Risky Retirement and the Role of Public Policy

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Income, Health, and Social Programs in an Aging Population
Risky Retirement

How well does Canada’s RIS protect our seniors against risk?

1. Low income at the onset of retirement
2. Longevity and loss of a spouse
3. Recessions
4. Decision-making

Milligan and Schirle (2013)

Today - focus on health and life expectancy.
Risky Retirement

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The Risk of Low Income at the Onset of Retirement

Later Retirees (age 65+)

- 6% below after-tax LICO in 2008 (Schirle 2013)
- 30% using GIS (Finnie, Gray, Zhang 2013)
- Lifetime earnings and labour market experience
- Health
The Risk of Low Income at the Onset of Retirement

Source: Reproduced with permission from Milligan (2013)
The Risk of Low Income at the Onset of Retirement

Early Retirees (before age 65)

- Lifetime earnings and labour market experience
  - Education
  - Employer-sponsored pension

- Health
  - Milligan (2013) - among 60-64 year olds, increases likelihood of hardship, particularly among non-earners.
  - Schirle (2010)
Health and Involuntary Retirement

Health, Pensions, and the Retirement Decision

<table>
<thead>
<tr>
<th></th>
<th>Poor Health</th>
<th>Poor Past H.</th>
<th>New Disability</th>
<th>Small Shock</th>
<th>Large Shock</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Indicator</td>
<td>.250</td>
<td>.245</td>
<td>.094</td>
<td>.021</td>
<td>.082</td>
</tr>
<tr>
<td>Pension Accrual</td>
<td>-.018</td>
<td>-.018</td>
<td>-.020</td>
<td>-.019</td>
<td>-.019</td>
</tr>
</tbody>
</table>


Source: Schirle (2010)
Involuntary Retirement

Male expected working life at age 50 (years)

Source: Reproduced with permission from Carrière and Galarneau (2012)
Involuntary - laid off, sick, disability, care for family member.
Who is at risk of involuntary retirement?

- Expected working life
- Potential reduction in working life due to involuntary retirements
- Expected duration of voluntary retirement

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Expected Working Life</th>
<th>Potential Reduction</th>
<th>Expected Duration</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than high school diploma</td>
<td>14.3</td>
<td>2.4</td>
<td>15.2</td>
<td>31.9</td>
</tr>
<tr>
<td>High school diploma or trades cert.</td>
<td>14.6</td>
<td>1.8</td>
<td>17.2</td>
<td>33.6</td>
</tr>
<tr>
<td>Post-secondary educ.</td>
<td>14.6</td>
<td>1.8</td>
<td>18.9</td>
<td>35.3</td>
</tr>
</tbody>
</table>

Source: Reproduced with permission from Carrière and Galarneau (2012)
Longevity Risk

Life Expectancy at Birth

Source: Reproduced from Ariizumi and Schirle (2012)
Longevity Risk

Higher life expectancy $\neq$ Greater longevity risk

- Longevity risk is the risk that mortality outcomes turn out differently than expected.
- Individual - risk of living longer than expected, facing serious poverty if risk isn’t covered.
Longevity Risk

E.g. 55-year-old female:

- Life expectancy 1975-77
- Self-reported life expectancy: 72.0
- Life expectancy 2007-09
- Adjust expectations
- Denton and Spencer (2011)
- Adjust for improvements

Underestimate health relative to others at same age?

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Longevity Risk

E.g. 55-year-old female:

- Life expectancy 1975-77: 81.1
- Self-reported life expectancy: 72.0
- Life expectancy 2007-09: 81.1
- Adjust expectations

Denton and Spencer (2011)

Adjust for improvements

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Longevity Risk

E.g. 55-year-old female:

- Life expectancy 1975-77: 81.1
- Self-reported life expectancy: 72.0
- Life expectancy 2007-09: 85.1
- Adjust expectations: 75.5

Underestimate health relative to others at same age?

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Longevity Risk

E.g. 55-year-old female:

- Life expectancy 1975-77: 81.1
- Self-reported life expectancy: 72.0
- Life expectancy 2007-09: 85.1
- Adjust expectations: 75.5
- Denton and Spencer (2011): 86.8 (+)
- Adjust for improvements: 77.0 (+)

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Evidence of Longevity Risk and Earnings Replacement?

Evidence of Longevity Risk & Low Income?

Effect of age on GIS entry hazard

Source: Finnie, Gray and Zhang (2013)
Risk of losing a spouse

Complete insurance against the loss of a spouse would imply living standards do not change when a spouse dies.

- Married women age 55-59 with zero earnings were 31% pts less likely below LICO than unmarried women, larger effect for men - Milligan (2013)
- Married age 65+ 10% pts less likely below LICO than unmarried - Schirle (2013)
- Controlling for permanent income, single females are less likely than single males to rely on GIS - Finnie, Gray & Zhang (2013)
- Changes to marital status raise GIS entry hazard - Finnie, Gray & Zhang (2013)
Canada’s RIS and these risks

OAS/GIS mitigates risk of low income (at onset, longevity, loss of spouse)
Canada’s RIS and these risks

- GIS protects against low income at the onset of retirement
- GIS partially mitigates longevity risk and loss of spouse by preventing severe hardship
  - Not designed to maintain standards of living
- CPP & defined benefit plans designed to partially cover longevity risk
- CPP disability benefits partially cover health risks (up to age 65)
- Annuities market in Canada needs improvement (Nielson 2012)
Canada’s RIS and these risks

Policy Questions (50 years later…)

Why do some seniors ‘deserve’ more protection than others?

- OAS/GIS eligibility at age 65 (67)
- OAS universal (except immigrants)
- Age 60-64 spouses, widows, not divorcées
- Home-owners vs. RRSP-holders

Why is the system still designed to favour the single-earner family?

- GIS provisions for spouses and widows
- Pension-splitting
- Cap on CPP survivor + retirement/disability benefits limits insurance against loss of spouse
References


• Nielson, N.L. 2012. ”Annuities and your nest egg: reforms to promote optimal annuitization of retirement capital.” C.D. Howe Commentary No. 358.

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- K. Milligan. Employer-provided pensions, incomes, and hardship in early transitions to retirement.
- M. R. Veall. Estimating the number of GIS recipients who have mistakenly saved in RRSPs and RPPs