Sustainability of the Canada Pension Plan

Presentation to the Institute for governance of private and public organizations

Jean-Claude Ménard, Chief Actuary
Office of the Chief Actuary, OSFI

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Presentation Outline

• Canada Pension Plan – A target benefit plan since 1997
  • Enhancement of the CPP (following 2016 agreement)

• Longevity, immortality and transhumanists
  • Life expectancy and life span: two different concepts
  • Can we live to 100?

• Self-adjustment mechanisms
  • Additional CPP sustainability regulations published in October 2018
Canadian Retirement Income System is based on a diversified approach to savings

- A three-tiered system with mixed funding approaches
  - Old Age Security Program – a universal basic pension/supplement aimed at poverty reduction (PAYG)
  - Canada / Québec Pension Plan – mandatory earnings-related DB plans aimed at providing basic retirement income (partially funded)
  - Occupational Pension Plans and tax-favoured individual savings – voluntary schemes aimed at providing adequate retirement income (fully funded)

- Today, first two pillars replace about 40% of pre-retirement earnings for an individual with average level of earnings

Canadian retirement income system is well recognized in the world for its capacity to adapt rapidly to changing conditions.
Canada Pension Plan is managed jointly by 11 governments

• Canada Pension Plan is jointly governed by federal, provincial and territorial ministers of finance
  • All changes to the Plan require agreement of two-thirds of provinces covering at least two-thirds of the population
  • Québec participates in decision-making regarding changes to the CPP

• Québec Pension Plan is governed by the Government of Québec
Triggers of the CPP enhancement

- Decline in coverage by employer-sponsored pension plans (especially in private sector)
- Changing labour market – increased employment mobility
- 2008-2009 financial crisis
- One in four families approaching retirement—1.1 million families—are at risk of not saving enough

Stewards of the CPP agreed on expansion parameters: modest, gradual and “fully-funded”
Federal and provincial Ministers of Finance reached an agreement to expand the CPP in June 2016 (QPP expansion decided in February, 2018)

- The Working Income Tax Benefit is increased to help offset CPP contributions for eligible low-income workers.

*Source: Bill C-26: An Act to amend the Canada Pension Plan, the Canada Pension Plan Investment Board Act and the Income Tax Act received Royal Assent on December 15, 2016*
Retirement is expensive and will become even more expensive in the future with improved longevity ... but we are not immortal
Life Expectancy at Birth and at Age 65 (by calendar year)

Source: Canadian Human Mortality Database, University of Montreal; Statistics Canada

98 years in 2019. Immortality?
Slowdown in mortality improvements in recent years: a blip or a new trend?

Source: OAS Mortality Fact Sheet – September 2018. OCA
Slowdown in mortality improvements in recent years: a blip or a new trend?

Source: OAS Mortality Fact Sheets. OCA; CPP27
Many other countries saw a slowdown in mortality improvements since 2011

Source: B. Ridsdale, Recent developments in longevity, internationally
Nearly half of Canadian men aged 20 today are expected to live to age 90 (58% of women)


Conclusion: Retirement is expensive.
8% of Canadian men aged 20 today are expected to live to age 100 (14% of women)

Conclusion: we will not become immortal tomorrow.

The financial sustainability provisions help to ensure that the CPP continues to benefit current and future generations.
Self-adjustment provisions serve as a safety net in case of political impasse

“Insufficient Rates” Provisions

If the legislated contribution rate is lower than the minimum contribution rate
AND
if the federal and provincial finance ministers cannot reach an agreement to increase or maintain the legislated rate
THEN
insufficient rates provisions apply

• Contribution rate increased by ½ of excess over three years
• Benefits frozen until next review (3 years)
• At end of three years, next review performed to determine financial status of Plan.
Additional CPP Sustainability Regulations are default actions

- The financial sustainability provisions would only be invoked in the event that:
  - a significant deviation arises between the AMCRs and their respective legislated additional rates and
  - the federal and provincial Ministers of Finance take no action regarding the deviation.

Similar to the Base CPP, Ministers bear the primary responsibility for the financial state of the additional CPP
The Financial Sustainability Regulations Aims at:

• Preserving the financial sustainability of the additional CPP (i.e. preventing both substantial underfunding and overfunding),
• Ensuring stability of contribution rates, and
• Reducing the risk of future reductions in benefits and/or increases in the contribution rates.
Financial Sustainability Provisions for the additional CPP – Action Triggers

By how much, and for how long, can the additional minimum contribution rates (AMCRs) deviate from the legislated rates (2%/8%) before action is required?
Three trigger zones: from the green to the red

Wider green ranges in early years minimize the frequency and magnitude of adjustments.

Wider green ranges in surplus mitigate the risk of reductions in benefits and/or increases in contributions.
Sustainability Provisions for the additional CPP – Required Actions

IF

• the AMCRs deviate from the legislated additional contribution rates by too much and/or for too long, and

• Finance Ministers do not reach agreement on the course of actions
Main adjustment mechanisms

• Adjusting benefits of current beneficiaries
  • Modify indexation of benefits in pay for a specified period (6+ years)
  • Limits on indexation adjustment: 60% - 200% of CPI
  • Benefits are not reduced from one year to the next

• Adjusting benefits of future beneficiaries (current contributors)
  • Multiplying starting amount by “benefit multiplier” (depends on the year of uptake)
  • Benefit multiplier is aligned with the value of extra/forgone indexation

• Increasing additional contribution rates – last resort in the case of deficit
Adjustments may be reversed

• The first action to be taken when the sustainability provisions are activated is a reversal of any previous adjustments in an opposite direction made to the additional Plan.

• Such reversal should be done to the extent that the AMCRs are restored to the legislated levels as defined by Schedule 2 of the legislation.
Benefits in pay cannot be reduced only the future indexation may be adjusted

Example of Evolution of Original Benefits and Adjusted Benefits with Later Reversal of Adjustments
Conclusion

• Retirement is expensive and will become even more expensive in the future with improved longevity
  ... but we are not immortal

• The additional CPP Sustainability Regulations are aimed at
  • preserving the financial sustainability of the additional Plan (i.e. preventing both substantial underfunding and overfunding),
  • ensuring the stability of the additional contribution rates, and
  • reducing the risk of future reductions in benefits and/or increases in the contribution rates.

• The additional CPP Sustainability Regulations are a default mechanism.
Thank you
Appendix - Longevity
Contribution to increase in life expectancy at birth has gradually shifted to people over age 65

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<tbody>
<tr>
<td>Infant mortality (&lt;1)</td>
<td>2.6</td>
<td>1.7</td>
<td>0.6</td>
<td>0.1</td>
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<td>Mortality (1-44)</td>
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<tr>
<td>Elderly mortality (65+)</td>
<td>0.3</td>
<td>0.4</td>
<td>1.6</td>
<td>3.2</td>
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<td><strong>Total Change in Life Expectancy</strong></td>
<td>5.9</td>
<td>2.8</td>
<td>5.0</td>
<td>4.8</td>
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<td><strong>% attributable to 65+</strong></td>
<td>5%</td>
<td>13%</td>
<td>31%</td>
<td>64%</td>
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*Source: Canadian Human Mortality Database, University of Montreal; Statistics Canada and Office of the Chief Actuary calculations*
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<td><strong>15%</strong></td>
<td><strong>40%</strong></td>
<td><strong>46%</strong></td>
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So, what is the impact of living longer on the CPP?

**Mortality Assumptions of the 27th CPP Report**

Life expectancy at age 65 in 2016 *(with future improvements)*

- M: 21.3 years
- F: 23.7 years

Life expectancy at age 65 in 2050 *(with future improvements)*

- M: 23.3 years
- F: 25.6 years

**Sensitivity Tests on Life Expectancy**

- +2.5 years: M: 25.8 years, F: 28.1 years
- -2.5 years: M: 20.8 years, F: 23.1 years

**Impact on Minimum Contribution Rate**

- +0.3%
- -0.3%
Appendix – Financial Sustainability of the Canada Pension Plan
In the early years, investment experience is expected to have limited impact on the financial status of the Plan.

Illustration: Distribution of FAMCRs as at 31 December 2024, 2027, 2030, 2033 and 2036

Note: The letters A to E in the chart refer to the FAMCR defined ranges. Based on CPP29 (1.98% / 7.92%).
As additional CPP matures, investment experience drives results

Illustration: Distribution of FAMCRs as at 31 December 2048 given Different FAMCRs as at 31 December 2045

As at 31 December 2045, FAMCR based on the best-estimates is 1.94% and assets are $0.9T

Note: The letters A to E in the chart refer to the FAMCR defined ranges. Based on CPP29 (1.98% / 7.92%).
Principal design features - deficit

• The benefits for both current and future beneficiaries (retirement, disability, and survivor) would first be adjusted to a certain specified limit
  • Maximum adjustment corresponds to providing indexation at 60% of CPI for six years

• If such an adjustment to benefits is not sufficient to restore the AMCRs to their respective legislated values, then the additional contribution rates would deemed to be increased.
Principal design features - surplus

• Increasing benefits for both current and future beneficiaries (current contributors).

• Aim is to bring the AMCRs to target values below the legislated rates: 10 bps and 40 bps lower than the first and second additional legislated contribution rates, respectively
  • AMCRs are more likely to remain close to the legislated rates for a certain time.

• Contribution rates are not affected.
Self-adjustment provisions of QPP touch only contribution rate

• From 2018, if steady-state contribution rate exceeds the legislated rate by at least 0.1%, then
  • the contribution rate for the year is equal to the contribution rate for the previous year plus 0.1%

• The Québec Government may decide that the rate of contribution remain the same as the rate for the preceding year.