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Pillar integration, basic protection and replacement rates in four modern multi pillar pension systems – case of Canada

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Pillar integration, basic protection, replacement rates and replacement rate sensitivity in 4 modern multi pillar pension systems

- **Joint project of Canada, Denmark, Netherlands and Sweden**

- **Working teams:**
  - Canada: Jean-Claude Ménard, Assia Billig (*Office of the Superintendent of Financial Institutions*)
  - Denmark: Ole Beier Sørensen, Kristian K. Grøsvik, Michael Jørgensen, Jelena Radic (*ATP*)
  - Netherlands: Marcel Lever, Ryanne Cox, Jan Bonekamp (*CPB Netherlands Bureau for Economic Policy Analysis)*
  - Sweden: Ole Settergren, Bengt Norrby (*Swedish Pension Agency*)

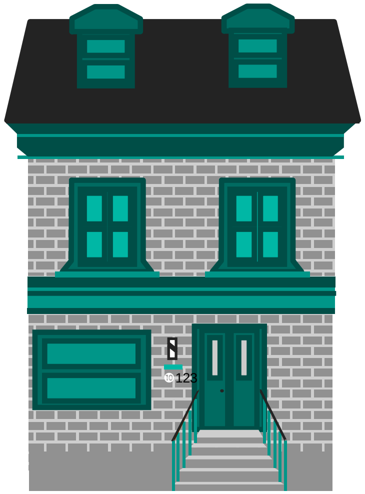
- **Synthesis report is expected to be released in 2015**

An efficient multi pillar retirement system addresses:

- **Financial sustainability**
  - Proper retirement saving and labour force participation incentives - *Pillars 2 and 3*
  - Reasonable economic cost of public pensions (e.g. % of GDP) – *Pillar 1*
  - Diversification of funding approaches - *Pillars 1, 2 and 3*
  - Diversification of sources of retirement income - *Pillars 1, 2 and 3*
- **Social sustainability**
  - Reduction of poverty among seniors - *Pillar 1 and 2*
  - Reduction of income inequalities - *Pillar 1 and 2*
  - Maintenance of standard of living at retirement – *Pillar 3*

Each pillar of the Canadian Retirement Income System has a specific objective

- **Canadian retirement system is a three-tiered system with mixed funding approaches**
  - Old Age Security Program – a universal basic pension/supplement aimed at poverty reduction (PAYG)
    - Guaranteed Income Supplement (GIS) is an income-tested component of the OAS Program
  - 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)



- **First two pillars replace currently about 40% of pre-retirement earnings for an individual with average level of earnings.**

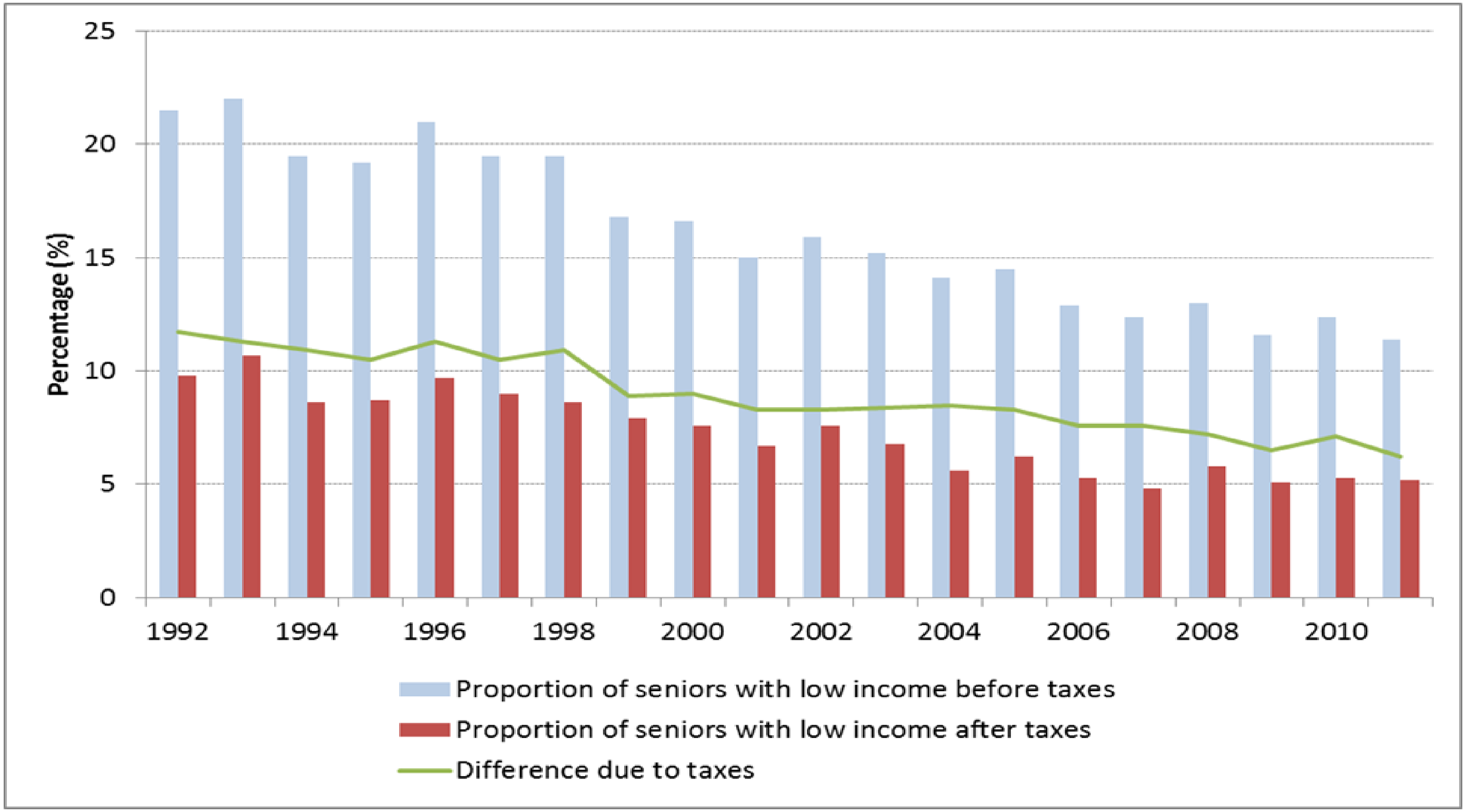
Income from all 3 pillars is necessary to guarantee Canadian seniors decent lives in retirement

Decomposing poverty protection for Canadian seniors aged 65 +

Percentage of seniors with equivalised household income before taxes below 35% of the average wage (2011)

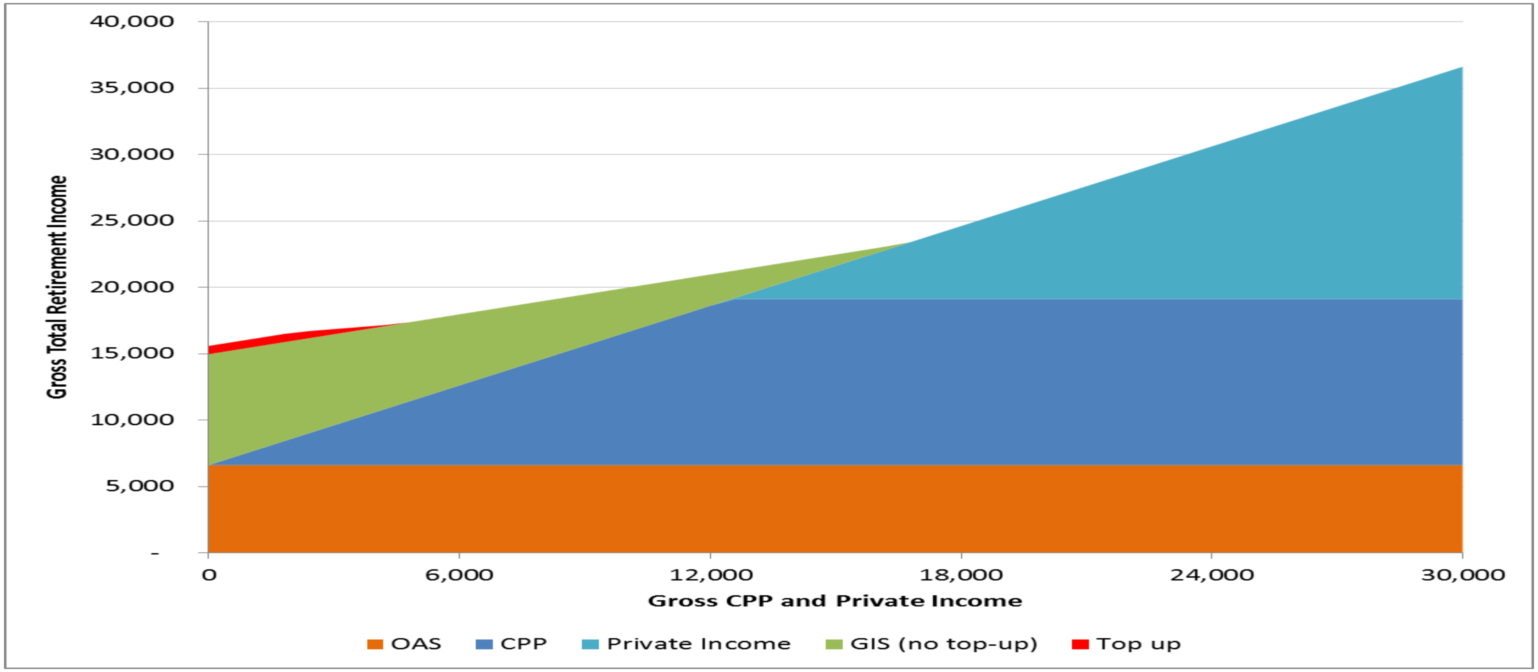
Above age 65 (no income)	100%
Basic OAS Income (universal Pillar 1)	100%
+ C/QPP Income (Pillar 2)	60%
+ Private Pension Income (Pillar 3)	35%
+ Investment Income	31%
+ Work Income	27%
+ Other Income	25%
+ GIS (Income-tested Pillar 1)	13%

The taxation is important for poverty reduction



Targeting and redistributive features of the first two pillars

- **OAS Program – provides safety net**
  - Income–tested Guaranteed Income Supplement

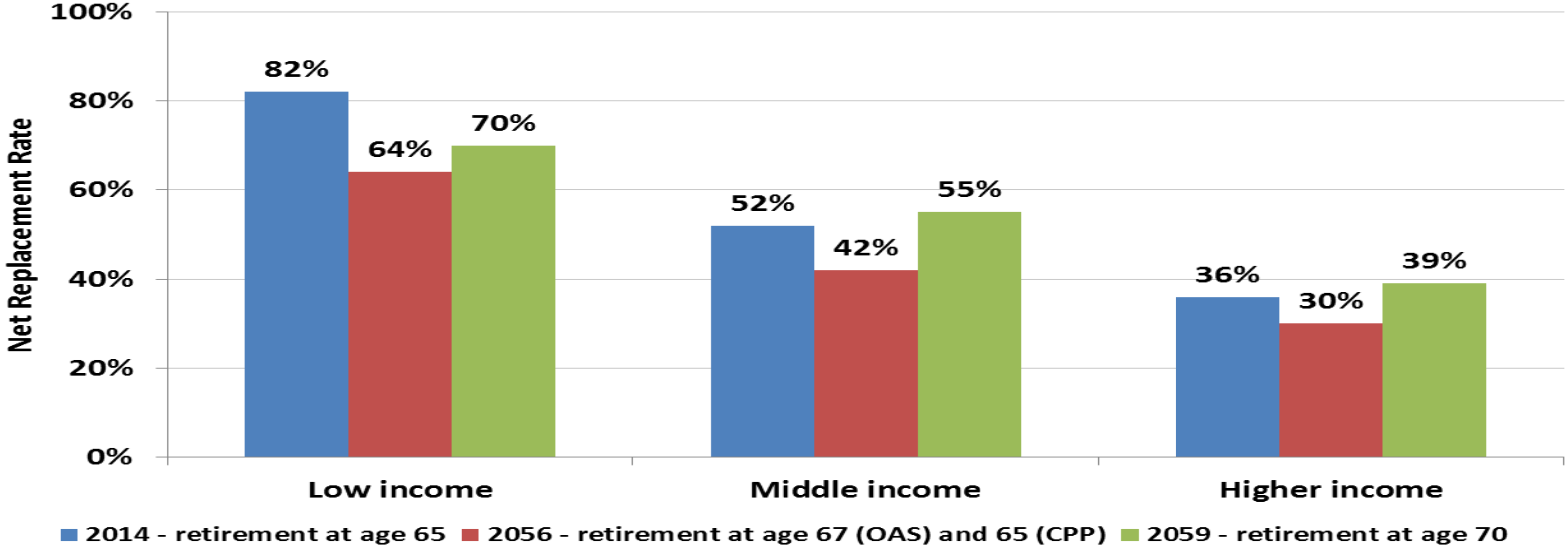


- **Canada Pension Plan – mitigates impacts of life events**
  - Drop-out provisions: low earnings, child-rearing, disability and post age 65

Projection model for four countries

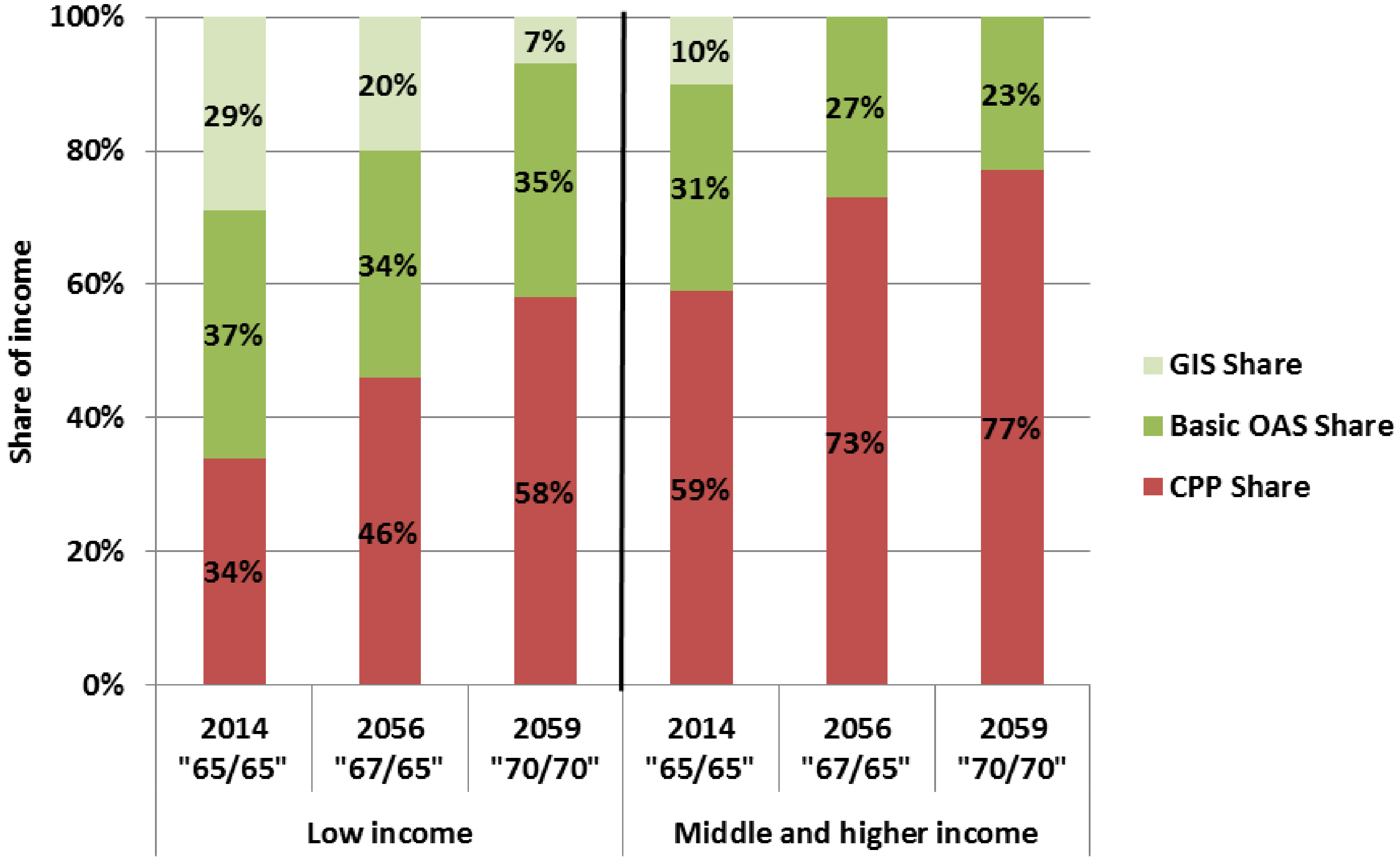
- The working group agreed on model's specifications and assumptions
- Entry into labour force at age 25 in 2014, retirement at legislated ages
- Three levels of income while working: 50%, 100% and 150% of average wage
- Career profiles
  - Full career full-time (reference scenario)
  - Two maternities combined with part-time work
  - Permanent part-time work (50%)
  - Five years of unemployment

Evolution of net replacement rates from the OAS and the CPP over the next 40 years

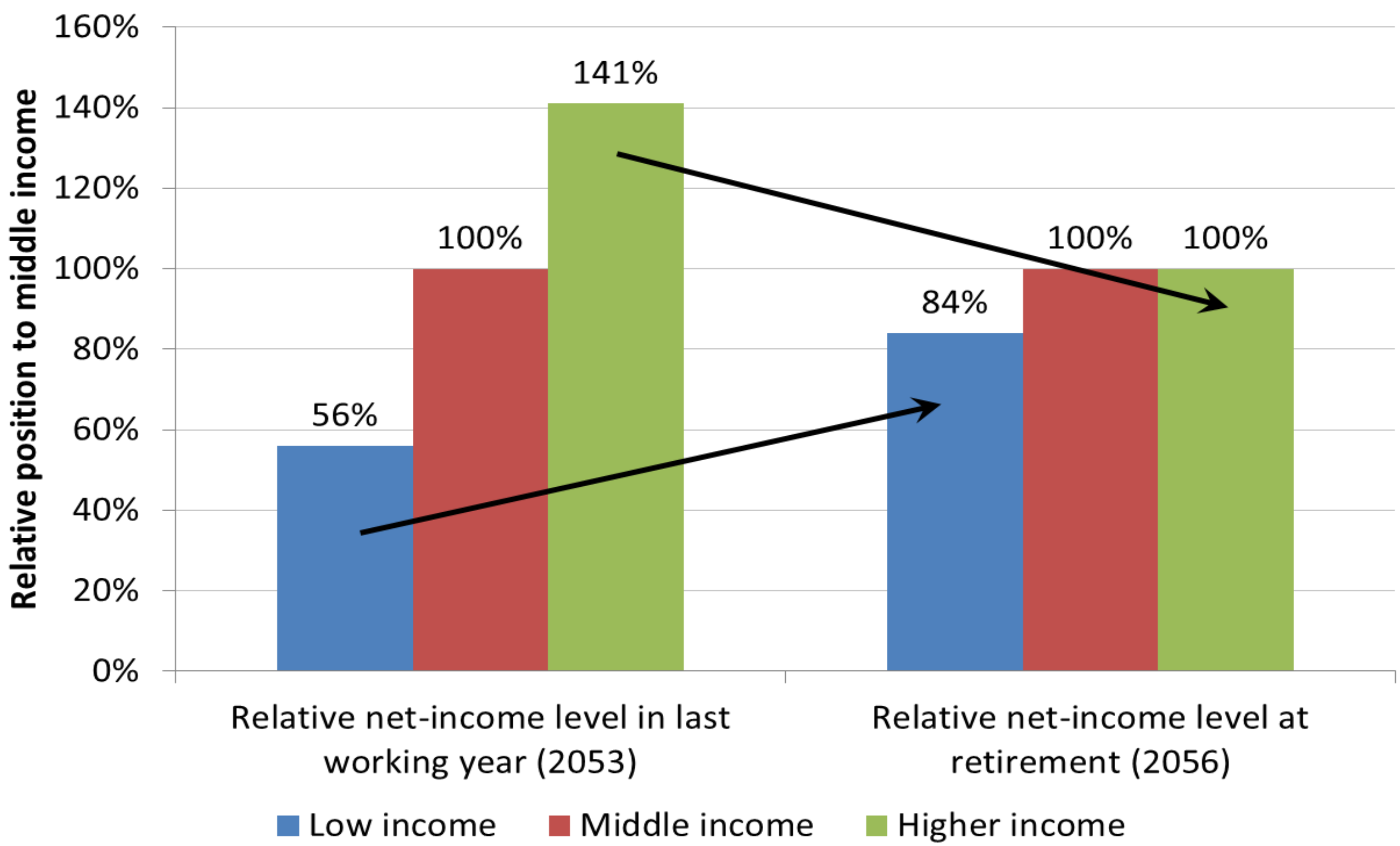


- **Net replacement rates generated by the first two pillars decline over the next 40 years**
  - Mainly due to the indexation of the OAS with inflation vs. wage
  - Low income individuals are affected the most
- **Postponing retirement to age 70 helps middle and higher income individuals**

Gross income composition shows the increasing importance of the CPP income

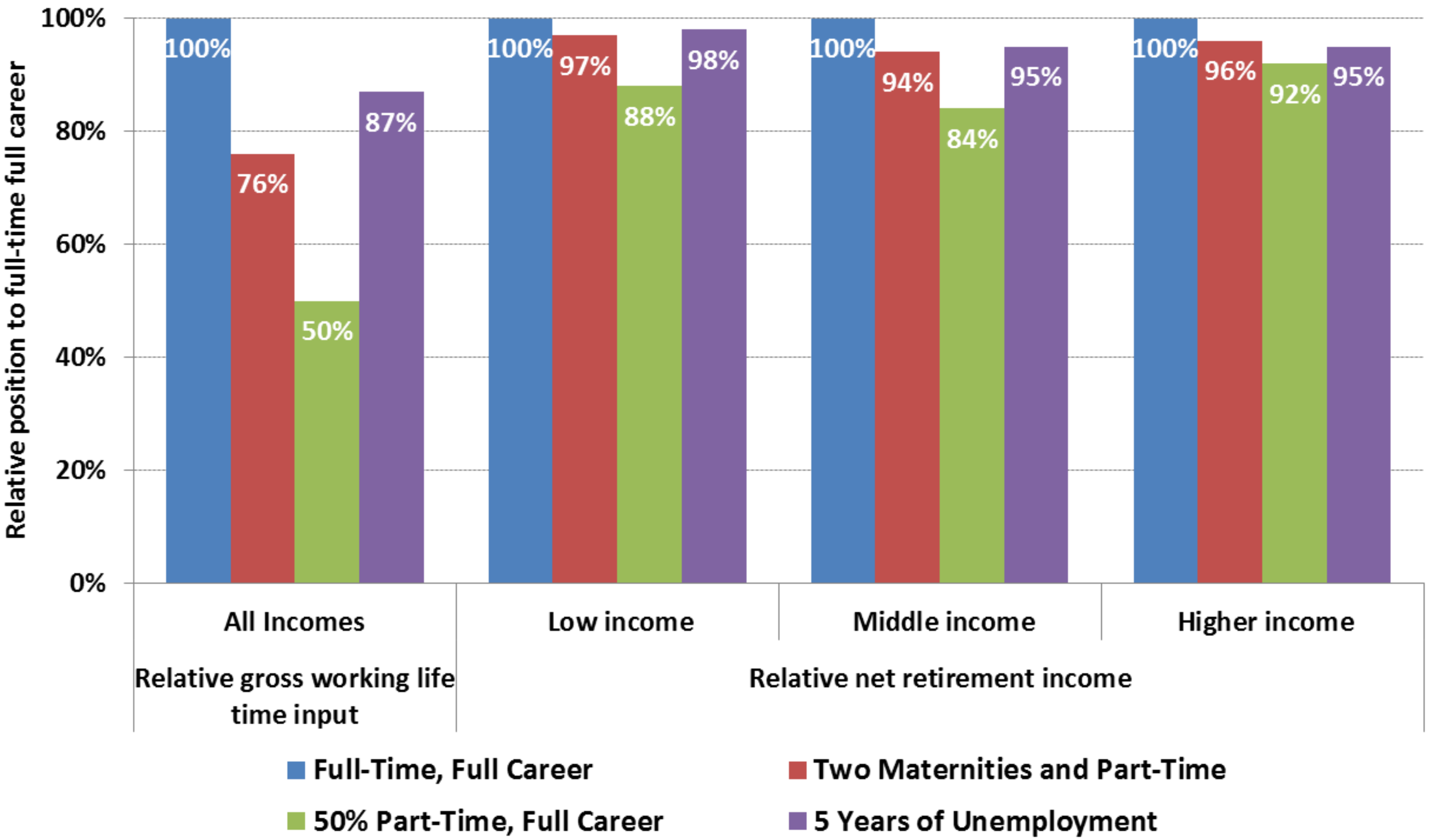


The redistributive nature of the first two pillars translates into a levelling of income after retirement



Targeting features of the OAS and the CPP protect Canadians from impacts of life events

Projections in 2056, age 67, retirement "67/65"



Meaningful comparison of Canada with other three countries is possible only if the 3rd pillar in Canada is taken into account

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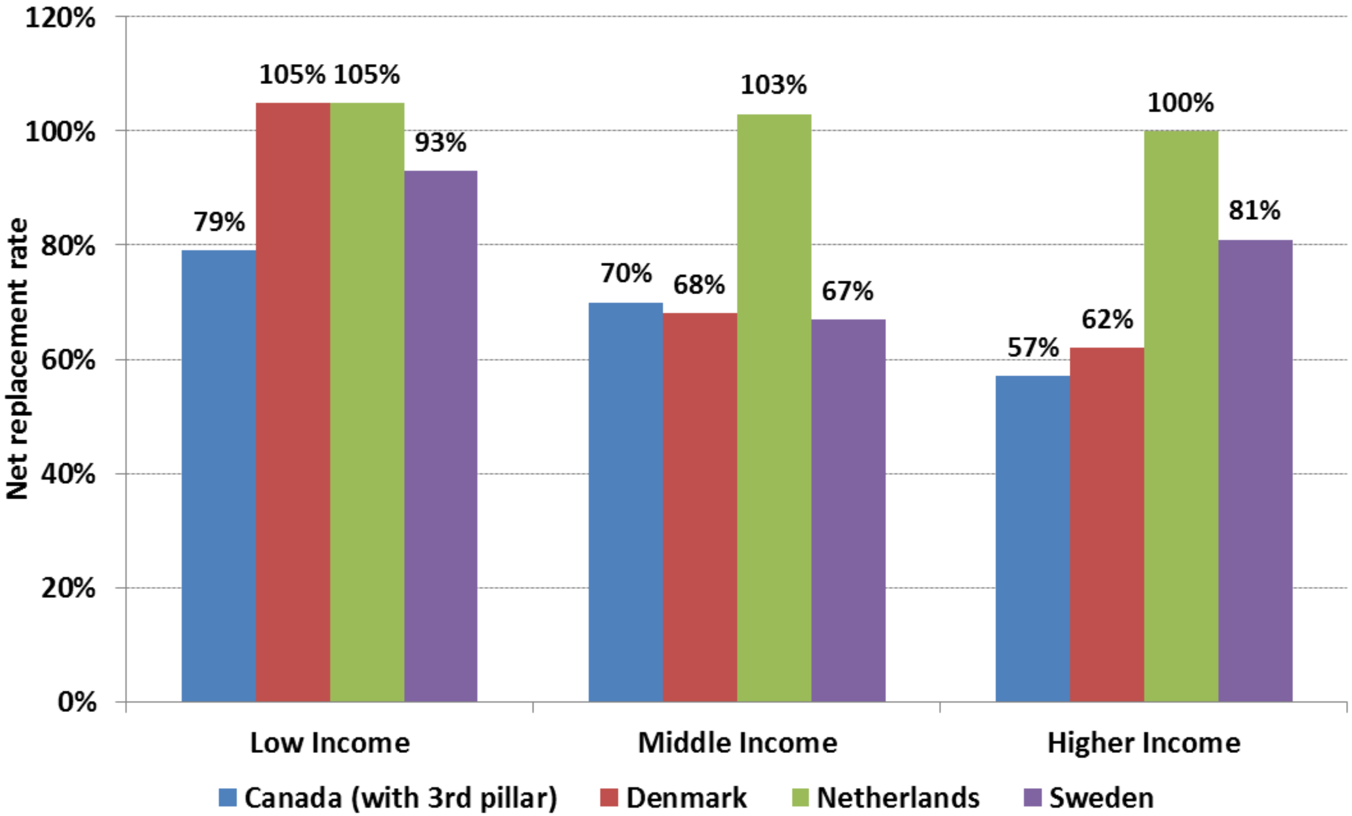
Net Replacement rate of full-time full career worker
(age 25 in 2014)

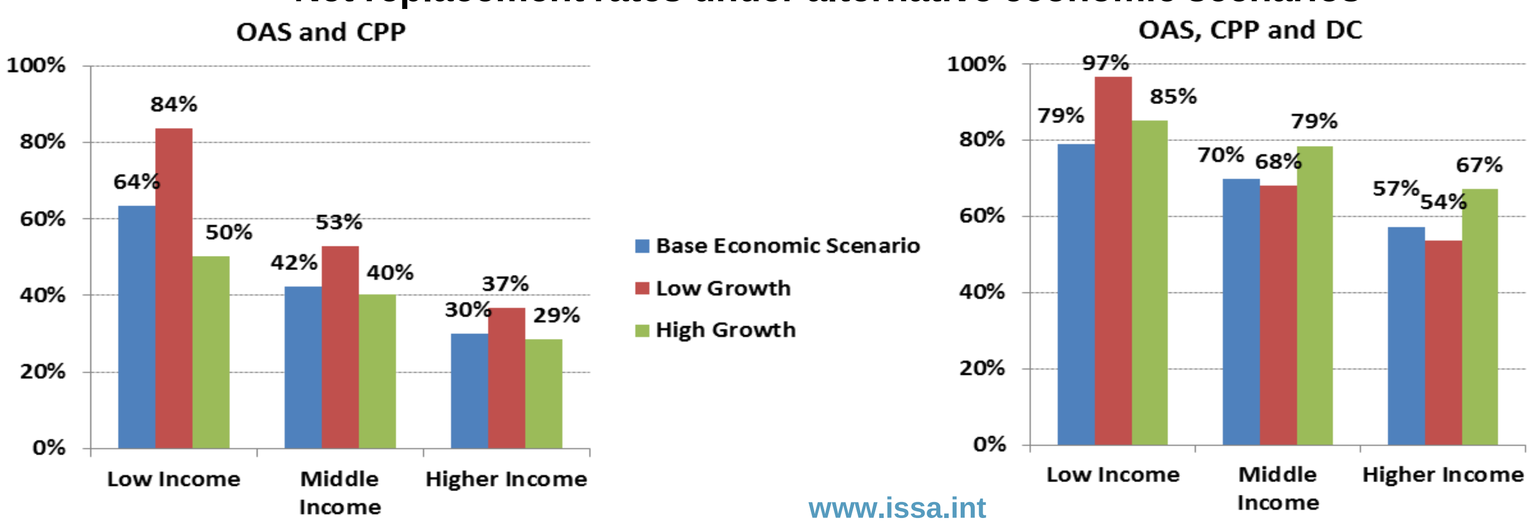


Assumed retirement age:
Canada: 67 (OAS), 65 (CPP)
Denmark: 73
Netherlands: 71
Sweden: 69

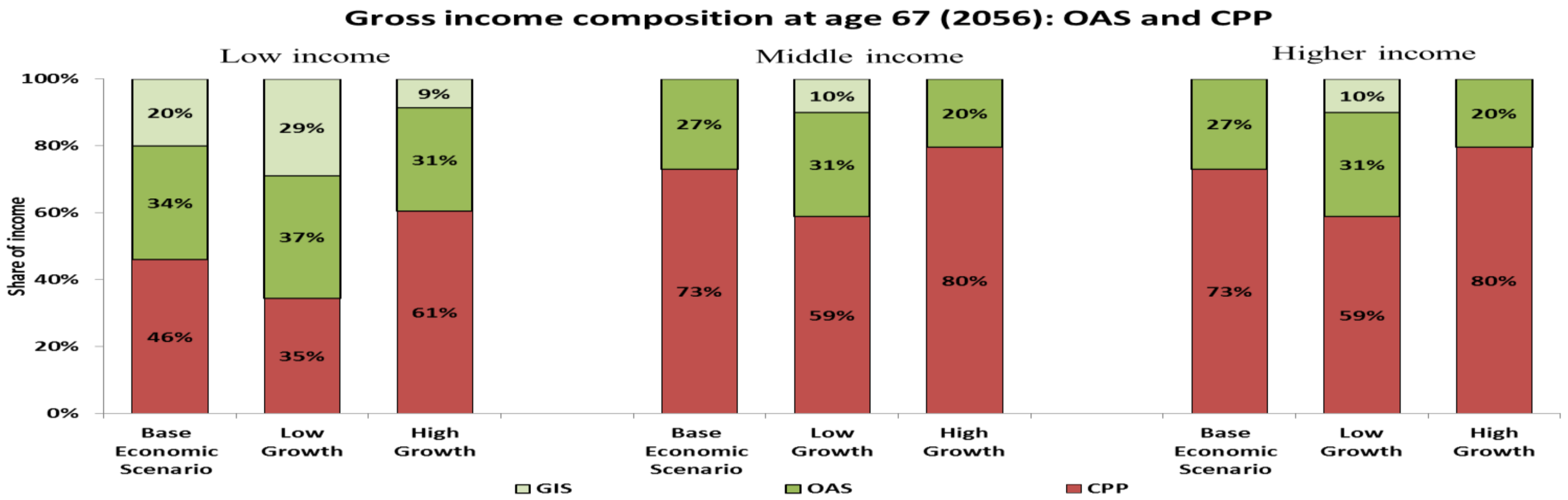
Lower and higher growth scenarios produce counterintuitive results …

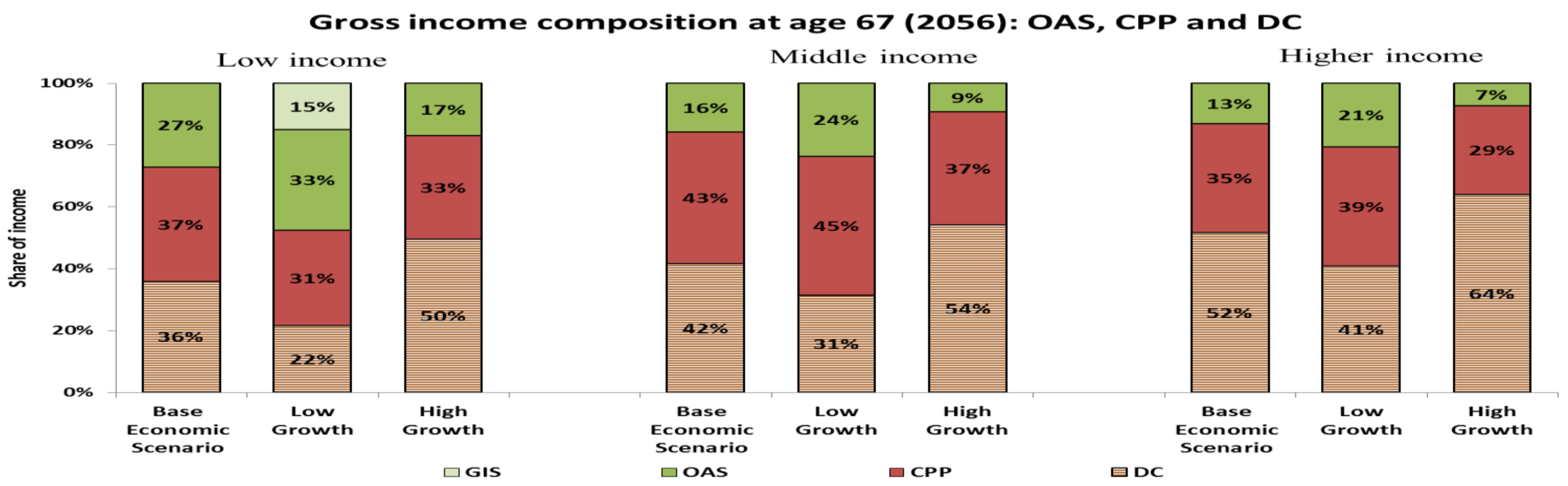
- **Low growth: wage growth and inflation are the same, poorer financial markets performance**
  - Net replacement rates are higher (only CPP and OAS) *(left chart)*
  - Slightly lower net replacement rates with the 3rd pillar for middle and higher incomes *(right chart)*
- **High growth, real wage increase and rates of return on assets are higher.**
  - Lower net replacement rates (only CPP and OAS) *(left chart)*
  - Higher net replacement rates with the 3rd pillar *(right chart)*

Net replacement rates under alternative economic scenarios



…due to the interplay of the relative size of Pillar 1 benefits and the average salary





To find a balance between adequacy and affordability, mandatory and voluntary, public and private, is a non-trivial task

- The CPP and QPP in combination with the OAS have been successful in reducing poverty amongst seniors by providing basic retirement income.
- The third pillar pensions play an important role in providing adequate retirement income to Canadian seniors.
- The combination of targeting and redistributive measures of the OAS the CPP mitigates to a considerable extent the impacts of variant careers on retirement income.
- Canadian retirement income system is diversified and is well recognized in the world for its capacity to adapt rapidly to changing conditions.

Q&A

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Working Group Modelling Assumptions

Main Economic Assumptions

	Inflation	Wage growth	Fixed income return	Equity return	Money Market Return
Base economic scenario	2.0%	3.0%	4.0%	7.0%	2.0%
Low growth scenario	1.0%	1.0%	2.0%	4.0%	1.0%
High growth scenario	2.0%	4.0%	6.0%	9.0%	3.0%

- Contribution rate for DC Scenario: employer 3%, employees 3%
- Asset allocation for DC scenario: 50% fixed income, 50% equities.
- Investment expenses: 0.5%

Life Expectancies for Canada, with improvements after the year shown (as per the 26th CPP Actuarial Report)

	2014		2056	
AGE	**Male**	**Female**	**Male**	**Female**
65	21.0	23.4	23.3	25.6
67	19.3	21.6	21.6	23.7
70	16.8	19.0	19.0	21.0