

Sharing Gains in Life Expectancy:

Which Balance between a Longer Career and a Longer Retirement Span?

The Case for the French 2003 Reform

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Motivations

Ongoing process of reforming the French pension system (1993, 2003, 2010, ...), in order to restore sustainability

Main mechanism = raising retirement age (preferred over increasing contributions or decreasing pensions)

Strong concerns in the public debate about inequalities and inequities as regards retirement duration

- In the intragenerational dimension: concerns about unfair consequences on retirement duration of inequalities in life expectancy and labour market conditions
- In the intergenerational dimension: concerns about distrust in the pension system by younger generations

Motivations (2)

The 2003 reform:

- Defines a general rule for changing retirement parameters, in order to restore sustainability while ensuring intergenerational equity
- Parameters indexed on gains in life expectancy ('automatic' rule)

Context:

- The 2003 rule criticised: imperfect implementation of the sharing in life expectancy?
- Interrogations about the double age/duration criteria to define pensions (cf. 2013 national debate on parametric vs. Systemic reform)

In this study: we simulate average durations of career and retirement ages by generation, in order to compare them to (forecasted) life expectancies

Outline of the presentation

The French 2003 and 2010 Retirement Reforms

Methodology

Results

- Retirement duration
- Career duration over retirement duration ratios

The French Retirement System

Legal age and duration parameters:

- 2 age boundaries: minimal age and normal age (*Note: no more compulsory retirement age before 70*)
- Required insurance duration

Condition for a 'Full Rate' pension (ie. pension without penalty)

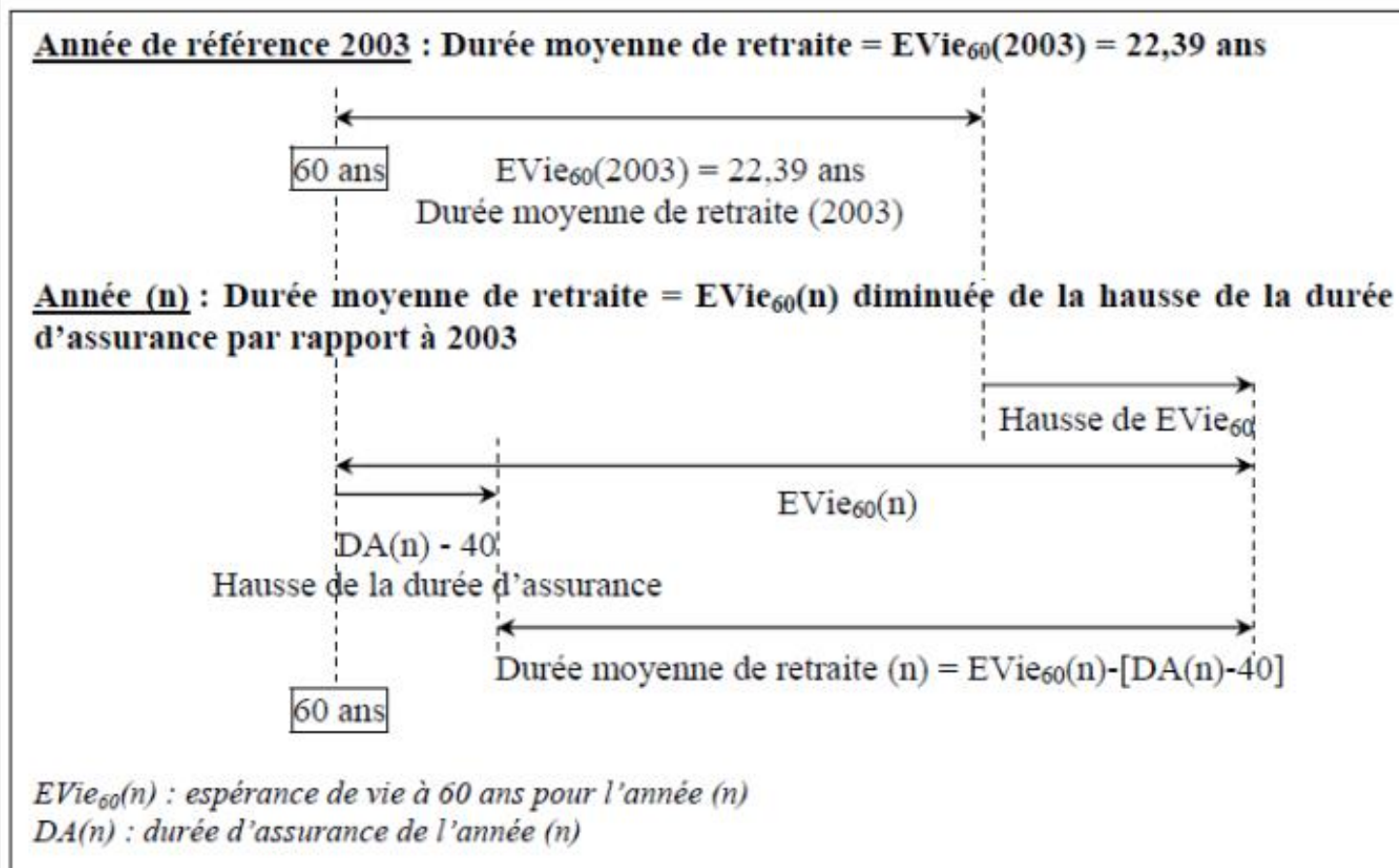
- Age OR insurance duration OR disability
- Penalty or bonus in case of retiring earlier or later than full rate (calculated as % of the pension, proportional to distance to full rate)
- 2-stage system, but full rate in second stage is defined by full rate in the 1st stage

French Retirement reforms: different ways to increase retirement age

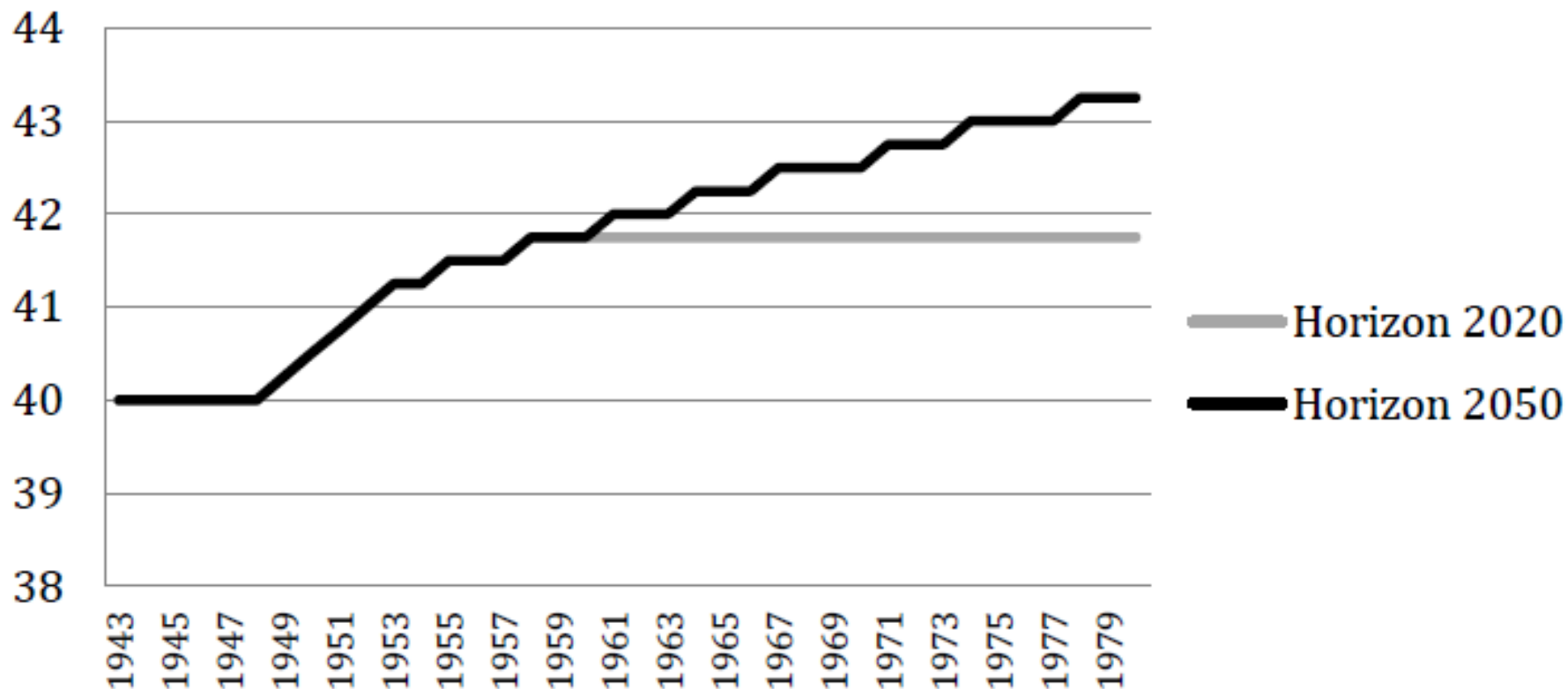
- *1993 reform*: increase in the required insurance duration from 37.5 years to 40 years
- *2003 reform*: further increase in the required insurance duration (indexation on gains in life expectancy)
+ lower minimal age (56 instead of 60) for workers with very long insurance duration
- *2010 reform*: increase in both minimal age (60 to 62) and normal retirement age (65 to 67)

The 2003 Rule for increasing the Required insurance duration

La durée moyenne de retraite, telle que définie par la loi



Forecasted increases in the required duration



Simulation Methodology: The Destinie Model

Based on the 2003 Asset Survey (contains full, self-declared labour market histories for all individuals)

Each year from 2003 to 2050, simulation of:

- Demographics (birth, death, migration, weddings, separations)
- Employment histories (status on the labour market and yearly wage)
- Decision to retire and calculation of the amount of pension

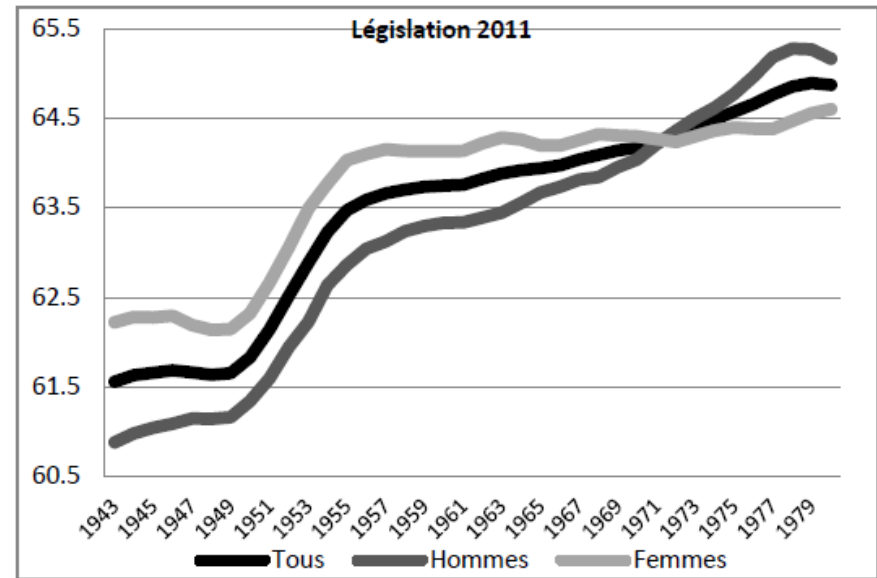
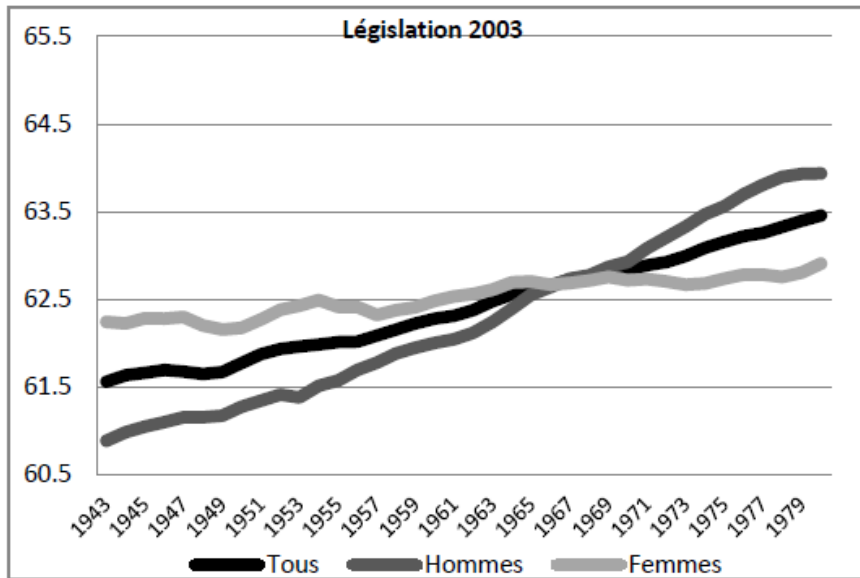
Simplified, yet accurate modelisation of careers:

- Some simplifications: only one labour market statut per year (employment, unemployment); not all pension schemes are modelised
- However, all main schemes are included: 'régime général' (CNAV – 1st-stage scheme for private sector wage earners), 2nd-stage complementary schemes (ARRCO and AGIRC), civil servants schemes, 1st-stage schemes for non wage earners (RSI)

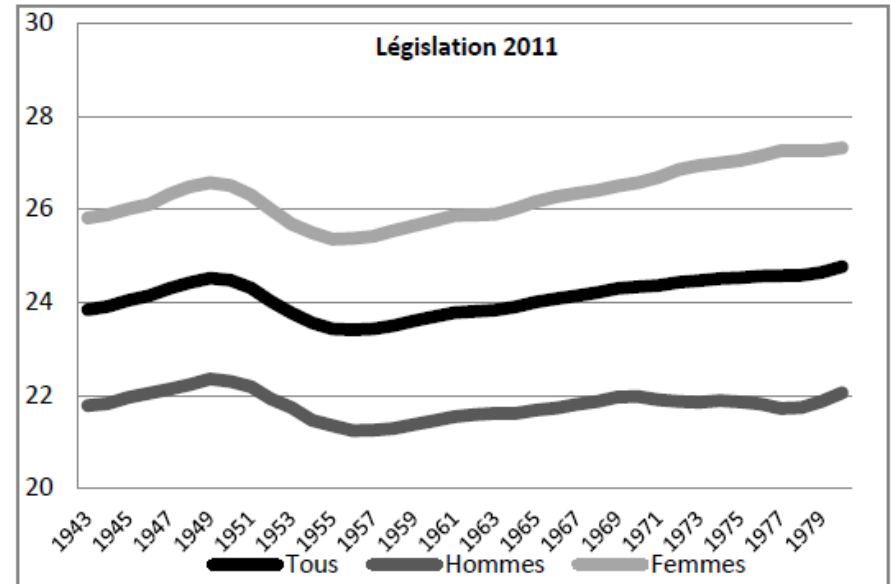
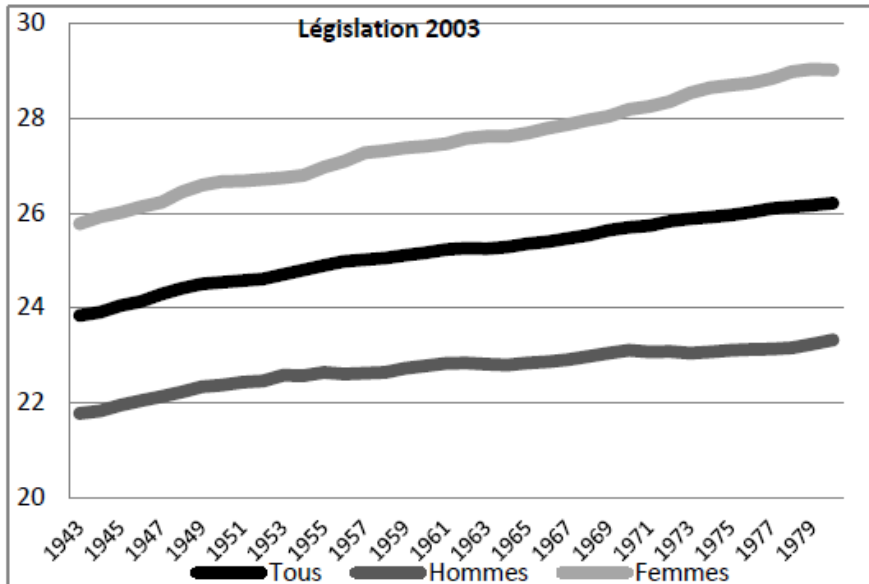
For each individual, we simulate retirement age under the hypothesis that individuals retire as soon as they reach full age

+ we neutralise retirement before the minimal age (individuals retiring at an early retirement age are supposed to retire at the normal minimal age)

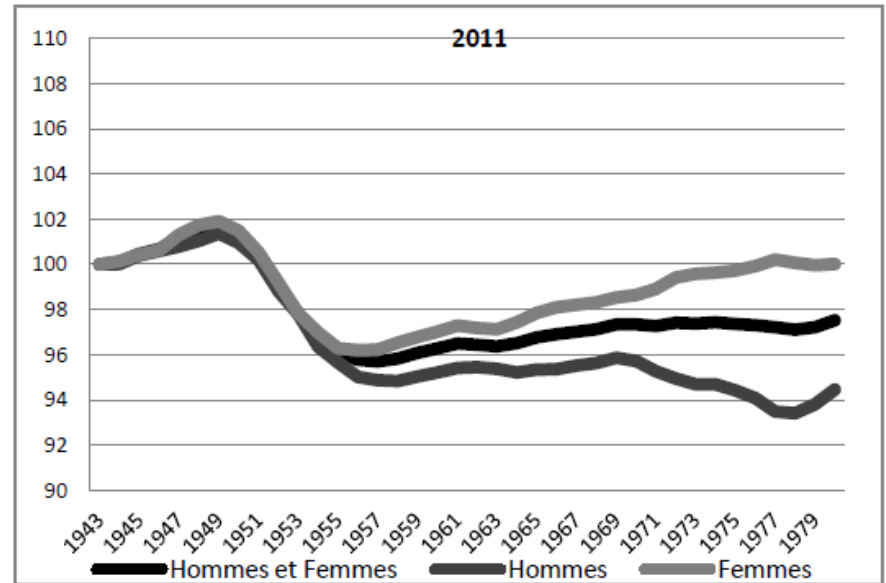
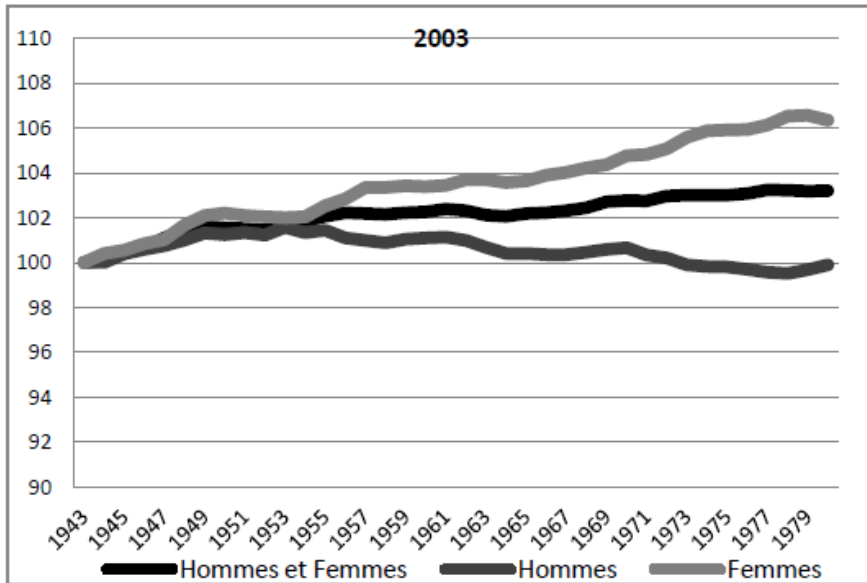
Average Retirement Age after the 2003 and 2010 Reforms



Number of Years spent in Retirement, by generation



Ratio of retirement duration over (40 + life expectancy at age 60)
(reference: 100 = ratio for the cohort born in 1943)



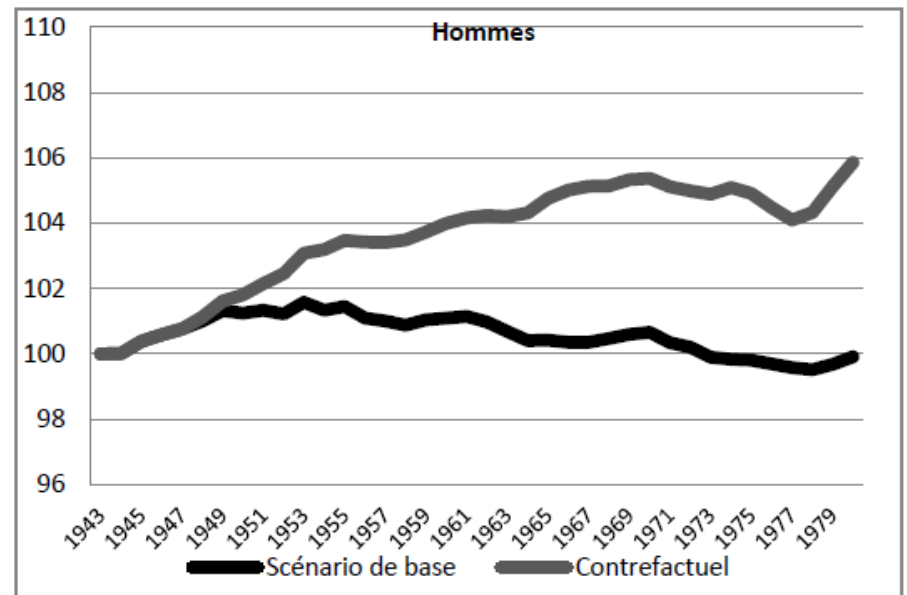
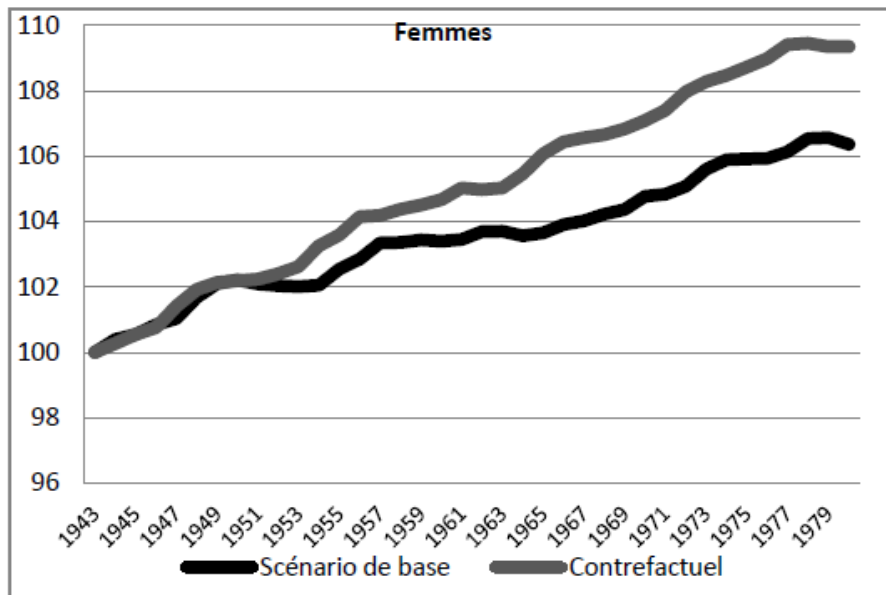
Share of gains in Retirement Span over gains in Life Expectancy
 (difference between generations 1943 and 1980):

Men: 34% after 2003 Reform, 6% after 2010 Reform

Women: 82% after 2003 Reform, 38% after 2010 Reform

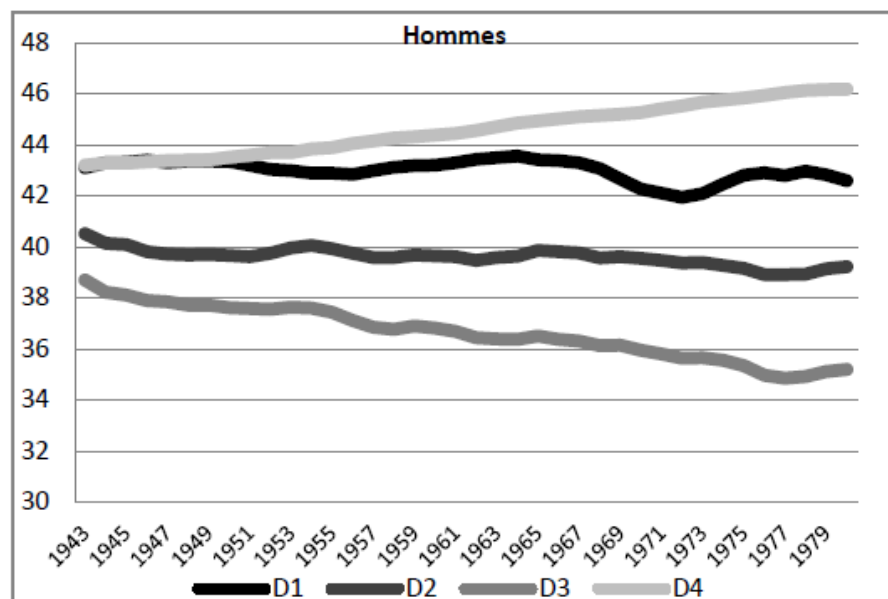
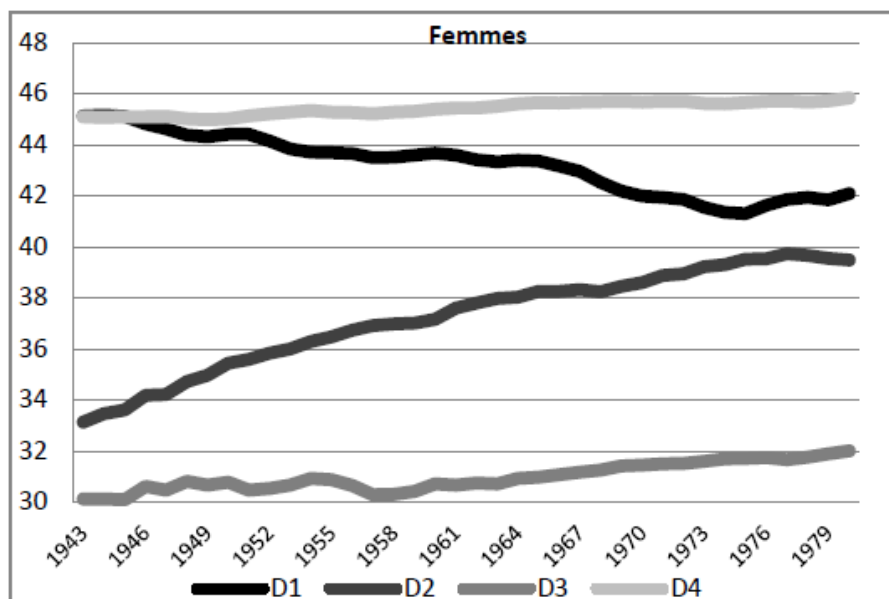
Counterfactual simulation: no increase in the required insurance duration

Ratio of retirement duration over (40 + life expectancy at age 60)
(reference: 100 = ratio for the cohort born in 1943)

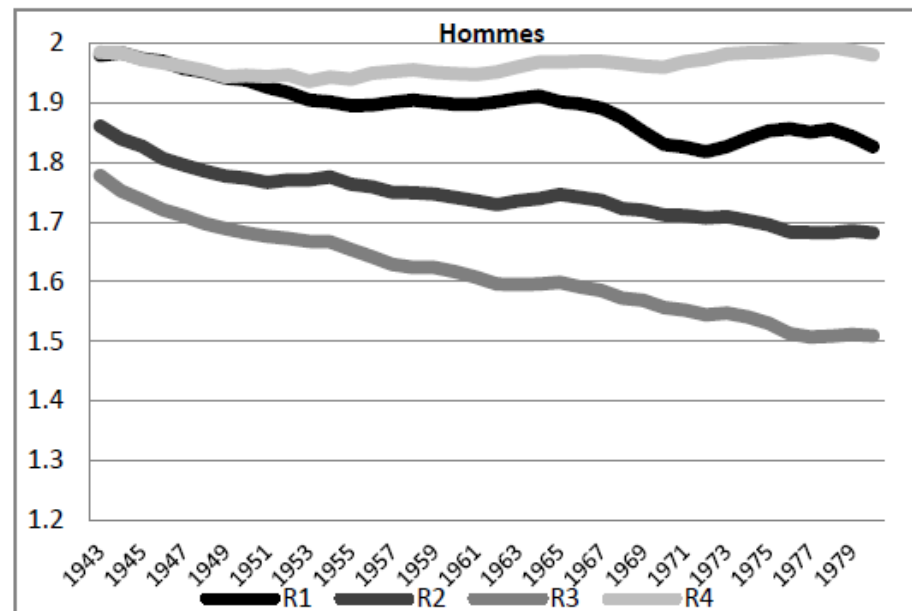
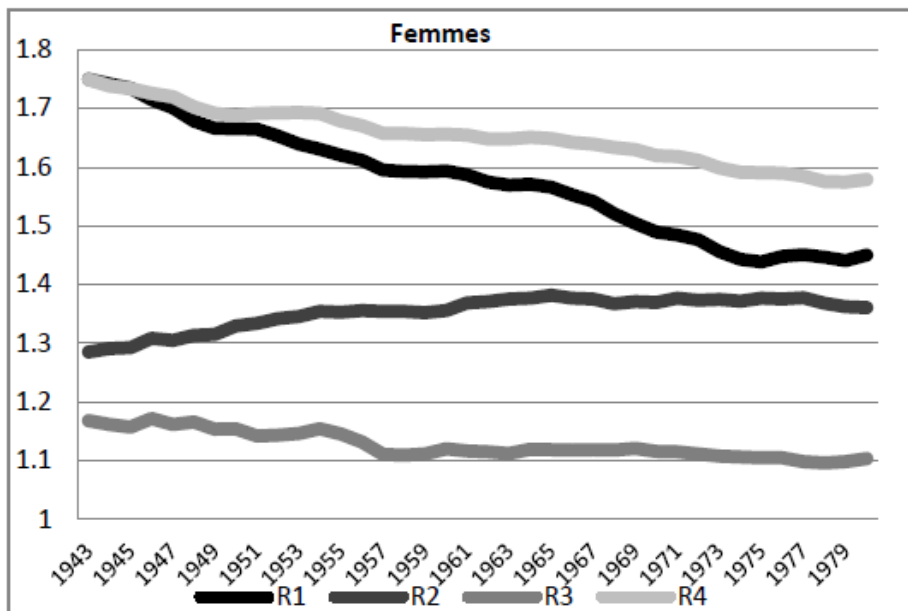


Several measures of the 'career duration' may be used:

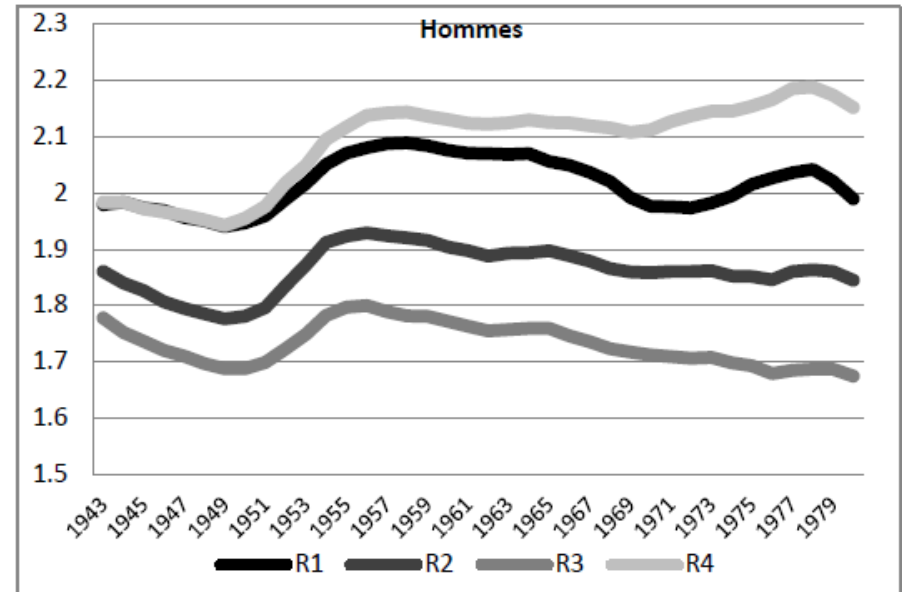
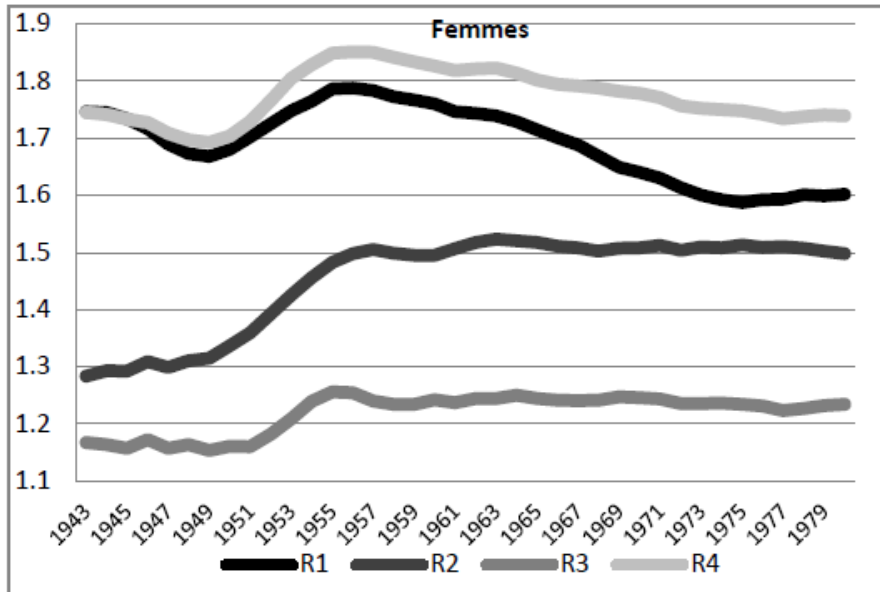
- Number of years between leaving school and retiring (D1)
- Insurance duration taken into account by pension schemes (D2)
- Number of years in employment (D3)
- Number of years between the average age at leaving school of the 1943 generation and the individuals' retirement age (D4).



Career Duration over Retirement Duration ratios (before the 2010 Reform)



Career Duration over Retirement Duration ratios (after 2010 Reform)



Robustness checks

Simulation without neutralising early retirements (i.e. retirements before the normal minimal age for some workers)

→ only transitory impact (generations born between 1944 and the mid 1950's)

Alternative hypotheses for the retirement age

- Replacement rate target, or Stock and Wise model: smaller increase of the average retirement age than with the hypothesis that workers retire at full rate

Conclusion

For men, the increase in the required insurance duration (2003 reform) roughly implies that 1/3 of gains in life expectancy correspond to gains in retirement duration

... but not for women, since the larger participation to the labour market among younger generations implies a slower increase of the average retirement age than for male.

Strong impact of the 2010 reform, with a shift between generations 1950 and 1955

Results on the career duration over retirement duration ratio highly sensitive to the definition of 'career duration'