

# L'Évolution récente des comportements de retraite au Canada

par

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## Motivation and objectives of the study

To document the evolution of retirement patterns over the last three decades

1. Retirement patterns of current retirees: trends, reasons and determinants
2. Expected retirement ages among workers: trends and determinants
3. Trends in work after retirement

We combined the analysis of retirement ages of actual retirees with data on expected retirement ages of current workers to create a longer perspective on changes in retirement behaviour in Canada

We study each with surveys conducted over roughly a 15 year period - the General Social Survey on retirement and older workers (1994, 2002 and 2007) covering over the last three decades.

Data sets: General Social Surveys conducted by Statistics Canada since the early 1990s with the theme being retirement

GSS-1994: 11,876 respondents but only 5,745 of them (representing almost 900,000 Canadians) were aged 45 years or more

GSS-2002: surveyed 24,855 respondents (representing 11,113,000 Canadians) aged 45 years or more

GSS-2007: surveyed 23,373 individuals aged 45 or more (representing almost 13 million Canadians)

## Three Samples

For each three GSS's: we constructed **three different samples** excluding individuals who report having never worked

### Sample 1

**A sample of retirees**: who have worked at some point in their life-cycle, having retired at least once, not working or looking for work at the time of the survey

We choose an age cut-off such that the majority of workers in this sample have retired. From a preliminary analysis of the sample, the age of 68 was chosen as a reasonable cut-off. We thus select **respondents aged 68 to 80 in each GSS**

These retirees are from cohorts **born between 1914 and 1926** in the 1994 wave, **1922 to 1934** in the 2002 wave, and **1927 to 1939** in the 2007 wave.

Thus they form a sample of individuals **having reached the age of 65 sometime between 1979 and 2004**

## Sample 2

2. A sample of workers: currently employed, having never retired in order to analyse retirement expectations

We selected a maximum cut off age of 54, at which most workers are still working and analyzed the expectations of retirement ages beyond that age

These cohorts were born between 1940 and 1949 in the 1994 wave, 1948 and 1957 in the 2002 wave and between 1953 and 1962 in the 2007 wave. Thus they will reach age 65 at any time between 2005 and 2027

## Sample 3

3. A Third sample to study the behaviour of those who have retired but may return to work after retirement: a sample of ever retired

This sample is different from the first retiree sample as there is no age cut-off and we include and we include both those who have retired and are still retired and those who have retired but are working after retirement at the time of the survey

## Variables

We construct different groups of variables that are similar across the surveys:

1. Demographic characteristics (gender, family status, age, province, number of children, education and immigration status)
2. Labour force characteristics (labour force status, occupation, sector of activity, employee status).
3. Age of retirement and reasons to retire
4. Expected age of retirement, plans to retire
5. Health status
6. Household income class and dwelling ownership
7. Indicators of a pension plan or receipt of a pension
8. Work after retirement and reasons for working after retirement
9. Reasons for retirement

The GSS's have little information that would allow the construction of precise financial incentive measures for private and public pensions. This is because past earnings are not known in the dataset and characteristics of private pension plans are also unknown. For example, we do not know the normal and early retirement ages for pension plans and the actuarial penalties for early withdrawal from the labour market

## The Past: Retirement Patterns of Current Retirees

### 1. Observed Trends in the Retirement Age of Retirees for years 1994, 2002 and 2007 by gender

Because the retirement ages are highly clustered around specific ages (55, 60, and 65), they are regrouped in the categories 55-57, 58-62, 63-65 and 66-67

The proportion who retired within the two earliest age categories has increased over time for both genders, especially for females

For the next age group, the 58-62 year-olds, the fraction is stable for males, but substantially increases for females

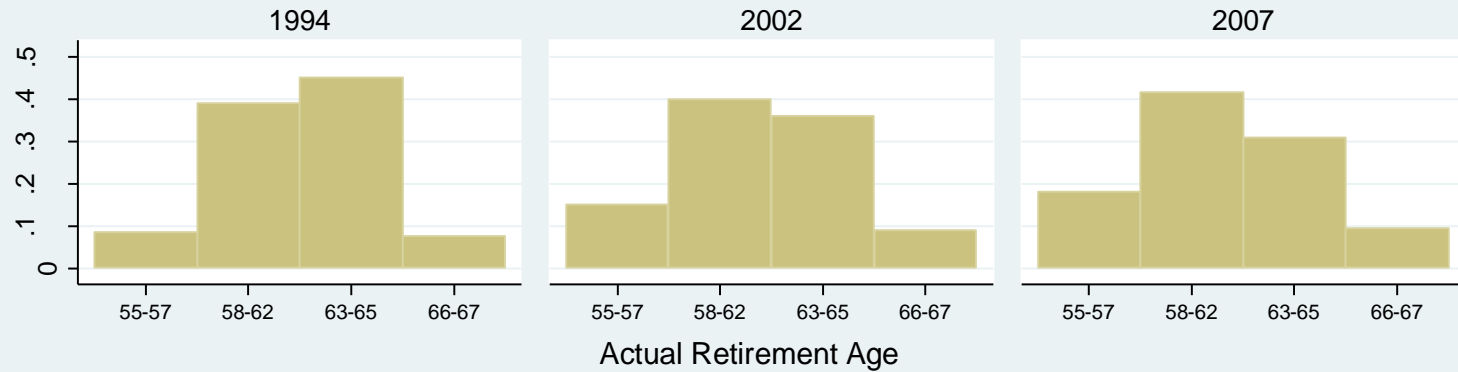
The 63-65 year-olds cluster trend shows an evolution which mirrors that at earlier ages: the fraction for both genders decreases substantially over the years

For the last age group, the 66-67 year-olds, we observe a small increase of Canadians that retire after 65 years.

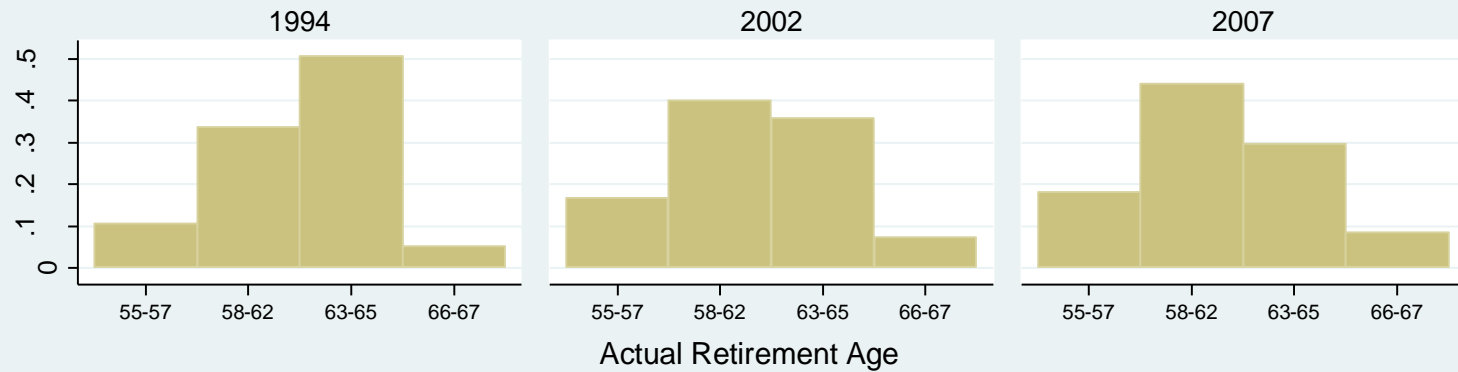
# Trends in Actual Retirement Age

General Social Survey 1994-2007, age 68+

## Males



## Females





# The Past: Retirement Patterns of Current Retirees

## 2. Reasons for retirement

We choose the most prevalent reasons that are comparable across the GSS's:

Health

Holding a job with mandatory age for retirement

Accessibility to an early retirement program

Technological changes at the job

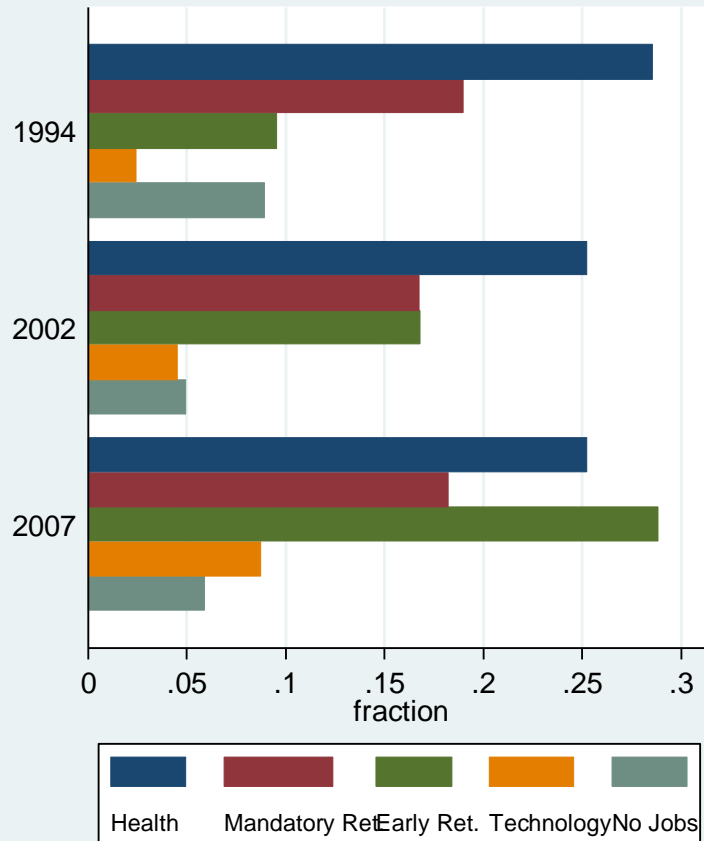
Being unemployed or inactive

- Retiring because of health seems to be the main factor for both genders with a slight decrease in that same
- Mandatory age for retirement and accessibility to an early retirement program are next in importance. The trend for mandatory retirement is not clear
- Accessibility to an early retirement program has gained in importance as a reason for retirement for both genders and has surpassed the “Mandatory age for retirement” reason, especially for males

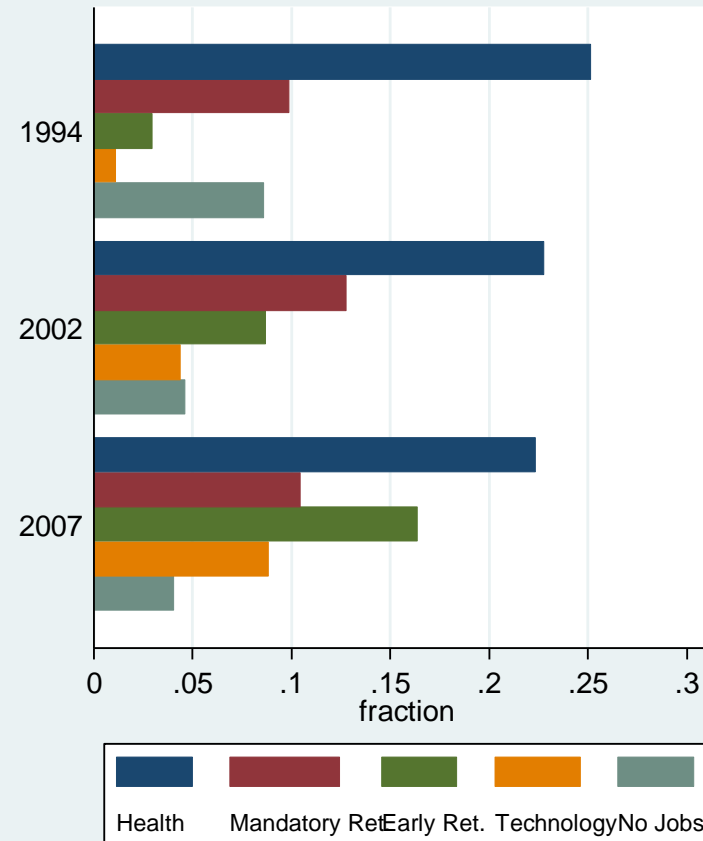
# Trends in Reasons for Retirement Among Retirees

General Social Survey 1994-2007, age 68+

Males



Females



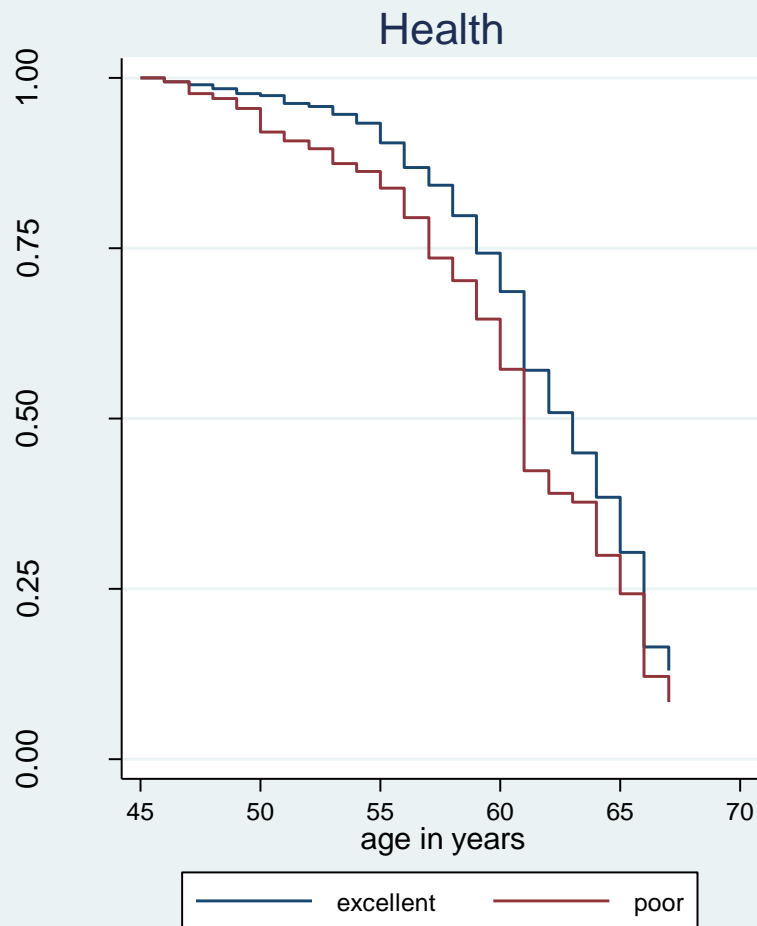
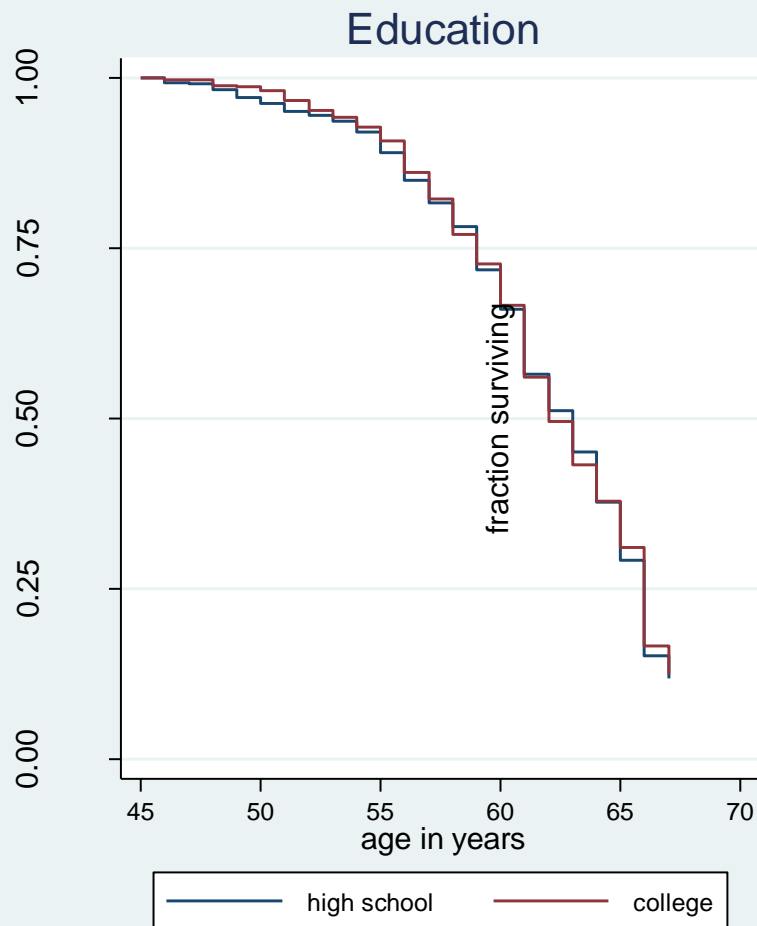
# The Past: Retirement Patterns of Current Retirees

## 3. Determinants of Actual retirement Ages: Survival Analysis

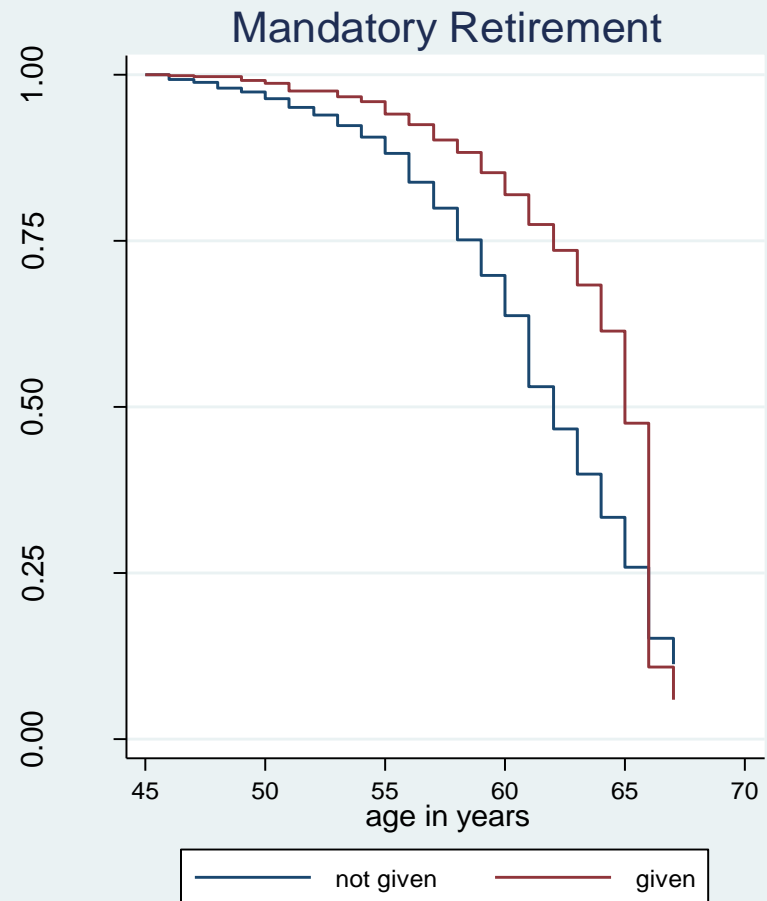
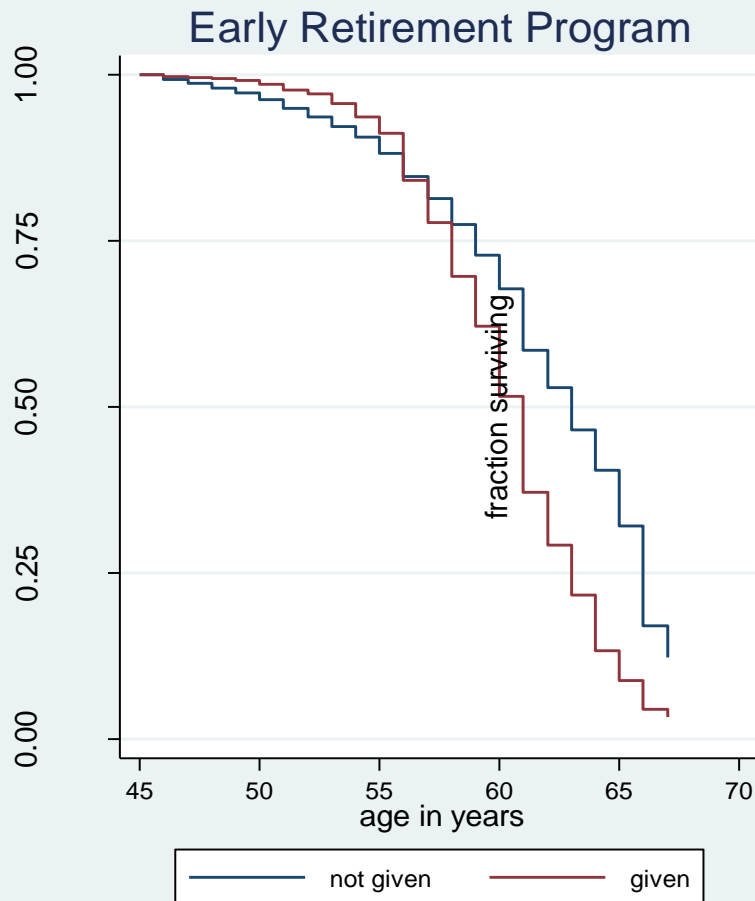
**Survival Rates in Employment by Selected Characteristics** assuming the risk of exiting starts at 45 for all individuals in our samples of retirees by education and health status as well as by two reasons for retirement (due to a mandatory requirement and access to an early retirement program)

- For education: practically no difference in the survival rates at all ages
- Overall, the survival curve for the healthier individuals is always higher than the less healthy: health plays a crucial role in exit rates out of the labour market
- An early retirement program has a large impact on age at retirement after 50
- Mandatory retirement has a clear different impact: the survival rates are much higher for retirees having most likely a pension plan with a mandatory retirement time limit
- For change in survival rates over time (by year): among those retired, survival rates in the labour force have decreased over time and are much higher in 1994

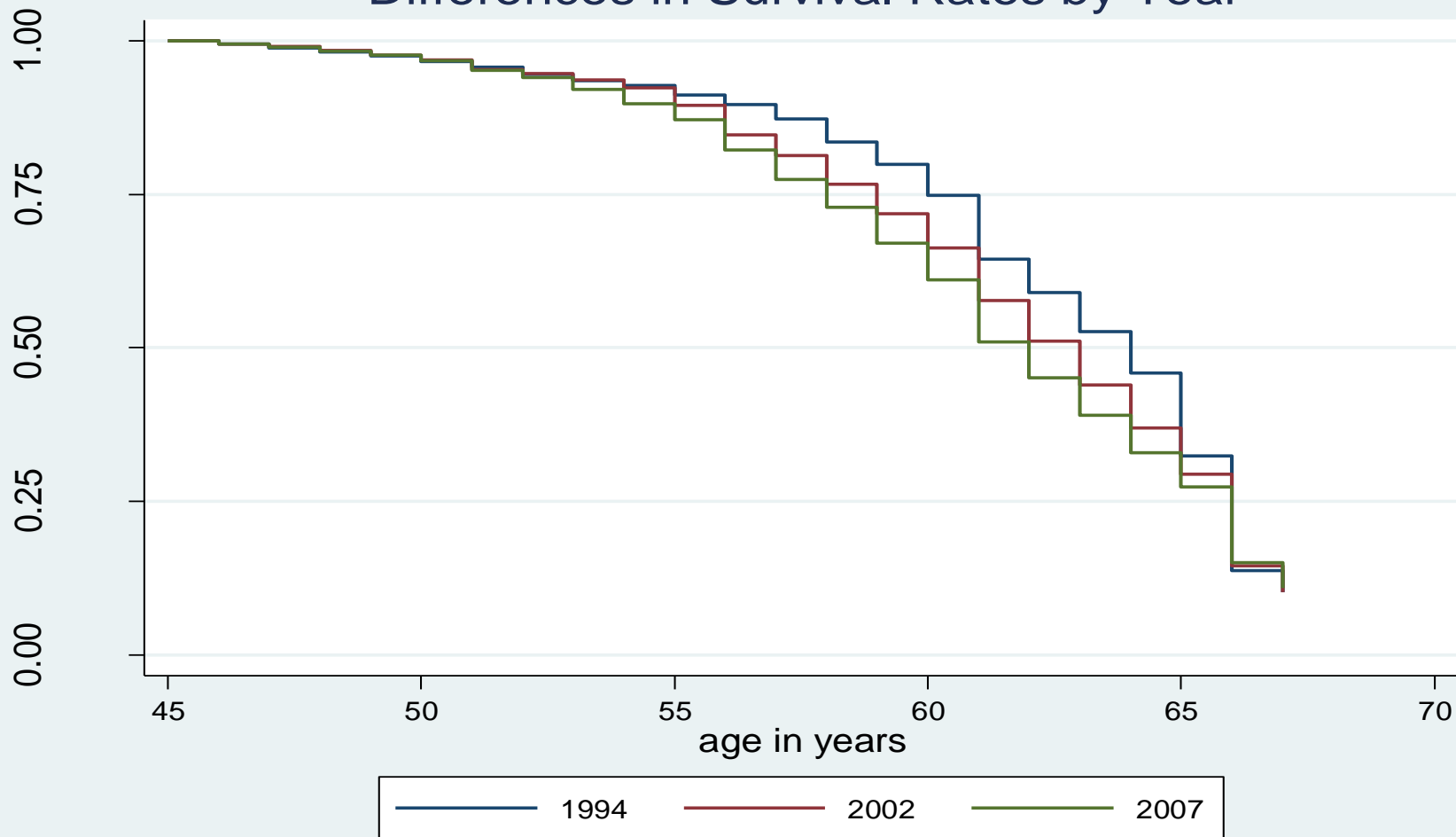
# Differences in Survival Rates for Actual Retirement by Education and Health



# Differences in Survival Rates for Actual Retirement by Reasons for Retirement



# Differences in Survival Rates by Year



## The Future: Expected Retirement Ages among Workers

### 1. Observed Trends in Expected Retirement Ages for years 1994, 2002 and 2007 by gender

- The proportion of workers in the first cluster (55-57) has decreased over time for both genders
- The fraction for the 58-62 cluster has not changed for males over time; and has increased marginally for females
- The 63-65 years cluster shows that over time more workers expect to retire at those ages in 2007 compared to 1994 and 2002, for both genders (the fraction is around 35%)

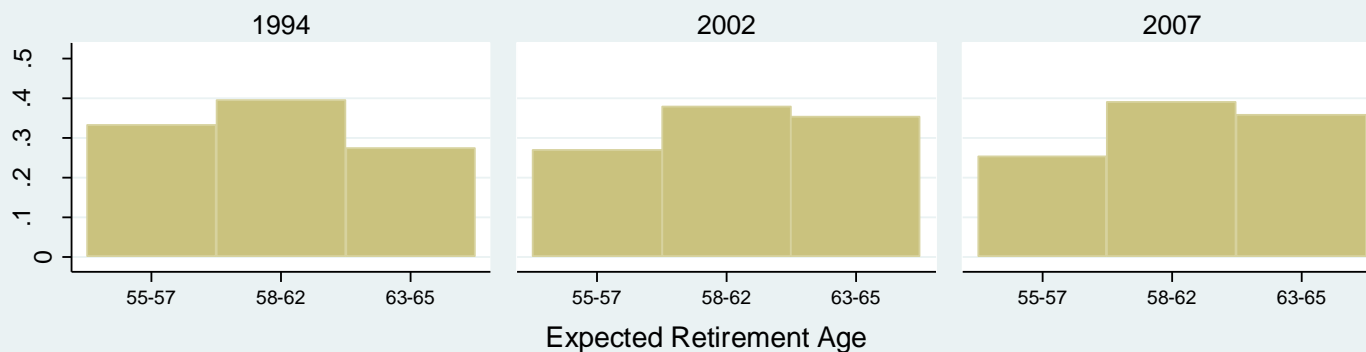
### 2. Determinants of Expected Retirement Ages (from OLS estimations)

- Expected increased by almost 2 years for males and females from 1994 to 2007
- Later retirement ages: men, married women, recent immigrants , lower educated
- Earlier retirement: university educated, having private pensions, owning dwelling, having capital income, high income household, Atlantic provinces, Québec, Manitoba
- By year of survey: similar effects

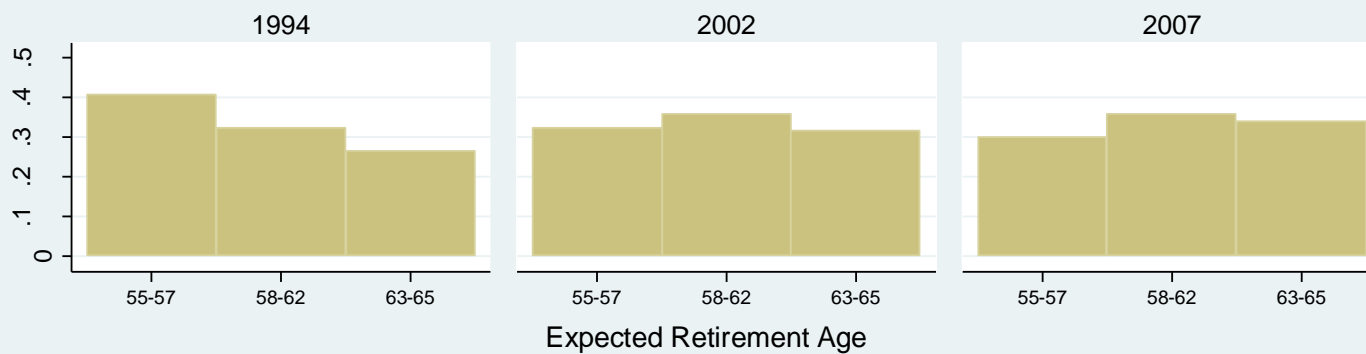
# Trends in Expected Retirement Age

General Social Survey 1994-2007

## Males



## Females





# **A New Reality: Return to Work After Retirement**

## **1. Trends in the Fraction Returning to Work**

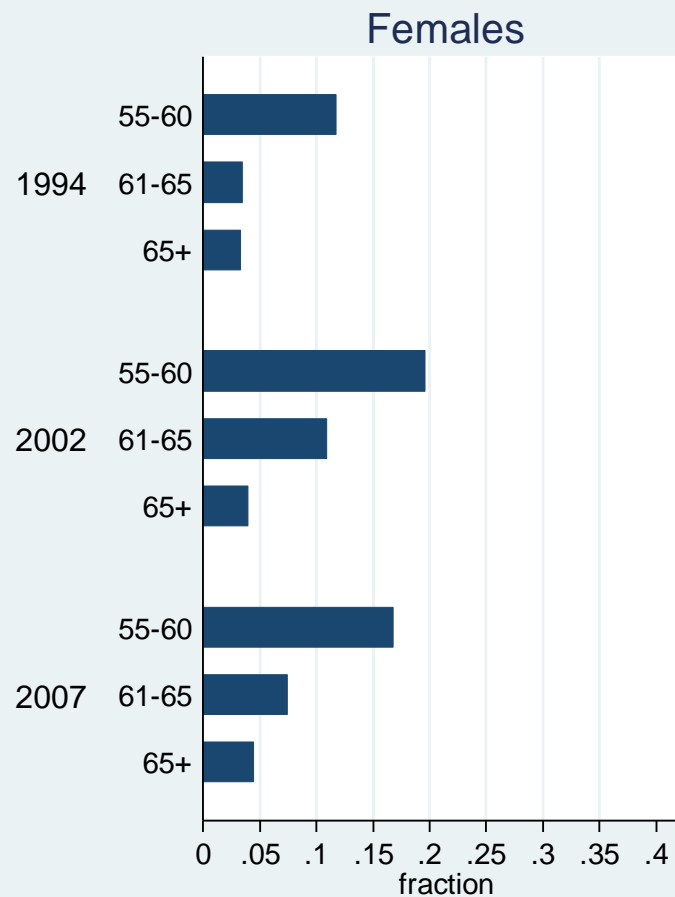
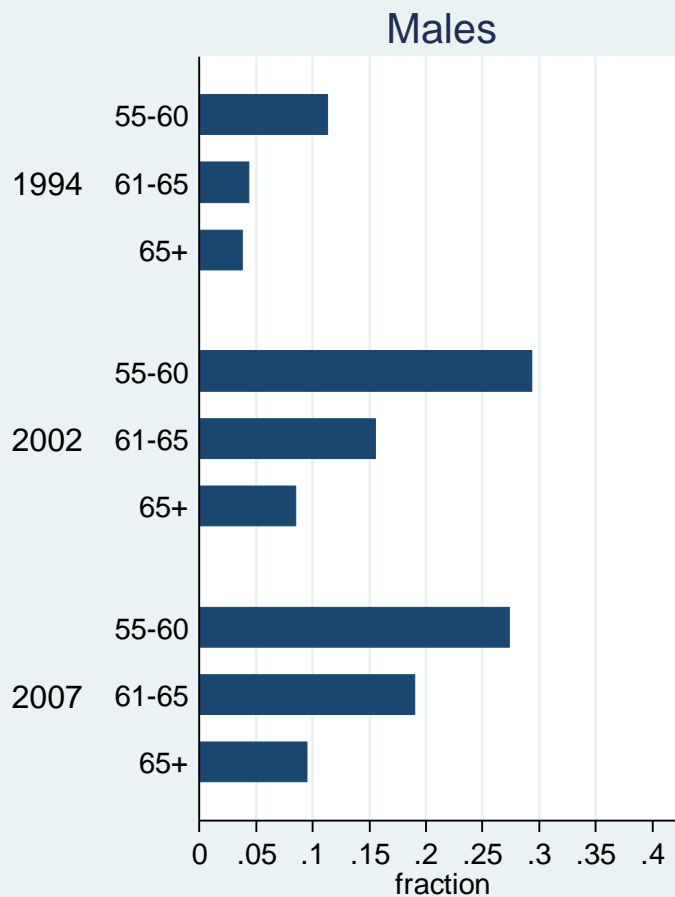
- The fractions of retirees retirement are clustered in age groups (55-60, 61-65, and 65 years old or more)
- The larger proportion of the returnees is from the 55-60 cluster for both genders
- Compared to 1994, for males there is clear positive trend to return to work after a first retirement, and for all age groups; for females the trend (2007 compared to 2002) is less clear cut. For males and years 2002 and 2007, the fractions of returnees in the first two clusters of ages are rather important

## **2. Reasons to Return to Work**

- Five reasons: 1. financial; 2. stopped care-giving to spouse or a parent; 3. better health; 4. was offered a job by a former employer; 5. dislikes retirement or wanted to do
- The financial motivation largely the main reason for both genders, and the fractions for this reason have substantially increased over time.
- The second most important reason is that retirees returning to work experienced a sense of boredom or uselessness in retirement

# Fraction of Respondents Working after Retirement

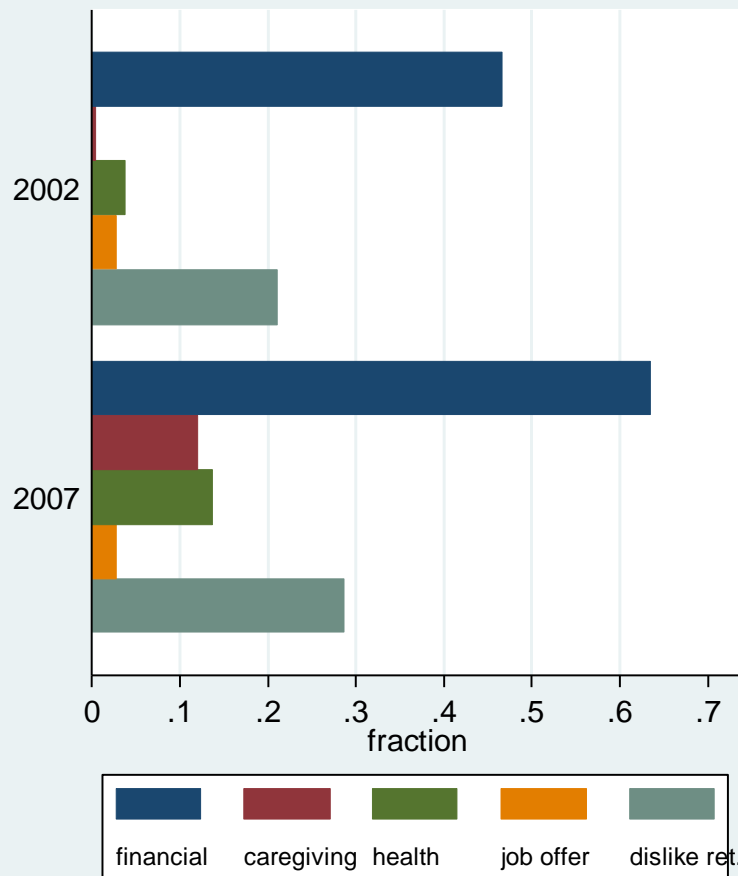
## General Social Survey 1994-2007



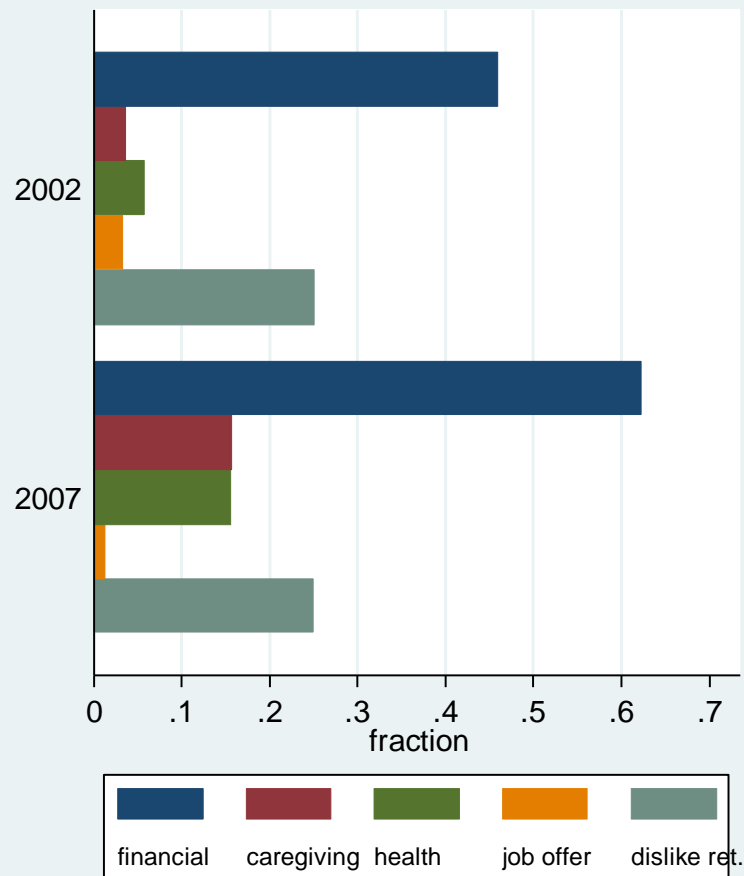
# Trends in Reasons for Return to Work After Retirement

## General Social Survey 1994-2007

### Males



### Females



# A New Reality: Return to Work After Retirement

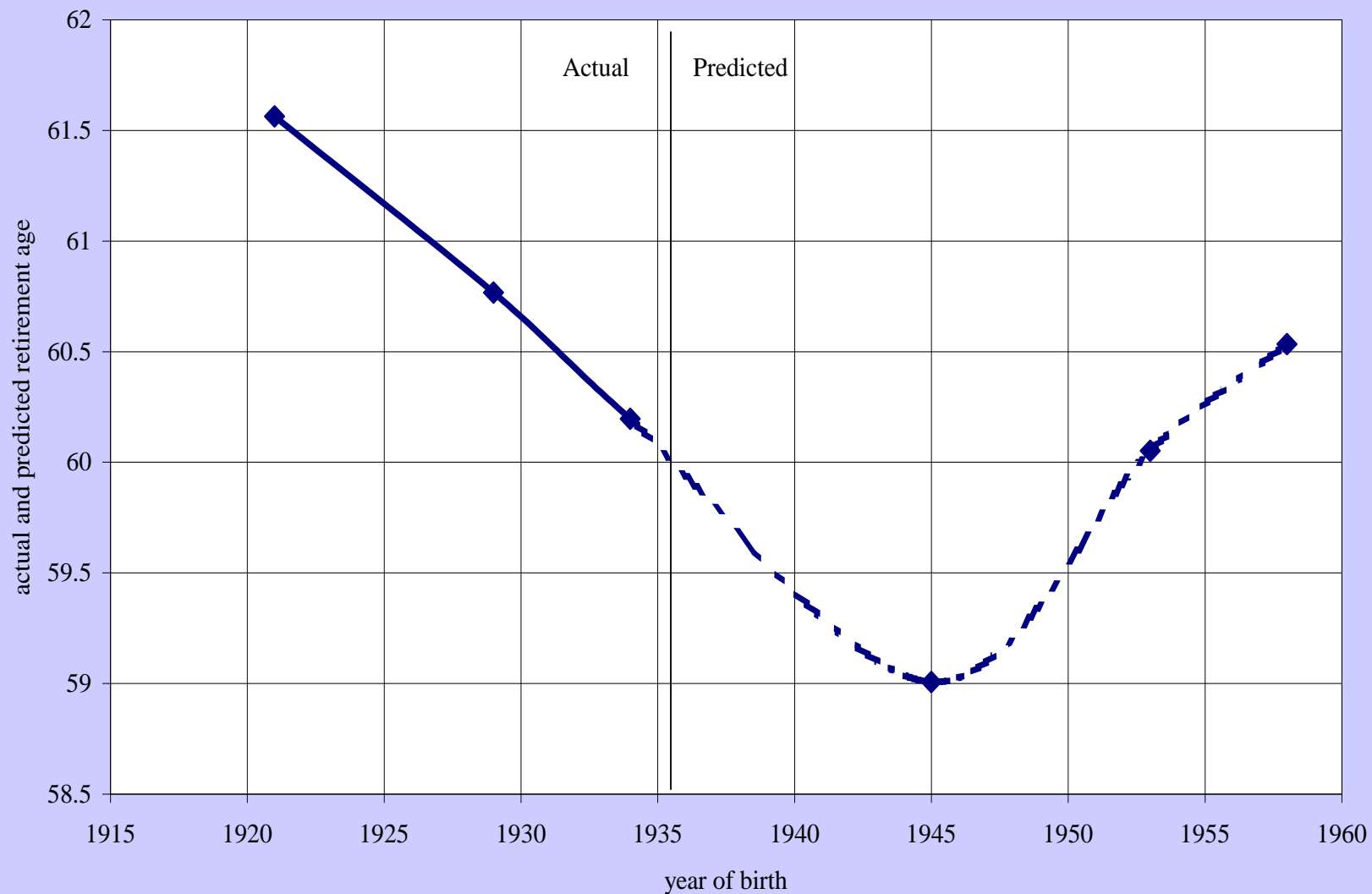
## 3. Factors Associated with Returning to Work

- Average effect of age is strong and negative
- Males have a much higher probability of working than females
- Education also has a strong positive effect
- An additional child in the household has a positive effect
- Place of birth and recent immigration have no effects
- Poor health reduces strongly the probability
- Receiving a pension or owning one's dwelling has no effects
- Owning capital income reduces the probability of work
- There are very strong regional effects. Quebecers and BC residents, ceteris paribus, participate considerably less than Ontarians while the inverse is true of Prairie residents with rather large effects in Manitoba
- Finally, year dummies show a very large increase from 1994 to 2002

## Connecting the dots between trends

- It is possible to connect the dots between the trend in the average retirement age of past birth-cohorts of retirees and the trend in the average expected retirement ages of current workers also by birth cohort
- We computed the average retirement ages of respondents aged 67 years or more in 1994, 2002, and 2007 for cohorts born prior to 1935; and the average mean retirement age of respondents less than age 55 in the same years
- It is clear that the trend in retirement age is likely to shift dramatically. Prior to 1945, cohorts of retirees (reaching age 65 prior to 2000) were retiring earlier. Starting with cohorts reaching 65 years in 2000, we are seeing a reverse trend with expected retirement ages increasing year after year
- This upward trend is apparent in current changes in labour force participation by age. For both males and females labour force participation rates have been steadily increasing. For females, the largest increases are at earlier ages because of the general increase in labour force attachment. For males, the largest changes are observed at later ages

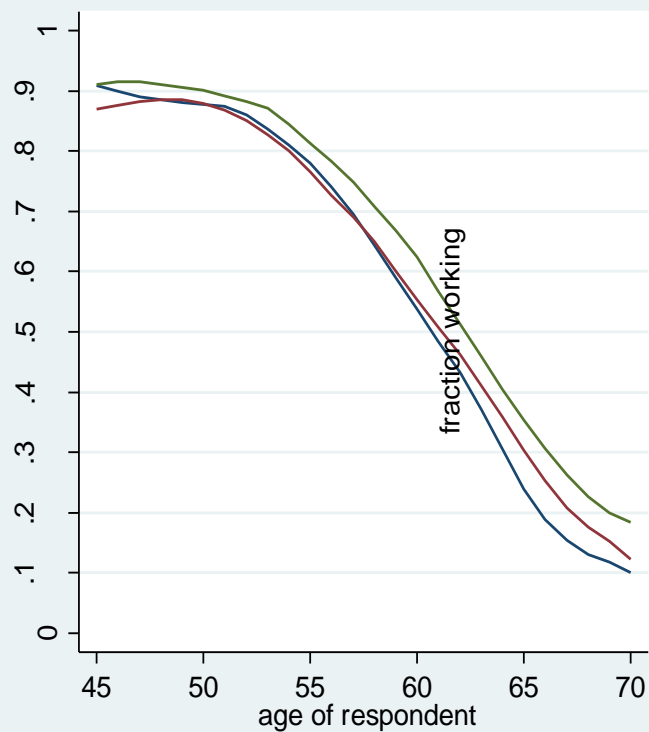
**Historical and Expected Retirement Age from GSS 1994,2002 and 2007 respondents**



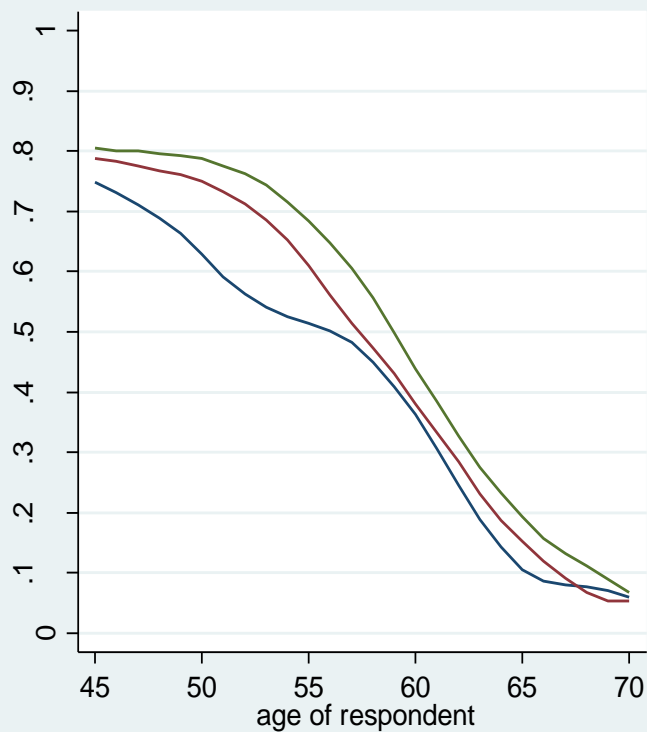
# Evolution of Labor Force Participation Rates

General Social Survey 1994-2007, age 45-70

Males



Females



## Conclusion and Policy Implications

### Main Results

1. Retirement ages are increasing again after a long period of steady declines
2. Another pattern is emerging: return to work after retirement is more frequent
3. These trends have the effect of increasing overall labour force participation

**Some factors that will continue to drive retirement patterns** (delaying retirement ages and increase labour force participation of the elderly)

- Decrease in early retirement program offers in the private sector (?)
- Decrease in the generosity of private pensions
- Change from defined benefit to defined contribution pensions

### On expected mean retirement age:

- Public sector workers no change (defined benefits and early retirement incentives); e.g. Québec large proportion of workers
- Larger proportions of immigrants and of women in labour force
- Better health status of the elderly population and better lifestyles



## Conclusion and Policy Implications

- Income effects, capital income and private pensions: potent forces driving expectations, reducing expected age at retirement and driving people into retirement
- Given the overall flat trend in financial returns as well as uncertainties in the financial market, investment income should decrease thus increasing both retirement age and labour force participation
- Education matters only for returning to work, as more educated individuals display a higher propensity to work. Given that the mean education level of Canadians has considerably risen over the past forty years, we should observe more individuals working after a first retirement

### The policy relevance of all this

- Two forces are at play for government budgets. People are living longer so that they will be consuming services and receiving pensions for a longer period
- But they will probably be working for longer and in greater numbers and the increase in value of private pensions should be slow in historical terms keeping individuals longer in the labour market as well

## Conclusion and Policy Implications

### The policy relevance of all this

- For the public purse, these trends are reassuring as they should reduce the pressure to make dramatic changes in the parameters that determine pensions or payroll taxes and employer contributions that fund pension plans
- The solvency of the CPP/QPP with recent increases in the contribution rates is insured. There should be no immediate problems for the forthcoming retirees, who (and their employers) will evidently face higher contribution
- Another issue is the solvability of private retirement saving plans
- Second, among the 'private' pension plans, a large proportion of them are maintained for employees of the different levels of government, public organizations or governmental enterprises. Moreover, a very large proportion if not almost all of these private pension plans for 'public' employees are defined-benefit plans and most have unfunded liabilities. We can presume that all these plans are defined-benefit ones and ultimately backed by taxpayers

## **Conclusion and Policy Implications**

- The evidence we present in this report is mostly good news for government and pension fund managers
- Although pensioners are living longer increasing the annuity burden of pension funds and dependency ratios continue to grow, workers are now working longer and often return to work after their first retirement which should lower the pressures on public and private pension funds
- Although, the data is pre-2008 and thus before the financial crisis, our results show that the expected trend in delayed retirement should be reinforced by the loss of jobs and wealth created by the crisis
- Despite this “good news” there remain important problems for retirement policy which should continue to spearhead political discussions across the country
- These discussions would be greatly helped by a special Canadian longitudinal survey on aging and retirement, as in England and the United States, with very detailed information on pension plans. Its creation, from our point of view, is necessary for an empirically based sound policy