What if ageing was counted differently?

Old age would then not be coupled to the number of years already lived, but to the number of years left to live.

The classic story of population ageing

To measure population ageing, several demographic indicators are traditionally proposed, including the average age of the population, the proportion of people aged 67 and over in the population or the demographic elderly dependency ratio. These indicators are based on the *chronological age*, that is, the number of years already lived by a person. No matter the chosen indicator, the story remains the same: the proportion of the elderly in the total population increases. This leads to challenges with regard to the financing of social security (increase in pension costs, increasing healthcare expenditure, etc.) but also at the level of societal organisation (housing of the elderly, intergenerational solidarity, ageism, etc.)

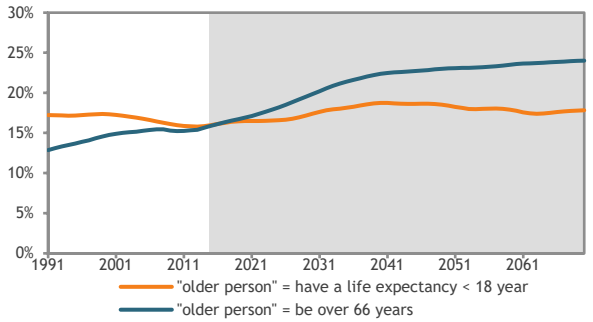
'The number of years left to live': an alternative way of measuring population ageing

On average, a 67-year-old in 2020 does not have the same characteristics as a 67-year-old in 1960 or in 2050. Owing to societal developments (living conditions, rising levels of education, medical progress, etc.) we not only live longer, but we do so in good health. To take into account this evolution, ageing can be calculated by dividing the population into different categories according to the number of years remaining to be lived, or the *prospective age* (concept introduced in 2005 by W.C. Sanderson and S. Scherbov in *Nature*).

This alternative way to measure ageing is based on the idea that individuals can be compared over time not according to the number of years already lived, but according to the years remaining to be lived.

Example: the proportion of people aged 67 and over increases from 17% in 2019 to 24% in 2070. In 2019 the average number of years remaining to be lived for a 67-year-old is 18 years. And the proportion of individuals which have less than 18 years remaining to live should increase from 17% in 2019 to 18% in 2070. Population ageing measured by the prospective age is consequently less pronounced.

Proportion of the elderly in the population – Belgium – two complementary indicators



Source: National Register, Statbel and Demographic Outlook, FPB

An alternative, but complementary story!

In order to assess the impact of population ageing on pension costs, it seems to make sense to use an ageing indicator based on the statutory retirement age. The line between working age and retirement is set by law.

In order to calculate the impact of population ageing on the future evolution of healthcare expenditure, an approach based on the average number of years remaining to be lived could be relevant. Healthcare expenditure rises considerably during the final years. With the increase in life expectancy, these later years begin at an older age, which is not captured by an indicator based on the *chronological age*, but by an indicator based on the *prospective age*.

A strong assumption is behind this alternative story: the increase in life expectancy goes, at least partly, hand in hand with an increase in life expectancy in good health. This assumption is best investigated further.