2. Fertility

**Definition and measurement**

The total fertility rate is the number of children that would be born to each woman at the end of her childbearing years if the likelihood of her giving birth to children at each age was the currently prevailing age-specific fertility rates. It is computed by summing up the age-specific fertility rates defined over five-yearly intervals. Assuming no net migration and unchanged mortality, total fertility rate of 2.1 children per woman (“replacement”) ensures broad population stability. Data typically come from civil population registers or other administrative records. These are harmonised according to United Nations and Eurostat recommendations. The exception is Turkey, where fertility data are survey-based.

The total fertility rate indicates the number of children an average woman has if she were to experience the exact age-specific fertility throughout her life. Allowing for some mortality during infancy and childhood, the population is replaced at a total fertility rate of a little over two.

In 2009, fertility was well below replacement level in most countries, averaging 1.74 across the OECD (Panel A, GE2.1). The highest rate was in Israel, where women had 0.74 more children than the next highest fertility country, Iceland. In addition to Israel and Iceland, New Zealand and Turkey had above replacement fertility (2.1 children per woman). Anglophone and Nordic countries were typically at the higher fertility end, while continental Europe (France is the one major exception) filled out the low fertility end, along with Japan. Fertility rates were notably low in Korea, with two parents replacing themselves in the next generation by little more than one child.

Fertility generally declined across the OECD countries over the last 25 years (Panel B, GE2.1). The declining trend arose out of postponement of family formation and a decrease in desired family size. Rising female education and employment, insufficient support to families juggling work and children, a need to generate a secure job and income, or growing housing problems may have all also played a role. Falls were especially pronounced – by around two children per woman on average – in Turkey and Mexico. Falls of one child per women were also experienced in Poland and Japan. The same period also saw modest rises in fertility rates in 14 OECD countries, including five Nordics and five Anglophone countries, and the contiguous nations France, Belgium, the Netherlands and Luxembourg. The largest rises were in Denmark, Norway and the Netherlands. These rises amounted to between a third and one half of an extra child on average per woman.

There was a moderate recovery in average fertility rates between 2000 and 2009. However, trends have been quite heterogeneous (GE2.2). Fertility rates continued to decline or remained stable in Austria, Japan, Hungary, Korea, Portugal and Switzerland – all low fertility countries. Fertility was more likely to rebound in countries with higher starting fertility rates, even recovering over replacement level in New Zealand and Iceland. This fertility rebound stalled in many OECD countries in 2009, possibly as a consequence of the economic crisis.

**Further reading**


**Figure note**

Figure GE2.1: 2008 for Chile, 2007 for Canada.

Information on data for Israel: http://dx.doi.org/10.1787/888932315602.
GE2.1. Fertility rates across the OECD are typically below replacement level with a moderate decline over the last generation

Panel A. Total fertility rate in 2009 (♀)
(number of children per women)

Panel B. Difference in TFR (number of children per women) between 1984 and 2009

GE2.2. Countries with higher fertility rates have had a bigger recent rebound

Panel A. Lower fertility countries
Panel B. Higher fertility countries

Source: National statistical offices and World Development Indicators (http://data.worldbank.org) for China, India and Indonesia.