



Bureau du surintendant  
des institutions financières  
Bureau de l'actuaire en chef

Office of the Superintendent  
of Financial Institutions  
Office of the Chief Actuary



# **CPP Financing and the Impact of a Larger Fund**

**Presentation to the 2<sup>nd</sup> National Pension Conference of  
the Canadian Labour Congress, Winnipeg**

18 October 2004

**Canada** 

# Presentation

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- Mandate of the Office of the Chief Actuary
- Canadian Aging
- Global Aging
- CPP Financing
- Future challenges



# Mission of OSFI – Mandate of OCA

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**OSFI is the primary regulator in Canada of federal financial institutions and pension plans.**

- protects policyholders, depositors, and pension plan members against any undue loss.
- provides services and actuarial advice to the Government of Canada through the **Office of the Chief Actuary**.

# 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)



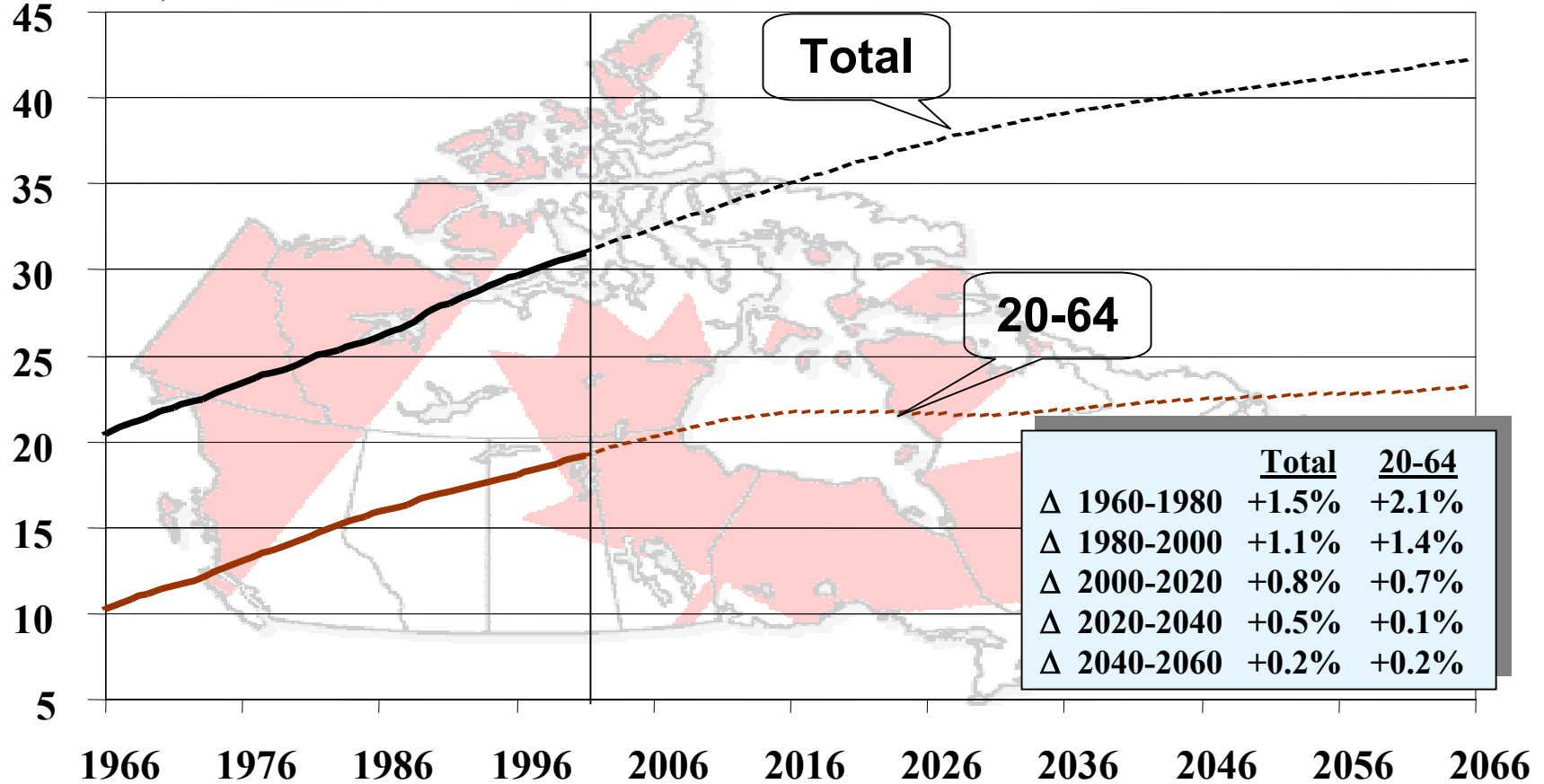
***The Canadian retirement system could be viewed as about 40% to 45% funded.***



# Population of Canada



(in millions)



After 2025, all projected population increase will come from migration.



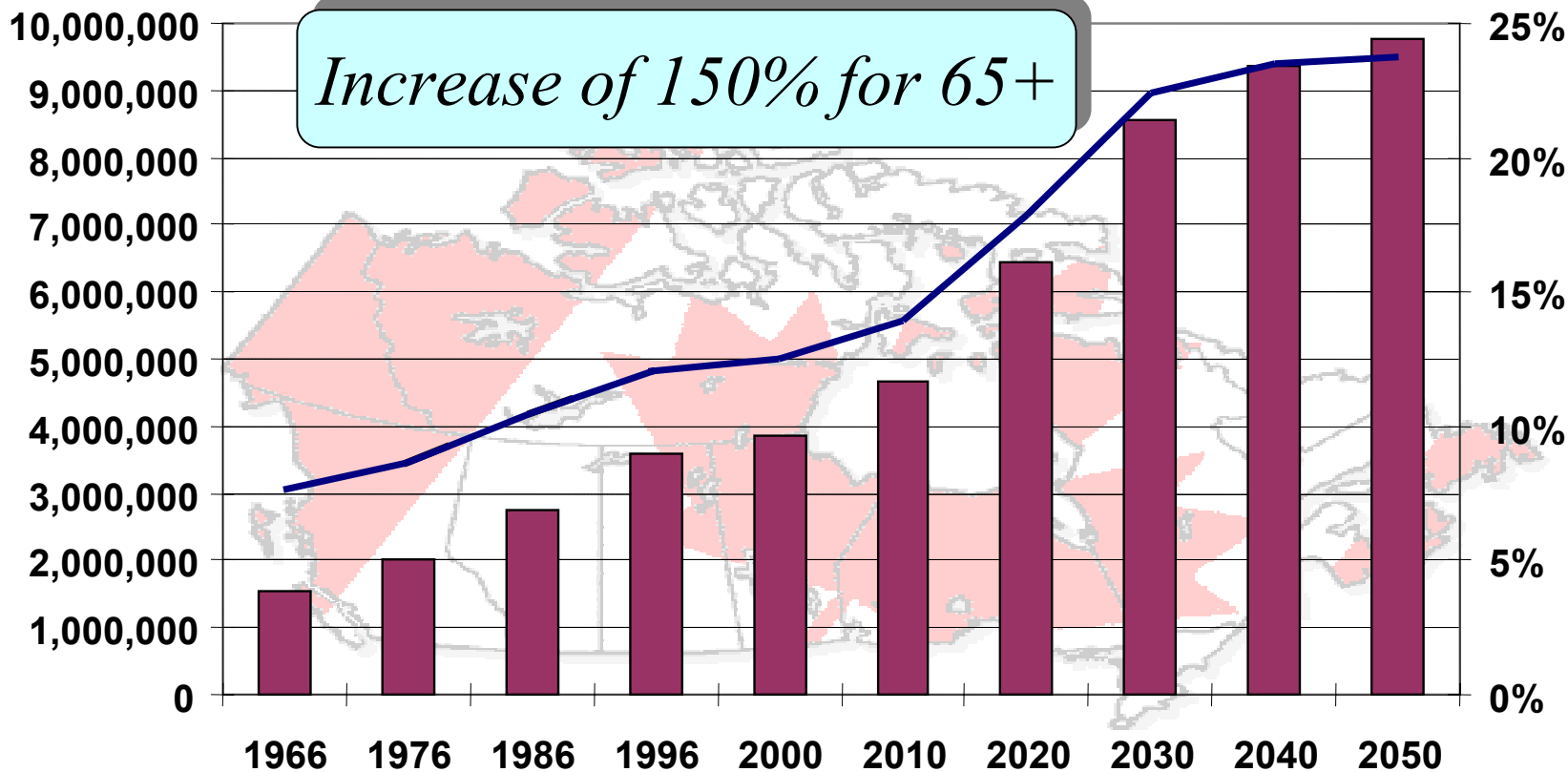
# Canadian Aging



(Population 65+)

*Increase of 275% for 80+*

*Increase of 150% for 65+*



Number
  % population



# Mortality rate

Yes, but...

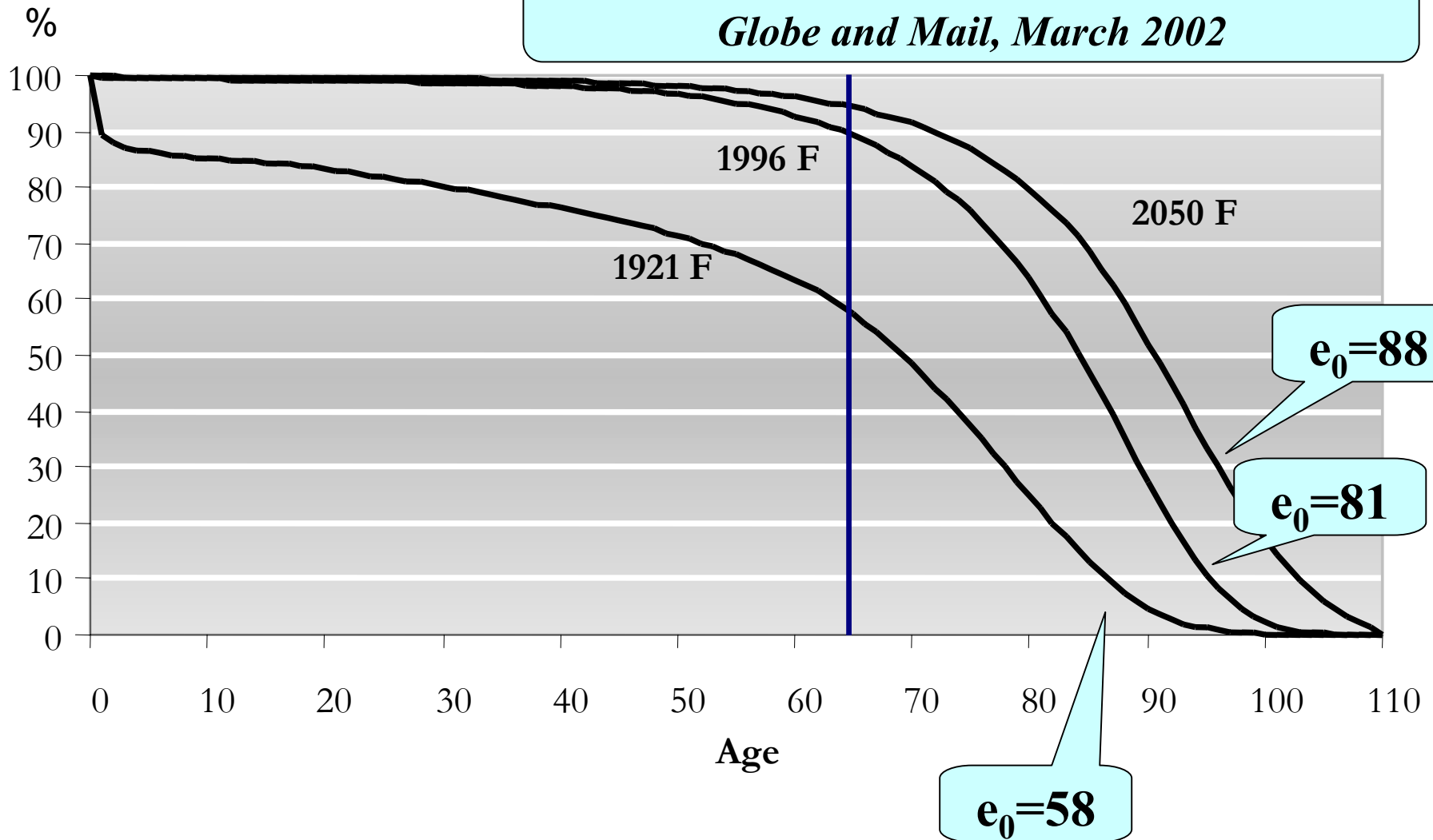
It requires eliminating all mortality risks before 80.

- In Canada and U.S., the leading causes of death are circulatory diseases (40% of deaths), cancer (20% of deaths) and accidents (9% of deaths).
- How long can we live? Is there a maximum life span?
- Can we reach 100 years old?
- From 1900 back 130,000 years, life expectancy remained approximately at the same level.
- It has increased by three decades since 1900 from 49 to 79.
- Analysts argue that **further progress will come more slowly** because we are approaching lower limits to death rates and we have already won the easier medical battles.



# Probability of surviving

« 70% of females would die between 77 and 96 »  
*Globe and Mail, March 2002*

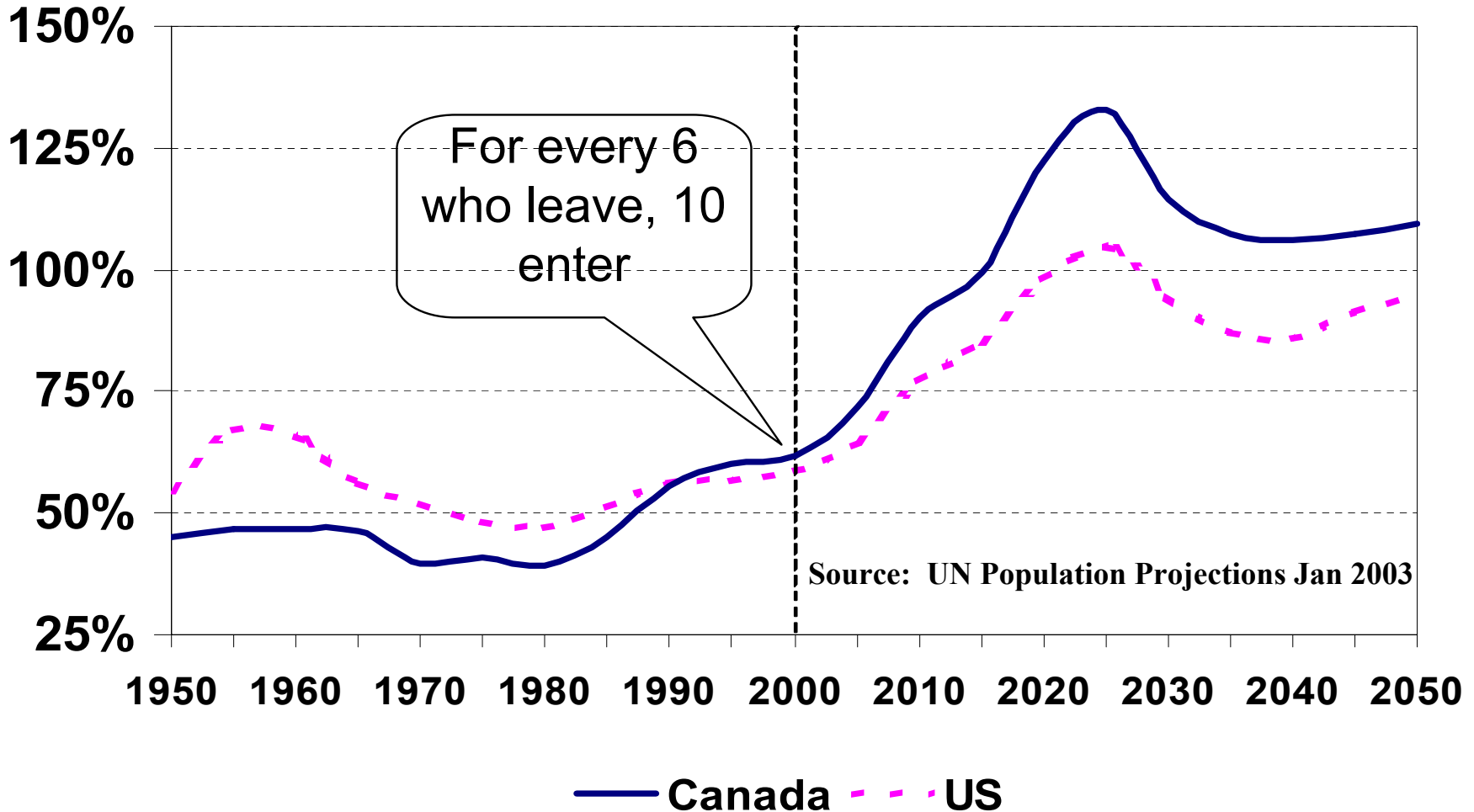




# Future Labour Shortage (More people leaving than entering)



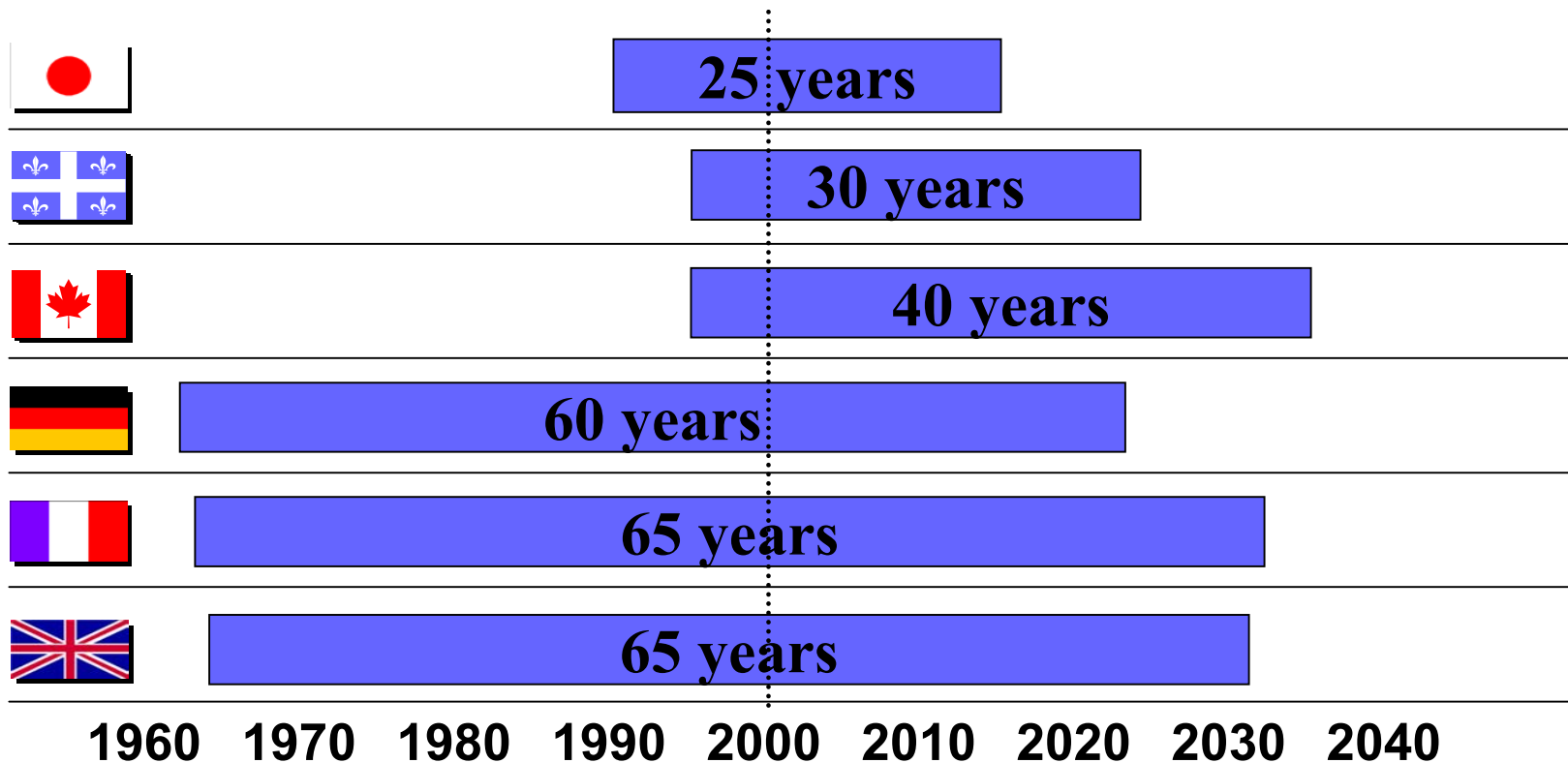
Ratio of 60-64 over 20-24



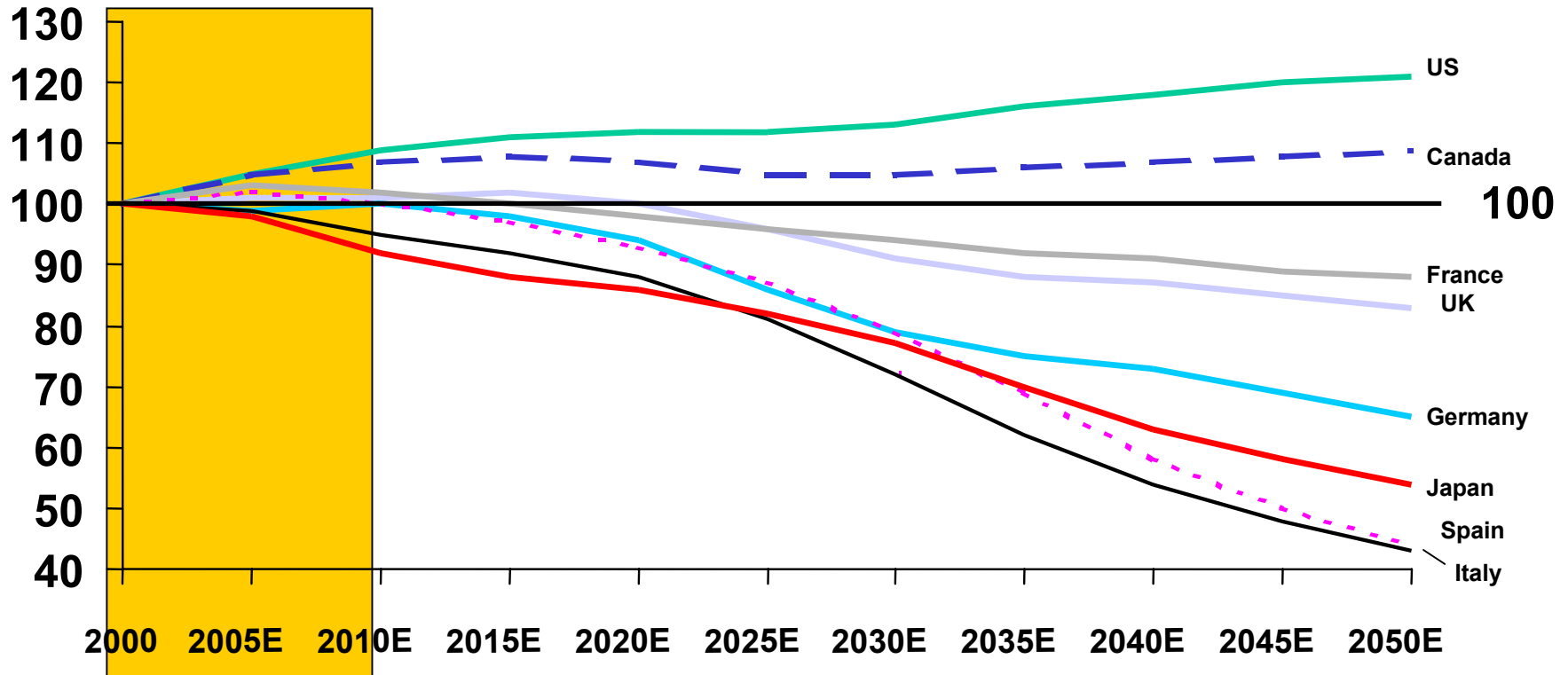
# Global Aging



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



# Working Age Population (ages 20-60) (indexed 2000=100)



Source: UN World Population Prospects

# Current Financial Situation of the Aged



	France	United Kingdom	Germany	Hungary	Canada	United States
<b>Poverty among the aged</b>	Yellow	Red	Yellow	Green	Green	Red
<b>Retirees and non-retirees revenue</b>	Green	Red	Yellow	Green	Green	Green
<b>Inequalities between retirees</b>	Yellow	Red	Green	Green	Green	Red
<b>Males/Females Difference</b>	Yellow	Green	Yellow	Yellow	Green	Green

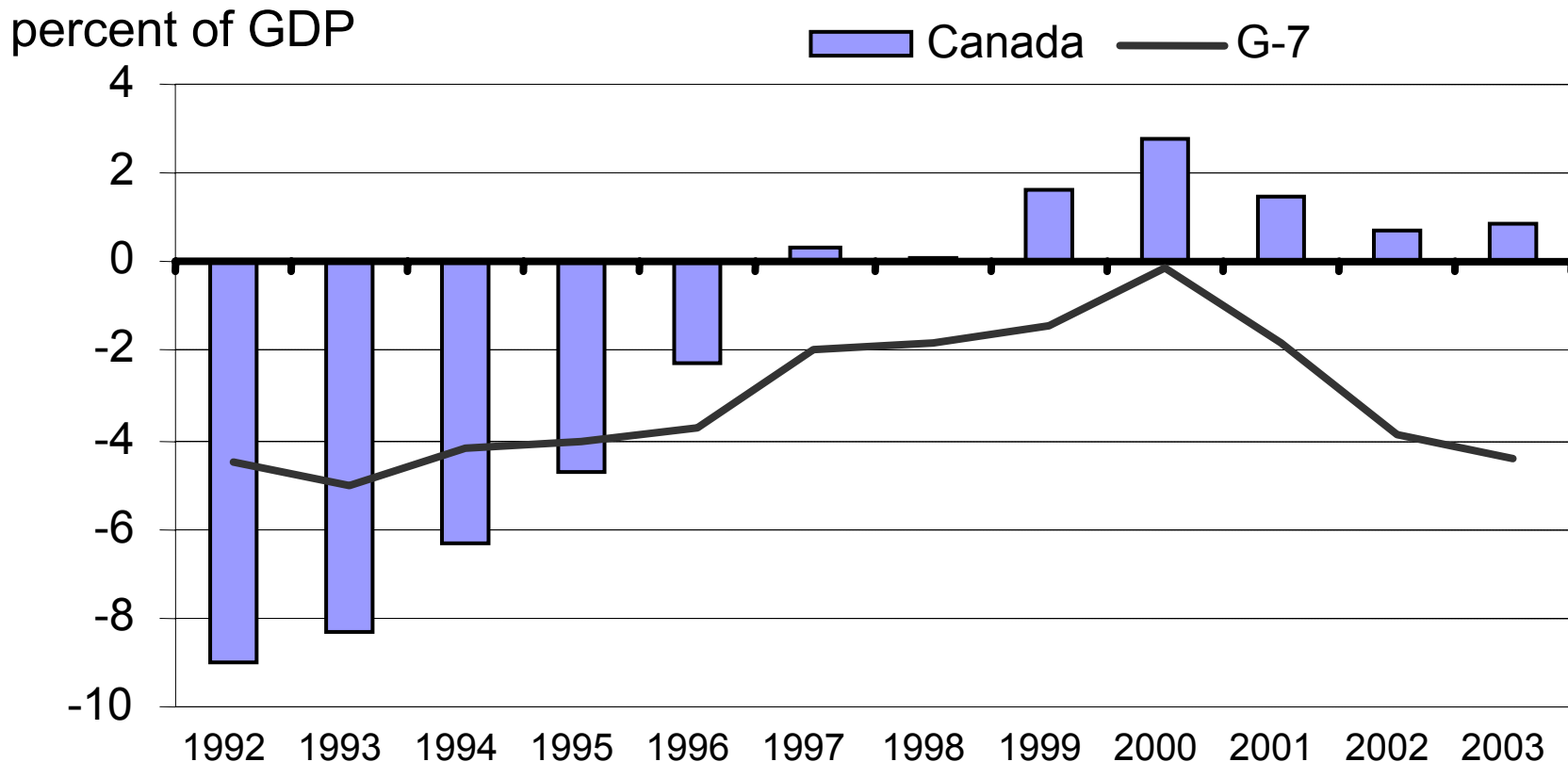
 **High Performance**
 **Medium Performance**
 **Low Performance**

Source: 2001 OECD study

# How do we position for the aging of the Canadian population?



## Total Government Financial Balances



Source: OECD Economic Outlook, No. 74 (December 2003); Department of Finance calculations

Balancing the budget and putting the debt-to-GDP ratio on a downward track are good ways to ensure that OAS can be financed on a sustainable basis.



# *How do we position for the aging of the Canadian population?*



## Guiding Principles of Federal-Provincial decisions on the CPP



- The CPP is a key pillar that is worth saving.
- The solutions must be fair across generations and between men and women.
- CPP must be affordable and sustainable for future generations. This requires fuller funding.
- CPP must be invested in the best interest of plan members, and maintain a proper balance between returns and investment risk.
- Any further benefit improvements must be fully funded.
- Available at [www.cpp-rpc.ca/principis/principe.html](http://www.cpp-rpc.ca/principis/principe.html)



# *How do we position for the aging of the Canadian population?*



- In Winnipeg, sixteen submissions were presented during the consultation representing a wide range of views.
- “We can afford the plan and we must protect it”, said the Canadian Labour Congress.
- Agreement on 14th February 1997

**Report on the  
Canada Pension Plan  
Consultations**

**June 1996**

**Federal/Provincial/Territorial  
CPP Consultations Secretariat**



# CPP Steady-State Financing



## Effect of the 1998 Amendments



- Increase Contributions by 70% over 6 Years (1997-2003)
- Decrease Benefits by 10% on a long-term basis (in 2050)
- Creation of the Canada Pension Plan Investment Board ([www.cppib.ca](http://www.cppib.ca))





# CPP Steady-State Financing

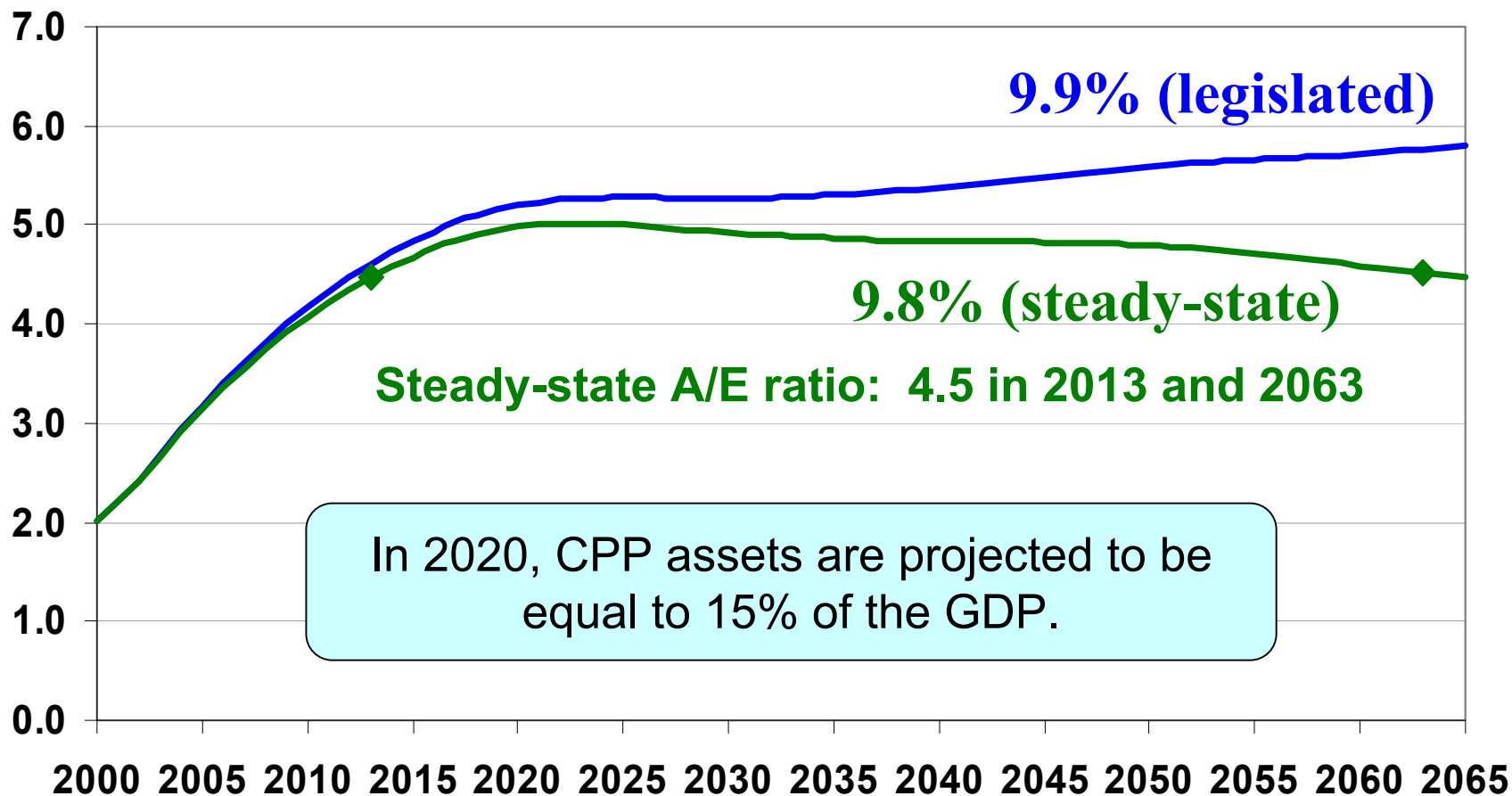


- The **steady-state contribution rate** is the lowest rate that can be charged that is sufficient to sustain the plan without further increase.
- It is also the lowest rate that can be maintained over the foreseeable future and that will result in a asset/expenditure ratio generally constant over a long period of time.
- Regulation requires that the A/E ratio should be equal in the 13<sup>th</sup> and 63<sup>rd</sup> year after the valuation date.

# CPP Steady-State Financing



## Evolution of the Asset/Expenditure Ratio



# CPP Steady-State Financing



- If the legislated contribution rate is higher than the steady-state rate, the funding status of the plan will increase over time.
- The higher this rate is set above the steady-state rate, the faster the plan will become more funded.
- SS rate under 18<sup>th</sup> CPP Report at 31 Dec 2000: 9.8%
- Current legislated rate from 2003: 9.9%



# CPP Steady-State Financing



- If the steady-state rate is higher than the legislated contribution rate AND if finance ministers cannot reach agreement on solution, then:
  - Contribution rate increased by  $\frac{1}{2}$  of excess over three years, subject to maximum increase of 0.2% per year
  - Benefits frozen
  - At end of three years, next review performed to determine financial status of Plan.

# Global Aging and Financial Markets – Hard Landings Ahead?



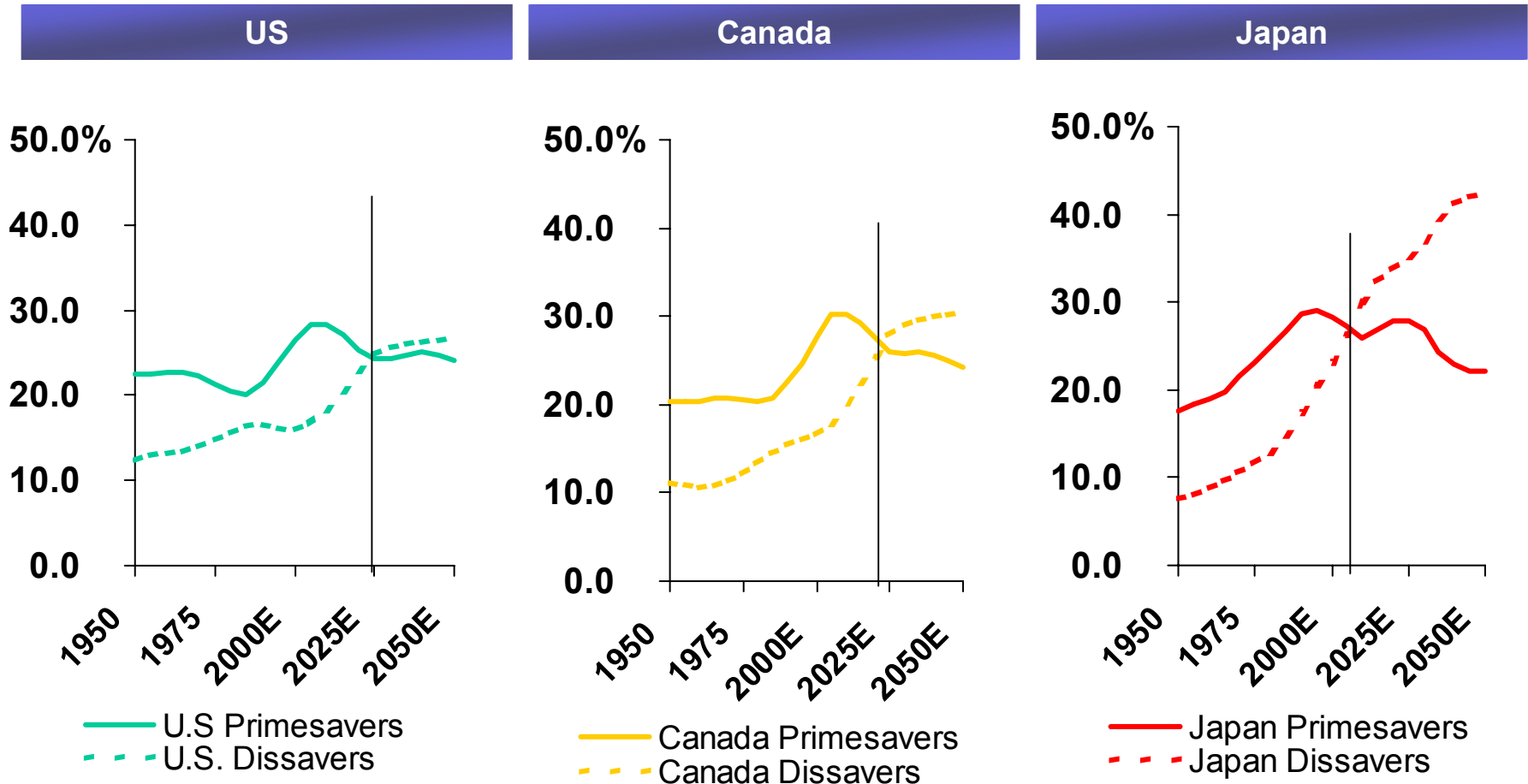
- **Will there be a financial market meltdown as a result of demographic changes?**
- Baby boomers will continue to be in their prime saving years throughout this decade. As more and more people save for their own retirement, world equities markets will boom.  
(*Global Pension Time Bomb*, Griffin, 1997)
- A rising trend around the globe toward pre-funding retirement benefits is a factor driving up total investment in equities.
- Although demand for domestic equities will be static, holding of international equities from pension funds are expected to rise.  
(*Global Aging – Capital Market Implications* Culhane, 2001)



# The Outlook for Capital Markets Becomes Less Certain as Baby Boomers Retire



(Prime savers 40-59 and dissavers 60+, as % of total population)



Source: UN World Population Prospects



# Global Aging and Financial Markets – Hard Landings Ahead?



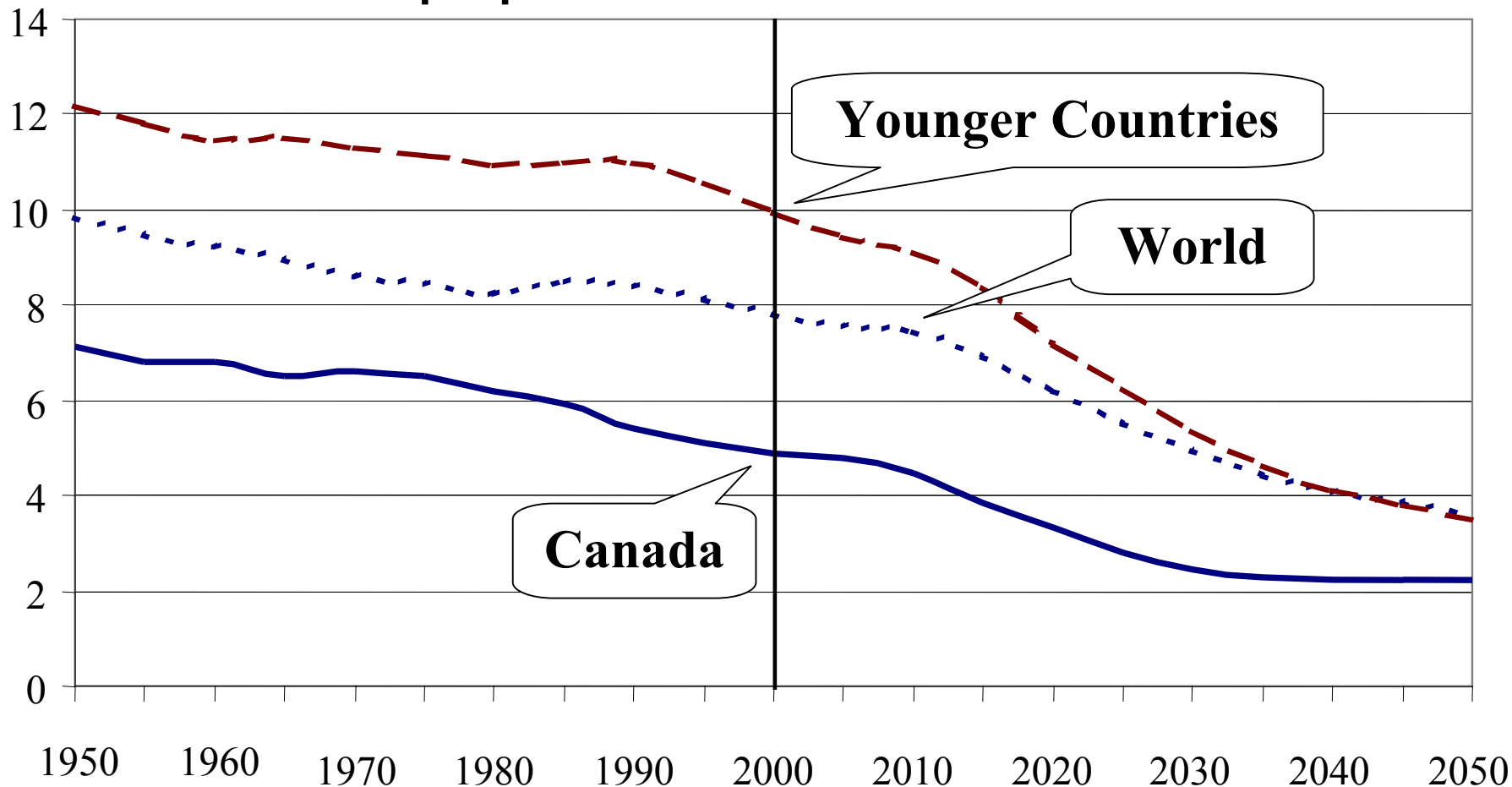
- **The question remains open to what extent the expected demand after 2020 will counter the downward pressure on pension assets from aging population in developed countries.**
- Total assets in private-sector DB plans would peak in 2024 with consequent negative effects on U.S. equity values. (Schieber/Shoven, 1994)
- Baby boomers will dampen stock prices. (Abel, Wharton School, 1999)
- After 2010, the number of people (of US, UK, Japan and Netherlands) who retire will increase dramatically and net cash flow into the systems will start to decrease. It is likely that pension funds in the future will hold fewer equities and more fixed income products in their portfolios. (*Demographics and Funded Pension System*, Mantel, Merrill Lynch, 2000)



# How do we position for the aging of the World population?



## Ratio of population 20 to 64 Over 65 +





# Future challenges



- The Canadian retirement system is in good shape considering that pension assets would roughly equal 40% to 45% of the liabilities.
- The aging is expected to be more severe in Canada than in United States, our main commercial partner.
- Contrary to the other industrialized countries, Canada should not undergo a decline of its working population thanks in particular to future immigration.
- However, the expected aging of the Canadian working labour force and the resulting labour shortage that could occur will represent one of the biggest challenges in the coming years.

