



Social Protection Reform Project
中国欧盟社会保护改革项目

1.4.1 - EUROPEAN BEST PRACTICES RELATED TO THE ADJUSTMENT OF BENEFIT FORMULAE FOR CHANGES IN LIFE EXPECTANCY

Component 1

Making good for the negative effect of improvements in longevity and deteriorating demographic balance on the sustainability of pension funds can be conducted through adjustments in the normal retirement age and/or the benefit formula. While the Chinese pension system has to cope with a strong and lasting ageing phenomenon, the present Note, authored by expert Koen Vlemminckx from Belgium, introduces the basic principles shaping reforms recently conducted across European countries in these interrelated areas.

Adjusting pensions to rising life expectancy at the age of retirement can be done by focussing on:

- The level of the pension, by reducing monthly benefits at the earliest eligibility age (i.e. the minimum age at which a person can draw pension); or
- The age at which pension is first payable, by gradually increasing the earliest eligible pension age, with no compensating increase (or a less-than-actuarial increase) in pension; or
- A combination.

International evidence suggests that increases in the earliest eligible pension age have a more robust effect than actuarial incentives.

Thus the system should adjust to rising life expectancy in two ways:

- Applying the longevity coefficient at the age at which a person first takes pension assists sustainability (e.g. NDC Systems or countries that have similar adjustments in their PAYG systems, such as Germany).
- Increasing the earliest eligibility age broadly in line with life expectancy assists adequacy in the face of potential non-rational behaviour.

1. Adjustment for life expectancy

In general, NDC systems (Sweden, Poland, ...) adjust pension benefit amounts to the life expectancy of a retirement cohort. In Sweden: when a person first draws pension, his or her accumulation is multiplied by a life expectancy coefficient, based on the remaining life expectancy at the age of withdrawal of the person's birth cohort. The intention is that if life expectancy increases, the monthly pension at a given age will be actuarially reduced, i.e. adjustment is via the level of pension, not the earliest eligibility age. The estimate of the cohort's remaining life expectancy is based on historic mortality data (see annex 1), rather than projected mortality rates.

The critique on the NDC system's adaptation of benefit amounts to life expectancy is that the retirement decision is not limited to an (economic) rationale, but also by cultural factors. Furthermore, the capacity of an individual depends also on his or her health condition, his or her education or skill level, the preferences of his or her employer, the general condition of the labour

market, etc.. If people cannot or will not adapt to the lowering of NDC Pension benefits by prolonging their career, they will end up with a low and in some cases inadequate pension benefit for a prolonged retirement career. In such cases, an increasing share of pensioners might become dependent upon '0-pillar' arrangements.

2. Increasing the mandatory retirement age

Increases in the retirement age are another way to adjust pension systems to increases in longevity. The long-term retirement age in almost half of OECD countries will be 65, and in 15 it will be between 67 and 69. Reforms tend to be phased-in slowly when the retirement age is increased, in order to allow the both citizens and employers to adapt themselves to the prospect of a prolonged career.

In 2007, Germany decided to gradually increase the mandatory retirement age from 65 to 67 between 2012 to 2023. Thus, the mandatory retirement age for people born after 1963 is 67¹. In 2014 German legislators made a correction to this decision, by allowing people who have worked at least 45 years since the age of 18 to retire at 63 without the reduction of pension rights.

In Italy, the NDC system was introduced in 2011. The normal pension age under the new system will increase gradually for men and women. In 2012, it was 62 for women employed in the private sector; 63 for self-employed women and 66 for men (both employed and self-employed). For women, the reform has established gradual increases in pension age, so as to equal men's at 66 years by 2018. Further increases in line with life expectancy evolution will take place after 2018 to achieve 67 at least in 2021. The 2011 pension reform has however introduced a flexible window of retirement between 62 and 70 years.

In 2013, Spain decided to gradually raise the mandatory retirement age from 65 to 67 over the period 2013-27.

In 2015, Belgium decided to gradually raise its mandatory retirement age from 65 to 66 in 2025 and to 67 in 2030 for both men and women.

Koen Vleminckx,
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¹ People with an insurance record of at least 45 years of mandatory contributions from employment or care or child-raising periods up to the child's 10th year will still be eligible to claim a pension aged 65.

Annex 1. Life-expectancy and Historical Mortality Data

Historical Mortality data are derived from National Life tables that contain statistics on period life expectancy by age and sex. National life tables are produced annually. They allow for an up-to-date analysis of mortality and life expectancy

National life tables are 'period' life tables. Period life expectancy is the average number of additional years a person would live if he or she experienced the age-specific mortality rates of the given area and time period for the rest of their life.

Life expectancy is the average number of years a person has before death. This is conventionally calculated from birth, but can also be calculated from any specified age. This gives the remaining further number of years a person on average can expect to live given the age they have attained. This means that period life expectancy at birth for a given time period and area is an estimate of the average number of years a new-born baby would survive if he/she experienced the particular area's age-specific mortality rates for that time period throughout his/her life.

Life expectancies that allow for actual or projected changes in mortality during a person's lifetime are known as 'cohort' life expectancies.

The UK's Office for National Statistics published a "Guide to calculating national life tables" on its website:

<http://www.ons.gov.uk/ons/guide-method/method-quality/specific/population-and-migration/demography/guide-to-calculating-interim-life-tables/index.html>