The Fiscal Consequences of Shrinking Populations

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Outline

• Motivation

• Long-term trends, demographic uncertainty and fiscal sustainability
  – Fertility
  – Longevity

• Policy options to address fiscal challenges of shrinking populations
  – Policies that affect demographics and labor markets
  – Reforms to age-related spending programs

• Conclusions
Motivation
Motivation I

- Population is already shrinking in many countries and populations are aging
- Shrinking populations pose a formidable fiscal challenge
  - Age-related spending projected to reach levels incompatible with fiscal sustainability
- Reforms should start now so that they will be gradual and lasting
This presentation makes three major contributions to the debate:

1. Uses July 2015 UN population projections to help project health and pension spending for over 100 countries
2. It presents spending projections to 2100
3. Reviews potential options to address these fiscal pressures, including migration
Long-term Trends, Demographic Uncertainty, and Fiscal Sustainability
Long-term trends
The prospect of aging, shrinking populations, and higher age-related expenditure

- Population aging will have a large direct impact on public spending
- Demographic changes will also affect fiscal sustainability through their impact on growth
The impact of demographic uncertainty on fiscal sustainability

- Demographic projections are surrounded by substantial uncertainty
- Past projections have been subject to large errors
Fertility

- After declining for over 100 years, fertility rates are projected to increase slightly in the more developed economies over 2015–2100
- For the less developed economies, the projections assume a continued but gradual decline in fertility rates
Lower fertility scenario

- The impact of lower fertility rates on fiscal variables is significant
Longevity

- Longevity improvement is expected to slow down in the more developed economies
- For the less developed economies, the projections suggest continued improvements in longevity
Improvements in longevity can also have an important fiscal impact.
Policy Options to Address Fiscal Challenges of Shrinking Populations
Overview of policy options

• Categories of potential policy responses to the fiscal challenges posed by population trends:
  1. Policies to raise fertility rates?
  2. Labor market policies
     - Allowing greater migration
     - Raising labor force participation
  3. Reforms to age-related spending programs
     - Increasing retirement ages
     - Addressing the growth of age-related costs
Fertility rates?

Increase fertility rates
(change from baseline, percentage points of GDP)

Percentage points of GDP

Old-age dependency ratio

More developed
Less developed
Japan
China

Pension (left axis)
Health (left axis)
Old-age dependency ratio (right axis)
Allowing greater migration

Allow higher migration
(change from baseline, percentage points of GDP)

Percentage points of GDP

Old-age dependency ratio

2050 2100 2050 2100

More developed

Less developed

Pension (left axis) Health (left axis) Old-age dependency ratio (right axis)
Raising labor force participation I

Increase labor force participation of women
(change from baseline, percentage points of GDP)

Percentage points of GDP

2050 2100 2050 2100 2050 2100 2050 2100
More developed Less developed Japan China

Pensions Health
Raising labor force participation II

Increase labor force participation of older workers
(change from baseline, percentage points of GDP)

<table>
<thead>
<tr>
<th>Year</th>
<th>More developed</th>
<th>Less developed</th>
<th>Japan</th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td>2050</td>
<td>-1.5</td>
<td>-1.0</td>
<td>-0.5</td>
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<tr>
<td>2100</td>
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<td>-0.5</td>
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Percentage points of GDP

Pensions
Health
Addressing the growth of age-related costs I

<table>
<thead>
<tr>
<th></th>
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<th>2100</th>
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<tr>
<td>More developed</td>
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<tr>
<td>Less developed</td>
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<tr>
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<td>China</td>
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Increase retirement age by 5 years over 2015-2020 (change from baseline, percentage points of GDP)

Percentage points of GDP

-2.5  -2.0  -1.5  -1.0  -0.5  0.0  2050  2100  2050  2100  2050  2100

More developed  Less developed  Japan  China

- Pensions
Addressing the growth of age-related costs II

Lower excess cost growth
(change from baseline, percentage points of GDP)

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<th>China</th>
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<tbody>
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Health
Conclusions

• The fall in fertility and eventual decline in world population are part of the transition to a sustainable growth path
• Nevertheless, shrinking populations pose a grave fiscal threat
• Demographic and age-related spending projections are surrounded by substantial uncertainty
• There is no escape from reforming entitlements
• Migration and labor market policies can ameliorate the impact of aging in the more developed economies
• Given the magnitude of the fiscal challenge, reforms should start now but be gradual