Key results

Population ageing is one of the main driving forces behind the wave of pension reforms in recent years. The old-age support ratio is an important indicator of the pressures that demographics pose for pension systems. It measures how many people there are of working age (20-64) relative to the number of retirement age (65+). At the moment, there are just over four people of working age for every one of pension age on average.

OECD countries have been ageing for some time: between 1950 and 1980, the average support ratio decreased from 7.2 to 5.1. However, the decline in the more recent period has been slower, with the fall from 5.1 to 4.1 taking 30 years. From 2010, population ageing is expected to accelerate. By 2025, the support ratio is projected to reach three and fall further to just over two in 2050.

In 2010, the demographically oldest OECD country was Japan, with a support ratio of only 2.6. Germany and Italy also had support ratios below 3.0.

The youngest countries were Turkey and Mexico, with support ratios of 9.8 and 8.6 respectively, followed by Chile, at 6.5. Four of the five mainly English-speaking OECD members – Australia, Canada, Ireland and the United States – all have a relatively favourable demographic situation. Support ratios range between 4.4 and 5.3. This is partly due to inward migration of workers, although Ireland and the United States have fertility rates currently just below replacement level. Other countries that are currently demographically young are the Slovak Republic and Poland, with support ratios of 5.4 and 4.9 respectively.

The evolution of support ratios depends on mortality, fertility rates and migration. As shown in the previous two indicators, OECD countries have seen continual increases in life expectancy, which most analysts forecast to continue in the future. This increases the number of older people and so the number of pensioners.

There have also been substantial declines in fertility, which, of course, will reduce the number of workers entering the labour market. Since the babies have already been born, we know the scale of the change in the number of people of working age for the next two decades. For example, fertility rates fell below the replacement level on average in OECD countries around 1980, meaning that each new generation will be smaller than that of its parents. By 2000, for example, the number of births implies that the cohort of "millennium babies" will be 20-25% smaller than its parents' generation. In the future, however, there is a great deal of uncertainty over how fertility rates will evolve.

For the OECD as a whole, the decline in the support ratio is forecast to continue at a reasonably steady rate in the future. There is, however, predicted to be a considerable convergence between OECD countries, with demographically younger countries ageing more rapidly. By far the most rapid population ageing among OECD countries will be in Korea. The support ratio is projected to drop from 6.1 in 2009 to 1.5 by 2050. Korea will move from being the fourth youngest country in the OECD to the second oldest, after Japan.

The other OECD countries that are currently demographically young – Chile, Mexico and Turkey – will also age relatively rapidly. However, unlike Korea, they will remain among the youngest OECD countries in 2050, with support ratios of 2.5 in Chile and Mexico and 3.2 in Turkey.

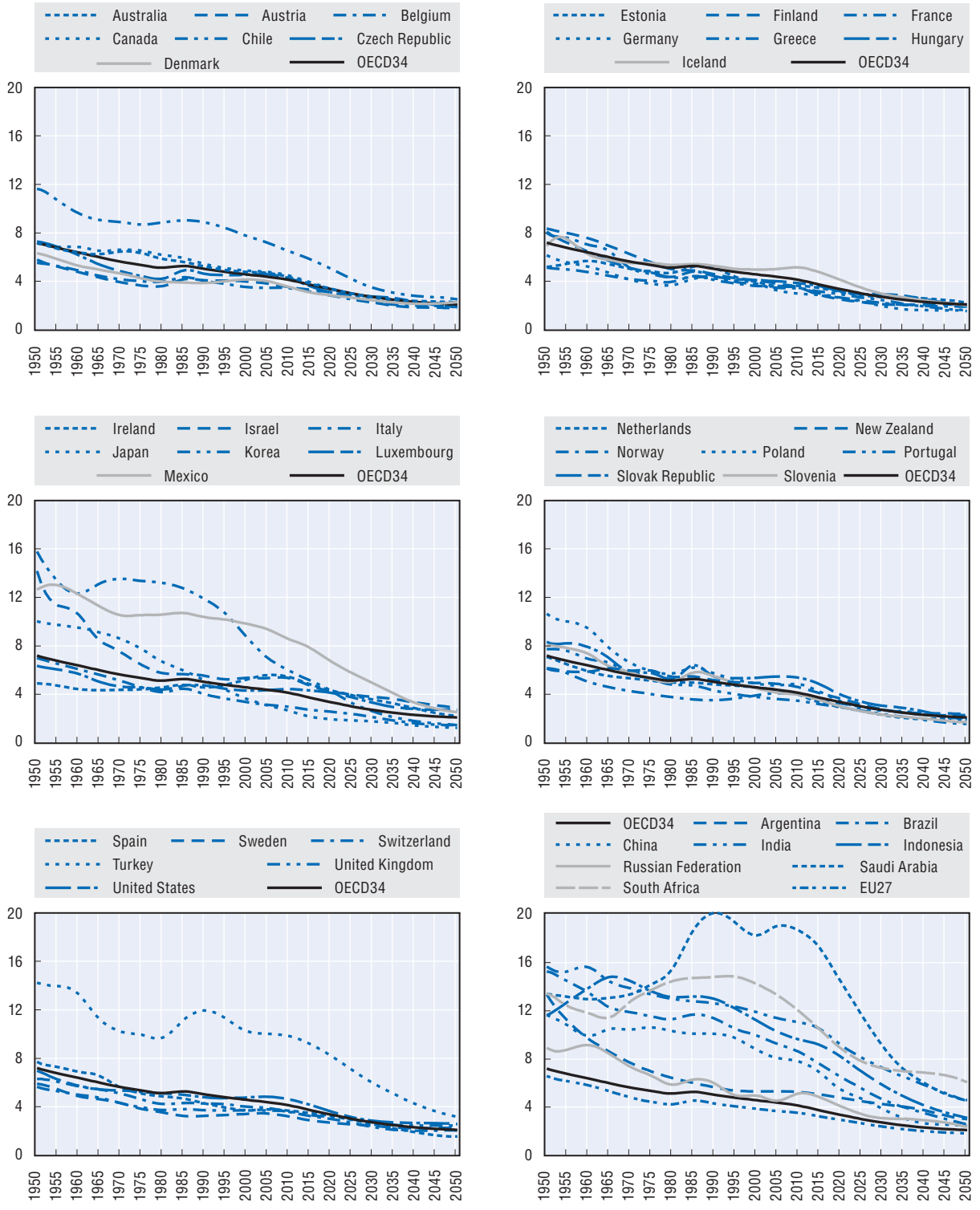
The pattern for the EU27 broadly follows the OECD average. European countries are already older than the OECD average: a support ratio of 3.5 for the EU27 in 2010 compares with an OECD figure of 4.1. By 2050, the support ratio for the EU is just 1.8.

All of the other major economies have a support ratio above that of the OECD average. However, many face rapid population ageing in the coming decades. In Brazil and China, for example, the support ratio will fall from around eight now to 2.5 in 2050. By the end of the forecast horizon, only India, Saudi Arabia and South Africa will be demographically younger than the OECD average situation today, with support ratios of 4.5, 4.6 and 6.1 respectively.

Definition and measurement

The projections for old-age support ratios used here are based on the most recent "medium-variant" population projections. They are drawn from the United Nations, *World Population Prospects – The 2008 Revision*.

Old-age support ratios: Historical and projected values, 1950-2050



Source: United Nations, *World Population Prospects – The 2008 Revision.*

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