Determination of Retirement and Eligibility Ages: Actuarial, Social and Economic Impacts

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Chapter 1

- Perspectives of retirement
Reality or wishful thinking?
Definitions

- “Eligibility age”: the age when an individual is eligible to begin receiving full retirement benefits

- “Retirement age”: the actual age when retirement begins
Variability of social security eligibility age

Trends

 Increasing eligibility age
  ◦ Nineteen OECD countries already have or are scheduled to have the eligibility age for males set at age 67 or older

 Converging eligibility age for males and females
  ◦ However, women are often more underemployed in years preceding retirement. So will this trend increase poverty level of elderly women?

 Elimination or redesign of generous early retirement programs
Flexible retirement

- Social security programs often offer early and/or late actuarially adjusted benefits

- Actuarial adjustments may be neutral
  - Neutrality with respect to the program (may include several cohorts), not individual

- or adjustment may provide incentives for early (DANGEROUS!!!) or late retirement

- Being in receipt of social security pension benefits doesn’t need to mean exit from the labour force
Employer-sponsored pension plans (mainly DB)

- Eligibility ages for employer-sponsored plans tend to cluster around the social security eligibility age
  - Is the harmonization possible or desirable?

- Eligibility age is affected by business objectives
  - The availability of late retirement is limited – older workers are more expensive!
Individual: do I want to retire?

- Am I healthy?
- Is my spouse retired? Do I need to care for members of my family?
- Will I be bored out of my mind if I stop working?
- Am I exhausted by years of demanding work and can’t wait to sit and do nothing?
Individual: can I afford to retire? Am I forced to retire?

- Do I have enough net retirement savings (personal, employer-sponsored pension plans) to
  - Last me for the life such that to
    - maintain my desired life style,
    - keep me out of poverty?

- Can I stay employed?
  - Full-time, part-time?
  - Same or different occupation?
Effective age of labour market exit and social security eligibility ages are not always aligned

Note: Effective retirement age shown is for five year period 2007-12. Pensionable age is shown for 2012. Source: OECD estimates based on the results of national labour force surveys and the European Union Labour Force Survey.

StatLink: http://dx.doi.org/10.1787/888932907186
Chapter 2

- Why increase the eligibility age?
Reason for this change

- Low fertility of the young & greater longevity of the old!

- An old majority depending on a young minority (dependency ratio)
Actuaries need to monitor:

- Mortality changes more closely
- Health improvements
- Lifestyle changes
- Carry out sensitivity test w.r.t. these
- Carry out reviews regularly
Aging and sustainability in pension plans

- This depends on plan types.
- There are multiple tiers in most countries.
- Longevity affects groups differently depending on plan types.
- Most state run plans i.e. tier 1 are adversely affected by longevity requiring either eligibility age change and/or benefit adjustment.
Accumulation and decumulation periods

source: Eurostat
What are the alternatives for longevity protection?

- Increasing accumulation period, i.e. the retirement/eligibility age
- Increasing contributions
- Reducing benefits
- Looking for better economic returns and higher economic growth
- Redistributing of consumption or wealth.
- Reconsidering labor force and productivity
- Considering immigration
Top ten on immigration

*United Arab Emirates.

Chapter 3

Assessing the fairness of a change to a social program
Factors to consider when assessing a change in a SS program

- Sustainability
- Adequacy of benefits
- Consistency with societal expectations
- Equity/fairness

Need to periodically review
- Changing conditions
- Changing societal values
Holistic assessment

- Assess on the entire population and population subgroups
- Consider six pillars:
  1. Social security benefits
  2. Safety-net (welfare) benefits
  3. Employer-sponsored plans
  4. Personal savings, including owned housing
  5. Current/future wages
  6. Family and community
Fairness

- Relative, not absolute concept
- Fairness is personal
  - Reflects viewpoint of each stakeholder/group
- Actuarial fairness or Actuarial neutrality
  - Based on equivalent cost in expected value terms
  - Not reflective of individuals, but rather of groups
- Ultimate conclusion based on
  - Weighting of group needs and values
How to quantify

- Replacement ratios
- Money’s worth comparisons
- Relative to expected benefits
- Affordability of contributions
Benefit adequacy

- Relative to needs, not to individuals
  - Minimum – means-tested?
- Important feature – when to start benefit payments
  - Eligibility age – “full” benefits
  - Early (disability)/late retirement
- Longevity risk
- Jeopardized if early withdrawal of funds allowed
  - Can be controversial
Inter-group actuarial fairness

- Ideally according to need
  - Standard of living
  - Health status
  - Financial resources
  - Dependents/survivors
  - Other support

- Complex, many trade-offs
  - Population groups have different longevity/morbidity profiles
  - Specific groups/circumstances
    - Poor
    - Disabled
    - Physically demanding jobs
    - Long-term illness, unemployment, dependents/survivors
Inter-generational actuarial fairness

- Between birth cohorts
- Differences
  - Expected longevity
  - Standard of living
Fairness of an increase in eligibility age

- When financial sustainability is at risk
- If primary cause is longer longevity, actuarially neutral between generations
- May not be inter-subgroup fair
  - Unless supplemented by adjustments in other features, including
    - Early retirement, disability, safety-net
  - Other than safety-net programs, not practical to consider the individual
  - A change needs long lead-time to enable those affected time to adapt/change other pillars
Chapter 4

- Retirement policy strategies
Retirement policy strategies

- Indexing eligibility age with life expectancy
- Increasing early retirement penalties and/or reward for delayed retirement
- Strengthening eligibility requirements for retirement benefits
- Providing an eligibility age that differs by population segments
- Combining work and retirement
- Encouraging higher pension payments
Retirement policy strategies

- Subsidizing certain population segments
- Linking eligibility age for pension with eligibility age for other benefits
- Harmonizing the eligibility age of employer-sponsored plans with social security programs
- Increasing labour force participation rates and employment rates of older workers
Chapter 5

- Effects of alternative eligibility ages
Effects of alternative eligibility ages – employer-sponsored plans

- Defined benefit plans – affordability and sustainability are key concepts in setting eligibility age
- Defined contribution plans – eligibility age an individual choice
- Increasing the eligibility age – additional period over which contributions are paid; longer period to earn investment return; reduced period over which benefits are payable.
- An increase in the eligibility age/retirement age should be less than an increase in expected longevity, to achieve actuarial neutrality
Effects of alternative eligibility ages – employer-sponsored plans

- Other benefits need to be integrated with change in eligibility age
- How occupational plans cope with part-time employment/portability
- Effect of alternative eligibility ages on investment opportunities
Effects of alternative eligibility ages - social security

- Each country has unique demographic, economic, social, cultural and political circumstances
- Increasing eligibility age increases the incidence of disability, ill-health and unemployment in the labour force
- Hence savings may not be as large as first expected
- Lower socio-economic groups are less able to work longer but have greater need of social security benefits
Case study Australia

Effect of changing demographics
Change in expenditure 2011-2012 to 2059-60

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<tr>
<th>Item</th>
<th>Change in share of GDP (%)</th>
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<tr>
<td>Health care</td>
<td>4.3</td>
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<tr>
<td>Age pension</td>
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<tr>
<td>Aged care</td>
<td>1.8</td>
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<tr>
<td>Disability</td>
<td>0.3</td>
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<tr>
<td>Education</td>
<td>-0.5</td>
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<tr>
<td>Total</td>
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Effect of increasing eligibility age from 67 to 70 estimated saving of 0.15% of GDP after allowing for increased cost of disability pensions and unemployment benefits
Effects of alternative eligibility ages – labour market

- Working longer can be beneficial in terms of health and satisfaction

- There is no evidence that increasing the eligibility age increases youth unemployment
What can we do as actuaries?

- Financial analyses at all levels of programs
  - Both technical and policy
- Provide advice to pension plan sponsors
  - Prepare objective forecasts
  - Assist in risk management
  - Address issues of benefit adequacy, sustainability, equity, etc.
- Need to combine a macro-economic view with micro analyses to develop practical solutions and promote the use of reasonable assumptions and models to form the basis of policy decisions