



Office of the Superintendent of
Financial Institutions Canada

Bureau du surintendant des
institutions financières Canada

Office of the Chief Actuary

Bureau de l'actuaire en chef

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

**33^e congrès de l'Association
des économistes québécois
15 May 2008**



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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



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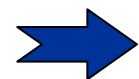
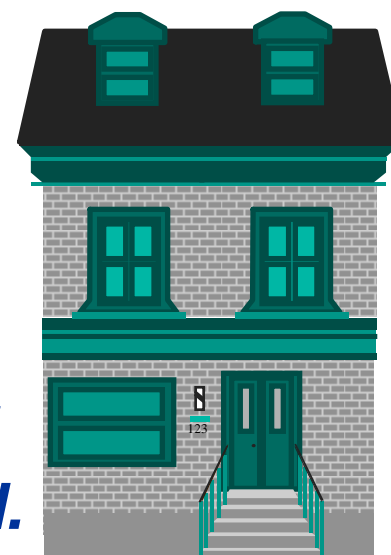
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Canadian Retirement Income Security

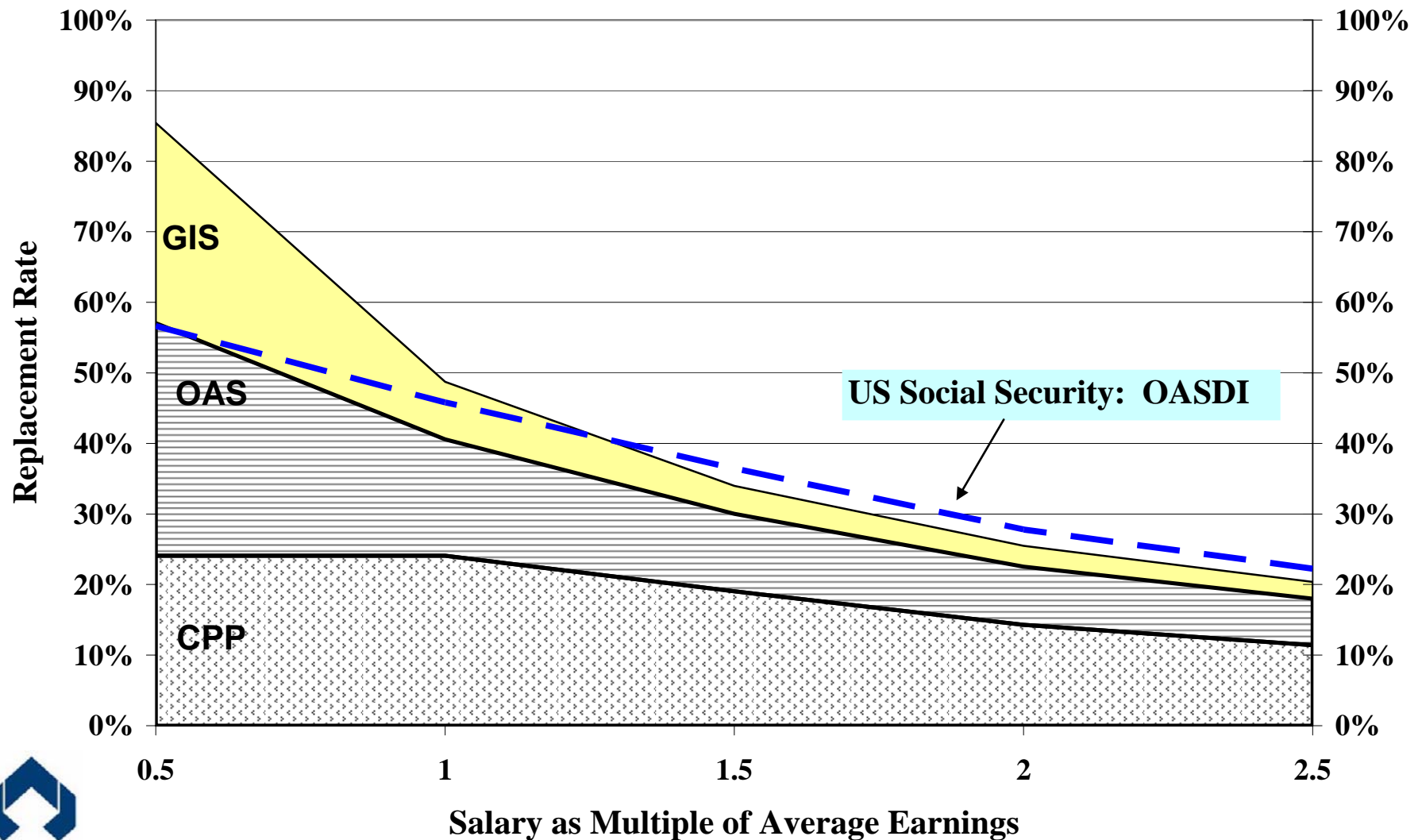
Canadian retirement system with mixed funding approaches is well recognized in the world for its capacity to adapt rapidly to changing conditions.

- 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)



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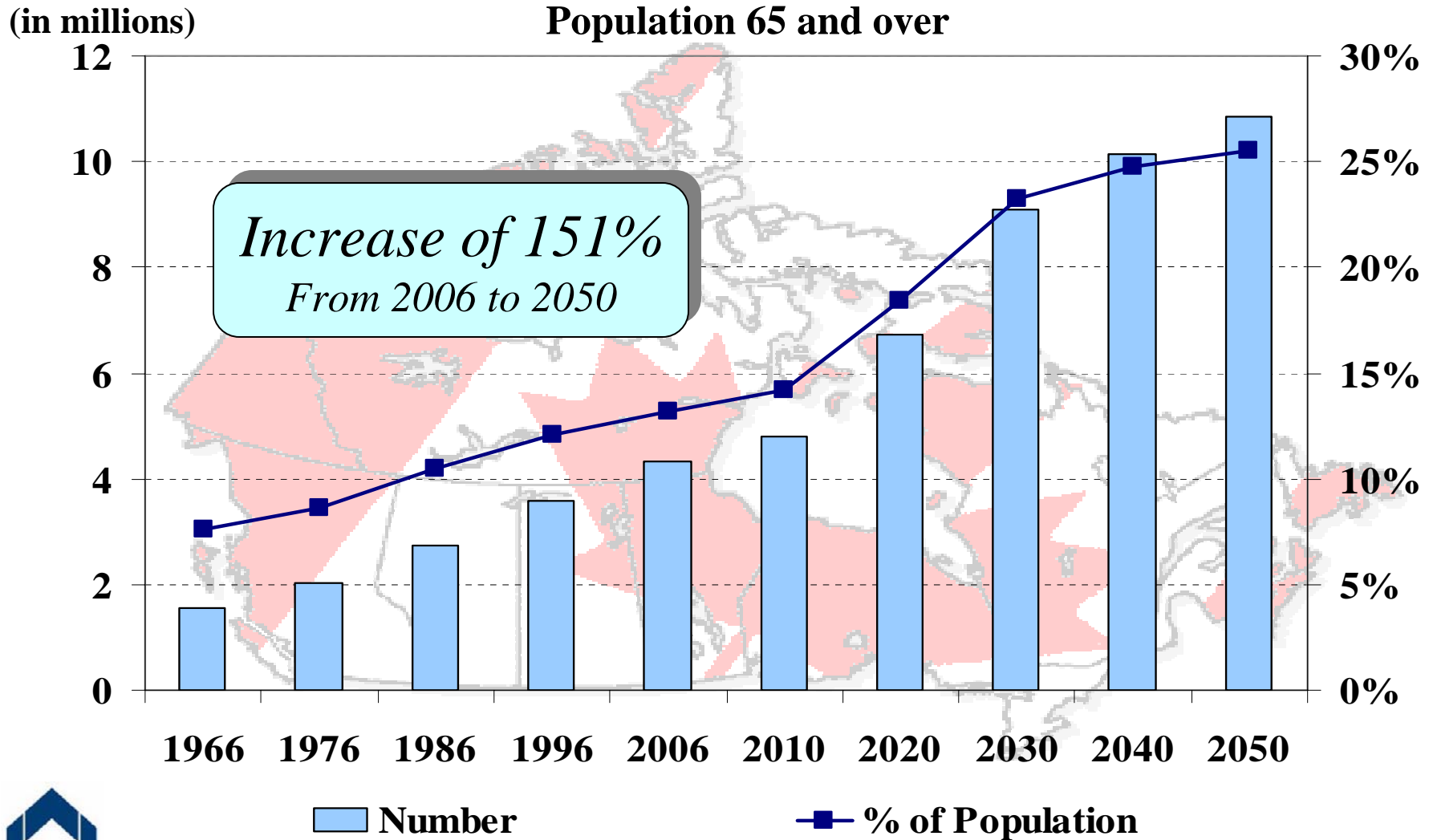
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Provision of Retirement Income Security – What is Required?

- 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



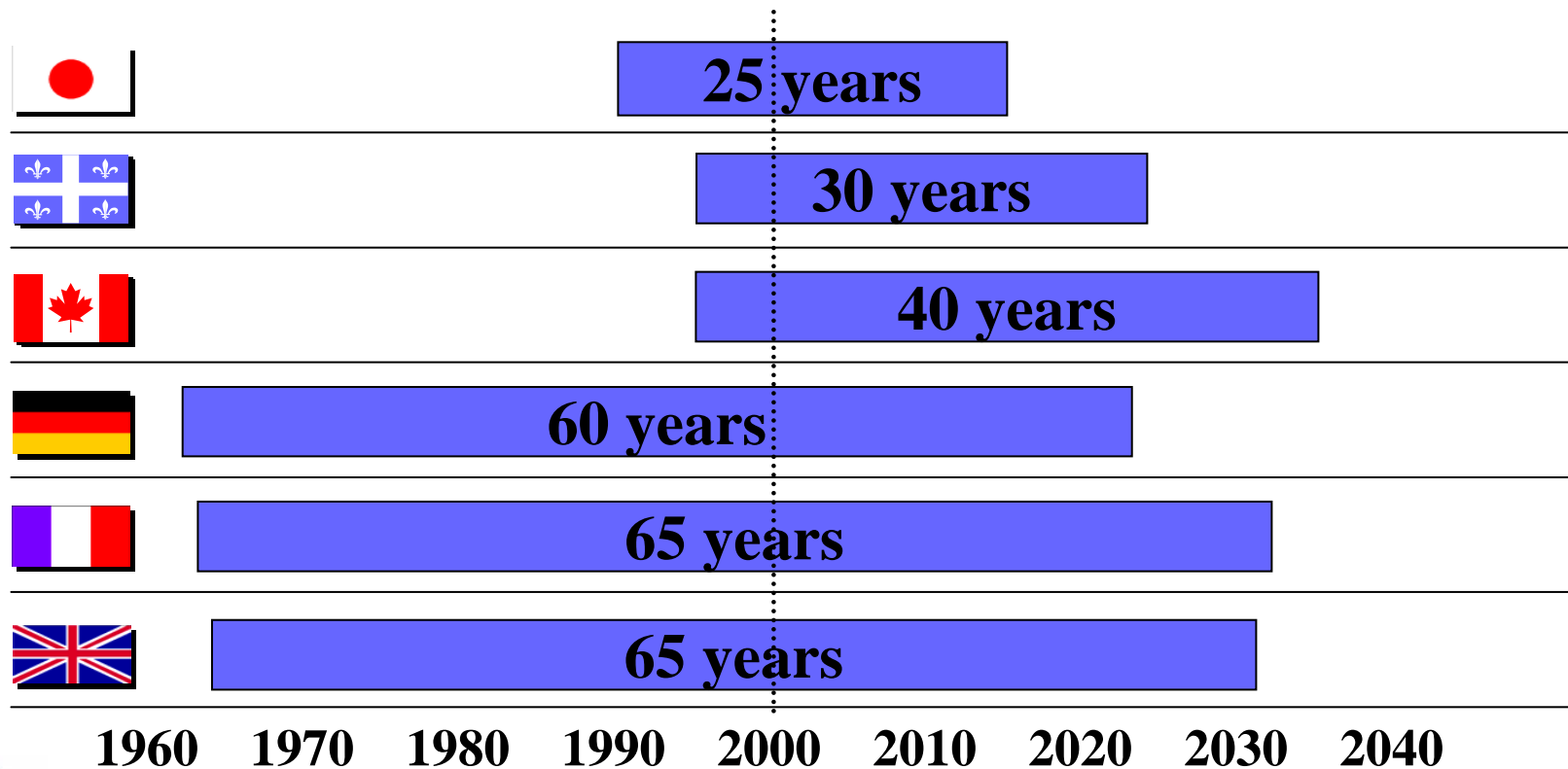
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Increase of 249% for 80+

Global Aging

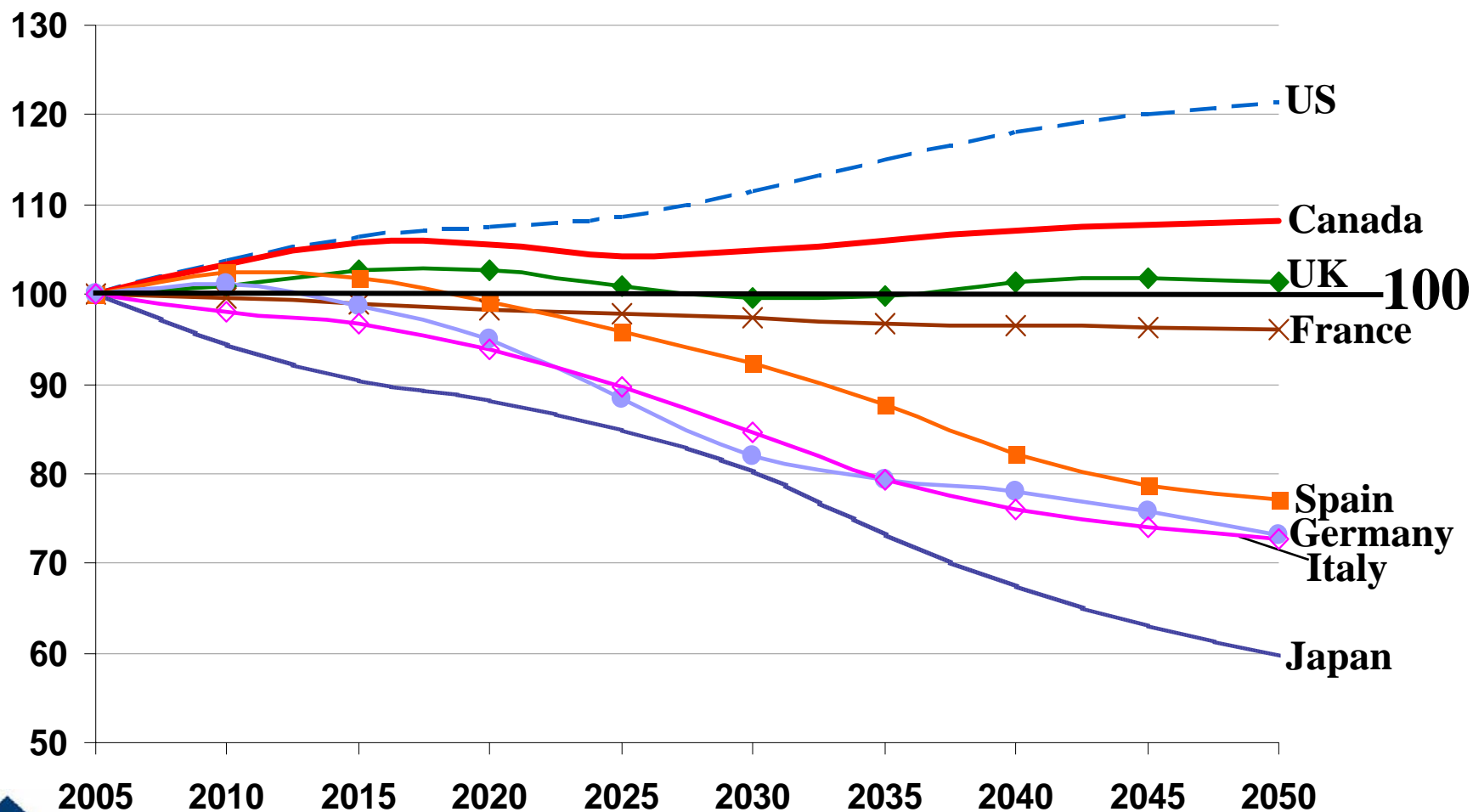
Projected number of years needed to go from 12% to 24% of 65 and over as a % the total population



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Working Age Population (ages 20-59) (indexed 2005=100)



Source: United Nations Population Division, World Population Prospects: The 2006 Revision

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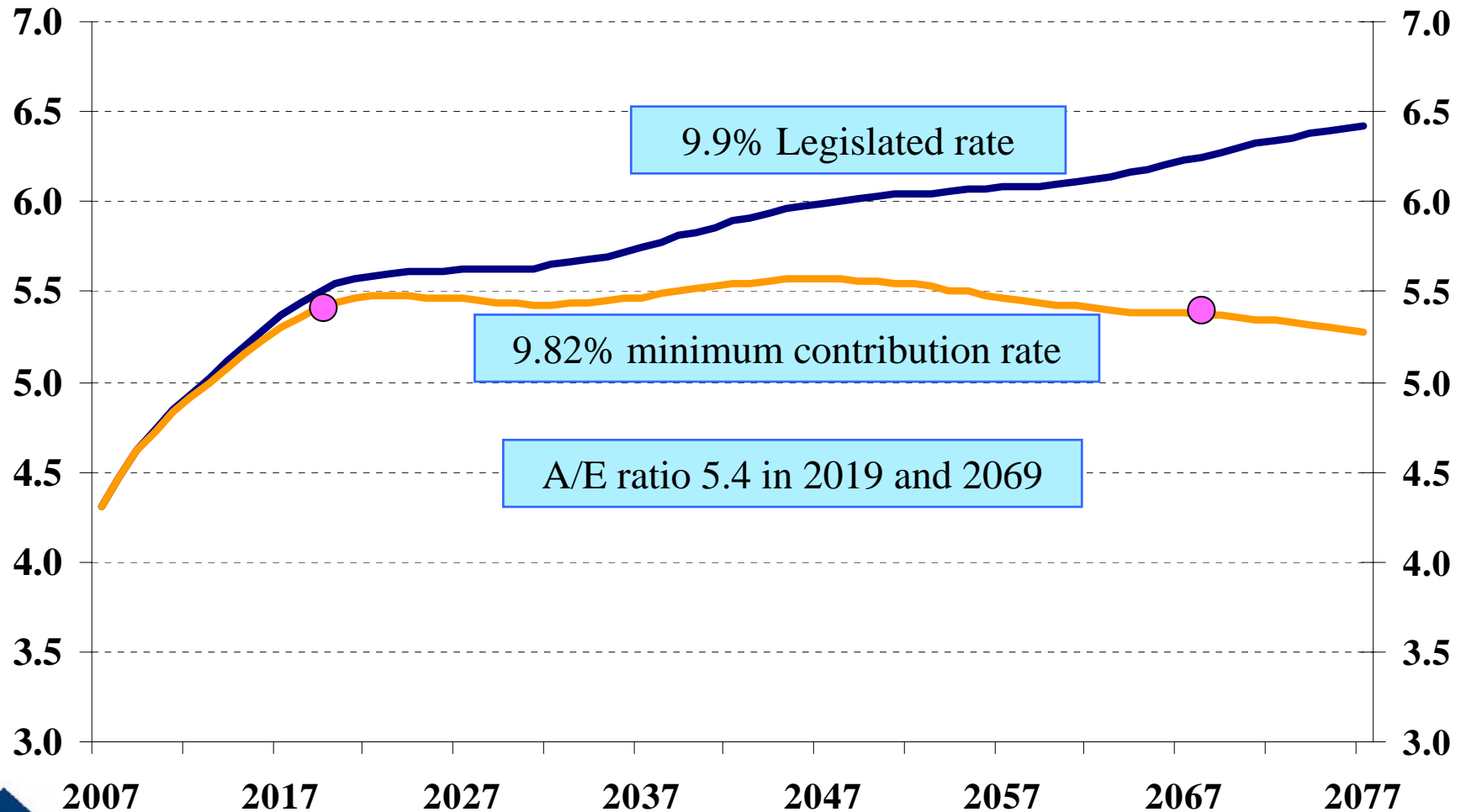
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CPP Financing

- *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 (eg: 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

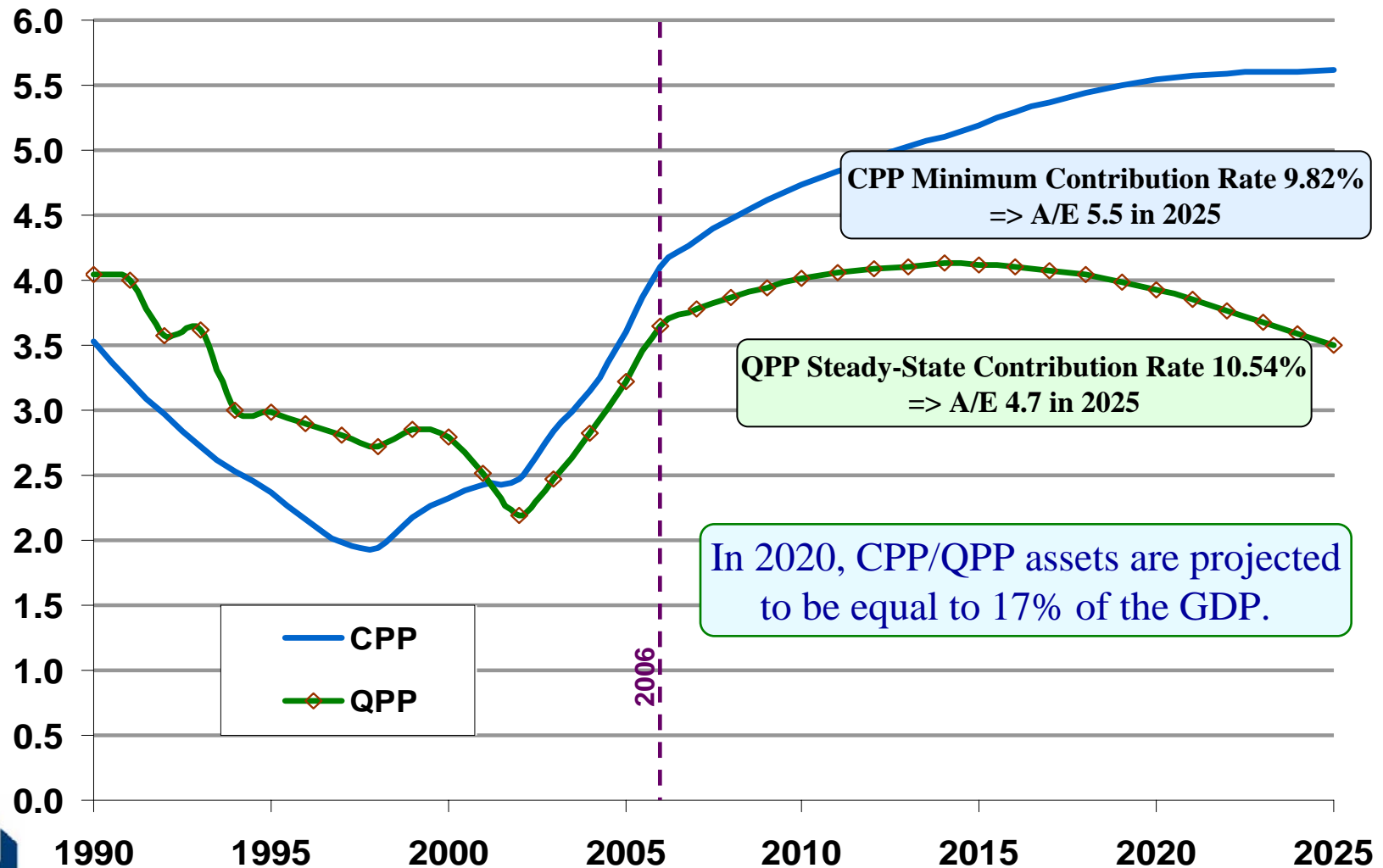


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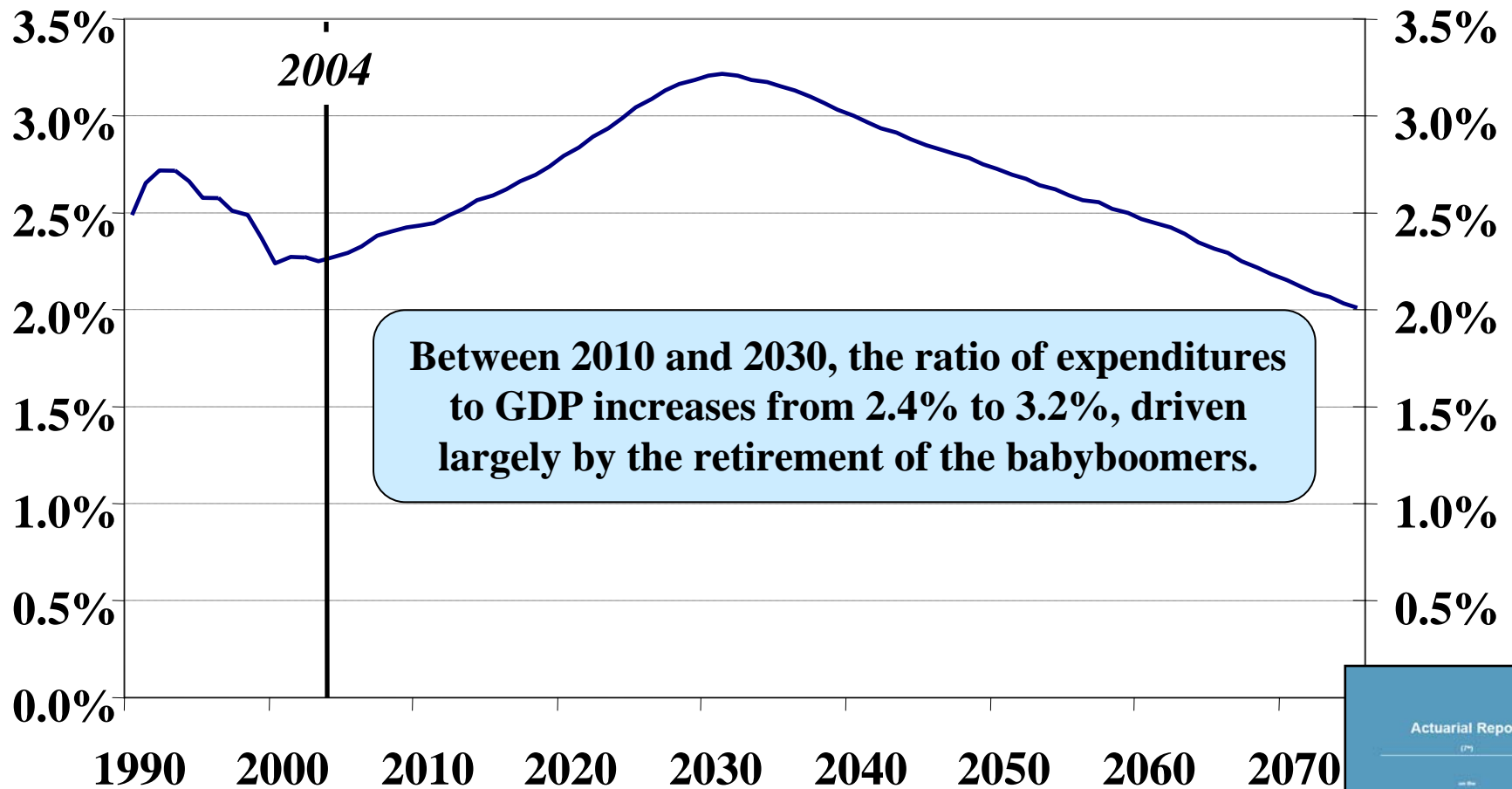
C/QPP Evolution of Asset/Expenditure Ratios

9.9% Contribution Rate



OAS Program Financing

Evolution of Old Age Security Expenditures in % of GDP



Between 2010 and 2030, the ratio of expenditures to GDP increases from 2.4% to 3.2%, driven largely by the retirement of the baby boomers.

\$28 billion in 2004; \$37 billion in 2010; \$110 billion in 2030

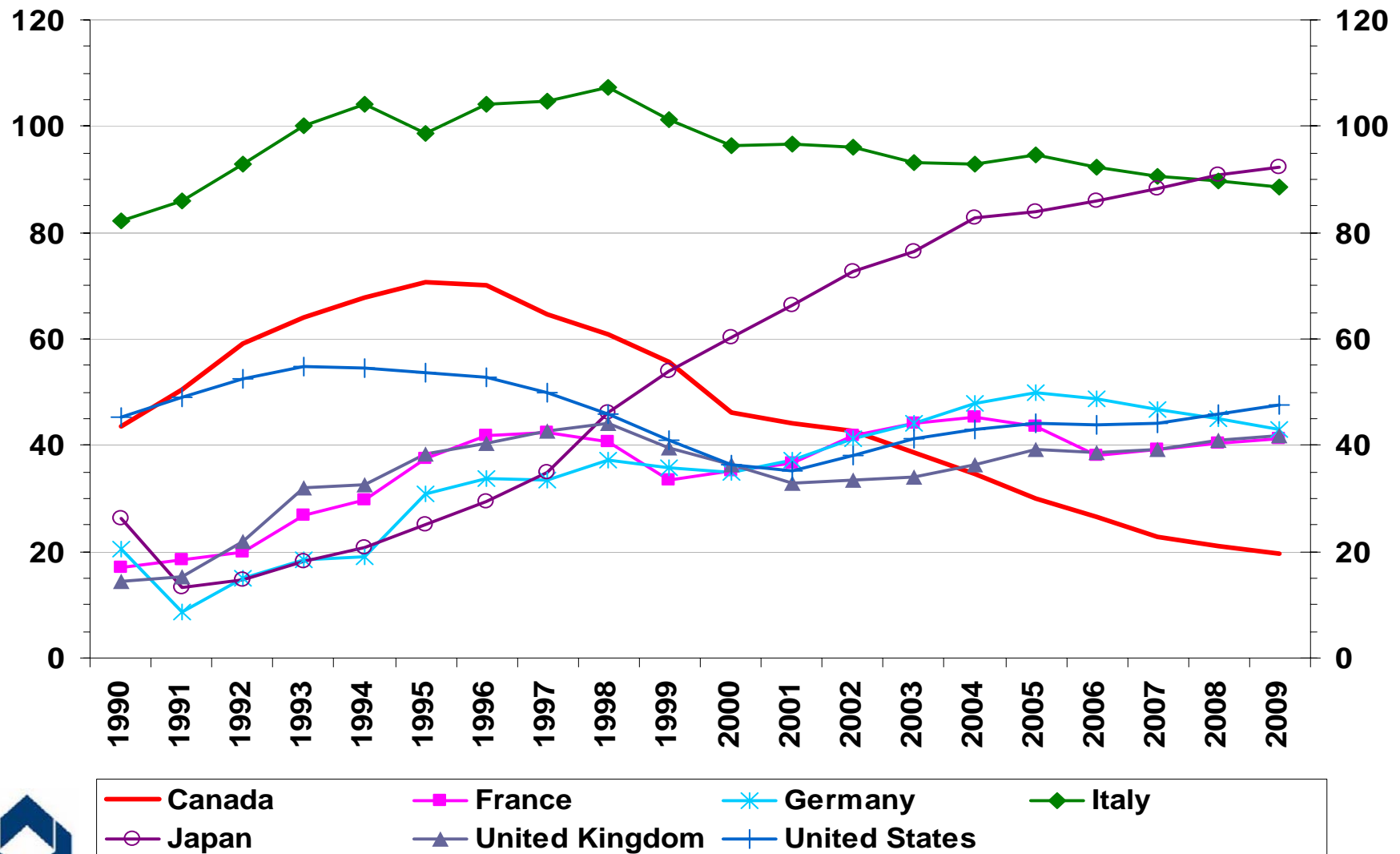


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Government Net Financial Liabilities as % of GDP (G7 Countries)



Source: OECD Economic Outlook No. 82 Database (Annex Table 33)

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OECD Countries – Increases in Normal Retirement Ages of State Pension Plans

	From	To	Transition Period
Austria	60 (F)	65 (F)	2024-2033
Belgium	60 (F)	65 (F)	by 2009
Czech Republic	57 (F) 60 (M)	65	by 2030 (proposed)
Denmark	65	67	2024-2027
Germany	65	67	2012-2029
Iceland	67 → 65 → 67		late 1980s – early 2000s



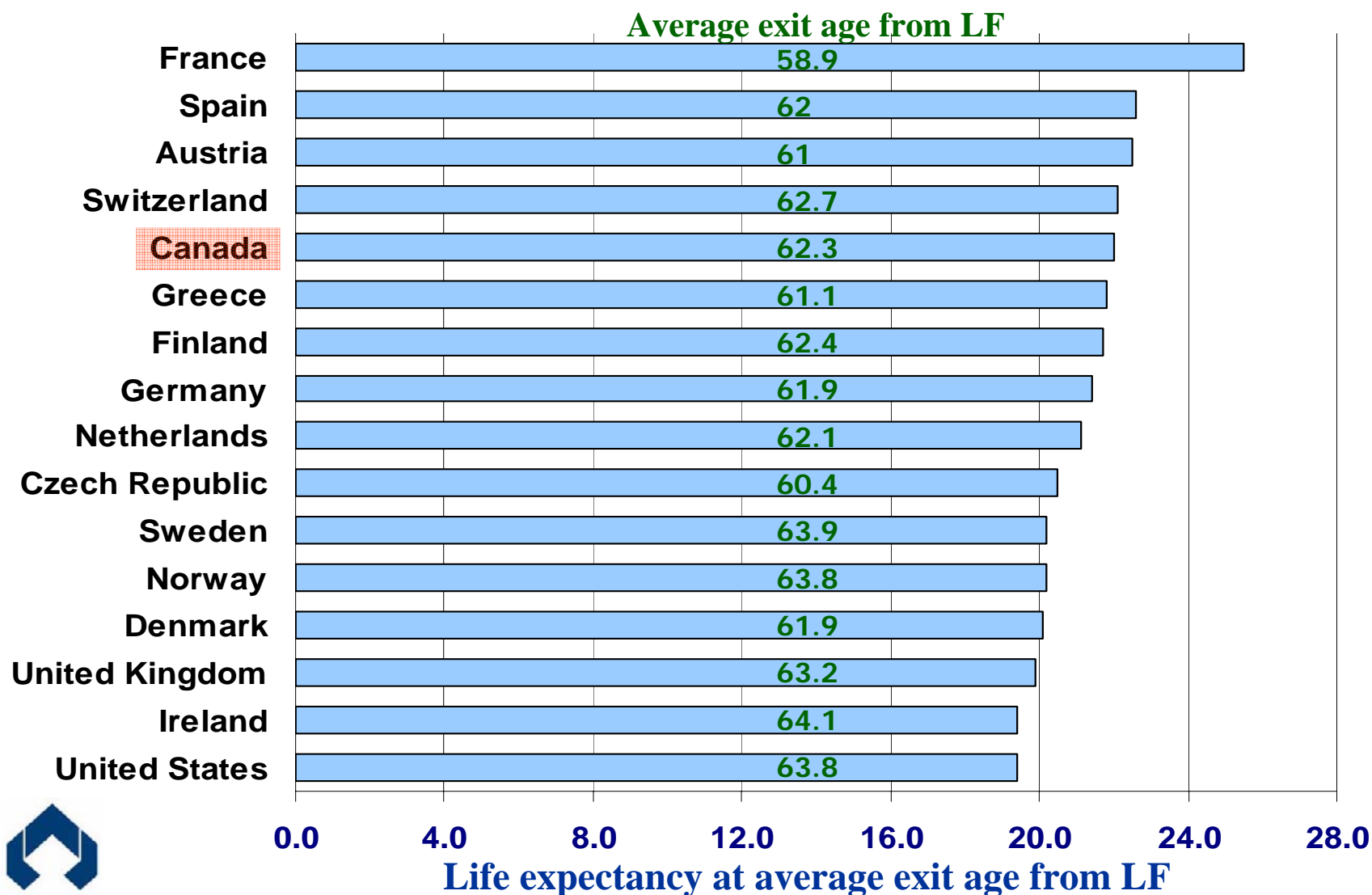
OECD Countries – Increases in Normal Retirement Ages of State Pension Plans

...(cont'd)

	From	To	Transition Period
Ireland	Social insurance pensions: retirement pension paid from 65, old age contributory pension paid from 66		
Japan	60	65	2000-2025 (M) / 2030 (F)
Norway	70	67 (new ERA 62)	1973 (proposed as part of new pension system 2010)
South Korea	60	65	2013-2033
UK	60 (F)	65 (F)	2010-2020
	65 (M, F)	68 (M, F)	2024-2046
U.S.	65	66	2002-2008 (year attained 65)
	66	67	2020-2026 (year attained 66)



OECD Countries – Life Expectancy at Average Exit Age from Labour Force*

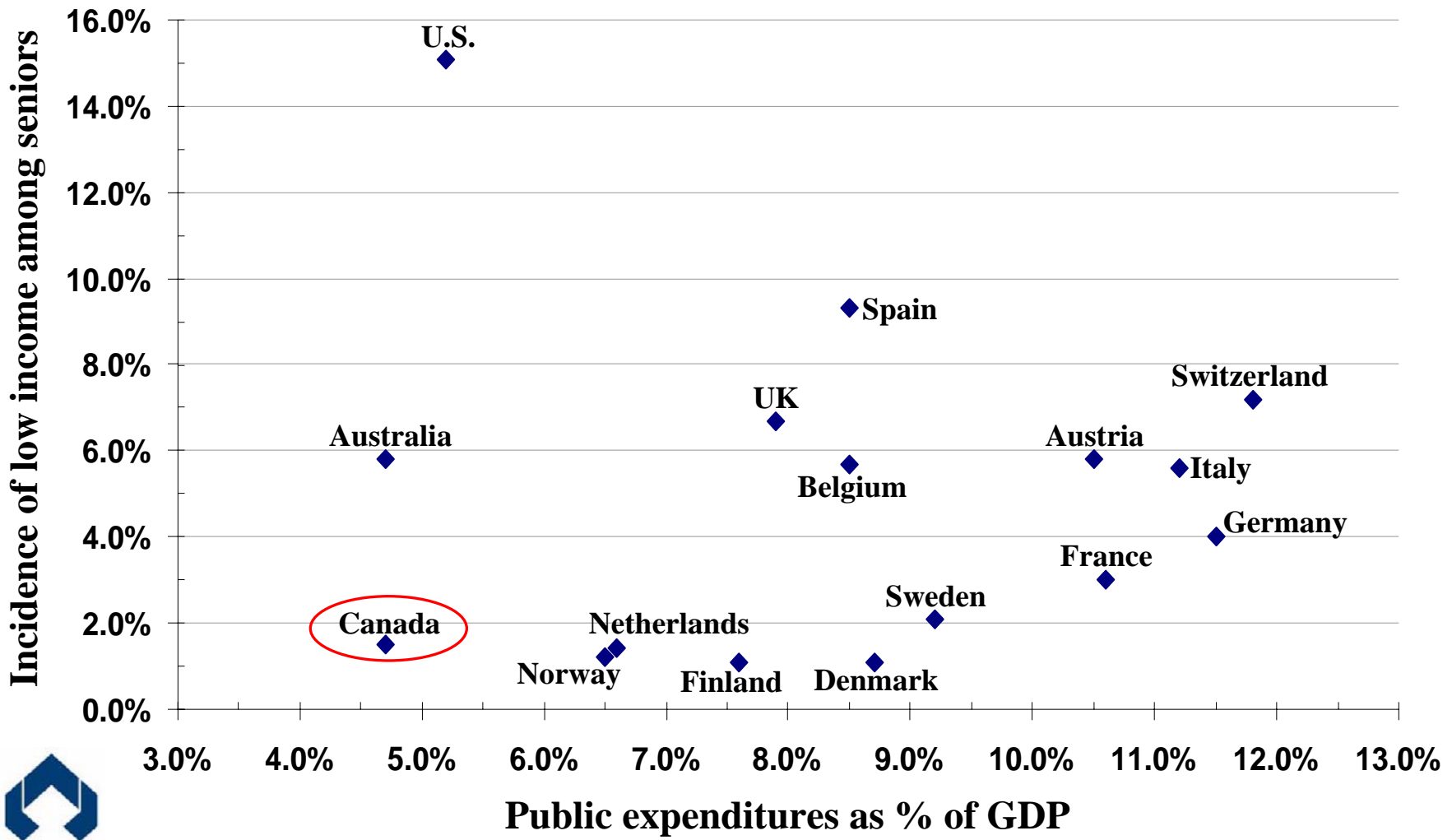


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*Life expectancies are for 2006 except for U.S. (2004) and UK (2005).
For Canada and U.S., effective average age of retirement is shown. 16
Sources: Eurostat, OECD, OCA, U.S. National Center for Health Statistics.

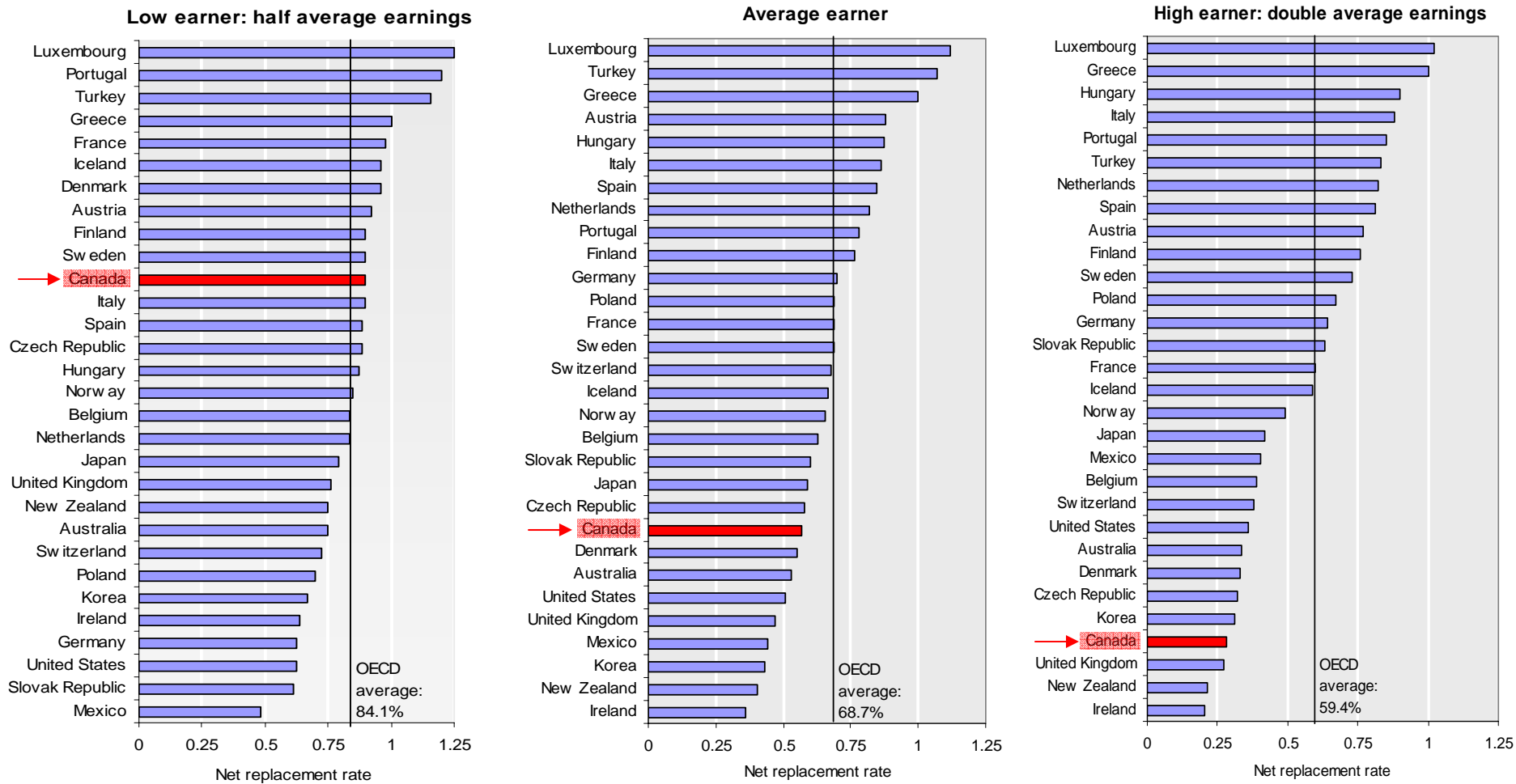
OECD Countries – Incidence of Low Income Among Seniors vs. Old Age Income Security Program Expenditures, as % GDP



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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)



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

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