

## SF2.3: Age of mothers at childbirth and age-specific fertility

### Definitions and methodology

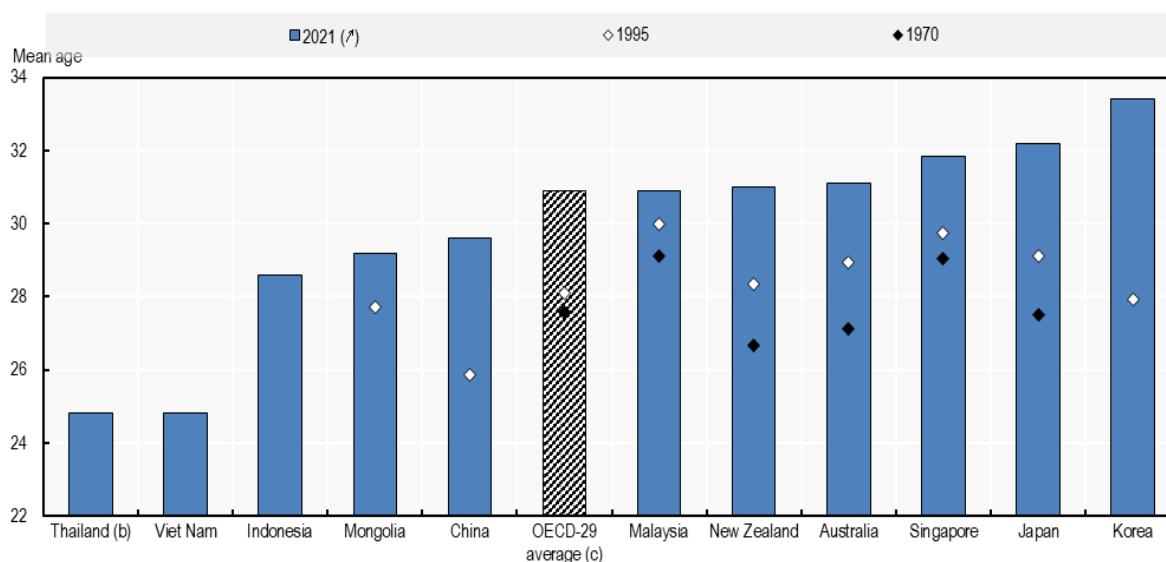
This indicator contains information on the age of mothers at childbirth and levels of fertility across age groups. It is based on two main measures:

- *Mean age of mothers at birth*, calculated as the simple mean average age in years of women at childbirth in a given year. The mean age of mothers at childbirth is shown both for all childbirths and also for first births only.
- *Age-specific fertility rates*, calculated as the number of births per 1000 women of a given age in a given year. As a means of simplification, age-specific fertility rates are presented here per five-year age group and with a particular focus on fertility among adolescent (15-19 year old) women.

### Key findings

In the Asia/Pacific region, as in many OECD countries, the average age of women at childbirth has increased considerably in recent decades (Chart SF2.3.A). In 1970, among Asia/Pacific countries included here, the mean age of women at childbirth ranged from 26.7 years of age in New Zealand to 29.1 in Malaysia and Singapore. In 2021, the mean age of women at birth was at least 30 years of age in all Asia/Pacific countries included here except for Thailand, Viet Nam, Indonesia, Mongolia and China, and was as high as 32 in Japan and 33 in Korea.

Chart SF2.3.A. Mean age of women at birth, 1970, 1995 and 2021<sup>a</sup>



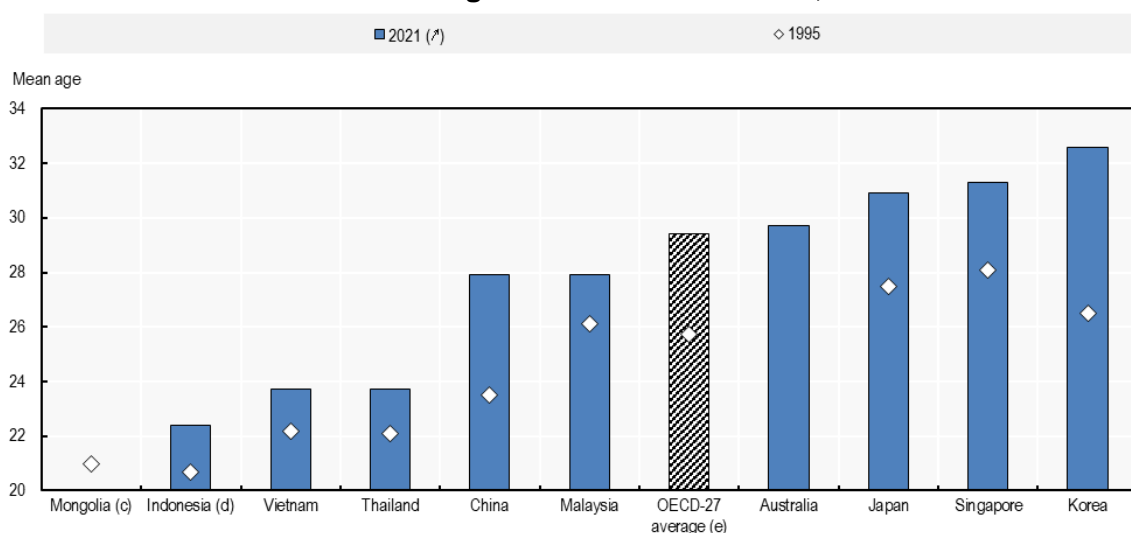
Notes:: a) 2021 data refer to 2020 for China and Malaysia; to 2018 for Singapore; and to 2017 for Thailand; b) Data for Thailand refer to women aged 15-49; and, c) The OECD-29 average refers to the unweighted average across the 29 OECD member countries with available and comparable data. See OECD Family Database Indicator SF2.3 ([www.oecd.org/els/family/database.htm](http://www.oecd.org/els/family/database.htm)) for more detail.

Sources: [Korea: Statistics Korea, Vital Statistics](#); [Malaysia: Knoema.com](#); Mongolia: World Population Prospects; OECD-29 average: [OECD Family Database Indicator SF2.3](#); Thailand: [National Statistical Office of Thailand](#); Viet Nam: Population and Housing Census 2019 and Health Statistics 2021; All other countries: [United Nations World Fertility Data](#).

*Other relevant indicators:* SF2.1 Fertility rates; SF2.4 Share of births outside of marriage; SF3.1 Marriage and divorce rate

Increases in the mean age of women at childbirth have been driven at least in part by a trend towards postponement of the first childbirth (Chart SF2.3.B). Current mean ages at first birth vary considerably from one country to another. In Indonesia, Mongolia and Viet Nam for example, the average age at which women give birth to their first child is around 22, whereas in Korea it is as high as 32. However, in all Asia/Pacific countries included here except Viet Nam, the average age at first birth increased since 1995. The largest increase was recorded for Korea (5.7 years).

Chart SF2.3.B. **Mean age of women at first birth, 1995<sup>a</sup> and 2021<sup>b</sup>**

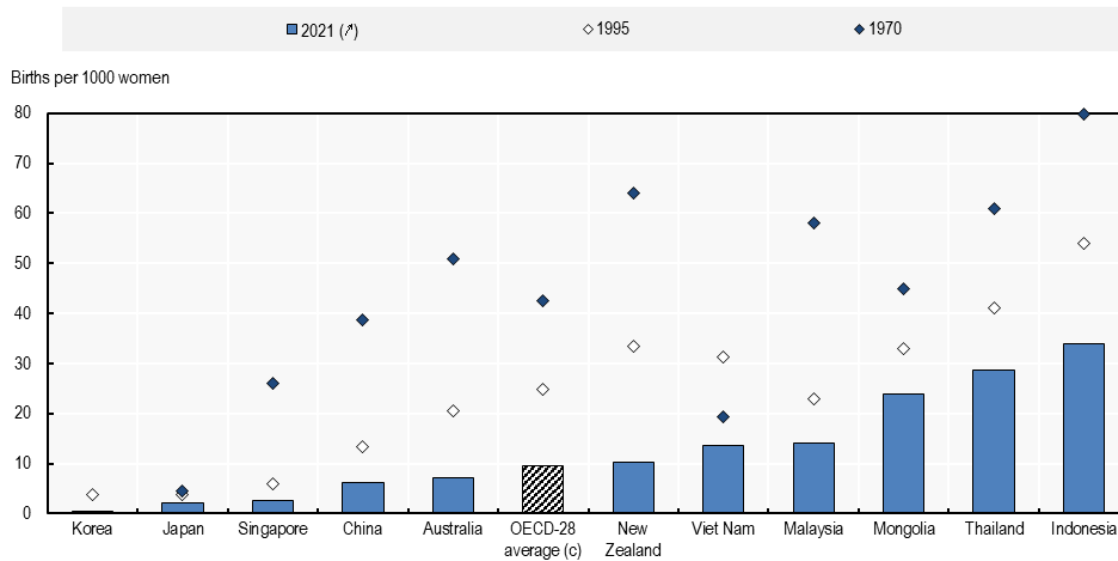


Notes: a) Data for 1995 refer to 1996 for Mongolia; and to 1994 for Indonesia.  
 b) Data for 2021 refer to 2020 for China; and to 2017 for Indonesia.  
 c) Data for Mongolia refer to median age at first birth among women aged 24-49 years.  
 d) Data for Indonesia refer to median age.  
 e) The OECD-27 average refers to the unweighted average across the 27 OECD member countries with available and comparable data. See OECD Family Database Indicator SF2.3 ([www.oecd.org/els/family/database.htm](http://www.oecd.org/els/family/database.htm)) for more detail.

Sources: China: Estimates based on data from the Chinese Population and Employment Statistical Yearbook; Indonesia: Indonesia Demographic Health and Survey, 2017; Japan: Ministry of Health, Labour and Welfare, Statistics and Information Department, Vital Statistics of Japan; Korea: Statistics Korea, Vital Statistics; Malaysia: Vital Statistics, Malaysia, Department of Statistics Malaysia; Mongolia: Social Indicator Sample survey; [OECD-27 average: OECD Family Database Indicator SF2.3](#); Singapore: National Population and Talent Division, Population in Brief.

The shift towards the postponement of the first birth is also reflected in trends in adolescent fertility (Chart SF2.3.C). In 2021, adolescent fertility rates varied across Asia/Pacific countries, from as low as 0.4 births per 1000 women aged 15-19 in Korea to 33.9 births per 1000 women aged 15-19 in Indonesia. However, in almost all cases, adolescent fertility rates are considerably lower than they were in 1995 and much lower than in 1970. For example, in Indonesia, although the current adolescent fertility rate is still the highest amongst countries included here, the rate fell from 139.3 births per 1000 women aged 15-19 in 1970 to 54.0 births per 1000 in 1995 and has since declined to 33.9 births per 1000 women aged 15-19 in 2021. In Viet Nam, the adolescent fertility rate increased by almost 12 points between 1970 and 1995 but has fallen by 25 points since then; from 41.2 births per 1000 women aged 15-19 in 1995 to 13.5 in 2021. In Japan adolescent fertility rates have remained broadly stable at very low levels since 1970 and, as in Korea and Singapore adolescent fertility rates are below 2.5 births per 1000 women aged 15-19.

Chart SF2.3.C. **Adolescent fertility rates, 1970<sup>a</sup>, 1995 and 2021<sup>b</sup>**  
 Births per 1000 women, 15-19 year olds



a) Data for 1970 refer to 1980 for Mongolia.

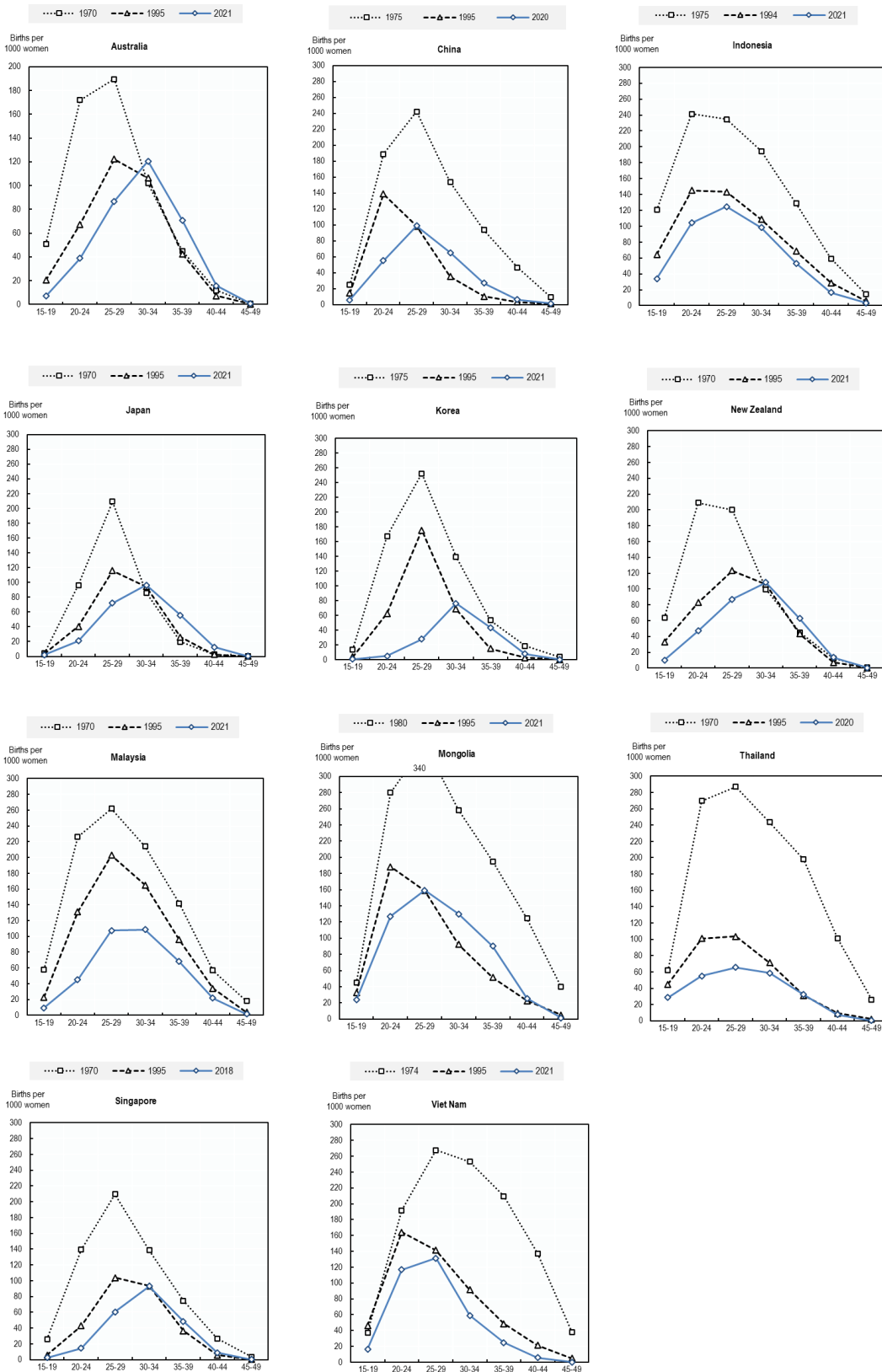
b) Data for 2021 refer to 2018 for Singapore; and to 2020 for Malaysia and Thailand.

c) The OECD-28 average refers to the unweighted average across the 28 OECD member countries with available and comparable data. See OECD Family Database Indicator SF2.3 ([www.oecd.org/els/family/database.htm](http://www.oecd.org/els/family/database.htm)) for more detail.

Sources: Korea: [Statistics Korea, Vital Statistics](#); Indonesia: [Indonesia Census, 1971 and Indonesia Demographic and Health Survey, 2012](#); Malaysia: [Vital Statistics, Malaysia, Department of Statistics Malaysia \(various years\)](#); [Malaysia Economic Statistics, Time Series, DOSM, 2015](#); Thailand: [Public Health Statistics, Ministry of Public Health 2003-2016](#); OECD average: [OECD Family Database Indicator SF2.3](#); all other countries: [United Nations World Fertility Data 2017](#).

The effects of the delay in childbearing are perhaps best illustrated by looking at shifts in fertility across age groups. Chart SF2.3.D shows, by country, age-specific fertility rates by five-year age groups for the years 1970, 1995 and 2021 (or nearest/latest available). Broadly speaking, the chart shows both a postponement of births and a general decrease in fertility for all covered Asia/Pacific countries. Across the countries included here fertility rates among young women aged 15-19, 20-24 and especially 25-29 are much lower today than they were in 1970. Much of this decline occurred between 1970 and 1995, but in countries like Korea and Malaysia fertility rates have continued to fall significantly since 1995. Conversely, in some countries (Australia, Japan, Korea, New Zealand and Singapore), fertility rates for women aged 30-34 and 35-39 are slightly higher today than they were in 1970. In several Asia/Pacific countries (Australia, Japan, Korea, Malaysia, New Zealand, and Singapore) fertility rates among 30-34 year old's are currently higher than those for any other five-year age group.

Chart SF2.3.D. **Age-fertility profiles, 1970, 1995 and 2021 or nearest/latest available**  
 Fertility rates (births per 1000 women) by five-year age group



Sources: Korea: Statistics Korea, Vital Statistics; Indonesia: Indonesia Census, 1971 and Indonesia Demographic and Health Survey, 2012; Malaysia: Vital Statistics, Malaysia, Department of Statistics Malaysia (various years); Malaysia Economic Statistics, Time Series, DOSM, 2015; Thailand: Public Health Statistics, Ministry of Public Health 2003-2016; OECD average: OECD Family Database Indicator SF2.3; all other countries: United Nations World Fertility Data.

**Box SF2.3. Childlessness**

In many Asia-Pacific countries, as also in many OECD countries, childlessness is on the rise (Box Table SF2.3.A). During the early- to mid-1990s, in most of the covered Asia-Pacific countries, fewer than 7% of women aged 40-44 had never had a live birth. The only exceptions were Japan (11% of women were childless in 1995), New Zealand (12% of women were childless in 1996) and Australia (13% in 1996). However, by around 2010, all the Asia/Pacific countries included here had childlessness rates at age 40-44 of 5% or above. Childlessness is least common in China and Indonesia where, according to the most recent data, just over 5% of women aged 40-44 were childless. Childlessness is most common in Australia, New Zealand, and Singapore, and particularly in Japan and Korea, where just over 20% of women aged 40-44 were childless. Thailand had rates of around 10% in 2010. The only country where childlessness declined somewhat for the age-group 40-44 is Indonesia.

**Box Table SF2.3.A. Childless women at age 40-44, mid-1990s and latest available year**  
 Proportion (%) of women aged 40-44 who have not had a live birth

	%	mid-1990s	%	Latest year
Australia	12.80	1996	16.00	2011
China	0.98	1995	5.62	2015
Japan	10.67	1995	21.50	2010
Korea (a)	3.60	1990	21.70	2020
Indonesia	6.70	1997	5.70	2017
New Zealand	11.90	1996	15.00	2006
Singapore (b)	4.66	1990	15.00	2021
Thailand (c)	4.42	1980	10.92	2010
Viet Nam	..	..	..	..

notes: a) For Korea, census only asked married, divorced, and widows how many children were born. Unmarried women were considered not having children.  
 b) For Singapore, proportion of ever-married females aged 44-49 who are without children by residency status of females in 2021.  
 c) For Thailand, data refer to ever-married women only.

Sources: [Australia, Korea and New Zealand: OECD Family Database indicator SF2.5](#); China: 1% National Population Sample Survey 1995 and 2015; Japan: Morizumi, R (2019) "An Analysis of Childlessness in Japan", *Journal of Population Problems*, Vol.78 No.1 (No.308) March 2019, and Japan Ministry of Health, Labour and Welfare (2010), *Vital Statistics Special Report on Fertility*; Indonesia: Indonesia Demographic and Health Survey 1997 and 2017; Singapore: Population in Brief 2022; Thailand: Population and Housing Census in 1980 and 2010.

*Comparability and data issues*

The disaggregation of fertility rates by mother's age is useful as a means of identifying changes in the timing of fertility which, amongst other things, affect trends in the total fertility rate (SF2.1). The age-fertility profiles shown below show that women are postponing childbearing with fertility declining at younger ages and, for some countries, increasing at older ages. The consequences of these changes in timing on overall levels of fertility are not always exactly clear but postponement of childbirth is likely to lead to the underestimation of fertility as measured by the total fertility rate (Hvidtfeldt et al, 2010).

"Fertility rates by birth order", "tempo-controlled estimates of fertility trends" and "the time between two births" are among the indicators that can help cast light on changes in the timing of fertility and help separate both the timing and quantum dimensions in the analysis of fertility evolution (see Potančoková *et al.* [2008] and other references below for a discussion in the context of fertility in European and OECD countries).

*Sources and further reading:* Bongaarts J., G. Feeney (2006), "The quantum and tempo of life-cycle events", *Vienna Yearbook of Population Research*, pp. 115-51; Lutz W., and V Skirbekk (2005), Policies addressing the tempo effect in low fertility countries", *Population and Development Review*, 31(4):699-730; Potančoková M., T. Sobotka, and D. Philipov (2008), *European Demographic data sheet - Estimating tempo effect and adjusted TFR*, Vienna Institute for demography; Hvidtfeldt, U. A., M. Gerster, L.B. Knudsen and N. Keiding (2010), "Are low Danish fertility rates explained by changes in timing of births?". *Scandinavian journal of public health*, 38(4), pp. 426-33; Chen, Y. (1991), "Analyzing the first marriage age and first birth age in China", *Chinese Journal of Population Sciences*, No.5.