

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

#### Definitions and methodology

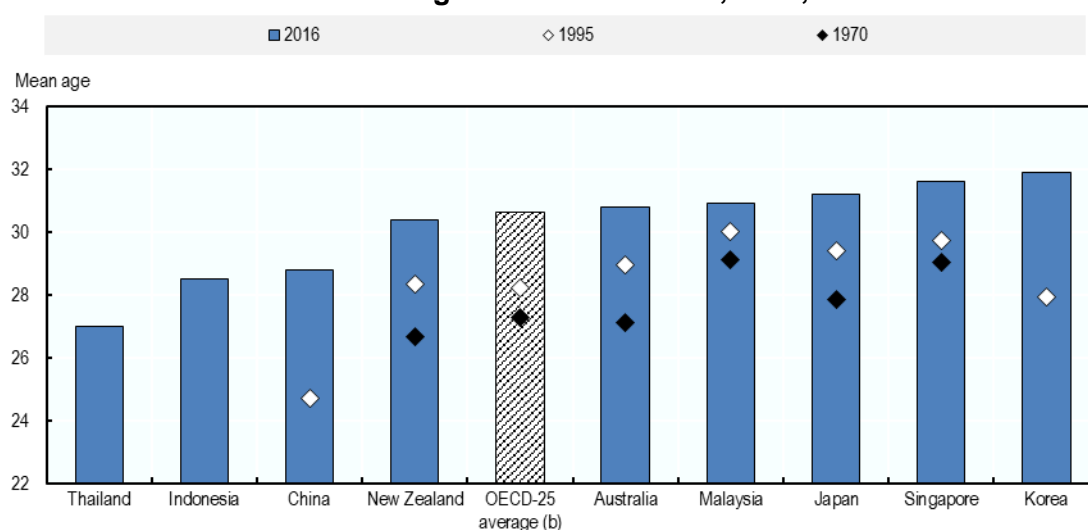
This indicator contains information on the age of mothers at childbirth and levels of fertility across age groups. It is based on two main measures:

- *Mean age of mothers at birth*, calculated as the simple mean average age in years of women at childbirth. The mean age of mothers at birth is shown both for all births 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 particularly focus on fertility among adolescent (15-19 year old) women.

#### Key findings

In the Asia/Pacific region as also 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 with available data, the mean age of women at childbirth ranged from 26.7 years of age in New Zealand to 29.1 in Malaysia and Singapore. Today, the mean age of women at birth is at least 30 in all covered Asia/Pacific countries with available data except Thailand, Indonesia and China, and reaches as high as 31.6 in Singapore and 31.9 in Korea. All covered countries have seen the mean age of women at childbirth increase over the intervening years, with the largest increases in Australia and New Zealand (3.7 years).

Chart SF2.3.A. Mean age of women at birth, 1970, 1995 and 2016<sup>a</sup>



a) 2016 data refer to 2014 for Indonesia; 2015 for Australia, Malaysia, Japan, Singapore and Thailand.

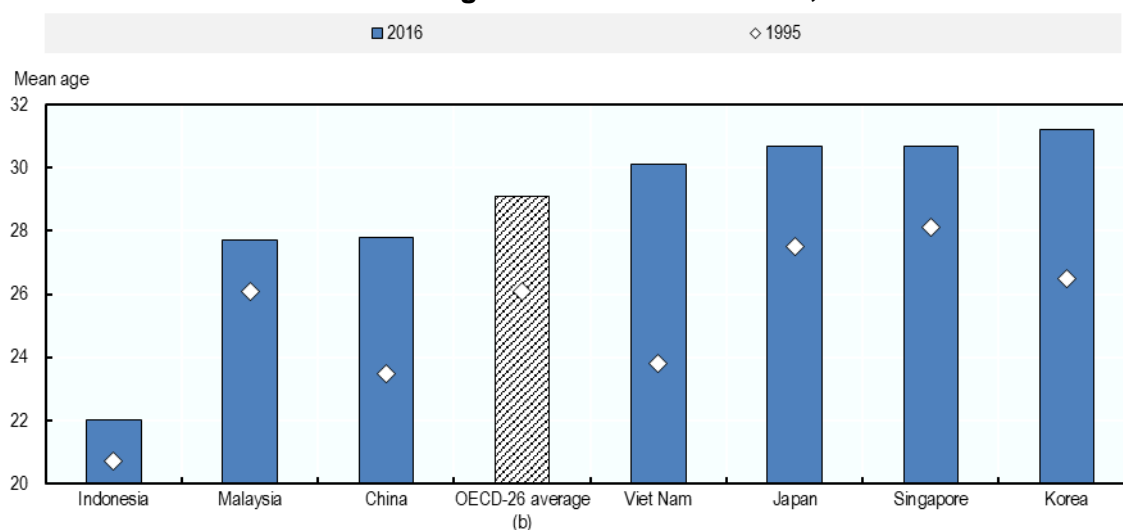
b) The OECD-25 average refers to the unweighted average across the 25 OECD member countries with available and comparable data. See OECD Family Database Indicator SF2.3 (<http://www.oecd.org/els/family/database.htm>) for more detail.

Sources: [Korea: Statistics Korea, Vital Statistics](#); [OECD-25 average: OECD Family Database Indicator SF2.3](#); [All other countries: United Nations World Fertility Data 2017](#)

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 birth (Chart SF2.3.B). Indonesia aside, current mean ages at first birth are generally fairly high in Asia/Pacific countries, though they do vary considerably from one country to another. In Indonesia, for example, the average age at which women give birth to a first child is 22, whereas in Korea it is as high as 31.2. However, all Asia/Pacific countries with available data have seen the average age at first birth increase since 1995. The largest increases have come in Korea (4.7 years) and especially Viet Nam, where the mean age of women at first birth in 2011 (30.1) was 6.3 years higher than it was in 1994 (23.8).

**Chart SF2.3.B. Mean age of women at first birth, 1995 and 2016<sup>a</sup>**



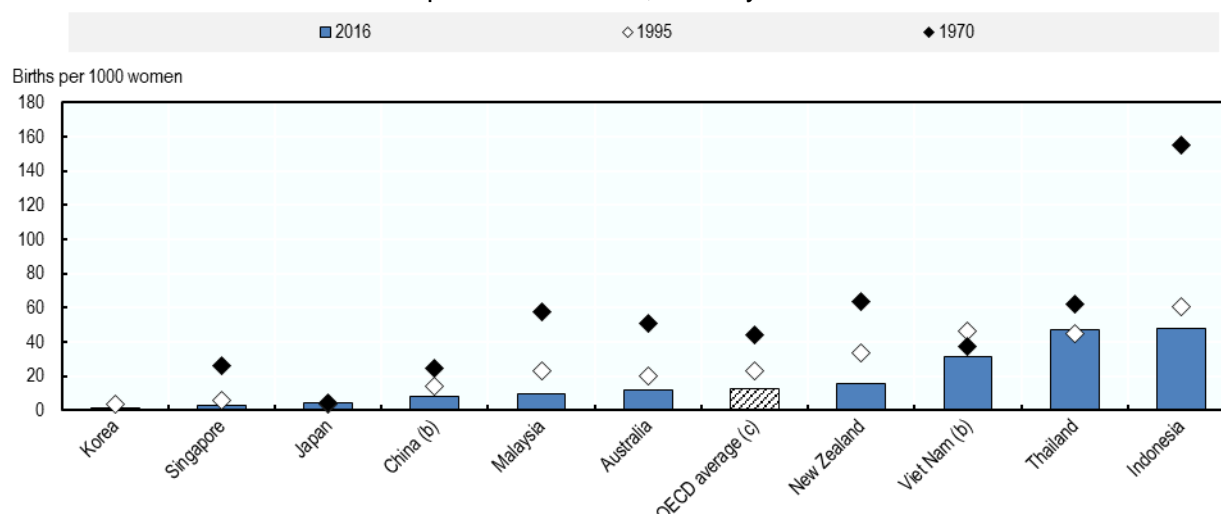
a) a) 2016 data refer to 2011 for Viet Nam; 2012 for Indonesia; 2015 for China;

b) The OECD-26 average refers to the unweighted average across the 26 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, 2012; 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; [OECD-25 average: OECD Family Database Indicator SF2.3](http://www.oecd.org/els/family/database.htm); 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). Current adolescent fertility rates vary somewhat across Asia/Pacific countries, from as low as 1.4 births per 1000 women aged 15-19 in Korea to 48 births per 1000 women aged 15-19 in Indonesia. However, in almost all cases the current rate is considerably lower than it was in 1995 and especially 1970. For example, in New Zealand, the adolescent fertility rate fell from 64 births per 1000 women aged 15-19 in 1970 to 33.4 in births per 1000 in 1995, and has since declined further to a current rate of 16.0 births per 1000 women aged 15-19. In Viet Nam, the adolescent fertility rate has fallen over 15 points just since 1995, from 46.3 to 31.1 births per 1000 women aged 15-19. The two exceptions to this broad trend are Japan, where adolescent fertility rates have remained fairly stable since 1970, and Thailand, where the rate fell between 1970 and 1995 but has since increased very slightly.

Chart SF2.3.C. **Adolescent fertility rates, 1970, 1995 and 2016<sup>a</sup>**  
 Births per 1000 women, 15-19 year olds



a) 2016 data refer to 2008 for Viet Nam; 2012 for Indonesia; 2013 for Singapore; 2015 for Australia, Korea.

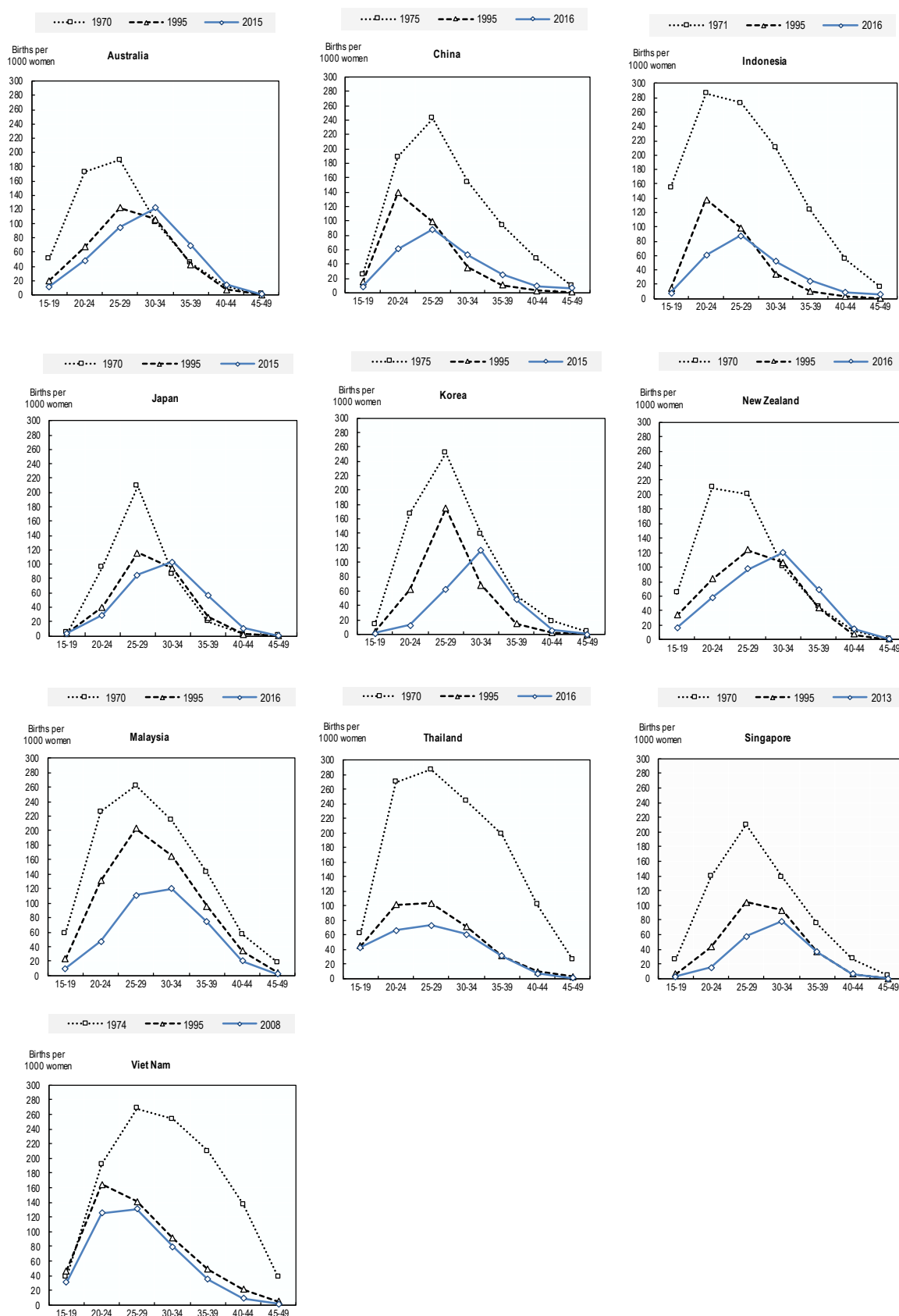
b) For China and Viet Nam, data based on census data.

c) The OECD average refers to the unweighted average across the 36 OECD member countries. See OECD Family Database Indicator SF2.3 (<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.

But 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 2016 (or nearest/latest available). Broadly, the chart shows both a postponement of birth and a general decrease in fertility for all covered Asia/Pacific countries. Across the covered countries, 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 many countries fertility rates have continued to fall since 1995. Conversely, fertility rates for women aged 30-34 and 35-39 are in some countries (Australia, Japan, New Zealand) actually slightly higher now than they were in 1970, and in several Asia/Pacific countries (Australia, Japan, Korea, New Zealand, and Singapore) fertility rates among 30-34 year olds are currently higher than those for any other five-year age group.

**Chart SF2.3.D. Age-fertility profiles, 1970, 1995 and 2016 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 2003-2016O](#); [ECD average: OECD Family Database Indicator SF2.3](#); [all other countries: United Nations World Fertility Data 2017](#)

### Box LMF2.1.A: 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 5% 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 of the covered Asia-Pacific countries had childlessness rates at age 40-44 of 5% or higher. Among the covered countries, childlessness is least common in China where, in 2015, just less than 6% of women aged 40-44 were childless. It is most common in Australia, New Zealand and especially Japan, where 22% of women aged 40-44 were childless in 2010. Singapore and Thailand also had rates of around 10% in 2010.

**Box Table SF2.3.A. Childless women at age 40-44, mid-1990s and 2010 or latest available year**  
 Proportion (%) of women aged 40-44 who have not had a live birth

	mid-1990s		2010 (or latest year)	
	%	Reference year	%	Reference year
Australia	12.80	1996	16.00	2011
China	0.98	1995	5.62	2015
Japan	10.67	1995	21.50	2010
Korea	3.60	1990	6.78	2005
New Zealand	11.90	1996	15.00	2006
Singapore	4.66	1990	9.30	2010
Thailand	4.42	1980	10.92	2010
Viet Nam	..	..	..	..

Notes: 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: Moriizumi, 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*; Singapore: National Population and Talent Division; 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.