Implications of Aging Populations and Increased Longevity for National Governments

Steve Goss, Chief Actuary
United States Social Security Administration

GAO/CNAO Joint Seminar
Impacts of Aging Populations on National Governments

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Developed Nations Are “Aging”

◆ “Macro aging”
  – Changing age distribution—getting older
    » Mainly from drop in birth rates

◆ “Micro aging”
  – People are living longer
    » Lower death rates
    » Increasing longevity

◆ Different challenges—different solutions—consider the U.S.
Micro Aging

We are living longer, but there are limits, and progress is slowing

Survival Curve U.S. Female: Period Data

Survival Curve U.S. Male: Period Data
Cause of “Macro Aging”

*Mostly drop in birth rates*

**U.S. Total Fertility Rate: With and Without Adjustment for Survival to Age 10**

<table>
<thead>
<tr>
<th>Period</th>
<th>Average TFR</th>
<th>Average Adjusted TFR</th>
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</thead>
<tbody>
<tr>
<td>1865-1895</td>
<td>4.44</td>
<td>3.09</td>
</tr>
<tr>
<td>1896-1925</td>
<td>3.36</td>
<td>2.80</td>
</tr>
<tr>
<td>1926-1965</td>
<td>2.86</td>
<td>2.71</td>
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<tr>
<td>1966-1990</td>
<td>1.99</td>
<td>1.95</td>
</tr>
<tr>
<td>1991-2015</td>
<td>2.00</td>
<td>1.98</td>
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</tbody>
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Notes: TFRs prior to 1917 are for whites only and survival rates prior to 1900 use Massachusetts data only.
U.S. Drop in Birth Rate after 1965 Causes Dramatic Level Shift; Continuing Longevity Gains Are Gradual and Small

Aged Dependency Ratio 2017 TR
Population 65+/(20-64)

- Actual and TR Intermediate
- TFR remains at 3.0 after 1964
- TFR remains at 3.3 after 1964
Social Security Beneficiaries per 100 Workers

Rise substantially due to this aging of the U.S. population
Social Security Cost as Percent of GDP

For U.S., rises from a 4.2-percent average in 1990-2008, to about 6% by 2035

Cost for public and private pensions and health care rise similarly.
Implications of “Macro Aging”

What will we need to do?

◆ It is a pay-as-you-go world
  – In the aggregate, consumption = production

◆ Solutions for dealing with aging population
  – The older age distribution for the U.S. requires:
    » Elders consume less: 2/3 as much
    » Working age share more: 3/2 as much
    » Get elders to work a lot longer: 5 years, and more
    » Or some combination
We Are All Aging Together

- Canada, China, Denmark, Japan, Sweden, U.S.
  - World Bank international population projections
- Birth rates have dropped for all
  - Resulting in sudden shifts in age distribution
- Net immigration can help slow macro aging
  - Or can hasten it if young individuals emigrate
- Increasing longevity is gradual
- We all have similar challenges
Birth Rates Now Below “Replacement”
(below TFR of 2.1 for all six nations)
Adding in Net Immigration Puts All But China and Japan Above “Replacement”
Population Over Age 65 Is Increasing For All of Us

*But this is not really our challenge*
In 2000, 65+ were less than 30 per 100 at working ages.
By 2050, all but U.S. expect over 40, Japan over 70.
Implications for our National Governments, our Economies, our Populations

◆ GDP and total income will grow slower
  – So we will at least avoid overpopulation
◆ Those over 65 will live AND work longer
◆ Workers will share more of their income
◆ We may encourage more births
◆ Immigration can help, but we cannot all gain
◆ Our governments must plan for changes
  – Changes are needed VERY soon
For More Information…

http://www.ssa.gov/oact/

◆ Annual Social Security Trustees Reports (U.S.)
  https://www.ssa.gov/oact/TR/index.html

◆ Documentation of Trustees Report data & assumptions

◆ International Population Projections—World Bank