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France 2009
Mean age at childbearing reaches 30 years

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The trend towards later childbearing is continuing in France. Women who gave birth in 2009 were aged 30 years on average, while their mothers, 30 years earlier, were under 27. After describing the changes observed over the last century, Gilles Pison compares the situation in France with that of its European neighbours, and examines just how far childbearing can be delayed.

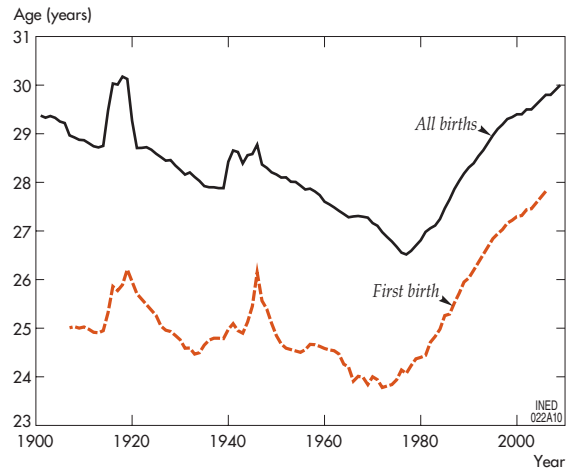
Despite the economic crisis, the number of births in France remained high in 2009. According to INSEE, 790,000 babies were born in metropolitan France, slightly fewer than in 2008, which saw the highest number of births since 1982 (796,000) [1]. In 2009, the total fertility rate in metropolitan France stood at 1.98 children per woman, very close to its 2008 level of 1.99 (Table page 3).

Between 2008 and 2009, women's fertility increased above age 30 and decreased at younger ages [1], and the trend towards later childbearing is continuing: women who gave birth in 2009 were aged 30.0 years on average, compared with 29.9 years in 2008. This is the first time in a century that the 30-year threshold has been reached, not counting the exceptional circumstances of the First World War which raised the age at maternity to above 30 between 1916 and 1919 (Figure 1). The steady increase observed over recent decades began in 1977, when women gave birth at mean age of 26.5. Their first child was born at age 24 on average, four years earlier than today [2].

The childbearing period has narrowed over the last century

To gauge the changes that have taken place in France over the last century, we can compare age-specific fertility in 1909 and 2009 (Figure 2), adding an intermediate year, 1979, when the mean age at childbearing was practically at its lowest. The three curves all peak at slightly above 15 births per 100 women, at age 25 in 1909 and 1979, but at around age 30 in 2009. The 1909 and 1979 curves follow the same path up to the maximum at around age 25, but subsequently diverge because the fertility rate is lower in 1979 than in 1909: one and a half times lower at age 31, twice as low at age 33, five times lower at age 40 and eight times lower at age 45. This indicates that in 1909, the fertility

Figure 1 - Mean age at childbearing in France since 1900



(G. Pison, *Population & Societies*, no. 465, Ined, March 2010) *Sources : [1], [2]*

* *Institut national d'études démographiques.*

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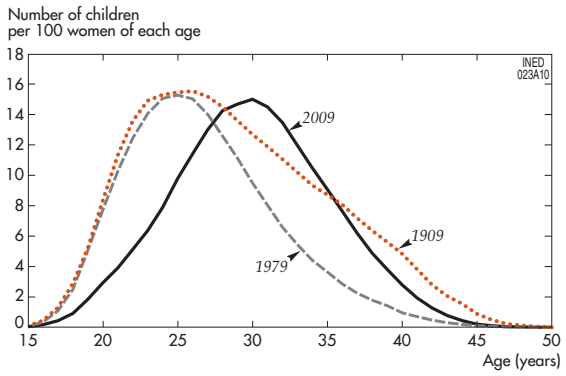
*Figure 2 - Age-specific fertility rates France**



Notes: *Age-specific fertility rates are calculated by dividing the number of births to women in a particular age group by the number of women in that age group.

The total fertility rate (see note (1)) is 2.6 children per woman in 1909, 1.9 in 1979 and 2.0 in 2009.

(G. Pison, *Population & Societies*, no. 465, Ined, March 2010) *Source: [1].*

of French women after age 25 was higher than in 1979. Many late births were additions to already large families, still common at that time. Comparing the profile of age-specific fertility in 1909 and in 2009, we see that it is generally comparable after age 30; it corresponds to very different family types, however. Large families are rare in 2009 and most children born to older mothers are the first, second or third children of women who began childbearing at a late age. Few women today have four or more children.

The differences between the three years considered can be summed up using two standard indicators:

– an indicator of fertility intensity, which sums the rates observed at each age from 15 to 50, and is represented by the area under the curve. This is the total fertility rate, which stood at 2.6 children per woman in 1909, 1.9 in 1979 and close to 2.0 in 2009 (1.98) (1). While fertility intensity today is much lower than a century ago (a difference of 0.6 children), it has barely changed over the last 30 years.

– an indicator of the timing of births, namely the mean age of mothers at the birth of their children: 28.9 years in 1909, 26.7 in 1979 and 30.0 in 2009. While of similar intensity, childbearing is delayed in 2009 compared with 1979.

These two indicators are published regularly by national statistical offices, so fertility in different countries can be compared.

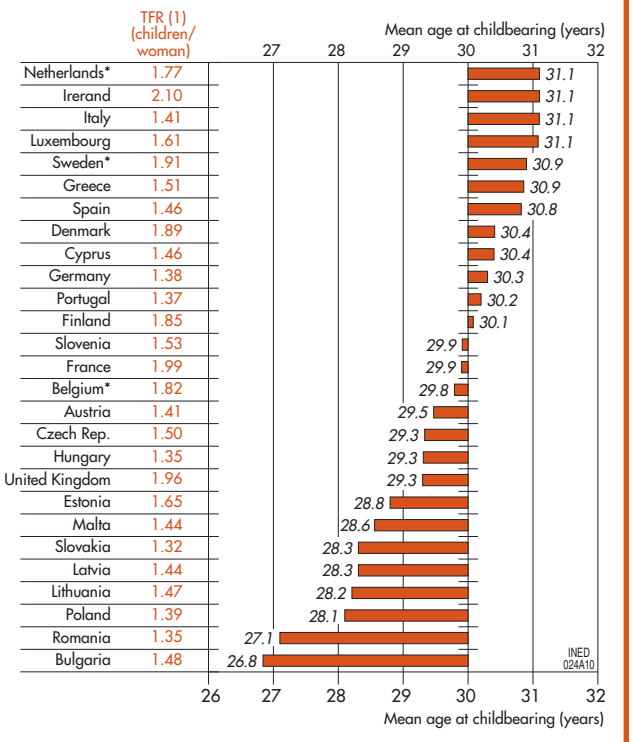
Contrasting fertility in Europe

If we take the total fertility rate, without considering timing variations, France ranks among Europe's most fertile countries [3]. In 2008, the most recent year for which estimates for the different countries are available, France, with 1.99 children per woman on average, ranks second in Europe behind Ireland (2.10). There is a large gap between the countries of northern and western Europe, on the one hand, where fertility is above 1.7 children per woman, and those of the south, the centre and the east, where fertility is below 1.6 children per woman practically everywhere. There is a general north-south and west-east gradient, with a few exceptions: Estonia, for example, with 1.65 children per woman, stands out among its less fertile Baltic neighbours. Austria (1.41) and Germany (1.38), while occupying a central geographical position in Europe, have low fertility levels more characteristic of the east and south than of the north and west.

Women have children later in the Netherlands, Ireland and Italy

In terms of fertility timing, the 27 countries are divided almost equally between those where the mean age at childbearing is below 30 in 2008, and those where it is above 30 (Figure 3). But the geographical distribution is less clear-cut. In particular, the north-south gradient observed for fertility intensity is absent here. The late-fertility group includes both Nordic and Mediterranean countries (with the exception of Malta). The countries of central and eastern Europe have early fertility, especially the two most recent EU entrants – Romania and Bulgaria – with much lower mean ages at childbearing than the others (27.1 years and 26.8 years,

Figure 3 - Mean age at childbearing in the 27 countries of the European Union, 2008



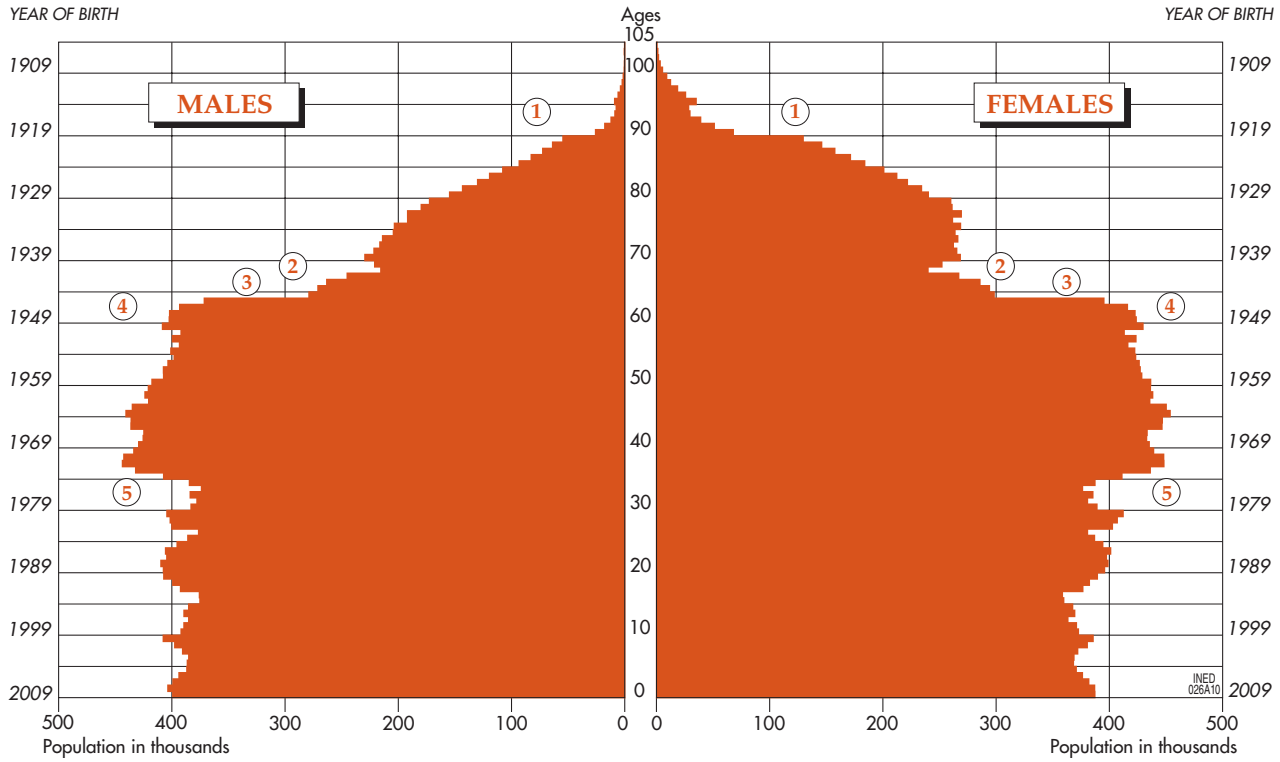
** in 2007 – Source: [3]*

(G. Pison, *Population & Societies*, no. 465, Ined, March 2010)

(1) The total fertility rate (TFR) combines in a single value the fertility behaviours of 35 different cohorts observed in a given year. It indicates the total number of children a woman would have during her lifetime if she were to experience the fertility rates of the period at each age. To find out more, see the "Measuring fertility" animation on the INED website (www.ined.fr/en/homepage_of_ined_website, "All about population")

POPULATION OF FRANCE

PROVISIONAL ESTIMATE AT 1 JANUARY 2010



(1) Birth deficit due to 1914-18 war (depleted cohorts)

(2) Depleted cohorts at reproductive age

(3) Birth deficit due to 1939-45 war

(4) Baby boom

(5) End of baby boom

Source: Insee.

(G. Pison, *Population & Societies*, no. 465, Ined, March 2010)

Table – Population indicators 1950 to 2009, metropolitan France

	1950	1960	1970	1980	1990	2000	2001	2002	2003	2004	2005	2006	2007	2008(p)	2009(p)
Births (m)	858	816	848	800	762	775	771	762	761	768	774	797	786	796	790
Deaths (m)	530	517	540	547	526	531	531	535	552	509	527	516	521	532	536
Natural increase (m)	328	299	308	253	236	244	240	226	209	258	247	280	265	264	254
Net migration (m)	35	140	180	44	80	70	85	95	100	105	95	115	70	75	70
Total growth (m)	363	439	488	297	316	314	325	321	309	363	342	395	335	339	324
Adjustment (1) (m)	-	-	-	-	-	94	94	94	94	94	95	-	-	-	-
Birth rate (t)	20.5	17.9	16.7	14.9	13.4	13.1	13.0	12.7	12.6	12.7	12.7	12.9	12.7	12.8	12.6
Death rate (t)	12.7	11.3	10.6	10.2	9.3	9.0	8.9	8.9	9.2	8.4	8.6	8.4	8.4	8.5	8.6
Infant mortality rate (r)	51.9	27.4	18.2	10.0	7.3	4.4	4.5	4.1	4.0	3.9	3.6	3.6	3.6	3.6	3.6
Total fertility rate (e)	2.93	2.73	2.47	1.94	1.78	1.87	1.88	1.86	1.87	1.90	1.92	1.98	1.96	1.99	1.98
Life expectancy :															
Male (a)	63.4	67.0	68.4	70.2	72.7	75.3	75.5	75.8	75.9	76.8	76.8	77.2	77.4	77.6	77.8
Female (a)	69.2	73.6	75.9	78.4	80.9	82.8	82.9	83.0	82.9	83.9	83.8	84.2	84.4	84.4	84.5
Marriages (m)	331	320	394	334	287	298	288	279	276	272	276	267	267	259	250
Marriage rate (t)	7.9	7.0	7.8	6.2	5.1	5.0	4.8	4.7	4.6	4.5	4.5	4.3	4.3	4.1	4.0
Population (2) (m)	42,010	45,904	51,016	54,029	56,893	59,267	59,686	60,102	60,505	60,963	61,400	61,796	62,131	62,469	62,793
Under 20 (2) (m)	12,556	14,665	16,748	16,419	15,632	15,054	15,060	15,069	15,124	15,151	15,280	15,315	15,315	15,319	15,325
65 and over (2) (m)	4,727	5,288	6,174	7,541	8,036	9,543	9,667	9,779	9,871	9,991	10,163	10,208	10,312	10,436	10,566
Under 20 (2) %	29.9	31.9	32.8	30.4	27.5	25.4	25.3	25.2	25.1	25.0	24.9	24.8	24.6	24.5	24.4
65 and over (2) %	11.3	11.5	12.1	14.0	14.1	16.1	16.2	16.3	16.4	16.5	16.6	16.5	16.6	16.7	16.8

(a) years – (e) children per woman – (m) in thousands – (p) provisional – (r) per 1,000 live births – (t) per 1,000 population.
(1) Population estimates for 1990-2005 were adjusted to establish accounting consistency between the 1990, 1999 and 2006 censuses (see Anne Pla and Catherine Beaumel, 2010 [1]) – (2) At year-end.
Sources: INSEE. Division des enquêtes et études démographiques (http://www.insee.fr).

respectively). The countries of western Europe occupy a middle position, with a few exceptions: the Netherlands, where age at childbearing is later (31.1 years on average) and the United Kingdom, where it is relatively early (29.3 years).

The curve of age-specific fertility in the United Kingdom is different from those of France and the Netherlands (Figure 4). In these last two countries, as in most of Europe, it is bell-shaped, with a steady increase in fertility rates between age 15 and the age of peak fertility, followed by an equally steady decline to the age of 45. The curve is roughly symmetrical around the modal age. In the United Kingdom, on the other hand, the second part of the curve is regular, but not the first. The fertility rate increases very quickly between ages 15 and 20, then levels off slightly to form a shoulder. The curve looks like the result of adding two bell-shaped curves, one at young ages, centred at ages 18-20, and a second, later curve similar to that of other countries. The first corresponds to births to very young mothers, many of whom are below 20. Their frequency is high in the UK, but also in Ireland and especially so in the United States [4]. In all three countries these teenage pregnancies are viewed as a serious social problem.

Just how far can childbearing be delayed?

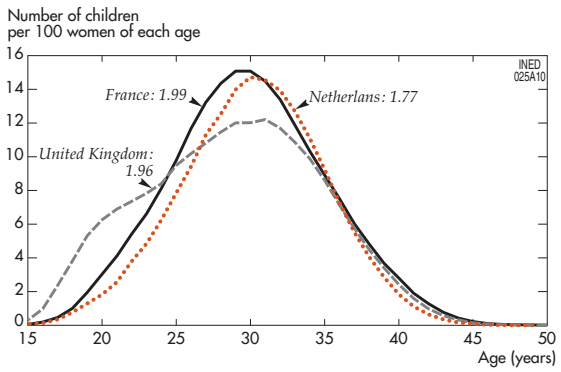
The trend towards later childbearing, widely observed in the developed world, is associated with the lengthening of time spent in education, the increase in female labour force participation and the growing desire among women to wait until they are well settled in life, with qualifications, a stable job, a place to live and a partner before starting a family. The spread of modern contraception has contributed to this trend by reducing the frequency of unplanned pregnancies, notably at young ages. The difficulty of reconciling work and family life has also played a role, especially in countries where family policies are limited.

The overall delay in childbearing is not systematically associated with fertility decline, as is often thought to be the case in Europe. The two phenomena are independent. The real contrast is between countries where low early fertility is "recuperated" after age thirty, and those where it is not.

Will the age at childbearing continue its upward trend? It may increase further in France over the coming years, but by how much? It could well reach 31 years or more, as is the case in the Netherlands, but is unlikely to go as far as 35 or 40 years. The main reason for this is biological. If women delay for too long, they run the risk of being unable to have a child when they finally decide that the time is right. The mean risk of infertility increases very rapidly with age: it is 14% at age 35, 35% at age 40 and almost 80% at age 45 [5].

Assisted reproductive technology (ART), which has developed rapidly in recent years, partly in response to fertility postponement, offers new hope to couples who are unable to conceive. But too few realize that beyond age 40 the chances of success are limited. Births to mothers in their 40s account for only a tiny fraction of births: just 4% in France in 2009. While this percentage is increasing, late births are unlikely ever to represent a substantial share of births, unless a method is found to delay the female menopause for all women. Such a prospect was envisaged in 1987 by Jean Bourgeois-Pichat but, as yet, remains a far-fetched notion.

Figure 4 - Age-specific fertility in the United Kingdom, France and the Netherlands (2008)



Note: The figure next to each country is the total fertility rate, expressed as a number of children per woman (see text).

(G. Pison, *Population & Societies*, no. 465, Ined, March 2010)

Sources: France: INSEE; Netherlands: Eurostat; United Kingdom: ONS.

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ABSTRACT

Despite the economic crisis, fertility in France remains high, with 1.98 children per woman on average in 2009, compared with 1.99 in 2008. Age at childbearing continues to increase, and women who gave birth in 2008 were aged 30.0 years on average, versus 29.9 in 2008. Over the last century, age at maternity has become more concentrated around the mean, as the number of large families has declined. The trend towards later childbearing is common to all developed countries. In Europe, the age at childbearing is highest in the Netherlands, Ireland and Italy.

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