Work Capacity of Older Workers: Canada and the United States

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Compares retirement institutions and behavior across 12 OECD countries.


- Belgium
- Canada
- Denmark
- France
- Germany
- Italy
- Japan
- Netherlands
- Spain
- Sweden
- United Kingdom
- United States
Credit where it is due: joint work with

Michael Baker, University of Toronto

Courtney Coile, Wellesley College

Tammy Schirle, Wilfrid Laurier University

David Wise, Harvard University

Papers can be found on my website at http://faculty.arts.ubc.ca/kmilligan
How sustainable are pensions?

Canada
- Public pensions are in good shape:
  - Partially funded through pre-saved investment fund (~$265B)
  - Latest Report of the Chief Actuary: no needed changes up to 2090.

USA
- OASDI Trustees Report projects 2014 at 4.92% of GDP
- Rising to 6.16% of GDP in 2035; stable after that.
- OASDI is now cash flow negative…

Contrast to:
- Germany: Population decline. We are past ‘peak Germany’.
- Italy: public pensions as share of GDP is 14%.
- Greece: early retirement is pivotal point of concern with creditors.
Average and Statutory Retirement Ages, OECD

3.8. Average effective age of labour market exit and normal pensionable age

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How sustainable are pensions?

Challenges:

- Household savings shortcomings.
  - Some have workplace pensions.
  - Some do well on their own.
  - Others struggle to save.

- Expanded lifespans—how to split between work and retirement?
  - Thinking more carefully about lifespans and work/retirement splits.
  - How to fund extended retirements?
Goal for this presentation

Present three sets of facts on older work and longevity.

1. Employment rates for older workers.
   (Trend is up.)

2. Life expectancy at older ages.
   (Trend is up, dramatically)

3. Are we fully employing elder work capacity?
   (First two trends fight it out....)
Plan for this presentation

1. Employment rates for older workers.

2. Life expectancy at older ages.

3. Are we fully employing elder work capacity?
How much are seniors working?

Lots of ways to measure an average ‘retirement age’
  • Career job exit? Part-time employment?

Instead, let’s just look at the employment rate.
  • Take labour force status question, count proportion answering ‘employed’.
Canada: Employment rates, 1976-2014

Year:

Employment rate:
0 .1 .2 .3 .4 .5 .6 .7 .8

- CAN Males
- CAN Females
Why are older people working more?

Family factors
- ‘New’ older cohorts of women were much more likely to have careers.
- Married males prefer to retire with spouse: leads to later, joint retirement (Schirle 2008)

Real factors
- Lower earnings growth.
- Lower return on savings.
- Longer lifespans.

Policy factors
- Disability Insurance rule changes. (CAN and USA)
- Retirement pension rule changes. (CAN and USA)
Plan for this presentation

1. Employment rates for older workers.

2. Life expectancy at older ages.

3. Are we fully employing elder work capacity?
Mortality and life expectancy at older ages

Make use of two measures:

- Death rate: roughly, count of those who died divided by population size for a given sex/age.

- Life expectancy:
  - Take the cross-sectional age pattern of death rates in a year.
  - Assuming alive to a certain age, figure out how long until only 50 percent chance of survival.

Data source: Human Mortality Database:  www.mortality.org

- Mortality graphs here show pooled male/female data.
  - Trends broadly similar for each sex.
Canada and US Death Rates: comparing 1965 to 2010

![Graph showing death rates for Canada and the US from 1965 to 2010 by age.](image-url)
Do Other Health Measures Show Similar Improvements?

Source: National Health Interview Survey, USA.
Life Expectancy Gains: Comments

- In Canada since 1965, life expectancy grew by 5 years; pension eligibility age went from 70 to 65
  - We’re funding ten more years of than in 1965.

- Trend appears to be continuing right up to 2011; no slowdown.
  - Driving the trends until now: smoking cessation; heart health
  - Future trends: Obesity vs. medical technology improvements.

- Is extra lifespan spent in ill health? The ‘healthy life expectancy’ debate.
  - Evidence in US and Canada suggest expansion of healthy lifespan.
  - Big debate in gerontology / demography / public health.

- How is this spread across SES? Evidence of SES gradients, but evidence is not widespread on this issue.
Plan for this presentation

1. Employment rates for older workers.

2. Life expectancy at older ages.

3. Are we fully employing elder work capacity?
How much of older work capacity is employed?

Here: I use mortality as an indicator of health to gauge work capacity.

- More subtle health-based approaches to study work capacity. (See Cutler, Meara and Richards-Shubik 2011)
- Also, NBER International Social Security Project compares ‘comprehensive’ health measures to mortality.

Disadvantages:
- Very coarse measure of health.
- Assumes all mortality improvements lead to health improvements
  - Takes extreme view on ‘health lifespan’ debate.

Advantages:
- Easy to measure; centuries of data available.
- Internationally comparable; not subjective.

See Milligan and Wise (J. Population Aging)
Employment vs. Mortality at Older Ages: Men 1980 and 2010 Canada

Age 55-69 gap: 4.9 years
Employment vs. Mortality at Older Ages: Men 1980 and 2010 USA

Age 55-69 gap: 3.9 years
Employment vs. Mortality at Older Ages:
Men 2010, Canada vs USA

Age 55-69 gap: 1.5 years
Employment vs. Mortality at Older Ages:
Men 2007, France vs USA

Age 55-69 gap: 4.5 years
Mortality-work capacity vs. 2010 benchmark, Canadian Men
Mortality-work capacity vs. 2010 benchmark, Men

![Graph showing mortality-work capacity vs. 2010 benchmark for men in Canada and the USA over different years.](image-url)
Comments on work capacity

- Through 1970s and 1980s, mortality was improving and men were working less at older ages.
  - Trends reinforced each other.
  - Combined to give large rise to unused work capacity.

- Since 1995 in Canada, employment increases have almost offset further mortality improvements
  - Only a little further deterioration in unused work capacity.
Conclusions

Summary of results:

1. Older workers age 60+ have been working more; moreso in Canada

2. Lifespans have been expanding rapidly.

3. Since 1995 in Canada, work has increased almost as much as mortality capacity.

Policy conclusions:

- Need more reflection on implications of rapid mortality improvements.
  - All pension policy should be discussed in context of longer lifespans.

- Continue to reflect on removing barriers to work at older ages:
  - Tax policy, pension policy, social attitudes, business practices.
References


Human Mortality Database. University of California, Berkeley (USA), and Max Planck Institute for Demographic Research (Germany). Available at www.mortality.org.


