

## 4. GENERAL CONTEXT INDICATORS

### Demographic trends

Age-dependency ratios are a measure of the age structure of the population. They provide information about the demographic shifts that have characterised OECD countries in the past and that are expected in the future.

**OECD populations became older and will continue to become older in the coming decades.** In 2015, on average across OECD countries, there were 28 persons aged 65 and over for every 100 persons aged 20 to 64; up from 18 in 1970 (Figure 4.13). Cross-country differences are large, varying from less than 15% in Mexico and Turkey, to over 35% in Finland, Italy, Greece and Portugal and to over 45% in Japan. By 2060, the average ratio is projected to double in the OECD area (to 57%) and to quadruple in Korea. By 2060, the old-age dependency ratio will almost reach 80% in Korea and Japan while remaining below 45% in Israel, Mexico, Turkey and the United States. This increase will contribute to higher public spending in health, long-term care and pensions.

**Conversely, the youth-dependency ratio declined between 1970 and 2015.** In 2015, there were 38 persons aged below 20 for every 100 persons aged 20 to 64 on average across OECD countries, down from 70% in 1970 (Figure 4.14). In 2015, the youth-dependency ratio ranged between 30% in Germany and Korea and 65% or more in Israel and Mexico. In most OECD countries, this ratio will stop declining, reaching an average level of 39% in 2060, except in Chile, Israel, Mexico and Turkey. Lower youth dependency means lower public spending in education and towards families. But overall, the declines are not large enough to offset higher spending towards the elderly.

**In emerging economies, old-age dependency ratios are in general lower than in OECD countries,** particularly in India, Indonesia, Saudi Arabia and South Africa. By contrast, youth dependency ratios are higher.

Figure 4.15 also presents the past, current and future shares of youth aged 15 to 29 – those in age to enter the labour market – as a percentage of the total population. On average, the share declined from 22% in 1970 to 19% in 2015, with strongest declines in the “ageing” countries Japan, Finland, Italy and Spain. The average ratio is

forecasted to decline even further to 16% of the total population by 2060, with the strongest declines in countries that will become considerably older in the next decades, like Chile, Mexico, Korea and Turkey.

#### Definition and measurement

Age-dependency ratios relate the number of individuals who are likely to be “dependent” on the support of others for their daily living – elderly or youths – to the number of those individuals who are capable of providing such support.

The old-age dependency ratio measures the number of individuals aged 65 and over as a percentage of the population aged 20 to 64. The youth dependency relates the number of individuals aged less than 20 to the population aged 20 to 64. An additional ratio is shown here: the share of youth aged 15-29 as a percentage of the total population.

Estimates prior to 2015 and projections for 2060 are drawn from the United Nations, World Population Prospects – 2017 Revision. Projections used here are based on the most recent “medium fertility variant” population projections, which for each country corresponds to the median of several thousand projected trajectories of each demographic component.

#### Further reading

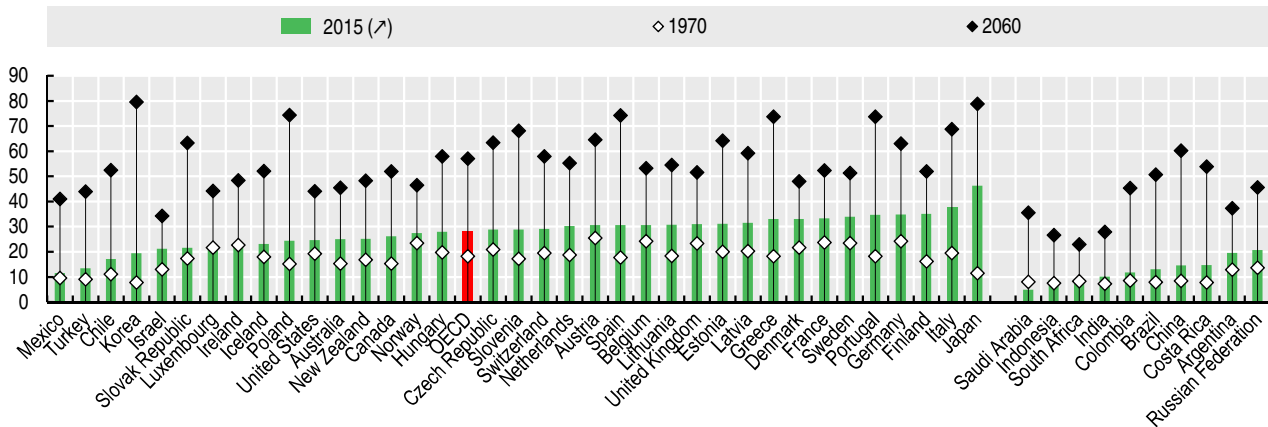
Boulhol, H. and C. Geppert (2018), The effect of population ageing on pensions, VOX, CEPR Policy Portal, <https://voxeu.org/article/effect-population-ageing-pensions>.

OECD (2017), *Pensions at a Glance 2017: OECD and G20 Indicators*, OECD Publishing, Paris, [http://dx.doi.org/10.1787/pension\\_glance-2017-en](http://dx.doi.org/10.1787/pension_glance-2017-en).

United Nations (2017), *World Population Prospects: 2017 Revision*, Washington, DC, <http://esa.un.org/unpd/wpp>.

**4.13. The old-age dependency ratio will double in the next 45 years**

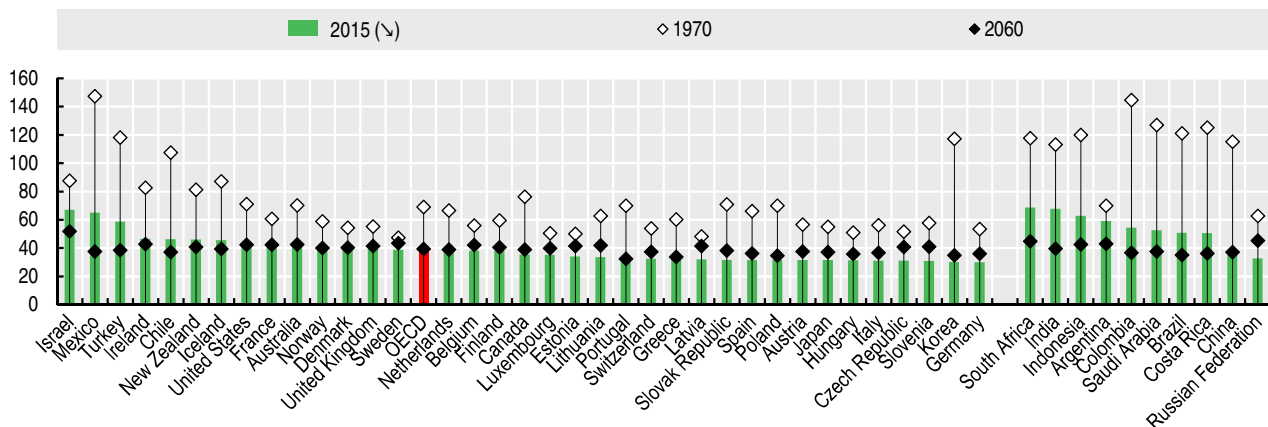
Number of people of retirement age (65+) per 100 people of working-age (20-64), in 1970, 2015 and 2060



Source: Calculations from United Nations, World Populations Prospects: 2017 Revisions.

StatLink <http://dx.doi.org/10.1787/888933938686>**4.14. The strong decline in the youth dependency ratio has stopped**

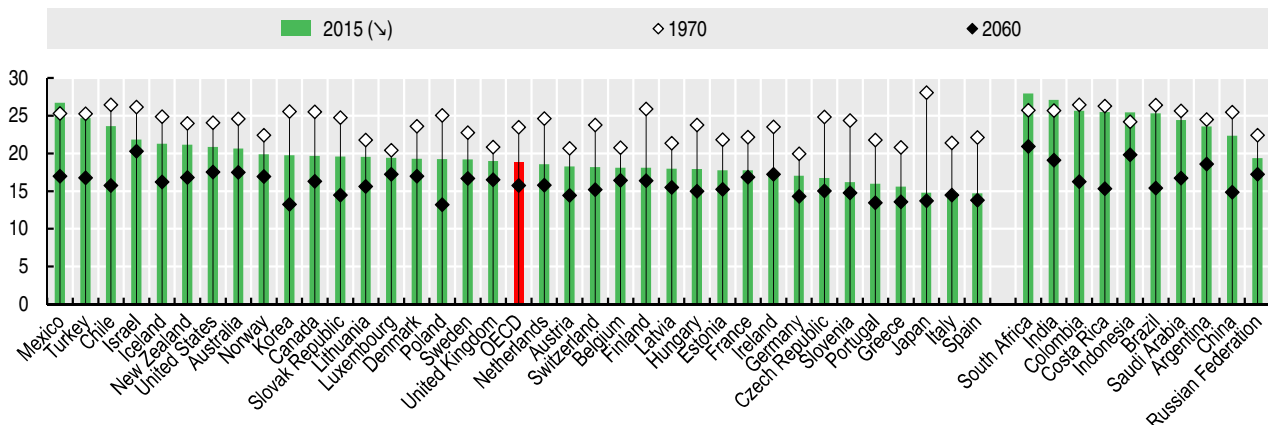
Number of young people (under 20) per 100 people of working-age (20-64), in 1970, 2015 and 2060



Source: Calculations from United Nations, World Populations Prospects: 2017 Revisions.

StatLink <http://dx.doi.org/10.1787/888933938705>**4.15. The share of youth in the total population declines in most countries**

Number of young people (15-29) in total population, percentages, in 1970, 2015 and 2060



Source: Calculations from United Nations, World Populations Prospects: 2017 Revisions.

StatLink <http://dx.doi.org/10.1787/888933938724>



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