Position of strength: The post-turmoil financial sustainability of the Canada Pension Plan

Why the CPP can weather the storm

HRSDC Knowledge Talks series

National and International Perspectives on Pension Plans

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Canadian Retirement Income Security System: Not all eggs in the same basket!

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

- Pay-as-you-go funding (OAS/GIS: Demogrants)
- Partial funding (CPP/QPP: DB Earnings-Related)
- Full funding (Occupational Pension Plans/RRSP)

The conceptual framework implies a retirement system funded at about 40%.
Considerations in financing public pensions

• Primary objective: stabilizing the contribution rate
  – Strengthen the contribution-benefit connection
  – Ensure intergenerational fairness
  – Strengthen fiscal discipline
  – Maintain public confidence

• Secondary objective: minimizing the contribution rate
  – Optimize the financing of a retirement scheme by considering the relation between the rate of return on investments and the rate of increase in wages (implicit rate of return on PayGo schemes).
CPP, a Partially Funded Pension Plan

Second Tier of the Canadian System: CPP/QPP

• Partial funding through employee/employer contributions.
  – Steady-state financing goal: stabilize and minimize the contribution rate.
  – Steady-state contribution rate: lowest rate that can be charged that is sufficient to sustain the Plan without further increase.
    • A funding level of 25% is sufficient to meet that condition for the CPP

• Full funding of future benefit improvements.

*Demographic, economic and investment risks faced by the CPP are partially hedged through steady-state financing.*
**CPP Assets should be equal to 25% of liabilities to stabilize the contribution rate**

Evolution of the Asset/Expenditure Ratio

- **9.9% Legislated rate**
- **9.82% minimum contribution rate**

Target Years 2019 and 2069
What is the impact of a particular demographic situation on partial funding rate? (assuming South Korea’s Current Demography)

Evolution of the Asset/Expenditure Ratio

- 11.3% minimum contribution rate
- Target years 2019 and 2069
- Total fertility rate of 1.3
- Net migration rate of 0%
- PayGo rates: 2023 – 11.5% 2050 – 15.3% 2075 – 17.5%

9.9% Legislated rate

Year

2007 2017 2027 2037 2047 2057 2067 2077
If there is no political agreement, CPP Self-Sustaining Default Provisions apply

Default Provisions
If the legislated contribution rate is lower than the steady-state rate (excluding full-funding incremental rate)
AND
If finance ministers cannot reach agreement on a solution, then default provisions apply

- Contribution rate increased by $\frac{1}{2}$ of excess over three years, subject to maximum increase of 0.2% per year
- Benefits frozen until next review (3 years)
- At end of three years, next review performed to determine financial status of Plan.
Is Partial Funding method still appropriate for the CPP under the recent turmoil?

Pension plans are under severe stress with the current economic environment

- Financial Turmoil: Negative market returns in 2008 and the first quarter of 2009
- Economic Downturn: Recession, rising unemployment, shrinking contributions base

In this environment it is important to reconfirm that the partial funding is the most robust approach for the Canada Pension Plan.
The actuarial report illustrates the uncertainty of results through sensitivity tests

Economic Sensitivity Test – “Economic half-cycle”
• The unemployment rate is increased from 6.3% to 11% for one year and gradually recovers over the next ten years.
• The increases in annual earnings are reduced for one year and then returned to their best-estimate value a year later
• This scenario is similar to the 1981-1983 recession in Canada.

Financial Sensitivity Test – “Financial markets volatility”
• Negative 10% return on equities over two years.
• The probability of such scenario was estimated at 6% based on past volatility of financial markets over the past 69 years.
• For the fully funded scenario we have assumed that the CPP is fully funded with assets equal to liabilities as of 31 December 2006.
Partial funding achieves contribution rate stability especially under extreme conditions

The impact on the contribution rate depends on the funding method

Relative variation of the contribution rate: 7%, 3%, 58%

Economic sensitivity test

Financial sensitivity test

PayGo 0.6%
Partially Funded 0.3%
Fully Funded 3.3%
Despite the global recession and major decline in financial markets, the Canada Pension Plan can weather the storm

- The partial funding approach for the CPP is optimal in terms of withstanding the economic and financial fluctuations.
- This approach provides successful hedging to both economic and investment risks.
- The lower relative increase in contribution rate under partial funding method as well as self-sustainable provisions of the CPP help to mitigate the political risk and the risk of plan restructuring.
- The next CPP actuarial report as at 31 December 2009 will take into account the current economic environment as well as the long-term demographic outlook.
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Annex

September 2009
Which countries are facing high PayGo rate?

Population aged over 65 as a percentage of working age population (15-64)


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

Public expenditures as % of GDP

Sources: Luxembourg Income Study (LIS) Key Figures for incidence of low income among seniors using 40% of median (2005)
OECD Social Expenditures Database, 1980-2001 for government expenditures on old-age income security programs as % of GDP

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Government Net Financial Liabilities as % of GDP, an indicator to be affected by various economic stimulus

(G7 Countries)

Source: OECD Economic Outlook No. 85 Database (Annex Table 33)
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How important is pension assets for the national economy?

Pension assets as % of national income, 2007

Source: IFSI estimates based on OECD & World Bank data
What is the equity exposure of pension funds?

Equity exposure for the CPP reference portfolio, 31 March 2009: 15% domestic, 50% international

Source: UBS Pension Fund Indicator, CPPIB 2007 Annual Report

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How severe is the market downturn?

Pension funds real rate of returns in 2008

Note: includes countries where pension fund assets in 2007 were worth more than 4% of GDP
Source: OECD Pensions at a Glance 2009, Figure 1.3
Which countries provide balanced public and private pension coverage?

Figure 4. Private pension assets compared with the public pension system’s gross replacement rate, 2007