This article looks at the development of a range of indicators concerning the number of births and fertility across the European Union (EU). Fertility rates steadily declined from the mid-1960s through to the turn of the century in the EU Member States. However, at the beginning of the 2000s, the total fertility rate in the EU-27 displayed signs of rising again. This development stopped in 2010 and a subsequent decline was observed through to a relative low in 2013, followed by a slight increase towards 2017. In 2018, the total fertility rate in the EU-27 was 1.55 live births per woman (as compared to 1.56 in 2017).
The birth rate in the EU decreased at a slower pace between 2000 and 2017 than before

In 2018, 4.246 million children were born in the EU-27, corresponding to a crude birth rate (the number of live births per 1 000 persons) of 9.5. For comparison, the EU-27 crude birth rate had stood at 10.5 in 2000, 12.8 in 1985 and 16.4 in 1970.

During the period 1961–2018, the highest annual total for the number of live births in the EU-27 was recorded in 1964, at 6.797 million. From this relative high up to the beginning of the 21st century, the number of live births in the EU-27 declined at a relatively steady pace, reaching a low of 4.365 million in 2002 (see Figure 1). This was followed by a modest rebound in the number of live births, with a high of 4.675 million children born in the EU-27 in 2008, in turn followed by further annual reductions up to 2018 (4.246 million live births).

1.55 live births per woman in the EU in 2018

In recent decades Europeans have generally been having fewer children, and this pattern partly explains the slowdown in the EU-27’s population growth (see Population and population change statistics). The most widely used indicator of fertility is the total fertility rate: this is the mean number of children that would be born alive to a woman during her lifetime if she were to pass through her childbearing years conforming to the age-specific fertility rates of a given year. A total fertility rate of around 2.1 live births per woman is considered to be the replacement level in developed countries: in other words, the average number of live births per woman required to keep the population size constant in the absence of migration. A total fertility rate below 1.3 live births per woman is often referred to as ‘lowest-low fertility’. The total fertility rate is comparable across countries since it takes into account changes in the size and structure of the population.

In 2018, the total fertility rate in the EU-27 was 1.55 live births per woman (as compared to 1.56 in 2017).
Figure 2). The EU-27’s total fertility rate raised from a low of 1.43 in 2001 and 2002 to a relative high of 1.57 in 2010, subsequently followed by a slight decrease to 1.51 in 2013 before a modest rebound up to 2017. Figure 2 also shows that the mean age of women at childbirth continued to rise between 2001 and 2018, from an average of 29.0 to 30.8 years. One partial explanation for the increase in the total fertility rate is that it may have been related to a catching-up process: following the trend to give birth later in life (witnessed by the increase in the mean age of women at childbirth), the total fertility rate might have declined first, before a subsequent recovery.

Indeed, women in the EU-27 appear to be having fewer children while they are young, and more children later. Figure 3 shows the growing relevance of fertility at ages higher than 30 in the EU-27. While the fertility rates of women aged less than 30 in the EU-27 have declined since 2001, those of women aged 30 and over have risen. In 2001, the fertility rate of women aged 25-29 years old was highest among all the age groups. In 2018, the fertility rate of women aged 30-34 became the highest.
Among the EU Member States, France reported the highest total fertility rate in 2018, with 1.88 live births per woman, followed by Sweden and Romania, with 1.76 live births per woman and Ireland, with 1.75 live births per woman. By contrast, the lowest total fertility rates in 2018 were recorded in Malta (1.23 live births per woman), Spain (1.26 live births per woman), Italy (1.29 live births per woman), Cyprus (1.32 live births per woman), Greece (1.35), and Luxembourg (1.38). In most of the EU Member States, the total fertility rate declined considerably between 1980 and 2000–2003: by 2000, values had fallen below 1.30 in Bulgaria, Czechia, Greece, Spain, Italy, Latvia, Slovenia and Slovakia. After reaching a low point between 2000 and 2003, the total fertility rate increased in seventeen Member States and by 2018, all of them except Malta, Spain and Italy reported total fertility rates that were above 1.30 (Table 1).

In the past 45 years, total fertility rates in the EU Member States have, in general, been converging: in 1970, the disparity between the highest rates (recorded in Ireland) and the lowest rates (recorded in Finland) was around 2.0 live births per woman. By 1990 this difference — between a high in Cyprus and a low in Italy — had decreased to 1.1 live births per woman. By 2010, the difference had fallen again to 0.8 live births per woman with a high in Ireland and a low in Hungary. By 2018 the difference narrowed to 0.6 when the highest total fertility rate was recorded again in France and the lowest rate was recorded in Malta.
Total fertility rate, 1960–2018
(live births per woman)

Table 1: Total fertility rate, 1960–2018 (live births per woman)

| Source: Eurostat (demo_frate) |

Total fertility rate and age of women at birth of first child

Figure 4 shows a plot of the total fertility rate against the mean age of women at the birth of their first child in 2018. Some of the countries with the highest total fertility rates also had a relatively high mean age of women at the birth of their first child. Four different groups of EU Member States can be broadly identified based on their position with respect to the EU-27 averages (as identified by the quadrants defined by the blue lines).

The first group (top right quadrant) is composed of Denmark, Germany, Ireland, the Netherlands and Norway where both the total fertility rate and the mean age of women at the birth of their first child were above the EU-27 average.

A second group (bottom left quadrant) is made up of Croatia, Malta, Poland, Slovakia and Finland: both their total fertility rates and mean ages of women at the birth of their first child were below the EU-27 averages, as was also the case in North Macedonia, Albania and Serbia.

A third group (bottom right quadrant) composed of Greece, Spain, Italy, Cyprus, Luxembourg, Austria, and Portugal, as well as Switzerland recorded a higher than average mean age of women at the birth of their first child but a lower total fertility rate than the EU-27 average.

The final group (top left quadrant) was composed of Belgium, Bulgaria, Czechia, Estonia, France, Latvia, Lithuania, Romania and Slovenia, as well as the United Kingdom, Iceland and Turkey; in each of these, the total fertility rate was higher than the EU-27 average but the mean age of women at the birth of their first child was below the EU-27 average.

In Hungary the total fertility rate was the same as the EU-27 average, while the mean age of women at the birth of their first child was below the EU-27 average. In Sweden the mean age of women at the birth of their first child was the same as the EU-27 average, while the total fertility rate was below the EU-27 average.
Almost half of children born in the EU in 2018 were first born children

Close to half (45.5 %) of the children born in the EU-27 in 2018 were first born children, with this share exceeding half in Romania, Luxembourg, Portugal, Malta, and Bulgaria (see Figure 5). By contrast, the lowest shares of first born children were recorded in Estonia (36.7 %), Ireland (38.4 %) and Latvia (39.5 %).

In the EU-27, more than one third (36.2 %) of all live births in 2018 were of second born children, around one eighth (12.5 %) were of third born children, and the remaining 5.7 % were of fourth born or subsequent children. Across the EU Member States, the highest share of the total number of live births ranked fourth or subsequent was recorded in Finland (10.9 %), followed by Ireland (9.3 %) and Belgium (8.3 %).
Source data for tables and graphs

- Fertility statistics, main figures: tables and figures

Data sources

Eurostat compiles information for a large range of demographic data, including statistics on the number of live births by sex (of new-borns), by the mother’s age, level of educational attainment and marital status. Fertility statistics are also collected in relation to the number of births and by birth order (in other words, the rank of the child — first, second, third child and so on). A series of fertility indicators is produced from the information collected, including the total fertility rate and fertility rates according to the mother’s age, the mean age of women at childbirth, the crude birth rate or the relative proportion of births outside of marriage.

Context

The EU’s social policy does not include a specific strand for family issues. Policymaking in this area remains the exclusive responsibility of EU Member States, reflecting different family structures, historical developments, social attitudes and traditions from one Member State to another. Nevertheless, policymakers may well evaluate fertility statistics as a background for family policymaking. Furthermore, a number of common demographic themes are apparent across the whole of the EU, such as a reduction in the average number of children being born per woman and the increasing mean age of mothers at childbirth.
Other articles

- Marriage and divorce statistics
- Mortality and life expectancy statistics
- Population and population change statistics
- Population structure and ageing

Publications

- Demography report — 2015 edition
- EU Employment and Social Situation — Quarterly Review — March 2013 — Special Supplement on Demographic Trends

Main tables

- Births and fertility data, see:

  Fertility (t_demo_fer)
  
  Total fertility rate (tsdde220)
  Mean age of women at childbirth (tps00017)
  Share of live births outside marriage (tps00018)
  Number of live births (tps00111)
  Crude birth rate (tps00112)

Database

- Births and fertility data, see:

  Fertility (demo_fer)
  
  Live births (total) by month (demo_fmonth)
  Live births by mother’s age and newborn’s sex (demo_fasec)
  Live births by mother’s age and birth order (demo_fordagec)
  Live births by mother’s year of birth (age reached) and birth order (demo_fordager)
  Live births by mother’s age and legal marital status (demo_fagec)
  Live births by mother’s year of birth (age reached) and legal marital status (demo_fager)
  Live births by mother’s age and educational attainment (demo_faeduc)
  Live births by mother’s age and activity status (demo_faemplc)
  Live births by mother’s age and citizenship (demo_facze)
  Live births by mother’s age and country of birth (demo_facbc)
  Live births by birth weight and duration of gestation (demo_fweight)
  Legally induced abortions by mother’s age (demo_fabort)
  Legally induced abortions by mother’s age and number of previous live births (demo_fabortord)
  Fertility indicators (demo_find)
  Fertility rates by age (demo_frate)
Dedicated section

- Population

Methodology

- Fertility (ESMS metadata file — demo_fer_esms)
- Population (ESMS metadata file — demo_pop_esms)

View this article online at http://ec.europa.eu/eurostat/statistics-explained/index.php/Fertility_statistics