Fertility statistics

Statistics Explained

Data extracted in April 2022. Planned article update: 9 March 2023.

"4.1 million babies born in the EU in 2020."

"1.50 live births per woman in the EU in 2020, ranging from 1.13 in Malta to 1.83 in France."

"29.5 years was the average age of women at the birth of their first child in the EU in 2020, ranging from 26.4 in Bulgaria to 31.4 in Italy."

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 showed 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 up to 2016 and another decrease since. In 2020, the total fertility rate in the EU was 1.50 live births per woman (compared to 1.53 in 2019).

The birth rate in the EU decreased at a slower pace between 2000 and 2020 than previously

In 2020, 4.071 million children were born in the EU, corresponding to a crude birth rate (the number of live births per 1 000 persons) of 9.1. For comparison, the EU crude birth rate was 10.5 in 2000, 12.8 in 1985 and 16.4 in 1970.

During the period 1961–2020, the highest annual total for the number of live births in the EU was recorded in 1964, at 6.797 million. From this relative high until the beginning of the 21st century, the number of live births in the EU 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 in 2008, which in turn was followed by further annual reductions up to 2020 (4.071 million live births).

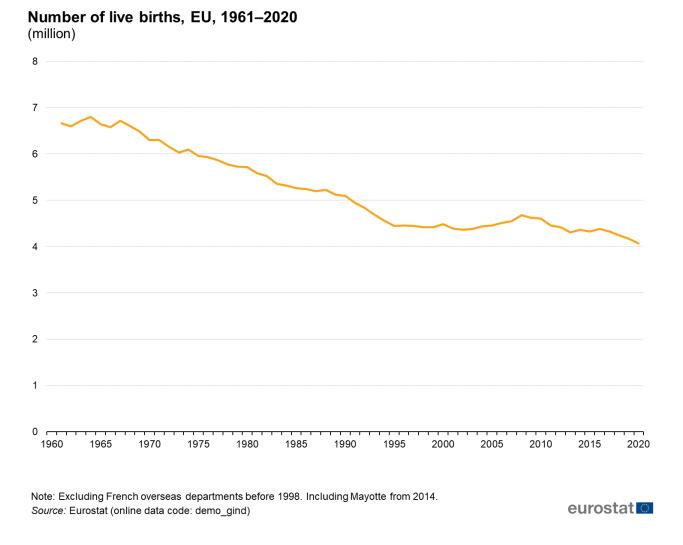


Figure 1: Number of live births, EU, 1961-2020 (million) Source: Eurostat (demo_gind)

1.50 live births per woman in the EU in 2020

In recent decades, Europeans have generally been having fewer children, and this pattern partly explains the slowdown in the EU'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 2020, the total fertility rate in the EU was 1.50 live births per woman (as compared to 1.53 in 2019 - Figure 2). The EU's total fertility rate rose from a low of 1.43 in 2001 and 2002 to a relative high of 1.57 in 2010; this was subsequently followed by a slight decrease to 1.51 in 2013 before a modest rebound until 2017, when the indicator started decreasing again. The decrease observed between 2019 and 2020 could be interpreted as a first sign of the effect of the COVID-19 pandemic on the EU population.

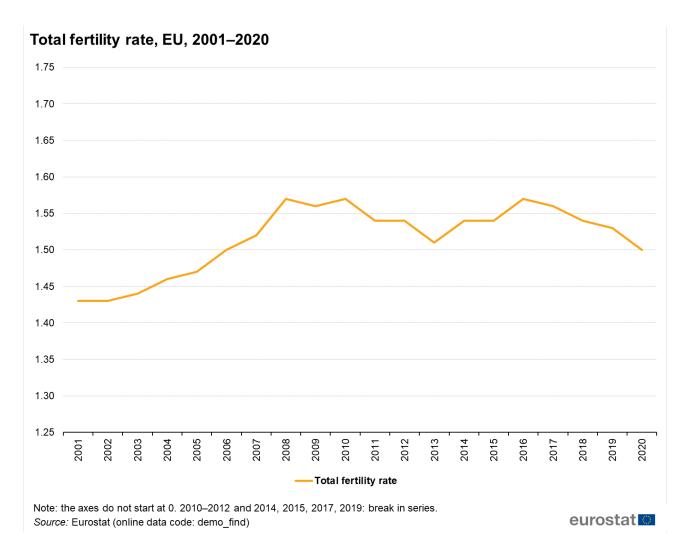


Figure 2: Total fertility rate, EU, 2001–2020 Source: Eurostat (demo_find)

Figure 3 shows that the mean age of women at childbirth continued to rise between 2001 and 2020, from an average of 29.0 to 31.0 years. An increase in the mean age of women at birth of the first child can also be observed in the same period, from a value of 28.8 in the EU in 2013 (the first year for which the EU value is available) to a value of 29.5 in 2020.

Mean age of women at childbirth and at birth of first child, EU, 2001–2020

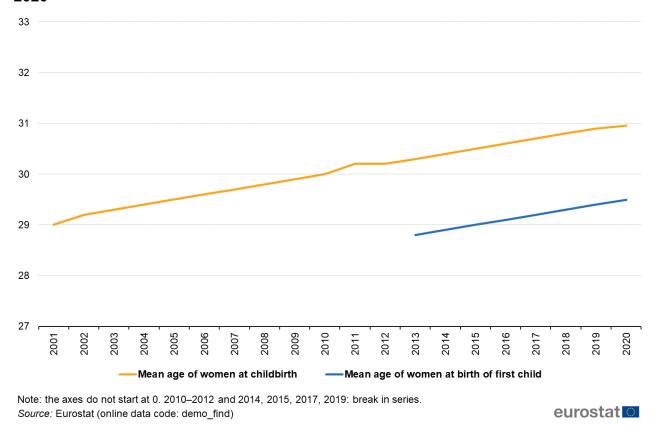


Figure 3: Mean age of women at childbirth and at birth of first child, EU, 2001–2020 Source: Eurostat (demo_find)

Indeed, women in the EU appear to be having fewer children while they are young, and more children later. Figure 4 shows the growing relevance of fertility at ages higher than 30 in the EU. While the fertility rates of women aged less than 30 in the EU 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 2020, the fertility rate of women aged 30-34 became the highest. The fertility rate at ages higher than 35 is also rising.

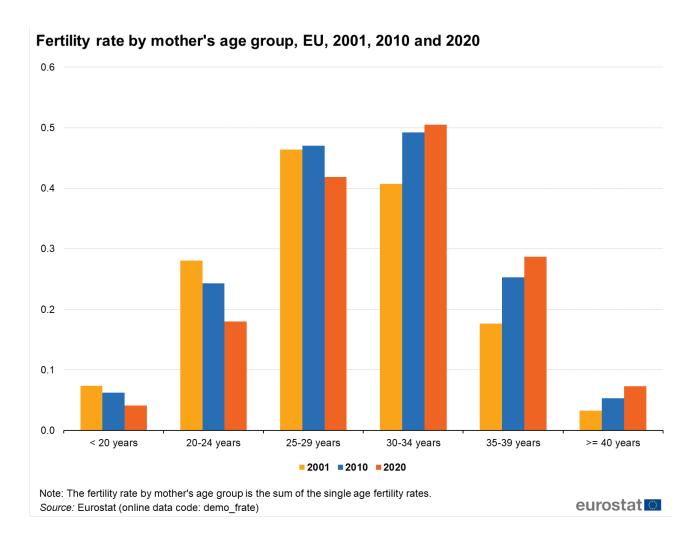


Figure 4: Fertility rate by mother's age group, EU, 2001, 2010 and 2020 Source: Eurostat (demo_frate)

Among the EU Member States, France reported the highest total fertility rate in 2020, with 1.83 live births per woman, followed by Romania, with 1.80 live births per woman and Czechia with 1.71 live births per woman. By contrast, the lowest total fertility rates in 2020 were recorded in Malta (1.13 live births per woman), Spain (1.19 live births per woman) and Italy (1.24 live births per woman). Among the EFTA and candidate countries the highest total fertility rates in 2020 were reported by Iceland (1.72), Montenegro (1.75) and Turkey (1.76).

Between 2019 and 2020, the total fertility rate decreased in 18 Member States, increased in eight Member States and was stable in Czechia: the highest decrease could be observed in Lithuania (from 1.61 in 2019 to 1.48 in 2020) while the highest increase was recorded in Greece (from 1.34 in 2019 to 1.39 in 2020).

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 many Member States and by 2020, 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 2020 the difference

narrowed to 0.7 when the highest total fertility rate was recorded in France and the lowest rate was recorded in Malta.

Total fertility rate, 1960-2020

(live births per woman)

	1960	1970	1980	1990	2000	2001	2010	2018	2019	2020
EU (1)	:	:	:	:	:	1.43	1.57	1.54	1.53	1.50
Belgium	2.54	2.25	1.68	1.62	1.67	1.67	1.86	1.62	1.58	1.55
Bulgaria	2.31	2.17	2.05	1.82	1.26	1.21	1.57	1.56	1.58	1.56
Czechia	2.09	1.92	2.08	1.90	1.15	1.15	1.51	1.71	1.71	1.71
Denmark	2.57	1.95	1.55	1.67	1.77	1.74	1.87	1.73	1.70	1.68
Germany	:	:	:	:	1.38	1.35	1.39	1.57	1.54	1.53
Estonia	1.98	2.17	2.02	2.05	1.36	1.32	1.72	1.67	1.66	1.58
Ireland	3.78	3.85	3.21	2.11	1.89	1.94	2.05	1.75	1.71	1.63
Greece	2.23	2.40	2.23	1.39	1.25	1.25	1.48	1.35	1.34	1.39
Spain	:	:	2.22	1.36	1.22	1.23	1.37	1.26	1.23	1.19
France	:	:	:	:	1.89	1.90	2.03	1.87	1.86	1.83
Croatia	:	:	:	:	:	1.46	1.55	1.47	1.47	1.48
Italy (2)	2.40	2.38	1.64	1.33	1.26	1.25	1.46	1.29	1.27	1.24
Cyprus	:	:	:	2.41	1.64	1.57	1.44	1.32	1.33	1.36
Latvia	:	:	:	:	1.25	1.22	1.36	1.60	1.61	1.55
Lithuania	:	2.40	1.99	2.03	1.39	1.29	1.50	1.63	1.61	1.48
Luxembourg	2.29	1.97	1.50	1.60	1.76	1.66	1.63	1.38	1.34	1.36
Hungary	2.02	1.98	1.91	1.87	1.32	1.31	1.25	1.55	1.55	1.59
Malta	:	:	1.99	2.02	1.68	1.48	1.36	1.23	1.14	1.13
Netherlands	3.12	2.57	1.60	1.62	1.72	1.71	1.79	1.59	1.57	1.54
Austria	2.69	2.29	1.65	1.46	1.36	1.33	1.44	1.47	1.46	1.44
Poland (3)	:	:	:	2.06	1.37	1.31	1.41	1.46	1.44	1.39
Portugal	3.16	3.01	2.25	1.56	1.55	1.45	1.39	1.42	1.43	1.40
Romania	:	:	2.43	1.83	1.31	1.27	1.59	1.76	1.77	1.80
Slovenia	:	:	:	1.46	1.26	1.21	1.57	1.6	1.61	1.59
Slovakia	3.04	2.41	2.32	2.09	1.30	1.20	1.43	1.54	1.57	1.59
Finland	2.72	1.83	1.63	1.78	1.73	1.73	1.87	1.41	1.35	1.37
Sweden	:	1.92	1.68	2.13	1.54	1.57	1.98	1.76	1.71	1.67
Iceland	:	2.81	2.48	2.30	2.08	1.95	2.20	1.71	1.74	1.72
Liechtenstein	:	:	:	:	1.57	1.52	1.40	1.58	1.48	1.46
Norway	:	2.50	1.72	1.93	1.85	1.78	1.95	1.56	1.53	1.48
Switzerland	2.44	2.10	1.55	1.58	1.50	1.38	1.52	1.52	1.48	1.46
Montenegro	:	:	:	:	:	:	1.70	1.76	1.77	1.75
North Macedonia	:	:	:	:	1.88	1.73	1.56	1.42	1.34	1.31
Albania	:	:	:	:	:	:	1.63	1.37	:	1.34
Serbia	:	:	:	:	1.48	1.58	1.40	1.49	1.52	1.48
Turkey	:	:	:	:	:	:	2.04	1.99	1.88	1.76

^{(1) 2010} and 2019: break in series.

Source: Eurostat (online data code: demo find)



Table 1: Total fertility rate, 1960–2020 (live births per woman) Source: Eurostat (demo find)

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

Figure 5 shows a plot of the total fertility rate against the mean age of women at the birth of their first child in 2020. 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 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 Sweden where both the total fertility rate and the mean age of women at the birth of their first child were above the EU average. A second group (bottom left quadrant) is made up of Croatia, Malta, Lithuania, Poland and Finland: both their total fertility rates and mean ages of women at the birth of their first child were below the EU averages, as was also the case in Albania, North Macedonia and Serbia. A third group (bottom right quadrant) composed of Greece, Spain, Italy, Cyprus, Luxembourg, Austria and Portugal, as well as Switzerland and Norway 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 average. The final group (top left quadrant) was composed of Belgium, Bulgaria, Czechia, Estonia, France, Latvia, Hungary, Romania, Slovenia and Slovakia, as well as Iceland and Turkey; in each of these, the total fertility rate was higher than the EU average but the mean age of women at the birth of their first child was below the EU average.

^{(2) 2019:} break in series.

^{(3) 2000} and 2010: break in series.

Fertility indicators, 2020

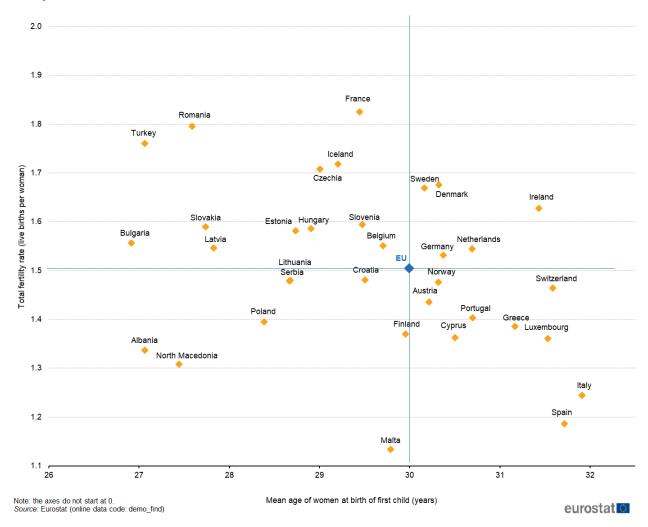
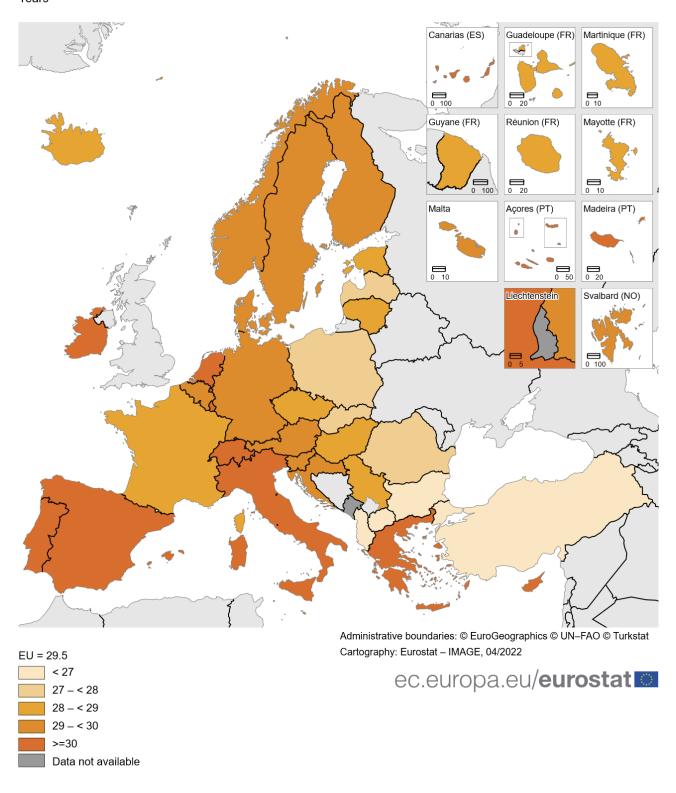


Figure 5: Fertility indicators, 2020 Source: Eurostat (demo_find)

As can be seen in Map 1, 29.5 years was the mean age of women at the birth of their first child, in the EU in 2020. The lowest mean age at birth of a first child can be found in Bulgaria (26.4 years) and Romania (27.1 years); the highest values can be observed in Italy (31.4 years) and in Spain (31.2 years).

Mean age of women at birth of first child, 2020

Years



Source: Eurostat (online data code demo_find)

Map 1: Mean age of women at birth of first child, 2020 Source: Eurostat (demo_find)

Almost one fifth of children born in the EU in 2020 were third born or subsequent children

Close to half (46.2 %) of the children born in the EU in 2020 were first born children, with this share exceeding half in Portugal, Romania, Luxembourg, Malta, Spain and Bulgaria (see Figure 6). By contrast, the lowest shares of first born children were recorded in Estonia (38.0 %), Latvia (38.7 %) and Ireland (39.3 %).

In the EU, more than one third (35 %) of all live births in 2020 were of second born children, around one eighth (12.5 %) were third born children, and the remaining 5.9 % were of fourth born or subsequent children. Across the EU Member States, the highest share of the total number of live births of fourth or subsequent children was recorded in Finland (10.0 %), followed by Ireland (8.8 %) and Estonia (8.7 %). Turkey also recorded a high share of live births of fourth or subsequent children (12.7 %).

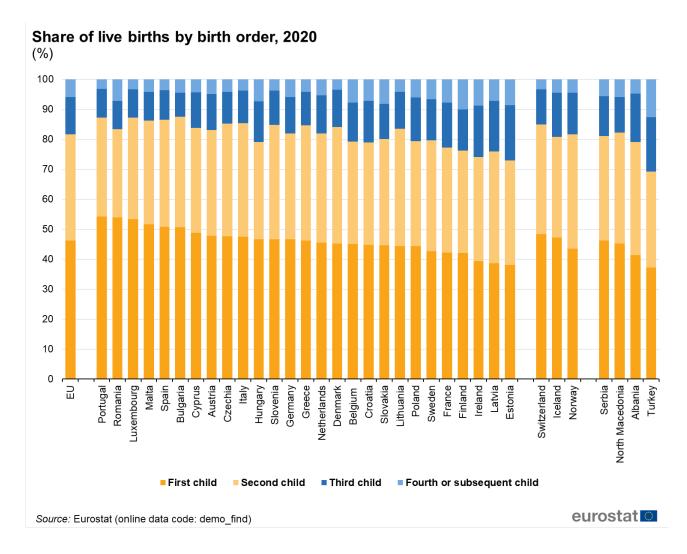


Figure 6: Share of live births by birth order, 2020 (%) Source: Eurostat (demo find)

Highest share of children from foreign-born mothers in Luxembourg

In 2020, 64 % of the children born in Luxembourg were from foreign-born mothers (see Figure 7). In Cyprus, Austria, Malta and Belgium around one third of children were born in 2020 to foreign-born mothers and two thirds were born to native-born mothers. Conversely, 98 % of live births in 2020 in Bulgaria and Slovakia were born to native-born mothers. Compared with 2013, most of the EU countries in 2020 showed an increase in live births from foreign-born mothers. Malta recorded the highest increase in live births from foreign-born mothers (22 p.p. from 11% in 2013 to 33% in 2020) followed by Greece (7 p.p. from 14% to 21%), Spain (6 p.p. from 22% to 28%) and Romania (5 p.p. from 1% in 2013 to 6% in 2020).

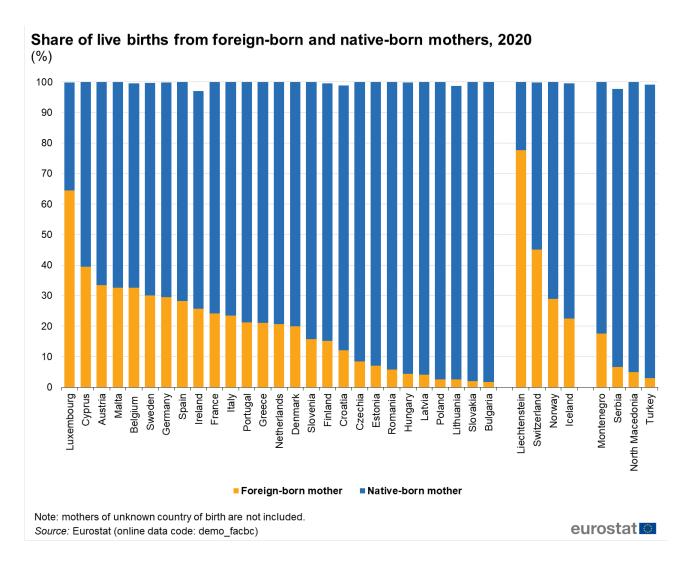


Figure 7: Share of live births from foreign-born and native-born mothers, 2020 (%) Source: Eurostat (demo_facbc)

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 newborns), by the mother's age, citizenship, country of birth, 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.

The EU has been going through a period of demographic and societal change. The outbreak of the COVID-19 pandemic will leave a lasting impact on the way we live and work together. The outbreak came at a time when Europe had already been going through a period of profound demographic and societal change. More information of the work of the European Commission 2019-2024 to tackle the impact of demographic change in Europe can be found in the European Commission dedicated pages.

Other articles

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

Publications

- · Ageing Europe 2021 interactive edition
- Demography of Europe Statistics visualised 2021 edition
- 2020 Report on the impact of demographic change
- Demography report 2015 edition
- EU Employment and Social Situation Quarterly Review March 2013 Special Supplement on Demographic Trends

Main tables

• Demography, population stocks and balance, see:

Fertility (national level) (t_demo_fer)

Total fertility rate (tps00199)

Mean age of women at childbirth and at birth of first child (tps00017)

Live births and crude birth rate (tps00204)

Share of live births outside marriage (tps00018)

Fertility (regional level) (t_demofreg)

Total fertility rate by NUTS 2 region (tgs00100)

Live births by NUTS 2 region (tgs00097)

Database

· Demography, population stock and balance, see:

Fertility (national level) (t demo fer)

Fertility indicators (demo find)

Fertility rates by age (demo_frate)

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 level (demo faeduc)

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Live births by mother's age and citizenship (demo_faczc)

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Live births by birth weight and duration of gestation (demo fweight)

Abortion indicators (demo fabortind)

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 (regional level) (t_demofreg)

Fertility indicators by NUTS 2 region (demo_r_find2)

Fertility indicators by NUTS 3 region (demo r find3)

Fertility rates by age and NUTS 2 region (demo_r_frate2)

Live births by mother's age and NUTS 2 region (demo r fagec)

Live births (total) by NUTS 3 region (demo r births)

Live births by age group of the mothers and NUTS 3 region (demo_r_fagec3)

Dedicated section

· Demography, population stock and balance

Methodology

- Fertility (ESMS metadata file demo_fer_esms)
- Population (ESMS metadata file demo pop esms)

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http://ec.europa.eu/eurostat/statistics-explained/index.php/Fertility_statistics