Long-Term Economic Challenges: Perception or Reality?
- Changing Demographics:
  Are We Ready?

33e congrès de l’Association des économistes québécois
15 May 2008
Presentation

- Mandate of the Office of the Chief Actuary
- Canadian Retirement Income System
- Canadian and Global Aging
- CPP and OAS Financing
- OECD Countries Comparisons
- Efficient Retirement Systems
Canadian Retirement Income Security

Canadian retirement system with mixed funding approaches is well recognized in the world for its capacity to adapt rapidly to changing conditions.

- Full funding (RPP/RRSP)
- Partial funding (CPP/QPP)
- Pay-as-you-go funding (OAS/GIS)

The Canadian retirement system could be viewed as about 40% to 45% funded.
Income Replacement Rate of Public Pension Plans (Canada and United States, 2006)
Provision of Retirement Income Security – What is Required?

• A retirement system built on the principles of:
  - Intergenerational equity
  - Solidarity: society protects all individuals and collectively ensures a basic level of assistance/standard of living for low-income retirees
  - Responsibility: retirement income security is a shared responsibility between the government, society, employers and individuals

• Incentives to remain in the labour force
Aging of the Canadian Population

Increase of 151%
From 2006 to 2050

Increase of 249% for 80+

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Global Aging

Projected number of years needed to go from 12% to 24% of 65 and over as a % the total population

- Japan: 25 years
- France: 30 years
- Canada: 40 years
- Germany: 60 years
- France: 65 years
- UK: 65 years
Working Age Population (ages 20-59) (indexed 2005=100)


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CPP Financing

- **Steady-state funding**: replaces the original pay-as-you-go financing to build a reserve of assets equivalent over time to about five and a half years of benefit expenditures or about 25% of Plan liabilities.

- **Incremental full funding**: requires that changes to the CPP that increase benefits or add new benefits be fully funded (e.g., increase in eligibility for disability benefits for long-term contributors).

- The *minimum contribution rate* is the sum of the steady-state and incremental full funding rates.

- The *legislated contribution rate* is currently 9.9%, same as for the QPP.
CPP Evolution of Asset/Expenditure Ratio

- 9.9% Legisllated rate
- 9.82% minimum contribution rate
- A/E ratio 5.4 in 2019 and 2069
C/QPP Evolution of Asset/Expenditure Ratios
9.9% Contribution Rate

In 2020, CPP/QPP assets are projected to be equal to 17% of the GDP.

CPP Minimum Contribution Rate 9.82%
=> A/E 5.5 in 2025

QPP Steady-State Contribution Rate 10.54%
=> A/E 4.7 in 2025
Between 2010 and 2030, the ratio of expenditures to GDP increases from 2.4% to 3.2%, driven largely by the retirement of the babyboomers.

$28 billion in 2004; $37 billion in 2010; $110 billion in 2030
Government Net Financial Liabilities as % of GDP (G7 Countries)

Source: OECD Economic Outlook No. 82 Database (Annex Table 33)
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<table>
<thead>
<tr>
<th>Country</th>
<th>From</th>
<th>To</th>
<th>Transition Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>60 (F)</td>
<td>65 (F)</td>
<td>2024-2033</td>
</tr>
<tr>
<td>Belgium</td>
<td>60 (F)</td>
<td>65 (F)</td>
<td>by 2009</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>57 (F)</td>
<td>65</td>
<td>by 2030 (proposed)</td>
</tr>
<tr>
<td></td>
<td>60 (M)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>65</td>
<td>67</td>
<td>2024-2027</td>
</tr>
<tr>
<td>Germany</td>
<td>65</td>
<td>67</td>
<td>2012-2029</td>
</tr>
<tr>
<td>Iceland</td>
<td>67 →</td>
<td>65 →</td>
<td>late 1980s – early 2000s</td>
</tr>
</tbody>
</table>
## OECD Countries –
Increases in Normal Retirement Ages of State Pension Plans

...*(cont’d)*

<table>
<thead>
<tr>
<th>Country</th>
<th>From</th>
<th>To</th>
<th>Transition Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ireland</td>
<td>Social insurance pensions: retirement pension paid from 65, old age contributory pension paid from 66</td>
<td>60</td>
<td>65</td>
</tr>
<tr>
<td>Japan</td>
<td>60</td>
<td>65</td>
<td>2000-2025 (M) / 2030 (F)</td>
</tr>
<tr>
<td>Norway</td>
<td>70 (new ERA 62)</td>
<td>67</td>
<td>1973 (proposed as part of new pension system 2010)</td>
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<tr>
<td>South Korea</td>
<td>60</td>
<td>65</td>
<td>2013-2033</td>
</tr>
<tr>
<td>UK</td>
<td>60 (F)</td>
<td>65 (F)</td>
<td>2010-2020</td>
</tr>
<tr>
<td>UK</td>
<td>65 (M, F)</td>
<td>68 (M, F)</td>
<td>2024-2046</td>
</tr>
<tr>
<td>U.S.</td>
<td>65</td>
<td>66</td>
<td>2002-2008 (year attained 65)</td>
</tr>
<tr>
<td>U.S.</td>
<td>66</td>
<td>67</td>
<td>2020-2026 (year attained 66)</td>
</tr>
</tbody>
</table>
OECD Countries –
Life Expectancy at Average Exit Age from Labour Force*

<table>
<thead>
<tr>
<th>Country</th>
<th>Average exit age from LF</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>58.9</td>
</tr>
<tr>
<td>Spain</td>
<td>62</td>
</tr>
<tr>
<td>Austria</td>
<td>61</td>
</tr>
<tr>
<td>Switzerland</td>
<td>62.7</td>
</tr>
<tr>
<td>Canada</td>
<td>62.3</td>
</tr>
<tr>
<td>Greece</td>
<td>61.1</td>
</tr>
<tr>
<td>Finland</td>
<td>62.4</td>
</tr>
<tr>
<td>Germany</td>
<td>61.9</td>
</tr>
<tr>
<td>Netherlands</td>
<td>62.1</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>60.4</td>
</tr>
<tr>
<td>Sweden</td>
<td>63.9</td>
</tr>
<tr>
<td>Norway</td>
<td>63.8</td>
</tr>
<tr>
<td>Denmark</td>
<td>61.9</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>63.2</td>
</tr>
<tr>
<td>Ireland</td>
<td>64.1</td>
</tr>
<tr>
<td>United States</td>
<td>63.8</td>
</tr>
</tbody>
</table>


Sources: Eurostat, OECD, OCA, U.S. National Center for Health Statistics.
OECD Countries –
Incidence of Low Income Among Seniors vs.
Old Age Income Security Program Expenditures, as % GDP

Public expenditures as % of GDP

Incidence of low income among seniors

Sources: Luxembourg Income Study (LIS) Key Figures for incidence of low income among seniors using 40% of median
OECD Social Expenditures Database, 1980-2001 for government expenditures on old-age income security programs as % of GDP
OECD Countries –
Net Replacement Rates at Different Earnings Levels (% of individual pre-retirement earnings)

Low earner: half average earnings

Average earner

High earner: double average earnings

Source: OECD pension models.
OECD Policy Brief: Solving the Pensions Puzzle, March 2005
Note: Chart reproduced by the OCA
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An Efficient Retirement System Provides:

- Diversification of sources of retirement income
- Diversification of funding approaches
- Reasonable economic cost of public pensions (% of GDP)
- Reduction of poverty among seniors
- Reduction of income inequalities
- Maintenance of standard of living at retirement
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Thank you