



# INEQUALITY IN LIFE EXPECTANCY AND PENSIONS

*Navigating the future: challenges and opportunities of longevity in Europe*  
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*Hervé Boulhol*  
Senior Economist, Pensions and Population Ageing  
OECD Directorate for Employment, Labour and Social Affairs



## ***Inequality in life expectancy and pensions : distinguishing the static from the dynamic analysis***

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- Static: Regressive features of differences in life expectancy
- Static: Gender dimension
- Dynamic: very different question as the demographic context matters greatly

*Increasing the retirement age (regressive) as a response to longevity gains (progressive)*



## *Static: Regressive features of differences in life expectancy*

In essence, pension systems redistribute from those who die early to those who live long: insurance mechanism against longevity risks

Problem: strong socio-economic pattern of differences in life expectancy, resulting *all else equal* in a redistribution from low-income to high-income pensioners

### Illustration:

- Assume remaining life expectancy at 65 is equal to:  
17 years for a low-income group and 20 years for a high-income group
- **Static life-expectancy effect of 15%**  $(=(17-20)/20)$ , detrimental to the low-income group on top of lower monthly pensions



## *Static effect: How to deal with it?*

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- Very tricky: difficult to differentiate retirement ages by socio-economic groups
- Elephant in the room: gender differences in life expectancy
- Mistargeting of sectoral retirement-age rules / long-career schemes
- Pension schemes for arduous and hazardous work

### **This strengthens the case for redistributive pension instruments:**

- provides higher replacement rates to workers with low income
- can be articulated with flexible retirement to e.g. provide similar replacement rates for low-income groups but accessible a few years earlier



## *Dynamic:*

### *(small) regressive impact of raising the retirement age*

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- Raising the retirement age by e.g. one year means more for people with lower remaining life expectancy

- *Illustration: raising the retirement age from 65 to 66*

assume that remaining life expectancy for the low-income group diminishes as a result from 17 to 16 years and for high-income group from 20 to 19 years

The regressive effect increases **from 15.0% ( $=3/20$ ) to 15.8% ( $=3/19$ )**, hence a 0.8 percentage point increase



## ***Dynamic: Dealing with old-age life-expectancy gains***

- Calls to raise retirement ages are not made in a static environment but typically to accompany longer lives: broadly shared life-expectancy gains are progressive
- Illustration: assume remaining life expectancy at age 65 increases by one year for all  
From 17 to 18 years the low-income group and from 20 to 21 years for the high-income group  
The regressive effect diminishes **from 15.0% (=3/20) to 14.3% (=3/19)**
- Raising the retirement age from 65 to 66 to accompany health improvements moves the effect back to **15.0%** (even when passing on 100% of life expectancy gains into the retirement age)
- What is key to deal with increases in longevity (dynamic) is ***how inequality in life expectancy changes over time***
- No consistent cross-country evidence of increasing life-expectancy inequality



## *Summary*

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- Inequality in life expectancy is a very serious issue for pension systems
- Difficult to tackle it and to differentiate retirement ages across population groups
- Taking into account the gender dimension even complicates this further
- This strengthens the case for redistribution within pension formulae or for redistributive instruments more generally
- But dealing with longevity gains is a very different question
- Raising retirement ages to deal with old-age life-expectancy gains remains a valid policy response, at least to the extent that inequality in life expectancy does not increase



# THANK YOU !

Herve.BOULHOL@oecd

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<https://www.oecd.org/pensions/policy-notes-and-reviews.htm>