



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

Canada Pension Plan Actuarial Report and its Independent Peer Review Process

*Presentation to the Conference Board of Canada
2005 Pensions Summit: New Thinking, New Strategies*



OSFI
BSIF

4 April 2005

Canada 

Presentation

- **Purpose of the CPP Actuarial Report**
- **Demographic and Economic Assumptions**
- **Steady-State Funding**
- **Peer Review Process and Strengthening the Accountability**



Purpose of the CPP Actuarial Report

- Inform on the current and projected financial status of the Canada Pension Plan
- Calculate the steady-state contribution rate

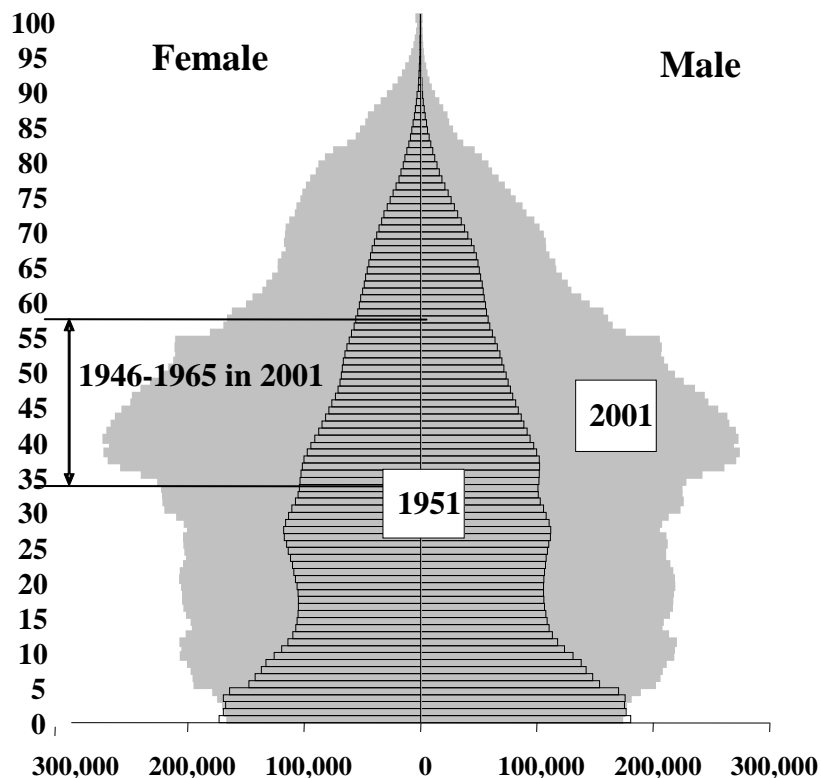
Consultations on Assumptions

- CPP and QPP seminars were organized to get opinions from a wide range of experts in the fields of demography, economics and investments.
- Federal and provincial officials attended these seminars.

Demographic Assumptions

- Fertility
(Number of births)
- Migration
- Mortality
(Life expectancy)

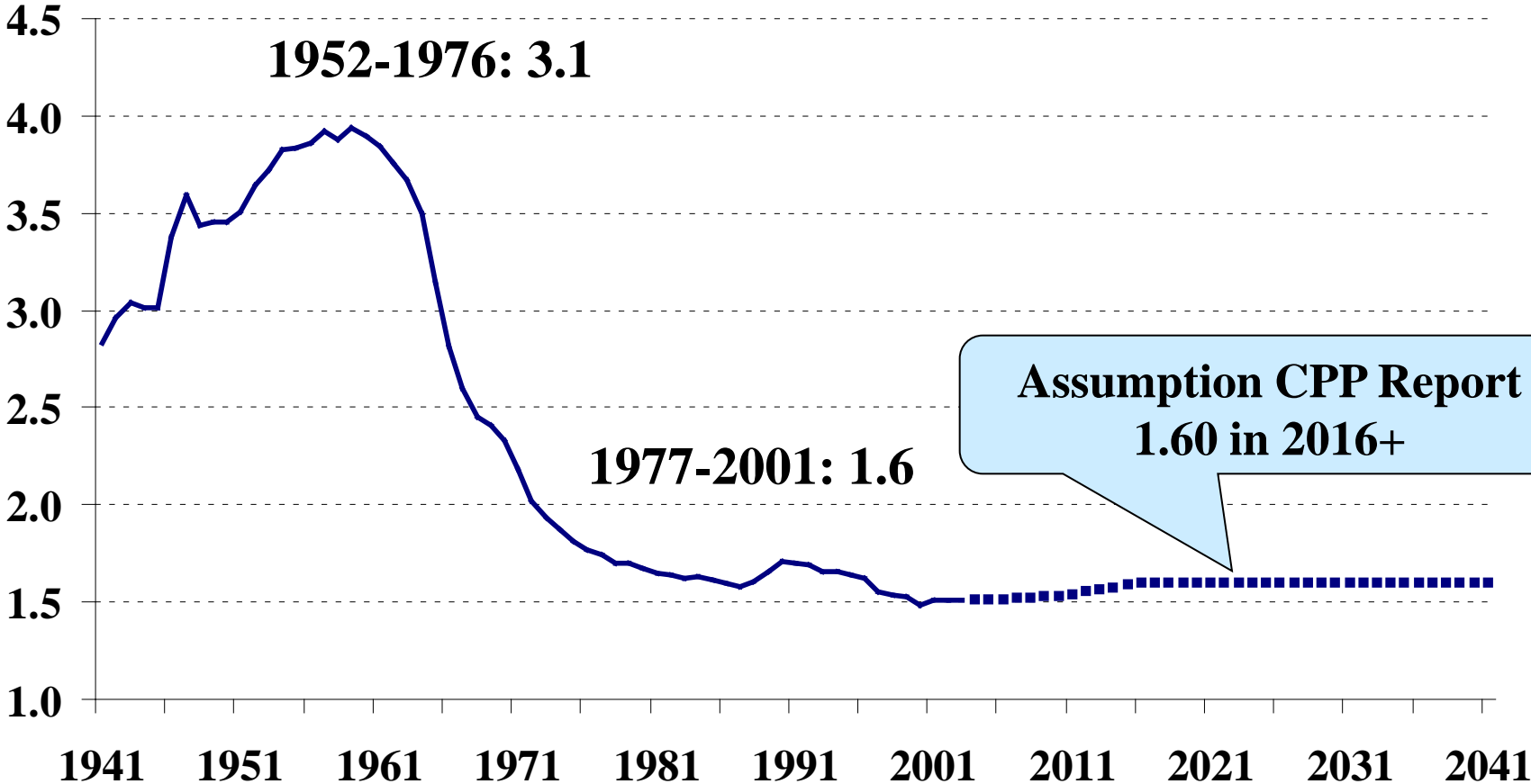
Age Profile of Canada's Population, 1951 & 2001



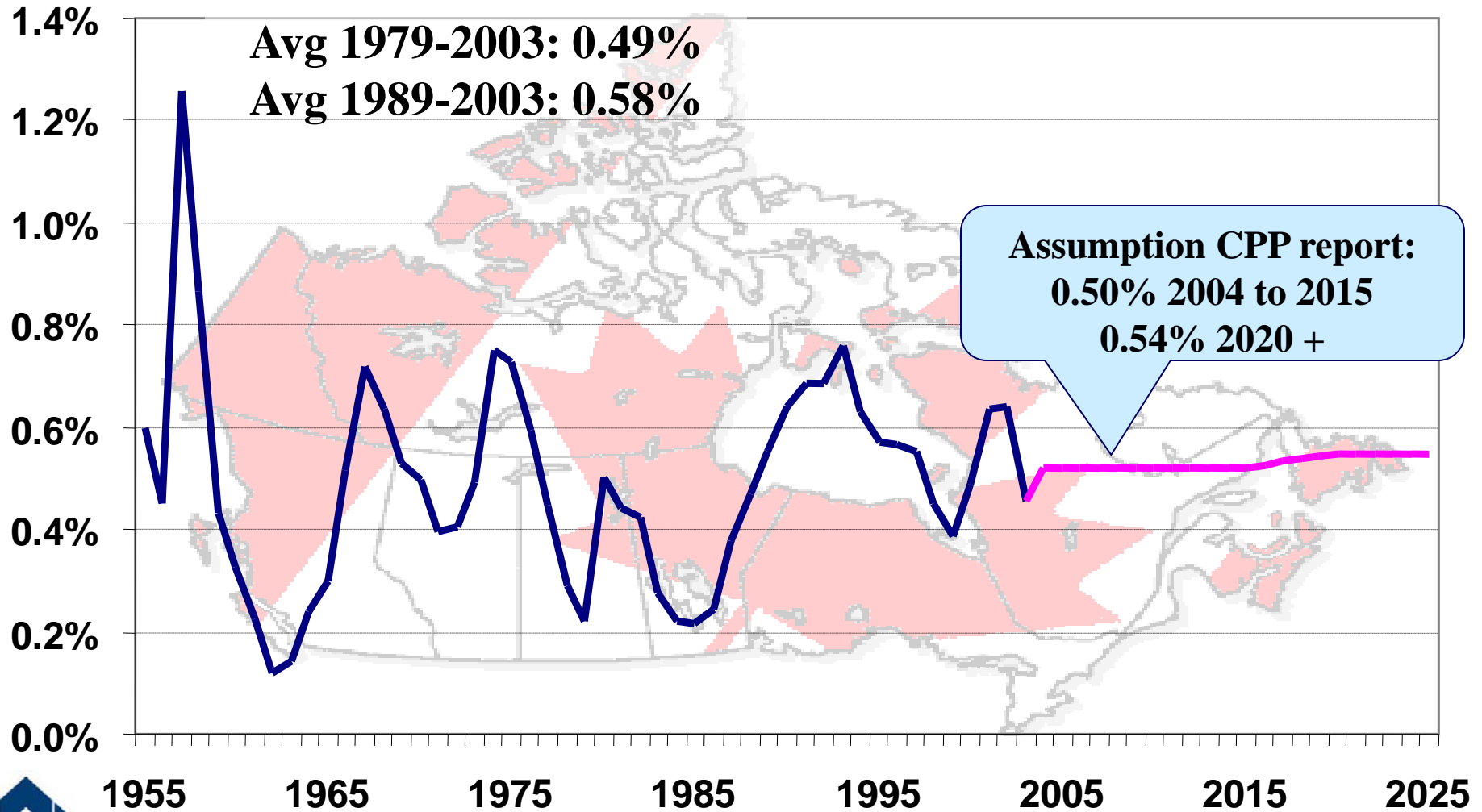
Sources: Statistics Canada (population census and historical data),
U.N. 2002 population projections, CPP seminars

Fertility Rate

(Children per woman)



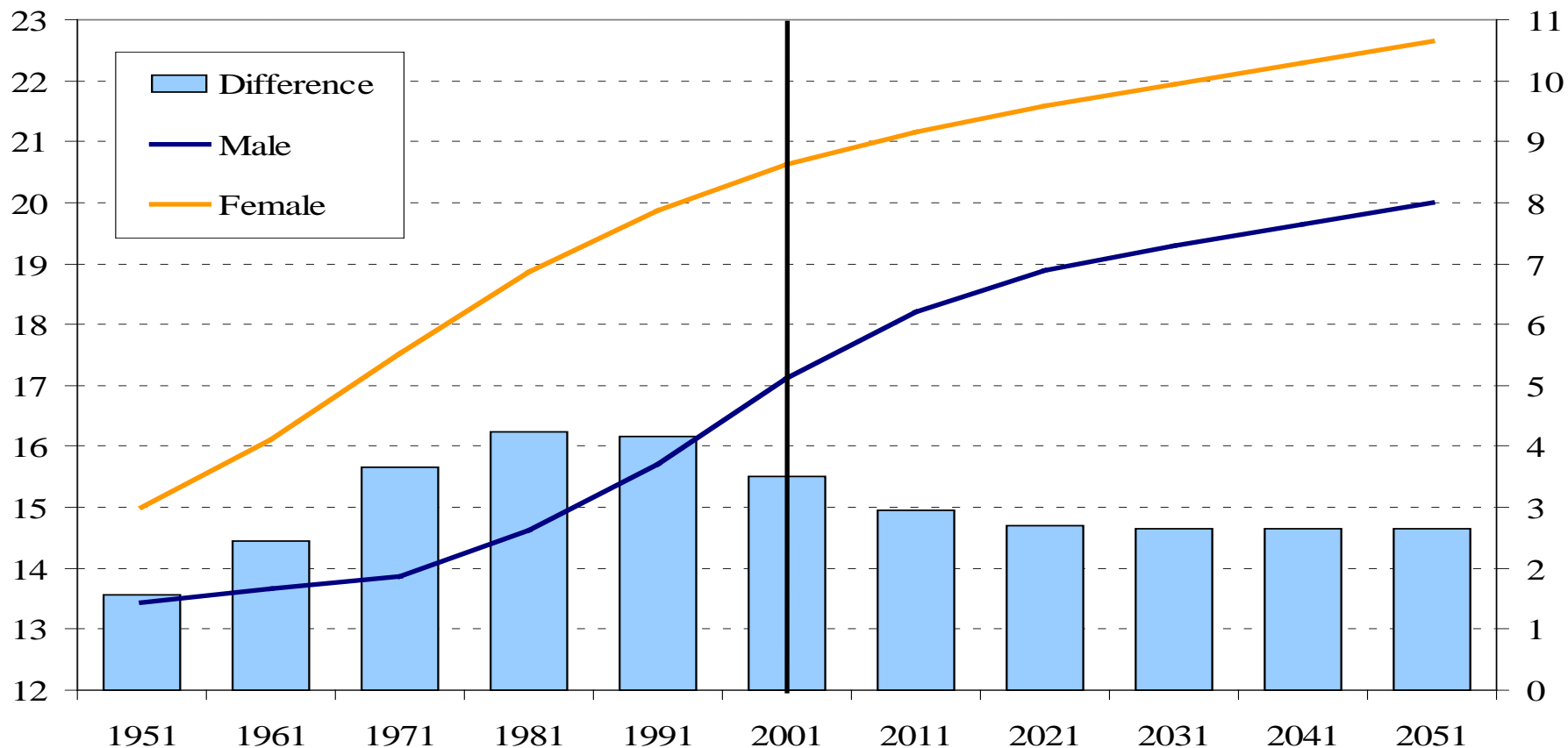
Net Migration Rate



Increase in Life Expectancies

Life expectancy at 65

Difference



More contributors are expected to reach the retirement age of 65.

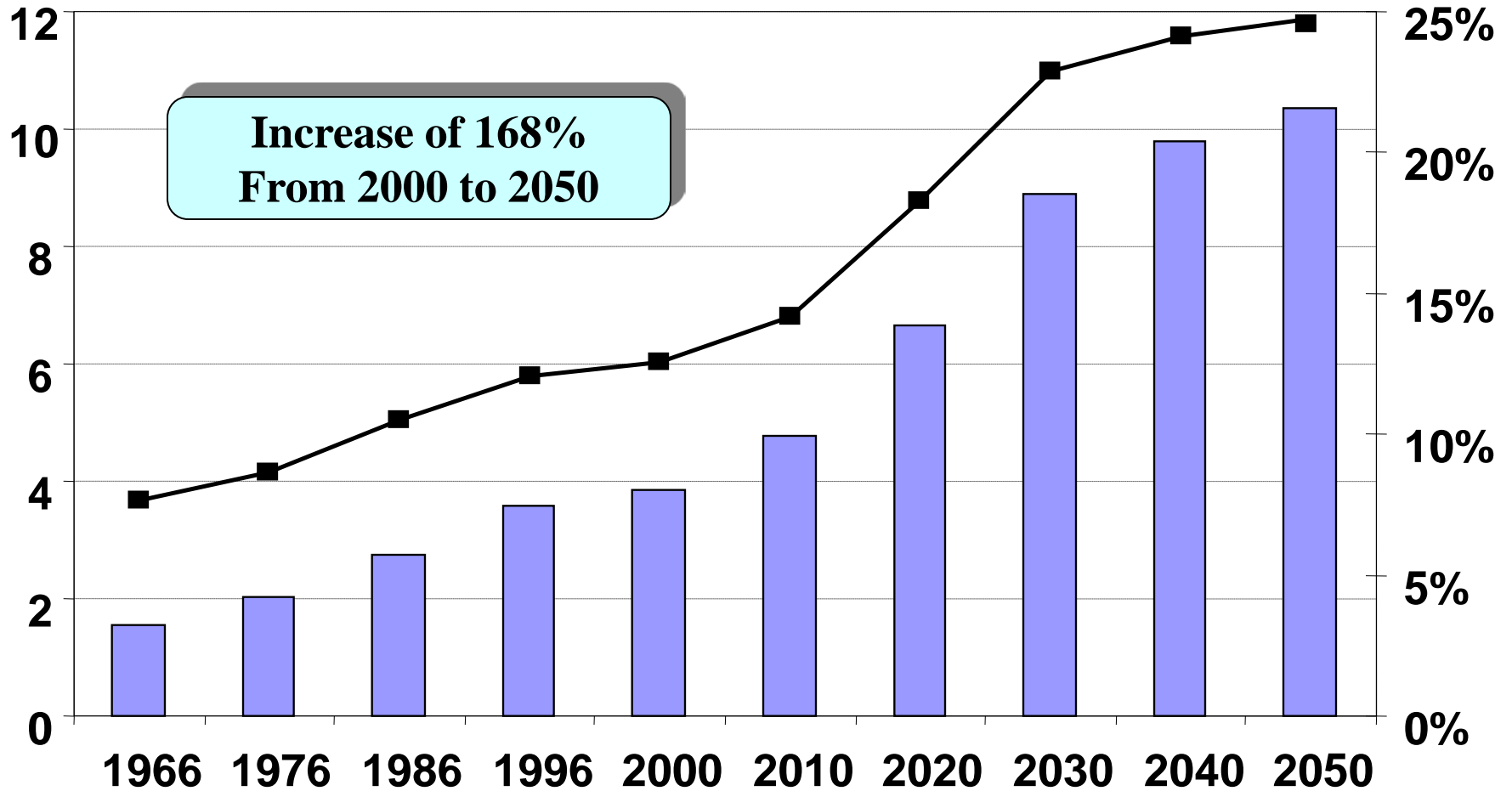
Retirement beneficiaries are expected to receive their benefit for a longer period.



Population 65+

(In millions)

(% of population)



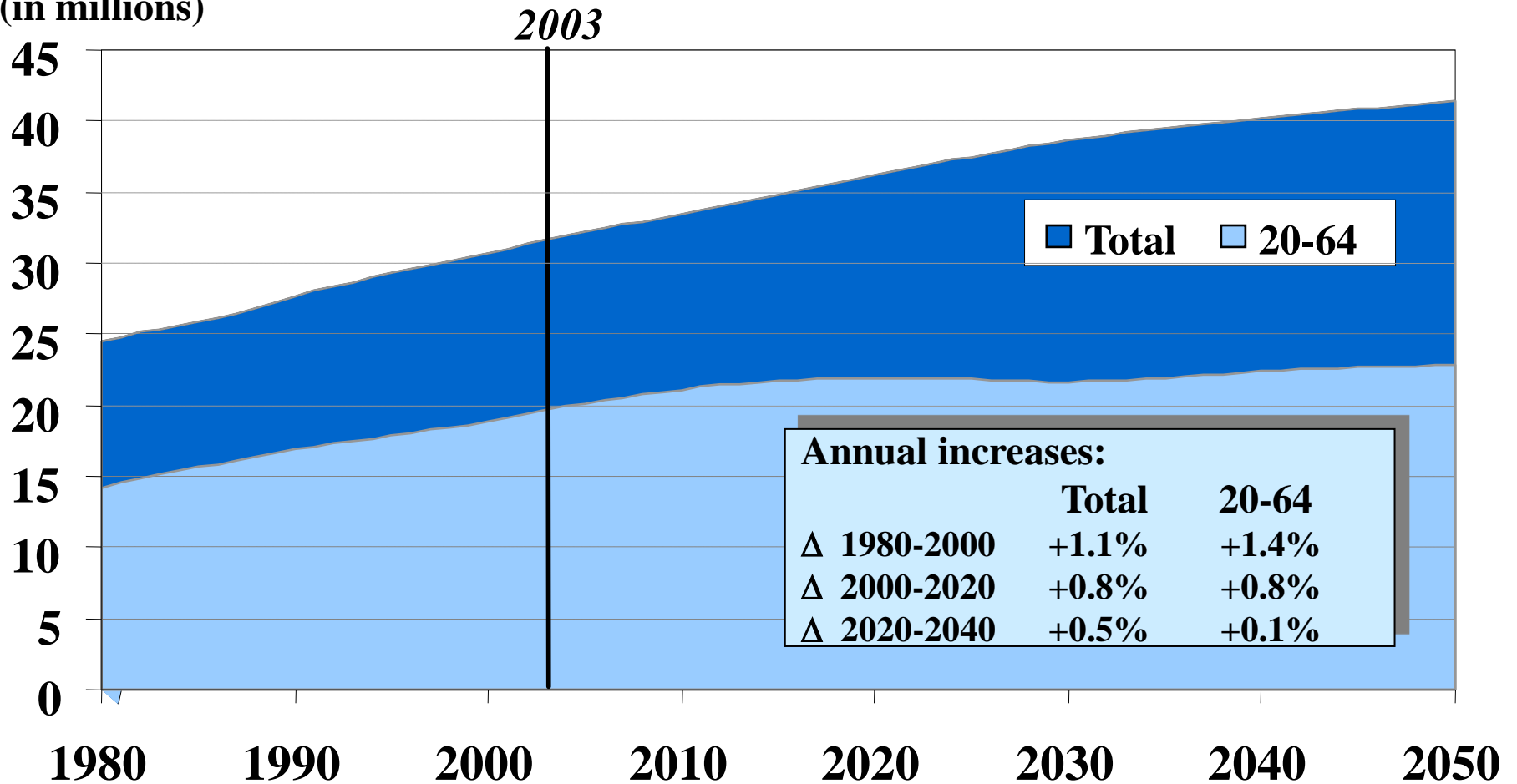
**Increase of 168%
From 2000 to 2050**

■ Number ■ % of population



Working Age and Total Population (Canada)

(in millions)



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

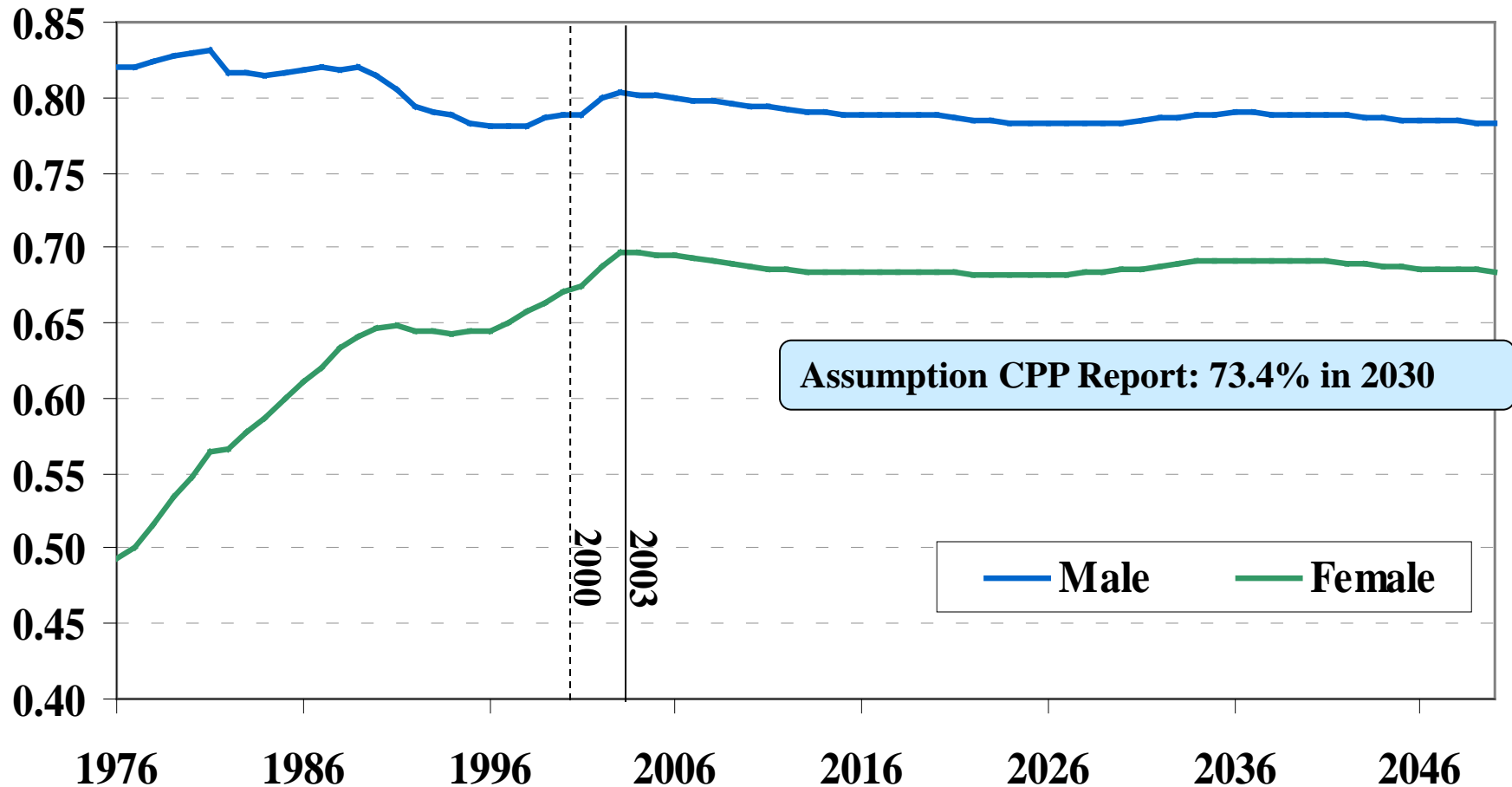


Economic Assumptions

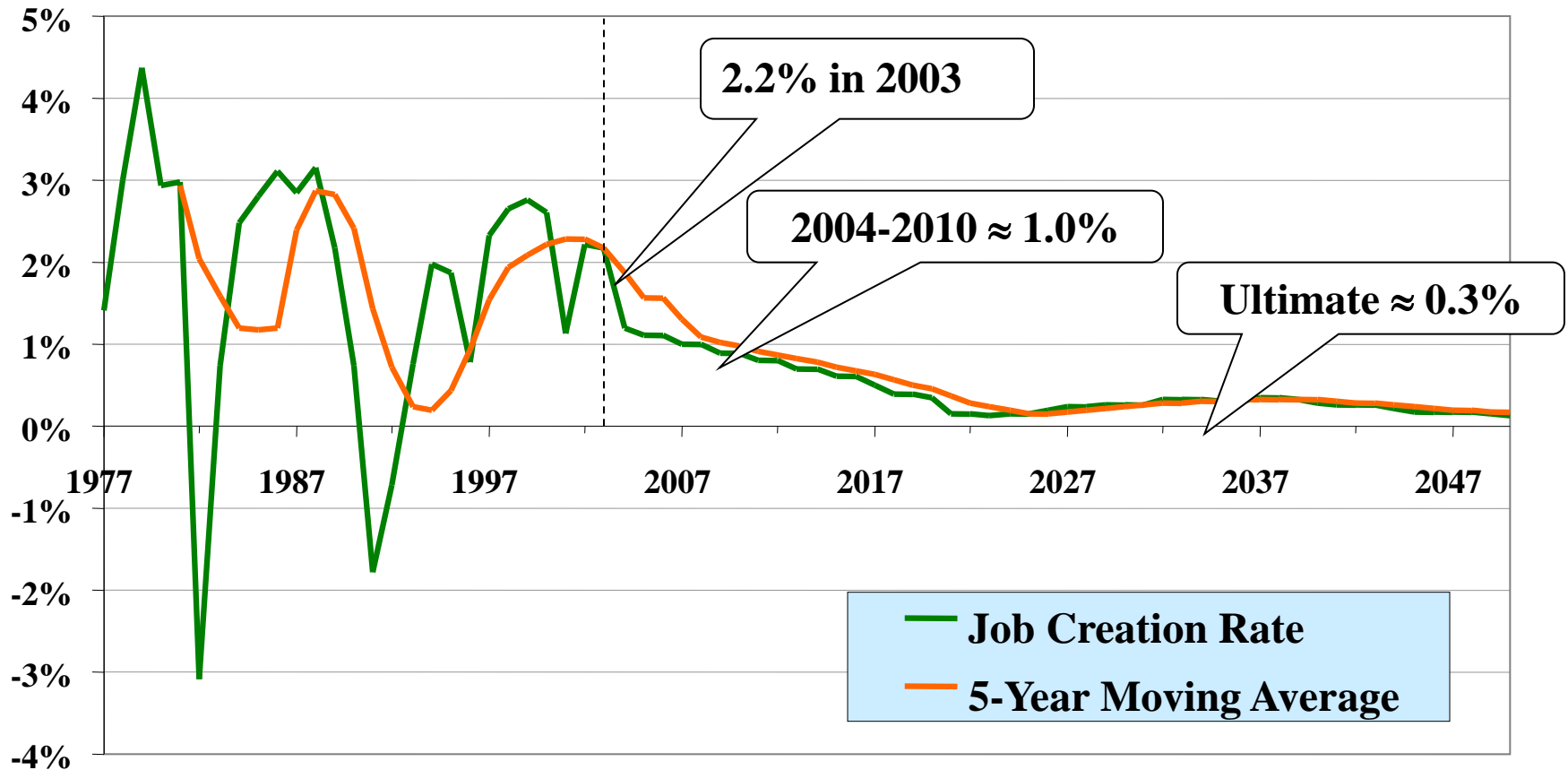
- Participation rates
- Employment increase (Job creation rate)
- Unemployment rate
- Inflation rate
- Increase of average employment earnings
- Interest rate and rate of return by asset class

Sources: Historical trends, Recent experience, PEAP from U of T., Department of Finance estimates, Conference Board, Report on Canadian Economic Statistics by CIA, CPPIB, Watson Wyatt Economic Expectations Survey, CPP seminars

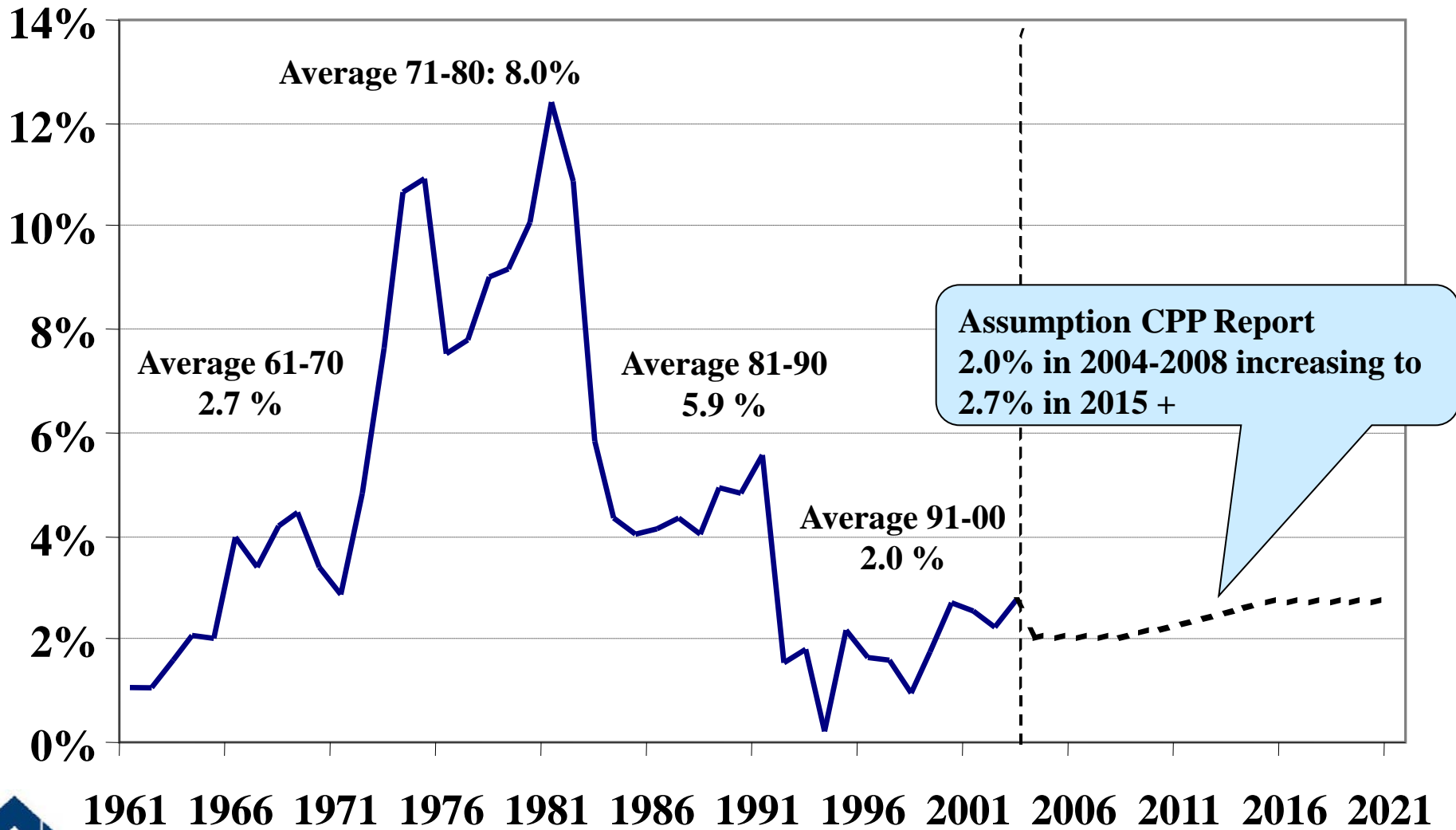
Participation Rates 15-69 (Canada)



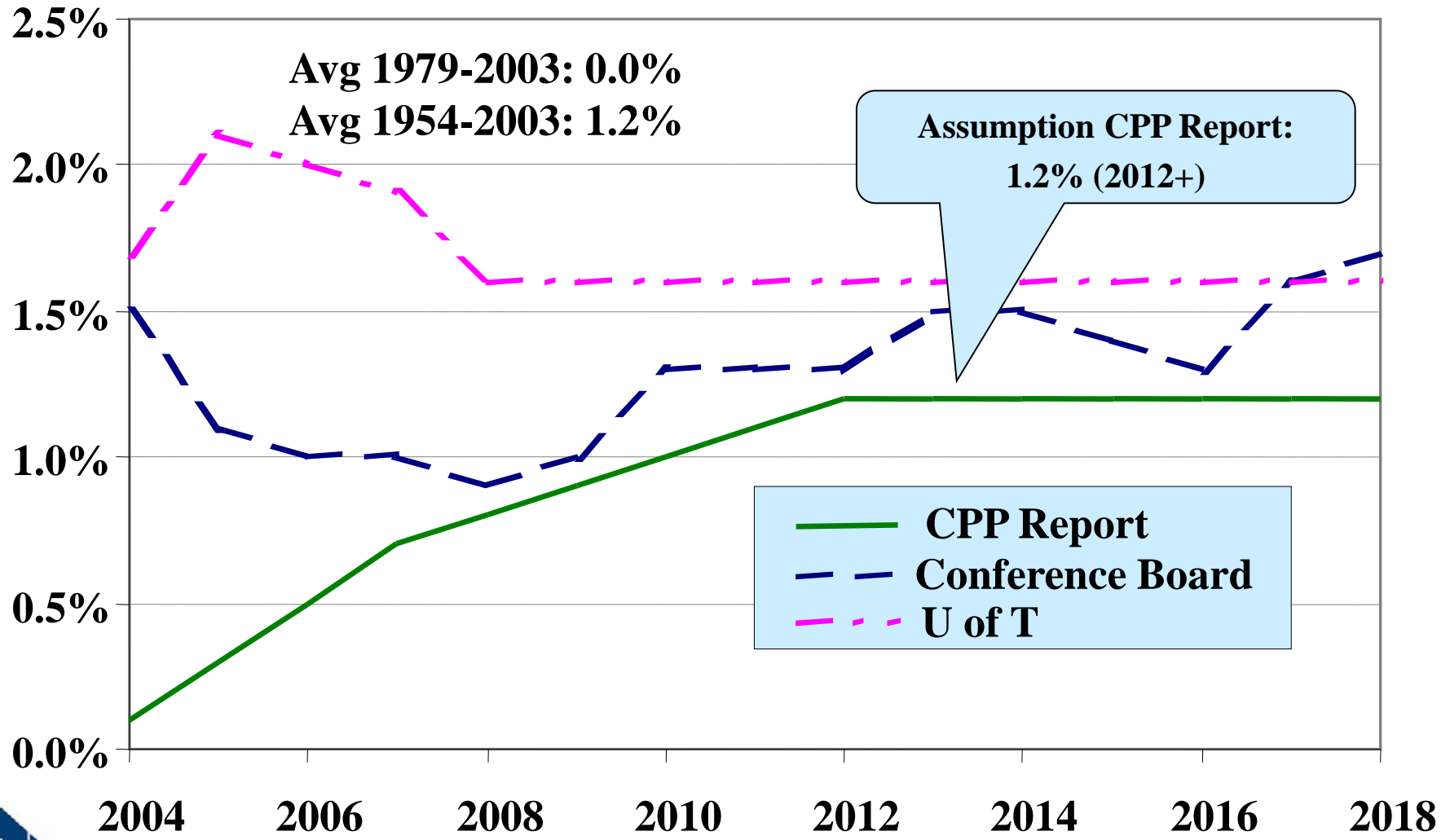
Job Creation Rate (15+, Canada)



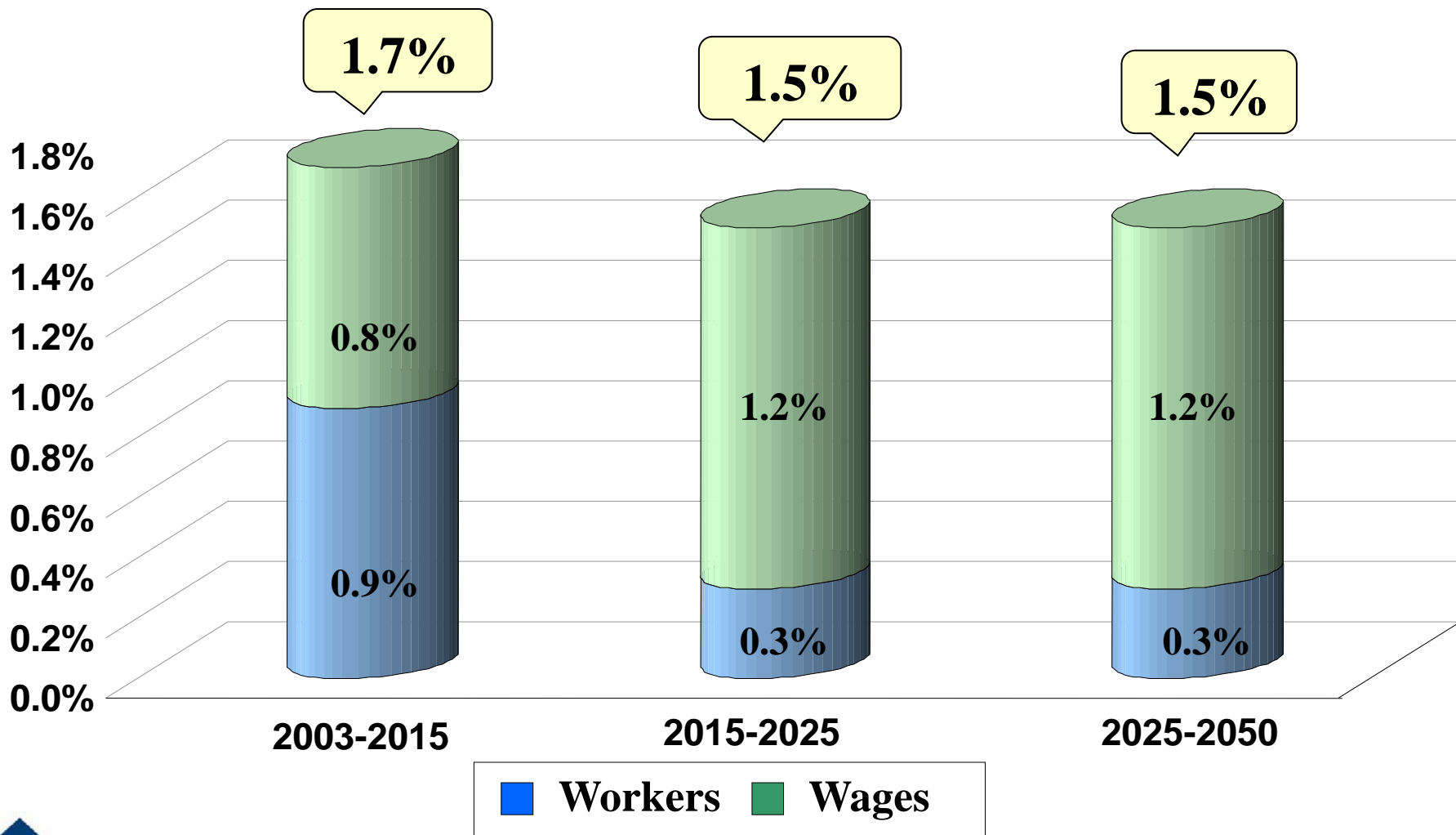
Annual Increase in Consumer Price Index



Annual Increase in Real Wages



Increase of Real Total Earnings



Asset Mix and Real Rate of Return

- Expected asset mix of CPP Investment Board by 2006
 - 65% Variable Income Securities
 - 35% Fixed Income Securities
- Expected asset mix by 2025
 - 55% Variable Income Securities
 - 45% Fixed Income Securities

Average Real Rate of Return: 4.1% (2011+)

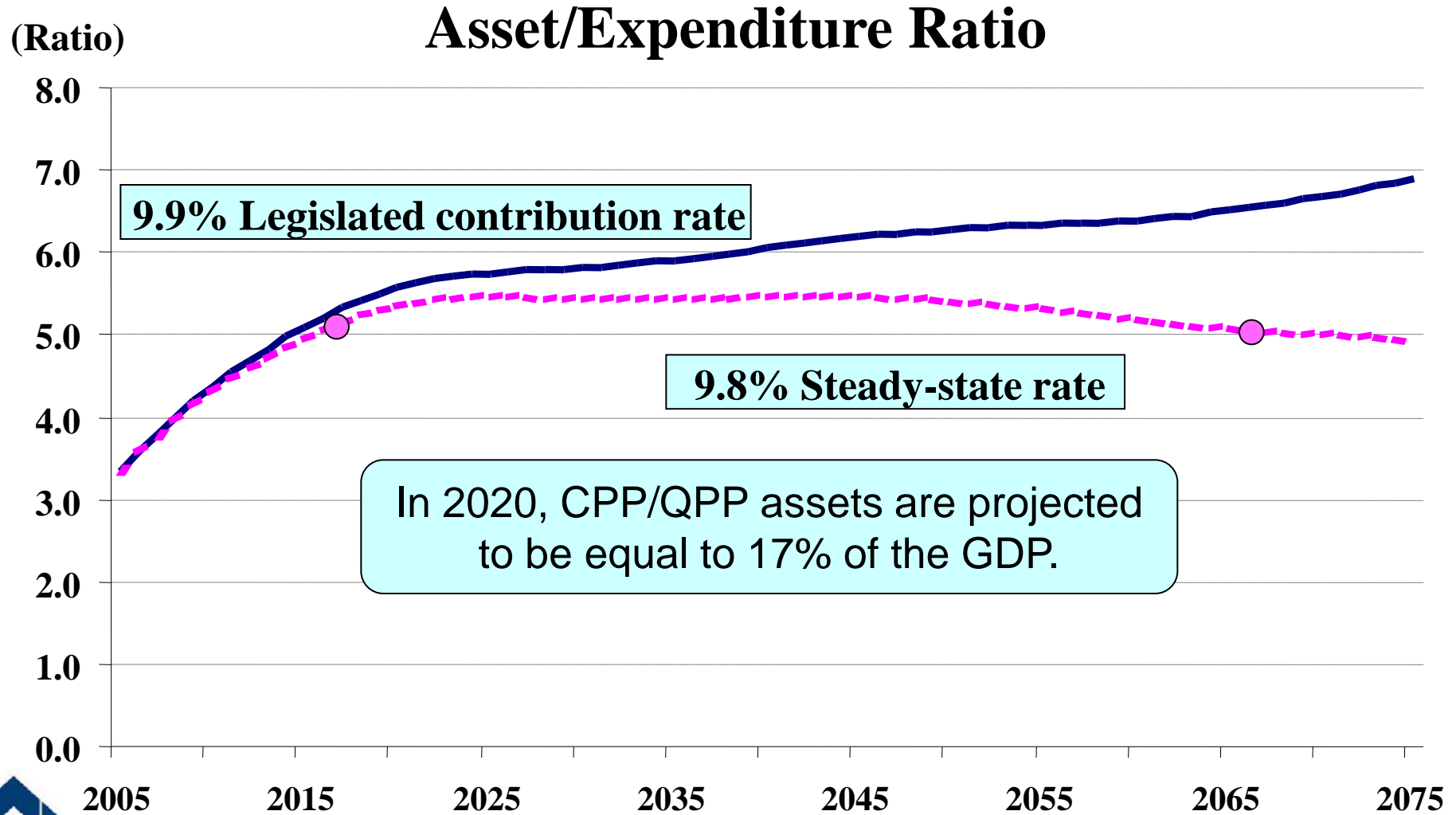
CPP Steady-State Funding

Effect of the 1998 Amendments



- Increase the contribution rate by 65% over 6 years (1997-2003) and keep the same rate thereafter
- Moderate the future growth of benefits by 10% on a long-term basis (in 2050).
- Creation of the CPP Investment Board (www.cppib.ca)

CPP Steady-State Funding



CPP Steady-State Funding

- The current legislated contribution rate is 9.9%.
- The steady-state contribution rate is 9.8%.
- 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.



CPP Steady-State Funding

- If the steady-state rate is higher than the legislated contribution rate AND if finance ministers cannot reach agreement on a 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.

Peer Review Process

- The past independent Panel confirmed:
 - actuarial standards of practice were met;
 - assumptions were reasonable;
 - the report fairly communicates the result;
 - actuarial conclusions reached by the Chief Actuary about the soundness of the CPP.
- and made a series of recommendations that we acted upon.

March 2002

Peer Review Process

2005 Peer Review

- Auditor General and Selection Process of Independent Panel
- Overseeing of the Peer Review by GAD
- Terms of Reference

Peer Review Process

Terms of Reference of 2005 Peer Review

- Is the professional **experience** of the Chief Actuary and his staff adequate for carrying out the work required?
- Has the work complied with professional **standards of practice** and statutory requirements?
- Did the Chief Actuary have access to the **information** required?
- Were the actuarial **methods and assumptions** used reasonable?
- Does the actuarial report fairly **communicate** the results?

Strengthening the Accountability

- **Federal and provincial governments took meaningful steps to strengthen the transparency and accountability of actuarial reporting. They endorsed :**
 - an increase in the frequency of actuarial reporting from every five years to every three years.
 - regular consultations by the Chief Actuary with experts on assumptions to be used in actuarial reports;
 - regular peer reviews of future actuarial reports on the CPP.