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# The Road to Low Fertility

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## Abstract

The power of low fertility to transform the European demographic landscape has become a major pre-occupation of policy-makers. Some think that Europe, with inexorably shrinking and ageing populations, is on the brink of a demographically-driven catastrophe. The demographic landscape, however, as this paper argues, is no less complicated and varied than are the forces that are driving current trends in fertility.

## In the beginning

Media folk are fond of writing about 'Europe's declining birth rate' leading inevitably to the disastrous detonation of 'demographic time-bombs'; part of an understandable media preference for bad news. The story of recent fertility trends, however, is much more complicated. To put modern fertility behaviour into perspective we must go back to the 1930s to the end of the 'demographic transition'.

That was the process, beginning in the 18th century, whereby the high birth and death rates of traditional society declined to those of the modern world: that is, at most two children on average, with an expectation of life of 75 years and increasing. The transition in countries such as Britain came to an end in the 1930s, if the 'end' can be taken to mean the return to an approximate balance between fertility and mortality rates that was left behind in the 18th century. Around that decade fertility fell to replacement level – and in many cases below it – for the first time since the beginning of the transition two hundred years earlier (Table 1).

This decline was not just due to the depression years: it continued previous trends. Fertility fell to low levels even in those parts of Europe which enjoyed low unemployment, high levels of economic growth and new investment, such as the South-East region of England. Population growth continued, however, because the younger age-structure inherited from the earlier 20th and from the 19th centuries guaranteed an excess of births over deaths for decades. That is the 'demographic momentum', which has now finally run out. Mortality rates were higher then; so that replacement fertility was a little higher than the 2.05 now conventionally assumed. In England and Wales in the early 1930s it was 2.35. Table 1 shows Total Fertility around 1930, 1950 and 2001 together with the net reproduction rate. Total Fertility is a shorthand indicator of average family size. It is the average number of children that each woman would have in her fertile lifetime (15–49) if the then current rates of childbearing persisted. It can also be regarded as the weighted propensity of recent cohorts of women to replace themselves in the population. It

*Table 1: Total fertility and Net Reproduction Rates, selected countries 1930 to 2000*

| | 1930s | | 1950 | | 2000 | |
|---|---|---|---|---|---|---|
| | **TFR** | **NRR** | **TFR** | **NRR** | **TFR** | **NRR** |
| England and Wales | 1.78 | 0.76 | 2.18 | 1.02 | 1.65 | 0.79 |
| Scotland | 2.17 | 0.91 | n.a. | n.a. | 1.48 | 0.71 |
| Australia | 2.15 | 0.96 | 3.06 | 1.48 | 1.7 | 0.82 |
| New Zealand | 2.16 | 0.98 | 3.38 | 1.63 | 2.01 | 0.96 |
| Canada | 3.19 | 1.32 | 3.46 | 1.74 | 1.48 | 0.71 |
| United States | 2.14 | 0.94 | 3.03 | 1.6 | 2.14 | 1.05 |
| Sweden | 1.67 | 0.75 | 2.32 | 1.04 | 1.54 | 0.75 |
| Germany | 1.64 | 0.91 | 2.09 | 0.85 | 1.38 | 0.69 |
| France | 2.06 | 0.87 | 2.93 | 1.26 | 1.89 | 0.91 |
| Italy | 3.29 | 1.24 | 2.47 | 1.09 | 1.24 | 0.58 |
| Ukraine | 5.09 | 1.68 | 2.81 | 1.29 | 1.1 | 0.88 |
| Japan | 4.76 | 1.54 | 3.65 | 1.19 | 1.36 | 0.65 |

Note: NRR for '1950' is actually for period 1950–55 (from UN).
Sources: Glass and Blacker (1938, Table V), Council of Europe (2002, Table 3.6), UN World Population Prospects (2002), National Statistical Yearbooks.

is a 'what-if' measure of the implications of current behaviour, not necessarily a forecast of actual completed family size. It is often referred to, incorrectly, as the Total Fertility *Rate* or TFR. The Net Reproduction Rate (NRR) is a related period indicator of the number of surviving daughters produced by each woman. By extension, it is the implied rate of population replacement given a stable population structure. Thus an NRR of 1.0 implies that the population will in the long run exactly replace itself given constant rates, neither increasing nor declining (ignoring the effect of population momentum). To obtain a measure of the true completed family size of a real cohort of women it is, of course, necessary to wait until they have completed or nearly completed their family building, beyond age 40.

There are many important differences between the low fertility of the 1930s and that of the present day. Unlike today there was no long history of low period or cohort fertility, so the age-structure was still youthful and could generate many years of natural increase even without replacement fertility. Today, that positive momentum is nearly exhausted in many European countries (Lutz, O'Neill *et al.*, 2003), especially those in the East which did not experience a 'baby boom'. Furthermore, the environment in which most children were brought up was different. The 1920s, 1930s and 1950s could be regarded as the 'golden age of marriage' No longer often disrupted by

premature death of partners, as yet little touched by divorce, seldom preceded by cohabitation, the great majority of births were confined to marriage. Indeed the proportion of births outside marriage declined to some of the lowest levels ever by the 1950s.

By the beginning of the Second World War, Western Europe's centuries – old pattern of delayed marriage and delayed childbearing appeared to be already coming to an end. By 1938, mean age at marriage had begun to fall in England and Wales, and other countries. This trend towards earlier marriage continued uninterrupted in two countries not directly involved in the war, Sweden and Switzerland. In the war's immediate aftermath, there was a very prominent 'spike' of births and birth-rates, peaking about 1947, just as there was after the first world war, although smaller in the case of Britain. In most of Europe, the birth rate rapidly returned to a low level, and it was generally supposed that the birth rates would resume the moderate level that they had reached in the late 1930s.

## Ups and downs of the post-war birth-rate

Amidst the prosperity that returned in the 1950s, marriage became more popular, and younger, than for many centuries. Younger marriages mean younger childbearing, and this acceleration of tempo increases the output of births, and hence total fertility, even without an increase in final completed family size. But couples also ended up with larger families than for some years, so that in England and Wales Total Fertility peaked in 1964 at 2.95 and women in their 20s around that time went on – famously – to have an average of 2.4 children. This period of high birth rates which continued into the late 1960s or early 1970s, is the 'baby-boom' proper, and was shared by all 'Western' countries to varying degrees. It is generally supposed that this the last fling of relatively high fertility owes something to the advent of near-universal family planning since the 1930s, which enabled the charms of married life to be enjoyed earlier without the risk of excessively large families, together with the unprecedented later prosperity from the 1950s, when Europe's economies grew between 3–7% per year, much faster than in Victorian times. Despite enthusiastic recruitment of women for war work, on the return of peace few married women worked. The 'opportunity costs' created by the conflicting choices of work and childcare, which later were to depress fertility, had not yet arisen for most women.

From the early 1970s birth rates in most Western countries had declined to the replacement level of 2.1 and have all since fallen below it, raising the long-term prospect of depopulation and an acceleration of population ageing. The modest birth rates in Central and Eastern European countries, where traditional early and universal marriage continued under communism, remained roughly around replacement level until the end of the regimes, propped up intermittently by extensive pronatalist policies. After the end of communism, sub-replacement period fertility became universal in Europe in the 1990s and has continued so ever since, although rates have ceased to decline. In some Western countries (including Italy, where post-war birth rates were never high,) it has now persisted for a generation. Some less-developed counties such as Greece, Portugal and Spain joined this group with extraordinary synchrony and speed a decade later, falling to very low levels. Later, the post-communist crisis of Central and Eastern Europe and the former Soviet Union took period fertility to the lowest levels yet recorded.

## A divergent developed world

Demographically, Europe today is divided into three parts, on long-standing cultural, political and economic lines. (Grasland,1990; Reher, 1998; Pinnelli *et al.*, 2002). One demographic fault-line identifies North-Western European countries with birth rates of at least 1.7 children (1.98 in the case of France, 1.90 in Norway, 1.87 in UK), all with positive migration inflows. Together with the Anglosphere overseas, they face a relatively benign demographic future, with the older population (65+) rising from about 16% today to about 25% or more in future. That will bringing the potential support ratio (population 15–64 / population 65+) down from today's 4 to something over 2 by mid century: a manageable level, given sensible if difficult adjustments to retirement age, workforce participation, pensions and productivity. Population momentum will support modest natural increase in those populations for some years (until the 2020s in the case of the UK) before natural decline commences in the absence of an increase in fertility. But far from declining, their populations are for the most part being driven up by immigration, increasing population by 15% – 20% by mid-century on current projections for Scandinavian countries, the Netherlands, France and the UK. What it will certainly do, with current immigration levels, is to create populations in Europe of up to 30% foreign origin by mid-century.

Germany, Austria and Southern Europe comprise a second group with much lower birth rates – 1.4 or less. Even with immigration most face population decline and more severe population ageing. Despite its low birth rates Spain is an exception, thanks to exceptionally high immigration made countable by repeated amnesties.The management of that ageing will be made more difficult by the rigid labour protection and dependence upon universal pay-as-you-go unfunded pension systems with high replacement rates that are typical of the 'European Social Model'. Germany's fertility has been too low for too long to save its population from at least temporary decline even if fertility returned to replacement level – the last cohort of Germans to replace themselves was born around 1933.

The third group of countries are in Eastern Europe, which is suffering a painful transition from Red to Grey (Chawla *et al.,* 2007), as inadequate socio-economic reform confronts rapid demographic change. Still recovering from the distortions of half a century of communism, birth rates are very low. Many countries in the region lose population by natural

decline, and most also through net emigration, although there are inflows from even poorer countries further east. Poland, the Czech Republic, Hungary, the furthest forward in reform, have begun to recover from the high male adult death rates that were a hallmark of Eastern European socialism since the 1960s. But that success accelerates ageing. Further East, political and economic reform is more tenuous. The populations of Romania and Bulgaria, the EU's new basket cases, are falling fast under the hammers of very low birth rates, high death rates and emigration that threaten depopulation on an interesting scale – a decline of 35% is forecast for Bulgaria. In worst position are the major countries of the former Soviet Union, where reform moved into reverse soon after it began. Russia's population, for example, is projected to decline by about a quarter by mid-century (when it will be overtaken by that of Uganda). In addition, a growing proportion will consist of Russia's restive Muslim minorities. Mr Putin had better rattle his sabres while he can; a few more decades of decline and he will not be able to afford very many.

Outside Europe, Japan, Korea and the 'little dragon' economies of East Asia display a current demographic pattern similar to that found on Southern Europe (Figure 1), with low birth and very low death rates, although reached from very different starting-points and cultural origins (Dalla Zuanna, 1998). Japan's fertility remained at a high level until the end of the second world war, propped up by the pronatalism of an authoritarian regime, then rapidly collapsed to modern levels. The other industrial economies of the area did not emerge from an essentially third-world demographic pattern until the 1960s. All these countries also share with Southern Europe a superficially similar 'familist' culture, patriarchal attitudes, sex inequalities and weak support for working mothers, which as we will see later bring similar demographic penalties. Korea's total fertility (1.2) is among the world's lowest; Japan, with one of the fastest-ageing populations in the world, tipped into population decline last year, further deepening national demographic despondency (Ogawa, 2005).

These 'lowest- low' levels in Southern and Eastern Europe and Eastern Asia, defined variously as period levels below 1.3 (Billari *et al.*, 2003) or 1.5 (Caldwell *et al.*, 2003) seem now to have reached their nadir. Average fertility in two of these 'lowest-low' fertility regions ceased to decline around 1996, although that in the 6 CEE countries is still drifting down a little, thanks to continued small falls in two of the Catholic countries of the region in which decline was late (Poland and Slovakia). In the national championships for the lowest fertility ever, Bulgaria in 1999 and Latvia in 1998 share first prize (both 1.09) unless the example of the former German Democratic Republic be admitted (0.77 in 1994). Lowest-low fertility is even more widespread in smaller (but still very large) sub-national populations, below the national level. Large areas of Northern Italy and Spain, for example – which exceed in population size many of the countries of Western Europe – have had period Total Fertility below 1.0 for more than a decade.

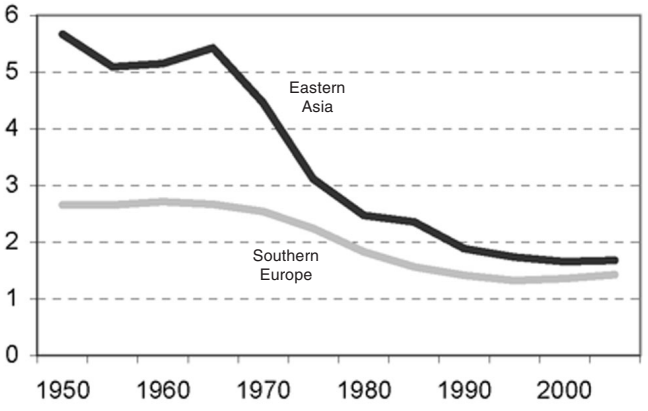


*Figure 1: Total fertility trends, Eastern Asian and Southern European countries, 1950–2005. Source: UN (2006).*

The United States, almost alone, is on a divergent path. It is the only major country of the developed world with fertility sufficient to replace the population – a total fertility of 2.04 in 2006; slightly rising since the 1990s. Only New Zealand is close. The high fertility of many of its minorities contribute to this relatively high fertility. Total fertility of the white non-Hispanic population is about 1.85, about the same as Norway, the UK and some other European countries, and less than France. However it must be remembered that total fertility in those European countries is also inflated by high immigrant birth-rates. In the UK for example total fertility of the white population is about 1.6. The impressive population growth of the US will re-enforce its geopolitical pre-eminence, although it too may face domestic lack of cohesion from the minorities that will comprise its majority from mid-century onwards. Now 300 million, US population is projected to grow to over 400 million by mid-century and almost 600 million by its end; partly thanks to its higher birth rate but primarily because of the assumed continuation of mass immigration. On forecast trends, US growth will overtake the declining EU25 by about 2060. If these projections come to pass; the US will remain the only one of the 'western' countries to remain in the world's population 'top ten'.

## Understanding low fertility

Trying to understand low fertility and its variety has preoccupied Western demographers for some time. Why did the baby boom begin and end? What, if anything, is the equilibrium fertility level in post-transitional societies? Why do birth rates in modern societies vary over time and space? And why do modern people have any children at all (Foster, 2000)? It used to be assumed that fertility would stabilise at replacement level at the end of the first demographic transition. That has not happened, and recent conclaves of demographic Magi could find no convincing reason why it should (UNPD, 1997; UNPD, 2002). So what is going to happen next? Have European populations come to rest at a new equilibrium below, or very substantially below, the replacement level? Or can fertility recover, even to the replacement level? The social and economic implications of

renewed decline are obvious. The implications even of stabilisation at current levels are very substantial.

Two groups of theoretical explanations have competed to account for all this; one emphasising economic motivations, the other culture and ideational change. They are by no means exclusive to each other, however, although often presented as though they were, and can be linked by a third explanatory component, the institutional context in the form of the often inadvertent effects of government measures and family policies to bridge conflicts between work and childbearing.

Most economic models work with ideas derived from the 'New Home Economics' of Becker and the Chicago school, and assume that adults want children in order to provide unique 'child services' mostly, nowadays, of a psychological nature. This theory can say nothing, however, about the number of children required to satisfy the desire for them. In the long run, once family planning is firmly established throughout a modern society, it is expected that a positive, not negative relationship will emerge between wealth and family size (i.e. richer people have more children just as they have more of everything else). There are now occasional hints of this in a number of Western countries.

On this view, family formation depends on the incomes of the partners and the extent to which that is affected by the arrival of children, especially the opportunity costs incurred (usually) by the wife or female partner insofar as she must choose between work and childbearing. All that is much influenced by the relative pay of men and women, their relative levels of workforce participation and the extent to which the state, or private arrangements, can compensate for money and time lost in looking after children. All of these have changed radically in recent decades, especially in NW Europe, including the elaboration of comprehensive systems of family support for working women and men often known as 'Scandinavian state feminism'. Although not without their strong critics (Robinson, 1997) , such models can account quite well for the end of the baby boom, which coincided with a major trend towards the movement of married women into the workforce and into higher education. When incorporating changes in the scale and terms of state family support with the state of the economy, they can account also for more recent ups and downs of the birth rate in (e.g.) Sweden (Hoem, 2000).

It might be expected that those countries that have progressed further in the emancipation of women, with higher levels of female participation in tertiary education and in the workforce, should have lower total fertility. As married women entered the workforce, fertility must, it seemed, necessarily decline *ceteris paribus*. Furthermore women's economic independence made marriage itself less attractive; it became rational to postpone such commitment or avoid it. Cohabitation became a more suitable compromise in societies that tolerate it; in those that do not, birth rates fell even further.

That is what happened in the 1970s; the theoretical expectation was gratifyingly realised. By the 1990s, however, the position was reversed (Figure 2): developed countries with high levels of female workforce participation now had higher, not lower total fertility than average (Coleman, 1999; Ahn and Mira, 2002). This does not however, mean that increased female workforce participation no longer has a downwards effect upon birth rates, other things being equal. It may do so (Engelhardt *et al.*, 2004), but other things are no longer equal. Birth rates have fallen in the Southern European and Far East countries, but not in NW Europe. Over two or three decades, family-friendly policies, mostly developed to help women with children return to the workforce or continue in it than for pronatalist ends, have inevitably helped women in work to have children and have helped to maintain or even increase, birth rates (Hoem, 2005). These are driven by state feminism in Northern Europe, more by private initiative in the Untied States. People in those societies, unlike those in the more 'familist' south, have developed values that make it easier to make compromises in the balance of child care and work, and to press through the political system for policies that make it easier. Through compensations of time, money and protection of status and entitlement, women's paid work had become at least partly compatible with childbearing and child-care.

Robinson (1997) summarises a review of the economic theories of fertility by commenting: 'the economic model seems bogged down in a simplistic demand-oriented framework, with the unnecessary and confusing 'quality of children' notion clouding everyone's thinking' (pp.70–71). The limited success of conventional economic models of fertility has shifted attention to theories which emphasise the effects of cultural change and the spread of ideas upon fertility, although these changes are themselves influenced by prosperity and welfare. The development of equality between the sexes is of central importance.

According to McDonald (2000), the symmetry of sexual equality in the public and in the private realms is crucial; asymmetry between them, in modern societies, leading to very low fertility. In most Western countries, opportunities for women in education, employment and public life ('economic gender equity') have advanced considerably, promoted, to varying degrees, by legislative change and equal opportunities policies. However, if these trends are not matched by equivalent changes in equality in the private realm, in domestic tasks, the care of young and old family members and in sharing other responsibilities, then fertility may be severely constrained. While in the 'familist' societies of Southern Europe, and in the Far East, economic, cultural and legislative changes have emancipated women in the public realm, division of labour in the home is still much more traditional, and support from outside the family less developed, thanks to the primacy of kinship links and responsibility. That is, women do the work, and in a modern world such familist societies are inimical to larger family size (Dalla Zuanna and Michaeli, 2004). It seems likely that one of the crucial differences between these and more 'family friendly' countries with higher birth rates is the more

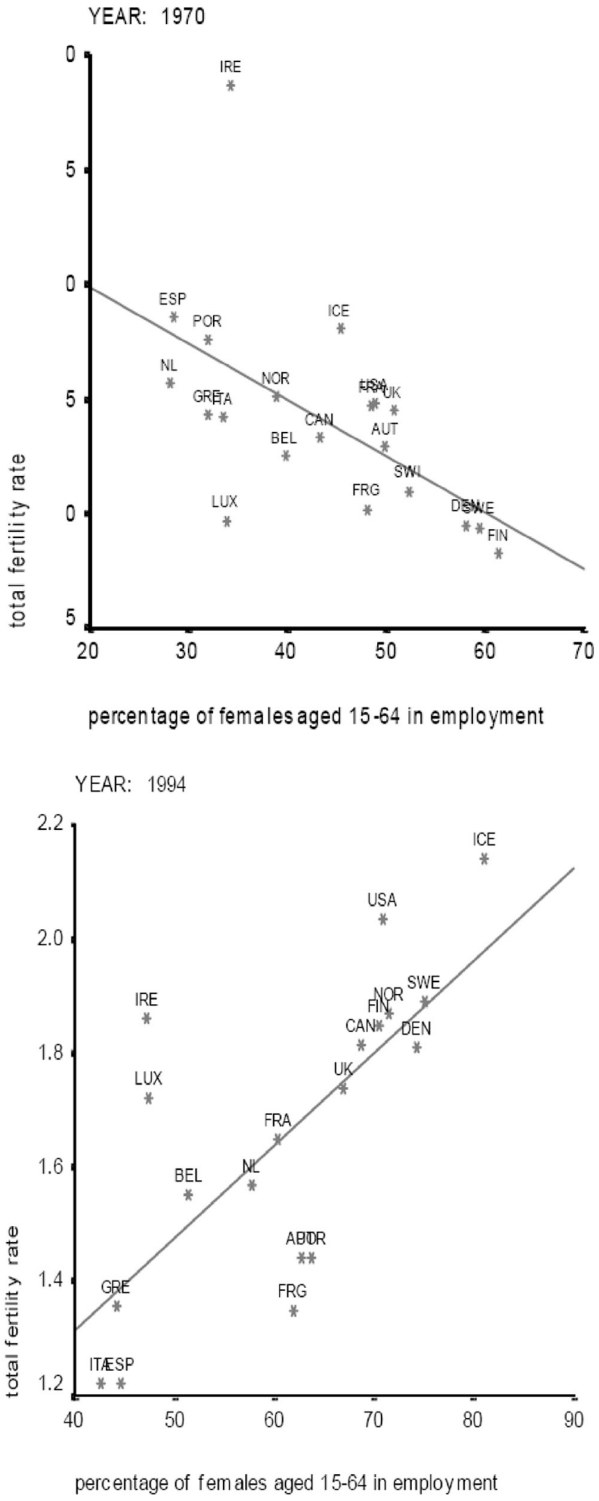


*Figure 2: Women's workforce participation rate and Total Fertility, 1970 and 1994. Sources of data: Council of Europe and Labour Force Surveys.*

extensive development of family policies in the latter group; all the intended and unintended consequences of government action (DiPrete *et al.*, 2003). That is, of course, in part an 'economic' factor, but its strength depends on the political culture of electorates which give a high emphasis to the responsibility of state rather than family.

Symmetrical gender equity can be regarded as inherent in a wider set of changes in beliefs and behaviour comprising a 'second demographic transition (SDT)' proposed by Lesthaeghe (2004) and van de Kaa in the 1980s. Based on the work of Maslow (1956) and Inglehart (2003), SDT theorists claim that modern prosperity, education and welfare have replaced traditional values and duties with the ideal of self-realisation. This 'post-materialist' ideology, flourishing in a prosperous welfare society, accounts for the substantial delay of marriage and childbearing, its displacement by cohabitation, the rise of divorce and of births outside marriage since the 1960s.

Not surprisingly, low birth rates are held to be characteristic of the second demographic transition, childbearing being a casualty of individualistic, more hedonistic attitudes and behaviour that puts self-realisation before more traditional concepts of 'duty'. There certainly seems to be little scope for 'self-realisation' in incurring huge direct costs of children, an opportunity cost of perhaps a third of lifetime earnings and twenty years partial house arrest during which to contemplate these manifold advantages. But, empirically, the reverse is true: in Europe only those countries with large proportions of births outside marriage have reasonably high birth rates. And these also tend to be societies where cohabitation and divorce have reached high levels. Those developed countries where births are confined within marriage, that is, those that have not yet embraced the values and behaviour of the second demographic transition, tend to have very low birth rates (Figure 3), in Southern Europe and outside it, for example in Japan, Korea, Singapore and Taiwan.

SDT theory, moreover, while predicting delay is silent about the recuperation of fertility in some of these societies whereby older women have at lest some of the children in their 30s that were put off in their 20s. And it is precisely that recuperation, or lack of it, that is a major determinant of overall period total fertility variance between countries. The Netherlands and Japan are the two counties with the oldest age at first birth. Yet total fertility in the Netherlands in 2005 was 1.71, and in Japan 1.26.

In this author's view, much of the postponement of marriage and childbearing can be accounted for by rational choice considerations arising from the advances in educational attainment, workforce participation and equality of pay among women, which argue against early childbearing. Additionally, postponement also represents a retreat from the highly abnormal and transient early childbearing of the baby boom. Although age at marriage is now even later than in the 1930s, age at first co-residential union is much closer to it, and in those unions much childbearing now begins. Furthermore, the delay in marriage so widespread in Asia, both in developed countries such as Japan and Korea and also in India, Thailand, Sri Lanka and elsewhere, could not be claimed to have anything to do with the spread of values related to the 'second demographic transition', which also sit rather ill with the conditions in Central and Eastern Europe.

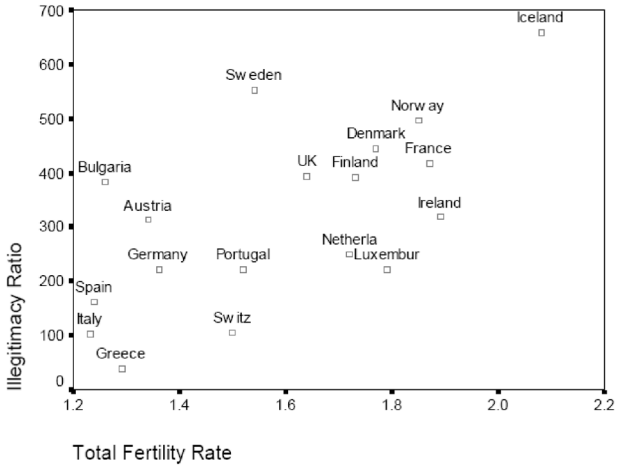


*Figure 3: TFR and births outside marriage 2000*

## Postponement paramount

For decades now most of the residents of the developed world, and poorer countries too, have been putting off most of life's major events: birth, marriage, leaving home, individual ageing, and dying (Billari, 2004). When vital events are postponed, then the conventional annual period indicators are deflated even if each individual eventually experiences the same number of births, marriages and so on in the course of their lives. The same number of events is spread over a larger number of years. In theory, completed family size could remain as it was, as long as births postponed earlier are produced later in life.

Current low period fertility levels may therefore not quite be what they seem. One number – total fertility – condenses information about: the timing of the onset of childbearing, the intervals between births, the chances of going from one birth to the next. Much technical progress has been made in addressing this problem of measurement, to determine how much of the decline in period fertility is due to tempo (postponement of births) and how much to a reduction in quantum (completed family size). If timing is important, then the eventual consequences for population decline and ageing may be less than feared, even though the constricting effect on some birth cohorts in the age-structure will be permanent. There is little agreement as to how this can be done, and even indeed if it is meaningful to do so (e.g., Bongaarts and Feeney, 1998; Kohler *et al.*, 2002). Some methods of adjustment suggest that period fertility in Western Europe understate the 'real' recent level of fertility by between 0.2 and 0.4 children. In Eastern Europe the great falls in period TF in many of those countries in the 1990s may represent little change in final quantum, as tempo adjustment restored total fertility nearly to two children (Philipov and Kohler, 2001). On the other hand, in the 1990s the republics of the former Soviet Union showed hardly any tempo effect. There, it seems, births were being reduced across the board, implying a substantial reduction in completed family size or 'quantum' (Macura *et al.,* 2002; Avdeev, 2001).

## Recuperation?

Recent trends in period total fertility, and increase of age-specific birth rates among women in their 30s and even 40s, suggests that recuperation is occurring in a number of NW European countries and also in the US and New Zealand, although part of this increase is of immigrant origin (Figure 4). For example, just over 50% of the increase in births to women in the UK from 2005 – 2006 was accounted for by additional births to immigrant women.

The family formation of cohorts shows us the real level to which completed fertility has fallen and also how much recuperation of fertility is needed to return to replacement (or other specified level) in the foreseeable future. The completed family sizes of women approaching the end of their childbearing career, at age 40, have moved steadily downwards from their post-war peak. In the most extreme case, the last cohort of Germans to replace themselves in the population was born around 1933. However the picture in the early 21st century, given by women now aged over 40 who were in their peak childbearing years ten to fifteen years ago, is somewhat different.

In 13 out of 38 European countries for which data are available, women born around 1960 had produced at least 2 children on average by 2001, including Iceland, Ireland, France, Norway and Sweden. In 1988, the picture had been one of continual decline in all these countries except Sweden. Now a more diverse pattern of cohort fertility has emerged. In Denmark, Norway and France completed family size has remained at about 2, even increasing slightly over the decade, while in Spain, Italy and Austria the decline has continued apace to well below two children (Frejka and Calot, 2001).

These data on completed family size at 2001 reflect the social and economic environment of the 1980s and early 1990s, when these women were producing most of their children. The crucial question relates to the intentions, and the behaviour, of women who are now in the late 20s and early 30s, whose families have yet to be completed. Incomplete cohort

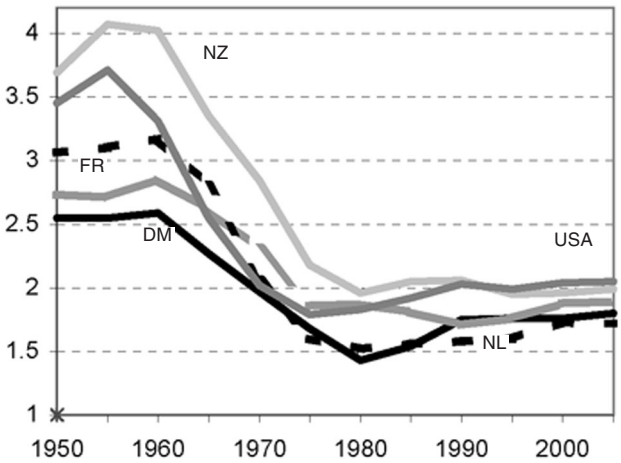


*Figure 4: Total fertility trends, industrial higher-fertility countries, 1950–2005. Source: UN (2006).*

data for these women indicates a continued delay in childbearing. In the southern countries the weak level of later recuperation to date makes a recovery to replacement rate increasingly unlikely: cohorts now in their 30s have so much to recuperate and so little time to do it (Frejka and Sardon, 2004; Lesthaeghe, 2001). However, rather stronger recuperation, associated with in increase in pre-marital cohabitation, is becoming apparent in urban areas of North Central Italy (Rosina 2004). Recuperation to sub-replacement levels closer to two children is more plausible in Northern populations. The Dutch (like the Japanese) are among the oldest mothers of first babies in the world, but (unlike the Japanese) they also have one of the highest levels of fertility over age 30. One factor omitted from these calculations, however, is the migration into these cohorts of immigrant women with higher fertility. What may be implausible recuperation for native cohorts may become more realisable when those cohorts are augmented by immigrants.

## Cohabitation and illegitimacy

In many countries most couples cohabit before marrying, if they marry at all (Figure 5). About half of young women in Denmark live with a partner outside marriage, compared with a small but growing minority in Italy and tiny proportions in Greece and Japan. Cohabiting relationships unfold in various different ways in Europe; always fragile, usually translating into marriage in Germany, less so in France (Kiernan, 2001). In some NW European countries, about one child in two is born outside marriage. As cohabitation varies, so also does the proportion of births outside marriage: a majority, 500–600 per thousand in some of the Scandinavian countries, but one in ten or less in Poland, in Italy, in Spain and Japan and the Far East. The UK is exceptional in the high proportion (about one third) of births to women without partners at all. Many of the latter mothers are teenagers; the UK's teenage fertility rate – almost 30 per 1000 – is four times the European average.

In much of NW Europe, levels of cohabitation and marriage appear to compensate for each other, statistically speaking, so that less than a fifth of men and women aged 25 –34 have had no partner of any kind (Figure 5). However this is less true in the South and in Ireland, and in the extreme case of Italy, 55% in that age-group had experienced no partnership in the 1990s. Lone parenthood is still little favoured in those regions. Very late union formation accounts for a lot of the lowest-low fertility prevalent there. Generally speaking, only those developed countries with high levels of non-marital fertility attain total fertility in or close to the demographically 'safe' zone of 1.7 or above.

## Conclusion

Postponement – or at least delay (see Ni Bhrolchain *et al.,* 2002) – and divergence are now the striking characteristics of birth rates in the developed world. In some major groups of countries, including most of North-west Europe, birth rates are relatively high and, if anything, trending upwards. In some of them delay in childbearing is coming to an end, in others continued postponement is being at least partly compensated by a recuperation of fertility at older ages. In the Southern European and Far Eastern countries, which share superficially similar 'familist' cultures, delay has not for the most part turned into recuperation and birth rates persist at a very low level. That threatens severe ageing and, in the absence of immigration on a large scale, population decline. Central and Eastern Europe, especially the former Soviet Union, is in the worst case, facing similarly low birth rates and even worse population prospects on the basis of a much poorer economy. In attempting to explain all this, it is clear that economic theories and those stressing cultural factors and ideational trends must be considered together. The social, cultural, political and policy environments in NW Europe and in the US have emerged in their very different ways to be much more 'family-friendly' than that of Southern Europe, Eastern Europe and the Asian industrial countries. Teasing out which is the most important of these factors has proved to be very difficult.

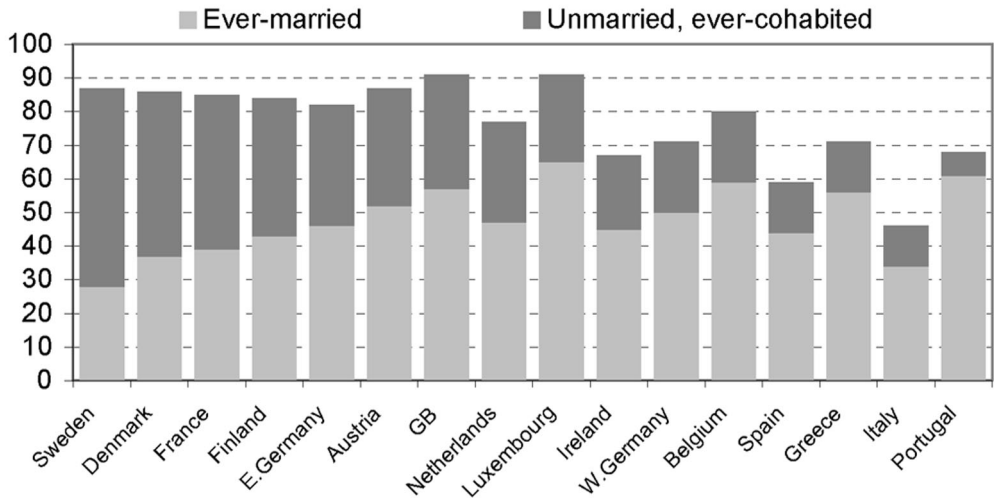


*Figure 5: Partnership status, men and women aged 25–34 years, EU countries 2000–2001. Percent, ranked from left by order of percent ever-cohabited. Source: Kiernan (2004, table 2).*

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