (employers' contribution) towards defined benefit component (Pooling area) and 8% (employees' contribution) towards individual accounts. Contributory wage is to be between 60% and 300% of the average social wage[6]. Contributions paid by and on behalf of employees do not necessarily correspond to their actual income from employment (under-declaration). In many instances, pooling authorities have established a de facto minimum pension (basic pension plus individual account) at 40% to 60% (depending on the pooling area) of the average social wage after a minimum contributory period of 15 years (subject to reaching the required retirement age).

CURRENT PENSION FORMULA

BASIC PENSION: 0.01* NYC* (ALS+AIS)/2 – NYC number of years of contribution, ALS average local salary, AIS average individual salary (floor 60% of ALS, ceiling 300% of ALS)

INDIVIDUAL ACCOUNTS, MONTHLY : (CA+AI)/ACTF – CA contributed amounts, AI, accrued interest, ACTF, actuarial factor – 139 at age 60

MINIMUM (BASIC + INDIV. ACCOUNTS) from 40% to 60% of ALS depending on regions

14. While the replacement income expected from the scheme was initially of 35% under the basic pension (PAYG, defined benefit) and 25% under the individual account components, the actual replacement rate has been declining over the years and is currently around the 45% mark[7].

15. Amounts accumulated on individual accounts (or better say amounts contributed by workers towards their individual accounts plus interests) represented some 4 trillion RMB yuan in 2014 (500 billion "real assets", 3.500 billion "empty accounts"). Individual accounts were introduced in 1997 as a nationwide feature of the pension scheme.

16. Interests accrued on individual accounts were until the year 2017 limited to interest rates paid by banks, which is historically far below other relevant indicators, such as GDP or wages growth rates[8]. This contributes to the relatively low level of pensions paid out of individual accounts. It has to be noted that while adjustment to benefits in payment apply to the whole basic pension, amounts remaining on individual accounts do not produce interest anymore as soon as the benefit starts being paid.

17. The actual value of the remaining part on individual accounts therefore decreases over time which in a sense may partly justify *a posteriori* the use of an apparently very favorable divisor of 139 at age 60[9] - it being understood that benefits remain payable in full even after the amount available on individual accounts would have been fully exhausted[10].

18. The inclusion in the defined benefit formula of an element reflecting the workers' own contribution at par with the element reflecting the evolution of the average social wage responded to a perceived need to achieve a better balance between social considerations (equity) and recognition of individual contributions (efficiency) in the basic pension formula.

19. However, the predominance of the relatively high and easy to achieve minimum benefit (qualifying period of 15 years only) and the final relatively low level accumulated on individual accounts resulted in a quasi *de facto* flat rate pension benefit, achieving good results in terms of redistribution towards the workers with low levels of contributions but delivering poorly in terms of replacement rate for contributors with real income above average.

20. This being said, the existence in the pension formula of two elements related to salary – one being the average local wage and the other the individual contributory wage – could be questioned, since it affects the efficiency of the scheme (benefits as replacement of past income) and could be substituted by the recognition of the entitlement to a minimum pension – as is currently informally practiced (40 or even 60% of the average local (contributory) wage).

21. It has to be noted however that the use of average minimum wage in the benefit formula itself – and not only as an exogenous variable for minimum-type benefits – represents an incentive for contributing at a level corresponding to individual income when higher than average, since under-declaration will directly affect the initial pension level.

22. Initially, only the average local wage appeared in the pension formula for its segment out of resources pooling, thus clearly segregating two components or pillars in the basic pension – one of solidarity based on work (insurance) duration, and one of individual reward of past contribution. This element is therefore a very distinctive feature of the Chinese pension scheme of Urban employees, which has a clear role to play in ensuring solidarity among workers (contributors) within a pooling area, and which abolition may raise strong questions and objections at the level of principles guiding the scheme.

23. What might be considered though, is the feasibility to discontinue or to limit[11] the current practice of raising basic pensions non-individual accounts components to substantial levels (40% to 60% of average local wage) which represents in a sense a double protection through which generous flat rate benefits tend to supersede the application of the benefit formula (and hence to act as an incentive towards under-declaration).

RECONCILE CURRENT AND FUTURE PROVISIONS

24. The difficulty to transfer to second pillar fund managers the responsibility to honour amounts accumulated on individual accounts does not mean that those amounts should simply be disregarded.

25. It would not however appear as wise either to design new transitional measures for workers having joined the fund after 1997 to keep entitlements based on personal contributions. The co-existence of numerous transitional provisions is indeed likely to generate confusion in public minds, and to run counter the advocated goal of renewed trust in pension provisions and their sustainability.

26. It is therefore proposed that amounts theoretically accumulated on individual accounts be recognized through a modification in the PAYG defined benefit component, which would henceforth represent the totality of the basic pension. This would be achieved through strengthening the portion corresponding to individual contributions in the benefit formula.

27. To avoid leaving the impression that current members may be suffering potential losses via the discontinuation of past individual accounts, it is also proposed to revise the formula to make it appear more generous in terms of replacement income – which should be possible thanks to the improvements in compliance expected from the transfer of the responsibility for contributions collection to Ministry of Finance[12].

PARAMETERS FOR A REFORMED BASIC PENSION

28. One key issue for the reformed formula applied to basic pension is the value to be attached to amounts in individual accounts. As already mentioned, those are currently receiving 8% of the contributory income, and after accruing interests are divided (normally) by 139 to obtain a monthly pension.

29. Assuming that interests accrued are such that the purchasing power of contributions expressed with reference to current salaries is kept throughout the contributory period until retirement, the amounts accumulated after 30 years of contributions would represent (age 60) IS*0,08*360/139 i.e. a 20.7 % replacement rate. This – for a contributor whose average wage is equal to the average social wage – would be equal to 2/3 of the amount paid out of the social pooling, with a total replacement rate reaching 50% of the last individual contributory wage. However, in view of the (until now) less favorable accrual of interests on individual accounts, contributors are not expecting this level of replacement rate, which is currently of some 45%.

30. It would therefore not appear as unreasonable to suggest that, in the basic pension formula, the impact of individual accounts be accounted for through both an increase from 1% to 1.5% of the accumulation rate, and the increase in the reference salary of the share of individual contributory base, the social (contributory) average representing only one third of the final income. The formula would then become:

BASIC PENSION (incl. Former Individual accounts): 0.015* NYC* (ALS+2*AIS)/3

where NYC is the number of years of contribution, ALS the average (contributory) local salary, AIS the average (contributory) individual salary (floor 60% of ALS, ceiling 300% of ALS)

31. After 30 years of contribution, a typical replacement rate would be of 55% of contributory income for workers contributing at 60% of the average social wage , of 45%'of contributory income at contribution levels corresponding to the average social wage, and of 35% of contributory income for those contributing at the ceiling of 3 times the average social wage.,

32. When keeping the threshold for maximum contributory levels (60% and 300% of ALS respectively) the formula would ensure that, after 30 years of service, no basic benefit would be less than 30*0,015*ALS*2.2/3 i.e. one third of the average social wage. The established practice of a minimum pension not below 40% (or 60%) of the average social wage could therefore be kept, subject however to two safeguards, one to ensure that no pension reaches levels too close to the average final individual wage – a limit of 75% of the average individual salary AIS could be envisaged -, and the other to limit access to minimum benefits to pensioners with at least 30 years of contributory services or equivalent[13].

33. Consideration could be paid, on the occasion of the reform, to the introduction of basic disability pensions (disability being non occupation-related) where calculations would be based on the number of years the beneficiary could have accomplished until retirement, had he/she not been disabled. Such pensions could be subject to a minimum qualifying period of 5 years of contributory services[14].

34. While a threshold of 30 years of service to access minimum benefits is recommended – and is compatible with the contents of relevant international instruments – the fact that the pension benefit formula is proportional to the duration of insurance makes the establishment of a threshold in terms of minimum number of contributory years apparently unnecessary to prevent abuses. A minimum contributory period of 15 years for old-age (5 for disability) could however be considered as per relevant international instruments – and also be applied to workers having interrupted their career before reaching retirement age, and claiming later a deferred retirement benefit.

35. The period to be covered under the average local salary and the individual local salary respectively is open for debate. While the current provisions (basic pension from the pooling funds) retain a short reference period – one year – it may be argued that although this is congruent with the pension scheme objective that benefits should replace last income when it is lost, this opens the way, as far as individual wages are concerned, to complacent salary increases for workers approaching retirement. It might therefore be advisable to calculate the individual salary over a longer period of time, 5 years, 10 years, 25 years, etc. subject to the proper indexation of past earnings (average local salaries could be used as a reference).

36. Benefits in course of payment should of course also be indexed, and the on-going reflection concerning such indexation mechanism is not to be affected by the proposed reform, as far as basic pensions are concerned. Similarly, on-going discussions on raising the retirement age would remain fully valid.

37. It was mentioned at the beginning of this Note that the decision had been made to establish a pooling at the national level – which might be made easier through the transfer to Ministry of Finance of the task to collect and manage pension contributions. This does not however mean that China could be considered as one unified territory in terms of basic pension benefits. As a matter of fact, there are important geographical discrepancies between salary levels among the provinces (the gap being greater than 2:1) as well as within the Provinces. It therefore appears as reasonable to, at least in a medium term perspective, keep existing boundaries ("pooling areas") for the definition of local parameters.

ACQUIRED RIGHTS AND RIGHTS IN COURSE OF ACQUISITION

38. Coordination mechanisms will still have to be decided upon and implemented as far as urban-rural migrant workers are concerned for the portability and vesting of basic pension rights. The international experience of totalization of periods and apportionment of benefits is now well known of Chinese authorities and could easily be implemented, especially within a system having acquired a certain level of centralization.

39. In practical terms, it might be envisaged that while the qualifying condition to access benefits or minimum payments might be appreciated through totalization of periods of insurance under various pooling arrangements, each responsible local administration would then calculate benefits according to its own legislation – and have them delivered to the beneficiary. Alternatively, the competent organization where the employees lodges his/her final claim could calculate the total benefit under its own regulations (based on local average salary + averaged individual salary wherever paid) and request reimbursement from other concerned agencies on a proportional basis.

40. The centralization of data thanks to Ministry of Finance intervention and the discontinuation of individual accounts would make the cumbersome procedure of transferring contributions whenever a worker changed the pooling area obsolete, and compensation mechanisms among provinces would drastically limit financial exchanges. One may even envisage that a special entity be created centrally, which key mission would be to facilitate portability and vesting operations for migrant workers.

41. This centralization may also help unify the management of pension entitlements for public officials (GOPI – see endnote 3 and Zhang Yinghua (2015)). The reformed pension scheme could immediately apply to those currently contributing - or–having contributed but awaiting for deferred benefit. It might be considered to what extent the revised basic pension formula could affect the supplementary benefit scheme introduced to make good for losses incurred in future pension rights when merging into the Urban employees' pension scheme, since the new formula is likely to be slightly more favorable than the previous one. However differences are not likely to be very substantive, and it might therefore be advisable to opt for a status quo concerning supplementary pensions for GOPI officials, since too frequent changes in pension provisions affecting this category of staff is not desirable.

42. Otherwise, the proposed reform should not affect pensions in course of payment. Similarly, existing provisions for the recognition of periods of work accomplished before the instauration of the reformed contributory system could remain unchanged.

43. The commitment of the Government towards these non-contributory benefits or part of benefits could be actuarially evaluated – beneficiaries forming what is called a "closed group", a precise calculation is feasible – while the scheme for those joining in on or after 1997 would be financed out of contributions and financial products. A revised PAYG (scaled premium) contribution rate (contributions to be paid by employers) could then be computed, with employees contributing 8% of their remuneration into an authorized pension fund management company of their choice – or of the choice of their entreprises.

44. An in-depth reflection should be devoted to the future of urban and rural residents' pension scheme. Under that scheme, the average contribution paid by insured persons is of about 200 RMB yuan annually, which goes into individual accounts providing minimal supplements to basic flat rate pensions. If individual accounts are being abolished, the scheme might become de facto non-contributory, and its membership will be extremely

difficult to trace all the more when responsibility for contributions collection under medical care might become incumbent upon the newly created State Medical Insurance Administration.

45. The proposed reform is therefore purposely limited to the urban employees' pension scheme – to which all rural urban migrant workers should contribute while under salaried employment – and it is recommended that a specific reflection be conducted by the Government on the possible future of the Residents' pension schemes.

CONCLUSION

46. When submitting this Proposal to comments of all interested parties, the EU-China SPRP Component One is perfectly aware that a number of details still need to be discussed to reach a stage of operationalization of the reform. In particular, it would be necessary to test the financial requirements attached to the basic pension component (first pillar) expressed in terms of employers' contribution rates for active workers.

47. Actuarial calculations are indeed to be central to any substantial reform and monitoring of pension systems. It is only through such calculations that the value to be attached to core parameters could be confirmed or amended – those core parameters being notably retirement age, indexation of past earnings, indexation of benefits, minimum and maximum for contributions and benefits, share of average local and individual contributory wages in benefit formula, accumulation rates, accrual of interest, commutation factors, qualifying conditions, etc.

48. Annex 3 provides a comparison for each of these core parameters between current and proposed situations. As for annex 4, it draws a table expressing the qualitative differences between the current and the proposed system concerning a number of technical factors, such as reliance on public institutions, efficiency and equity, predictability of results, vesting and portability, etc.

49. Component One of the EU-China Social protection reform project sincerely hopes that, through this proposal, it will contribute to the design of a successful mutation of the Chinese pension system, matching the needs of its development and the expectations of its people.

JVG, 28 June 2018

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Annex 1 - Project reports used as reference materials

Author	Title		Address
Fang Lianquan	Diagnosis and Baseline report on China's pension system	2015	http://www.euchinasprp.eu/images/documents/Component1/baselineC1.pdf
Zhang Yinghua	Pension reform for public sector	2015	http://www.euchinasprp.eu/images/documents/Component1/131PublicpensionsENNov4.pdf
Song Xiaowu	Evaluation of the combination of basic pension and individual accounts	2015	http://www.euchinasprp.eu/images/documents/Component1/132ENV18JUL15.pdf
Dong Keyong	Multi-tiered design of pension systems (public pension, enterprise annuity and individual pension)	2015	http://www.euchinasprp.eu/images/documents/Component1/134ENV27Jul15.pdf
Wang Zeying	Strategy of integrating social security system in urban and rural context also through the portability of social insurance	2015	http://www.euchinasprp.eu/images/documents/Component1/143MigrantEN(2015-10-20).pdf
Vleminckx Koen	First consolidated European best practices report	2015	http://www.euchinasprp.eu/images/documents/Component1/1stC1BestPracticesReportDraft.pdf
Zheng Bingwen	The financial sustainability of the basic pension system in China	2016	http://www.euchinasprp.eu/images/documents/2016%20assessment%20report/ZBWEN.pdf
Dong Keyong	China's ageing population and its economic and social impact	2016	http://www.euchinasprp.eu/images/documents/2016%20assessment%20report/AGINGDKYEN.pdf
Gruat J-V	Some striking features of the Chinese pension system	2017	http://www.euchinasprp.eu/en/components-en/component1-en/update-to-2015-baseline-data
Zhou Hong	Parametric reform in Public pension schemes	2017	http://www.euchinasprp.eu/images/documents/Component1/2017-assessment-report/ParametricEN.pdf
Li Shi	Redistributive effect of pension reform in China	2017	http://www.euchinasprp.eu/images/documents/Component1/2017-assessment-report/RedistributionEN.pdf
Zheng Gongchen	Evaluation of Social security policies	2017	http://www.euchinasprp.eu/images/documents/Component1/2017-assessment-report/EvalSSEn.pdf
Zheng Bingwen	The role of entreprise annuity funds in the Chinese pension system	2018	n.a.
Wang Dehua	Social contributions collection: towards a unified system, the Chinese context	2018	n.a.

Annex 2 – Illustrating the loss of purchasing power on individual accounts

	Salary	Contribution value	Contribution as % of salary
1997	1250	100	8.00
1998	1399	103	7.34
1999	1566	105	6.73
2000	1753	108	6.17
2001	1962	111	5.66
2002	2196	114	5.19
2003	2458	117	4.76
2004	2751	120	4.36
2005	3080	123	4.00
2006	3447	127	3.67
2007	3858	130	3.37
2008	4318	133	3.09
2009	4834	137	2.83
2010	5410	140	2.60
2011	6056	144	2.38
2012	6778	148	2.18

Used historical yearly average growth rates: salary + 11.93%, bank interest rate + 2.65 %

Annex 3 – Compared pension parameters, current and proposed schemes

TECHNICAL PENSION PARAMETERS	CURRENT SCHEME	PROPOSED SCHEME
Retirement age	50 – 55 – 60 under revision	Same
Indexation of past earnings	Weak and unstable for individual accounts	Automatic for basic pension. According to Financial company rules for 2nd pillar
Indexation of benefits	Not systematic – under review	TBD – average wage indexation or other index
Minimum and maximum for contributions and benefits	60% and 300% average social wage	60% and 300% average contributory local wage
Share of average local and individual contributory wages in benefit formula	50 - 50	1/3 – 2/3
Accumulation rates	1% per year max. 30 years	1.5 % per year max. 30 years
Accrual of interest	Bank interest rate, moving to wage growth	Pillar 2 only, following rules by Financial company
Commutation factors	1/139 age 60	Pillar 2 only According to rules Financial company, probably vicinity 1/300 at age 60
Qualifying conditions	15 years to qualify for full pension	30 years for full pension, reduced benefit if 15 to 30 years (old age). 15 years for full disability benefit (5 for reduced benefit)
Disability provisions	Early retirement only	To be introduced
Management	Public local social insurance agency	Public pension institution for first pillar, authorized financial institutions for pillars 2 and 3
Financing	De facto PAYG	PAYG first pillar, full funding second and third pillars

Annex 4 – Qualitative differences, current and proposed systems

	CURRENT	PROPOSED
Separation first – second pillar	- -	+ +
Redistributive effect	+ +	+
Benefits matching contributions	+	+ +
Indexation of past earnings	+ -	+ +
Stability in replacement rates	- -	+ -
Predictability of pension amounts	-	+
Influence of minimum pension	+ +	+ -
Vesting / Portability	+ -	+ +
Sustainability	-	+

[1] A word of caution appears as necessary though. The Government is to be held responsible for the proper functioning of the compulsory pension system. When transferring the responsibility for handling second pillar arangements to specialised non governmental companies, the Government should therefore make the necessary arrangements for a proper monitoring and control over the governance, the efficiency, the overhead and other costs of these trustees. A number of examples from a great variety of countries including highly developed ones has indeed showed that their might be serious risks of misbehaviour in that area, leading to substantial losses for contributors whose benefits in the end had to be taken over by State finances without matching contributions.

[2] In 2014, when amounts in individual accounts were computed at 4.1 trillion RMB yuan, only 500 billion – 12% - were " real assets" (See Gruat JV (2017), p. 15

[3] These amounts do not take into account the entitlements of Civil servants and comparable categories ("GOPI" Government officials and Public institutions – incorporated in pension scheme for Urban employees from January 2015). The total accumulated surplus of the public social insurance fund reaches a comparable level (around 3.5 trillion RMB yuan)

[4] 318 months in France at age 60 for annuities served over 30 years. In the US, 300 months for annuities served over 25 years – see https://www.bankrate.com/calculators/investing/annuity-calculator.aspx

[5] In 2015, 262 million active urban employees, 38 million GOPI – see Zhang Yinghua (2015)

[6] The average social wage is the average wage contributed in the pooling area. Although pension pooling wasespabished at Provincial level years ago, and a national pooling as provided in the XIIIth Five-year Plan starts being implemented, there are still many local areas with specific parameters in handling pension matters within individual Provinces (e.g. 24 in Guangdong Province).

[7] If one takes as reference the contributory base and not the real salary, the replacement rate is higher – near 60% in Tianjin after 30 years of validated employment. Actual contribution rates for pension may be as low as 9% in Guangdong province (contributory base arbitrarily fixed below real wage by employers). Source: Zheng Gongcheng (2017)

[8] Between 1998 and 2011, amounts on individual accounts accrued an average 2.65% interest rate, while wages increased over the period by an average of 11.93% per year – this means that the amount corresponding to 8% of the salary at the inception of the scheme represented only 2.2% of the salary 15 years later hence a loss of about 4 times in purchasing power – see Zhen Li, 2013 for data – mentioned in JV Gruat (2017) -, author's calculations in annex 2.

[9] Assuming an implicit 7% "advanced interest" corresponding to the non-indexation of benefits from individual accounts, a life-expectancy related divisor of 300 could probably be decreased to around 140.

[10] There is no real time calculation of balance of amounts available on individual accounts after those were used to compute the initial level of pension benefits.

[11] For example, limiting access to minimum benefits to those having started their career before 1997 and reaching retirement age before 2027 (i.e. those who, physically, cannot reach 30 years of contributory employment within a normal working duration, e.g. male borne 1967 and before.

[12] Improvements may come from both the inclusion of new entreprises in the scheme (known otherwise as tax payers) and the alignement of contributory amounts on real salaries (when also declared for tax purposes)

[13] The expression "or equivalent" notably refers to the case of beneficiaries who started their career before the introduction of the contributory scheme.

[14] See ILO Convention on Social security (minimum standards) n.102, the ratification of which is being actively considered by China