

## Two children per woman in France in 2010: Is French fertility immune to economic crisis?

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Contrary to expectation, the number of births continued to increase in France in 2010, despite the economic crisis. Instead of lowering fertility, has increased unemployment actually produced the opposite effect? Are jobless women taking advantage of their situation to have a child? To shed light on the question, Gilles Pison analyses the relationship between economic climate and fertility in France and in other developed countries, notably during periods of recession.

Despite the economic crisis, 2010 was a prolific year for births in France. According to INSEE, the French statistical office, a total of 797,000 babies were born in metropolitan France (mainland France and Corsica) in 2010, up from 793,400 in 2009. Not since 1982 had such a large number of births been recorded [1]. The total fertility rate reached 2.00 children per woman, a level unequalled since the end of the baby boom more than 35 years ago. It was up slightly on 2009, when it stood at 1.99 (Table on page 3).

This increase came as a surprise, since earlier analyses of past recessions suggested that fertility would decline in 2010, the only question being by how much. This time last year, it was believed that increased unemployment would lower fertility due to uncertainty about the future.

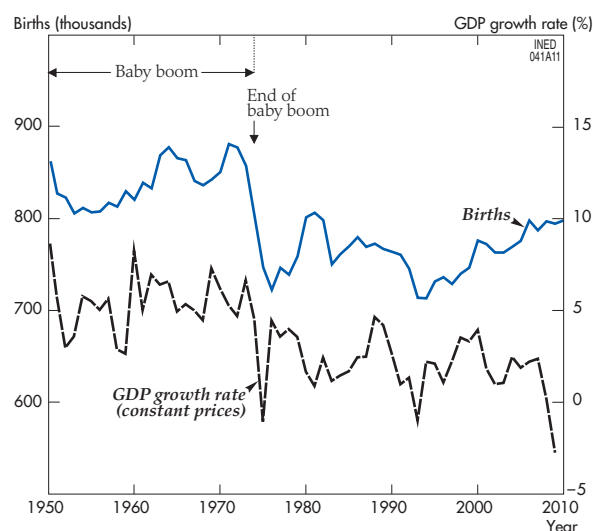
Such was indeed the case in the United States, where the total fertility rate fell from a pre-crisis level of 2.12 children per woman in 2007 to 2.08 in 2008 and 2.01 (provisional estimate) in 2009. It may have fallen further in 2010, since births between July 2009 and June 2010 were down 3% with respect to the previous 12 months.

Things are very different in France where, far from falling, fertility rose very slightly in 2010. Increased unemployment is once again cited as a possible factor, but this time with a positive effect on fertility: unemployed

women may be taking advantage of their situation to have a child.

Is this really the case? What is the true effect of increased unemployment and, more generally, the economic crisis on fertility in France? And what are the mechanisms involved? We will try to shed light on these questions, first by examining the historical relationship

Figure – Births and GDP growth rate in France since 1950



(G. Pison, *Population & Societies*, no. 476, INED, March 2011)

Source: INSEE.

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between the economic situation and fertility in France, and then by looking at the effects of past and present economic crises on other developed countries.

### ◆ A loose link between economic climate and fertility in France

The number of births in France has fluctuated widely since the 1950s, ranging between just below 900,000 and slightly above 700,000. These variations are partly correlated with gross domestic product (GDP), but only loosely. Let's look more closely at the most significant episodes of economic slowdown. After the period of stagnation in GDP from 1952 to 1953, a decrease in births was indeed observed one year later (a lag that corresponds to the time between the decision to have a child and the birth). In 1958 and 1959, GDP growth again slowed sharply, but this time the ongoing uptrend in births was largely unaffected, give or take a slight dip in 1960 and a small peak in 1961. Following the oil shock, French GDP fell in 1975, as did the number of births, which were already trending downward as the baby boom came to an end. It reached an all-time low the following year, in 1976. GDP decreased again in 1993, followed by a dip in births in 1993 and 1994. Yet while 2008 was a year of stagnating growth, followed by a sharp GDP contraction in 2009, the number of births remained practically stable over the period.

In short, while the economic crises of the last sixty years in France have generally been followed by a shortfall of births, there are exceptions to this rule, notably during the most recent recession.

### ◆ Economic crisis simply delays births

A systematic review of the classic periods of recession in developed countries over recent decades (with no change to the economic system<sup>(1)</sup>) confirms that demographic trends are often affected, but in ways which vary from one recession to another, and from one country to another [2]. A regular pattern is nonetheless visible:

1 – A recession has practically no impact on the final number of children born; it merely alters the timing of births. When times are bad, some couples postpone their childbearing plans until the economic situation improves, thereby reducing fertility in the two years following the crisis onset. When things improve, these couples start

(1) The former Communist countries of Eastern Europe experienced a severe crisis after 1989 following the transition from a planned to a market economy. The number of births fell rapidly in most countries, with the total fertility rate falling by 30-50% within the space of a few years. In Russia, for example, it fell from 2.14 children per woman in 1988 to 1.23 children ten years later (1998), and in Poland from 2.14 to 1.41. Women have children at relatively young ages in these countries. The crisis delayed the childbearing of young generations reaching reproductive age, resulting in a sudden drop in births which were only partly recuperated in subsequent years. However, the shock experienced by these countries was much more severe than a mere economic recession lasting just one or two years; their entire social and economic system was profoundly modified.

having children again, so fertility increases once the crisis is over [2, 3]. In other words, a crisis does not reduce the overall number of births, it simply delays them.

2 – Delayed childbearing affects first births more than subsequent ones [4]. Once the first child is born, the timing of subsequent births follows a pattern often planned in advance by the parents and largely unaffected by the economic climate. In other words, while a first birth may be delayed or brought forward, the spacing of later births does not change significantly.

3 – First birth postponement is itself partly the consequence of a delay in marriage or union formation brought about by economic crisis [3]. But this link is observed mainly in countries where childbearing outside marriage remains rare, as in southern Europe (Italy, Spain, Greece) and Asia (Japan, South Korea).

4 – The decision to delay a birth depends on the situation of each couple. For example, postponement is more likely if one partner has lost his or her job as a direct consequence of the crisis. But the overall economic situation also has an effect, even if the couple is not directly affected. Curiously, the economic climate in the country or region, measured by indicators such as GDP or unemployment rate, tends to influence couples' decisions more strongly than their own personal situation [2].

5 – Variations in the unemployment rate or in indicators reflecting confidence in the future, such as the French "household confidence indicator", tend to be more closely linked to births and fertility than variations in GDP.

6 – But even the economic indicators with the strongest apparent influence have only modest effects on fertility. In OECD countries, a doubling of the unemployment rate lowers the total fertility rate by no more than 0.09 children on average [5].

7 – In a couple, male unemployment generally has more impact on fertility than female unemployment [4]. The woman's income is often perceived as secondary to that of the man, as confirmed by the higher frequency of part-time working among women.

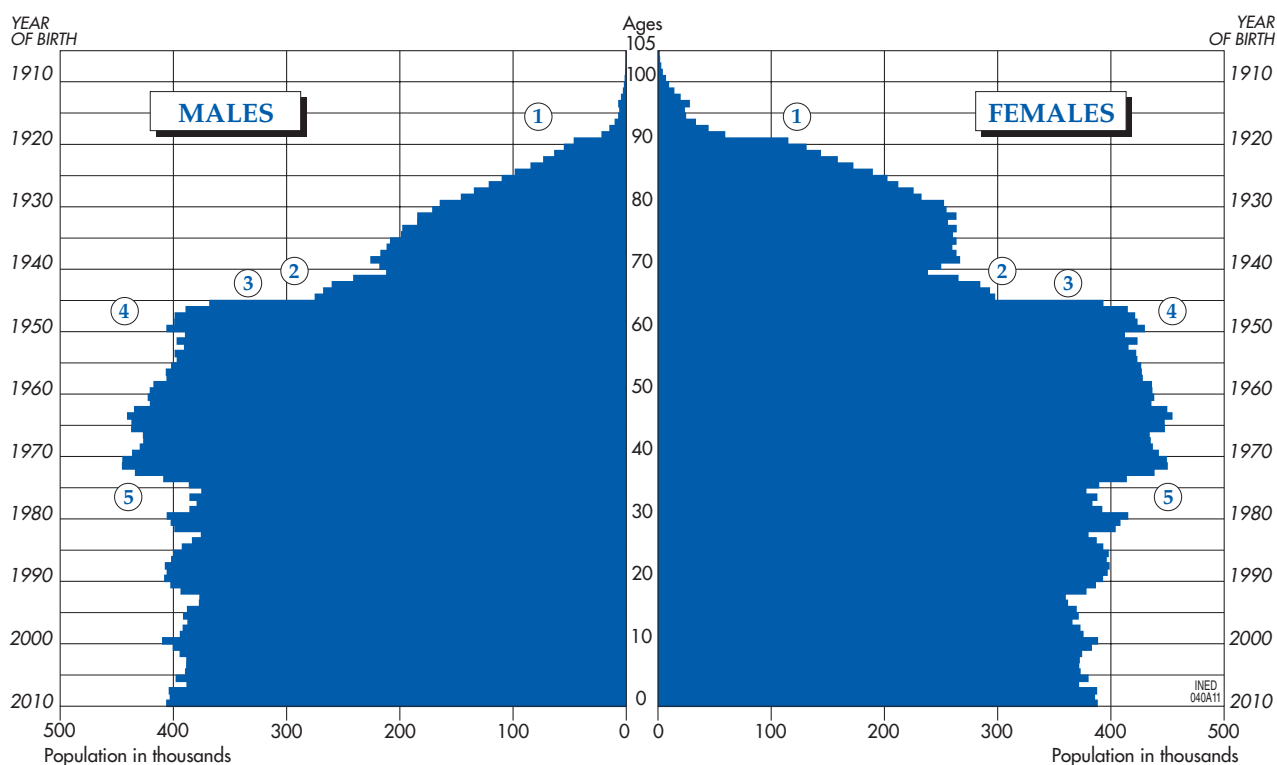
8 – The influence of female unemployment is less clearcut than that of men because it varies by educational level and social status. Among women with a degree in higher education, unemployment and lack of confidence in the future tend to delay the first birth, while the opposite is true for the least educated women, for whom unemployment appears to bring it forward [3].

9 – The relationship between unemployment and fertility also varies by age. Young women below 30 are generally more strongly influenced by the economic climate or by their own situation, and more frequently delay their first pregnancy than older childless women.

10 – What is true in one country is not necessarily so in another. An economic recession generally has a negative impact on fertility and births, but in some cases the effect

# POPULATION OF FRANCE

PROVISIONAL ESTIMATE AT 1 JANUARY 2011



- ① Birth deficit due to 1914-1918 war (depleted cohorts)      ③ Birth deficit due to 1939-45 war  
 ② Depleted cohorts at reproductive age                      ④ Baby boom  
 ⑤ End of baby boom

(G. Pison, *Population & Societies*, no. 476, INED, March 2011)

Source: INSEE

Table – Population indicators 1950 to 2010, metropolitan France

|                           | 1950          | 1960          | 1970          | 1980          | 1990          | 2000          | 2002          | 2003          | 2004          | 2005          | 2006          | 2007          | 2008(p)       | 2009(p)       | 2010(p)       |
|---------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Births (m)                | 858           | 816           | 848           | 800           | 762           | 775           | 762           | 761           | 768           | 774           | 797           | 786           | 796           | 793           | 797           |
| Deaths (m)                | 530           | 517           | 540           | 547           | 526           | 531           | 535           | 552           | 509           | 527           | 516           | 521           | 532           | 538           | 535           |
| Natural increase (m)      | 328           | 299           | 308           | 253           | 236           | 244           | 226           | 209           | 258           | 247           | 280           | 265           | 264           | 255           | 262           |
| Net migration (m)         | 35            | 140           | 180           | 44            | 80            | 70            | 95            | 100           | 105           | 95            | 115           | 75            | 75            | 70            | 75            |
| Total growth (m)          | 363           | 439           | 488           | 297           | 316           | 314           | 321           | 309           | 363           | 342           | 395           | 340           | 339           | 324           | 337           |
| Adjustment (1) (m)        | -             | -             | -             | -             | -             | 94            | 94            | 94            | 94            | 95            | -             | -             | -             | -             | -             |
| Birth rate (t)            | 20.5          | 17.9          | 16.7          | 14.9          | 13.4          | 13.1          | 12.7          | 12.6          | 12.7          | 12.7          | 12.9          | 12.7          | 12.8          | 12.7          | 12.7          |
| Death rate (t)            | 12.7          | 11.3          | 10.6          | 10.2          | 9.3           | 9.0           | 8.9           | 9.2           | 8.4           | 8.6           | 8.4           | 8.4           | 8.5           | 8.6           | 8.5           |
| Infant mortality rate (r) | 51.9          | 27.4          | 18.2          | 10.0          | 7.3           | 4.4           | 4.1           | 4.0           | 3.9           | 3.6           | 3.6           | 3.6           | 3.6           | 3.7           | 3.6           |
| Total fertility rate (e)  | 2.93          | 2.73          | 2.47          | 1.94          | 1.78          | 1.87          | 1.86          | 1.87          | 1.90          | 1.92          | 1.98          | 1.96          | 1.99          | 1.99          | 2.00          |
| Life expectancy :         |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| Male (a)                  | 63.4          | 67.0          | 68.4          | 70.2          | 72.7          | 75.3          | 75.8          | 75.9          | 76.8          | 76.8          | 77.2          | 77.4          | 77.6          | 77.8          | 78.1          |
| Female (a)                | 69.2          | 73.6          | 75.9          | 78.4          | 80.9          | 82.8          | 83.0          | 82.9          | 83.9          | 83.8          | 84.2          | 84.4          | 84.4          | 84.5          | 84.8          |
| Marriages (m)             | 331           | 320           | 394           | 334           | 287           | 298           | 279           | 276           | 272           | 276           | 267           | 267           | 259           | 245           | 243           |
| Marriage rate (t)         | 7.9           | 7.0           | 7.8           | 6.2           | 5.1           | 5.0           | 4.7           | 4.6           | 4.5           | 4.5           | 4.3           | 4.3           | 4.1           | 3.9           | 3.9           |
| <b>Population (2) (m)</b> | <b>42,010</b> | <b>45,904</b> | <b>51,016</b> | <b>54,029</b> | <b>56,893</b> | <b>59,267</b> | <b>60,102</b> | <b>60,505</b> | <b>60,963</b> | <b>61,400</b> | <b>61,795</b> | <b>62,135</b> | <b>62,474</b> | <b>62,799</b> | <b>63,136</b> |
| Under 20 (2) (m)          | 12,556        | 14,665        | 16,748        | 16,419        | 15,632        | 15,068        | 15,117        | 15,183        | 15,242        | 15,280        | 15,315        | 15,338        | 15,344        | 15,352        | 15,368        |
| 65 and over (2) (m)       | 4,727         | 5,288         | 6,174         | 7,541         | 8,036         | 9,561         | 9,818         | 9,921         | 10,067        | 10,163        | 10,208        | 10,301        | 10,426        | 10,555        | 10,691        |
| Under 20 (2) %            | 29.9          | 31.9          | 32.8          | 30.4          | 27.5          | 25.4          | 25.2          | 25.1          | 25.0          | 24.9          | 24.8          | 24.7          | 24.6          | 24.4          | 24.3          |
| 65 and over (2) %         | 11.3          | 11.5          | 12.1          | 14.0          | 14.1          | 16.1          | 16.3          | 16.4          | 16.5          | 16.6          | 16.5          | 16.6          | 16.7          | 16.8          | 16.9          |

(a) years – (e) children per woman – (m) in thousands – (p) provisional – (r) per 1000 live births – (t) per 1000 population.

(1) Population estimates for 1990-2005 were adjusted to establish accounting consistency between the 1990, 1999 and 2006 censuses (see Anne Pla, 2009 [1]) –

(2) At year-end.

Sources: INSEE, *Division des enquêtes et études démographiques* (<http://www.insee.fr>).

is reversed. Finland, for example, experienced a severe economic crisis in the early 1990s which actually raised fertility.<sup>(2)</sup>

11 – Last, the fertility level is less sensitive to economic crises in countries with a long tradition of family policies and a social security system that cushions against the effects of recession on employment, health and housing.

As we have seen, an economic downturn does not always result in fewer births or lower fertility one or two years on, though this is often the case. Fertility is influenced by a wide range of interacting factors which may pull in opposing directions for different population sub-groups, making prediction difficult.

### ◆ A general fertility uptrend held back by recession

Let us examine how the recent recession which began in 2007-2008 affected fertility in the 44 developed countries where fertility estimates are available for 2008 and 2009. Between these two years, fertility declined in half of these countries (22) and increased in the other half. For 2010, the data are incomplete, since only 25 countries have published their estimated fertility rates. It fell between 2008 and 2010 in 14 of them, and rose in 11 others. Does this mean that the recession has not affected fertility? It occurred at a time when births were increasing in most western countries after a period of low or even lowest-low fertility, notably in southern, eastern and central Europe. This low fertility was due partly to a temporary shortfall in births caused by a progressive increase in the age at childbearing: the older cohorts had already completed their childbearing and were no longer having children, while younger women were postponing their entry into parenthood. But in recent years, the trend towards increasingly delayed childbearing has been slowing down, producing a mechanical increase in fertility [6]. In countries where fertility was rising again, such as Russia or Slovenia, the recession held back this recovery. It even reversed the trend, provoking a fertility decline in Spain, the United Kingdom, the Czech Republic, Estonia, Latvia and Ukraine. The situation is similar in the United States, where fertility nonetheless remains among the highest in the developed world. The American fertility rate bottomed out in 1976 at 1.7 children per woman, then rose steadily to a peak of 2.1 children in 2007 before dipping again in the last few years.

(2) In the mid-1980s, the Finnish government introduced an allowance for stay-at-home parents of children under three. During the crisis in the early 1990s, this allowance, while not specifically designed to promote childbearing during a recession, encouraged women affected by the crisis to have children. Some of those who became unemployed took advantage of the allowance to stay at home with their child rather than look for a new job.

(3) It is important to remember that the French fertility rate is only marginally modified by the presence of immigrants. Without their contribution, it would fall from 2.0 to 1.9 children per woman (see [7] for an explanation).

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Fertility in France has followed the American pattern, with a steady rise over the last 30-40 years, but has not experienced the recent downturn observed there. The only decrease concerns the fertility of women under 30, which dipped in 2009 and 2010 after almost a decade of stability, reflecting the trend towards later childbearing. This modest decline has been more than offset by a fertility increase among women over 30. A number of factors may explain this observation. First, the recession was less severe in France, and the economy was less shaken by the crisis than in other countries. Second, families were less hard-hit thanks to social and family policies which tempered the adverse effects. While avoiding a slump such as that observed in the United States, the fertility rate was doubtless affected nonetheless. Without the crisis, births would probably have been even more numerous in 2010, and the total fertility rate would have topped two children per woman in metropolitan France.<sup>(3)</sup>

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#### ABSTRACT

While economic slowdowns generally result in fewer births, the total fertility rate in France continued to increase in 2010 (2.00 children per woman versus 1.99 in 2009). The most recent recession occurred at a time when fertility was rising in most western nations. The recession reversed this trend in some countries, including the United States, or slowed down the increase in others, such as in Russia. France appears to be in the latter situation. Without the crisis, the total fertility rate would probably have increased even further, topping two children per woman in metropolitan France.