

2 The challenge of ageing

Rapid population ageing is a major challenge to future increases in living standards and the sustainability of public finances. Longer working lives would help address this challenge but must be combined with efforts to strengthen work attachment at all ages.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Infographic 2.1. Population ageing

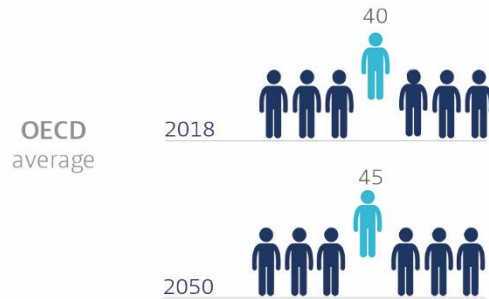
Facts and challenges

Economic dependency

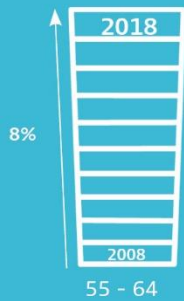


The number of retirees per worker will increase substantially by 2050.

Median age in 2018 and 2050



Increased participation



Labour force participation rates for 55 - 64 year-olds have increased by 8 percentage points in the decade to 2018.

Labour force

Participation rates of 55 - 64 year-olds.

Top Performers

Iceland, New Zealand, Sweden



Bottom Performers

Luxembourg, Greece, Turkey

Gender gap

The gender gap in participation rates for 55 - 64 year-olds was 18 percentage points in 2018, down only by 3 percentage points over the last ten years.



Effective retirement age

Over the past two decades, the average effective retirement age increased by 2.7 years for women and 2.3 years for men in the OECD area.



Rapid population ageing is widespread

People in all OECD countries and most developing and emerging economies are living longer and in better health than ever before. This is one of the major social and economic achievements of the past century. However, in combination with very low and in many cases falling fertility rates, longevity is leading to unprecedented population ageing that challenges labour markets, economies and societies in many ways. Fewer workers relative to the overall population can challenge further improvements in living standards and the sustainability of public finances as expenditures on public pension and health rise for a swelling elderly population. Promoting more rewarding and productive employment at an older age is the key to addressing these challenges but also for realising the opportunities that longer lives will bring.

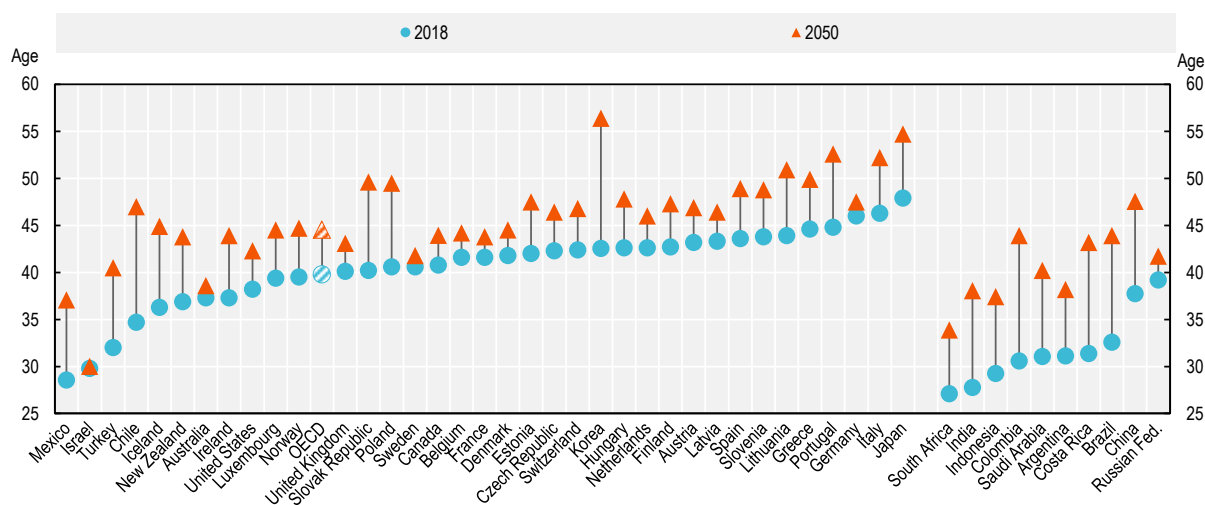
Currently, in the majority of the OECD countries, the median age of the population is 40 or above (Figure 2.1). In the past decades, the pace of population ageing has already been substantial, most notably in Italy, Germany, and Japan where the median age was already 46 or more in 2018. This demographic situation is different in emerging economies such as India, Indonesia, and South Africa, where the population is relatively young, with half being under 30. However, populations everywhere are set to become older over the coming decades.

The most dramatic increase in median age is expected in Korea from 43 in 2018 to 56 in 2050. Population ageing will also be rapid in all of the emerging economies, reflecting low or falling fertility rates and further increase in life expectancy. For instance, half of the population in China is projected to be older than 48 by 2050. By then, Brazil and Turkey, two currently “young” countries, will see median ages similar to those in several OECD countries today.

In some countries, such as India and South Africa, birth rates will remain comparatively high, slowing the increase in the average age for the population as a whole¹. But sizeable cohorts of currently young adults will translate into successively larger numbers reaching old age in these countries as well, and the age difference with the oldest economies will have narrowed notably by 2050.

Figure 2.1. Rapid population ageing is widespread

Median age of the total population (in years), 2018 and 2050



Source: Eurostat estimates and projections for European countries; United Nations (2019), World Population Prospects: The 2019 Revision for Argentina, Colombia, China, India, Indonesia, the Russian Federation, Saudi Arabia and South Africa; and national estimates and projections for the other countries.

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Without policy action, growing numbers of retirees will strain public budgets and slow economic growth

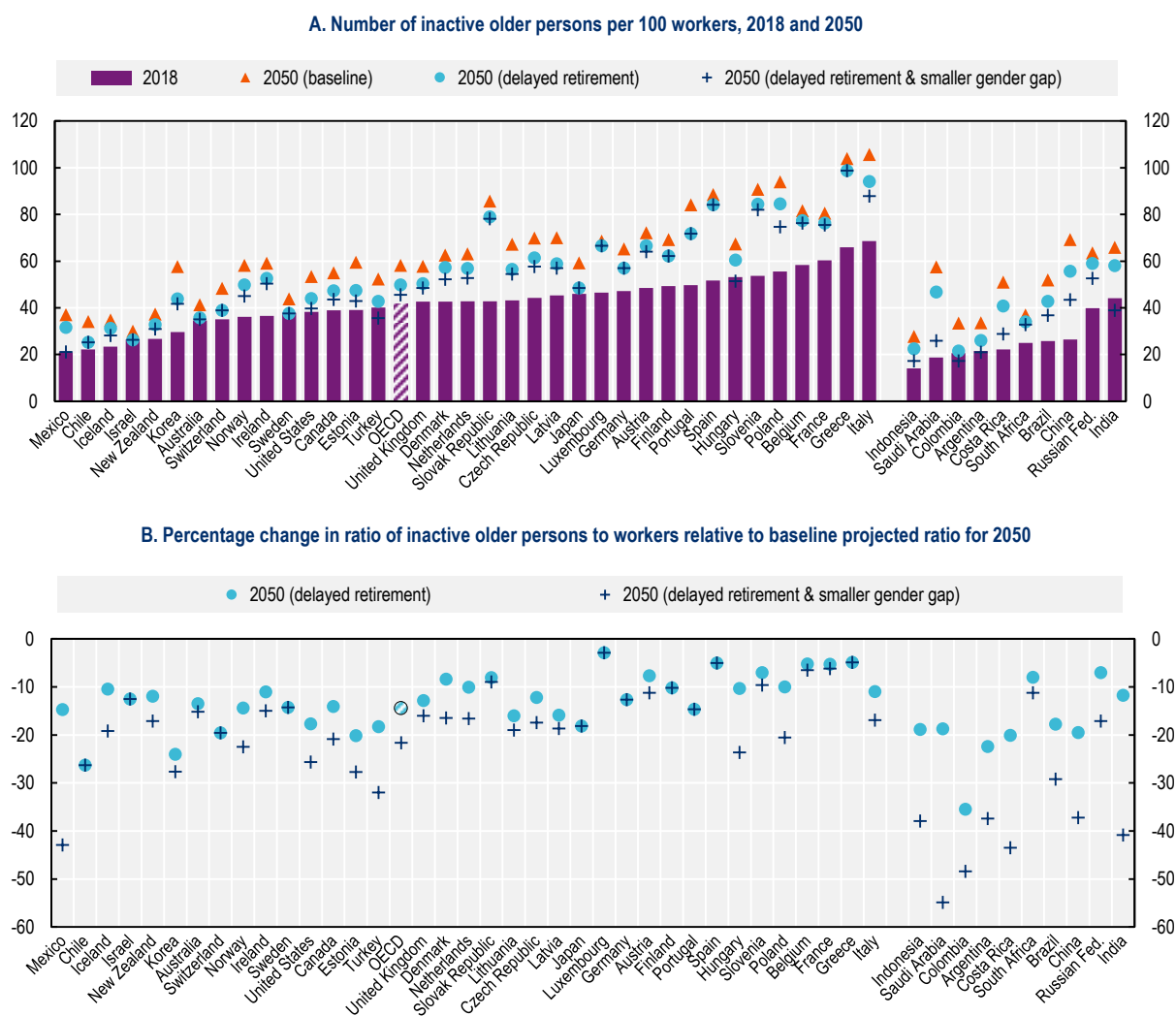
If labour force entry and exit patterns by age and gender remain unchanged (the baseline scenario), the average number of “retirees” or inactive² (i.e. all persons aged 50 and over who are not in the labour force) in OECD countries is projected to rise from 42 per 100 workers in 2018 to almost 60 in 2050 (Figure 2.2, Panel A). This increase could be slowed considerably, to 52 retirees per 100 workers, if employment at older ages was strengthened, and the labour market exit rate for older workers was reduced by 20% (i.e. the delayed retirement scenario). The increase could be further limited to 46 retirees per 100 workers if, in addition to delayed retirement, there was a reduction in the gender gap in labour force participation by 50% by 2050 from its level in 2012 (the delayed retirement and smaller gender gap scenario).

These cuts in the rise of the number of retirees per worker may seem modest in some countries according to the different scenarios but still represent a significant cut in the potential burden that workers may face in the future to finance a much larger number of older inactive people. Under the simple assumption that all pension payments for this group are financed out of current labour income, the percentage changes in the ratio of retirees to workers under the two alternative scenarios relative to the baseline scenario represent the potential savings that workers would gain in their incomes in 2050. Under the scenario of delayed retirement and a smaller gender gap, this would range among the OECD countries from a modest 3% saving in Luxembourg to 43% in Mexico, with an average saving for the OECD area of 22%. Even larger savings could occur in some of the other non-OECD G20 countries.

Thus, without determined and sustained efforts to enhance the participation of older workers in the labour market – as well as that of other under-represented groups such as women and migrants – population ageing can act as a significant drag on growth in living standards, and put public finances under strain. According to a recent OECD study, assuming no changes in institutional and policy settings, ageing populations would slow down GDP per capita growth although to varying degrees. Over the period 2018-30, declining working-age populations will drag down GDP per capita in the OECD, by up to 0.5 percentage points. Over the period 2030-60, only India and South Africa will still enjoy a demographic dividend (Guillemette and Turner, 2018^[1]).

However, efforts to raise old-age participation rates alone will not be sufficient in most countries to prevent dependency burdens on workers from rising. A comprehensive strategy is needed to strengthen work attachment across all age and population groups.

Figure 2.2. Population ageing will place a growing economic burden on workers



Note: "Inactive older persons" refer to all people aged 50 and over who are not in the labour force. The baseline projections assume that labour force entry and exit rates over 5 years by gender and 5-year age groups remain constant at their average rate observed in the period 2014-18. The projections with delayed retirement adjust the exit rates from age 50 onwards downwards by 20% (10% in Chile, Israel, Indonesia, Japan, Korea, Mexico and New Zealand, and no adjustment prior to age 60 in Iceland, where participation rates for men and/or women are already very high at older ages), phased in over the period 2018-31. The projections including a narrowing of the gender gap assume that the gender gap in labour force participation for persons aged 15-64 is reduced progressively by 50% by 2050 from its value in 2012.

Source: OECD population and labour force projections dataset (unpublished).

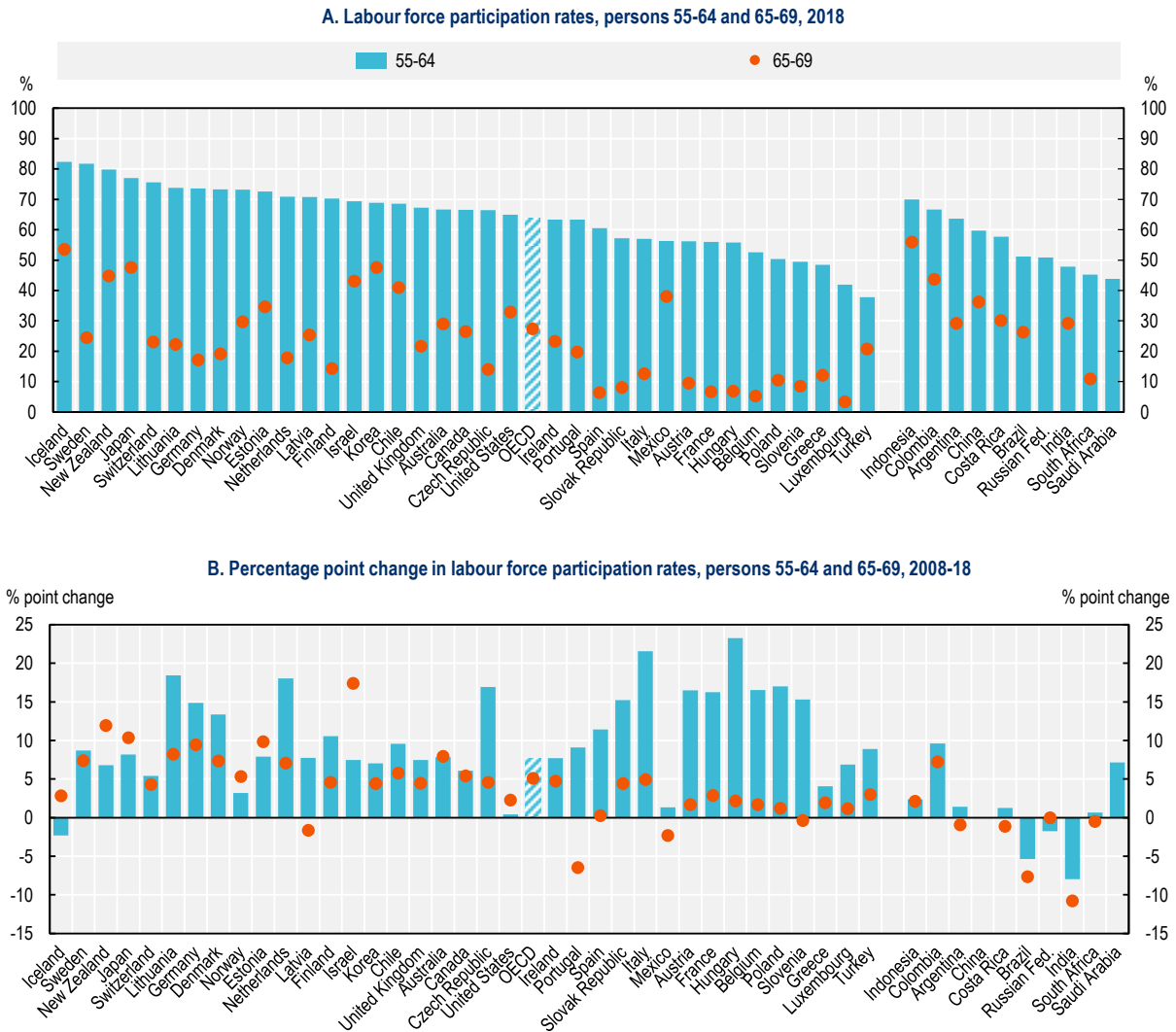
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Participation rates have mostly improved but progress has been uneven

The labour force participation rate of 55-64 year-olds has risen remarkably in most OECD countries over the past decade. On average in the OECD area, it rose from 56% in 2008 to 64% in 2018 (Figure 2.3, Panel A). Gains were notable in countries where rates were already high before the global financial crisis (Japan, Germany, Korea, United Kingdom, Australia, Canada), as well as in several countries where participation remains comparatively low (Italy, France, Saudi Arabia and Turkey). At more than 18 percentage points, Italy, Lithuania, Hungary and the Netherlands recorded the biggest increases for this pre-retirement age group. Only Iceland experienced a marginal drop, but it continues to have the

highest participation rate among older people of any OECD country. In contrast to the OECD area, participation among older people improved little in most emerging G20 economies, and deteriorated in Brazil, India and Russia (Figure 2.3, Panel B).

Figure 2.3. Labour force participation rates have risen remarkably over the past decade



Note: Data for 2018 refer to 2010 for China and 2017 for Indonesia and Saudi Arabia. OECD is a weighted average.
 Source: *OECD Dataset on LFS by sex and age - indicators*, <http://stats.oecd.org/Index.aspx?QueryId=64197>. OECD estimates based on microdata of the Encuesta Permanente de Hogares (EPH) for Argentina and Labour Force Survey results published by the General Authority for Statistics for Saudi Arabia.

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Despite the mostly positive developments, differences in labour market participation across OECD countries remain large; highlighting a diverse range of challenges and substantial scope for policies to mitigate the adverse effects of population ageing:

- Efforts to promote the labour market inclusion of 55-64 year-olds are needed in countries that lag behind.

- In Japan, Germany, New Zealand and Korea, participation rates for 55-64 year-olds are already very high and further progress at strengthening old-age employment will require efforts to extend working lives beyond the age of 65. Life expectancy at age 65 has risen by nearly 3 years over the past 20 years and so it is reasonable to expect that participation rates of the age group 65-69 could eventually match those previously recorded by 60-64 year-olds. Indeed, during the past decade, labour force participation for those aged 65 and over have risen in most OECD countries, although the gains have mostly been very modest. By 2018, around 27% of the 65-69 age group were active compared with under one quarter in 2008.
- Narrowing gender gaps in labour-market activity remains a key challenge in most OECD countries. Across the OECD, the average gender gap stood at 18 percentage points in 2018 for 55-64 year-olds, down by only 3 percentage points from 2008 levels. While gender gaps declined almost everywhere, and virtually disappeared in the Baltics, the Nordics and in France, they remain very large in many countries, exceeding 30 percentage points in Chile, Mexico and Turkey (Figure 2.4 Panel B). Achieving further and more substantial progress requires promoting participation of women at a younger age where there is still a substantial gap in most countries (25-54, Panel C). In particular, progress in fulfilling the G20 goal of a 25% reduction in the gender gap in labour force participation between 2012 and 2025 would help to offset an ageing-related slowdown or contraction in labour force, growth while boosting old-age income security.
- In some emerging economies, a major challenge will be to ensure a smooth transition of young cohorts into the labour market to prevent accumulation of disadvantages in life. Maintaining a workable social contract between generations also requires ensuring that more workers have access to good-quality, formal-sector employment.

Effective retirement ages are rising in advanced economies but remain below historical levels in many countries

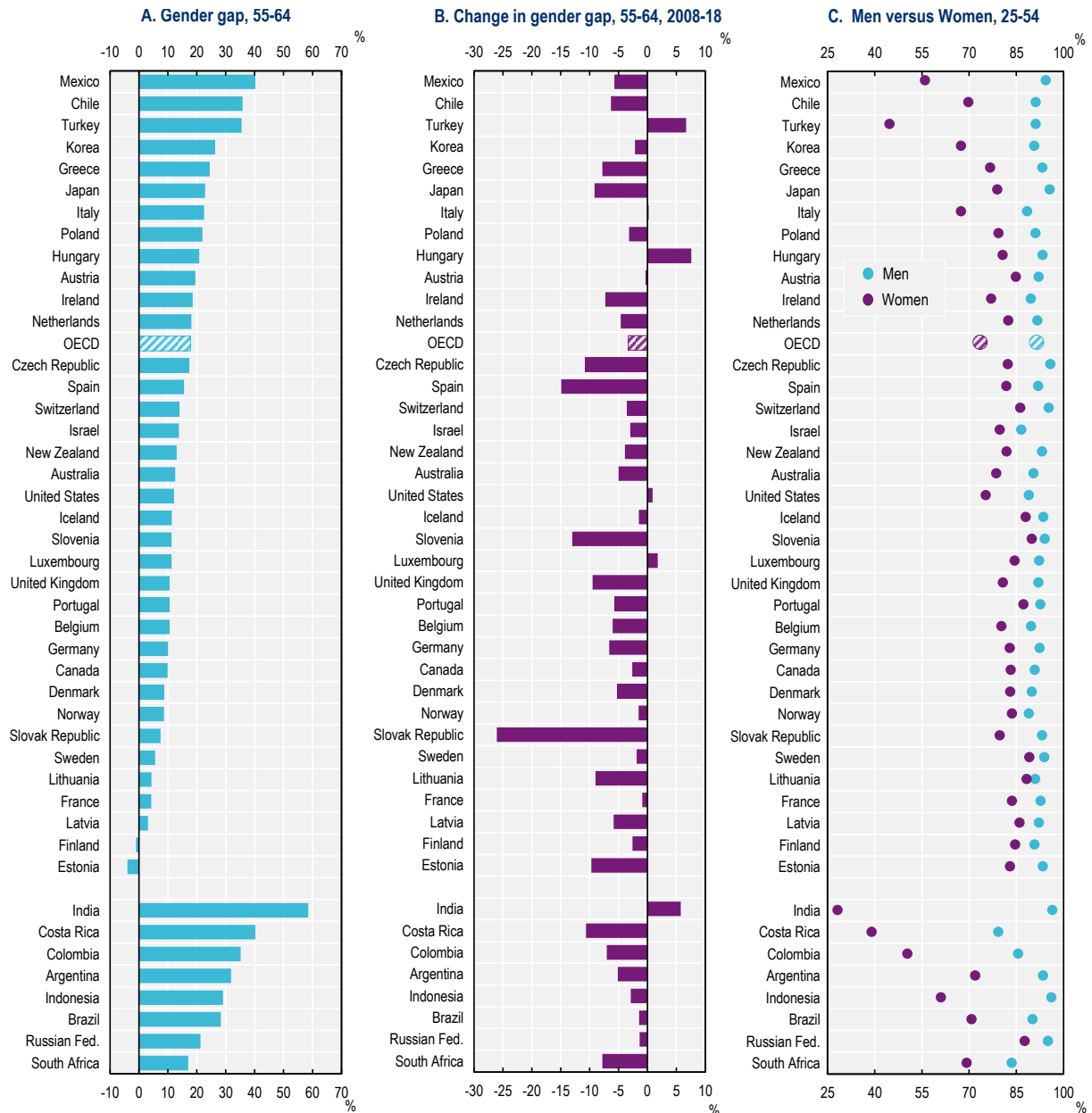
Progress in labour force participation of older workers is largely driven by delayed exit from the market. Over the past two decades, the average effective retirement age increased by 2.3 years for men and 2.7 years for women in the OECD area (Figure 2.5). In many emerging economies, including Argentina, Brazil, Indonesia, Mexico, Saudi Arabia and South Africa, average labour market exit ages for men were initially higher, because a large numbers of informal workers had to work well into old age to sustain themselves and their families given low or non-existent pension entitlements. Nevertheless, unlike in OECD countries, effective retirement ages in these countries have fallen or remained stable after 2000.

The turnaround in effective retirement ages and higher labour market attachment across the OECD area are likely driven by several factors including the closing or tightening of early retirement schemes and other passive benefits and tightening of public pension schemes that previously discouraged people to work longer (see Chapter 3). In addition, long-term trends in rising educational attainment, better health and higher life expectancy have also played a key role (Geppert et al., 2019^[2]).

However, in all countries, despite the significant increases life expectancy, the effective retirement age is still lower today than it was 30 years ago. This suggests that there is still scope for reforms to make work more rewarding at an older age. In addition to policies that strengthen labour supply, this requires determined reforms to sustain employability over work careers and to improve employment practices in firms to retain and hire older workers.

Figure 2.4. Gender gaps have narrowed but more should be done to improve labour force participation of women

Labour force participation rates, 2018

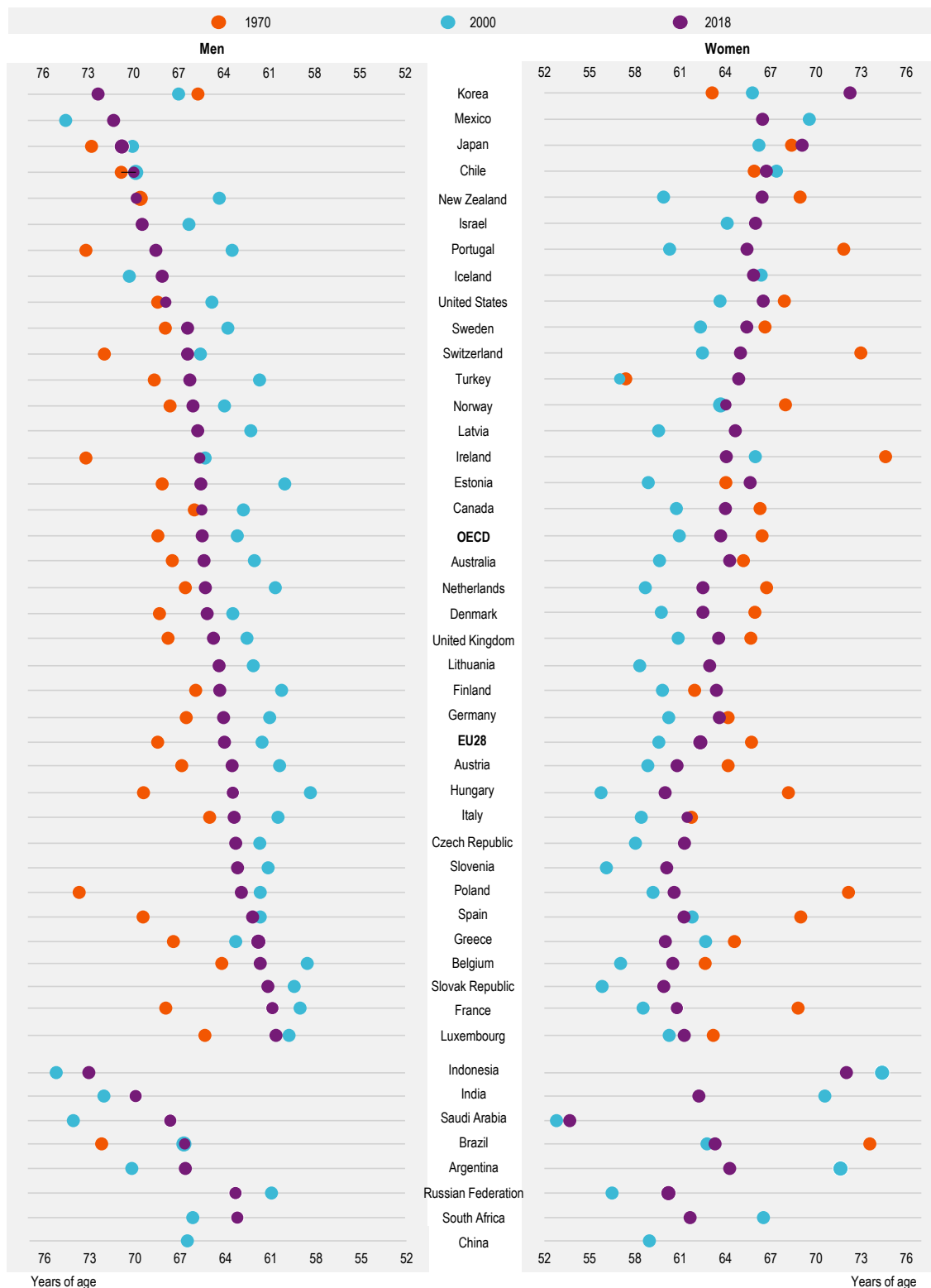


Source: OECD Dataset on LFS by sex and age - indicators, <http://stats.oecd.org/Index.aspx?QueryId=64197>.

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Figure 2.5. Labour market exit ages have increased but could rise further

Effective retirement age, OECD and emerging economies



Note: Each year refers to the end-year of a 5-year period. Data refer to 2017 instead of 2018 for Saudi Arabia.

Source: OECD Database on Average Effective Retirement Age, www.oecd.org/els/emp/average-effective-age-of-retirement.htm.

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Towards effective employment policies for older workers

There have been many changes in policies aimed at improving employment chances for older workers and making work a more attractive option at an older age. There are a number of policy levers to structure retirement pensions and other out-of-work benefits in a way that encourages and rewards later retirement. However, if working longer is to be an attractive and rewarding proposition for older workers, action on both the demand side and the supply side will need to be taken. Indeed, an increasing number of countries are also focusing on encouraging employers to retain and hire older workers. This includes: extending or abolishing mandatory retirement ages; fighting age discrimination; promoting further training over the whole working life; encouraging age-management approaches by employers; strengthening employment services for older job-seekers; and improving the health of older workers through good workplace practices throughout working careers.

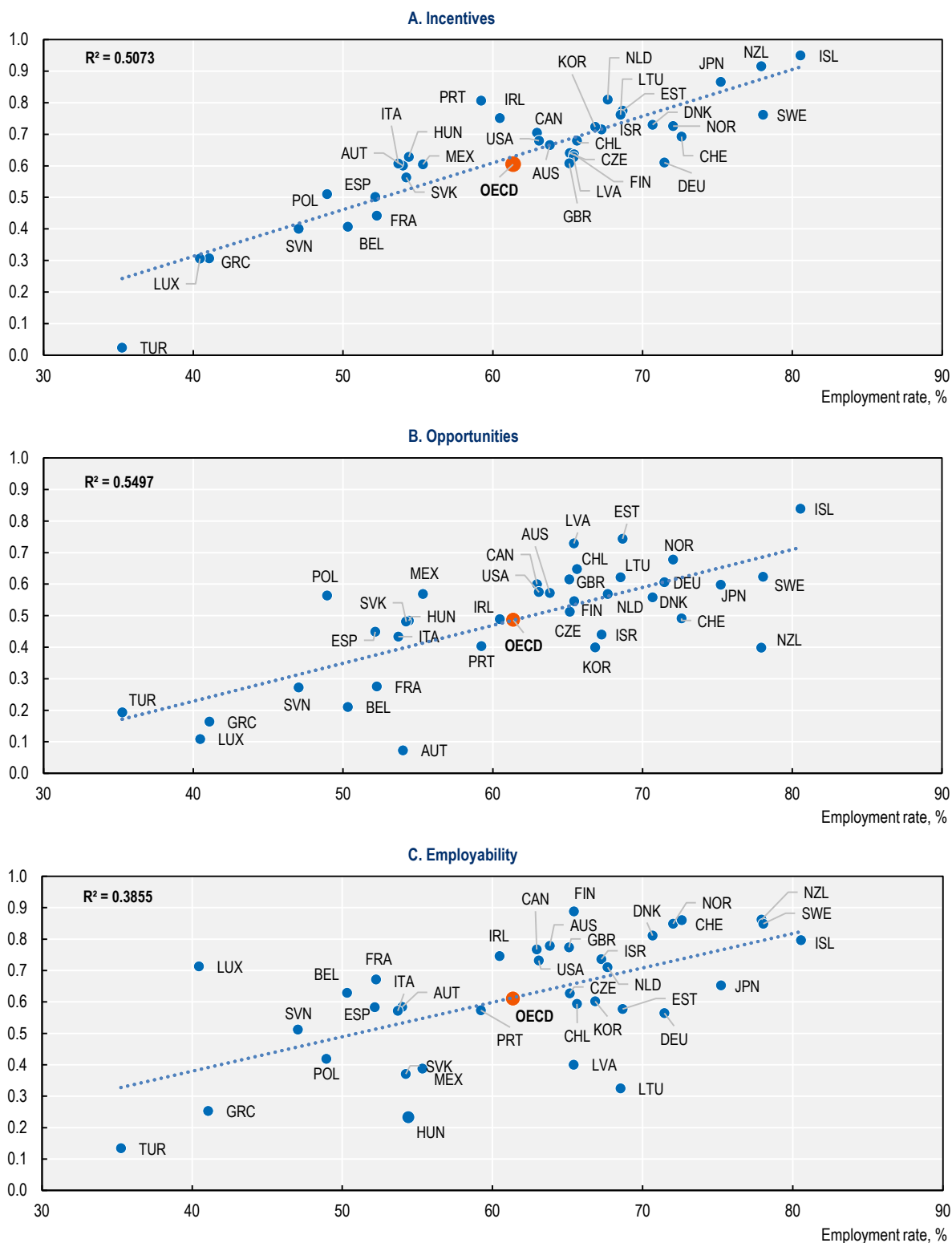
To provide guidance for tackling the challenges related to ageing workforces, OECD member countries adopted the Council Recommendation on Ageing and Employment (OECD, 2018^[3]). These recommendations build on countries' reform experiences and can be summarised in three broad policy areas: i) strengthening **incentives** for workers to continue working at an older age; ii) ensuring there are good job **opportunities** for older workers by encouraging employers to retain and hire them; and iii) promoting the **employability** of workers throughout their working lives for better work choices and opportunities at an older age.

Each of these policy areas, along with good country practices, are discussed in detail in the subsequent three chapters. To support and contextualise this discussion, three indicators have been developed that summarise countries' positions along the key policy dimensions. **Incentives** for older people to continue working at an older age are captured by focusing on i) a combination of current retirement ages (men), ii) the gross replacement rates and iii) the impact on benefits when working and deferring pensions. Job **opportunities** for older workers the focus are captured by i) retention rates and ii) the full-time earnings ratio 55-64/25-54. Finally, the **employability** of older workers is proxied by several indicators, including i) training, ii) job strain and iii) life expectancy at 65. Further details on the construction of the composite indices for each of these key policy dimensions and country comparisons based on these indices are provided in Annex 2.A.

Higher country scores in each of these three areas are associated with better labour market outcomes for older people as summarised by either the employment rate of 55-64 year olds or the effective age of retirement (Figure 2.6). Stronger incentives to keep working such as higher retirement ages or less generous pension benefits are closely correlated with both higher employment rates and later exit from the labour force (Panel A). But employer behaviour also matters as shown by the positive correlation with the opportunities index (Panel B). Lastly, there is also a close association between a higher employability index and better outcomes of older workers (Panel C).

The main conclusion from these findings are that countries which provide better incentives, better opportunities and invest more in employability of workers via training and good quality jobs do better in promoting employment for older workers. For example, the Nordics such as Iceland, Sweden, Norway and Denmark as well as New Zealand and Canada, are among the best performing countries across the three policy dimensions and in terms of employment outcomes for older people. In contrast, Turkey, Greece and Luxembourg have relatively low employment rates for older people, reflecting relatively low retirement ages, weak incentives for working longer, low retention rates and poor lifelong learning opportunities.

Figure 2.6. Further policy reforms can aid higher employment of older workers



Source: OECD calculations based on [Older Workers Scoreboard](https://www.oecd.org/pensions/public-pensions/OECD-Policy-Brief-Future-Pensioners-2019.pdf), OECD (2017^[4]), *Pensions at a Glance 2017: OECD and G20 Indicators*, http://dx.doi.org/10.1787/pension_glance-2017-en and OECD (2019^[5]), *Will future pensioners work for longer and retire on less?*, <http://www.oecd.org/pensions/public-pensions/OECD-Policy-Brief-Future-Pensioners-2019.pdf>.

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- OECD (2018), *Recommendation of the Council on OECD Legal Instruments Ageing and Employment Policies 8*, <http://legalinstruments.oecd.org> (accessed on 18 February 2019). [3]
- OECD (2017), *Pensions at a Glance 2017: OECD and G20 Indicators*, OECD Publishing, Paris, https://dx.doi.org/10.1787/pension_glance-2017-en. [4]

Annex 2.A. Policy indicators to measure employment promotion of older workers

The OECD Council Recommendation on Ageing and Employment identified the following three key policy leavers for promoting longer working lives:

- Strengthening incentives for workers to build up longer careers.
- Encouraging employers to retain and hire older workers; and
- Promoting employability the employability of workers throughout their working lives.

In order to characterise the country situation along each of these three dimensions, a number of indicators were selected and combined. The indicators were selected on the basis of their relevance, availability and comparability. They build on the OECD's [Older Workers Scoreboard](#) as well as information from OECD *Pensions at a Glance* and other data regularly collected on job quality and life expectancy.

The indicators included for each dimension are as follows:

- *Incentives*: i) current statutory retirement ages (men); ii) gross replacement rates; and iii) impact on benefits when working and deferring pensions.
- *Opportunities*: i) retention rates; and ii) full-time earnings ratio 55-64/25-54.
- *Employability*: i) participation in training; ii) job strain; and iii) life expectancy at 65.

All indices are normalised between 0 and 1 for all countries for the latest year available, and averaged across each dimension. Each index is constructed so that higher values correspond to employment promoting policies for older workers (see Annex Table 2.A.1). For instance, the highest normal retirement age and the lowest gross replacement rate have the highest value on the scale. Similarly, higher seniority wages as measured by the full-time earnings ratio 55-64/25-54 and higher levels of job strain have lower values on the scale.

Annex Table 2.A.1. The highest and lowest observed values for each of the eight sub-indicators

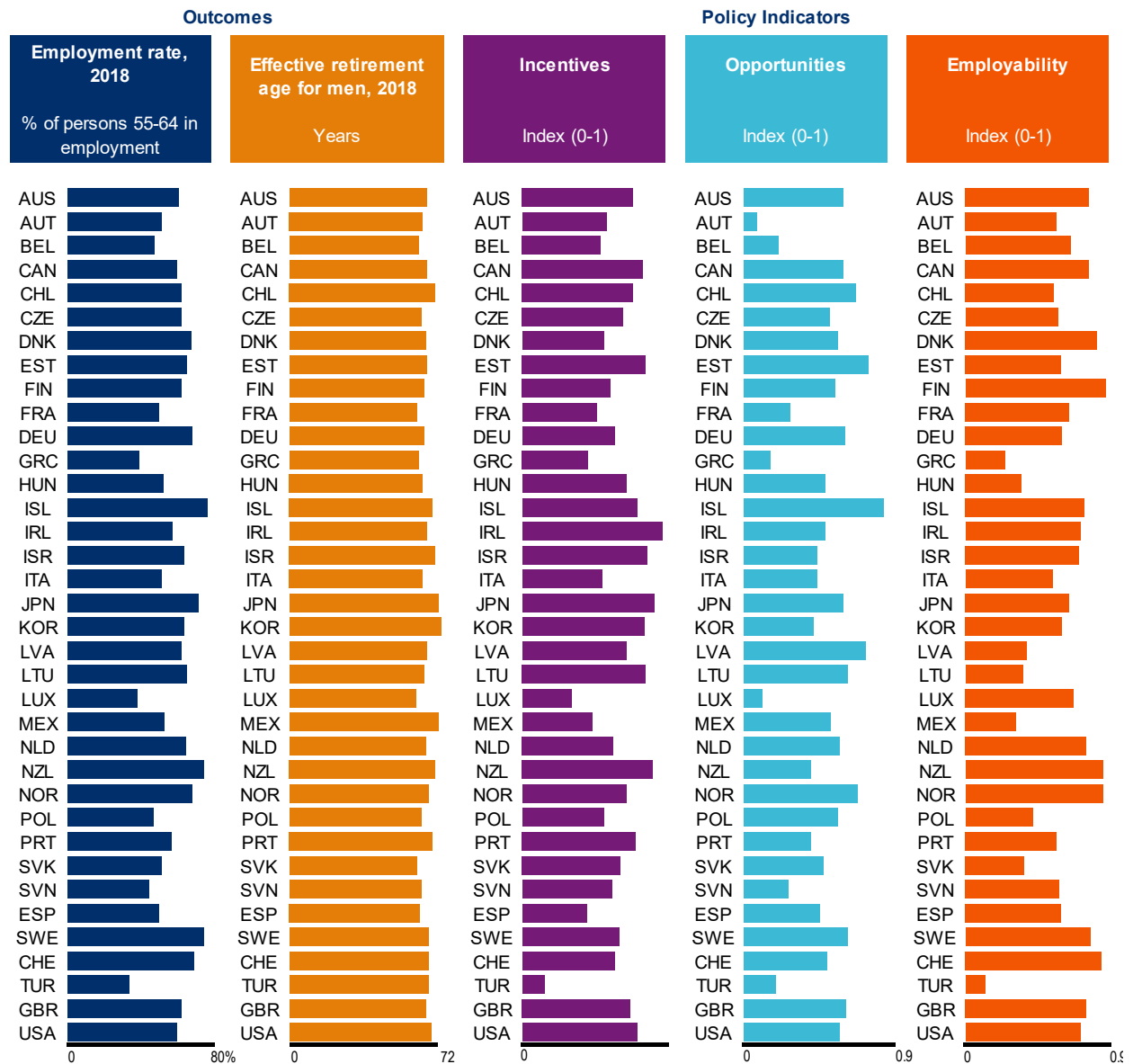
	Statutory retirement age (men)	Gross replacement rates	Impact on benefits when working and deferring pensions	Retention rates	Full-time earnings ratio 55-64/25-54	Participation in training (employed persons)	Job strain (total)	Life expectancy at 65 (years)
Value corresponding to 1= max	67	25.7	13.7	80.2	0.8	61.3	13.8	22.0
Value corresponding to 0=min	49	99.8	2.8	22.6	1.4	10.1	47.9	16.5

Source: OECD (2017^[41]), *Pensions at a Glance 2017: OECD and G20 Indicators*, https://doi.org/10.1787/pension_glance-2017-en, OECD (2019^[51]), Policy Brief on Pensions, <http://www.oecd.org/pensions/public-pensions/OECD-Policy-Brief-Future-Pensioners-2019.pdf>, OECD Job Tenure database, <http://stats.oecd.org/Index.aspx?QueryId=9590>, OECD Earnings Database, <https://www.oecd.org/employment/emp/employmentdatabase-earningsandwages.htm>, Survey of Adult Skills (PIAAC), <http://www.oecd.org/skills/piaac/>, OECD Job Quality Database, <https://stats.oecd.org/Index.aspx?DataSetCode=JOBQ> and OECD Health Status dataset http://dotstat.oecd.org/Index.aspx?DataSetCode=HEALTH_STAT.

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The country values for each index as well as for the employment rate of 55-64 year-olds and the effective retirement age for men are shown in Annex Figure 2.A.1.

Annex Figure 2.A.1. Country situation in incentives, opportunities and employability for older workers



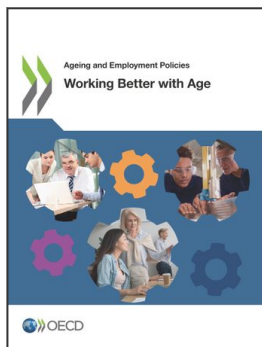
Source: OECD Employment Database, <http://www.oecd.org/employment/emp/onlineoecdemploymentdatabase.htm>, OECD (2017⁽⁴⁾), *Pensions at a Glance 2017: OECD and G20 Indicators*, https://doi.org/10.1787/pension_glance-2017-en, OECD (2019⁽⁵⁾), Policy Brief on Pensions, <http://www.oecd.org/pensions/public-pensions/OECD-Policy-Brief-Future-Pensioners-2019.pdf>, OECD Job Tenure database, <http://stats.oecd.org/Index.aspx?QueryId=9590>, OECD Earnings Database, <https://www.oecd.org/employment/emp/employmentdatabase-earningsandwages.htm>, Survey of Adult Skills (PIAAC), <http://www.oecd.org/skills/piaac/>, OECD Job Quality Database, <https://stats.oecd.org/Index.aspx?DataSetCode=JOBQ> and OECD Health Status dataset http://dotstat.oecd.org/Index.aspx?DataSetCode=HEALTH_STAT.

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Notes

¹ However, there is considerably uncertainty about the rate of decline in fertility rates in emerging economies, as it will depend on a number of factors, including the increase in educational attainment of women in these countries. All else equal, population ageing will be faster the greater the decline in fertility

² A more traditional indicator has been the old-age dependency ratio which refers to the ratio of the population aged 65 and over to the population aged 20 to 64 (or more traditionally 15 to 64). However, not all people in the younger age group are working and not all older people have retired, and these proportions vary considerably across countries.



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