

Fertility

Key Results

The total fertility rate is below the estimated replacement level – the number of children per woman needed to keep the total population constant – of about 2.1 in developed countries in 2022, in all OECD countries except Israel. Fertility rates fell sharply in the second half of the 20th century and have tended to stabilise in the OECD on average over the last two decades. In 15 OECD countries, fertility rates have slightly increased since the early 2000s. Over the last two years, fertility rates decreased, and to a larger extent in Australia, Costa Rica, Korea, Mexico and Türkiye. Fertility rates have a profound implication for pension systems because they, along with life expectancy, are the drivers of substantial shifts in demographic structures. Since 1960, there has been a steady convergence of fertility rates across countries.

Fertility rates currently average 1.59 across OECD countries, well below the level that ensures population replacement. The trend to fewer children started in the late 1950s, and the average fertility rate across OECD countries has stabilised close to 1.6 over the last two decades and is projected to remain at this level in the future. The fall in fertility rates reflected changes in individuals' lifestyle preferences, in family formation, and in constraints of everyday living, such as those driven by labour market insecurity, difficulties in finding suitable housing and affordable childcare.

Another effect might come from changes in women's aspirations regarding partnership and childbearing norms, especially in countries such as Japan and Korea where there is a strong link between marriage and maternity. However, the childbearing patterns of unmarried men and women have also changed. For example, half or more of births now occur outside of marriage in France, Iceland, Norway and Sweden. The average proportion of births outside marriage in OECD countries is now one-third of the total.

Over the last 50 years, there has been a steady convergence in fertility rates across OECD countries. In the early 1960s, Colombia, Costa Rica, Korea, Mexico and Türkiye had rates around twice the OECD average, with Hungary and Latvia not much over half. There has been a steady convergence across countries: the standard deviation declined from 1.4 in 1962 to 0.3 in 2022 and is projected to continue to drift lower to only 0.1 in the 2060s.

Since 2000, the fertility rates have slightly increased in 15 out of 38 countries while the average has decreased slightly. The increases from a very low level have been the strongest in a few countries, including Czechia (+0.52), Latvia (+0.33) and Slovenia (+0.42). The largest declines have been observed in Colombia (-0.74), Costa Rica (-0.66) and Mexico (-0.82). However, between 2020 and 2022 fertility levels have fallen in a large majority of OECD countries, and by 0.1 on average. Falls of 0.2 or more have occurred in Australia (-0.23), Costa Rica (-0.24), Korea (-0.24), Mexico

(-0.34) and Türkiye (-0.20), with the decrease in Korea being particularly marked as fertility was already at the lowest level in the OECD in 2020.

While the average fertility rate will be 1.63 across OECD countries by 2062 according to the median forecast of the United Nations Population Prospects, forecast uncertainty is considerable, with the 20th percentile of probabilistic projections for the OECD average at only 1.28 and the 80th percentile close to reproduction at 1.97 (Figure 6.1).

As a result, the old-age to working-age ratio will increase sharply placing additional burdens on the working-age population to finance pay-as-you-go pensions and healthcare for older people.

Among the other major economies, Indonesia, Saudi Arabia and South Africa all currently have fertility rates above the replacement level of 2.1, with India just below. However, the downward trend is expected to continue in these countries, with fertility rates going below the natural replacement rate by 2030. By contrast, the trough has now been reached in China with levels projected to increase over the next 40 years.

Definition and measurement

The total fertility rate is the number of children that would be born to each woman if she were to live to the end of her child-bearing years and if the likelihood of her giving birth to children at each age was the currently prevailing age-specific fertility rate. It is generally computed by summing up the age-specific fertility rates defined over a five-year interval. A total fertility rate of 2.1 children per woman – the replacement level – broadly ensures a stable population size, on the assumptions of no migration flows and unchanged mortality rates.

Table 6.1. Total fertility rates, 1962-2062

	1962	1982	2002	2022	2042	2062		1962	1982	2002	2022	2042	2062
Australia	3.39	1.93	1.76	1.60	1.65	1.67	Mexico	6.77	4.44	2.62	1.80	1.70	1.67
Austria	2.80	1.66	1.37	1.47	1.55	1.59	Netherlands	3.17	1.50	1.73	1.64	1.66	1.67
Belgium	2.60	1.62	1.64	1.59	1.65	1.67	New Zealand	4.13	1.94	1.87	1.76	1.69	1.68
Canada	3.73	1.70	1.49	1.47	1.53	1.55	Norway	2.87	1.71	1.76	1.51	1.59	1.62
Chile	4.60	2.65	1.92	1.54	1.55	1.58	Poland	2.74	2.32	1.25	1.46	1.54	1.57
Colombia	6.65	3.62	2.43	1.69	1.64	1.63	Portugal	3.27	2.07	1.46	1.37	1.45	1.51
Costa Rica	6.51	3.53	2.18	1.52	1.53	1.56	Slovak Republic	2.84	2.29	1.19	1.57	1.62	1.64
Czechia	2.11	1.99	1.18	1.70	1.72	1.72	Slovenia	2.29	1.92	1.21	1.63	1.68	1.69
Denmark	2.54	1.42	1.73	1.72	1.72	1.73	Spain	2.78	1.93	1.24	1.29	1.41	1.48
Estonia	1.95	2.08	1.36	1.68	1.67	1.68	Sweden	2.22	1.61	1.65	1.67	1.68	1.69
Finland	2.66	1.72	1.71	1.40	1.50	1.56	Switzerland	2.56	1.54	1.37	1.50	1.57	1.60
France	2.77	1.92	1.86	1.79	1.78	1.76	Türkiye	6.22	4.14	2.32	1.88	1.76	1.72
Germany	2.50	1.49	1.33	1.53	1.57	1.59	United Kingdom	2.89	1.77	1.62	1.57	1.63	1.66
Greece	2.30	2.10	1.32	1.37	1.45	1.50	United States	3.34	1.82	2.00	1.66	1.69	1.70
Hungary	1.80	1.78	1.30	1.58	1.62	1.64	OECD	3.30	2.15	1.65	1.59	1.62	1.63
Iceland	3.97	2.28	1.94	1.73	1.68	1.65	Argentina	3.09	3.19	2.48	1.88	1.77	1.72
Ireland	3.91	2.95	1.95	1.76	1.72	1.71	Brazil	5.97	3.82	2.08	1.63	1.60	1.62
Israel	3.76	3.15	2.88	2.95	2.54	2.21	China	6.07	3.00	1.55	1.18	1.35	1.43
Italy	2.46	1.56	1.27	1.29	1.41	1.47	India	5.90	4.57	3.20	2.01	1.83	1.75
Japan	1.99	1.70	1.33	1.31	1.44	1.50	Indonesia	5.53	4.20	2.45	2.15	1.92	1.81
Korea	5.64	2.46	1.19	0.87	1.11	1.27	Saudi Arabia	7.44	6.95	3.71	2.39	1.96	1.82
Latvia	1.92	1.99	1.26	1.59	1.61	1.63	South Africa	6.04	4.62	2.31	2.34	2.00	1.84
Lithuania	2.49	1.97	1.24	1.62	1.67	1.70	EU27	2.59	1.93	1.44	1.53	1.59	1.62
Luxembourg	2.26	1.49	1.62	1.39	1.50	1.55							

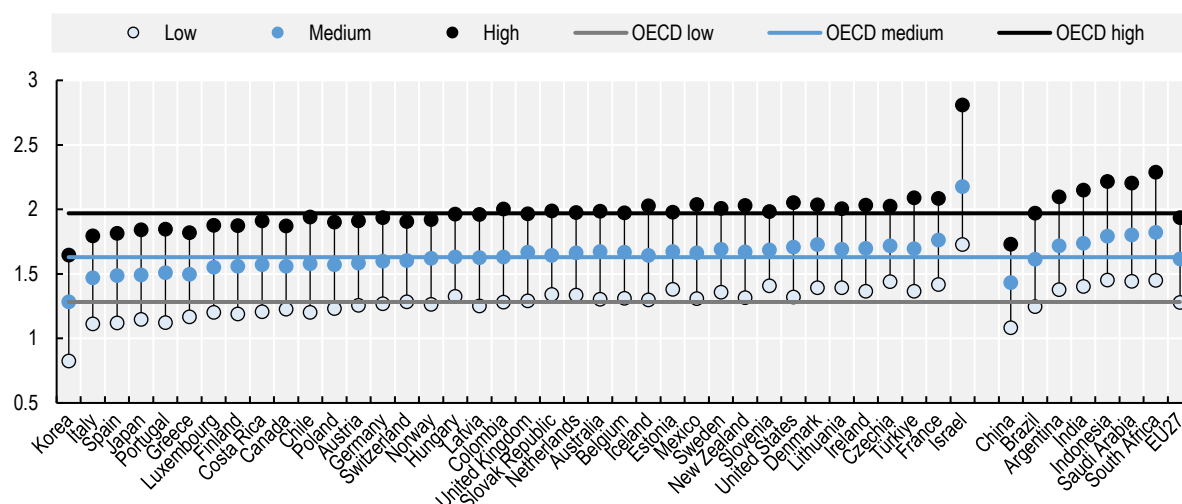
Note: The data refers to 5-year periods whose endpoint is indicated in the first row of the table.

Source: United Nations, Department of Economic and Social Affairs, (2022). World Population Prospects 2022, Online Edition (for future periods: medium-variant forecast).

StatLink  <https://stat.link/4euijq>

Figure 6.1. Uncertainty about total fertility-rate projections

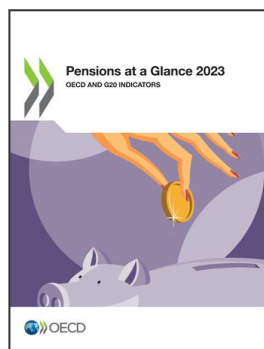
Low, medium and high variant projections for 2055



Note: Low, medium and high variant projections correspond to the 20%, 50% and 80% percentiles of probabilistic projections, respectively.

Source: United Nations, Department of Economic and Social Affairs (2022). Probabilistic Population Projections based on the World Population Prospects 2022: <http://population.un.org/wpp/>.

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