How can Korea Raise its Future Potential Growth Rate?

Elena Ianchovichina and Danny Leipziger
PREM Network, World Bank
Background

- Korea is one of 13 economies that have experienced sustained high growth
  - defined as 7% per year or more for 25 years or longer, post WW II

- Growth has slowed down in recent years
  - average real growth rate of 4.8% during Roh administration

- Short term outlook dimmed in 2008
  - Volatility in commodity prices
  - Mass protests in Korea against US beef imports
  - Global financial crisis
Hopes for growth vs. reality

- “747” policy platform hopes to aim for:
  - Achieving annual real growth rate of 7 percent for the next ten years
  - Enabling Korea to reach $40,000 per capita income level by the end of the ten-year period
  - Placing Korea among the group of 7 largest economies

- In reality, “747” growth target much higher than
  - Growth rates achieved in the period 2002-2008 and short-run growth forecasts
  - Current consensus, potential growth estimates: in the range of 4 to 5 percent
  - Forecasts of potential growth in the long-run
    - e.g. IMF estimates potential annual real growth of just 2.5 percent by 2030
Korea’s potential output growth forecast (baseline)

Source: International Monetary Fund (2006)
What is driving the drop in potential output growth?

- **Demographic transition:**
  - Korea’s labor supply will start to fall in less than 15 years

- **Persistent productivity differential**
  - Productivity growth in services is expected to continue lagging behind productivity growth in the non-service economy
What can be done about sluggish productivity growth in services?

Progress with reforms so far:
- Reforms to relax entry barriers
  - Special economic zones with tax incentives for foreign investors introduced in 2002
  - Eased regulation on entry into legal and accounting services
- Policies to strengthen competitiveness
  - Business support services and job training implemented in 2003
- Policies to abolish or reform anti-competitive regulations in 2004

But more can be done:
- Reform land use regulation to facilitate development of large-scale retail centers
- Open up to foreign competition the education, health and business service sectors
- Improve access to financing for R&D
- Improve efficiency of the bankruptcy framework
- Increase transparency of the regulatory framework
Korea’s potential output growth outlook with reform in services

Growth payoff: an increase of 1.2 ppts above baseline average, annual real GDP growth if TFP growth for services increased sharply and matched TFP growth for non-services by 2015

Source: Authors’ calculations using a model for measuring potential output growth developed for Korea by International Monetary Fund (2006).
Is the decline in labor supply preordained?

- Korea’s society is aging rapidly
  - Share of population over 65 years of age is expected to surpass 20 percent by 2026
  - One of the lowest birth rates in the developed world: 1.1 births per woman

- How to offset these trends
  - Increase labor force participation
  - Reverse early retirement
Korea is lagging behind other developed economies in terms of female participation rates.

Note: The figure shows averages for the respective decade except for 2000s when the average is for the period 2000-06.
Policies encouraging female participation

*Child care options*

- Implementing full day schooling
- Increasing availability and access to affordable and quality child care services
  - Public spending on formal day care and pre-primary education was 0.1% of GDP in 1999
  - Spending per child has been lowest in Korea among a group of developed countries
    - Empirical evidence suggests that childcare subsidies increase female labor supply (Gelbach, AER 2002)
    - Though their effectiveness may be reduced as women substitute formal for informal childcare
Policies encouraging female participation

*Different types of parental leave*

- Strengthen job security and attachment to the labor market
- Evidence that parental leave increases the employment-to-population ratio of women by 3 to 4% while having little effect on wages in some OECD countries
  - Women might obtain jobs prior to childbirth in order to qualify for future leave benefits;
  - Return to work of new mothers might speed up.
### Policies encouraging female participation

**Flexible working-time arrangements**

Percentage of employed women aged 25-54 in part time* jobs, 1999

<table>
<thead>
<tr>
<th></th>
<th>%</th>
<th></th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia**.a</td>
<td>38.3</td>
<td>Korea**</td>
<td>9.2</td>
</tr>
<tr>
<td>Austria</td>
<td>26.2</td>
<td>Luxembourg</td>
<td>29.2</td>
</tr>
<tr>
<td>Belgium</td>
<td>37.1</td>
<td>Mexico</td>
<td>27.0</td>
</tr>
<tr>
<td>Canada</td>
<td>22.3</td>
<td>Netherlands</td>
<td>54.3</td>
</tr>
<tr>
<td>Denmark</td>
<td>15.1</td>
<td>New Zealand</td>
<td>34.1</td>
</tr>
<tr>
<td>Finland</td>
<td>9.5</td>
<td>Norway</td>
<td>30.7</td>
</tr>
<tr>
<td>France</td>
<td>23.5</td>
<td>Poland**</td>
<td>16.5</td>
</tr>
<tr>
<td>Germany</td>
<td>34.3</td>
<td>Portugal</td>
<td>11.1</td>
</tr>
<tr>
<td>Greece</td>
<td>13.3</td>
<td>Spain</td>
<td>15.7</td>
</tr>
<tr>
<td>Iceland</td>
<td>31.3</td>
<td>Sweden</td>
<td>19.0</td>
</tr>
<tr>
<td>Ireland</td>
<td>32.1</td>
<td>Switzerlanda</td>
<td>47.4</td>
</tr>
<tr>
<td>Italy</td>
<td>23.8</td>
<td>United Kingdom</td>
<td>38.6</td>
</tr>
<tr>
<td>Japan**.b</td>
<td>39.2</td>
<td>United Statesc</td>
<td>13.0</td>
</tr>
</tbody>
</table>

*Part-time employment refers to persons who usually work less than 30 hours per week in their main job. Data include only persons declaring usual hours.
**Part-time data are based on actual hours worked.
a Part-time employment based on hours worked at all jobs.
b Part-time employment is defined as less than 35 hours per week.
c The share of part-time employment is for wage and salary workers only.
Source: OECD Labor Market Statistics.
Practices discouraging female labor participation

- Gender discrimination in pay and promotion
  - Evidence suggests that the higher the level of education, the greater the gender gap
- Most developed countries have gender-specific anti-discrimination laws
- Measures are needed to:
  - nurture talent
  - provide equal opportunities for career advancement and recognition
  - Help women transition from higher education to the labor market
Policies encouraging both male and female labor force participation

- Making the retirement age flexible depending upon the health and skills of the elderly
- According to Rhee (1994) nearly 80 percent of Korea’s aged 65 and above want to work, yet most retire before age 65
  - In the private sector employees retire at age 55
  - In the government sector, employees retire at age 60
Korea’s potential output growth outlook with improved participation rates

Growth payoff: an increase of 0.5 ppts above the baseline average, annual growth rate if by 2020 Korea managed to increase (a) female participation rates to match those observed in Japan in 2006 and (b) male participation rates to those in the OECD in 2006.

Source: Authors’ calculations using a model for measuring potential output growth developed for Korea by International Monetary Fund (2006).
Combined effect of reforms

Growth payoff: an increase of up to 1.5 ppts in addition to the average baseline growth rate of 4.4% by 2014 if Korea implements successfully reforms to boost productivity in services and labor participation. *Doubling of income by 2020 is still possible!*

Source: Authors’ calculations using a model for measuring potential output growth developed for Korea by International Monetary Fund (2006).
What can be done to halt Korea’s aging workforce?

- Korea’s labor force aging
  - Is taking place faster than in any other country in history
  - Will threaten growth and impose fiscal pressures
  - Calls for a quick and forceful policy response to arrest this trend

- Labor force growth may be revived by implementing
  - Family-friendly labor participation policies which may stimulate both participation and labor force growth (Sleebos 2003)
  - Direct measures including raising birth rates and overtime work or relaxing immigration restrictions
Korea’s potential output growth with improved population growth

Growth payoff: an increase of up to 1.2 ppts in addition to the average baseline growth rate in the period 2020-2050 if Korea managed to catch up with the average population growth rate in OECD countries in 2006 (0.62% per year)

Source: Authors’ calculations using a model for measuring potential output growth developed for Korea by International Monetary Fund (2006).
Combined effect of reforms

Long run growth payoff: the combined effect of reforms intended to boost productivity in services sector, labor participation and population growth could help Korea grow at double its baseline growth rate in the period 2020-2040.

Source: Authors’ calculations using a model for measuring potential output growth developed for Korea by International Monetary Fund (2006).
Hopes for growth could become reality

- Simulation analysis tracing the path of potential growth to 2050 under different scenarios
- Suggests that policies to boost labor force participation and productivity growth in services could:
  - Enable Korea’s per capita income level to surpass $40,000 by 2020
  - Raise the annual potential output growth rate to 5% from the 2.7% estimate of the business-as-usual baseline scenario in the period 2020-2040