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Introduction

Contextualizing the reforms

• The dynamics of the reforms
• Reforms and reforms (which can be postponed)
• Unavoidable reforms (nothing can be postponed forever)
• Things to come
Section 1

Introduction

Aspects that come into play

• Urgencies
• Economic institutions
• Politics
• Structural factors (a limiting factor...)
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Starting point for reforms

Politics

Generous, inexpensive benefits

Mismanagement

Unsustainable realities

Unsustainable financial and fiscal risks/parameters of the system not in line with demographic trends

Problems of contribution evasion/mismanagement of funds/costs of management/opacity to the distribution of funds
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What has been achieved?

A key structural reform for Latin America

A cornerstone to building a pension system that puts into balance efficiency and equity
Section 3
What has been achieved?

Contributors as a percent of beneficiaries (EAP)
Source: BBVA Research

Replacement rate
Source: BBVA Research
Section 3

What has been achieved?

A key structural reform for Latin America

- A cornerstone to building a pension system that puts into balance efficiency and equity
- Key role for fiscal consolidation
- Important part of the monetary policy channel
Section 3
What has been achieved?

A key structural reform for Latin America

- A cornerstone to building a pension system that puts into balance efficiency and equity
- Key role for fiscal consolidation
- Important part of the monetary policy channel
- Innovative actor in capital markets
- Impact on growth
- Regulatory framework
Section 3

What has been achieved?

**Peru: Pension deficit as a percent of GDP**
Source: ONP, MEF, SBS, BBVA

**Chile: Pension deficit as a percent of GDP**
Source: Favre et al. (2006)
### Pension funds as a % of GDP

Source: BBVA Research

**Investment portfolios**

* May 2010, **fixed-income

Source: BBVA Research

<table>
<thead>
<tr>
<th>Instruments</th>
<th>Chile</th>
<th>Colombia*</th>
<th>Mexico</th>
<th>Peru</th>
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<tr>
<td>Government securities</td>
<td>10.1</td>
<td>42.0</td>
<td>66.0</td>
<td>19.2</td>
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<td>4.2</td>
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<td>Non-financial</td>
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<td>Mutual funds and others</td>
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<td>36.1</td>
<td>....</td>
<td>3.1</td>
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<tr>
<td>Foreign issues</td>
<td>45.0</td>
<td>12.3</td>
<td>4.0</td>
<td>23.4</td>
</tr>
<tr>
<td>Others</td>
<td>-0.6</td>
<td>.....</td>
<td>1.0</td>
<td>3.4</td>
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</tbody>
</table>
Section 3

What has been achieved?

Growth and pension funds
Source: Corbon, Schmidt, Hebbel - 2003

Pension funds and infrastructure projects
(1) Electricity, Water, Telecommunications; (2) Excludes SB1 and SB2 with 0 and 5% respectively; (3) December 2008
Source: BBVA Research

<table>
<thead>
<tr>
<th></th>
<th>USD$ millions</th>
<th>Indirect Investment (% portfolio)</th>
<th>USD$ millions</th>
<th>Direct Investment (% portfolio)</th>
<th>Maximum limits of direct investment in infrastructure (% portfolio)</th>
</tr>
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<tbody>
<tr>
<td>Chile</td>
<td>9969(1)</td>
<td>9.17%</td>
<td>1956</td>
<td>1.80%</td>
<td>Without specific limit</td>
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<tr>
<td>Colombia</td>
<td>4431 (3)</td>
<td>17.10%</td>
<td>0</td>
<td>0</td>
<td>Without specific limit</td>
</tr>
<tr>
<td>Mexico</td>
<td>5535</td>
<td>6.90%</td>
<td>0</td>
<td>0</td>
<td>10% (2)</td>
</tr>
<tr>
<td>Peru</td>
<td>2416</td>
<td>11.50%</td>
<td>700.2</td>
<td>3.30%</td>
<td>Without specific limit</td>
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</table>
Section 4
What lies ahead

More challenges ...

Extend participation
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Colombia: Coverage of the elderly
Source: BBVA Calculations

Peru: Coverage of the elderly
Source: SBS, ONP, BBVA/Elaboration
Section 4

What lies ahead

More challenges ...
- Extend participation

Various alternatives ...
- Matching contributions
- Benefit pools
- Universal schemes
- Focused help

... the challenge is to not disincentive voluntary saving
Section 4

What lies ahead

More challenges ...

• Extend participation
• Reduce distortions in distribution systems
• The challenge of fiscal sustainability
### Colombia: Replacement rates of the private system *(RAIS)*

Source: BBVA calculations

<table>
<thead>
<tr>
<th>Group</th>
<th>2015</th>
<th>2030</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>75.5%</td>
<td>75.9%</td>
<td>76.3%</td>
</tr>
<tr>
<td>B</td>
<td>68.0%</td>
<td>70.7%</td>
<td>72.9%</td>
</tr>
<tr>
<td>C</td>
<td>12.6%</td>
<td>17.0%</td>
<td>21.3%</td>
</tr>
<tr>
<td>D</td>
<td>2.6%</td>
<td>2.7%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Replacement Rate Average</td>
<td>34.0%</td>
<td>41.6%</td>
<td>43.2%</td>
</tr>
</tbody>
</table>

### Colombia: Replacement rates of the PAYGO system *(RPM)*

Source: BBVA calculations

<table>
<thead>
<tr>
<th>Group</th>
<th>2015</th>
<th>2030</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>92.8%</td>
<td>94.0%</td>
<td>94.1%</td>
</tr>
<tr>
<td>B</td>
<td>86.5%</td>
<td>87.3%</td>
<td>88.9%</td>
</tr>
<tr>
<td>C</td>
<td>5.4%</td>
<td>7.7%</td>
<td>8.5%</td>
</tr>
<tr>
<td>D</td>
<td>1.3%</td>
<td>1.6%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Replacement Rate Average</td>
<td>46.5%</td>
<td>47.4%</td>
<td>55.6%</td>
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</tbody>
</table>
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What lies ahead

More challenges ...

- Extend participation
- Reduce distortions of distribution systems
- The challenge of fiscal sustainability
- Changing demographics
Section 4
What lies ahead

**Colombia: Comparison of average replacement rates**

Source: BBVA calculations

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2030</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average Replacement rate</td>
<td>70.0%</td>
<td>73.5%</td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td>89.7%</td>
<td>90.1%</td>
</tr>
</tbody>
</table>

**Projections of the net present value of pension debt**

Source: Albo et al (2007), National Provisional Office of Peru, Social Protection Ministry of Colombia/BBVA calculations

- Mexico (GDP 2008): 67
- Peru (GDP 2006): 58
- Colombia (GDP 2007): 148

Note: Peru's estimation takes into account the actuarial present value between 2006 and 2050. The discount rate used is 4% for Mexico and Colombia.
Section 4
What lies ahead

Life expectancy from birth: Chile and Sweden
Source: UN Population statistics

- Longevity risk: How to finance a longer lifespan
- Credit risk: How to prevent insurers from falling into financial problems due to poor assessment of this new risk?
- Reinvestment risk: How to secure more long term assets that are appropriate for the investment of pension funds during the retirement phase?
Section 4
What lies ahead

The differences are apparent between the survival probability used by the industry and that which is observed.

An annuity can vary as much as 20 percentage points when the other alternative mortality table is used in the country.
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Proposals to increase coverage

<table>
<thead>
<tr>
<th>Chile</th>
<th>Colombia</th>
<th>Mexico</th>
<th>Peru</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Public policies designed to increase workers’ productivity and, thus, enhance their employability.</td>
<td>1. Greater control and supervision of contributions to the pension system.</td>
<td>1. The unification of the two pension sub-systems (IMSS and ISSSTE) into a single National Pension System, as referred to in this book, would enable more independent workers to join pension plans.</td>
<td>1. Adjusting the contribution amounts and presenting them as a minimum daily contribution that varies according to the contributor’s income would help improve coverage for informal workers who are not part of the pension system.</td>
</tr>
<tr>
<td>2. Consider a provisional framework of minimum formality standards (temporary, progressive and focused) for gradual incorporation of informal workers into the formal economy.</td>
<td>2. Boost the use of the PILA (Integrated Contribution Settlement Table)</td>
<td>2. Stop the fragmentation of the social security system and increase the contribution densities and pensions of people who currently contribute intermittently in one or more pension sub-systems.</td>
<td>2. Establish obligatory membership for formal independent workers.</td>
</tr>
<tr>
<td>3. Assess the possibility of complementing the minimum standard framework with a scheme of pension subsidies going directly into their individual account, conditional on fulfilling the requirements.</td>
<td>3. Keep a check on the validity of the information provided by the member, and cross check this information with the sources of information held by the state.</td>
<td>3. Establish a government co-financed plan for voluntary saving in individual accounts for independent workers within the Retirement Saving System.</td>
<td></td>
</tr>
</tbody>
</table>
### Recommendations

#### Proposals for the retirement stage and to facilitate minimum pensions

<table>
<thead>
<tr>
<th>Measures</th>
<th>Chile</th>
<th>Colombia</th>
<th>Mexico</th>
<th>Peru</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Modification of the contribution rate</td>
<td>• Think in the medium-term about adjustments to contribution rates according to the changes in the socioeconomic and demographic sphere</td>
<td>• Remove the link between the minimum pension and the increase in the minimum wage</td>
<td>• Increase of 4.8% of the contribution base wage immediately, or gradually by 0.5% a year</td>
<td>• Contribution rate of 10% on the wage</td>
</tr>
<tr>
<td>• Modification of minimum contribution periods</td>
<td>• Automatic adjustments according to changes in life expectancy</td>
<td>• Make the requirements to access the Solidarity Account subsidy for people with lower incomes more flexible (currently they are at 250 weeks of contribution for independent workers, with a minimum age of 35)</td>
<td>• 900 weeks of contributions to have the right to 50% of the guaranteed pension. Increase it by 7% for each 50 additional weeks of contribution to the 100% under the Law with 1,250 weeks of contribution</td>
<td>• Reduction from 20 to 15 years of the minimum vesting period to receive the right to a guaranteed minimum pension</td>
</tr>
</tbody>
</table>
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Recommendations (1/2)

Proposals for the retirement stage and to facilitate minimum pensions

<table>
<thead>
<tr>
<th>Measures</th>
<th>Chile</th>
<th>Colombia</th>
<th>Mexico</th>
<th>Peru</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Modification of the contribution rate</td>
<td>• Subsidies intended for the minimum standard proposal for accessing formality should be properly aligned with the criteria for having access to a minimum pension, so that saving decisions are not distorted.</td>
<td>• Provide financial benefits below the minimum pension and allow pension contributions to be made for periods of employment of less than one month.</td>
<td>• State contribution of 11% of the minimum wage in the Federal District instead of the current 5.5% for incomes of up to 3 times the minimum wage, and a contribution of 0% for people with income over 3 times the minimum wage. The cost of the Social Contribution would be focused only on people with lower incomes. Establish a state co-financing plan to ensure the coverage of the minimum pension.</td>
<td>• Subsidy depending on income level to cover the minimum pension. Greater subsidies for workers with lower incomes than for those who have higher incomes.</td>
</tr>
</tbody>
</table>
### Measures

- **Modification of minimum contribution periods**

- Subsidies intended for the minimum standard proposal for accessing formality should be properly aligned with the criteria for having access to a minimum pension, so that saving decisions are not distorted literacy of consumers.

- **Chile**

- Allow pension contributions for employment periods of under a month. Buy insurance to cover invalidity and survivors’ risks, with the funds coming from the Occupational Risk Fund.

- **Colombia**

- Sliding scale of supplements to voluntary savings in the individual accounts of independent workers, up to a maximum contribution by the worker of 750 pesos per month. The supplementary contributions are reduced as the contributions made by the workers increase.

- **Mexico**

- Extend the guarantee of a minimum pension for all the members of the SPP. Obligatory membership for formal independent workers. Discount of the percentage corresponding to the contribution rate, together with withholding income tax for those workers with incomes of over 7 applicable tax units per year, which is equivalent to PEN 2,500 per month (approx. USD 830).

- **Peru**
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Conclusion
About possible and impossible trinities: A conclusion

- Three criteria for a pension system
- The importance of:
  - Financing?
  - Generating inclusion?
  - How to not generate excessive distortions?

A Trinity is possible ...
About possible and impossible trinities: A conclusion

- Despite the good intentions, there are things that cannot be given
- A system of social security has to coincide with a “realistic” miracle

An impossible Trinity...
Thank you

April 6th, 2011

David Tuesta Chief Economist-Pensions | BBVA Research | IDB, Washington, D.C.