

Population & Societies

France and Germany: a history of criss-crossing demographic curves

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The demographic situations of France and Germany are very different. In France, women have two children on average and the population is increasing, while in Germany, they have just one and a half, and the population is declining. If these trends continue, the French population will overtake that of Germany in the near future. Yet in the past, it was Germany that led the way in terms of demographic vigour. Gilles Pison explains the reasons for this turnaround, and its consequences.

According to INSEE (the French statistical office), birth numbers in metropolitan France (mainland France and Corsica) were almost as high in 2011 as in 2010, reaching 797,000 compared with 802,000 the previous year, [1] and the total fertility rate (TFR) stood at 2.00 children per woman, versus 2.01 in 2010 (Table page 3). In Germany, where the TFR was 1.39 in 2010 and where the population is ageing and declining in number, the situation is strikingly different. The case of Germany is often cited to illustrate France's demographic vigour. Let us examine the two countries in more detail. What are the reasons for the differences observed? Have things always been this way?

Two centuries ago, the French population was double that of Germany

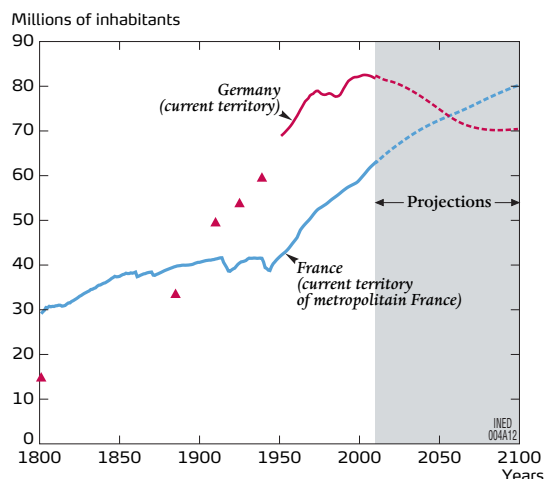
Two centuries ago the territory covered by present-day Germany had a population of around 15 million (Figure 1). This estimate is imprecise, however, as Germany did not exist at that time and its territory was divided into numerous different states. Moreover, its frontiers have changed since the country's unification in 1871, with each major war leading to a redefinition of national borders. This makes it very difficult to reconstitute population trends in the territory of present-day Germany prior to 1945. The problem barely arises

for France, whose mainland territory has remained very stable over two centuries. In 1800, it had 30 million inhabitants, double the population living in the area now covered by Germany.

150 years of faster German growth...

The two populations increased over the nineteenth century, but at different speeds (Figure 1). Between 1800

Figure 1. Population change in France and Germany, 1800-2100

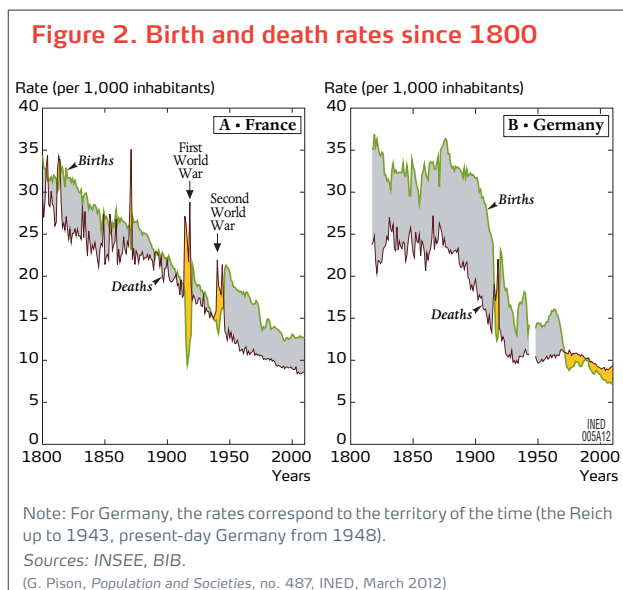


Sources: INSEE, BIB (Bundesinstitut für Bevoelkerungsforschung), Sebastian Kluesener (personal communication), United Nations (projections) [2].
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and 1900, the French population rose from 30 to 40 million, while that of Germany increased from 15 to more than 40 million. By the end of the nineteenth century, Germany had overtaken France, where growth was now stagnating: its population increased by just one million between 1900 and the eve of the Second World War. By that time, Germany's population was 50% larger than that of France: 60 versus 41 million.

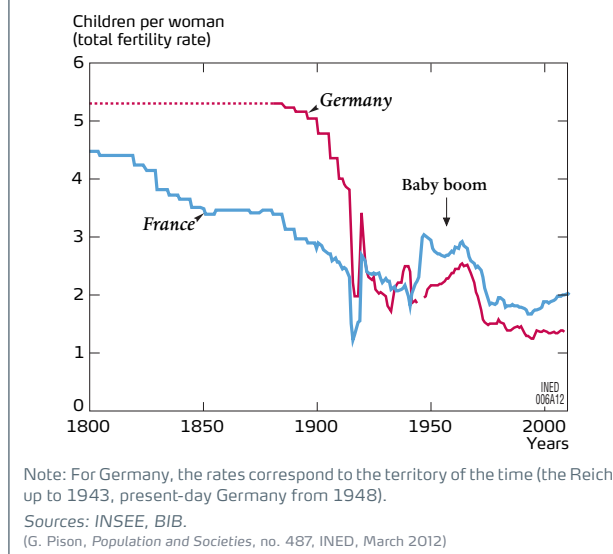
German growth was due to a surplus of births over deaths, with a birth rate that remained consistently above the death rate throughout the nineteenth and early twentieth centuries (discounting war years) (Figure 2). By contrast, the curves of births and deaths in France remained very close over this same period, and the resulting low level of natural growth was even cancelled out by the losses of the 1914-1918 war. It was only thanks to immigration that the population did not totally stagnate between 1900 and 1939. Immigration began to develop in the late nineteenth century, growing in scale after the First World War. Germany, on the other hand, far from being a country of immigration, saw an exodus of its inhabitants towards the New World. Without this emigration, its population would have increased even further.



...due to higher German fertility

In the mid-eighteenth century, women in both countries had 5 or 6 children on average. But by the end of the century, the practice of birth control was spreading in France, and fertility fell from 5.4 children per women in the 1750s to 4.4 in the 1800s and 3.4 in the 1850s. In Germany, on the other hand, it was not until the late nineteenth century that German women, in turn, started to limit their family size (Figure 3). This timing differential is often attributed to the early spread of

Figure 3. Fertility since 1800



Enlightenment ideas across France, or to the lifting of religious constraints.

One consequence of the early fertility decline was slower French population growth in the nineteenth century compared with its European neighbours, and early population ageing. The Germans were highly critical of this country full of old people, so cruelly lacking in children. A part of the French ruling classes shared this point of view. The crushing defeat in the Franco-Prussian War of 1870-71 was attributed to the superiority of the Prussian education system, but also to the demographic decline of France which was believed to have lost its triumphant vigour of the Napoleonic First Empire. Similar reasons were given to explain France's vulnerability in the face of its German enemy at the start of the First World War. These ideas served to justify the introduction of pronatalist policies at the end of the nineteenth century.

Since 1945, French fertility has been half a child above that of Germany

With the baby boom that followed the Second World War, the situation changed radically. The French population started rising again, at an annual rate of close to 1% in the 1950s and 1960s, compared with 0.7% in Germany. In 1964, French fertility stood at 2.9 children per woman, versus 2.5 in Germany (Figure 3). The German baby boom started at a later date and covered a shorter period, so was less marked than in France. This was partly because fertility had already increased before the war, reaching 2.5 children in 1939, owing not to the pronatalist policy of the Nazi regime – which proved ineffective – but rather to renewed price stability after years of hyper-inflation.

Figure 4. Population of France – Provisional estimate at 1 January 2012

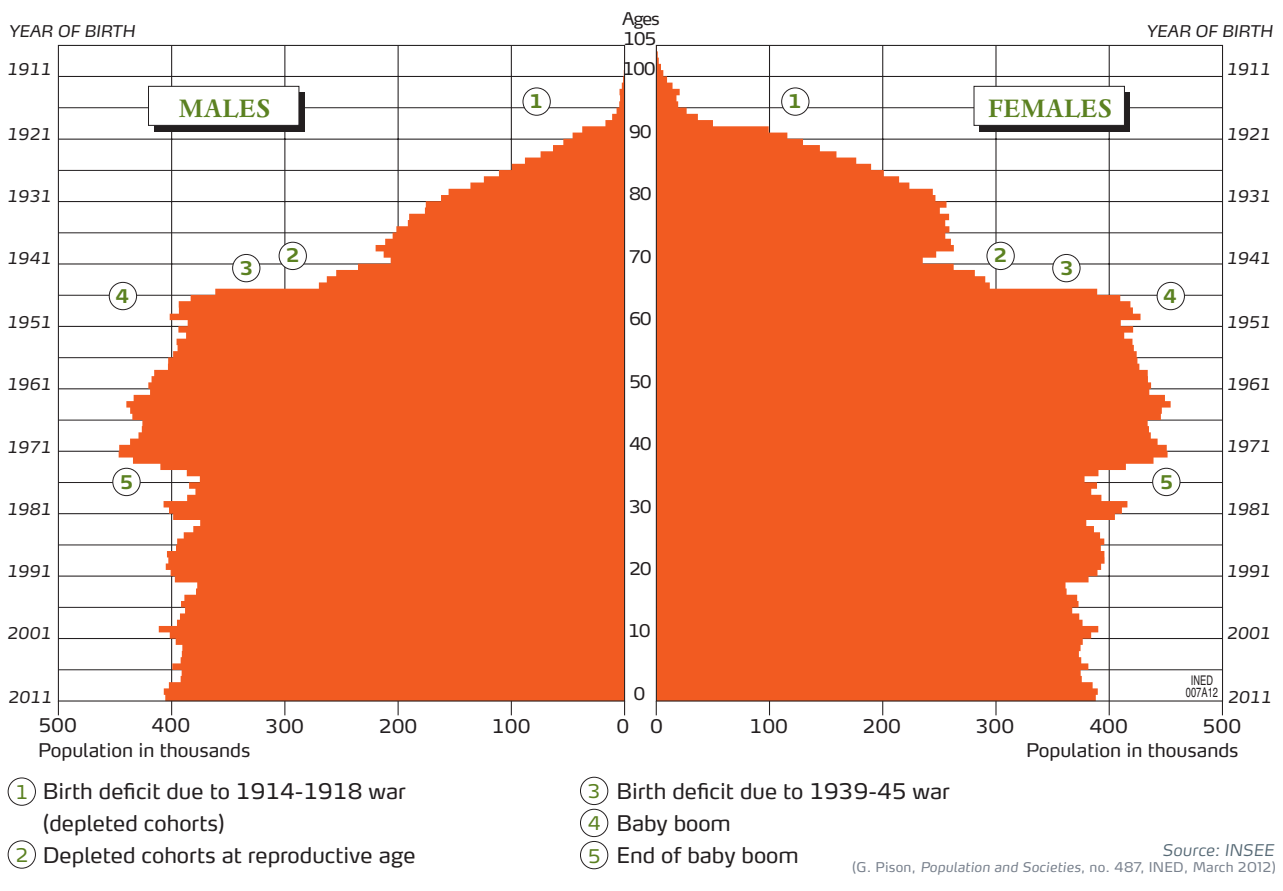


Tableau. Population indicators 1950 to 2011. Metropolitan France

	1950	1960	1970	1980	1990	2000	2003	2004	2005	2006	2007	2008	2009	2010(p)	2011(p)
Births (m)	858	816	848	800	762	775	761	768	774	797	786	796	793	802	797
Deaths (m)	530	517	540	547	526	531	552	509	527	516	521	532	538	540	544
Natural increase (m)	328	299	308	253	236	244	209	258	247	280	265	264	255	262	253
Net migration (m)	35	140	180	44	80	70	100	105	95	115	75	67	70	75	80
Total growth (m)	363	439	488	297	316	314	309	363	342	395	340	331	324	337	333
Adjustment (1) (m)	-	-	-	-	-	94	94	94	95	-	-	-	-	-	-
Birth rate (t)	20.5	17.9	16.7	14.9	13.4	13.1	12.6	12.7	12.7	12.9	12.7	12.8	12.7	12.7	12.6
Death rate (t)	12.7	11.3	10.6	10.2	9.3	9.0	9.2	8.4	8.6	8.4	8.4	8.5	8.6	8.6	8.6
Infant mortality rate (r)	51.9	27.4	18.2	10.0	7.3	4.4	4.0	3.9	3.6	3.6	3.6	3.6	3.7	3.5	3.4
Total fertility rate (e)	2.93	2.73	2.47	1.94	1.78	1.87	1.87	1.90	1.92	1.98	1.96	1.99	1.99	2.01	2.00
Life expectancy:															
Male (a)	63.4	67.0	68.4	70.2	72.7	75.3	75.9	76.8	76.8	77.2	77.4	77.6	77.8	78.0	78.2
Female (a)	69.2	73.6	75.9	78.4	80.9	82.8	82.9	83.9	83.8	84.2	84.4	84.4	84.5	84.7	84.9
Marriages (m)	331	320	394	334	287	298	276	272	276	267	267	259	245	245	235
Marriage rate (t)	7.9	7.0	7.8	6.2	5.1	5.0	4.6	4.5	4.5	4.3	4.3	4.1	3.9	3.9	3.7
Population (2) (m)	42,010	45,904	51,016	54,029	56,893	59,267	60,505	60,963	61,400	61,795	62,135	62,466	62,791	63,128	63,461
Under 20 (2) (m)	12,556	14,665	16,748	16,419	15,632	15,068	15,183	15,242	15,280	15,315	15,338	15,369	15,379	15,400	15,426
65 and over (2) (m)	4,727	5,288	6,174	7,541	8,036	9,561	9,921	10,067	10,163	10,208	10,301	10,421	10,551	10,682	10,990
Under 20 (2) %	29.9	31.9	32.8	30.4	27.5	25.4	25.1	25.0	24.9	24.8	24.7	24.6	24.5	24.4	24.3
65 and over (2) %	11.3	11.5	12.1	14.0	14.1	16.1	16.4	16.5	16.6	16.5	16.6	16.7	16.8	16.9	17.3

(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, 2012 [1]) – (2) At year-end.

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

In both countries, the baby boom ended in the mid-1960s, with fertility dropping back to two children per woman by 1970 in Germany and by 1974 in France. Demographers expected it to remain stable from then on, but to their great surprise, it continued its downward path, reaching 1.3 children per woman in Germany and 1.7 in France in the 1990s. To begin with, this was attributed to the postponement of childbearing among the younger generations, linked to longer time spent in education and delayed marriage which produced a mechanical decrease in fertility rates. Fertility was then expected to start rising again thanks to a "catch-up effect" of women giving birth later in their lives. This is indeed what happened in France, where the total fertility rate returned to 2 children per woman in the 2000s. In Germany, by contrast, it has recovered only slightly, up to just 1.4 in 2010. Recovery of delayed births has been only partial: women born in the 1960s, who had few children before age 30, did not go on to have more at a later age. Their completed fertility is just 1.5 children, compared with 2 for French women of the same birth cohorts; the two countries' fertility curves have remained half a child apart since the end of the Second World War. This gap may seem small, but in demography it is substantial, especially if it persists for decades.

What are the reasons for this disparity between the two countries? French family policy is doubtless a factor at play. In France, pro-family measures have long been advocated by governments of all political colours, while in Germany the memory of Nazi pronatalist zeal held back such policies for many years before they were finally implemented. The Germans spend as much as France on family policy (slightly less if we include the "quotient familial", a French system of income tax breaks which favours large families). But their efforts are recent, and are based mainly on financial incentives. Preschool childcare services are less widely available than in France, making it more difficult to reconcile work and family life. Other factors are also involved, such as the widely held belief that a good mother should look after her baby herself, and not leave it in a daycare centre while she is at work.

Will the French population soon overtake that of Germany?

In 2010, the French population increased by 0.53% while that of Germany fell by 0.06%. Without immigration – net migration was estimated at +130,000 in 2010 – the German population would have fallen by 0.22%, with deaths (859,000) greatly outnumbering births (678,000). In France, the reverse is true, with more births than

deaths (802,000 versus 540,000 in 2010). Most of the country's population growth is due to natural increase, with net migration (estimated at +75,000 in 2010) accounting for just one-fifth.

Under the United Nations medium variant projections, the population of France will catch up with that of Germany by 2055 (Figure 1). [2] They are based on the assumptions that fertility will continue to rise in Germany and France, reaching 1.92 and 2.06 children per woman, respectively, in that year; that life expectancy will continue to increase in both countries, reaching 85.5 years and 86.5 years in 2055; and that immigration will also continue (positive net migration of 1 per 1,000 in that year in both countries).

One and a half centuries after the German population overtook that of France, the curves are set to cross again, this time with the French population surpassing that of its neighbour. The positions of the two countries in terms of population growth and ageing have already been reversed. While France was seen as an ageing nation threatened with demographic decline before the Second World War, this is now the image of Germany. These trend reversals are the consequence of changes in fertility and family formation that have occurred in both countries, but at different times. Will German ultimately converge with France, thanks to a fertility level stabilized at 2 children per woman, or will its low fertility regime persist over the long term? Only time will tell. If fertility remains low, a constant inflow of migrants will be needed to offset the surplus of deaths over births and to maintain the German population at its current level. Unless, that is, Germany resigns itself to the prospect of steady population decline.

REFERENCES

- [1] Anne Pla and Catherine Beaumel - "Bilan démographique 2011: la fécondité reste élevée", *Insee-Première*, 1385, January 2012, and INSEE website: www.insee.fr.
[2] United Nations, 2011 – *World Population Prospects: the 2010 Revision* (<http://esa.un.org/unpd/wpp/>).

ABSTRACT

Two centuries ago, the German population, at around 15 million inhabitants, was just half that of France. It then increased rapidly over the next 150 years, overtaking France to reach 60 million inhabitants in 1939 (versus 41 million in France). However, projections suggest that the French population may again outnumber that of Germany within the next half century.