Comments on “Demographic Changes and Social Security Sustainability in China”

Presented by Dr. GONG Sen, China Center for International Knowledge on Development

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Senior Fellow

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### Major Demographic Indicators of China


<table>
<thead>
<tr>
<th></th>
<th>Unit</th>
<th>2015</th>
<th>2020 (Target)</th>
<th>2030 (Target)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>Million people</td>
<td>1,375</td>
<td>1,420</td>
<td>1,450</td>
</tr>
<tr>
<td>Total fertility rate</td>
<td></td>
<td>1.5-1.6</td>
<td>1.8</td>
<td>1.8</td>
</tr>
<tr>
<td>Sex ratio at birth</td>
<td></td>
<td>113.5</td>
<td>≦112</td>
<td>107</td>
</tr>
<tr>
<td>Share of population aged 60 years and over</td>
<td>%</td>
<td>16.1</td>
<td>-</td>
<td>25</td>
</tr>
<tr>
<td>Life expectancy</td>
<td>Years</td>
<td>76.3</td>
<td>77.3</td>
<td>79</td>
</tr>
<tr>
<td>Average years of schooling of working-age population</td>
<td>Years</td>
<td>10.23</td>
<td>10.8</td>
<td>11.8</td>
</tr>
<tr>
<td>Urban population's share of total population</td>
<td>%</td>
<td>56.1</td>
<td>60</td>
<td>70</td>
</tr>
</tbody>
</table>
Growth Rates of Total Population and Working-age Population in China

Note: Average over 5 years.
Total Fertility Rate
- Comparison between China and Japan

Share of Population Aged 60 Years and Over
- Comparison between China and Japan

Median Age of the Total Population
- Comparison between China and Japan

Changes in the Labor Market Suggest a Fall in the Potential Growth Rate

- Despite a sharp fall in the economic growth rate, the labor market has remained tight.
- The job-offers-to-seekers ratio has followed an upward trend since 2009 and stayed at a high level.
- The job-offers-to-seekers ratio has diverged sharply from the economic growth rate, suggesting that the economy may have arrived at the Lewisian turning point where surplus labor in rural areas has dried up.
- Coupled with the decline in working-age population, the potential growth rate has fallen sharply.

Note: The job offers-to-seekers ratio shown above is calculated by dividing the number of job offers by that of job seekers registered in public employment services organizations in approximately 100 cities in China. Source: Compiled by Nomura Institute of Capital Markets Research based on data provided by the National Bureau of Statistics of China and the Ministry of Human Resources and Social Security.
Factors Contributing to the Decline in China’s Potential Growth Rate

The contribution of labor input is turning negative as working-age population declines and the pool of surplus labor in rural areas dries up.

The contribution of capital input should be suppressed by a lower savings rate.

The one-child policy has been relaxed, but the effect is expected to be limited.

Since the traditional growth pattern based on expanding inputs is no longer sustainable, China needs to shift to a new one based on productivity growth.

**Notes:**
1) Contribution of total factor productivity growth includes contribution from human capital growth.
2) Components do not add to 9.9% due to rounding.

Changes in the Current Account of China Based on the Balance of Savings and Investment

Promoting Productivity Growth – Supply-side reform

- **Innovation**
  - Strengthen protection of intellectual property rights
  - Turn brain drain into brain gain
  - Support startup businesses
  - Guarantee the free flow of information

- **Industrial upgrading**
  - Promote new industries instead of protecting old ones
  - Promote inflow of foreign direct investment
  - Promote free trade (through regional trade agreements) so that Chinese companies can export from headquarters
  - Enhance mobility of factors of production, particularly labor and land

- **Ownership reform**
  - Privatize state-owned enterprises
  - Allow zombie companies (mostly state-owned) to go bankrupt
  - Lower entry barriers for non-state-own enterprises
  - Strengthen protection of private property
## Changes in the Number of Chinese Students Going Abroad to Study and Returning Home

Source: Compiled by Nomura Institute of Capital Markets Research based on data from Ministry of Education of the People’s Republic of China.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Students Leaving to Study Overseas (a)</th>
<th>Number of Students Returning from Overseas Study (b)</th>
<th>Ratio of Outgoing to Returning Students (%) (b)/(a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>83,973</td>
<td>12,243</td>
<td>14.6</td>
</tr>
<tr>
<td>2002</td>
<td>125,179</td>
<td>17,945</td>
<td>14.3</td>
</tr>
<tr>
<td>2003</td>
<td>117,307</td>
<td>20,152</td>
<td>17.2</td>
</tr>
<tr>
<td>2004</td>
<td>114,682</td>
<td>24,726</td>
<td>21.6</td>
</tr>
<tr>
<td>2005</td>
<td>118,515</td>
<td>34,987</td>
<td>29.5</td>
</tr>
<tr>
<td>2006</td>
<td>134,000</td>
<td>42,000</td>
<td>31.3</td>
</tr>
<tr>
<td>2007</td>
<td>144,000</td>
<td>44,000</td>
<td>30.6</td>
</tr>
<tr>
<td>2008</td>
<td>179,800</td>
<td>69,300</td>
<td>38.5</td>
</tr>
<tr>
<td>2009</td>
<td>229,300</td>
<td>108,300</td>
<td>47.2</td>
</tr>
<tr>
<td>2010</td>
<td>284,700</td>
<td>134,800</td>
<td>47.3</td>
</tr>
<tr>
<td>2011</td>
<td>339,700</td>
<td>186,200</td>
<td>54.8</td>
</tr>
<tr>
<td>2012</td>
<td>399,600</td>
<td>272,900</td>
<td>68.3</td>
</tr>
<tr>
<td>2013</td>
<td>413,900</td>
<td>353,500</td>
<td>85.4</td>
</tr>
<tr>
<td>2014</td>
<td>459,800</td>
<td>364,800</td>
<td>79.3</td>
</tr>
<tr>
<td>2015</td>
<td>523,700</td>
<td>409,100</td>
<td>78.1</td>
</tr>
<tr>
<td>2016</td>
<td>544,500</td>
<td>432,500</td>
<td>79.4</td>
</tr>
</tbody>
</table>
Comparison between China’s Two Major Pension Schemes (2015)

<table>
<thead>
<tr>
<th></th>
<th>Old-age Insurance for Employees</th>
<th>Old-age Insurance for Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>Billion yuan</td>
<td>2,655.4</td>
</tr>
<tr>
<td>State subsidies</td>
<td>Billion yuan</td>
<td>389.3</td>
</tr>
<tr>
<td>Expenditures</td>
<td>Billion yuan</td>
<td>2,309.2</td>
</tr>
<tr>
<td>No. of participants</td>
<td>Million people</td>
<td>331.23</td>
</tr>
<tr>
<td>No. of pensioners</td>
<td>Million people</td>
<td>85.37</td>
</tr>
<tr>
<td>Expenditures/No. of pensioners</td>
<td>Yuan</td>
<td>27,049</td>
</tr>
<tr>
<td>State subsidies/No. of pensioners</td>
<td>Yuan</td>
<td>4,560</td>
</tr>
</tbody>
</table>

Source: Table 1 of GONG and Ministry of Human Resources and Social Security of the People’s Republic of China.
Author’s proposal
- Gradually raise retirement ages and reverse incentive for early retirement
- Raise female labor participation rate
  - Equalize retirement age for both men and women
  - Improve childcare and elderly care
- Shift welfare development from expansion to prioritization
  - Focus more on human capital accumulation, which has to do with education and healthcare

Further suggestions
- Use the proceeds from selling state-owned stocks (privatization) to provide additional funding for pensions
- Shift public spending from building infrastructure to social services
  - Given very large income disparities in China, more emphasis should be placed on equity than on efficiency when formulating economic policy.
  - In addition to education and healthcare, priority should be put on pensions (particularly for peasants), housing (particularly for migrant workers), and environmental protection.
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2004- Senior Fellow, Nomura Institute of Capital Markets Research

Books in English  
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Books in Japanese  
The New Normal of the Chinese Economy, Nikkei Publishing Inc. 2015.  
China as Number 1, Toyo-keizai Shimposha, 2009.  
Dilemma Facing the Chinese Economy, Chikuma Shobo, 2005.

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1997 - 99 and 2003 - 2010 : Foreign Exchange Committee (MOF)

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