Global Trends of Pension Reforms and the World Bank Proposal for China

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Most of the world is aging, though at different rates
China is well-along in its demographic transition, though some countries will age more rapidly in the years ahead.

Over 60 population

Source: World Bank staff calculations from UN population projections
Challenges facing global pension reforms

• Pension coverage is generally low in low and medium income countries, and for those who are self-employed or employed in informal sectors.

• Pension benefits are often inadequate to provide income support for retired people, while increasing pension benefits raises a question where additional financing resources could be obtained.

• Both population aging and rising benefits cast huge fiscal burden and threaten the financial sustainability of pension systems.
Coverage in global perspective

\[ y = 3.8536x^2 - 49.957x + 164.13 \]

\[ R^2 = 0.8536 \]
Spending in global perspective

\[ y = 0.0039x^2 + 0.2484x - 0.2674 \]

\[ R^2 = 0.6889 \]
Under current schemes, the replacement ratios for various countries also differ.
Globally, various instruments have been adopted, aiming to eradicate elderly poverty (income redistribution) and smooth consumption.
Pension structural reforms illustrate some general trends, but no a “standard” model among countries

- A shift from historically dominated defined benefit (DB) pension schemes to increasing defined contribution (DC) pension schemes

- Social pension schemes have increased in popularity
  - All OECD countries have social pension (universal or means-tested)
  - A number of developing countries have expanded the scope of social pensions in recent years – e.g. India, Thailand, Brazil, Chile and South Africa

- New pension types have been developed in recent years to meet changing context and needs
  - NDC (Notional Defined Contribution): a pension type combining features of DB and DC – introduced in Sweden, Poland, Italy, Latvia and Egypt
  - MDC (Matching Defined Contribution): incentivizing people outside formal pension systems into pension schemes such as in Korea, Germany, UK, New Zealand, India, China and Colombia
Parametric reforms have been widely introduced to build up an automatic balancing mechanism and ensure a balance between revenues and expenditures

- Increase retirement age
- Adjust accrual rates in DB pensions
- Apply price indexation of pensions in payment
- Introduce notional interest rates in NDC
- Adjust annuity factors
Many countries have increased or are planning to increase retirement ages in face of ageing

- Eastern Europe & former Soviet countries had sharp adjustments in 1990s & 2000s – often raising age by 6 months per year and typically to age 65

- EU and OECD are also in process, though usually more slowly (1-3 months per year) and increasingly towards 67 years

- Most countries harmonize male and female retirement ages in the process of increasing ages

- **BUT** – remaining issue in many countries with average retirement several years below system “retirement age”
Adjust accrual rates in DB pensions – & lengthened period of wage history for calculating pensions

<table>
<thead>
<tr>
<th>Region</th>
<th>Average accrual rate</th>
</tr>
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<tbody>
<tr>
<td>East Asia and Pacific</td>
<td>1.8%</td>
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<tr>
<td>Eastern Europe and Central Asia</td>
<td>1.7%</td>
</tr>
<tr>
<td>Latin America &amp; Caribbean</td>
<td>1.2%</td>
</tr>
<tr>
<td>Middle East and North Africa</td>
<td>1.6%</td>
</tr>
<tr>
<td>South Asia</td>
<td>2.0%</td>
</tr>
<tr>
<td>High-income OECD</td>
<td>1.6%</td>
</tr>
<tr>
<td><strong>WORLD</strong></td>
<td><strong>1.7%</strong></td>
</tr>
<tr>
<td><strong>Vietnam</strong></td>
<td><strong>2% and 3%</strong></td>
</tr>
<tr>
<td><strong>China</strong></td>
<td><strong>1%</strong></td>
</tr>
<tr>
<td><strong>Korea</strong></td>
<td><strong>1%</strong></td>
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More countries have shifted to price indexation of pensions in payment

<table>
<thead>
<tr>
<th>Region</th>
<th>Prices</th>
<th>Wages</th>
<th>Mixed</th>
<th>Ad Hoc</th>
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<td>-</td>
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<tr>
<td>Eastern Europe and Central Asia</td>
<td>10</td>
<td>5</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Latin America &amp; Caribbean</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>Middle East &amp; North Africa</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>9</td>
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<tr>
<td>High-income OECD</td>
<td>11</td>
<td>2</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>WORLD</td>
<td>39</td>
<td>10</td>
<td>15</td>
<td>37</td>
</tr>
<tr>
<td>Vietnam</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>China</td>
<td></td>
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<td>**</td>
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<tr>
<td>Korea</td>
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<td>**</td>
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<tr>
<td>Thailand</td>
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</table>
Countries have explored better returns on public funds through pension fund investment and operation.

Real returns on public pension funds relative to income growth:

- Investments with clear returns such as government bonds
- Allowing some investment in higher return assets such as shares and corporate bonds
- Outsourcing some/all management of funds to private sector with more flexible rules on investment
Countries have used different levels of pre-funding to save for future retirement

- Heavy reliance on private, funded accounts in countries such as Australia, Chile, Mexico, Switzerland
- Moderate reliance on private, funded accounts in countries like US, UK, Brazil, South Africa
- Marginal role for pre-funding in countries like France, Germany, Italy
- Government managed pension funds
  - *Pension Reserve Funds* that aim to smooth out long run expenditures (New Zealand, Norway, Canada)
  - Defined contribution accounts where liabilities are matched with assets (India, Singapore, Malaysia, US Thrift Savings Plan for Civil Servants)
- Some pre-funding in China through *Individual Accounts* and *National Social Security Fund*
The size of pension reserves varies across countries.
China is getting old before getting rich

- China has entered an aging society in 2000 due to declining fertility and increasing life expectancy
- The pace of population aging has been accelerated, which will further lead to an increasing dependency ratio
- With the shrinking of working age population, the demographic dividend has depleted
Understanding the major pension schemes in China

• **Urban workers pension scheme**
  – A mandatory scheme for urban enterprise employees (equivalent to formal sector workers, but excluding public sector workers), but voluntary to the self-employed and informally employed, and rural migrants

• **Rural and urban residents pension scheme**
  – A voluntary scheme for rural residents (including rural migrant workers) and for urban residents with a local hukou who are not covered by the urban employee pension scheme

• **Scheme for PSU employees and civil servants**
  – Defined-benefit in design with a generous replacement rate financed from government revenues
  – Reformed in 2015 by introducing the same design as the urban workers pension scheme plus an occupational pension scheme

• **Voluntary enterprise and individual pension savings arrangements**
Pension reform design has been consistent in policy thinking

• China’s pension reforms have followed the principle of combining social pooling with individual account, reflecting a consistent policy thinking of both elderly poverty protection and consumption smoothing, to achieve the objectives of “full coverage, basic protection, multi-layer and

• With broad coverage achieved, the focuses of pension reform shift to full coverage, portability, adequacy and equity, and financial sustainability
Urban employee pension scheme now covers more than 60% of urban labor force
But urban workers pension scheme faces challenges

- **Coverage** remains low for informal employment and rural migrants

- **High SI contribution rates** discourage participation (up to 28% of wage for pension alone)

- **Program management and pooling** remains very fragmented

- “Empty” **individual accounts and high deficits** of pension funds in the long term

- **Policy measures for portability** have been introduced, but challenges remain for implementing those policies

- **Increasing pension benefits without a formal indexation mechanism** in the past consecutive 11 years threatens the financial sustainability of the pension system

- It needs **parametric and structural reforms** to increase incentives and achieve financial sustainability (e.g. pension age increase; introducing NDC design; increasing return on fund investments)
China is one of countries with high labor taxation
China has innovated with informal sector to achieve major pension coverage expansion

- Rural and urban resident pension schemes were introduced 2009/11 and merged 2014
- Individual account with low annual contribution (RMB 100 annual minimum) which is matched by local government at 30%
- After 15 years of contribution to individual account, worker entitled to low flat “basic pension” at age 60 (increased from RMB 55 per month to RMB 70 per month in 2015)
- Those now over 60 can receive basic benefit if their working children contribute (“family binding”)
- On financing, the design requires around 80-85% of total benefits from government subsidy (“contributory social pension”)
- Central government finances basic benefit (variable by province) and local government the match
The coverage of rural/urban resident pension scheme expand rapidly, but challenges remain.

**Coverage - mlns**

- Financial protection very modest (less than some African social pensions)
- Fund management remains fragmented
- Incentives to contribute under 45 years old weak
- IA management demanding
- Rate of return on IA very low
A proposal of China’s pension reform design recommended by the World Bank

Basic Pillar

Contributory Pillar

Supplementary Pillar

Residents Social Pension
(financed from current revenues)

Reformed *Urban Workers Scheme* - for salaried workers (contributory - PAYG financed w/external reserve fund)

Reformed *Residents Pension Schemes* – for non-salaried workers (contributory - PAYG financed)

Salaried workers

PSUs & civil servants

Migrants

Informal workers/ self employed

Supplemental *Occupational and Individual Annuities* - Prefunded

Farmers
Features of WB proposed reform design: 123

• One integrated framework
  • The unified design framework cover all rural and urban workers and retirees, which can facilitate labor mobility and transfer of pension rights and benefits

• Two schemes
  • Two schemes consider the difference of employment in nature: wage income and non-wage income workers

• Three pillars
  • A combination of basic pillar, contributory pillar and supplementary pillar to ensure suitable pension benefits
An integrated system design—three pillars

• A basic pillar - Residents Social Pension (RSP)
  - No elderly person left uncovered, non-contributory financed by government revenues

• A contributory pillar
  - *Reformed Urban Workers Scheme* – Mandatory, contributory NDC scheme for wage-based workers (incl. civil servants, PSU employees, migrant workers w/contracts)
  - *Reformed Residents Pension Scheme*. Voluntary, contributory NDC pension scheme for non-wage workers (i.e. temporary workers, self-employed, unemployed, migrants and farmers)

• A supplementary pillar
  - Voluntary occupational and individual pension savings to supplement other benefits
  - Defined-contribution, fully-funded, well regulated and supervised.
The reformed schemes can strengthen old age income and poverty protection while addressing individual needs.
PSUs & civil servants integrated into reformed UWS

• Future benefits = UWS + occupational annuity

• Accrued rights paid from legacy cost fund (separately financed)

• Parallel reforms needed to public wage system & PSU classification reform
**Proposed financing approach and sources**

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Financing Approach</th>
<th>Sources of Financing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Pension</td>
<td>Non-contributory, un-funded.</td>
<td>Government budgetary allocations</td>
</tr>
<tr>
<td>Reforms Urban Workers Pension Scheme</td>
<td>• Contributory pay-as-you-go</td>
<td>• Employer and employee contributions</td>
</tr>
<tr>
<td></td>
<td>• Legacy costs unfunded – paid from Government budgetary allocations</td>
<td>• Government budgetary allocations</td>
</tr>
<tr>
<td></td>
<td>• Separate external pre-funding to address long-term demographic changes</td>
<td>• Government external pre-funding</td>
</tr>
<tr>
<td>Reformed Residents Pension Scheme</td>
<td>Contributory pay-as-you-go</td>
<td>• Workers.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Matching contribution subsidies from Government at different levels</td>
</tr>
<tr>
<td>Occupational and Personal Annuities</td>
<td>Contributory and fully-funded.</td>
<td>• Employers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Employees, self-employed.</td>
</tr>
</tbody>
</table>
Financial pooling at the national level would be a political economy of decision making

- Only a few provinces (cities) has achieved fully pooling at the provincial level
  - Beijing, Tianjin, Shanghai, Chongqing, Shaanxi, Qinghai and Tibet

- Most of provinces have introduced partially pooling at the provincial level

<table>
<thead>
<tr>
<th>Province</th>
<th>Ratio (%)</th>
<th>Province</th>
<th>Ratio (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shanxi</td>
<td>3.0</td>
<td>Hubei</td>
<td>5.0</td>
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<tr>
<td>Inner Mongolia</td>
<td>2.0</td>
<td>Hunan</td>
<td>0.5</td>
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<tr>
<td>Liaoning</td>
<td>10.0</td>
<td>Guangdong</td>
<td>9.0</td>
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<tr>
<td>Jilin</td>
<td>5.0</td>
<td>Guangxi</td>
<td>1.0</td>
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<tr>
<td>Jiangsu</td>
<td>1.5</td>
<td>Hainan</td>
<td>1.0</td>
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<td>Zhejiang</td>
<td>2.0</td>
<td>Sichuan</td>
<td>5.0</td>
</tr>
<tr>
<td>Jiangxi</td>
<td>3.0</td>
<td>Xinjiang</td>
<td>1.0</td>
</tr>
</tbody>
</table>

- The Social Insurance Law requires financial pooling at the national level
Upgrade the pooling level through capacity building and management

• *Unify design, contributions, quantifying conditions and benefits* to support upgrading the pooling level and implementing an integrated pension system.

• *All options require pooling of data and management to the provincial level* and supporting accounting, financial control and accountability systems which ensure the integrity of the financial pooling process.

• *Means of using existing capacity while ensuring provincial accountability would be to adopt a Vertical Management approach.*

• *Put into place unique identification, common data standards and modern information system, and strengthen capacity building for accounting, financial management, data and funds.*
Conclusion

- An integrated pension system can help China remove barriers to labor mobility, enhance labor market efficiency, improve system sustainability and incentivizes participation towards the goal of full coverage for all.

- Deepening structural and parametric reforms together with appropriate financing and pooling strategies can ensure financial sustainability and social sustainability in China.

- Institutional and capacity building is essential, including policy unification, data and management standardization, integrated information systems, administrative apparatus with vertical management, costing and actuarial projection, regulatory and supervisory policies to support and implement pension policy reforms.
Thank you!