1 Recent pension reforms

This chapter looks into pension developments over the past two years. It presents an overview of pension reforms introduced in OECD countries between September 2021 and September 2023. The chapter also describes recent trends in life expectancy and healthy life expectancy as well as inequalities in life expectancy. It provides an overview of long-term trends in employment rates for older age groups and labour market exit ages, and evolutions since COVID-19. The chapter assesses to what extent pension indexation protected pensioners' purchasing power throughout the surge in inflation since 2021.

Introduction

The COVID-19 pandemic, Russia's war of aggression against Ukraine and the policy response to these challenges have triggered an inflation wave felt across the globe. The inflation surge since 2021 has increased expenditures somewhat more for older people than for others in many countries, as energy and food make up a larger share of the consumption baskets of many older people compared to other age groups. Yet, pensioners' purchasing power is likely to be affected less than that of working-age people in countries indexing pension benefits to price increases. Over half of OECD countries tend to protect earnings-related pensions fully from inflation shocks over time. The impact of inflation on pensioners' purchasing power is particularly limited in countries where pensions are price adjusted shortly after prices rise, for instance through frequent indexation or by adjusting when the index crosses a certain threshold.

The impact of COVID-19 on both future life expectancy and employment is likely to be temporary in most OECD countries. Life expectancy dropped due to excess mortality in most OECD countries in 2020, but by the end of 2021, trends reversed in many of them. Concerns over a permanent reduction of labour supply ("great resignation") have not materialised, despite some concrete evidence of increasing inactivity among older individuals in some OECD countries in the initial stages of the pandemic. The employment rates of older workers grew between 2019 and 2022, resuming the trend of increasing employment at older ages since the turn of the millennium. Over the last two years, several countries took initiatives to further increase employment of older workers though reduced taxation, providing deferral incentives or reducing or eliminating the withdrawal of pension income against earned income.

Several countries have passed pension reforms increasing retirement ages, consistent with the general trend in the OECD since the 1990s. As three in five OECD countries will have a higher normal retirement age in the future, increasing retirement ages remains a common strategy to improve financial sustainability without reducing pension levels. Now that the Slovak Republic and Sweden introduced a link between their retirement ages and life expectancy over the last two years, one in four OECD countries now boast such a link. Costa Rica and Czechia tightened eligibility to early retirement and France raised the minimum retirement age over the last two years. In addition, Switzerland and Israel decided to gradually increase the retirement age for women, gradually closing and reducing the gender gap in retirement ages, respectively.

Concerns over financial sustainability remain an important driver of pension reform. Beyond adjusting retirement ages, this can also entail adjustments to benefits and contributions. The Netherlands passed a systemic pension reform entailing a transition of pension funds from funded defined benefit to funded defined contribution schemes to improve solvency. Costa Rica and Spain passed parametric reforms to contributions and benefits to improve pension finances.

Pension protection has been improved in several OECD countries over the last two years, in particular for low earners. Chile replaced its targeted public pension scheme with a quasi-universal scheme in January 2022, increasing the benefit and expanding coverage to 90% of the older population. Furthermore, Canada, Estonia, France, Italy, Lithuania, Spain, Sweden and Türkiye substantially increased basic pensions, minimum pensions and/or targeted benefits. Moreover, in their respective earnings-related pension systems, Hungary sped up the introduction of the 13th month payment, and Poland introduced a 14th month payment.

Finally, coverage of various pension schemes has been extended in several countries. The Slovak Republic has become the sixth OECD country to have introduced automatic enrolment, joining Lithuania, New Zealand, Poland, Türkiye and the United Kingdom. Australia and Costa Rica respectively removed and reduced minimum earnings thresholds to participate in earnings-related pension schemes, removing barriers to participate for low-income earners, and the Netherlands lowered the minimum age when workers can enter a pension scheme. Chile and Mexico extended coverage to platform and domestic workers, respectively, who previously were not covered by mandatory pensions. At the same time, New Zealand and Sweden tightened residency requirements to qualify for certain pension benefits.

Key findings

Inflation and pensions

- The ongoing episode of high inflation reverses the standard way of thinking about pension indexation. In normal circumstances, wages grow faster than prices due to productivity gains, and in the past many countries shifted from wage to price indexation to limit pension expenditures. In the short term, due to falling real wages, price indexation has become more favourable for pensioners. But it is more costly than initially anticipated for public finance or pension providers more generally.
- Over half of OECD countries protect pensioners fully from inflation trends over time. These countries index pensions to prices, to prices plus real-wage growth if positive, or to the higher of prices or wages. A few other countries index to a mix of prices and wages, or fully to wages.
- Frequent indexation is necessary to uphold pensioners' purchasing power. Belgium's fixed-threshold indexation, increasing pensions every time the price index increases by 2%, has provided good protection. By contrast, the real value of old-age safety-net benefits dropped drastically in Latvia and Poland as they are only indexed every three years and inflation was particularly high, resulting in both countries deviating from their indexation rules in 2023, and Latvia moving to annual indexation from January 2024.
- Loss of purchasing power can also be caused by delays when the indexation indicator is smoothed over long periods, as in Lithuania, or from a lag between the reference period and pension adjustment, as in Denmark.
- Applying indexation rules consistently is key to building confidence in pension promises. However, protecting all pensioners against high inflation has been costly. Depending on the fiscal space and national preferences, temporary deviations from full price adjustment for all can include flat-rate payments or full adjustment up to a threshold only. It may be fair in exceptional times of economic and fiscal pressure that pensioners with retirement income above a certain threshold share some of the pain with the working-age population in terms of reduced benefit adjustments.

Current income of pensioners

- On average across the OECD, people aged 66-75 have a disposable income of 93% of that of the total population, falling to 81% among people aged over 75. The disposable income of people aged 66+ is below 75% of that of the total population in the Baltic states and Korea whereas it is 100% or more in Costa Rica, France, Israel, Italy, Luxembourg and Mexico.
- Across all OECD countries, 12.5% of people aged 66-75 and 16.6% of those aged 76+ are in relative income poverty (equivalised disposable income below 50% of the median), compared to 11.4% of the total population. The relative income poverty rate among people aged 66+ exceeds 25% in the Baltic states and Korea and is below 6% in Czechia, Denmark, France, Iceland, Luxembourg and Norway.

Main recent pension policy measures in OECD countries

- The Netherlands passed a systemic reform of funded private pensions from defined benefit to defined contribution.
- The Slovak Republic reintroduced a one-to-one link between the retirement age and life expectancy. Sweden raised the retirement age and will link it to two-thirds of life-expectancy gains, which will boost pensions from the notional defined contribution scheme. One in four OECD countries now link retirement ages to life expectancy, including Denmark, Estonia, Finland, Greece, Italy, the Netherlands and Portugal.

- In France, the minimum retirement age of the main mandatory scheme was increased from 62 to 64 and some special pension schemes will be gradually eliminated. In Costa Rica, the tightening of early retirement ages results in the increase of the normal retirement age by three years for both men and women to 65 and 63, respectively. Czechia tightened early retirement eligibility from five to three years before the statutory retirement age. By contrast, Italy extended the early retirement options that were supposed to expire. In Türkiye, for people who entered employment before the statutory retirement age was legislated in 1999, the statutory retirement age was scrapped; among them, women can access a pension after at least 20 years of contributions and men after at least 25 years.
- Switzerland will close the gender gap in normal retirement ages, and Israel will reduce it from five to two years.
- Spain formally removed the automatic adjustment mechanisms previously legislated to address financial sustainability and reintroduced price indexation of pensions in payment. Instead, contributions were raised, especially for high earners, while income protection for low-income pensioners and workers with irregular careers, including mothers, was increased.
- Chile significantly raised low pensions by replacing its means-tested public pension scheme by a quasi-universal scheme. In addition to Chile and Spain, Canada, Estonia, France, Italy, Lithuania, Sweden and Türkiye substantially increased first-tier pensions, which benefit more the retirees with low pensions.
- Costa Rica extended the reference period for past wages used to calculate pensions from 20 last years to 25 best years, as well as Spain from 25 to 27 years from 2044. The only other countries that still continue to calculate earnings-related pensions on earnings for only part of the career are Colombia (10 years), Slovenia (24), France (25), the United States (35) and Portugal (40).

Implications

- In 2022, men with a full career from age 22 could retire with a full pension between 62 (Colombia, Costa Rica, Greece, Korea, Luxembourg and Slovenia) and 67 years (Denmark, Iceland, Israel and Norway), except Türkiye, with a current normal retirement age of 52.
- Normal retirement ages are set to increase in three-fifths of OECD countries. Only Colombia, Costa Rica, Hungary, Israel, Poland and Türkiye still maintain lower normal retirement ages for women than for men for labour market entrants in 2022. The average normal retirement age among OECD countries will increase from 64.4 years for men retiring now to 66.3 years for those starting their career now. Future levels range from 62 years in Colombia, Luxembourg and Slovenia to 70 years or more in Denmark, Estonia, Italy, the Netherlands and Sweden.
- On average across the OECD, full-career average-wage workers entering the labour market in 2022 will receive a net pension at 61% of net wages. Future net replacement rates are at 40% or below in Australia, Estonia, Ireland, Japan, Korea, Lithuania and Poland; they exceed 90% in Greece, the Netherlands, Portugal and Türkiye.
- The future net replacement rate of workers earning half the average wage is higher at 74% on average. In Japan, Lithuania and Poland, it is below 50%, while it exceeds 100% in Colombia, Denmark and Greece.
- As a result of recent pension reforms, net replacement rates of full-career workers will increase significantly in Chile, Spain and Sweden, and to some extent in the Slovak Republic, whereas they will decrease significantly in Costa Rica, although less so for workers with declining earnings towards the end of the career.

Other findings

- Life expectancy at older ages bounced back in most OECD countries from 2021 after a drop of about half a year in 2020 on average. Since 2012, the trend in life expectancy gains at age 65 has slowed significantly to 0.9 years per decade, from a fast pace of 1.4 years per decade between the mid-1990s and the early 2010s.
- It is sometimes argued that retirement ages should be linked to changes in healthy life expectancy instead of changes in life expectancy. Analysis in this chapter shows that available indicators of healthy life expectancy are not suited to determine how retirement ages should evolve.
- Most OECD countries have resumed the pre-COVID trend of growing employment at older ages, although employment rates did decline significantly between 2019 and 2020 in several Latin American countries.
- Denmark, France, Italy, Luxembourg and Slovenia have lower retirement ages without penalty for people with long careers who started working at a young age. In Germany and Portugal, early starters are exempt from the penalties that otherwise apply in case of early retirement.

This chapter is structured as follows. The first section takes stock of evolutions in life expectancy at older ages, including the impact of COVID-19, in inequalities in life expectancy and in healthy life expectancy. The second section provides an overview of employment at older ages and labour market exit ages. The third section analyses to what extent the various pension indexation mechanisms have managed to help shield older people from losing purchasing power given the recent surge in inflation. The chapter closes with a section on pension reforms legislated in OECD countries since the previous edition of *Pensions at a Glance*.

Population ageing: COVID-19 and life expectancy

The COVID-19 pandemic has left its mark on populations worldwide, affecting people's health and raising mortality especially among older people. Across OECD countries, excess mortality reached about 13% for the population aged 65+: the actual number of deaths exceeded the expected number of deaths based on 2015-19 figures by 13%.[1]

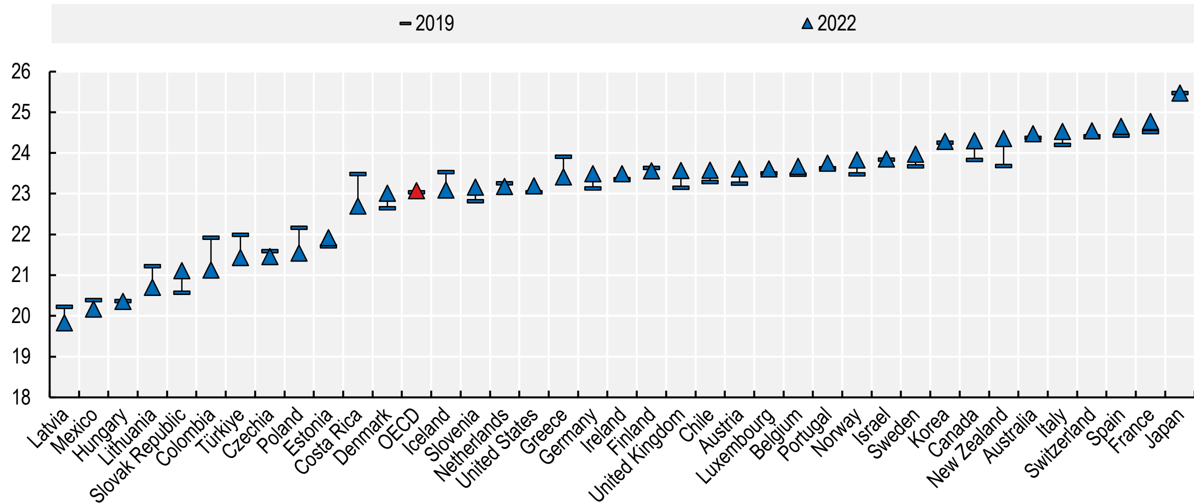
Trends in life expectancy gains and inequality

Life expectancy dropped due to excess mortality from COVID-19 in most OECD countries in 2020 (OECD, 2021[1]). Increased mortality among people aged 60+ is the most significant contributor to excess mortality, in particular in countries with lower full vaccination rates in this age group (Schöley et al., 2022[2]). By the end of 2021, trends had reversed in several countries and some already returned to their 2019 life-expectancy levels (OECD/European Union, 2022[3]; Schöley et al., 2022[2]).

New long-term projections of old-age life expectancy do not factor in any significant impact of COVID-19. The United Nations' 2022 projections of life expectancy at age 65 for the period 2050-55 are stable on average across OECD countries compared with projections made before COVID-19 (Figure 1.1). However, the new projections of remaining life expectancy at age 65 are at least half a year higher for New Zealand and the Slovak Republic, while they are at least half a year lower in Colombia, Costa Rica, Lithuania, Poland and Türkiye. As a result, cross-country differences in projected life expectancy have increased between 2019 and 2022 as countries with below-average life expectancy projections in 2019 have been particularly prone to downward adjustments in the 2022 projections, although the adjustments are not correlated with excess mortality due to COVID-19.

Figure 1.1. Projected remaining life expectancy at 65 for the period 2050-55

In years, comparing projections in 2019 and 2022



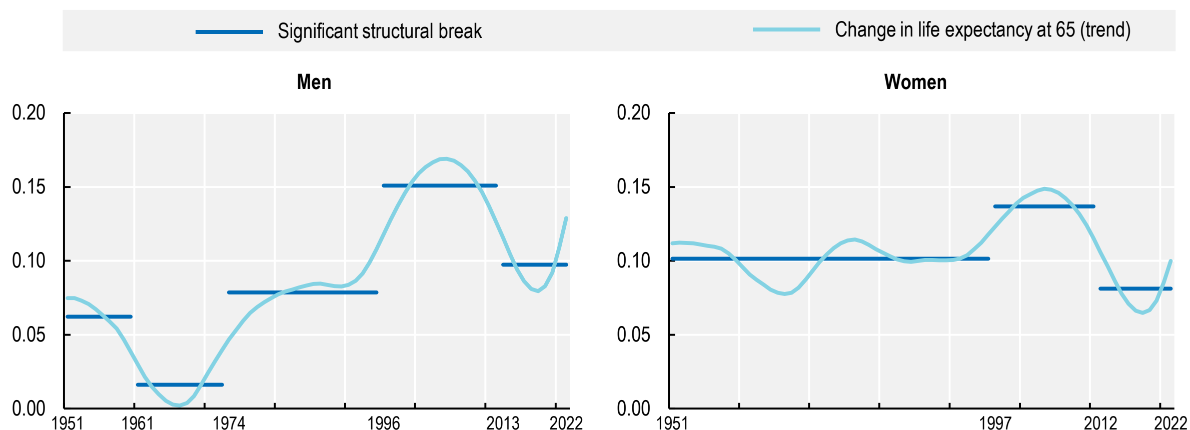
Source: United Nations, Department of Economic and Social Affairs (2022). World Population Prospects, Online Edition.

StatLink https://stat.link/s7qlw0

After a period of faster longevity growth between the mid-1990s and the early 2010s, improvements in remaining life expectancy at age 65 have slowed significantly for both men and women in recent years. On average in all 38 current OECD countries, life expectancy at age 65 increased at a pace of around 1.5 years for men per decade and 1.4 years for women during that period of faster life-expectancy increases (Figure 1.2). Since about 2012, this pace has slowed to 1.0 and 0.8 years per decade for men and women respectively, with the break in the trend being magnified by COVID-19.

Figure 1.2. Life expectancy gains have been smaller over the last decade

Annual change in remaining life expectancy at age 65 in the OECD on average, in years



Note: The breaks are significant at the 99% confidence level. To limit interferences from short-term fluctuations in change in period life expectancy, the breaks are estimated on the Hodrick-Prescott filtered trend series (lambda=100).
Source: See Chapter 6, Figure 6.4, https://stat.link/kqwb6l.

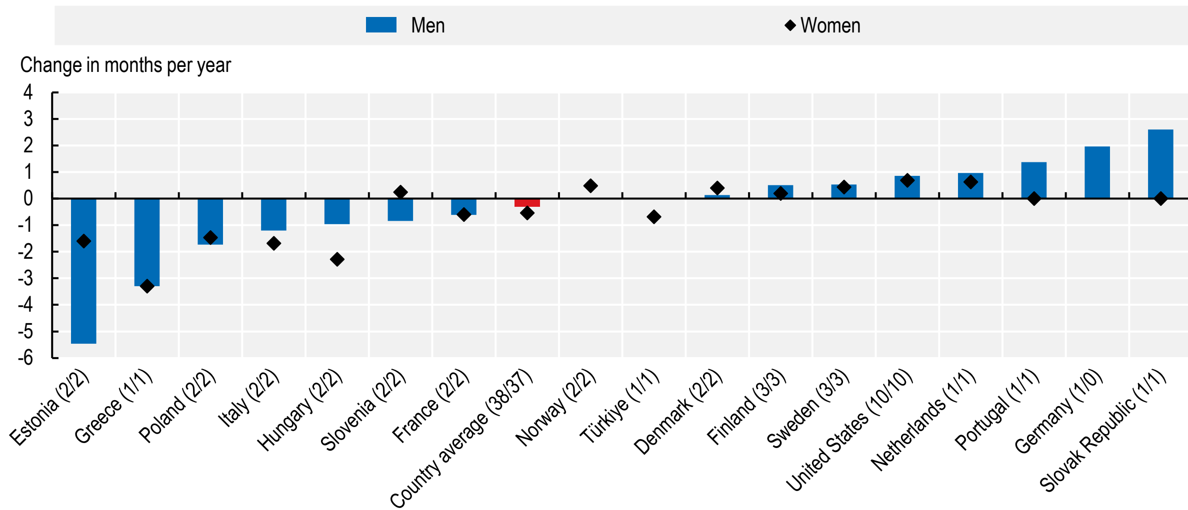
There are substantial inequalities in life expectancy between socio-economic groups in all countries, whether based on occupation, income and education (Mosquera et al., 2018[4]; OECD, 2017[5]). Lifestyle factors, in particular smoking, play an important role in explaining for example educational differences in life expectancy (Mackenbach et al., 2019[6]), and educational attainment and life expectancy have some common determinants such as the socio-economic status of the family one grew up in. Income redistribution from those dying early to those dying late is the core insurance function of pension systems. As low earners have a shorter life expectancy and thus receive benefits over a shorter period, this effect is regressive and thus it reduces the progressivity of pension systems.

Addressing longevity inequality is a challenge for pension policies. One theoretical solution would be to differentiate retirement ages by socio-economic groups based on differences in life expectancy, but those groups would be very difficult to define in a practical way and implementation of differentiated rules would be very difficult (Deeg, De Tavernier and de Breij, 2021[7]). Hence, policy makers should take this inequality into account when determining benefit levels for low-income workers as large longevity gaps can justify high redistribution within the pension benefit formulae. However, when dealing with adequate measures to respond to rising longevity, it is not the existence of inequalities in life expectancy but changes in life expectancy gaps over time that matter most for the distributive impact of linking retirement ages to life expectancy (OECD, 2021[8]). If inequalities in life expectancy are broadly stable, this means that improvements in life expectancy tend to benefit the different socio-economic groups equally.

While socio-economic inequalities in longevity are well-documented, the evidence on *changes* in these inequalities is mixed, varying across OECD countries and inequality measures. This updates and confirms the assessment in the previous edition of *Pensions at a Glance* (OECD, 2021[9]) based on accumulated evidence so far. Studies analysing how educational inequalities in life expectancy at age 60 or 65 evolve over time, show no general trend over time (Figure 1.3). There is wide evidence of a general trend of increasing inequalities in life expectancy in the United States (Crimmins and Saito, 2001[10]; Olshansky et al., 2012[11]; Solé-Auró, Beltrán-Sánchez and Crimmins, 2015[12]). Limited evidence for Germany suggests increasing educational inequalities among men between the mid-1990s and around 2010 (Grigoriev and Doblhammer, 2019[13]) and in Portugal and the Slovak Republic between 2010 and 2017 (Eurostat, 2020[14]). The gap has shrunk sharply in Estonia especially among men, and to a lesser extent in Greece, Hungary, Italy and Poland, between 2007 and 2017 (Eurostat, 2020[14]). These estimated sharp changes should not be extrapolated as they are likely to be temporary: just like a decline in the gap of more than five months per year in Estonia and three months per year in Greece cannot be sustained, the sharp increases found by single studies in Germany and the Slovak Republic could only reflect a snapshot rather than a sustainable long-term trend.

Figure 1.3. No international trend in the evolution of the educational gap in life expectancy

Average annual growth (in months) in life expectancy gap at 60 or 65 between the lowest and highest educational category, number of included study periods between brackets (men/women)



Note: Study periods are weighted by the length of the period assessed so that an evolution in life expectancy assessed over a 10-year period has double the weight of an evolution in life expectancy assessed over a five-year period. There is no change in the gap over time for men in Norway (covered by two study periods) and Türkiye (one study period).

Source: Crimmins and Saito (2001[10]), "Trends in healthy life expectancy in the United States, 1970-1990: gender, racial, and educational differences", https://doi.org/10.1016/s0277-9536(00)00273-2; Eurostat (2020[14]), "Life expectancy by age, sex and educational attainment level (demo_mlexpecedu)", https://ec.europa.eu/eurostat/databrowser/view/DEMO_MLEXPECEDU/default/table?lang=en; Gheorghe et al. (2016[15]), "Health inequalities in the Netherlands: trends in quality-adjusted life expectancy (QALE) by educational level", https://doi.org/10.1093/eurpub/ckw043; Grigoriev and Doblhammer (2019[13]), "Changing educational gradient in long-term care-free life expectancy among German men, 1997-2012", https://doi.org/10.1371/journal.pone.0222842; Insee (2016[16]), "Les inégalités sociales face à la mort", https://www.insee.fr/fr/statistiques/1893092?sommaire=1893101; Olshansky et al. (2012[11]), "Differences In Life Expectancy Due To Race And Educational Differences Are Widening, And Many May Not Catch Up", https://doi.org/10.1377/hlthaff.2011.0746; Solé-Auró, Beltrán-Sánchez and Crimmins (2015[12]), " Are Differences in Disability-Free Life Expectancy by Gender, Race, and Education Widening at Older Ages?", https://doi.org/10.1007/s11113-014-9337-6; Zarulli, Jasilionis and Jdanov (2012[17]), "Changes in educational differentials in old-age mortality in Finland and Sweden between 1971-1975 and 1996-2000", https://doi.org/10.4054/demres.2012.26.19.

https://stat.link/32hzyp

Based on the few studies analysing changes in occupational or income inequalities in remaining life expectancy at 60 or 65, it is not possible to exclude a potential widening of the occupational life-expectancy gap. Change in occupational inequalities in life expectancy at 60 or 65, often measured as the difference between manual workers and professionals or managers, was only assessed for France (Cambois, Robine and Hayward, 2001[18]; Insee, 2016[16]), Germany (Kibele, Jasilionis and Shkolnikov, 2013[19]) and Sweden (Burström, Johannesson and Diderichsen, 2005[20]). In France, the occupational gap in remaining life expectancy has been stable over time for women and at most increased slightly for men – by about one week per year. In Germany, the gap increased by 1.5 months per year for men, whereas in Sweden it increased by one month per year for men and 0.4 months per year for women. One German study on income inequalities in life expectancy at 65 found that inequalities increased for both men and women between the early 1990s and the early 2010s (Lampert, Hoebel and Kroll, 2019[21]).

Including studies assessing remaining life expectancy also at younger ages, there is no clear trend in educational and occupational inequalities in life expectancy for most OECD countries. This is the case for Australia, Austria, Denmark, Finland, France, Greece, Hungary, Iceland, Israel, Korea, Mexico, the Netherlands, New Zealand, Norway, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom. The lack of a clear trend can either be the consequence of

inequalities having remained stable or of contradictory trends between studies or over time periods. Among studies assessing life expectancy around age 30, educational gaps did grow in Belgium during the 1990s (Deboosere, Gadeyne and Van Oyen, 2009[22]), in Canada from the mid-1990s to around 2010 (Bushnik, Tjepkema and Martel, 2020[23]) and in Lithuania from 2001 to 2014 (Mesceriakova-Veliuliene et al., 2021[24]),[2] while they have decreased in Czechia between 2010 and 2016 (OECD, 2013[25]; OECD, 2019[26]).

Different measures of healthy life expectancy

In the debate on increasing retirement ages as people live longer it is sometimes proposed to link retirement ages to healthy life expectancy instead of life expectancy as not all extra years are spent in good health. Retirement-age links should be based on a robust indicator to ensure that changes in retirement ages are predictable and that people can adjust their retirement expectations in time.

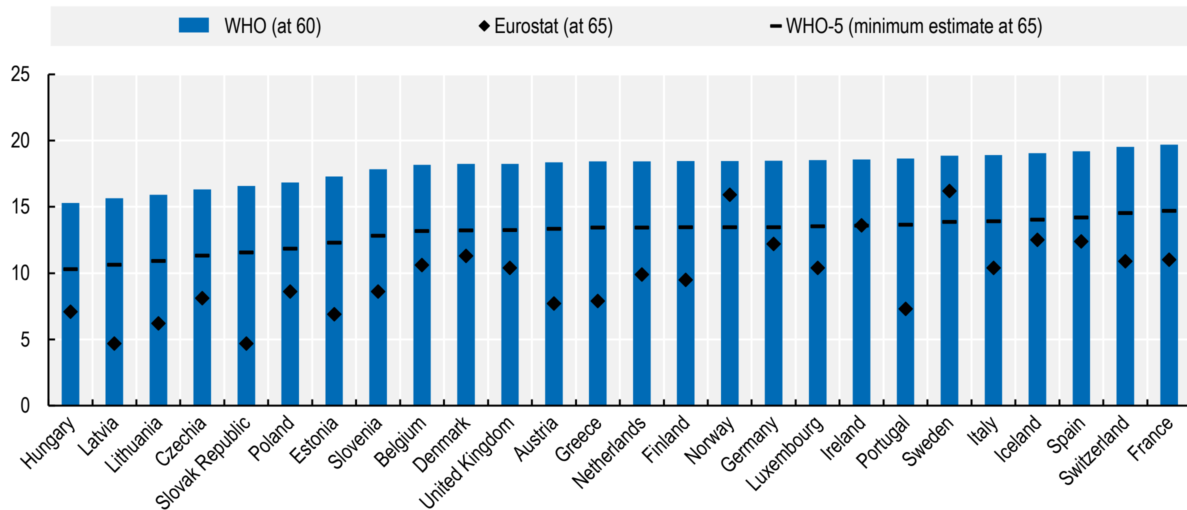
The World Health Organization (WHO) and Eurostat use different methodologies to produce estimates of healthy life expectancy.[3] The WHO defines healthy life expectancy (HALE) as the average number of years in good health a person (e.g. at age 60) can expect to live based on current rates of ill-health and mortality. The WHO publishes estimates by age and sex based on the disability-adjusted life years (DALY) methodology.[4] These estimates are produced from objective health data on 369 diseases and injuries gathered from a wide array of sources including among others censuses, household surveys, civil registration and vital statistics, disease registries and health service use (Vos et al., 2020[27]). Disability is not measured directly but estimated based on the expected disabling burden of conditions (Saito, Robine and Crimmins, 2014[28]).

Eurostat, on the other hand, defines healthy life years (HLY) as the number of remaining years that a person of specific age is expected to live without any severe or moderate health problems. Health problems are measured using the Global Activity Limitation Instrument (GALI) that is included in the annual EU Statistics on Income and Living Conditions (EU-SILC) survey. GALI is a single subjective question to assess health: “For at least the past six months, to what extent have you been limited because of a health problem in activities people usually do?”. Respondents can select one of the following options: severely limited; limited but not severely; and, not limited at all. Respondents are considered to be living without any severe or moderate health problems if they indicate not to be limited at all in performing usual activities (Eurostat, 2020[29]). The subjective nature of the indicator makes it unsuitable as a condition for automatic adjustments in pension policies such as retirement-age links for a number of reasons, including the need for reliable survey research with a large enough sample and the possibility for people to reply strategically to the survey question if they are aware that it can influence pension policy.

The WHO’s healthy life expectancy estimates are almost consistently higher than the ones produced by Eurostat. Numbers cannot be expected to be similar as the WHO calculates healthy life expectancy at age 60 while Eurostat analyses it at age 65, but based on the WHO estimate at age 60 a range of possible values at age 65 can be roughly estimated. The Eurostat estimates of healthy life expectancy at age 65 only fall in the range of possible WHO estimates for Ireland, Norway and Sweden (Figure 1.4).[5] However, the Eurostat and WHO measures are correlated, with a linear correlation coefficient of 0.63.

Figure 1.4. WHO estimates higher healthy life expectancy than Eurostat

Healthy life expectancy at age 65 according to Eurostat and at age 60 according to WHO, 2019



Note: Healthy life expectancy at 65 following the WHO calculation is likely to fall between the lines and the top of the blue bars. The top of the bar shows healthy life expectancy at age 60 (HLE60); the bottom shows HLE60 – 5. Hence, the bottom of the bar shows life expectancy at age 65 under the assumption that all life years between 60 and 65 are in good health. Eurostat data refer to 2018 for Iceland and the United Kingdom.
Source: Eurostat, Healthy life years by sex (HLTH_HLYE); WHO, Healthy life expectancy (HALE) at age 60 (WHOSIS_000007).

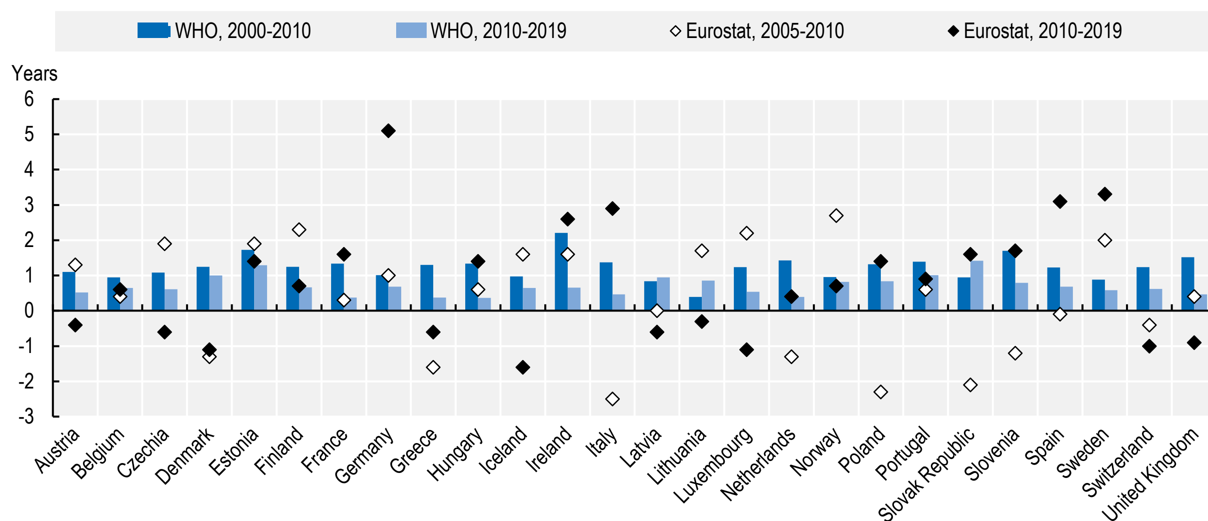
StatLink https://stat.link/0r34e7

The WHO estimates show a stable growth in healthy life expectancy over time compared to Eurostat. According to the WHO calculations, all countries for which comparable data are available experienced growth in healthy life expectancy over both the first and the second decade of the 21st century (Figure 1.5). Eurostat estimates in contrast are less stable over time and show negative growth in 15 countries either between 2005 and 2010 or between 2010 and 2019 – or in both periods. For instance, in Denmark, the WHO calculated that healthy life expectancy grew by at least one year in each period, whereas Eurostat found a decrease of at least one year for both periods. The Eurostat measure changes a lot in an erratic manner over time for individual countries, potentially as a result of limited sample sizes.

The WHO indicator, while being more stable, provides little added value over measures of remaining life expectancy. The cross-country correlation between healthy life expectancy (as measured by WHO) and remaining life expectancy (as measured by UN) is very strong, with a linear coefficient of 0.95. Moreover, based on the WHO indicator, the share of remaining life expectancy people can expect to live in good health is remarkably stable across countries and over time. On average across the OECD, 76% of life expectancy at age 60 was in good health based on the WHO estimates in 2019, ranging from 71% in the United States to 78% in France, Israel and Japan. This share has remained stable since 2000 (OECD, 2023[30]). While the WHO measure may seem more robust, these limited cross-country differences are puzzling, which may suggest that the measure captures the reality only partially. Using the WHO measure for automatic links in pension policies would thus entail a complex procedure requiring more data and entailing a higher risk of errors than using remaining life expectancy, for little gain. Based on these estimates, retirement age links to life expectancy designed to keep the share of adult life spent in retirement constant (e.g. increasing the retirement age by two-thirds of life-expectancy increases) are unlikely to result in a shortening of healthy life expectancy at retirement.

Figure 1.5. WHO show more stable growth in healthy life expectancy over time than Eurostat

Growth in healthy life expectancy in years



Note: Eurostat data refer to 2007 instead of 2005 for Switzerland and to 2018 instead of 2020 for Iceland and the United Kingdom. Eurostat data are imputed for Italy for 2010 as data are missing for that year but the estimates for 2009 and 2011 are the same.
Source: Eurostat, Healthy life years by sex (HLTH_HLYE); WHO, Healthy life expectancy (HALE) at age 60 (WHOSIS_000007).

https://stat.link/mekpzj

Special rules for early starters

Some countries (see below) have introduced special rules for people who started working early as a way to account for inequalities in health and life expectancy. The reasoning is that those people have enjoyed fewer years of education and are unlikely to have a tertiary education degree, and therefore are more likely to perform physical labour or to work in hazardous environments, impacting their health and life expectancy. However, the analysis of such a scheme in France shows that mortality rates are not higher for people who retired through the early-starter scheme and that they in fact are in better health at retirement than people who retired in the general old-age pension scheme. A key explanatory factor is that early-starter schemes typically entail a long career requirement, so that only comparably healthy people can benefit from the scheme (Aubert, 2023[31]; Börsch-Supan et al., 2022[32]).

In most countries with special rules for early starters, early retirement rules are relaxed for this group. Denmark legislated a new flat-rate benefit in 2020 allowing people to retire early as of 2022. Access to the benefit requires between 42 and 44 years worked or credited between age 16 and six years before the statutory retirement age, resulting in between 1 and 3 years of early retirement, respectively. With the statutory retirement age currently at 67, the scheme can only be accessed by people who started working between age 16 and 19. In 2022 the benefit was equal to 35% of gross average earnings. France allows people who started working before age 16, 18, 20 and 21 to retire at age 58, 60, 62 and 63, respectively, on the condition of having a full career, which is increasing from 42 to 43 years (see Recent pension reforms). Italy allows people who worked at least 12 months before age 19 to retire after 41 years worked. In Luxembourg, early old-age pension is in principle available as of age 60 for people with a career of at least 40 years worked or credited with study years between age 18 and 27 counting as periods credited. However, early retirement is accessible already as of age 57 for people who effectively worked for 40 years. Hence, the scheme requires labour market entry before age 20. Slovenia allows men to retire

two years earlier and women three years earlier if they started to pay contributions before age 18 and have a 40-year career.

Germany and Portugal allow for early retirement without a penalty for early starters. In Germany, people can access early retirement without a penalty between 2 and 2.5 years (depending on year of birth) before the statutory retirement age in case of a 45-year career. For birth cohorts until 1952 this required entering the labour market latest at age 18; from the 1964 cohort it will require entering latest at age 20. Portugal allows people to access early retirement without a penalty after a 48-year career or after 46-year career with contributions first paid before age 17. In addition, for people who paid 40 years of contributions by age 60 – requiring labour market entry latest at age 20 –, old-age benefits are accessible without penalty four months earlier for each extra year contributed after 40 years of contributions, but not before age 60.

Austria and Switzerland treat years worked before age 20 in a special way although it does not grant access to early retirement. Austria provides a bonus to people who worked at least for one year before age 20. The bonus equals EUR 1 per month for each month worked before age 20 with a maximum of 60 months, corresponding to a monthly benefit of between EUR 12 and EUR 60. The bonus was introduced in 2022 to replace an early retirement scheme and is meant to improve pension adequacy of people who started early as they often have low pension build-up in their first years of employment. In Switzerland, the pension calculation in principle only accounts for contributions made as of age 20, but contributions paid between age 17 and 19 can be used to compensate up to three years of missing contributions later in the career.

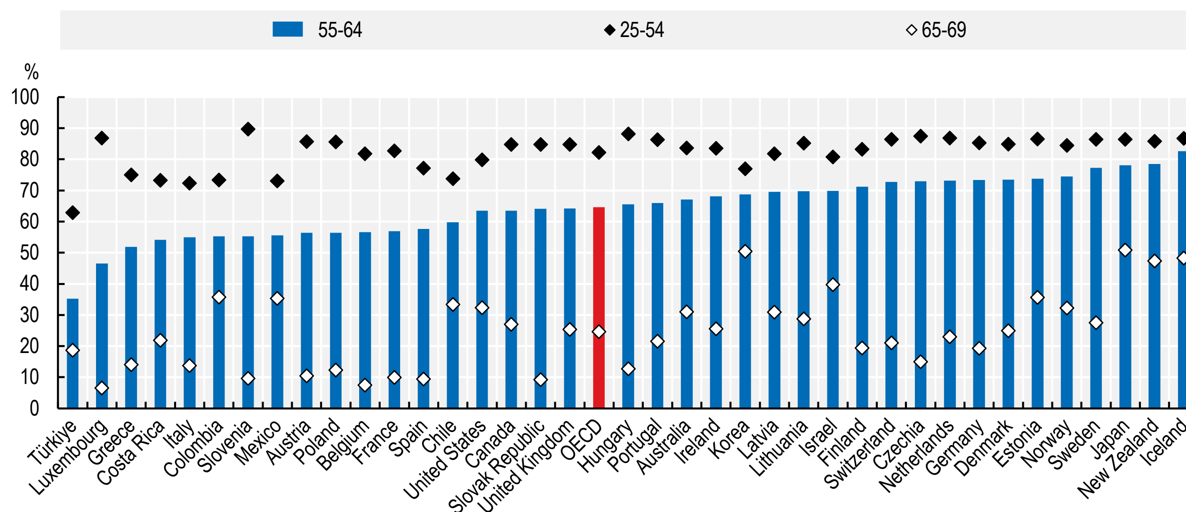
In contrast to special rules for people who entered the labour market early, some countries credit periods of education in pension build-up. This is a regressive policy as it strengthens the pensions of those who can expect to live longer and to do so in good health. A few OECD countries credit study periods. Germany credits up to eight years of studies from age 17, and Luxembourg credits all study years between age 18 and 27. Finland credits three to five years depending on the type of study, and in Sweden period are credited for students receiving certain types of government support such as study grants. Three countries abolished crediting new study periods but will still pay pensions based on credited study periods for decades to come: Czechia credits secondary education that took place before 1996 and tertiary education that took place before 2010; Hungary credits vocational and higher education study years before 1998 with the number of years credited depending on the type of study; and the Slovak Republic credits secondary and tertiary education as of age 16 that took place before 2004. In addition, study periods can be purchased in nine OECD countries, either through schemes that allow a certain number of years of education to be purchased (Austria, Belgium, Greece, Hungary, Italy and the Slovak Republic), or through a general purchase option (Czechia, Slovenia and the United Kingdom). Japan and Switzerland stand out as the only countries where students have to pay mandatory contributions as of age 20.

Still increasing employment of older ages throughout COVID-19

The employment rate of older age groups is well below that of prime-age workers. On average across the OECD, 64.6% of people aged 55-64 and 24.7% of those aged 65-69 are in employment, compared to 82.2% of those aged 25-54 (Figure 1.6). Less than half of people in the age group 55-64 are in employment in Luxembourg and Türkiye, compared with more than three-quarters in Iceland, Japan, New Zealand and Sweden. In the age group 65-69, fewer than one in ten are employed in Belgium, France, Luxembourg, the Slovak Republic, Slovenia and Spain against around half in Iceland, Japan, Korea and New Zealand. Moreover, in Iceland, Japan, Korea, New Zealand, Norway and Sweden the gap in employment rates between people aged 55-64 and those aged 25-54 is 10 percentage points. or less. That gap is between 25 and 30 percentage points in Austria, Belgium, France, Poland and Türkiye, and it is even larger in Luxembourg and Slovenia.

Figure 1.6. Employment rates for older adults lag behind those of prime-age individuals

Employment rates by age group, 2022



Source: *OECD Labour Force Statistics*, Australian Bureau of Statistics table LM9 for Australian employment rates 65-69.

However, the situation has sharply improved over the last decades. Since 2000, the employment rates of older individuals have substantially increased in most OECD countries. Across the 33 OECD countries for which data are available for the entire 2000-22 period for all age groups, the employment rate among 55-64 year-olds grew by 20.5 percentage points (Figure 1.7, Panel A). The increase exceeded 40 percentage points in Hungary and the Slovak Republic, which had employment rates around half of the OECD average at the start of the period and have basically closed the gap in 2022.[6] Among the 65-69, the employment rate grew by 9.4 percentage points on average across the 33 OECD countries.

The impact of the COVID-19 pandemic has not reversed the trend of increasing employment at older ages. Concerns over a permanent reduction of labour supply ("great resignation") have not materialised (OECD, 2023[33]), despite some concrete evidence of increasing inactivity among older individuals in some OECD countries in the initial stages of the pandemic. The employment rates for the age groups 55-64 and 65-69 grew by 2.4 percentage points and 1.2 percentage points, respectively, compared to 1.0 percentage points among people aged 25-54, between 2019 and 2022 on average (Panel B). Among the 55-64, the increase was particularly strong in Greece and Hungary whereas Finland, Latvia, Lithuania, the Netherlands and Portugal saw substantial increases in employment among the 65-69 age group. However, the COVID-19 pandemic and its economic impact did result in declining employment rates in some countries in particular in Latin America, with declines of more than 1 percentage point for the age group 55-64 in Chile, Colombia, Costa Rica and the United Kingdom, and for the age group 65-69 in Chile, Colombia, Costa Rica, Israel, Mexico and Switzerland.

Figure 1.7. Most OECD countries have resumed the pre-COVID trend of growing employment at older ages

Percentage-point change in employment rates of different age groups over the periods 2000-22 (Panel A) and 2019-22 (Panel B)

55-64 | 25-54 | 65-69

A. Change 2000-2022

p.p.

40 30 20 10 0 -10

Iceland, Türkiye, Mexico, United States, Costa Rica, Norway, Switzerland, Korea, Chile, Sweden, Greece, United Kingdom, Portugal, Japan, Canada, Denmark, Luxembourg, OECD-33, Spain, Australia, New Zealand, Ireland, Israel, France, Italy, Poland, Austria, Finland, Lithuania, Belgium, Estonia, Slovenia, Latvia, Netherlands, Germany, Czechia, Slovak Republic, Hungary

B. Change 2019-2022

p.p.

10 8 6 4 2 0 -2 -4 -6 -8 -10

Chile, Costa Rica, Colombia, United Kingdom, Sweden, Mexico, Switzerland, United States, Canada, Germany, Italy, Lithuania, Denmark, Türkiye, Estonia, Norway, Japan, Israel, Korea, Austria, Latvia, New Zealand, OECD-37, Australia, Luxembourg, Netherlands, Spain, France, Finland, Belgium, Iceland, Ireland, Czechia, Slovenia, Poland, Slovak Republic, Portugal, Greece, Hungary

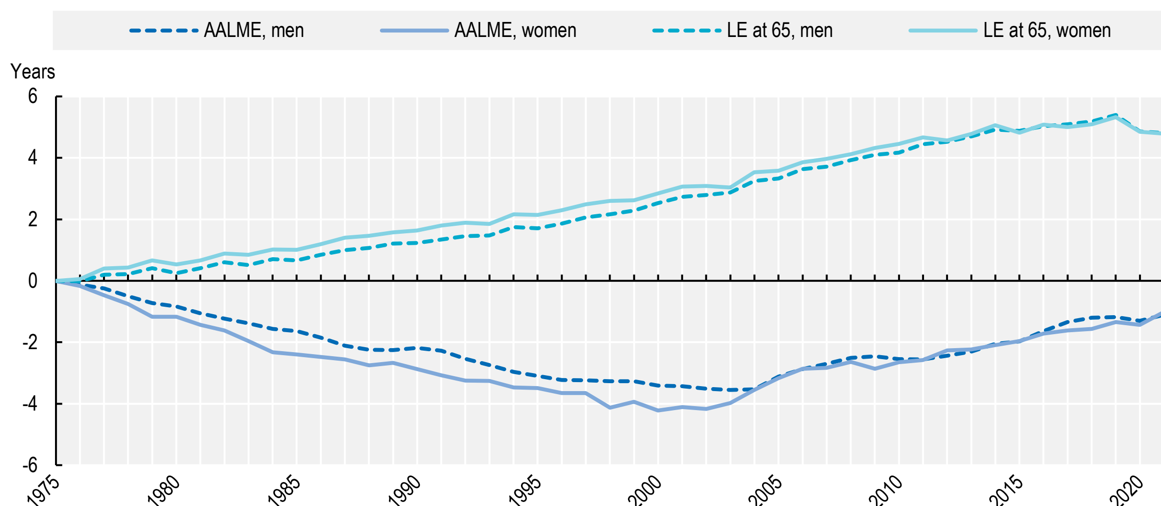
Note: In Panel A, Czechia, Japan, Luxembourg and Poland are not included in the average as no data are available for the 65-69 age group; Colombia is not included as no data are available for all age groups for the year 2000. In Panel B, Luxembourg is not included in the average as no data are available for the 65-69 age group.
Source: *OECD Labour Force Statistics*, Australian Bureau of Statistics table LM9 for Australian employment rates 65-69.

Combining long-term trends in life expectancy and labour market exit age suggests that health is currently not a key obstacle to higher participation rates at older ages. People on average still leave the labour market at an earlier age than in 1975 despite strong increases in life expectancy. With the exception of the impact of the COVID-19 pandemic in 2020, life expectancy at age 65 has been increasing steadily since 1975, by 5.3 years in total for both men and women by 2019, before dropping by half a year for both sexes in 2020 (Figure 1.8). At the same time, labour market exit ages had drifted lower until the turn of the millennium. Across 25 OECD countries for which data are available for the entire time series, men and women left the labour market 3.4 and 4.2 years earlier, respectively, in 2000 than in 1975. After a couple

of years of stability in the average age of labour market exit, the trend was reversed in the first half of the 2000s and people on average have been gradually exiting the labour market later, and in total by 2.3 years for men and 3.2 years for women since 2000. Since the mid-2000s, the labour market exit age has increased roughly at the same pace as remaining life expectancy at age 65.

Figure 1.8. Average time in retirement from the labour market increased substantially since 1975

Evolution in years of the average age of labour market exit (AALME) and life expectancy (LE) at the age of 65 by gender, average of 25 OECD countries, 1975-2021



Note: Average of 25 OECD countries for which data on effective age of labour market exit and life expectancy at the age of 65 are available for both men and women for all years in the period 1975-2021. Due to missing data, Austria, Canada, Chile, Colombia, Costa Rica, Germany, Ireland, Israel, Latvia, Lithuania, Slovenia, Türkiye and the United Kingdom are not included in the OECD average.
Source: OECD calculations.

Pensioners' income security and inflation

The COVID-19 pandemic, Russia's war of aggression against Ukraine and adjustments of macroeconomic policies have triggered an inflation wave felt across the globe. While energy prices are declining since the end of 2022 and food price inflation has slowed down since spring 2023, core inflation (excluding food and energy) remains at an elevated level. Inflation has not hit all OECD countries equally, as Japan and Switzerland saw consumer prices increase by only 6% between January 2021 and August 2023, whereas Colombia, Czechia, Estonia, Hungary, Latvia, Lithuania, Poland and the Slovak Republic experienced price increases of between 25% and 40% over the same period. In Türkiye, the CPI even more than tripled over the same period. People facing increasing expenditures due to inflation are affected if their incomes are not adjusted at a similar pace in a timely manner. The extent to which older people are exposed to a potential loss in purchasing power thus depends on pension indexation mechanisms and their effective application. These mechanisms vary greatly across OECD countries as well.

Older people's consumption patterns and inflation

The inflation surge since 2021 has increased expenditures somewhat more for older people than for others in many countries. As older people tend to have lower incomes than the total population in most OECD countries, they tend to spend a larger share of their budgets on energy and food. Yet, not all older

people were affected in the same way: the impact of inflation differs substantially between older people themselves according to French data, with a higher variation in cost-of-living increases than for any other age group (Insee, 2023[34]). Certainly not all older people have thin budgetary margins to absorb price increases. Older people generally dissave at a much slower pace than the life-cycle model would imply, with a substantial part of older people even continuing to accumulate savings in retirement (Horioka and Ventura, 2022[35]; Niimi and Horioka, 2019[36]). In the majority of OECD countries studied in Causa et al. (2022[37]), inflation has had a bigger negative effect on the expenditures of older people relative to those of middle-aged people.[7]

Beyond lower incomes, some structural factors explain why inflation had a bigger impact on older people's cost of living. Increasing food prices[8] and, in particular, heating costs have weighed on older people's budgets. In France, for instance, heating accounts for 3% of expenditures of people younger than 30, compared to 6% for people aged 60-74, and about 9% for those aged 75+ (Insee, 2023[34]), while in Ireland, energy costs accounted for 49% of the cost-of-living increase of people aged 65+ in December 2021, compared to 35% for people younger than 35 (Lydon, 2022[38]). Related to the high home-ownership rates among older people (Cournède and Plouin, 2022[39]), people often stay in the same family home after the children moved out and even after losing their spouse. Not only do older people lose economies of scale on heating expenses as a result of staying in their homes, these older homes are often also less energy efficient (European Construction Sector Observatory, 2019[40]) and more likely to use heating systems based on fossil fuels (Insee, 2023[34]).[9] The large heterogeneity in the energy efficiency of older people's dwellings and in the types of energy sources they use for heating contribute to the higher variation in impact of inflation among older people compared to other age groups.

Inflation disparities between urban and rural areas also contribute to variation in inflation across age groups in most OECD countries as older people live relatively more often in rural areas (OECD, 2022[41]). On average across 10 OECD countries, for instance, the difference in the loss of purchasing power between rural and metropolitan areas was bigger than between the lowest and the highest income quintile over the period between August 2021 and August 2022 (Causa et al., 2022[37]).

Indexation rules and pensioners' exposure to inflation shocks

While the cost of living has risen faster for older people than for other age groups in many countries, pensioners may still be less affected in terms of purchasing power thanks to the indexation of pension benefits. Indexation mechanisms vary significantly across countries and across pension schemes within countries. The extent to which indexation prevented a real income loss among retirees depends on whether pensions are indexed to prices or another indicator such as wages, as well as on the timing of adjustments and the reference periods they are based on.

Price versus wage indexation

During a surge in inflation resulting from a negative supply shock, price indexation provides better protection against a drop in standards of living than wage indexation. While price indexation is meant to stabilise the purchasing power of retirees, in normal times wage indexation generates greater benefits over time as productivity gains translate in positive real-wage growth. However, with a sudden increase in prices and falling real wages, wage indexation does not protect the purchasing power of pensioners and price indexation becomes more costly than initially anticipated for public finance or pension providers more generally: the ongoing episode of high inflation thus reverses the standard way of thinking about pension indexation (OECD, 2022[42]).[10]

Price indexation may even have overcompensated pensioners in some countries. First, pensioners may have been compensated twice for high energy prices, first via energy cheques and subsequently via price indexation of pensions. Second, average price inflation may have effectively been lower than indicated by CPI in countries where fixed-price or regulated energy contracts are commonplace. Indeed, at any given

moment, CPI accounts for how much an average household would pay for energy if it were to sign a new energy contract today. When there is a temporary jump in energy prices, this is fully reflected in the index even if it does not affect those households with a fixed-price energy contract. For instance, in Belgium, the CPI indicates that energy was 81% more expensive in 2022 compared to 2018, whereas the average energy bill was estimated to be only 17% higher – the difference is only partially explained by reduced energy consumption. The overestimation of the price most people pay for energy would result in an overestimation of CPI by 3.3% on average over the whole of 2022 (Peersman, Schoors and van den Heuvel, 2023[43]). Similarly, in the Netherlands, year-on-year inflation would have been around half the official number for several months throughout 2022 if fixed-price contracts were accounted for (Statistics Netherlands, 2023[44]). Hence, Statistics Netherlands has decided to adjust its CPI calculations as of June 2023 to account for people with fixed-price contracts. However, these effects are temporary as CPI inflation is likely to underestimate price increases when energy prices come down, as some consumers will be locked in energy contracts with a higher fixed price.[11]

Price indexation is the most common form of indexation of pensions in payment across OECD countries, in particular for targeted benefits (Table 1.1). Targeted benefits are adjusted to prices in 21 OECD countries, basic pensions in four (out of 17) countries and earnings-related pensions in 18 countries. Japan adjusts basic and earnings-related pensions below prices when the number of active contributors to the pension scheme declines. Price indexation is typically based on the consumer price index (CPI), although some countries deviate from this standard.[12] The Slovak Republic indexes both targeted and earnings-related pensions to a pensioner-specific cost-of-living index, and Czechia will do so as well for the price component in its mixed indexation of earnings-related pensions as of 2025 – it currently uses highest of either CPI or a pensioner-specific cost-of-living index, as does Australia for its targeted pensions.[13] Spain reintroduced price indexation in November 2021, effective as of 2022, after the previous adjustment mechanism resulted in a decline in pensions in real terms several years in a row (OECD, 2021[8]).

Several countries index pensions in payment to prices, and in addition, partially or fully, to real-wage growth if positive. Within the OECD, 5 countries do so in their targeted scheme, 4 in their basic scheme and 4 in their earnings-related scheme.[14] Israel, Luxembourg and the United Kingdom adjust all their public pensions to the highest of either price or wage growth, with the latter applying in addition a minimum increase of 2.5% as part of the triple lock that was temporarily suspended in 2022 (see below). Czechia, Latvia and Poland index their earnings-related pensions fully to prices and in addition partially adjust to the growth rate of real wages (Czechia, Poland) or the real wage bill (Latvia) if the latter is positive. The targeted pension in Australia[15] and the basic pension in New Zealand are indexed to prices but are in practice over time adjusted to wages as their lower-bound level is defined relative to wages.

Finally, some OECD countries index pensions in payment to a mix of price and wage growth. Estonia, Switzerland and Norway since its 2022 pension indexation reform [16] combine partial indexation to CPI with partial indexation to nominal wages (Norway, Switzerland) or the wage bill (Estonia) in all their public pension schemes; Finland and Slovenia do so in their earnings-related scheme and Germany in its targeted scheme.

Table 1.1. Overview of OECD countries by way of indexing pensions in payment

Less than prices	Prices		At least prices		Mix of prices and wages	Wages	Less than wages	Discretionary
	CPI or similar		100% prices + x% real wages if positive	Highest of prices or wages	Part prices, part wages (%p+%w)	Avg. wage or similar		
TARGETED BENEFITS								
0	21		5		4	3	0	4
	AUT	JPN		AUS	CHE (50+50)	DNK		COL
	BEL	KOR		GBR (or 2.5%)	DEU (70+30)	LVA		CRI
	CAN	LTU		ISL	EST (20+80, wb)	NLD		CZE
	CHL	POL		LUX	NOR (50+50)			IRL
	ESP	PRT		NZL				
	FIN	SVK						
	FRA	SVN						
	GRC	SWE						
	HUN	TUR						
	ISR	USA						
	ITA							
BASIC PENSIONS								
1	4		4		2	4	0	2
JPN	CAN	ISR		GBR (or 2.5%)	EST (20+80, wb)	CZE		IRL
	GRC	KOR		ISL	NOR (50+50)	DNK		MEX
				LUX		LTU (wb)		
				NZL		NLD		
EARNINGS-RELATED PENSIONS								
1	18		4		5	2	1	0
JPN	AUT	HUN	CZE (50%)	LUX	CHE (50+50)	DEU	SWE	
	BEL	ITA	LVA (wb, 50-80%)		EST (20+80, wb)	LTU (wb)		
	CAN	KOR	POL (20%)		FIN (80+20)			
	CHL	MEX			NOR (50+50)			
	COL	NLD			SVN (40+60)			
	CRI	PRT						
	ESP	SVK						
	FRA	TUR						
	GRC	USA						

Note: The Statlink contains a more detailed overview of OECD countries' pension indexation policies. FDC annuities are not included with the exception of Chile and Mexico where CPI indexation is mandatory for FDC annuities. Wb = wage bill. Some countries indexing to prices do not use the (full) CPI but use similar metrics. This includes alternative cost-of-living measures (Australia, the Slovak Republic and the United States, as well as Japan for targeted benefits), CPI measures where certain types of goods are removed from the basket (Belgium, France and Portugal), and measures where indexation in principle follows CPI but can be higher or lower depending on other metrics (the Netherlands and Portugal). The targeted pension in Australia and the basic pension in New Zealand are indexed to prices but in practice adjust to wages over time as they cannot fall below a certain percentage of average earnings (see Statlink for more information). In Austria, Italy, Latvia and Portugal, full price indexation is only applied for pensions below a certain threshold. In Canada, indexation is frozen if there is a projected deficit in the pension system and a political agreement on how to restore long-term financial sustainability cannot be reached, although this has so far never happened. Czechia will reduce the wage-growth component in indexation of earnings-related pensions from 50% to 33.3% from 2025. Since 2023, the targeted benefit in Germany is additionally adjusted to full price inflation over the last year as a proxy for inflation over the current year, although this supplementary adjustment in the current year is not taken into account in the calculation of the benefit in the next year. Greece adjusts pensions to less than CPI if real GDP declines. Japan indexes earnings-related and basic pensions to the wage bill until age 67, and applies price indexation as of age 68. Ireland currently adjusts targeted and basic pensions on a discretionary basis but is expected to introduce indexation following a smoothed-earnings method.

https://stat.link/8yb9m3

Some countries only apply full indexation to low pensions and index pensions above a certain threshold at a lower rate or not at all. This is the case in Austria, Colombia,[17] Italy,[18] Latvia[19] and Portugal. While Colombia, Latvia and Portugal[20] have clear rules about the thresholds above which pensions are adjusted at a lower rate than prices, these thresholds change very regularly in Austria and Italy resulting in quasi-discretionary indexation.

More than half of OECD countries tend to protect earnings-related pensions fully from inflation shocks. These include countries where earnings-related pensions are fully indexed to prices – CPI or similar, 100% prices plus real-wage growth if positive, highest of prices or wages (Table 1.1, columns "Prices" and "At least prices"). However, whether price-indexed pensions are adjusted quickly after the shock or with some delay resulting in a temporary loss of purchasing power depends on timing aspects of indexation mechanisms, which are discussed below. A few countries index pensions in payment to a mix of prices and wages or fully to wages, which should enable catching up over time as positive real-wage growth tends to generate higher indexation than prices in the long term.

Timing and reference periods for adjustments

Pension indexation mechanisms' ability to maintain the real value of pensions throughout the inflation shock also depends on various timing aspects of the mechanisms, including adjustment frequency, smoothing and the time between the reference period and indexation.

There are two general approaches to the timing of adjustments: fixed-frequency and fixed-threshold indexation. Almost all OECD countries apply fixed-frequency indexation, typically indexing once per year in a specific month, most often January. Australia, Hungary, the Netherlands and Türkiye index twice per year, Canada's targeted pension is indexed quarterly and the annuities in Chile's FDC scheme are even adjusted on a monthly basis. By contrast, Switzerland only indexes its earnings-related pensions every two years and Poland indexes its targeted benefits only every three years.[21] Facing similar lags, Latvia has recently decided to increase the frequency of adjustments of its targeted benefit and minimum pension from every three years to annually from 2024.

Belgium and Luxembourg do not adjust at fixed times but instead when an index exceeds a certain level (fixed-threshold indexation), and several other countries use fixed-threshold indexation as a secondary indexation mechanism to protect pensioners at a time of high inflation. In Belgium, pensions are increased by 2% whenever the CPI index exceeds the level it had at the time of the previous indexation by 2%. Luxembourg has the same rule in steps of 2.5% and combines it with fixed-frequency indexation for adjustments to real-wage growth, although indexation was temporarily suspended (see below). Several countries supplement fixed-frequency indexation with fixed-threshold indexation with higher thresholds than the ones used in Belgium and Luxembourg to provide income protection to pensioners at times of exceptionally high inflation: Chile for its targeted scheme (fixed threshold of 10%), Czechia and, since 2023, the Slovak Republic (5%) and Switzerland (4%). Czechia deviated from this rule in 2023 (see below).

Smoothing is a useful tool to avoid that indexation is too much affected by month-to-month fluctuations in prices or wages, but long smoothing periods also delay the adjustment after an inflation shock. Most OECD countries smooth adjustments over 12-month periods.[22] This is the case for pension schemes in Austria, Denmark, France, Germany, Greece, Hungary, Italy, Latvia, Norway, Poland, Portugal, Slovenia, Spain and Sweden, as well as Canada's mandatory earnings-related scheme and Lithuania's targeted scheme. Schemes in Chile, Czechia, Estonia, Israel, New Zealand, Switzerland, Türkiye and the United Kingdom do not apply any smoothing, and merely compare the index in a single month to the index in another month. Other countries apply smoothing over three months (Canada, Finland and the United States), four months (Belgium) or six months (Australia, Luxembourg and the Slovak Republic). Lithuania is an absolute outlier smoothing wage-bill growth over seven years in its contributory pension scheme.

Timely adjustment matters as the gap between the end of the reference period and the pension adjustment taking effect contributes to pensioners temporarily losing purchasing power when inflation accelerates. For most countries pensions are adjusted three or four months after the end of the assessment period. However, for some it is substantially longer: six months in Austria, seven months in Czechia, Germany[23] and the United Kingdom and for the Swedish targeted scheme, and even a full year in Denmark and two years in Latvia's targeted scheme.[24] By contrast, in Belgium, Israel, Luxembourg and Türkiye, pensions are adjusted in the month after the end of the assessment period, and the gap is two months in France and Spain as well as for the earnings-related scheme in Mexico. Slovenia indexes earnings-related pensions two months after the end of the assessment period, but the adjustment is applied retroactively starting from the previous month.

Finally, some countries index pensions based on projections of how inflation or wages will develop over the current year; they implement corrections afterwards to adjust for the difference between projected and observed changes.[25] Hungary indexes in January to the projected annual change in CPI, with a retroactive correction from January applied in November. Italy similarly indexes to the projected CPI inflation but implements the correction together with next year's January indexation. The Netherlands adjusts its basic and targeted schemes based on the projected increase in minimum wages set in collective bargaining over the current year. In both January and July, indexation equals 50% of the projected increase for the current year, plus a correction of the gap between projection and effective evolution over the last six months. Finally, Sweden indexes to projected wage growth minus 1.6% and Norway now to a mix of projected wage growth and price inflation for the current year, while correcting for differences between effective and projected changes in the past year.

A surge in inflation may create early-retirement incentives depending on indexation rules, in particular when pensions in payment are indexed (mostly) to prices whereas past earnings are either not uprated around the time of retirement or uprated based on wages. In those cases, there is an incentive to retire early and benefit from a high first indexation of the pension in payment to prices. In Finland, for instance, past earnings are uprated based on 80% wages and 20% prices whereas pensions in payment are indexed to 20% wages and 80% prices. Hence, it was financially beneficial to retire at the end of 2022 rather than at the beginning of 2023 as high inflation has created an incentive to retire as long as price inflation persists and wages lag. As a result, the number of people claiming a pension increased sharply in the autumn of 2022. In particular in December, the number of new pension claimants bounced to very high levels compared with the monthly average for both old-age and partial old-age pensions (Finnish Centre for Pensions, 2023[45]). Similarly, in Austria, in the calendar year of retirement, past earnings are not uprated and pensions are not indexed, while pensions are indexed on a pro-rata basis in the year after retirement depending on the exact month one retired. After the inflation shock, these rules generated an incentive to retire early and receive the full price indexation in the year after retirement; they were subsequently revised.

In sum, the impact of inflation on the purchasing power of pensioners is very dependent on the characteristics of the indexation mechanism. Figure 1.9 illustrates this with developments recorded in six countries. In Belgium, where indexation is based on a fixed threshold of 2% as discussed above, there were six indexations between September 2021 and May 2023. This resulted in earnings-related pensions rising roughly at the same pace as inflation overall and with limited lags. Targeted benefits grew even faster due to some previously scheduled supplementary benefit increases taking effect over this period (Figure 1.9). In Canada, targeted and earnings-related pensions are indexed to CPI on a quarterly and annual basis, respectively. The more frequent adjustment of targeted benefits provided better protection of purchasing power throughout the inflation surge.

In Poland earnings-related pensions recorded steadily growing losses in real terms between April 2022 and March 2023 due to the sharp rise in consumer prices, but once pensions were adjusted in March 2023 their value caught up again. Hungary faced an even steeper increase in prices. Hungary adjusts pensions at the start of the year to projected CPI inflation for that year, and then applies corrections throughout the year as needed. These corrections are applied retroactively from January through lump-sum payments

covering the difference between the initial and the corrected benefit level. This projection-based approach is complex and not well suited to deal with sharp price increases: inflation for the year 2022 was severely underestimated in the January indexation and even after a supplementary correction in July. However, the November adjustment and its retroactive implementation has resulted in pensions being fully adjusted to 2022 inflation.

Denmark and Japan have been much less successful in upholding pensioners' purchasing power in the short term. As Denmark combines wage indexation with smoothing over a full year and a one-year gap between the end of the reference period and indexation taking effect – pensions are indexed to the change in average wage between the third and the second year before indexation –, all aspects of its indexation mechanism result in a delayed response in case of an inflation shock and pensioners' incomes falling behind. This resulted in pensioners losing significant purchasing power over a longer period of time, although wage indexation will ultimately provide higher benefits as wage growth usually exceeds price growth. In Japan, pensions have also not kept up with price increases over this period – although the increase in inflation has been less steep than in other OECD countries. Basic and earnings-related pensions are indexed to less than prices which results in pensions losing value in real terms. Targeted benefits, which are only adjusted every five years, were not adjusted at all over this period.

Figure 1.9. Different types of pension indexation and their impact

Pension indexation and inflation (September 2021 = 100)

Belgium

HICP
Earnings-related pension
Targeted benefit

Canada

CPI
Earnings-related pension
Targeted benefit

Poland

HICP
Earnings-related pension
Targeted benefit

Hungary

HICP
Earnings-related pension
Retroactive adjustment

Denmark

HICP
Basic pension
Basic & targeted pension

Japan

CPI
Basic & earnings-related pension
Targeted benefit

Note: HICP = harmonised index of consumer prices. For Hungary, additional indexations throughout the year are retroactively applied from January.

Source: OECD Consumer Price Indices database; OECD calculations based on information provided by Member States.

Deviations from pension rules

In addition to the permanent changes in indexation rules in Norway and Spain (see above), several countries applied temporary deviations from their standard indexation rules since September 2021 (Table 1.2). Norway, Poland, Portugal and Spain increased low pensions above what the indexation rule would have required as CPI underestimated the cost-of-living increase for low-income people during the inflation shock. Norway increased its targeted benefits by 1.72% above regular indexation in January 2023. Poland adjusted earnings-related pensions following the general indexation rule in March 2023, but set a minimum flat-rate increase of 8.6% of the average pension[26] so that lower pensions were increased at a higher rate than inflation. Similarly, Portugal followed the general indexation rule but increased pensions by at least EUR 10 in 2022.[27] In Spain, on top of the re-introduction of price indexation on contributory benefits at the end of 2021 (see Recent pension reforms), non-contributory benefits were increased by 6.5% above inflation in January 2023. Finally, Lithuania, Slovenia and Türkiye increased all earnings-related pensions by more than the rule required. Lithuania, adjusting earnings-related pensions to wage-bill growth, implemented a supplementary 5% indexation in June 2022 to help people cope with the inflation surge. Slovenia increased earnings-related pensions in January 2022 by between 1.0% and 3.5% depending on the date the pension was claimed. Türkiye increased pensions by 30% in January 2023 ahead of the elections, exceeding the 16.5% adjustment The indexation rule would have required.

Czechia, Italy and the United Kingdom adjusted pensions at a lower rate than the index required (Table 1.2). In Czechia, the supplementary fixed-threshold indexation rule would have triggered an indexation of 11.5% in June 2023,[28] but due to its budgetary impact the rule was deviated from and an indexation of 2.3% plus a fixed sum of around 1.6% of the average pension was implemented instead. Italy applies reduced indexation to higher pensions. Finally, the United Kingdom temporarily suspended the triple-lock mechanism in 2022. In 2021, pensions were increased by 2.5% given yearly (as of September 2020) low inflation and negative wage growth. As COVID-19 restrictions were eased and wages rebounded in 2021, pensions would have had to increase by around 8% in 2022 if the triple lock was upheld. Due to the suspension, pensions were instead indexed in line with inflation (3.1%).

Some countries also adjusted the timing of indexation, with Finland, France and Latvia advancing indexation and Luxembourg and Portugal postponing it. Finland in principle indexes its targeted pension benefit once per year in January but moved forward part of that indexation to August 2022 to avoid that the purchasing power of people on these benefits drops too much (Table 1.2). After a long period of sub-indexation (OECD, 2022[42]), France similarly advanced part of the January 2023 indexation, increasing earnings-related and targeted benefits by 4% in July 2022. Latvia advanced indexation by two months in 2022. In addition, Italy advanced the correction for the underestimation of inflation in 2023 with one month: normally, the correction for the difference between projected and confirmed inflation takes place together with the next indexation in January, but the correction for 2023 (0.8%) is exceptionally applied in December. By contrast, Luxembourg, which applies threshold indexation to prices, suspended indexation between June 2022 and April 2023 to avoid further boosting inflation. In Portugal, indexation in January 2023 was only about half the amount it should have been if the rule was followed, although in combination with ad hoc supplements paid in 2022, low-income pensioners have received somewhat more than if the rule would have been followed. An additional adjustment in July 2023 increased pensions to the level of the full indexation required by the rule.

Table 1.2. Several countries have deviated from their pension indexation rules

Deviations from indexation rules since September 2021

	Amount		Timing	
	Better than index	Worse than index	Advanced	Delayed
Czechia		2.3% + flat amount equal to 1.6% of average pension compared with an increase of 11.5%		
Finland			5 months	
France			6 months	
Italy		Lower indexation in higher pension income bands	1 month	
Latvia			2 months	
Lithuania	Earnings-related pensions: +5%			
Luxembourg				9 months
Norway	Targeted benefits: +1.72%			
Poland	General indexation rule, but with a minimum flat-rate increase of 8.6% of the average pension			
Portugal	General indexation rule, but with minimum increase of EUR 10 (2.2% of average pension of private-sector workers)			6 months
Slovenia	Earnings-related pensions: +3.5% for pensions in payment since before 2011 +1.7% for pensions in payment since 2011 +1.0% other pensions and minimum pensions			
Spain	Targeted pension: +6.5%			
Türkiye	+13.5%			
United Kingdom		Suspension of triple lock: price instead of wage indexation		

Note: While France advanced indexation through an intermediary indexation based on the evolution of CPI in part of the reference period and Finland did so for its targeted benefits, Latvia advanced indexation by reducing the gap between the end of the reference period and implementation of the adjustment. Germany terminated a deviation from its indexation rule. As Germany does not apply negative indexation, a catch-up factor offsets non-implemented negative indexation by lowering the positive indexation in the following years. That factor was suspended in 2018 as there was a fear that it could result in the replacement rate for a standard worker falling below 48% before 2025 (OECD, 2021[8]). The catch-up factor was reinstated in July 2022, hence regular indexation was reduced by 1.17 percentage points to compensate for the lack of negative indexation in 2021 as a result of wages falling the year before due to the pandemic.
Source: Information provided by countries.

Pensions fell in real terms in many OECD countries

Bringing together both inflation trends and pension adjustments, the real value of pensions was lower in January 2023 compared to January 2022 in most OECD countries (Figure 1.10). The period is arbitrarily selected to cover the lion's share of the inflation surge and to correspond to the most-used indexation cycle in OECD countries, i.e. annual indexation in January. These results should be interpreted with care as the precise indexation timing plays a key role in the outcome shown in the chart for many countries, as the case of Poland discussed above illustrates. In a given country, the graph would show no change in the real value of pensions if indexation to inflation in the previous year were applied in January whereas it would show a significant loss if the same indexation rule is only applied in February.

First, earnings-related pensions in payment lost more than 5% of their real value in Austria, Costa Rica, Estonia, Poland and Sweden. Among these countries, Sweden does not index to prices at all and pensions are only partially adjusted to prices in Costa Rica and Estonia (20%). In Austria and Poland, there is some delay in pensions adjusting to price increases as they all apply a smoothed price indicator comparing inflation between two 12-month periods.

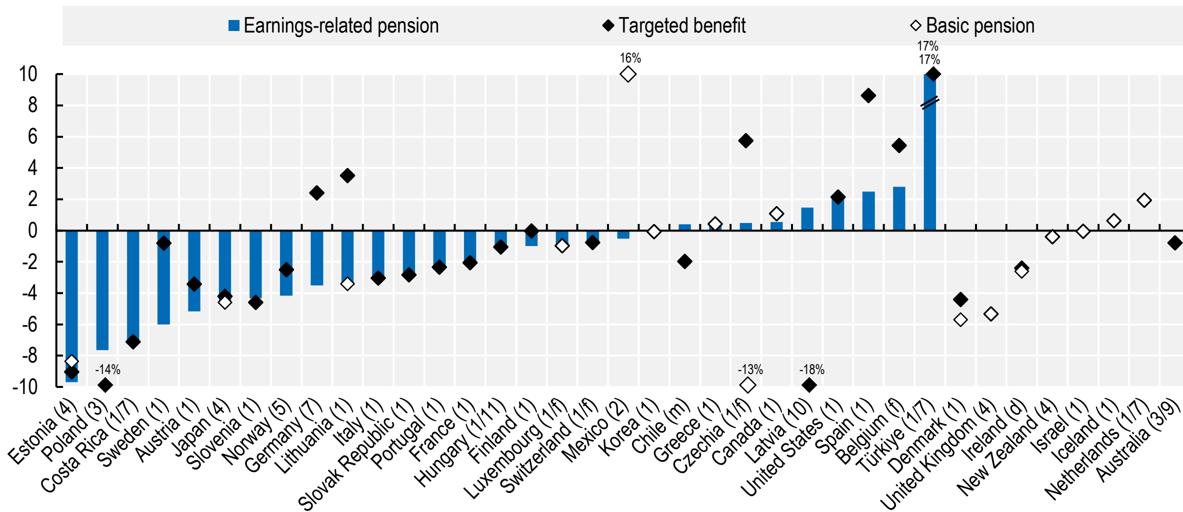
Second, targeted benefits were more than 5% lower in real terms in Costa Rica, Estonia, Latvia, Poland and the United Kingdom in January 2023 compared to January 2022. Latvia's targeted pension lost around 18% and Poland's 14% of their real value due to high inflation combined with an indexation rule that only requires adjustments once every three years so that no indexation took place during this period. Both countries decided to index their targeted benefits before the end of the three-year period: Latvia increased targeted benefits in nominal terms by 14.7% in July 2023 and by 9.6% in January 2024, and has moved to annual indexation from 2024 (see Recent pension reforms); in Poland, targeted benefits are scheduled to increase by 39% in January 2024.

Third, basic pensions were more than 5% lower in real terms in Czechia, Denmark, Estonia and the United Kingdom in January 2023 compared to January 2022. Basic pensions in Czechia, Denmark and Estonia are adjusted to wages or the wage bill, which resulted in a loss of purchasing power over this period, further exacerbated in Denmark by the lag between wage increases and pension adjustments (see above). The loss of value of the basic pension in the United Kingdom is related to the suspension of the triple lock indexing pensions to the highest of inflation, wage growth or 2.5%.

Only a few countries saw their pensions improve in real terms over the same period. In Türkiye, the real value of earnings-related and targeted pensions increased by around 17% over this period due to deviations from the indexation rule discussed above. In addition, Lithuania and Spain saw steep increases in the real value of their targeted benefits. In Lithuania the steep increase is the consequence of the importance of food prices in indexation of targeted benefits. In Spain, on top of the re-introduction of price indexation on contributory benefits at the end of 2021 (see below), non-contributory benefits were increased by 6.5% above inflation in January 2023. Targeted benefits also steeply increased in Czechia over this period following a discretionary adjustment. In Mexico, the basic pension increased by about 16% in real terms in Mexico as part of a wider reform to bolster old-age income.

Figure 1.10. Pensions were lower in real terms in many countries in January 2023 compared to January 2022

Percentage difference in real value of pensions in payment in January 2023 compared to January 2022 accounting for CPI inflation and pension indexation



Note: The numbers between brackets refer to the month(s) of indexation of the earnings-related pension or, if that is not included, the basic pension (targeted pension for Australia). d = discretionary adjustments; f = fixed-threshold indexation; m = monthly indexation. Colombia is not included as no data are available. HICP is used for EU countries and Norway, CPI for all other countries. For countries indexing pensions at different rates based on pension height (Austria, Italy, Latvia and Portugal) or career length (Latvia), the scenario for the average pensioner is shown (average male pensioner for Austria).
Source: OECD calculations based on information provided by Member States.

https://stat.link/bhzo8x

Other measures reducing the impact of inflation on pensioners

Some countries have made other interventions to support retirement income in response to the inflation surge. Australia temporarily loosened (between July 2022 and June 2024) the means test to qualify for the targeted pension benefit for people with investment income. The Netherlands relaxed its funding requirements for pension funds to be able to better index pensions in payment ahead of the systemic reform leading to the transition to the new occupational pension scheme (see below). Hungary moved forward the introduction of its 13th-month pension payment, reaching the full amount in 2022 instead of 2024.

Several countries have implemented ad hoc payments for pensioners including Austria, Estonia, Germany, Poland, Portugal, the Slovak Republic, Slovenia and the United Kingdom. Moreover, in Denmark and Greece ad hoc payments specifically targeted low-income pensioners. At the same time, most OECD countries provided support that was not targeted to older people but that older people could benefit from, such as heating allowances or lower VAT rates on energy.

Policy implications

The surge in inflation raises the competing objectives between sound pension finances and retirement income adequacy with some unusual acuity due to large short-term impacts. Upholding pensioners' purchasing power requires adjusting pensions to increasing prices. But, in the recent period, wages, and therefore most pension schemes' revenues, have not increased at the same pace as the negative terms-

of-trade shock in most countries translates into general-income and real-wage losses. Therefore, if benefits are adjusted in line with price inflation, this generates deficits in pension finances – and indeed in public finances more broadly (Bańkowski et al., 2023[46]). Hence, whether to apply existing indexation rules or to deviate from them in response to fast inflation depends in each country on the fiscal space and political preferences. Applying the rules is in general essential for confidence in the pension system, but these exceptional circumstances raise thorny questions which may warrant exceptional deviations from the rules.

Even in countries with price indexation, in order to protect pensioners' purchasing power, it is important that the indexation takes place soon after the price index surges. Threshold indexation to prices with a low threshold such as Belgium's 2% is very appealing to achieve this goal. However, in addition to overall concerns about the cost of price indexation during an inflation wave, any indexation mechanism that involves frequent adjustments throughout the year makes budgeting more challenging. Projection-based indexation rules are easier to predict in the short term of course, but they may be complex, are prone to large revisions and have not been effective at protecting pensioners' purchasing power during the inflation surge.

Protecting the lowest pensions while limiting the impact of price indexation on pension financing at times of high inflation can be achieved through price indexing pensions only partially above a certain threshold, at least temporarily. Reduced indexation of higher pensions as is often done in Austria and Italy can be an effective strategy to control pension expenditures while fully protecting the purchasing power of low-income pensioners who spend a large share of their incomes on essential goods such as heating and food. In that case, one policy question around this redistributive measure is whether it should be followed by a catch-up phase for pensions above the threshold once the situation normalises in order to limit permanent losses in pension benefits.

While pensioner-specific cost-of-living indices in theory may better reflect the changes in the cost-of-living of older people, it is questionable whether such an index would perform better than standard CPI combined with discretionary adjustments in truly exceptional circumstances. Research has highlighted short-term differences in inflation measured by different consumption baskets but has typically found little evidence of persistent differences over time. For example, in France, the impact of changing the consumption basket to better fit the consumption of retirees would have had a very limited impact, estimated at a total of -0.3% cumulated over 1998-2015 (Insee, 2015[47]), although since mid-2021, inflation is estimated to have affected older people more than other age groups (Insee, 2022[48]). In the United States, the Consumer Price Index for the Elderly (CPI-E) weighs prices to the specific spending pattern of older people including larger expenditure on medical care. While over 1983-2002 annual inflation measured by CPI-E outpaced the CPI index that is used to uprate old-age benefits (CPI-W) by 0.4 percentage points on average, there was virtually no difference between 2002-21, in part due to slower growth of healthcare costs (Munnell and Hubbard, 2021[49]). Differences in consumption patterns are larger across income levels than between working-age and old-age households in most countries. If the objective of price indexation were to better protect the purchasing power of low-income pensioners, this would suggest considering a price index better reflecting the consumption basket of individuals with low income.

Recent pension reforms

This section summarises pension reforms introduced in OECD countries between September 2021 and September 2023.

Retirement age reforms

Retirement ages are increasingly linked to life expectancy

The Slovak Republic and Sweden introduced a link between their retirement ages and life expectancy over the last two years, joining Denmark, Estonia, Finland, Greece, Italy, the Netherlands and Portugal, discussed in greater detail in the previous edition of *Pensions at a Glance* (OECD, 2021[8]). The establishment of a retirement-age link to life expectancy is also being discussed in Czechia as well as in Norway after their Pension Commission proposed it in 2022.

The Slovak Republic previously had a short-lived retirement-age link to life expectancy but abolished it effectively by capping the retirement age once it will reach 64 in 2030. In October 2022, a new link to life expectancy was established. From 2030 onwards, for those born from 1967, the retirement age will increase at the same pace as life expectancy.[29] Higher retirement ages will generate higher replacement rates for workers who can extend their career, although this will be partially offset by past wages being uprated by 95% of wage growth instead of full wage growth from January 2023. While before the reform, future pension spending was projected to rise at very high levels (Chapter 8), the retirement-age link is expected to limit spending increases significantly.

Sweden reformed retirement ages in the targeted and NDC schemes. As of 2023, the eligibility age for targeted benefits (Guarantee pension) has been increased from 65 to 66 years, and it will be increased again to 67 in 2026 and then linked to two-thirds of life expectancy gains at age 65.[30] In the NDC scheme, a target retirement age is introduced which aims to nudge retirement decisions by providing a clear suggestion of what the adequate age to retire should be. The target retirement age will be 67 upon taking effect in 2026 and will subsequently follow the same life-expectancy link as the eligibility age for the Guarantee pension. The minimum retirement age for the NDC pension was increased from 61 to 62 in 2020, and further to 63 years in 2023 and will move up to 64 in 2026. From then onwards, the minimum retirement age will remain three years before the target retirement age and thus also follow changes in life expectancy.

Automatic mechanisms are increasingly used to adjust retirement ages to life expectancy among OECD countries, with one in four now boasting such a link. Denmark, Estonia, Greece, Italy and the Slovak Republic increase the retirement age by the full increase in life expectancy (one-to-one link) whereas Finland, the Netherlands, Portugal and Sweden increase it by eight months per one-year increase in life expectancy (two-third link) which roughly keeps the share of adult life that people can expect to spend in retirement constant across cohorts. The Netherlands moved from a one-to-one link to a two-third one before it took effect and discussions in Denmark are ongoing on whether to move from a one-to-one to a slower link. Hence, while a one-to-one link may be beneficial from a perspective of financial sustainability, the political sustainability of such a link might be weak over time.

Retirement ages will increase by about two years by the 2060s based on current legislation

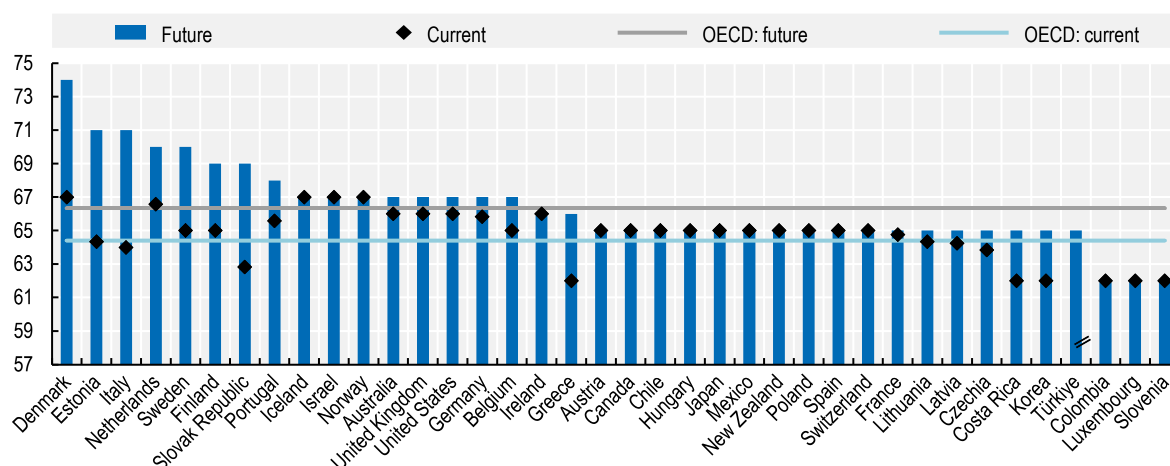
The range in the current normal retirement age among OECD countries is between 62 (except Türkiye where it is much lower) and 67 years. The normal retirement age is defined as the age at which individuals are eligible for retirement benefits from all pension components without penalties, assuming a full career from age 22. The average of the current (people retiring in 2022) normal retirement in OECD countries is 64.4 years for men – for gender differences, see below –, from 67 years in Denmark, Iceland, Israel and Norway, to 62 years in Colombia, Costa Rica, Korea, Luxembourg and Slovenia – Türkiye is an absolute outlier with a current normal retirement age of 52 years (Figure 1.11).[31]

In the future, based on already legislated measures, the average normal retirement age in the OECD will increase by two years to 66.3 years for a man entering the labour market in 2022. There is an increase in 20 out of 38 OECD countries – in 3 more countries, the normal retirement age will increase for women only

–, and cross-country differences are set to become starker: the normal retirement age will remain at 62 in Colombia, Luxembourg and Slovenia, whereas it is expected to reach 70 years in the Netherlands and Sweden, 71 years in Estonia and Italy and even 74 years in Denmark[32] based on established links between the retirement age and life expectancy (Figure 1.11).[33] The eight countries with the highest future normal retirement age are all countries with such a link, including also Finland, Portugal and the Slovak Republic. The other OECD country with a retirement-age link to life expectancy is Greece, transferring the full increase in life expectancy to an increase in the statutory and the minimum retirement age. Yet the Greek normal retirement age is only projected to be just below the OECD average in the future: this is because early retirement is accessible without penalty after a 40-year career, hence the minimum age which is set to increase from 62 to 66 in the future determines the normal retirement age in Greece.

Figure 1.11. The normal retirement age will be rising in more than half of OECD countries

Normal retirement age for men entering the labour market at age 22 with a full career



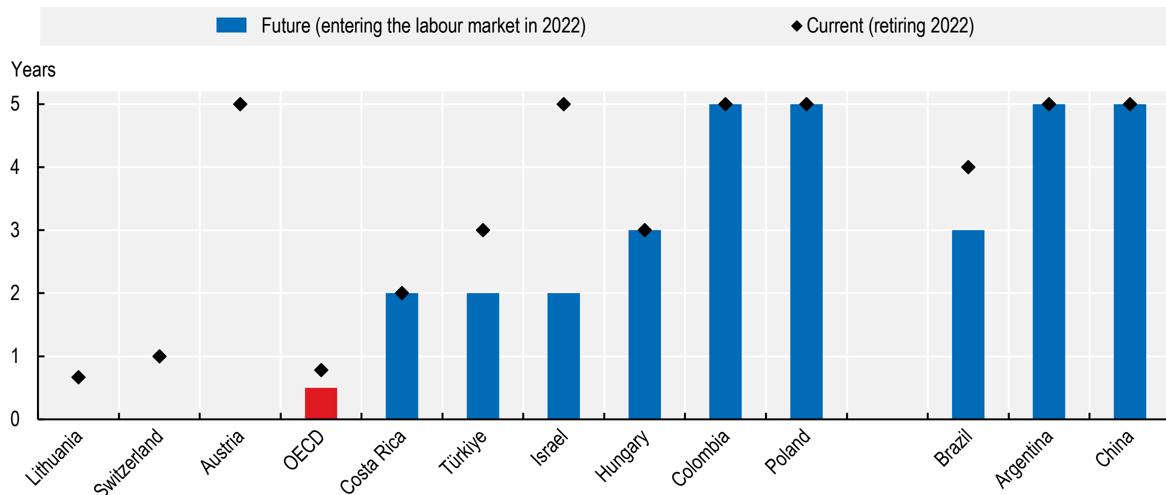
Note: The normal retirement age is calculated for an individual with a full career from age 22. "Current" refers to people retiring in 2022. "Future" refers to the age from which someone is eligible to full retirement benefits from all mandatory components (without any reduction), assuming a full career from age 22 in 2022. Educational credits are not included. For better visibility, the scale of this chart excludes the lowest observed value of 52 for current normal retirement age in Türkiye.
Source: See Chapter 3, Figure 3.8, https://stat.link/f9zejl.

Gender gaps in retirement ages are fading

Israel and Switzerland took action to reduce gender gaps in retirement ages over the last two years. Switzerland decided by referendum in September 2022 to gradually increase the retirement age for women from 64 to 65 in steps of three months from 2025, equalising their retirement age with the one for men by 2028. Hence, Switzerland joins the ranks of Austria and Lithuania which previously decided to close the gender gap in normal retirement ages, with the five-year gap in Austria set to close at a high pace from 2024 to 2033 (Figure 1.12). In November 2021, Israel decided to gradually reduce the gender gap from five to two years: while the statutory retirement age for men is 67, the one for women is now set to increase by four months per year from 62 in 2022 to 65 in 2032. On top of Israel, only five OECD countries still maintain lower normal retirement ages for women than for men for people entering the labour market now: Colombia, Costa Rica, Hungary, Poland and Türkiye. However, the gender gap in the normal retirement age is scheduled to be eliminated in Türkiye for people entering the labour market as of 2028. In Chile, FDC pensions can be accessed by women at age 60 compared to 65 for men, but the targeted scheme (PGU) is only accessible as of 65 for both men and women. Among G20 countries, gender gaps in the normal retirement age exist in Argentina, Brazil and China and are maintained in the future.

Figure 1.12. Only six OECD countries maintain gender gaps in future normal retirement ages

Gender gap in current and future normal retirement ages for men and women who entered the labour market age 22



Note: In Türkiye, the gender gap will be closed for men and women entering the labour market aged 22 in 2026.
Source: See Chapter 3, Figure 3.7, https://stat.link/b04nhr.

By contrast, Italy extended once again the so-called women's option, initially introduced for a year in 2017, although access has been tightened since January 2023. In 2022, as in 2021, this option allowed women to retire at age 58 (or 59 if self-employed) after a 35-year career, but it then requires that pensions are fully calculated based on the notional defined contributions (NDC) rules while pensions from defined benefit (DB) and NDC schemes are prorated when retiring at the statutory retirement age. The NDC rules generally result in benefits being lower than those based on the DB scheme, due to the automatic actuarial adjustments in NDC and low penalties in DB. For 2023, the age condition is increased to 60 – actually 59 for women with one child and 58 for women with two or more children – and the option is tightened as it is now only available for women who are caregivers, disabled at least 74% or employed or laid off by companies in crisis. As a result of these tighter conditions, the number of new pensions taken up in this scheme fell by 39% in the first half of 2023 compared to 2022 (INPS, 2023[50]).[34]

Some countries have increased early or minimum retirement ages

Consistent with the general trend in the OECD since the 1990s, Costa Rica and Czechia tightened eligibility to early retirement and France raised the minimum retirement age over the last two years. At the same time, Türkiye and, to a lesser extent, Iceland made retirement possible at earlier ages, while Italy temporarily extended the early retirement options that were supposed to expire. The Slovak Republic restricted early retirement for some people and relaxed them for others.

Costa Rica decided in January 2022 to eliminate the early retirement option for men and to increase the early retirement age for women. From 2024 onwards, men will only be able to draw a pension once they reach the statutory retirement age of 65 instead of 62 today. Conditional on 405 months of contributions (33.75 years), women will be able to draw a pension without penalty two years before the statutory retirement age, from age 63 instead of 59 years and 11 months now.

Czechia has reduced early retirement from five to three years before the statutory retirement age from October 2023. A unified penalty of 6% per year of early retirement now applies, whereas previously the penalty ranged between 3.6% and 6% depending on the duration of early retirement. Moreover, from October 2024 onwards, a career of 40 years will be required to become eligible to early retirement instead

of 35 years now, and from 2025 onwards early-retirement pensions will no longer be indexed until the recipient reaches the statutory retirement age.

The 2023 pension reform in France, mainly motivated to improve pension finances by 2030, has increased the minimum retirement age of the main mandatory schemes. Initially at 62, the age is set to increase in steps of three months per year from September 2023, reaching 64 in 2032. Moreover, the gradual increase in the contribution-period requirement to access a full pension from 42 years currently (1961 birth cohort) to 43 years will be accelerated as 43 years will now apply from about 2028 (more precisely for the 1965 birth cohort) instead of about 2036 (1973 birth cohort) before the reform.[35] The reform will gradually eliminate the special pension schemes for the energy sector, the Paris metro company, the central bank and notary clerks, which have their own advantageous rules often including early retirement options. New entrants in these sectors or occupations from September 2023 will fall under the general private-sector scheme (grandfathering). People already working in these occupations will stay in their respective special schemes, but their eligibility age and career length requirement will increase at the same pace as in the general scheme as of 2025. In October 2023, social partners removed the three-year penalty in the mandatory occupational pension scheme for people retiring without exceeding by at least one year the contribution period required in the general scheme, resulting in the lowering of the future normal retirement age from 66 to 65.

By contrast, Türkiye relaxed access conditions in March 2023, ahead of the elections. When Türkiye introduced its statutory retirement age on 8 September 1999, at age 52 before the 2023 reform, it also applied to people who were already in employment and building up pension entitlements. Considered by some as a breach of contract, the statutory retirement age is now scrapped again for people who entered employment before the introduction of the statutory retirement age, and for them pension eligibility only depends on fulfilling the career-length requirement. Women can access a pension after at least 20 years of contributions and men after at least 25 years.[36] As this applies to people who entered employment at the latest on the day before the law was introduced in 1999, the elimination of the statutory retirement age is likely to affect pension uptake patterns for another two decades.

As with the women's option (see above), Italy extended temporary early retirement options which were supposed to expire by 2022, undermining the impact of the 2012 reforms increasing the statutory retirement age to improve financial sustainability of the pension system. The quota system, initially legislated as "Quota 100" in 2019 to terminate in 2021, was extended once again. In 2023, a person can retire at age 64 with 38 years of contributions (Quota 102) or at age 62 with 41 years of contributions (Quota 103), whereas the statutory retirement age currently is at 67. Furthermore, the option to retire at age 63 with 30 years of contributions for people who are unemployed, disabled or giving care, or after 36 years for people in arduous occupations (Social APE) was extended. A similar extension to retire from age 58 was granted to workers in companies undergoing restructuring.

Iceland added an early retirement option in its funded occupational pension scheme. In June 2022, the mandatory minimum employer contributions in the occupational pension scheme was increased from 8% to 11.5%.[37] The employee can decide whether to add the supplementary 3.5% to the general FDC pension or whether to put it in another individual account. If it is put in this other account, the funds can be used to finance early retirement: a pension can be drawn from the individual account from age 62, five years before the statutory retirement age, and the account can be drawn down fully by age 67.

The Slovak Republic revised its early retirement conditions taking effect from January 2023. On the one hand, access to early retirement for people with low pensions has been restricted with the minimum amount of pension, as a ratio of the minimum subsistence level, required to draw a pension before the statutory retirement age being increased by one-third.[38] On the other hand, early retirement conditions are somewhat relaxed for people with long careers as early retirement is now possible after a 40-year career with a penalty of 0.3% per month of anticipation – for people with shorter careers early retirement remains possible two years before the statutory retirement age with a penalty of 0.5% per month.

Incentives to defer pension uptake and to work beyond retirement

Poland and Spain introduced incentives to delay pension uptake. Poland opted for a favourable tax treatment of labour income of people who have reached the statutory retirement age but do not take up their pension in order to encourage delaying retirement. Since January 2022, the threshold below which income is not taxed is almost three times higher for people above the statutory retirement age who do not take up their pension than it is for those who do take up their pension.[39] Spain introduced an incentive for delaying retirement in December 2021, which can be taken up as a supplement to the monthly pension or as a lump sum – or a combination of both. By default, the deferral incentive comes in the form of a 4% pension bonus supplementing the monthly pension for each year the retirement is delayed after becoming eligible to an old-age pension. However, it is possible to opt for a lump sum instead. While the lump sum option may be a good tool to nudge people in delaying retirement,[40] it has been estimated (BBVA, 2022[51]) that the choice between both options is far from an actuarially neutral one as the lump sum would be well below what most people could expect to receive from the 4% increase in their monthly pensions.

Denmark and Germany eliminated and Australia reduced the withdrawal of pension income against earned income. Denmark removed disincentives for both retirees and their partners to remain in employment. Since January 2023, both the older person's and their spouse's or cohabitating partner's income from work are removed from the income test of its basic and targeted benefits in the public pension system (i.e. excluding social assistance). In addition, the partner's income was also removed from the income test of certain disability benefits. Germany abolished the earnings limit for old-age pensioners in January 2023, beyond which pension income was withdrawn. Australia reduced the importance of income from work in the means test for their targeted pension benefits. Australia temporarily increased the threshold above which income from work is accounted for in the means test of the targeted scheme by 51% from 1 December 2022 to 31 December 2023, a measure that will likely be made permanent.[41]

Within its pay-as-you-go pensions, Czechia decided in July 2022 to reduce employers' social insurance contributions for certain groups of workers who are often in vulnerable positions in the labour market, including people older than 55 working part-time. For these people, employers' social insurance contributions decreased from 24.8% to 19.8%. In addition, the government has proposed to no longer let working pensioners further accrue pension entitlements and instead exempt them from paying pension contributions.

Adjustments to benefits and contributions

Improving financial sustainability

Financial sustainability can be improved not only through adjusting retirement ages, but also through adjustments to benefits and contributions. The Netherlands passed a systemic pension reform of its occupational pension scheme and Costa Rica and Spain passed parametric reforms to contributions and benefits. In Switzerland, the parliament passed a reform to improve financial sustainability in the occupational scheme, but it will be subject to a referendum in 2024.

The Netherlands passed a systemic pension reform that entered into force in July 2023, obliging pension funds to transition from FDB to FDC schemes, with social partners playing a key role in the reform process. From 2028 onwards, new entitlements can only be built up in DC schemes. Age-specific contributions are abolished, so the same contribution rate applies to all people contributing to a specific pension scheme. Moreover, funds are encouraged to transfer existing DB entitlements to the new pension system. Low expected real interest rates over the long term have created financial pressure. Implied requirements for funding ratios of FDB pensions led to little or no indexation of pensions in payment for more than one decade despite high returns (OECD, 2021[8]), Financial solvency issues and discontent about the lack of indexation have weakened the support for FDB schemes. In addition, the transition to DC is meant to

make occupational pensions more individual and transparent, and to accommodate increasing flexibility in the labour market.

Social partners can choose one of three types of DC schemes. First, a flexible scheme allows members to make their own investment choices for their individual pension savings. Upon retirement, members can choose between an annuity of a fixed monthly amount – i.e. without indexation – or a variable annuity depending on investment returns. Second, a collective scheme has a single investment policy for all members. Collective schemes will apply life-cycle investment strategies, meaning that the share of assets invested in risky assets is larger at the beginning of the accumulation phase and declines as the individual gets closer to retirement (OECD, 2022[52]). Similar to current DB plans, the contribution rate of a collective scheme should be based on a pension target and can be revised every five years. Pay-out happens through a variable annuity depending on investment returns. In both flexible and collective schemes, all fund members pay the same contribution rate. The third type of DC scheme has existed since 2011 and remains in place. Under this scheme, employers pay contributions to individual accounts managed by specific institutions. These institutions invest the funds they manage but they are neither allowed to carry any risks nor to provide insurance services – they cannot pay annuities, survivor's or disability benefits, and upon retirement, the employee must use the capital to purchase a pension product from an insurer. The Dutch Parliament is discussing whether to allow people to take out a lump sum of up to 10% of the total value of the individual's DC assets or estimated total value of DB entitlements upon retirement.

Ahead of pension funds transitioning from DB to DC pensions, indexation rules have been relaxed since 1 July 2022. The funding-ratio threshold from which full price indexation can be applied has been lowered from around 130% to 105%. Only pension funds that expect to transfer already built-up pension entitlements to the new system are able to index pensions based on the relaxed rules.

The Dutch reform follows an international trend of funded occupational pensions increasingly shifting from DB to DC (Boulhol, Lis and Queisser, 2023[53]). Easier to manage and more in line with the idea that the role of occupational pension funds is to provide a supplement in a multi-tiered pension system, most countries with substantial occupational schemes have moved from DB to DC occupational pensions since the 1990s. After the Dutch reform, Switzerland is the only country with large occupational pension funds to maintain DB funded occupational pensions for new private-sector workers.

Switzerland passed a reform in parliament reducing their funded occupational pensions to improve financial sustainability, although the measure is subject to a referendum. In March 2023, the Swiss Parliament voted to reduce the conversion rate used to convert pension assets from the mandatory part of the occupational pension scheme into annual pensions from 6.8% to 6%. The current high level of the conversion rate is not actuarially consistent with projected life expectancy. The proposed reduction improves financial sustainability but lowers new pensions by 12% all other things equal. Whether the conversion rate will be lowered to 6% will depend on the outcome of a referendum in 2024 as trade unions have challenged this change.

Already suspended since 2018, Spain formally removed in November 2021 the revalorisation pension index (IRP) used for pension indexation and the sustainability factor (SF) to be used to adjust new benefit levels. As these automatic adjustment mechanisms were initially put in place to improve financial sustainability, their removal meant that alternative measures had to be found under the pressure from the European Commission as a condition to allocate funds from the European Recovery and Resilience Facility.[42] The March 2023 reform aims to reduce future pension deficits through raising additional pension revenues and improves protection for low-income pensioners and people with irregular careers, including women.

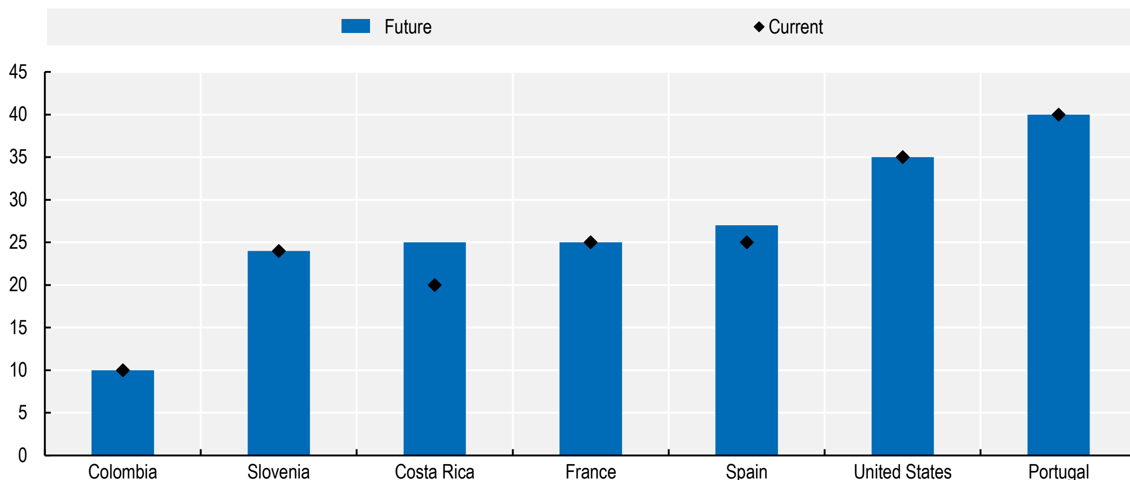
The Spanish reform relies on higher contributions in particular from high earners that are only to a small degree offset by increasing their pensions, which will be used to improve pension finances and build the reserve fund. A new contribution is introduced on the part of earnings exceeding the maximum contribution base, beyond which no pension entitlement accrues and which was equal to 1.75 times average earnings

in 2022.[43] From 2025, the new contribution equals 0.92% of the part of the salary between 100% and 110% of the maximum contribution base, plus 1.00% between 110% and 150% and 1.17% above 150%. These rates will gradually increase to reach high levels of 5.5%, 6% and 7% in 2045, respectively. This potentially has a substantial impact on pension revenues. Furthermore, Spain will gradually double the contributions to its reserve fund. Set at 0.6 percentage points upon its introduction in December 2021, this component of the contribution rate will increase by 0.1 percentage points every year from 2024 onwards to reach 1.2 percentage points in 2029. Withdrawals from the reserve fund may be made from 2032 to finance pension spending. The annual drawdown cannot be higher than 0.2% of GDP and until around 2040 flows into the fund must exceed the outflow. The maximum contribution base is set to increase by 1.2% per year in real terms between 2024 and 2050 or 38% in total, while the maximum pension would only increase by 0.115% per year in real terms or 3% in total.[44] In total, these measures, together with a reform of contributions of the self-employed, are estimated to generate annual revenues of 1.3% of GDP in 2050 (AIReF, 2023[54]). With Spain's pension expenditures forecasted to grow fast until 2049, the sharp rise in the maximum contribution base combined with a limited increase in the maximum pension will help finance the increase in expenditures. However, the additional revenues only partially cover increasing expenditures mainly stemming from the re-introduction of price indexation: annual expenditures are projected to increase by 2.4% of GDP, resulting in a projected increase in the deficit of 1.1% of GDP in 2050 (AIReF, 2023[54]).

In addition, an extension of the reference contribution period to calculate pensions was a key demand of the European Commission.[45] The large majority of OECD countries take into account wages throughout the whole career for calculating pension benefits. Recently, Austria, Czechia, Greece and Norway joined this group. Only Colombia, Costa Rica, France, Portugal, Slovenia, Spain and the United States still continue to calculate earnings-related pensions on earnings for only part of the career (Figure 1.13).

Figure 1.13. Only a few countries do not take the whole career into account for the reference wage

Number of years used to compute the reference wage of private-sector workers



Note: In Colombia, the full career is taken into account for the reference wage if this results in a higher pension.
Source: See "Country Profiles" available at http://oe.cd/pag.

https://stat.link/sguope

Rather than introducing a significant change in this area, Spain opted for a small extension and a long transition period with unclear impacts. Since 2022, the reference contribution period is the last 25 years, which was increased from the last 15 years in 2013. With the reform, this will become the best 27 out of the last 29 career years for people retiring from 2044.[46] Until then people can choose the most beneficial of the two calculation methods, meaning that until 2044 this change can only increase benefits and expenditure.

Costa Rica reduced the effective accrual rates for the first 25 years of contributions and extended the reference period for past wages used to calculate pensions. From January 2024, a career of 25 instead of 20 years is required to accrue between 43% and 52.5% (depending on wage level), while the accrual for additional years remains unchanged at 1% per year. The period on which the reference wage is calculated is adjusted in parallel: the pension will be calculated based on the average wage in the best 300 months (25 years) instead of the last 20 years of the career. For people with declining earnings towards the end of the career, the change from last to best years may result in a higher reference wage, which could compensate for some of the impact of the reduction in effective accrual rates.

For given pension spending levels, calculating pensions based on earnings during only part of the career generates inequities as people with the same lifetime earnings and the same total contributions may end up receiving very different pensions. While taking into account only the best years protects against some forms of career incidents, it also generates perverse, regressive effects – for the same total spending level – by favouring workers experiencing large wage improvements who tend to be high-wage earners, as the low-wage periods often at the beginning of the career are ignored. In addition, people with longer career breaks rarely enjoy strong career progression and therefore they do not benefit from the shorter period to calculate the reference wage. As women are more likely than men to take longer career breaks to take up family responsibilities, taking only part of the career into account for the reference wage contributes to the gender pension gap.

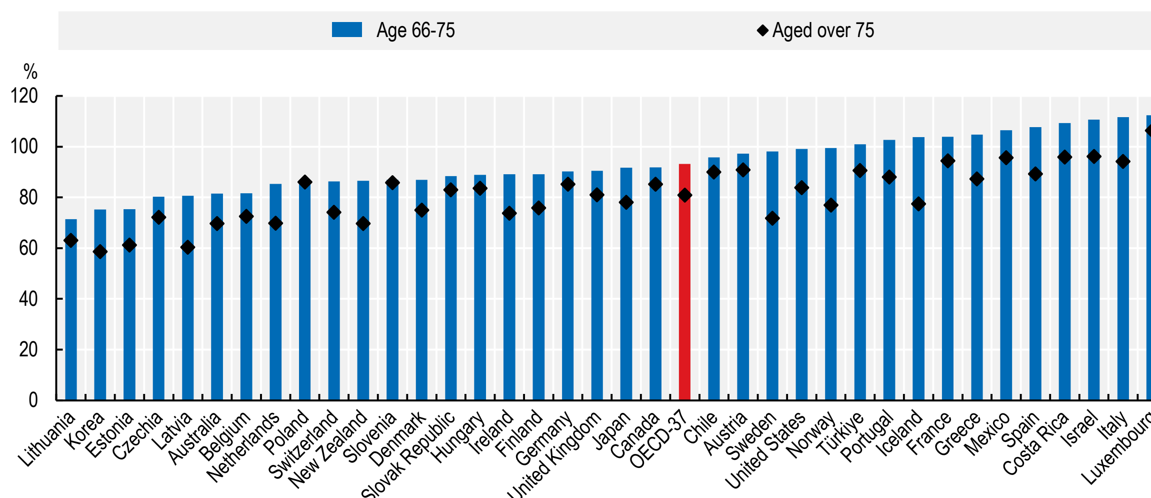
In addition, Ireland slightly increased social insurance contribution rates. An earlier plan to increase financial sustainability of the public pension system through increasing the retirement age was abandoned in 2023. Instead, the government proposed to improve financial sustainability through gradually increasing social contributions. The contribution rate for employees and employers, of currently 4% and 8.8% or 11.05% depending on income level, respectively, will both increase by 0.1 percentage points in October 2024. The contribution rate is expected to increase further in the coming years.

Improving pension protection of low earners

People aged 65+, and in particular those aged 75+, have a lower disposable income than the total population in most OECD countries. On average across the OECD, people aged 66-75 have a disposable income of 93% of the disposable income of the total population, falling further to 81% among people aged over 75 (Figure 1.14). There are stark differences between countries, with average relative income below 80% of the disposable income of the total population in Estonia, Korea and Lithuania in the age group 66-75, and below 65% in the same three countries and Latvia in the age group 76+. The relative income of people aged 66-75 is higher than that of the total population in 11 OECD countries and exceeds 110% in Israel, Italy and Luxembourg. Luxembourg is the only country where the relative income of people over 75 exceeds that of the total population.

Figure 1.14. Older people on average have lower incomes than other age groups

Average disposable income by age group in percentage of average disposable income of total population, 2020 or latest available year



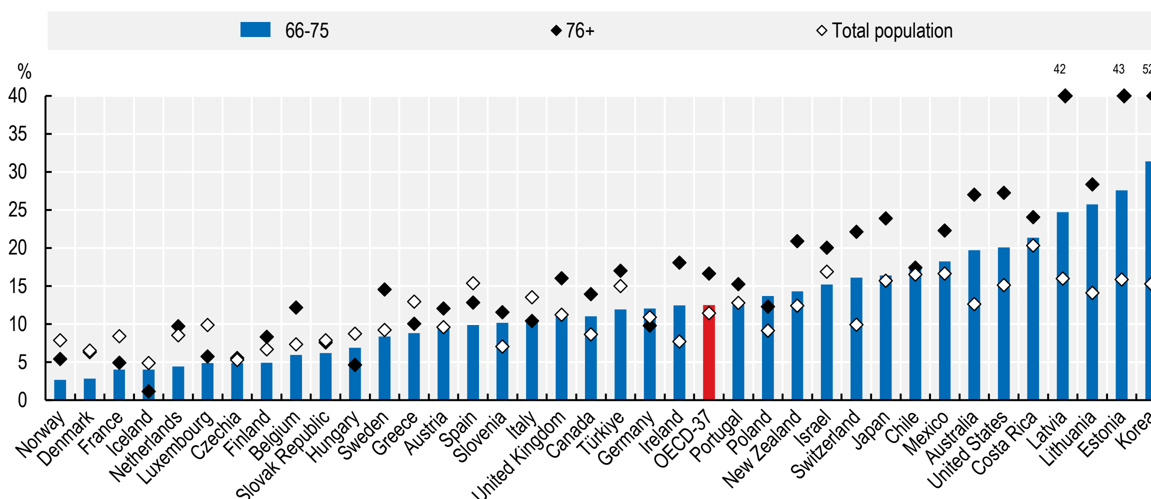
Note: Most recent data are for 2020 except for the following countries: Costa Rica, Finland, Latvia, the Netherlands, Norway, Sweden and the United States (2021), Denmark, France, Germany, Hungary, the Slovak Republic, Switzerland and Türkiye (2019), Japan (2018) and Chile and Iceland (2017). Data for Colombia are unavailable.
Source: See Chapter 7, Table 7.1, https://stat.link/jcruw9.

Older people are more likely to fall below the relative income poverty threshold than other age groups. Across all OECD countries, 12.5% of people aged 66-75 and 16.6% of those aged 76+ are in relative income poverty, meaning that they have an equivalised disposable income below 50% of the median, compared to 11.4% of the total population (Figure 1.15). The relative income poverty rate is below 5% in eight countries in the 66-75 age group and in France, Hungary and Iceland in the age group above 75. In contrast, the Baltic states and Korea have relative income poverty rates around or above 25% in the age group 66-74 and even above 40% in the age group 76+ – with the notable exception of Lithuania. The Latin-American OECD members, Australia and the United States are also among the countries with elevated relative poverty levels among older people.

Chile replaced its targeted public pension scheme with a quasi-universal scheme in January 2022. While the previous scheme (basic solidarity pension) was targeted at those aged 65+ belonging to the poorest 60% of the population, the new scheme (universal guaranteed pension) was initially accessible to the 90% poorest people aged 65+.[47] Coverage was further expanded in February 2023 to all people aged 65+ belonging to the 90% poorest people in the entire population, which is estimated to include another 70 000 beneficiaries or an increase of around 4%. Moreover, the benefit level was increased: upon introduction, it was 4% higher in real terms than its predecessor, or about 19% of gross average earnings. Withdrawal rules have changed substantially with large improvements for pension benefits: while the basic solidarity pension was withdrawn by 33.8% from the first peso received from the FDC pension, no withdrawal takes place in the new scheme until the FDC pension renders 3.4 times the amount of the universal guaranteed pension, after which a withdrawal rate of 50% applies. Hence, the reform improves the old-age income of a large majority of retirees.[48]

Figure 1.15. Older people are more likely to be in relative income poverty than other age groups

Percentage with income lower than 50% of median equivalised household disposable income



Note: Most recent data are for 2020 except for the following countries: Costa Rica, Finland, Latvia, the Netherlands, Norway, Sweden and the United States (2021), Denmark, France, Germany, Hungary, the Slovak Republic, Switzerland and Türkiye (2019), Japan (2018) and Chile and Iceland (2017). Data for Colombia are unavailable.
Source: See Chapter 7, Table 7.2, https://stat.link/pv3isj.

In addition to Chile, Canada, Estonia, France, Italy, Lithuania, Spain, Sweden and Türkiye, and to a lesser extent Austria and Belgium, increased first-tier benefits. Canada increased its residence-based basic pension by 10% for people aged 75 and over in July 2022. Estonia increased its basic and targeted pension by EUR 20, or about 7% above indexation in January 2023. Sweden increased its targeted pension benefits by about 12% in August 2022.

France, Italy, Lithuania, Spain and Türkiye passed increases in their minimum contributory pensions, for France and Spain as part of a larger package of reforms improving financial sustainability. France significantly increased the minimum pension from the general scheme after a full career, and much less so for careers that are shorter than 30 years of contributions.[49] Combined with the mandatory occupational pension, the total gross minimum pension after a full career at the minimum wage is now set at 85% of the net minimum wage, or about EUR 1 200 per month in 2023, or an increase of about 9%. Italy increased minimum pensions above regular indexation by 1.5% for pensioners younger than 75 and by 6.4% for pensioners aged 75+ in 2023. Lithuania abolished the pro-rata reduction in the contributory basic pension for shorter careers. Previously, 33 years of contributions (supposed to increase to 35 years by 2027) were required to receive the full amount of the basic pension. Now, everyone who qualifies for the public pension – conditional on having 15 years of contributions – receives the full amount of the basic pension. In Spain, minimum contributory pensions and targeted pension benefits were raised. Between 2024 and 2027, the minimum pension for a pensioner with a dependent spouse will gradually be increased from 51% in 2021 to 60% of median equivalised disposable income for this type of household.[50] The safety net benefiting the most vulnerable old-age individuals will similarly be increased over the period 2024-27, so that for a single individual the benefit will be equal to 45% of median equivalised disposable income compared to 35% in 2021.[51] Moreover, the supplement for women who raised children, which was introduced in 2021, will be increased by 10% above inflation in the period 2024-25 with the aim of reducing the gender pension gap. The benefit, EUR 30.40 per month in 2023, is also accessible to men if they can show that they have interrupted their career to raise children. In addition, credits for periods of care leave or part-time work due to care responsibilities have been extended. Türkiye has tripled its minimum pension to keep up the

purchasing power of its low-income pensioners throughout the last two years in response to the exceptionally high level of inflation the country faces. Together with the last adjustment to the minimum pension in April 2023, the holiday bonus was increased by 82%.

Finally, Austria and Belgium passed more modest increases in their first-tier benefits. Austria increased its income-tested top-up to the earnings-related pension by EUR 20, or about 1.9%, above inflation. In Belgium, the contributory minimum pension for employees and the self-employed was increased by 2.65% above inflation in January 2022 and 2023, and by 2% in July 2023. The minimum entitlement per career year, another type of minimum pension, was increased by 2% above inflation in January 2022. In addition, social assistance benefits for older people were increased by 2.58% above price indexation in January 2022 and 2023, and by 2% in July 2023.

Increasing importance of children, changes in entitlements for spouses

Beyond Spain discussed above, Czechia, France, the Slovak Republic and Slovenia have improved pensions for parents, in particular mothers. Finland and Greece reformed survivor's benefits, albeit in different directions.

Czechia introduced a bonus for raising children to one parent and a similar bonus in Slovenia became transferable between both parents. Czechia introduced a top-up to the earnings-related pension for parents in September 2022. For each child, the parent who provided most care to the child – usually the mother – receives a monthly flat-rate top-up equal to about 1% of the average wage or 3% of the average pension as of January 2023. Slovenia already had a pension bonus of 1.36% per child, but since April 2022, the father can claim the bonus if the mother agrees regardless of the father having received parental benefits, provided that the mother does not receive a pension yet.

Both France and the Slovak Republic introduced parental benefits available to both parents. As part of the 2023 French pension reform, the 10% pension increase in the general private-sector scheme for parents of at least three children was extended to the liberal professions. The Slovak Republic introduced a new form of intergenerational support measure in its pension system. As of 2023, children can decide whether their parents' pension should receive a top-up calculated based on the child's earnings. For each child, a parent can receive a top-up of 1.5% of the child's monthly pensionable earnings capped at 1.2 times the average wage.[52] The granting of the parental pension happens automatically, but children can decide to exclude one or more parents from receiving the parental pension. The introduction of the parental pension, which is meant to compensate parents for their lower pensions compared to childless retirees, does not impact the contribution rate nor the future pension benefits of the children.

Finland, Greece and the Slovak Republic made adjustments to survivor's benefits. Finland substantially reformed its survivor's pensions in November 2021. From January 2022, the duration of the survivor's pension was limited to 10 years for surviving spouses born as of 1975, or until the youngest child turns 18 years old. When a partner of a non-married cohabitating couple passes away, the surviving partner receives a survivor's pension, on the condition that they have at least one child together, until the youngest child turns 18. After the reform, survivor's benefits for children have improved: children who lost a parent receive a benefit until age 20 instead of 18 previously, and if the deceased does not have a spouse, the spousal survivor's pension is now given to the children as well. In January 2023, Greece increased the minimum survivor's pension by 8% for people whose deceased spouse had a career of at least 15 years. The Slovak Republic extended the standard duration of the survivor's pension from one to two years as of January 2023. Extended periods for parents, retired and disabled survivors remain in place, and parents of one child can now receive an extended survivor's pension from age 57 instead of from the statutory retirement age.

Improving earnings-related pension benefits and reducing taxation

Several countries have taken measures to improve the income position of pensioners beyond indexation measures discussed in greater detail in the previous section. In Belgium, the wage ceiling applied in the calculation of new pensions was increased by 4.38% above price indexation in January 2022 and by 2.38% in January 2023. It will be increased a third time by 2% above inflation in 2024. Hungary sped up the introduction of the 13th month payment. Reintroduced in 2021, it was initially scheduled to increase gradually in four stages to take full effect as of 2024, but in February 2022 it was decided to already pay the full 13th month as of 2022. Poland introduced a 14th month payment, first paid in September 2023. The level of the payment is not fixed, but it cannot be below the level of the minimum pension. Lithuania devised a new supplementary pension indexation mechanism for its earnings-related pension, linking pension indexation to adequacy indicators since 2022.[53]

Estonia, Greece and Sweden improved older people's disposable incomes through reducing taxation. In December 2021, Estonia decided to exempt pension benefits from income taxation up to the level of the average pension from 2023 onwards. While pensions were taxed under the same rules as earnings before, the threshold below which income is not taxed now is 8% higher for pensioners than for other people. In September 2022, Greece abolished a tax on pension benefits that was introduced in 2010. Previously, pensioners had to pay a supplementary tax of between 3% and 14% depending on pension level on the part of the pension exceeding EUR 1 400. Sweden expanded its basic tax allowance for people aged 66+ in 2022. The basic tax allowance depends on a person's income, with the allowance for retirees being between 1 and 3.2 times the one for employees depending on the income level. To encourage working beyond the retirement age, both Estonia and Sweden apply the tax rules for pensioners also to their employment income.

In March 2023, as part of the new budget, the United Kingdom increased the annual tax-free allowance for contributions to a pension savings account by 50%, and removed the upper limit people can save in their pension accounts throughout their life. This change will mostly impact high-income individuals, although also middle-income people may benefit as well under specific circumstances.[54]

On average across the OECD, an average-wage worker who will retire at the normal retirement age after a full career from age 22 in 2022 will receive a net pension from mandatory schemes at 61% of net wages based on already legislated measures (Figure 1.16). Future net replacement rates are at 40% or below in Australia, Estonia, Ireland, Japan, Korea, Lithuania and Poland. They are at or above 90%, on the other hand, in Greece, the Netherlands, Portugal and Türkiye.

On average among OECD countries, the future net replacement rate of workers with low earnings (50% of the average wage) is 73%, more than 10 percentage points above the replacement rate for average earners. Replacement rates are generally higher for low earners due to redistributive features within pension systems. In Japan, Lithuania and Poland, the net replacement rate for low earners is below 50%, and it is close to that in Canada, Estonia and Korea. At the other side of the spectrum, in Colombia, Denmark and Greece, the net replacement rate of low earners is more than 100%, meaning that income is higher when moving from work to retirement, with Luxembourg, the Netherlands and Portugal being close to 100%.

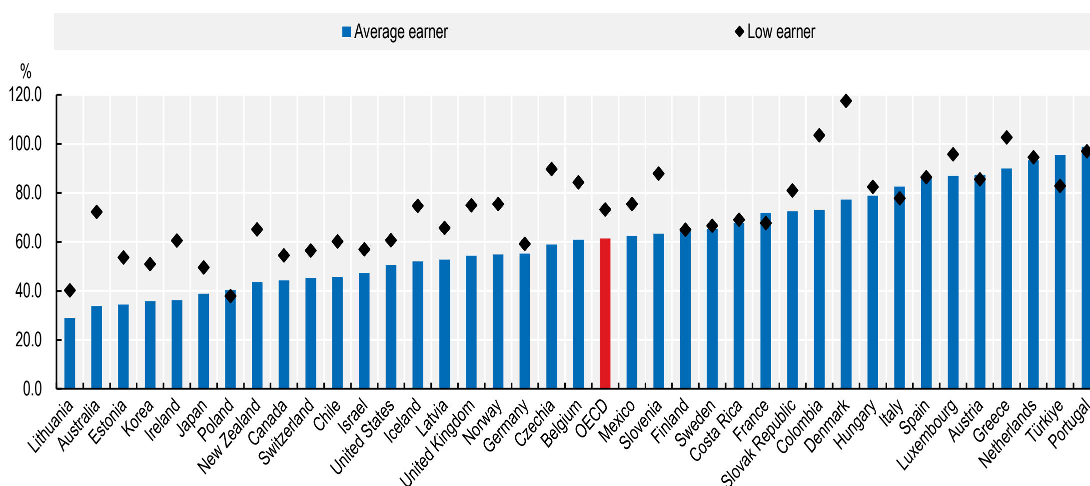
Measures legislated over the last two years and described above have the largest positive impact on net replacement rates over the long term in Chile, Spain and Sweden. In Chile, by vastly expanding the targeted pension, the impact of the reform is to raise, all else equal, future projected replacement rates by 15 and 13 percentage points for full-career workers with low and average wages, respectively. For Spain, the elimination of the sustainability factor results in net replacement rates that are around 7 percentage points higher. Sweden also records a significant increase in replacement rates due to the effect of higher retirement ages. In Greece, the shift from NDC to FDC for the auxiliary pensions, legislated in 2021 and effective as of 2022 (OECD, 2021[9]), generates the typical trade-off when replacing PAYG by funded pensions: higher future pensions – especially as the NDC returns in Greece are influenced by the sharp

projected fall in the working-age population which affects long-term GDP potential growth – and medium-term pressure to publicly finance accumulated NDC entitlements as new contributions are invested in FDC accounts. Moreover, replacement rates will increase in the Slovak Republic due to higher retirement ages.

By contrast, Costa Rica's replacement rates dropped by about 8.5 percentage points in particular due to the reduction in effective accrual rates to improve financial sustainability. Net replacement rates decreased in Czechia as well as for low earners in Türkiye due to reductions in the taxation income from work, which boost net wages. Czechia, for instance, passed a tax reform in 2021 excluding employer contributions from taxable income. As this causes an increase in net earnings while net pensions remain stable, the net replacement rate for an average earner drops by 4 percentage points.

Figure 1.16. Net pension replacement rates for average and low earners

Future net replacement rate from mandatory schemes after entering the labour market in 2022 aged 22



Note: Normal retirement age between brackets. Low earners earn 50% of the average earner. Low earners in Colombia, New Zealand and Slovenia are at 64%, 63% and 56% of average earnings, respectively, to account for the minimum wage level. For Hungary, the net replacement rate is based on the assumption that the thresholds above which only part of earnings are taken into account in the pension calculation are constant in nominal terms, which has been the case since their introduction in 2013. If the thresholds instead were to be price- or wage-indexed, the net replacement rate increases from 78.8% to 83.7% or 89.8%, respectively.
Source: See Chapter 4, Table 4.4, https://stat.link/r1pgws.

Early withdrawals from funded schemes

Australia and the Slovak Republic have made changes to the types of payments people can receive from their funded pensions or the conditions for a lump-sum withdrawal. Australia increased the amount people can withdraw from their FDC accounts for the purchase of their first home by two-thirds in July 2022.[55] As of January 2025, the Slovak FDC scheme in which automatic enrolment was introduced (see below) will be paid out in two phases. First, half of the account's value has to be withdrawn via a programmed withdrawal. The programmed withdrawal should cover half of the median life expectancy at the age of initial withdrawal. During this phase further contributions can be paid into the account. At the end of the programmed withdrawal, the remaining assets are to be turned into a lifetime annuity.

Coverage reforms

Several OECD countries have implemented reforms to extend the coverage of pension schemes. This includes the introduction of automatic enrolment as well as initiatives to extend coverage to vulnerable workers such as reducing or eliminating minimum earnings thresholds or expanding coverage to domestic

and platform workers. Reforms changing residency requirements for access to certain pension benefits have gone the other way, however, with residency requirements having become more restrictive in some countries.

Expanding the use of automatic enrolment

The number of OECD countries operating an automatic enrolment scheme in a retirement savings plan at the national level is increasing further. The Slovak Republic has joined the ranks of Lithuania, New Zealand, Poland, Türkiye and the United Kingdom who introduced automatic-enrolment programmes over the last 15 years, and Ireland is set to follow soon as well (see below). The Slovak Republic legislated automatic enrolment in November 2022. People below age 40 entering employment for the first time as of May 2023 are automatically enrolled in the FDC scheme but can decide to opt out within two years after being enrolled. The contribution rate under automatic enrolment is 5.5% in 2023, increasing to 6% in 2027 – three years later than previously legislated. Enrolment is voluntary for people under 40 who entered employment earlier. Before the introduction of automatic enrolment, enrolment in the DC scheme was voluntary although for those people under 35 who did opt in, paying contributions was mandatory. Furthermore, the United Kingdom passed a legal amendment in September 2023 allowing the government to set a lower minimum age and a lower minimum earnings threshold for automatic enrolment than the minima defined in the law.[56]

Increasing coverage of vulnerable workers

Access to earnings-related pensions was improved for low-income earners in Australia and Costa Rica.[57] Australia decided to remove the minimum earnings threshold for mandatory employer contributions, the so-called Superannuation Guarantee, effective as of July 2022.[58] This means that individuals on very low earnings will also build up entitlements in the FDC scheme. As a result, the 3% of employees who previously fell below the minimum earnings threshold now also receive employer contributions. The workers affected are mostly young, low-wage and part-time workers, the majority being women (Treasury of the Australian Government, 2020[55]). Also, all Australian workers now have the possibility to pursue employers for unpaid superannuation contributions.[59] In addition, Australia relaxed access conditions to the targeted pension for pensioners selling their principal home[60] and to healthcare at a reduced rate.[61] To reduce informal employment and increase the social protection of part-time workers, Costa Rica halved the minimum contribution wage in the earnings-related pension scheme for part-time workers taking effect as of January 2023. Previously, workers earning less than the monthly minimum wage, in particular part-time workers, were obliged to pay contributions at the monthly minimum-wage level. An estimated 16% of employed people would be affected by the reform (CCSS, 2023[56]).

Chile and Mexico extended coverage to platform and domestic workers, respectively, who previously were not covered by mandatory pensions. In Chile, platform workers are covered by mandatory FDC pensions under the same rules as the self-employed since September 2022. As for all self-employed, coverage is conditional on the issuing of invoices. In Mexico, mandatory FDC coverage was extended to domestic workers. In 2019, the Mexican Constitutional Court ruled that it was discriminatory that social security coverage was mandatory for all employees except for domestic workers, for whom it was voluntary. As per the Court’s ruling, a pilot programme to extend mandatory coverage to domestic workers was set up that same year, followed by Parliament unanimously adopting a law formally expanding their coverage in October 2022. Domestic workers are subject to the same mandatory social insurance rules as other employees. As domestic workers often provide services to multiple households and as a result have complex working-time arrangements, they are considered as insured for the entire month if their total income in the month is at least equal to the minimum monthly salary, irrespective of days worked. If that threshold is not reached, employees are only covered for the days they are registered as working. An online platform makes it easy for families register a domestic worker and pay social contributions.

Households can decide whether to pay contributions twice per month, monthly, every six months or once per year.

The Dutch pension reform includes some measures to increase coverage. Employees build up pension entitlements from the very first day they work for an employer covered by a pension scheme from July 2023, and the minimum age workers can enter a pension scheme is also lowered from 21 to 18 from January 2024. The tax exemption for pension contributions to an individual pension is expanded from 13.3% to 30% from July 2023.

Tightening residency requirements

New Zealand and Sweden both made changes to their residency requirements to receive first-tier pensions. In November 2021, New Zealand decided to gradually increase the minimum residence requirement to qualify for the public pension from 10 years currently to 20 years for those born on or after 1 July 1977 with a full effect from 2042.[62] Since January 2023, Sweden no longer provides the targeted top-up (*Minimum Garantipension*) to the earnings-related pension to individuals residing outside of the country.

At the same time, Greece decided to temporarily lower the residency requirement for some specific groups of immigrants in 2022. In order to receive a full basic pension, the residency requirement was reduced from 40 to 30 years in 2022 specifically for Albanian and former Soviet nationals who have been legally and permanently residing in Greece since 1992. The limit will gradually be increased to reach 40 years again in 2032.

Pension reforms in progress

Governments in several Latin-American OECD countries are preparing substantial reforms, in particular by increasing pension benefits for low-income earners and expanding coverage through formalisation of employment in order to reduce old-age poverty. In Chile, contribution rates will likely increase in the future although so far there is no political agreement on a concrete reform. There is a broad political consensus to increase mandatory contributions for employers by 6 percentage points[63] Employers currently only pay a contribution of 1.5% to the FDC scheme, which is the third lowest mandatory contribution rate for employers in the OECD as there are no mandatory employer contributions in Lithuania and New Zealand. However, there is no political consensus on how the supplementary employer contributions should be used. While opposition parties favour strengthening individual FDC accounts, the government proposes to use these contributions to finance a contribution-based basic pension for current pensioners on a pay-as-you-go basis.[64] Contributors would in turn build up entitlements in a new notional-account scheme with a strong redistributive feature: flows in the individual notional accounts will be equal to contributions applying to 70% of the individual's wages and 30% of the economy-wide average wage. The proposed reform also contains some instruments to compensate women for their lower FDC annuities due to higher life expectancy.

Colombia and Costa Rica are also working on important reforms. Colombia is debating transforming its pension system currently consisting of two alternative earnings-related pension schemes into a multi-pillar system with a targeted, a public earnings-related, a mandatory private earnings-related and a voluntary component. Costa Rica is developing a reform proposal that would transform its targeted scheme into a residence-based basic pension financed from a reserve fund to be created. The reform is among others driven by a concern over high poverty rates among older people who have been in informal employment for a significant part of their careers.

There is a political agreement in Belgium to tighten the eligibility conditions for the minimum contributory pension. Currently, people can access the minimum pension after 30 years worked or credited. A supplementary condition would be added on top of the 30 years worked or credited requiring that people

worked at least at 80% of a full-time job during at least 20 years. Periods such as maternity and palliative care leave would be credited as work under the 20-year condition nonetheless. Furthermore, Belgium plans to introduce a deferral incentive similar to the one introduced in Spain (see above). There is an agreement within the government coalition to award people with a lump sum of a fixed amount per year of deferral of pension uptake irrespective of the height of the pension.[65]

Germany is preparing a draft law reform expanding the pension coverage of the self-employed. Currently, the statutory pension system is only mandatory for certain categories of self-employed. In the 2021 coalition agreement, the governing parties agreed to introduce mandatory old-age pension insurance for all new self-employed. The new self-employed would be insured in the statutory pension system unless they choose an “equivalent” private pension product. The reform mainly aims to reduce old-age poverty and harmonise pension protection between employees and the self-employed.

Ireland is in the process of setting up automatic enrolment schemes for employees who currently are not covered by occupational pension schemes provided by employers. A bill to establish the scheme is currently being drafted, with the parliament expected to enact the legislation in 2024. Announced in 2019 with implementation planned for 2022, after some delays due to COVID-19 automatic enrolment is now expected to take effect in the second half of 2024. When the measure does come into effect, workers aged between 23 and 60 who are currently not covered by a pension scheme will be automatically enrolled into the new retirement savings system on the condition that they earn more than EUR 20 000 annually. Workers who do not meet these criteria can join the scheme on an opt-in basis. For every EUR 3 the employee contributes, the employer will also contribute EUR 3 and the state will put in EUR 1. Employers and employees will each contribute 1.5% and the state 0.5% upon introduction, gradually increasing to reach to 6% and 2%, respectively, or a total of 14% over a ten-year period.[66] Ireland is furthermore scheduled to enact legislation in January 2024 to introduce the option to defer the uptake of the basic pension from age 66 up to 70. The basic pension will be increased for each year of deferral in an actuarially neutral way.

In Switzerland, contributions paid after reaching the statutory retirement age will be included in the calculation of the public pension in the future, increasing incentives to continue working.[67] People working beyond the statutory retirement age of 65 currently pay mandatory contributions but do not build up pension entitlements. In addition, flexibility in retirement between 63 and 67 is further extended as partial retirement will become an option, so that people can take up part of their pension early or defer it in order to supplement earnings from part-time work.

References

AIReF (2023), *Opinion on the long-term sustainability of the general government: The impact of demographics*, https://www.airef.es/wp-content/uploads/2023/03/OPINI%C3%93N-SOSTENIBILIDAD/AIReF-2023_Opinion-sostenibilidad-de-las-AAPP-largo-plazo_EN.pdf. [54]

Aubert, P. (2023), *Les départs anticipés pour carrière longue permettent-ils de compenser une plus grande pénibilité des métiers ?*, https://blog.ipp.eu/2023/03/06/les-departs-anticipes-pour-carriere-longue-permettent-ils-de-compenser-une-plus-grande-penibilite-des-metiers/. [31]

Bańkowski, K. et al. (eds.) (2023), *The effects of high inflation on public finances in the euro area*, ECB Eurosystem Occasional Paper Series No 332. [46]

Baquero, M. and N. Forcada (2022), “Thermal comfort of older people during summer in the continental Mediterranean climate”, *Journal of Building Engineering*, Vol. 54, p. 104680, https://doi.org/10.1016/j.jobe.2022.104680. [63]

Basso, H., O. Dimakou and M. Pidkuyko (2023), *How inflation varies across Spanish households*, Banco de España Documentos Ocasionales 2307, https://doi.org/10.53479/29792. [59]

BBVA (2022), *Qué pensión cobraré si retraso mi jubilación más allá de la edad de jubilación ordinaria [What pension will I receive if I delay my retirement beyond the ordinary retirement age]*, https://www.jubilaciondefuturo.es/es/blog/que-pension-cobrare-si-retraso-mi-jubilacion-mas-alla-de-la-edad-de-jubilacion-ordinaria.html. [51]

Bloom, D., A. Sousa-Poza and U. Sunde (eds.) (2023), *Trends in Pension Reforms in OECD Countries*, Routledge, https://doi.org/10.4324/9781003150398. [53]

Börsch-Supan, A. et al. (2022), “Targets missed: three case studies exploiting the linked SHARE-RV data”, *Journal of Pension Economics and Finance*, Vol. 21/1, pp. 1-21, https://doi.org/10.1017/s1474747220000359. [32]

Burström, K., M. Johannesson and F. Diderichsen (2005), “Increasing socio-economic inequalities in life expectancy and QALYs in Sweden 1980-1997”, *Health Economics*, Vol. 14/8, pp. 831-850, https://doi.org/10.1002/hec.977. [20]

Bushnik, T., M. Tjepkema and L. Martel (2020), “Socioeconomic disparities in life and health expectancy among the household population in Canada”, *Health Reports*, Vol. 31/1, pp. 3-14, https://doi.org/10.25318/82-003-x202000100001-eng. [23]

Cambois, E., J. Robine and M. Hayward (2001), “Social Inequalities in Disability-Free Life Expectancy in the French Male Population, 1980-1991”, *Demography*, Vol. 38/4, pp. 513-524, https://doi.org/10.2307/3088315. [18]

Cardoso, M. et al. (2022), *The Heterogeneous Impact of Inflation on Households’ Balance Sheets*, Red Nacional de Investigadores en Economia (RedNIE) Working Paper N° 176, https://rednie.eco.unc.edu.ar/files/DT/176.pdf. [58]

Causa, O. et al. (2022), “A cost-of-living squeeze? Distributional implications of rising inflation”, *OECD Economics Department Working Papers*, No. 1744, OECD Publishing, Paris, https://doi.org/10.1787/4b7539a3-en. [37]

CCSS (2023), *Patronos con trabajadores menores a 35 años y reportados en jornadas parciales pagarán menos por aseguramiento [Employers with workers under 35 years of age and reported on part-time work will pay less for insurance]*, https://www.ccss.sa.cr/noticia?v=patronos-con-trabajadores-menores-a-35-anos-y-reportados-en-jornadas-parciales-pagaran-menos-por-aseguramiento. [56]

Cournède, B. and M. Plouin (2022), *No Home for The Young? Stylised Facts and Policy Challenges*, OECD, https://www.oecd.org/housing/no-home-for-the-young.pdf. [39]

Crimmins, E. and Y. Saito (2001), “Trends in healthy life expectancy in the United States, 1970-1990: gender, racial, and educational differences”, *Social Science & Medicine*, Vol. 52/11, pp. 1629-1641, https://doi.org/10.1016/s0277-9536(00)00273-2. [10]

Deboosere, P., S. Gadeyne and H. Van Oyen (2009), “The 1991–2004 Evolution in Life Expectancy by Educational Level in Belgium Based on Linked Census and Population Register Data”, *European Journal of Population / Revue européenne de Démographie*, Vol. 25/2, pp. 175-196, https://doi.org/10.1007/s10680-008-9167-5. [22]

Deeg, D., W. De Tavernier and S. de Breij (2021), “Occupation-Based Life Expectancy: Actuarial Fairness in Determining Statutory Retirement Age”, *Frontiers in Sociology*, Vol. 6, https://doi.org/10.3389/fsoc.2021.675618. [7]

European Construction Sector Observatory (2019), *Housing affordability and sustainability in the EU: Analytical Report*, European Commission, https://single-market-economy.ec.europa.eu/document/download/e816b42f-c2f1-4407-aa1d-36fb3fdf848a_en. [40]

Eurostat (2020), *Healthy life years by sex (from 2004 onwards) (hlth_hlye)*. [29]

Eurostat (2020), *Life expectancy by age, sex and educational attainment level (demo_mlexpecedu)*, https://ec.europa.eu/eurostat/databrowser/view/DEMO_MLEXPECEDU/default/table?lang=en. [14]

Finnish Centre for Pensions (2023), *Unusual index increase led to a flood of pension claims*, https://www.etk.fi/en/topical-issues/unusual-index-increase-led-to-a-flood-of-pension-claims/. [45]

Gheorghe, M. et al. (2016), “Health inequalities in the Netherlands: trends in quality-adjusted life expectancy (QALE) by educational level”, *The European Journal of Public Health*, Vol. 26/5, pp. 794-799, https://doi.org/10.1093/eurpub/ckw043. [15]

Grigoriev, O. and G. Doblhammer (2019), “Changing educational gradient in long-term care-free life expectancy among German men, 1997-2012”, *PLOS ONE*, Vol. 14/9, p. e0222842, https://doi.org/10.1371/journal.pone.0222842. [13]

Horioka, C. and L. Ventura (2022), “Do the Retired Elderly in Europe Decumulate Their Wealth? The Importance of Bequest Motives, Precautionary Saving, Public Pensions, and Homeownership”, *Review of Income and Wealth*, https://doi.org/10.1111/roiw.12632. [35]

INPS (2023), *Pensioni decorrenti nel 2022 e nel primo semestre del 2023: Rilevazione al 02/07/2023 [Pensions starting in 2022 and in the first semester of 2023: Survey on 02/07/2023]*, https://www.inps.it/content/dam/inps-site/pdf/allegati/Decorrenti_nel_2022_e_nel_primo_semestre_2023_Rilevazione_al_2_luglio_2023.pdf. [50]

Insee (2023), “La croissance résiste, l’inflation aussi”, *Notes de conjoncture*, Vol. mars 2023, https://www.insee.fr/fr/statistiques/6966784. [34]

Insee (2022), *Guerre et Prix: Note de conjoncture*, https://www.insee.fr/fr/statistiques/6464639. [48]

Insee (2016), *Les inégalités sociales face à la mort*, https://www.insee.fr/fr/statistiques/1893092?sommaire=1893101. [16]

Insee (2015), *Indices des prix 1998-2015 selon la catégorie socioprofessionnelle de la personne de référence du ménage*, https://www.insee.fr/fr/statistiques/fichier/2832246/FCSP_2015.pdf. [47]

Kibele, E., D. Jasilionis and V. Shkolnikov (2013), “Widening socioeconomic differences in mortality among men aged 65 years and older in Germany”, *Journal of Epidemiology and Community Health*, Vol. 67/5, pp. 453-457, https://doi.org/10.1136/jech-2012-201761. [19]

Koch, S., K. Neusser and S. Haupt (2022), “Inflationsraten nach Haushaltstypen und soziodemographischen Merkmalen - Aktualisierung und Ergänzung des Policy Briefs Nr. 11/2022”, *Institute for Advanced Studies Policy Brief*, Vol. 14/2022, https://irihs.ihs.ac.at/id/eprint/6410/. [57]

Lampert, T., J. Hoebel and L. Kroll (2019), “Social differences in mortality and life expectancy in Germany. Current situation and trends”, *Journal of health monitoring*, Vol. 4/1, pp. 3–14, https://doi.org/10.25646/5872. [21]

Lydon, R. (2022), “Household Characteristics, Irish Inflation and the Cost of Living”, *Central Bank of Ireland Economic Letter*, Vol. 2022/1, https://www.centralbank.ie/docs/default-source/publications/economic-letters/household-characteristics-irish-inflation-and-the-cost-of-living.pdf?sfvrsn=5d86931d_7. [38]

Mackenbach, J. et al. (2019), “Determinants of inequalities in life expectancy: an international comparative study of eight risk factors”, *The Lancet Public Health*, Vol. 4/10, pp. e529-e537, https://doi.org/10.1016/s2468-2667(19)30147-1. [6]

Mesceriakova-Veliuliene, O. et al. (2021), “Inequalities in Life Expectancy by Education and Its Changes in Lithuania during 2001–2014”, *Medicina*, Vol. 57/3, p. 245, https://doi.org/10.3390/medicina57030245. [24]

Ministerio de Inclusión, Seguridad Social y Migraciones (2021), *Memoria del análisis de impacto normativo del anteproyecto de ley de garantía del poder adquisitivo de las pensiones y de otras medidas de refuerzo de la sostenibilidad financiera y social del sistema público de pensiones*, https://tinyurl.com/z8u7nfk2. [66]

Ministry of Labour, Social Affairs and Family of the Slovak Republic (2023), *Sociálna poisťovňa v máji vypláca rodičovský dôchodok takmer 852 tisíc poberateľom [In May, the Social Insurance Company pays parental pensions to almost 852 thousand beneficiaries]*, https://www.employment.gov.sk/sk/uvodna-stranka/informacie-media/aktuality/socialna-poistovna-maji-vyplaca-rodicovsky-dochodok-takmer-852-tisic-poberatelom.html. [62]

Mosquera, I. et al. (2018), *Review of Socio-economic inequalities in life expectancy and health expectancy in Europe*. [4]

Munnell, A. and P. Hubbard (2021), *What Is the Right Price Index for the Social Security COLA?*, https://crr.bc.edu/what-is-the-right-price-index-for-the-social-security-cola/. [49]

Niimi, Y. and C. Horioka (2019), "The wealth decumulation behavior of the retired elderly in Japan: The relative importance of precautionary saving and bequest motives", *Journal of the Japanese and International Economies*, Vol. 51, pp. 52-63, https://doi.org/10.1016/j.jjie.2018.10.002. [36]

OECD (2023), *Beyond Applause? Improving Working Conditions in Long-Term Care*, OECD Publishing, Paris, https://doi.org/10.1787/27d33ab3-en. [30]

OECD (2023), *Health at a Glance 2023: OECD Indicators*, OECD Publishing, Paris, https://doi.org/10.1787/7a7afb35-en. [64]

OECD (2023), *OECD Employment Outlook 2023: Artificial Intelligence and the Labour Market*, OECD Publishing, Paris, https://doi.org/10.1787/08785bba-en. [33]

OECD (2023), *Taxing Wages 2023: Indexation of Labour Taxation and Benefits in OECD Countries*, OECD Publishing, Paris, https://doi.org/10.1787/8c99fa4d-en. [65]

OECD (2022), *How inflation challenges pensions*, OECD, Paris, https://www.oecd.org/pensions/How-inflation-challenges-pensions.pdf. [42]

OECD (2022), *OECD Pensions Outlook 2022*, OECD Publishing, Paris, https://doi.org/10.1787/20c7f443-en. [52]

OECD (2022), *OECD Regions and Cities at a Glance 2022*, OECD Publishing, Paris, https://doi.org/10.1787/14108660-en. [41]

OECD (2021), "Chapter 2: Automatic adjustment mechanisms in pension systems", in *Pensions at a Glance 2021: OECD and G20 Indicators*, OECD Publishing, Paris, https://doi.org/10.1787/d9c5d58d-en. [8]

OECD (2021), *Pensions at a Glance 2021: OECD and G20 Indicators*, OECD Publishing, Paris, https://doi.org/10.1787/ca401ebd-en. [9]

OECD (2021), "Trends in life expectancy", in *Health at a Glance 2021: OECD Indicators*, OECD Publishing, Paris, https://doi.org/10.1787/e0d509f9-en. [1]

OECD (2019), *Health at a Glance 2019: OECD Indicators*, OECD Publishing, Paris, https://doi.org/10.1787/4dd50c09-en. [26]

OECD (2017), *Preventing Ageing Unequally*, OECD Publishing, Paris, https://doi.org/10.1787/9789264279087-en. [5]

OECD (2013), *Health at a Glance 2013: OECD Indicators*, OECD Publishing, Paris, https://doi.org/10.1787/health_glance-2013-en. [25]

OECD/European Union (2022), "Trends in life expectancy", in *Health at a Glance: Europe 2022: State of Health in the EU Cycle*, OECD Publishing, Paris, https://doi.org/10.1787/cf070758-en. [3]

Olshansky, S. et al. (2012), "Differences In Life Expectancy Due To Race And Educational Differences Are Widening, And Many May Not Catch Up", *Health Affairs*, Vol. 31/8, https://doi.org/10.1377/hlthaff.2011.0746. [11]

Peersman, G., K. Schoors and M. van den Heuvel (2023), “Hoezo energiecrisis? Analyse van de energiefactuur van 930.000 gezinnen”, *Gentse Economische Inzichten*, Vol. 9, https://www.ugent.be/eb/economics/en/research/gei/gei9. [43]

Saito, Y., J. Robine and E. Crimmins (2014), “The methods and materials of health expectancy”, *Statistical Journal of the IAOS*, Vol. 30/3, pp. 209-223, https://doi.org/10.3233/SJI-140840. [28]

Schöley, J. et al. (2022), “Life expectancy changes since COVID-19”, *Nature Human Behaviour*, Vol. 6/12, pp. 1649-1659, https://doi.org/10.1038/s41562-022-01450-3. [2]

Solé-Auró, A., H. Beltrán-Sánchez and E. Crimmins (2015), “Are Differences in Disability-Free Life Expectancy by Gender, Race, and Education Widening at Older Ages?”, *Population Research and Policy Review*, Vol. 34/1, pp. 1-18, https://doi.org/10.1007/s11113-014-9337-6. [12]

Statistics Lithuania (2023), *Average monthly earnings in the whole economy and average monthly state social insurance old-age pension*, https://osp.stat.gov.lt/statistiniu-rodikliu-analize?hash=22c19ca5-1e16-4718-88cf-56506c08ee42#/. [61]

Statistics Netherlands (2023), *CBS introduces new energy price measurement method*, https://www.cbs.nl/en-gb/background/2023/09/cbs-introduces-new-energy-price-measurement-method. [44]

Superintendencia de Pensiones (2023), *Número y monto promedio, en U.F., de las pensiones pagadas en el mes por modalidad, según tipo de pensión (Al 31 de julio de 2023)*, https://www.spensiones.cl//inf_estadistica/afipen/mensual/2023/07/m00.html. [60]

Treasury of the Australian Government (2020), *Retirement Income Review - Final Report*, https://treasury.gov.au/publication/p2020-100554. [55]

Vos, T. et al. (2020), “Global burden of 369 diseases and injuries in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019”, *The Lancet*, Vol. 396/10258, pp. 1204-1222, https://doi.org/10.1016/s0140-6736(20)30925-9. [27]

Zarulli, V., D. Jasilionis and D. Jdanov (2012), “Changes in educational differentials in old-age mortality in Finland and Sweden between 1971-1975 and 1996-2000”, *Demographic Research*, Vol. 26, pp. 489-510, https://doi.org/10.4054/demres.2012.26.19. [17]

Annex 1.A. Recent pension reform overview

Annex Table 1.A.1. Pension reform decided between September 2021 and September 2023

	Retirement age	Coverage	Pension benefits	Contributions	Minimum and basic pensions, income and means testing	Taxes and fees	Other
Australia		February 2022: As of July 2022, the minimum earnings threshold above which the employer has to pay the minimum contribution rate (Superannuation Guarantee) is removed. Previously, it was AUD 450. June 2023: On 30 June 2023, the Protecting Workers Entitlements legislation received Royal Assent, including a right to superannuation in the National Employment Standards. This gives Australian workers the power to pursue their unpaid superannuation as a workplace entitlement.	The Home Equity Access Scheme (HEAS), previously known as the Pensions Loans Scheme prior to 1 January 2022, allows seniors to access home equity for additional retirement funds. It was enhanced on 1 July 2022, allowing participants to receive lump sum payments, and a No Negative Equity Guarantee was introduced.		Deeming is the assumed income returned from financial investments in the income test for the targeted pension. The annual deeming rates were frozen at 0.25% and 2.25% until 30 June 2024. From 1 January 2023, pensioners can more easily sell their principal home without the proceeds affecting their pension. The assets-test exemption for principal home sale proceeds was extended to 24 months from 12 months, and these proceeds are deemed at the lower rate only (0.25%). From December 2022 to December 2023, Age Pension recipients receive a one-off AUD 4 000 increase to their Work Bonus balance and the maximum balance increases temporarily to AUD 11 800. The Work Bonus reduces the amount of eligible income included in the Age Pension income test.		February 2022: In July 2022, the maximum first home super saver (FHSS) withdrawal limit increased from AUD 30 000 to AUD 50 000. July 2022: From January 2023, up to AUD 300 000 from the proceeds of the sale of one's home can be contributed to one's superannuation fund as of age 55, down from 60 since July 2022 and 65 since July 2018 (downsizer contributions). In November 2022, the income limits for Commonwealth Seniors Health Card (CSHC) increased. The card is for seniors of Age Pension age whose income or assets preclude them from receiving Age Pension. From July 2023, the annual superannuation performance test covers more products, protecting more members from investing in products with poor long term investment performance.
Austria			January 2022: Pension indexation in 2022 deviated from the rule (prices, 1.8%) for lower monthly pensions:		In January 2023, the income-tested top up was increased by EUR 20 per month on top of the 5.8% indexation, resulting in a		A one-off payment was paid in March 2023 to help low- and middle-income pensioners in the face of high inflation:

	Retirement age	Coverage	Pension benefits	Contributions	Minimum and basic pensions, income and means testing	Taxes and fees	Other
			3% for pensions up to EUR 1 000; declining from 3% to 1.8% for pensions between EUR 1 000-1300; 1.8% for pensions above EUR 1 300. January 2023: Pension indexation followed the rule (5.8%) for total pension incomes up to EUR 5 670 per month; for total pensions exceeding that amount, the pension increased by EUR 328.86. The 2020 Social Security Act determined that for those retiring as of 2022, indexation in the year after retirement depends on the month of retirement: people retiring in January receive 100% of the indexation in the next year, those retiring in February, 90%, etc. People retiring in November or December receive no indexation the year after. Due to high inflation, the rule was temporarily altered from January 2023 (at least 50% of the full indexation) and suspended for 2024 and 2025 (everyone will receive full indexation).		total increase of 7.74%.		If the total monthly pension does not exceed EUR 1 666,66 the payment equals 30% of total pension income; if the total monthly pension is over EUR 1 666,66 and below EUR 2 000, the payment is EUR 500; for incomes from EUR 2 000 up to 2 500, the payment amount decreases linearly from EUR 500 to EUR 0.
Belgium			In 2024, the wage ceiling applied in the calculation of new pensions is increased by 2%.		In July 2023, minimum pension and social assistance benefits for older people were increased by 2%. In		

	Retirement age	Coverage	Pension benefits	Contributions	Minimum and basic pensions, income and means testing	Taxes and fees	Other
					January 2024, the minimum pension will be increased by 2.08% and the amount and ceiling of the minimum right per career year by 2%.		
Canada	The Government of Quebec passed legislation that the maximum deferral age for a retirement pension under the Quebec Pension Plan will increase from age 70 to age 72 as of 2024.		In July 2022, the Old Age Security pension increased by 10% for people aged 75 and over.	As part of the seven-year phase-in of the Canada Pension Plan Enhancement decided in 2016 and taking effect between 2019 and 2025, the contribution rate for the Canada Pension Plan (CPP) was increased from 5.45% to 5.7% for both employees and 5.7% for employers on 1 January 2022. The contribution rate payable on self-employment earnings was similarly increased from 10.9% in 2021 to 11.4% in 2022 as self-employed persons pay both the employer and employee components of CPP contributions. The level of maximum annual pensionable earnings on which contributions are payable also increased from CAD 61 600 to CAD 64 900 in 2022.		An additional one-time goods and services tax credit (GST credit) payment took effect in November 2022. This additional one-time payment will double the GST credit for six months for those who receive it. Seniors could potentially receive this payment. In July 2023, a grocery tax rebate was paid to persons who were entitled to receive the GST credit for January 2023, including seniors. This measure provided an extra CAD 225 for seniors, on average, and was expected to deliver targeted inflation relief for 11 million individuals and families, including more than half of Canadian seniors.	In December 2022, persons who have paid rent in 2022 equaling 30% or more of their net family income received a one-time top-up of CAD 500 to the Canada Housing Benefit. The benefit is application-based, non-taxable and can be received by pensioners. In March 2023 the government announced that a new Canada Dental Care Plan will become available to uninsured Canadians under 18, persons with disabilities, and seniors who have an annual family income of less than CAD 90 000. There will be no co-pays for those with an annual family income under CAD 70 000. By 2025, the Canadian Dental Care Plan will cover all uninsured Canadians with an annual family income under CAD 90 000.
Chile		As of September 2022, digital platform workers are covered by social security, including pensions. To be covered, the workers have to issue invoices and are therefore subject to the			January 2022: The new Universal Guaranteed Pension (PGU) replaces the Basic Solidarity Pension as of February 2022. People aged 65+ can access it if		

	Retirement age	Coverage	Pension benefits	Contributions	Minimum and basic pensions, income and means testing	Taxes and fees	Other
		same rules as the rest of self-employed workers who issue invoices.			they have resided at least 20 years in Chile since age 20 and at least 4 years in the last 5 years before claiming PGU. The benefit is not accessible to the 10% richest people aged 65+ and to people with a monthly pension income exceeding CLP 1 048 200. The monthly amount of the PGU equals CLP 193 917 for people with a pension income up to CLP 660 366, after which the benefit declines linearly with pension income until reaching 0 when the monthly pension income exceeds CLP 1 048 200. February 2023: Starting April 2023 the coverage of the PGU was increased. The means test was changed to grant access to the 90% poorest among all the people in the country (previously 90% of all 65+), which is estimated to increase the number of beneficiaries by 70 000.		
Colombia							
Costa Rica	January 2022: From January 2024, men can no longer retire early (now possible at 61 years and 11 months after 462 months of contributions). Women	September 2022: From 2023, the minimum contributory base is halved for part-time workers, from CRC 307 000 to CRC 153 500, to reduce	January 2022: As of January 2024, the reference wage to calculate the pension benefit is the average (corrected for inflation) of the best 300 months of				

	Retirement age	Coverage	Pension benefits	Contributions	Minimum and basic pensions, income and means testing	Taxes and fees	Other
	will have access to early retirement from age 63 with 405 months of contributions (now at 59 years and 11 months after 450 months of contributions). As before, pension can be drawn from statutory retirement age of 65 on the condition of 300 months of contributions, or at a reduced rate with 180 months of contributions.	informality. For IVM Insurance, contribution bases for employer contributions can be 25%, 50%, 75% or 100% of the minimum contributory base; the amount closest to the worker's salary is applied. From 2023, the reduction applies to people under 35, from 2025 to people under 50 and from 2025 to all workers without age limit.	contributions instead of the last 240 months of contributions made. At the same time, a replacement rate of 43-52.5% (depending on earnings level in the last 60 months before retirement) is attained after 300 months of contributions instead of 240 months of contributions.				
Czechia	September 2023: From October 2023 early retirement is tightened from 5 years to 3 years before reaching statutory retirement age, and penalties increased. The penalty is now 1.5% for each quarter, whereas previously penalties were lower for the first (0.9% per quarter) and second year of early retirement (1.2%). From October 2024 the required number of years of contributions to qualify for early retirement will be 40 instead of 35.		As of January 2023, a CZK 500 top up to the monthly earnings-related pension is granted for each raised child to the parent who provided most care to the child. September 2023: From January 2025, pensions will be indexed to prices plus 1/3 of real wage growth, compared to 1/2 now. Only the pensioner price index will be used to decide the indexation (the CPI will no longer be tracked). Early pensions will not be indexed until the recipient reaches statutory retirement age.	July 2022: As of February 2023, employers' social insurance contributions are reduced by 5 percentage points (from 24.8% to 19.8%) for workers younger than 21, as well as for part-time workers working between 8 and 30 hours per week who are either older than 55, or parents caring for young children, or people with disabilities.			
Denmark					June 2022 and June 2023 (applied retroactively): From January 2023, both the older person's and their spouse's or cohabitating partner's		

	Retirement age	Coverage	Pension benefits	Contributions	Minimum and basic pensions, income and means testing	Taxes and fees	Other
					income from work are excluded from the income test of basic and targeted benefits in the public pension system (i.e. excluding social assistance). The partner's income was also removed from the income test of early-retirement and disability benefits, removing disincentives for partners of retirees to remain in employment.		
Estonia			October 2021: In January 2023, the monthly amount of the basic flat-rate component of the social insurance old-age pension and of the social assistance national pension increases by EUR 20.			December 2021: Starting in 2023, the tax exemption for pensioners is expanded so that the average pension is exempt from income tax.	
Finland			November 2021: As of January 2022, for surviving spouses born as of 1975, the survivor's pension is limited in time to 10 years after death of the spouse, or until the youngest child becomes 18 years old. The child's pension in the earnings-related pension system is paid until the age of 20 after the reform (earlier 18) and the surviving spouse's part of the earnings-related pension is paid to the child if there is no surviving spouse. Also, a cohabiting partner	June 2022: As of January 2023, in addition to the self-employed persons' confirmed income, defined as the monetary value of the work input of the self-employed person, the pension provider also takes into account the median wage of the field of self-employed person's business, the value and amount of their work input, the scope of their entire business activity and their professional skills. The confirmed	A one-off advanced indexation of 3.5% on the 1st of August 2022.	The responsibility for organising healthcare, social welfare and rescue services was transferred from municipalities and joint municipal authorities to 21 well-being services counties on 1 January 2023. This led to structural reform in taxation as the municipal tax rate was lowered at the same time as state taxes were raised. Overall, there was no significant change in the level of individual taxation.	The act with the goal to promote the return to work of employees on disability pension is extended from the beginning of 2023 until the end of 2024.

	Retirement age	Coverage	Pension benefits	Contributions	Minimum and basic pensions, income and means testing	Taxes and fees	Other
			can receive a survivors' pension if they had a child with the deceased until the child is 18.	income will be adjusted regularly every three years by the pension provider.			
France	March 2023: From September 2023, the minimum retirement age increases from 62 to 64 in 2032 (1968 birth cohort) in increments of 3 months per cohort. The retirement age also increases by 2 years for active occupations in the public sector. The extension of the minimum contribution period for a full-rate pension from 42 years (168 quarters) to 43 years (172 quarters) is accelerated to 2028 (1965 cohort). People who started working before age 16 can retire at 58, before 18 at 60, before 20 between 60 and 62 depending on cohort, and before 21 at 63. Periods spent as stay-at-home parents to take care of children (assurance vieillesse des parents au foyer) will be taken into account in the eligibility for the long careers scheme (up to 4 quarters) as well as in the minimum pension calculation. Special pension schemes for among	March 2023: From September 2023, old-age insurance coverage has been extended to more types of caregivers and some trainee periods sponsored by the State in the past will be included in the contribution period.	March 2023: The 10% pension increase in the general private and public sector schemes for parents of at least three children was extended to the liberal professions. The reform increases flexibility for working after retirement. Returning to work after claiming a full pension will provide additional pension rights, and civil servants now have the option of a gradual retirement (combining working and a partial pension). October 2023: Social partners agreed to eliminate the 3-year temporary penalty in the mandatory occupational pension scheme for people retiring from December 2023. Similarly, the deferral bonus is eliminated from December 2023 for people born as of September 1961, except for people who were not affected by the reform of the public pension on the condition of a deferral of between 2 and 4 years.		March 2023: As of September 2023, the minimum pension from the general scheme is increased from EUR 748 to EUR 848 after a full career and from EUR 684 to EUR 709 for careers shorter than 30 years. Together with the mandatory occupational pension, the total gross minimum pension after a full career at the minimum wage is now 85% of the net minimum wage, or about EUR 1 200 per month in 2023.		

	Retirement age	Coverage	Pension benefits	Contributions	Minimum and basic pensions, income and means testing	Taxes and fees	Other
	others the energy sector, the Paris metro company, the central bank and notary clerks will be gradually eliminated. New entrants in these sectors or occupations from September 2023 will fall under the general private-sector scheme (grandfathering). People already working in these occupations will stay in their respective special schemes, but their eligibility age and career length requirement will increase at the same pace as in the general scheme as of 2025.						
Germany			July 2022: The catch-up factor was reinstated, so that the increase of the pension in line with regular indexation was reduced to compensate for the lack of negative indexation in 2021 (pension guarantee). In the former West-German states, pensions were increased by 5.35%; in former East-German states by 6.12%. July 2023: In the former West-German states, pensions were increased by 4.39%; in former East-German states by 5.86%.				January 2023: The earnings limit was abolished for people receiving early old-age pensions. The earnings limit for people receiving disability pensions was increased from EUR 6 300 per year to EUR 35 650 in case of a partial disability pension and to EUR 17 820 in case of a full disability pension. The source of earnings should fall within the determined capacity. June 2022: In July 2024, disability pensions claimed between 2001 and June 2014 will be increased by 7.5%, and

	Retirement age	Coverage	Pension benefits	Contributions	Minimum and basic pensions, income and means testing	Taxes and fees	Other
							between July 2014 and 2018 will by 4.5%. Since 2019, new disability pensions are calculated as if one worked until the statutory retirement age, but benefits in payment were not yet adjusted.
Greece			Since 2022, the residence requirement for a full national pension is temporarily reduced from 40 to 30 years for expatriates with Albanian nationality and expatriates coming from the former Soviet Union who have been legally and permanently residing in Greece since 1992. The requirement will increase again by one year each year until it reaches 40 again in 2032. The gross total amount of auxiliary pension was capped at 6/20th of the pension paid by the main scheme for people who paid contributions before 2015.	As of 25 November 2022, the special contribution of 1% of all employees of the public sector was abolished.	Regarding survivors' pensions, the statutory minimum benefit was changed to EUR 387.90 per month if the deceased has an insurance record of 15 years and a max of EUR 413.76 per month if the deceased has an insurance record of 20 years. The benefit is not subject to means-test. Regarding invalidity pensions, the statutory minimum pension (national and contributory pension combined) in the case of invalidity due to accident at work or occupational disease cannot be less than double the amount of the national pension corresponding for 20 years of insurance (i.e. 2 x EUR 413.76 per month).	In September 2022, the social solidarity contribution for pensioners was abolished. Previously, pensioners had to pay a supplementary tax of between 3% and 14% depending on pension level on the part of the pension exceeding EUR 1 400.	
Hungary			February 2022: The 13th month pension benefit was planned to be reintroduced gradually from 2021 to 2024, but the implementation has been accelerated and the 13th		The monthly minimum amount of HUF 24 250 for orphan allowance was increased to HUF 50 000 per month from 1 January 2022.The increase applies to both newly established orphan		Since September 2022, the national Firewood Programme provides Hungarian families, including pensioners, with firewood to meet energy needs for the 2022/23 heating season. A maximum

	Retirement age	Coverage	Pension benefits	Contributions	Minimum and basic pensions, income and means testing	Taxes and fees	Other
			month was paid out in full already in 2022.		benefits and orphan benefits in payment.		of 10 forest cubic metres of firewood per household can be purchased at a set price, as defined by law.
Iceland	June 2022: If the supplementary 3.5% of contributions (see 'contributions') is put in another individual account instead of the general FDC pension, it can be withdrawn as an early-retirement pension as of age 62, until reaching the statutory retirement age of 67.		June 2022: The pension system aims to ensure an annual accrual of 1.4% of career-average wages, resulting in a replacement rate of 56% after a 40-year career. However, if the supplementary 3.5% of contributions (see 'contributions') is put into the general FDC pension, the target replacement rate is 72%, corresponding to an accrual rate of 1.8% over a 40-year career.	June 2022: As of 2023, minimum contributions in the occupational pension scheme are increased from 12.0% to 15.5% (11.5% employer contributions + 4% employee contributions), in line with previous collective agreements. The employee can decide whether to put the supplementary 3.5% in the general FDC pension or in another individual account.			June 2022: If the supplementary 3.5% contributions are put in an individual account (see 'contributions'), then the money in the account can be inherited in case the owner passes away.
Ireland			The total contributions approach (TCA) to determine the state pension is gradually introduced between 2025 and 2034. Currently, the pension is based on the average number of contributions paid each year between entering the labour market and reaching the statutory retirement age, making later labour-market entry more beneficial than early entry followed by a career break even if the total period in which contributions are made is the same. Under TCA, a full pension is reached after 40 years' worth of	October 2023: The contribution rate for employees and employers, currently respectively 4% and 8.8% or 11.05% depending on income level, will both increase by 0.1 percentage points in October 2024. The contribution rate is expected to increase further in the coming years.			

	Retirement age	Coverage	Pension benefits	Contributions	Minimum and basic pensions, income and means testing	Taxes and fees	Other
			contributions irrespective of when these contributions were paid. During the transition period, the importance of the TCA in pension calculation gradually increases by one-tenth each year. Enhanced State Pension provision for carers (in excess of 20 years) is introduced from January 2024. People who spent more than 20 years providing full-time care to an incapacitated person get these periods credited in the contribution record for the contributory State Pension.				
Israel	November 2021: The statutory retirement age for women will be increased from 62 to 65. From 2022 it will increase by 4 months a year to 63 in 2024 and then by 3 months a year to 65 in 2032. The age for men remains at 67.						
Italy	Some temporary early retirement programmes were extended: - Early retirement for women (Opzione Donna): with 35 years of contributions, women could retire at 58 years (59 years if self-employed) in 2022, and		In 2023-24, only the lowest pensions will be indexed fully to prices, with lower indexation of higher pension bands: - up to 4 times INPS minimum: 100% prices - between 4 and 5 times INPS minimum: 85%		December 2022: The budget law n. 197/2022 introduced an extraordinary and temporary revaluation for minimum pensions only in 2023, in order to counteract the negative effects of inflation. The minimum pension is	In 2022, the tax reform changed income brackets and tax rates: 23% for pension income up to EUR 15 000, 25% between EUR 15 001 and EUR 28 000, 35% between EUR 28 001 and EUR 50 000 and	

	Retirement age	Coverage	Pension benefits	Contributions	Minimum and basic pensions, income and means testing	Taxes and fees	Other
	at 60 (59 with one child or age 58 with two children) in 2023. As of 2023, Opzione Donna is only available for women who are caregivers, disabled at least 74% or fired or employed by companies in crisis. - Early retirement for unemployed or disabled people, caregivers or people in arduous occupations (Social APE): In 2022 and 2023, people who have contributed for more than 30 years (36 years in case of an arduous occupation) can receive an old-age pension from the age of 63. - Early retirement for restructuring: with 35 years of contributions, employees in firms in crisis can retire at 58. - Quota 102 / quota 103: In 2023, a person can retire at age 64 with 38 years of contributions (Quota 102) or at age 62 with 41 years of contributions (Quota 103).		prices - between 5 and 6 times: 53% - between 6 and 8 times: 47% - between 8 and 10 times: 37% - over 10 times: 32%		increased by 1.5% on top of regular indexation for older pensioners under 75 years of age and by 6.4% for pensioners aged 75+.	43% above EUR 50 000.	
Japan				September 2021: From December 2024, the maximum monthly contribution amounts for DC plans change as follows: - Corporate-type DC plan:			

	Retirement age	Coverage	Pension benefits	Contributions	Minimum and basic pensions, income and means testing	Taxes and fees	Other
				JPY 55 000 minus the contribution amount for DB plans etc. - Individual-type DC plan: the lowest of JPY 20 000, or JPY 55 000 minus the sum of contribution for corporate-type DC plan and the contribution amount for DB plans etc.			
Korea							
Latvia		July 2023: A person who permanently lives outside the EU/EEA countries has the right to an old-age pension and a survivor's pension if the length of the period of insurance in Latvia required for granting pension is at least 15 years.			March 2023: After a supplementary indexation in July 2023, the frequency of indexation of first-tier benefits is increased from every three years to annually from January 2024. Minimum pension applying after 15 years (1.1 * 25% of median income 3 years prior): from EUR 150 since January 2021 to EUR 172 in July 2023 and EUR 188 in January 2024 Basic pension and targeted benefit (20% of median income 3 years prior): from EUR 109 since January 2021 to EUR 125 in July 2023 and EUR 137 in January 2024.	In 2022, the non-taxable minimum of the pensioner was increased from EUR 330 per month to EUR 350 per month in the first half of 2022 and from July 2022 to EUR 500 per month.	
Lithuania			November 2021: From 2022, a supplementary indexation applies to the social security pension		November 2021: From 2022, the pro-rata reduction in the contributory basic pension for shorter careers is		

	Retirement age	Coverage	Pension benefits	Contributions	Minimum and basic pensions, income and means testing	Taxes and fees	Other
			(i.e. indexation of pension points). If the at-risk-of-poverty rate for people 65+ exceeds 25% and/or the average old-age pension is projected to fall below 50% of the average net salary in the year of indexation, the supplementary index of pension points is applied. If the social insurance fund budget is expected to be in surplus in the year of indexation and the application of standard indexation is expected to cost less than 75% of the surplus, then the supplementary indexation of pension points is applied so that the total cost of indexation equals 75% of the surplus. In 2023, the pension point value was indexed by a supplementary 5.8%, on top of the 9.02% indexation. April 2022: An additional index of social insurance pension benefits of 5% was applied in June 2022 to compensate for the high level of inflation.		abolished. Previously, 33 years of contributions (increasing to 35 by 2027) were required to receive the full amount of the basic pension. Now, everyone who qualifies for the public pension – conditional on having 15 years of contributions – receives the full amount of the basic pension.		
Luxembourg							
Mexico		November 2022: Mandatory FDC coverage was extended to domestic workers.					

	Retirement age	Coverage	Pension benefits	Contributions	Minimum and basic pensions, income and means testing	Taxes and fees	Other
Netherlands			May 2023: A new law entering into force in July 2023 obliges pension funds to transition from FDB to FDC schemes before 2028. From 2028, new entitlements can only be built up in DC schemes. Funds are encouraged to transfer existing DB entitlements to the new pension system. Social partners can choose one of three types of DC schemes: 1. A flexible scheme allows members to choose between different investment profiles which are defined by the pension fund. Upon retirement, members can choose between an annuity of a fixed monthly amount (not indexed) or a variable annuity depending on investment returns. 2. A collective scheme has a single investment policy for all members, applying life-cycle investment strategies. The contribution rate should be based on a pension target and the probability of achieving this pension target should be calculated at least every five years. Pay-out happens through a variable annuity				

	Retirement age	Coverage	Pension benefits	Contributions	Minimum and basic pensions, income and means testing	Taxes and fees	Other
			depending on investment returns. 3. Employers pay contributions to individual accounts managed by specific institutions (in existence since 2011). These institutions invest the funds they manage but they are neither allowed to carry any risks nor to provide insurance services (no annuities, survivor's or disability benefits). Upon retirement, the employee must use the capital to purchase a pension product from an insurer. In both flexible and collective schemes, all fund members pay the same contribution rate. In the run-up to the new pension system, indexation rules have been relaxed from 1 July 2022 up until the end of 2023. The threshold from which indexation may be applied has been lowered (from ~130% to 105%) and a computational rule that indexations granted should be future proof has been abolished. Only pension funds that indicate they are expecting to transfer current pension rights to the new system are able to use the relaxed rules.				

	Retirement age	Coverage	Pension benefits	Contributions	Minimum and basic pensions, income and means testing	Taxes and fees	Other
New Zealand		In 2021, the New Zealand Super / Veteran Pension minimum residence requirement increased. The residence requirement after age 20 is gradually raised from 10 years to 20 years by birthdate. The full 20 years are required for people born from July 1977 onwards. The increase does not apply to refugees arriving in New Zealand aged 55 or older, and a reduced requirement applies to refugees arriving between age 45 and 55.					
Norway			From 1 May 2022, the targeted pension benefit and the mandatory earnings-related pension benefit are indexed to the average of wage and price growth.	January 2022: Contributions to the FDC scheme are made on all income up to 12 base amounts, instead of on income between 1 and 12 base amounts.	From January 2023, the minimum pension is increased by NOK 4 000 for single pensioners (1.72%) above indexation.		
Poland			October 2022: All benefits were increased from March 2023 following the general indexation rule but by no less than PLN 250. July 2023: A 14th month pension payment was made permanent, first paid in September 2023; in 2021 and 2022 it was paid as a discretionary benefit. The level of the payment is not		October 2022: The minimum pension was increased from March 2023 by PLN 250.	November 2021: As of January 2022, old-age and disability pension benefits are exempt from tax up to PLN 30 000 per year (aligned with the tax-free allowance for earnings), and income up to PLN 85 528 per year is exempt from taxation for people who have reached the statutory retirement age but continue to work without claiming	

	Retirement age	Coverage	Pension benefits	Contributions	Minimum and basic pensions, income and means testing	Taxes and fees	Other
			fixed, but it cannot be below the level of the minimum pension.			pension benefits.	
Portugal	Following the automatic adjustment of the retirement age to life expectancy, the normal age of retirement increased from 66 years and 6 months in 2021 to 66 years and 7 months in 2022. In 2023, the normal retirement age dropped to 66 years and 4 months.		In 2021, total pensions up to 1.5 times Social Support Index (EUR 658.22) were increased by EUR 10 above indexation. In July 2022, indexation of total pensions up to 2.5 times SSI (EUR 1 108) at the beginning of the year was topped up to EUR 10, applied retroactively from January. In October 2022, all the pensioners received a bonus worth half of their monthly pension (one-off payment). In January 2023, pensions were increased below regular indexation. Total pensions up to 2 times SSI (EUR 960.86) were increased by 4.83%, between 2 and 6 times SSI by 4.49% and above 6 times SSI by 3.89%. In July 2023 all pensioners received an extraordinary increase of 3.57%, increasing pensions to the level of the full indexation required by the rule.			In 2023, the special tax allowance for pensioners is EUR 10 640 for annual pension income.	
Slovak Republic	As of January 2023, the cap on the increase in the statutory retirement age at 64 is removed.	From May 2023 auto enrolment into second pillar will be set up with the possibility to opt out	November 2022: As of 2023, a parental pension is introduced. For each child, a parent	If a person decides to join or stay in the FDC scheme with automatic enrolment, mandatory			As of May 2023, a default investment strategy is introduced in the FDC scheme with automatic

	Retirement age	Coverage	Pension benefits	Contributions	Minimum and basic pensions, income and means testing	Taxes and fees	Other
	The retirement age increase is equal to the median of the average yearly life expectancy increase over the last available 7 5-year periods. From 1 November 2022, the condition for entitlement to early retirement has been tightened to 1.6 times the adult subsistence minimum income level (previously 1.2 times). From 1 January 2023, in addition to the option to retire two years before the statutory retirement age with a penalty of 0.5% per month, it is now possible also to retire after a career of 40 years regardless of age, in which case a reduced penalty of 0.3% per month applies.	within two years. At the same time, the upper age limit for entry will be increased from 35 to 40 years.	receives 1.5% of 1/12 of the child's annual assessment base for pension contributions from two years ago, capped at 1.2 times the average wage. The parental pension is paid monthly, except the year 2023 when the whole amount of the parental pension is paid once a year. Since 2023, the pension point value is indexed to 95% of average earnings growth instead of full average earnings growth. From 1 January 2024, half of the saved amount in second pillar savings is paid as a programmed withdrawal by a pension management company, and afterwards the second part is paid as a lifetime annuity by a life insurance company. The programmed withdrawal covers half of the median life expectancy for men and women of the saver's at the age of (early) retirement, and can be paid as a fixed or variable amount. During this period, the saver can continue to contribute voluntarily, or has to continue to pay mandatory contributions if employed. February 2023 From January 2024, an	contributions amount to 5.50% of the assessment base in 2023 and 2024, 5.75% of the assessment base in 2025 and 2026, and 6% from 2027 from the assessment base. The contribution rate to the public earnings-related scheme is reduced proportionately, so that the total contribution rate remains constant at 18%.			enrolment, in which during the first phase of saving, the saver's assets, are placed exclusively in equity investments through a passively managed index non-guaranteed pension fund. At a certain time horizon (50 years in 2023), the saver's property and contributions to less risky bond and cash investments will subsequently begin: the share of the net value of assets in the index non-guaranteed pension fund will be reduced by 4 percentage points per year in favour of the share of the net value of assets in the bond guaranteed pension fund.

	Retirement age	Coverage	Pension benefits	Contributions	Minimum and basic pensions, income and means testing	Taxes and fees	Other
			additional indexation mechanism is introduced, so that pension benefits increase by 5% when the cost-of-living index grows by at least 5% since the previous indexation.				
Slovenia			As of April 2022, a father can claim the bonus for having children if the mother has not yet claimed the right to an early, old-age or disability pension, in mutual agreement. The bonus remains the same at 1.36% accrual per child up to three children. If the mother dies before claiming an early, old-age or disability pension, the father may assert an additional percentage of the assessment.				
Spain	December 2021: From 1 January 2022, the person who delays retirement will receive a bonus of 4% per full year worked after reaching the retirement age, or can opt to receive it as a lump sum which depends on the amount of the initial pension and the period of contributions, or as a combination of both.		November 2021: The revalorisation pension index (IRP) used for pension indexation and the sustainability factor (SF) to be used to adjust new benefit levels but never implemented were removed. As of January 2022, the pensions in the public PAYGO system are automatically adjusted to CPI. If inflation is negative, pensions will remain unchanged. March 2023: - The period on which the	November 2021: As of January 2023, the contribution rate is increased by 0.6 percentage points (0.1 percentage points for workers, 0.5 percentage points for employers) from 2023 to 2032 to finance the Intergenerational Equity Mechanism (MEI), a reserve fund. July 2022: From January 2023, the self-employed can no longer choose their contribution base, which	March 2023: Between 2024 and 2027: - The minimum pension for a pensioner with a dependent spouse will gradually be increased to 60% of median equivalised disposable income for this type of household. Other minimum pensions follow the same evolution. - The safety net benefit for older people will be increased so that for a single individual the benefit will be equal to 45% of median		

	Retirement age	Coverage	Pension benefits	Contributions	Minimum and basic pensions, income and means testing	Taxes and fees	Other
			reference wage is calculated is expanded from the last 25 years to the last 29 years with the possibility of discarding the worst 20-four monthly contributions from 2044. Until then people can choose the most beneficial of the two calculation methods. - The maximum pension will increase each year by 0.115 percentage points above inflation between 2024 and 2050 and faster after 2050, with a total increase of 20 percentage points by 2065. - The supplement for reducing the gender pension gap received by women (or men under certain conditions) who raised children, EUR 30.40 per month in 2023, will be increased by 10% above inflation in the period 2024-25 with the aim of reducing the gender pension gap.	resulted in the majority paying minimum contributions. Self-employed are now divided in 15 groups based on their net income level, with a specific minimum and maximum contribution base defined for each group. Between 2023 and 2025, the minimum and maximum contribution bases will decline for the lowest three income groups and increase for the highest nine income groups. March 2023: The maximum contribution base is gradually increased by 1.2 percentage points above inflation each year between 2024 and 2050, and a new solidarity contribution is established on the part of earnings exceeding the maximum contribution base for which no pension entitlements are built up. From 2025, the new contribution equals 0.92% of the part of the salary between the 100% and 110% of the maximum contribution base, 1% between 110% and 150% and 1.17% above 150%. These rates will gradually increase to reach 5.5%, 6% and 7%	equivalised disposable income (i.e. 75% of the at-risk-of-poverty threshold at 60% of median equivalised disposable income). Other old-age safety net benefits for older people follow the same evolution.		

	Retirement age	Coverage	Pension benefits	Contributions	Minimum and basic pensions, income and means testing	Taxes and fees	Other
				in 2045, respectively. - From 2024, the contribution to the MEI doubles from 0.6 to 1.2 percentage points in 2029, by 0.1 percentage points per year.			
Sweden	May 2022: The eligibility age for targeted benefits (guarantee pension, income pension supplement and housing supplement) increased from 65 to 66 years in 2023, and to 67 in 2026. From 2026, eligibility age for targeted benefits and the target retirement age in the earnings-related pension (currently 67) are linked to two-thirds of life-expectancy gains at age 65. As increases have to be announced 6 years before taking effect, these retirement ages remain at 67 at least until 2029. The minimum retirement age for the earnings-related pension increased from 62 to 63 in 2023, and to 64 in 2026, after which it will remain three years before the target retirement age.	September 2022: As of January 2023, the guarantee pension is no longer paid to individuals residing outside of Sweden.	June 2022: In August 2022, the guarantee pension levels were increased to boost adequacy. For those born in 1938 or later, the maximum guarantee pension was raised from SEK 8 779 to SEK 9 781 for unmarried persons, and from SEK 7 853 to SEK 8 855 for married persons. For those born in 1937 or earlier, the increase was from SEK 8 985 to SEK 9 988 for the unmarried, and from SEK 8 027 to SEK 9 030 for the married.			December 2021: From 1 January 2022, the basic tax allowance for people aged 65 and above was increased for a yearly income of app. SEK 100 000 or more. November 2022: From 1 January 2023, the age requirement for the basic allowance for the elderly was increased from age 65 to 66.	December 2021: In January 2022, the ceiling for housing cost was raised from SEK 7 000 per month to SEK 7 500 per month. The consumption allowance in the housing supplement increased by SEK 200 for those who are unmarried and by SEK 100 for those who are married in January 2022, and by SEK 300 and SEK 150, respectively, in August 2022.
Switzerland	Confirmed by referendum in September 2022:		March 2023: Parliament voted to reduce the conversion			September 2022: From January 2024, VAT will increase by	

	Retirement age	Coverage	Pension benefits	Contributions	Minimum and basic pensions, income and means testing	Taxes and fees	Other
	Between 2025 and 2028, the statutory retirement age for women increases from 64 to 65, equaling that of men, by 3 months per year. The reference age for the occupational pension will be raised at the same rate. Compensation measures are provided to women born in 1969 or before. Retirement flexibility is increased, including the possibility to retire between 63 and 70 or partial retirement. Contributions paid after 65 will result in pension build-up. From 2027, reduction rates for early retirement and deferral supplements will be adjusted to life expectancy, with a lower reduction rate for low incomes.		rate used to convert pension assets from the mandatory part of the occupational pension scheme into annual pensions from 6.8% to 6%. This reduction takes into account the increase in life expectancy and the situation of the financial markets. The reform, which aims to strengthen the financing of occupational pensions, to maintain the overall level of pensions and to improve coverage of part-time workers, is subject to a referendum in 2024.			0.4 percentage points to finance the AVS. The new standard rate will therefore be 8.1%.	
Türkiye					The minimum pension, previously TRY 1 500, was increased several times: - January 2022: TRY 2 500 - July 2022: TRY 3 500 - January 2023: TRY 5 500 - April 2023: TRY 7 500		April 2023: The amount of the bairam bonus was increased from TRY 1 100 to TRY 2000, for both bairams. In November 2023, a one-time bonus of TRY 5 000 was paid to all retirees who are not working (12.2 million people) to increase their purchasing power.
United Kingdom				For automatic enrolment (AE) into a workplace pension the upper and			From October 2022, the simpler statements regulations introduce new

	Retirement age	Coverage	Pension benefits	Contributions	Minimum and basic pensions, income and means testing	Taxes and fees	Other
				lower earnings limits are determined every year by the statutory AE thresholds review. The 2023/24 thresholds have been maintained at the 2022/23 levels of GBP 6 240 for the lower earnings limit of the qualifying earnings band and GBP 50 270 for the upper earnings limit of the qualifying earnings band. Contributions are based on earnings between these two thresholds, which amounts to a minimum contribution of 8% of earnings within the thresholds (5% from employees, 3% from employers). The annual allowance for pension savings is increased from GBP 40 000 to GBP 60 000.			requirements for the trustees or managers of DC pension schemes that provide money purchase benefits only and that are used for automatic enrolment. Simpler statements should be in a prescribed format not exceeding a double-sided A4 paper (or digital equivalent). From April 2022, flat-fee charges levied on members of a DC pension scheme used for automatic enrolment with rights invested in the pension scheme's default fund are no longer allowed if it would result in the value of the account falling below GBP 100. From April 2023, specified performance-based fees are excluded from the charge cap. From April 2023, most occupational DC schemes with 12+ members are required to report their policies on illiquid investment in their default Statement of Investment Principles (SIP), and to publicly disclose their asset allocations in their annual Chair's Statement.
United States							

Notes

[1] OECD Health Statistics, COVID-19 Health Indicators: Mortality (by week): Excess deaths by week, 2020-23.

[2] On average, studies covering the period 2000-10 are more likely to find increasing gaps in life expectancy compared to studies covering other periods, as are studies published in academic journals compared to data from databases or other papers. The latter could be the result of publication bias meaning that studies that do not find increasing gaps in life expectancy are less likely to be accepted for publication in a journal, of researchers' interests in analysing inequalities or of good-quality data being more accessible to academic researchers in countries where the gaps increase.

[3] Healthy life expectancy can also be calculated based on a variety of other indicators including subjective health as well as various indicators to assess disability (Saito, Robine and Crimmins, 2014[28]).

[4] The WHO's healthy life expectancy indicator is based on one of two components of DALY, years lost due to disability (YLD). It does not include years of life lost due to premature mortality (YLL). See www.who.int/data/gho/data/indicators/indicator-details/GHO/gho-ghe-hale-healthy-life-expectancy-at-age-60 and www.who.int/data/gho/indicator-metadata-registry/imr-details/158.

[5] More recent estimates of healthy life expectancy are available in *Health at a Glance 2023* (OECD, 2023[64]). For the purpose of comparison, the data in this report refer to the most recent year in which the healthy life expectancy measures are available in both WHO and Eurostat databases.

[6] Over the same period, the employment rate among the 55-64 did not improve at all in Iceland and Türkiye, notably the countries with the highest and the lowest employment rates in this age group, respectively.

[7] Age gaps can differ greatly depending on the age groups compared. Causa et al. (2022[37]) conclude that the age gap in loss of purchasing power due to inflation is less pronounced than the income gap based on comparisons mostly of people aged 65-74 to those in middle-age, mainly in the age group 35-44. Across countries, younger people have been impacted markedly less by increasing inflation, and hence age differences are more pronounced when comparing older people to those under 30 than when comparing them to middle-aged people. In Austria, year-on-year price inflation for people aged 65 and over was 1.2 percentage points higher than for those below 30 in August 2022 whereas it was similar compared to those aged 30-64 (Koch, Neusser and Haupt, 2022[57]). In France, there was an almost linear incremental increase of inflation with age with an increase of about 0.5-0.7 percentage points per 15-year age group in January 2023 (Insee, 2023[34]). In Ireland and Spain, inflation was respectively 0.9 and 1.9 percentage points higher for people over 65 compared to people below 35 (Cardoso et al., 2022[58]; Lydon, 2022[38]).

[8] French people aged 60+ spent 21% of their budget on food compared to 11% of people younger than 30 (Insee, 2023[34]). French data moreover show that prices have increased faster for the types of alimentation older people consume more of – particular proteins of animal origin, fats and oil – than for other foods, although stark differences in dietary habits between older people contribute to the greater variation in the impact of inflation among older people (Insee, 2023[34]).

[9] Sensitivity to temperatures changes as people age, which may further affect heating consumption. The neutral temperature for older people is over 2 degrees Celsius higher than for other adults, although at the same time they are comfortable in a wider range of temperatures (Baquero and Forcada, 2022[63]).

[10] At the same time, the net impact for pension finances is more difficult to anticipate with price indexation than with wage indexation as pension revenues tend to follow wages.

[11] In contrast, the Spanish Statistical Office only takes the electricity prices in the regulated market into account. Hence, fluctuations in electricity prices may not fully be reflected in official inflation statistics (Basso, Dimakou and Pidkuyko, 2023[59]).

[12] The United States indexes pension benefits to a cost-of-living index for urban and clerical workers. Belgium (alcohol, tobacco and motor fuels), France (tobacco) and Portugal (housing) take certain products out of the basket to determine indexation, in particular goods that are subject to excise duties to avoid that raising duties automatically results in higher pensions. Lithuania on the other hand indexes targeted benefits to a mix of food costs and total price inflation.

[13] Pensioner-specific cost-of-living indices are calculated in the same way as the overall CPI index, but products are weighted by the average consumption basket of pensioners instead of the full population. Moreover, Australia and New Zealand apply price indexation, but set a minimum threshold relative to average wages below which pensions cannot sink.

[14] Wage indexation comes in various forms as well, with countries indexing pensions to average wage, minimum wage or wage bill growth, or to growth of the median income. Indexation purely to nominal wage growth applies to the basic pension in Czechia and basic and targeted pensions in Denmark. Germany adjusts earnings-related pensions to nominal wage growth in addition to other factors adjusting to changes in the contribution rate and in the rate of pensioners to contributors. Lithuania indexes earnings-related and basic pensions to wage bill growth. The Netherlands adjusts its basic and targeted pensions to minimum wages. Sweden adjusts earnings-related pensions to nominal wage growth reduced by 1.6%. In Latvia, the targeted benefit equals 20% of median income three years prior and the minimum pension 25%.

[15] Australia uses male wages as a benchmark.

[16] In May 2022, the indexation of earnings-related pensions to wage growth minus 0.75% was replaced by the average of wage and price growth.

[17] Colombia indexes pensions up to the minimum wage to minimum-wage growth, and pensions exceeding that to price inflation.

[18] While Austria applies thresholds for full pension indexation in a discretionary manner, Italy has changed the legislated thresholds several times in recent years. A 2019 reform reduced the number of income bands to which a specific indexation rate applied in Italy from seven to three bands as of 2022. However, in 2022 a temporary deviation from this rule was legislated, with indexation in 2023-24 varying across six income bands.

[19] Latvia only indexes the part of the pension that is below 50% of the average insurable earnings in the previous year. The threshold was at EUR 534 in 2022.

[20] Portugal furthermore adjusts indexation to CPI both upward and downward depending on past real GDP growth and individual pension levels.

[21] Japan indexes its targeted benefits only every five years based on local cost-of-living surveys.

[22] Either indexing to the annual inflation index comparing the last year to the previous one, or averaging monthly year-on-year inflation over a 12-month period.

[23] Germany adjusted the procedure for indexation of its targeted benefits as of 2023 to ensure that the value of its targeted benefit would not fall behind on inflation too much before the next indexation. The indexation each year is now composed of a basic adjustment, which has a permanent impact on the benefit amount, and a supplementary adjustment, which only affects the benefit for one year. The basic adjustment increases targeted benefits in January each year by 70% of price increases and 30% of net nominal wage increases between the last period July-June and the previous period July-June. On top of that, the supplementary adjustment, which happens at the same time, adjusts to 100% of the change between average monthly CPI over the last period April-June and the previous period April-June – which effectively serves as an approximation of the inflation that will take place throughout the year. The benefit level in the next year is calculated based on the benefit level in the current year after basic adjustment but without supplementary adjustment.

[24] Latvia set its targeted benefit at 20% of the median income three years prior, so the 2024 benefit is set at 20% of the median income in 2021. Following the same procedure, the minimum pension is set at 25% of the median income three years prior.

[25] Since 2022, Greece similarly uses an estimate of CPI growth for the previous year in order to index pensions already in January, with a correction being applied once the CPI statistics for the previous year are confirmed.

[26] The minimum increase was PLN 250.

[27] The general indexation rule was applied in January 2022, while the minimum indexation of EUR 10 was only paid from July 2022 but applied retroactively as of January.

[28] The rule requires an indexation to prices five months after the 5% threshold is exceeded, and hence it can trigger indexations exceeding 5% if prices increase further over this five-month period.

[29] The retirement age is calculated for each cohort based on life expectancy at the retirement age applying to the previous cohort, and announced five years before taking effect.

[30] The life-expectancy link will be in place as of 2026 but as increases take effect six years after announcement and no increases have been announced yet, the eligibility age will remain at 67 at least until 2029.

[31] After the elimination of the retirement age in March 2023 for people who entered the labour market before 8 September 1999, the normal retirement age in Türkiye even dropped to 47 for men and 46 for women.

[32] Increases in the statutory retirement age require parliamentary approval in Denmark. So far, Parliament has approved the increase of the statutory retirement age to 69 in 2035. The retirement age revisions take place every five years and take effect 15 years after approval (OECD, 2021[8]).

[33] While Türkiye is an absolute outlier for people retiring now, its normal retirement age is set to increase fast as it will be 65 for men entering the labour market in 2022.

[34] In the first half of 2023, 7 536 new pensions were paid under the women's option compared to 24 559 in the full year of 2022. The uptake of the women's option before age 60 fell by 63%, from 9 568 in 2022 to 1 781 in the first half of 2023 (INPS, 2023[50]).

[35] For people who started working before age 21 with long careers, the age condition is relaxed if they fulfil the career-length requirement: retirement is possible at 58 for those who started working before age 16, at 60 for those who started working before 18, between 60 and 62 (depending on cohort) for those who started working before age 20, and at 63 for those who started working before age 21.

[36] Self-employed and civil servants can access a pension after 7 200 days of contributions for women and 9 000 days for men.

[37] The minimum contributions as set in the law now correspond to those previously agreed in collective agreements, although the change impacts 17% of the workforce who were previously not covered by a collective agreement including these minima.

[38] In the Slovak Republic, early retirement is now only possible with a pension of at least 1.6 times the subsistence minimum (EUR 375 in the first half of 2023), up from 1.2 times previously.

[39] In 2022, the threshold below which no income tax is paid is PLN 85 528 for people above the statutory retirement age who do not take up their pension, compared to PLN 30 000 for those who do.

[40] Survey research indicates that some people prefer receiving the lump sum over the 4% bonus (Ministerio de Inclusión, Seguridad Social y Migraciones, 2021[66]).

[41] Australia increased its so-called Work Bonus from AUD 7 800 to AUD 11 800 for the period between 1 December 2022 and 31 December 2023.

[42] www.lamoncloa.gob.es/temas/fondos-recuperacion/Documents/16062021-Componente30.pdf.

[43] In 2022, the maximum contribution base was EUR 49 673, or 1.75 times average annual earnings reported in *Taxing Wages 2023* (OECD, 2023[65]).

[44] However, the maximum pension is subsequently scheduled to increase fast from 3.2 percentage points above inflation in 2051 to 20 percentage points in 2065, after which it will be left to the social partners to decide whether to increase it further to 30 percentage points, that would roughly correspond to the total increase in the maximum contribution base.

[45] https://elpais.com/economia/2021-11-10/bruselas-obliga-a-espana-aumentar-el-periodo-de-calculo-de-las-pensiones-para-recibir-los-fondos-de-recuperacion.html.

[46] More precisely, this new reference period in Spain covers the 29 last years, but the 24 months with the lowest contributions can be excluded.

[47] Whether a person belongs to the 90% poorest people and thus is eligible to the universal guaranteed pension is determined based on the household's pension targeting score. The score takes various sources of income into account, as well as the family type and family needs. See www.spensiones.cl/portal/compendio/596/w3-propertyvalue-4394.html.

[48] For people with FDC pensions up to 5.4 times the universal guaranteed pension benefit or about four times the average FDC pension benefit. The gains are particularly high for people with FDC pensions around 3 times the universal guaranteed pension benefit (between about half and two-thirds of the gross average wage) as they would not have received any benefits from the public scheme in the old system yet would be entitled to the full amount of the public benefit in the new system.

[49] The French minimum pension was increased as of September 2023 from EUR 748 to EUR 848 after a full career and from EUR 684 to EUR 709 for careers shorter than 30 years.

[50] The Spanish minimum pension for persons with a dependent spouse, EUR 13 527 per year in 2023, is projected to reach EUR 16 511 in 2027. The minimum for single pensioners is expected to increase from EUR 10 963 in 2023 to EUR 12 881 in 2027.

[51] The non-contributory targeted benefit will increase from EUR 6 785 per year in 2023 to EUR 8 250 in 2027. The benefit is set at 75% of the at-risk-of-poverty threshold for a single individual at 60% of median equivalised disposable income, or 45% of the median.

[52] The maximum amount of the parental pension in 2023 is EUR 21.80 per month per child; according to preliminary data the average parental pension parents received from all their children combined is EUR 25.50 per month (Ministry of Labour, Social Affairs and Family of the Slovak Republic, 2023[62]).

[53] If at least one-quarter of people aged 65+ have an equivalised disposable income below the at-risk-of-poverty threshold of 60% of the median for the total population or if the average old-age pension is projected to fall below 50% of the average net salary in the year of indexation, a supplementary index is applied on the condition that the social security pension is expected to be in surplus in the year of indexation. If the standard indexation rule is expected to cost less than 75% of the surplus, the supplementary indexation tops this up to the 75% threshold. The new indexation mechanism already resulted in supplementary adjustments in 2022 and 2023, and is expected to do so in 2024 as well. Lithuania currently meets both criteria for indexation: the provisional at-risk-of-poverty rate for 2023 in Lithuania is 36.5%, above the 25% threshold; and, the average pension was 43% of the average net salary in the second quarter of 2023 (Statistics Lithuania, 2023[61]). Hence, the new indexation mechanism is likely to be activated as the pension system's revenues are expected to exceed its expenditures by 3.7% of in 2023. www.lrt.lt/naujienos/verslas/4/1823806/seimas-prieme-2023-m-sodros-biudzeta-dides-pensijos-ir-kitos-ismokos.

[54] The reform also expands the annual allowance for people who have previously accessed their pension savings, increasing the maximum annual contributions for these people from GBP 4 000 to GBP 10 000. www.gov.uk/government/publications/abolition-of-lifetime-allowance-and-increases-to-pension-tax-limits/pension-tax-limits.

[55] The first home super saver (FHSS) scheme allows for the withdrawal of voluntary contributions for the purchase of a first home – mandatory employer contributions cannot be withdrawn through the scheme. The withdrawal limit increased from AUD 30 000 to AUD 50 000 or 21% of average annual earnings. At the same time, the possibility to put the proceeds of the sale of the home into one's FDC account known as "downsizer contributions" was expanded from age 65+ to 60+ in July 2022 and 55+ in January 2023.

[56] The government has not yet changed these minima, although it is expected that the minimum age for automatic enrolment will be lowered from 22 to 18 and the minimum earnings threshold eliminated by the mid-2020s.

[57] Moreover, Norway abolished its minimum earnings threshold for contributions to the FDC scheme in January 2022. Previously, no contributions had to be paid on earnings below the basic amount, which is about 18% of the average wage.

[58] The minimum earnings threshold for mandatory employer contributions in Australia was previously AUD 450 per month, or 6% of average earnings.

[59] Previously only workers covered by specific industrial instruments (modern awards or enterprise agreements) could directly pursue unpaid superannuation contributions from an employer.

[60] In January 2023, the exemption from the means test of the proceeds of pensioners selling their principal home was extended from one to two years. Assets are accounted for in the means test based on an assumed yearly return of 0.25% below a certain asset threshold and 2.25% above the threshold, and the assumed return is added to other sources of income to determine eligibility to and the level of the targeted pension. Under the exemption, the part of the proceeds from the sale of the principal home that the targeted pension recipient plans to use to purchase, build or renovate a new principal home are accounted for in the means test based on an assumed return of 0.25% regardless of the threshold.

[61] The income threshold below which older people are entitled to the Commonwealth Seniors Health Card was increased by 47% in November 2022.

[62] The increase happens in steps of one full year per two birth cohorts, with residency requirements increasing for people reaching the statutory retirement age between 2024 and 2042. It does not apply to refugees arriving in New Zealand aged 55 or older, and a reduced requirement applies to refugees arriving between ae 45 and 55.

[63] www.camara.cl/cms/noticias/2023/01/12/reforma-a-las-pensiones-en-que-va-la-tramitacion-del-proyecto/.

[64] The government proposal foresees a pension to current retirees of 0.1 U.F. (Unidad de Fomento, a unit of account used in finance in Chile) per year worked, with a maximum of 3 U.F.-. The average FDC old-age pension paid out in July 2023 was 7.13 U.F., or around CLP 257 000 (Superintendencia de Pensiones, 2023[60]).

[65] For each year worked after becoming eligible to early retirement up to a maximum of three years, a one-off payment of EUR 7 550 would be granted.

[66] Any worker who is in the system will be able to leave or pause their contributions under certain circumstances, but they will be automatically re-enrolled after two years if they are still eligible.

[67] These changes are yet to be legislated and are expected to be in place by 2027 at the earliest.

From:
Pensions at a Glance 2023
OECD and G20 Indicators

Access the complete publication at:
https://doi.org/10.1787/678055dd-en

Please cite this chapter as:

OECD (2023), “Recent pension reforms”, in *Pensions at a Glance 2023: OECD and G20 Indicators*, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/ed6f08dc-en

This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area. Extracts from publications may be subject to additional disclaimers, which are set out in the complete version of the publication, available at the link provided.

The use of this work, whether digital or print, is governed by the Terms and Conditions to be found at http://www.oecd.org/termsandconditions.

OECD