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# Explanations of the fertility crisis in modern societies: A search for commonalities

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*Near-global fertility decline began in the 1960s, and from the 1980s an increasing number of European countries and some Asian ones achieved very low fertility (total fertility below 1.5) with little likelihood of completed cohort fertility reaching replacement level. Earlier theory aiming at explaining this phenomenon stressed the incompatibility between post-industrial society and behaviour necessary for population replacement. Recent theory has been more specific, often concentrating on the current Italian or Spanish situations or on the contrast between them and the situation in either Scandinavia or the English-speaking countries, or both. Such an approach ignores important evidence, especially that from German-speaking populations. The models available concentrate on welfare systems and family expenses, omitting circumstances that may be unique to individual countries or longer-term factors that may be common to all.*

**Keywords:** fertility decline; low-fertility population; population policy; population replacement; population theory; pronatalist policy; developed countries; Europe; population law; social policy

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Fertility declined in most of the industrialized world from the late nineteenth century until the 1930s when much of Western Europe recorded, for the first time in history, total fertility below two, with net reproduction only three-quarters of replacement levels (Keyfitz and Flieger 1968). At that time some observers forecast that advanced industrial societies would experience a decline in population numbers (see Charles 1934), but this prediction was subsequently discarded as birth rates rose and analysis showed its flaws. It was found that many births had been deferred, and that completed family size had fallen below replacement level for few birth cohorts and by only a modest amount. Furthermore, it had required the dire economic conditions of the World Depression to produce even these modest changes. Consequently, demographic transition theorists gave little thought to the possibility that the end of demographic transition would see shrinking populations.

Nevertheless, the high birth rates after the Second World War were ultimately followed by fertility decline—from the early 1960s in the USA and from the late 1960s in most other Western countries. This decline ceased in the USA in the late 1970s, to be succeeded by a persistent rise to replacement-level

fertility. But in much of the West the decline came to a halt only in the late 1980s, to be followed by continued low fertility with some very limited rises. The exception was Germany, where fertility fell during the 1990s largely because it did so steeply in East Germany, as it had elsewhere in Eastern Europe.

The result was the new phenomenon of very low fertility, defined here as a continuing total fertility of under 1.5 until 2002. Table 1 shows that, with some overlapping of dates, very low fertility was achieved in Central Europe in the early 1980s, in Southern Europe in the late 1980s, in parts of East Asia in the early 1990s, and in Eastern Europe and ex-USSR Western Asia as the 1990s progressed. By omission, Table 1 also throws further valuable light on what was happening in that it excludes some of the leaders in the fertility decline of the 1930s, namely Britain, Sweden, France, and Belgium where total fertilities at the end of the twentieth century were in the range 1.6–1.9. It also excludes what Maddison (2001) calls the ‘Western Offshoots’ (the English-speaking countries of overseas European settlement, USA, Canada, Australia, and New Zealand) where the range was 1.5–2.1.

This paper will explore whether the extreme

**Table 1** Countries with continuing total fertility below 1.5 by region, period when it first fell below 1.5, and total fertility in 2002<sup>1</sup>

Region <sup>2</sup>	1980–85	1985–90	1985–90	1995–2000	2000–2005
Central Europe	Germany (1.3)	Austria (1.3)			Switzerland (1.4)
Southern Europe		Italy (1.3) Spain (1.2)	Greece (1.3)		
Eastern Europe			Bulgaria (1.3) Slovenia (1.3)	Belarus (1.3) Czech R. (1.1) Estonia (1.3) Hungary (1.3) Latvia (1.2) Lithuania (1.3) Poland (1.3) Romania (1.2) Russian Fed. (1.3) Slovakia (1.2) Ukraine (1.1)	Moldova (1.3) Croatia (1.4)
Ex-USSR Asia				Armenia (1.1)	Georgia (1.2)
Other Asia		Hong Kong (0.9)	Japan (1.3)	Macau (0.9)	Singapore (1.4) Taiwan (1.4)

<sup>1</sup> Continuing means the period, no matter how short, that encompasses the time spent up to and including 2002 with the annual total fertility not exceeding 1.5. Total fertility for 2002 shown in parentheses.

<sup>2</sup> Eastern Europe includes all ex-Communist European countries.

Sources: United Nations (2001a), Population Reference Bureau (2002).

fertility decline that resulted in very low cross-sectional fertility rates with little likelihood of cohort fertility reaching replacement levels was a single irreversible change and whether current theories are sufficient to explain what happened across the range of affected countries. We are concerned about conclusions reached from what may prove to be the short-term heterogeneity in the fertility levels of these countries, and we stress the need for a long-term perspective on population replacement based on a single explanation for very low fertility. In general terms the paper will address the question of whether rich countries have inherent problems in replacing their population. In specific terms it will try to throw light on such issues as the following: (i) Is the present explanation of the causes of very low fertility in Italy (or Italy and Spain) suited to a more general treatment of the phenomenon of very low fertility? (ii) Is something being missed by ignoring the situation in Central Europe, given that Germany and Austria were the first societies to attain very low fertility and may well achieve the lowest completed cohort fertility? (3) Are the current emphases on the type of welfare state or kind of family structure appropriate as explanations, or should we be stressing the lifestyles of postmodern societies or family building in a regime of liberal economics? The paper will also try to draw together some of the

rapidly expanding literature on the causes of very low fertility.

A significant recent feature of the fertility decline was its bottoming-out and, in the case of the USA, its ending with a rise in fertility. There are echoes here of the 1930s. Bongaarts and Feeney (1998) argued that cross-sectional measures (like total fertility) yielded lower fertility rates when young women were deferring births than would be revealed eventually by completed family size; by choosing the cases of the USA and Taiwan, they appeared to be arguing that catch-up births late in women's reproductive spans would bring most national fertility levels back close to replacement. This was queried in the case of Continental Europe by Lesthaeghe and Willems (1999) and Frejka and Ross (2001), who all argued that below-replacement-level fertility would continue to characterize much of Europe, although probably at more moderate levels than current total fertilities appeared to indicate. Bagavos and Martin (2001, p. 7) showed that the completed cohort fertility of the European Union (i.e., the 15 countries comprising that union at the beginning of the twenty-first century) for women born in 1950 was 2.0 and for those born in 1963 would probably be 1.7. Near-consensus was reached with Bongaarts's (2002) analysis of the European situation: he concluded that 'countries in the EU and elsewhere could experience

a period of modest rises in fertility . . . [but] it seems unlikely that fertility will climb back to the replacement level' (p. 439). Kohler and Ortega (2002) agreed with this analysis, as did Demeny (2003). Prioux's (2002, p. 721) estimates for the completed fertility of the 1963 Western European birth cohorts showed only Germany, Austria, Italy, and Spain below 1.7, in contrast to Ireland, France, Sweden, and Norway at replacement level. Van Nimwegen et al. (2002, p. 13) arrived at a similar conclusion, but Kohler et al. (2001) calculated somewhat lower completed cohort fertility, with Germany reaching only 1.54, Italy 1.57, Austria 1.60, Spain 1.63, Russia 1.66, and Japan 1.68. The estimates were even lower in Kohler et al. (2002, p. 650). There are problems in comparing the USA with Europe in that its higher fertility is partly a reflection of immigrant Hispanic reproductive behaviour.

The deferment and forgoing of marriages of women (an old practice in Western Europe, see Hajnal 1965) had played a role in the (perhaps) temporary attainment of very low fertility by increasing steeply in all industrialized countries from the 1970s. For many young couples, the impact on fertility of women deferring marriage was partly—but not wholly—offset in Northern Europe and the Western Offshoots by the choice of cohabitation, but this was not the case in Italy, Spain, and Japan where women's age at first marriage rose just as steeply and moved towards that of Northern Europe.

Later marriage and falling fertility suggested that childlessness was probably increasing and provoked a renewed interest in its historical role. Goldstone (1986) had re-examined Wrigley and Schofield's (1981) English data and concluded that the historical periods of low fertility were explained by the higher proportions of non-marriers, and hence of childless women. Morgan (1991) showed that in early nineteenth-century America childlessness had been around 15 per cent, only half of which had been explained by failure to marry; and that by the economic depression of the 1930s, 20–25 per cent of women remained childless, less than one-third of them by not marrying. Anderson (1998) demonstrated that childlessness in British marriages rose from 8 per cent for those of the 1870s to 16 per cent for those of 1925, and that non-replacement fertility (i.e., having no or one child) rose over the same period from 13 to 41 per cent. Moreover, very low fertility had been related to deferred marriage: childlessness among women marrying at 30–34 years was around 15 per cent up to the mid-nineteenth century and 23 per cent by the end of the century, with the percentage of 0–1-child families rising for these

women over the same period from under 30 per cent to 46 per cent. McDonald warns that the emphasis on childlessness can be overdone. 'Differences between the average fertility levels across contemporary industrialized countries appear to be due less to the proportions of childless women than to differences in the proportion that have three or more children' (McDonald 2002, p. 423). If this is the case, there is ample room for further fertility declines.

### A changing world

Although there is little evidence that total fertilities below 1.5 had been foreseen, there is ample evidence that vast changes that would have demographic repercussions were taking place. In the second half of the twentieth century global population multiplied by 2.4, real global income by over six, and real income per head by 2.7. In the richer countries the multiplication of real income per head was even greater: almost three times in the Western Offshoots, over four times in Western Europe, and ten times in Japan (Maddison 2001). By the century's end, half the population of the world, and three-quarters of the population of developed countries, lived in urban areas. Life expectancy climbed over the half-century from 44 to 66 years and in the developed countries from 65 to 75 years. Education levels rose to the point where, in industrialized countries, most of the population finished secondary education and girls had caught up with boys. Education and urbanization allowed women to spend most of their adult life in the urban labour force; the women's movement provided the justification, and huge growth in the tertiary sector of the economies provided the opportunity. Doing so implied being able to plan one's life, especially its pregnancies, and this became much easier with the new contraceptives of the 1960s and parallel attitudinal and legal changes affecting sterilization and abortion. Murphy (1993) spelt out the impact of the pill on British fertility, describing the process as 'irreversible', but, rather curiously, said little about the changes to society that near-perfect birth control allowed. New demographic justifications for very low fertility reassured the young about the social acceptability of deferring or forgoing births (Caldwell 2001). Such rapid attitudinal changes were assisted by an explosion in communications, creating what Chesnais (2001, p. 258) termed 'new mentalities'. The new forms of communication, especially television, had the potential for at least partly substituting for children. Consumerism increased and the old relationships enjoyed by homebuilding women

collapsed as neighbouring women went to work and as visits to the local shop gave way to weekend car journeys to the distant supermarket (Ruzicka and Caldwell 1977, pp. 38–42). Such changes were facilitated, except perhaps in the USA, by growing secularization and a decline in the influence of organized religion (Lesthaeghe 1980, 1983; Lesthaeghe and Meekers 1986; Simons 1986; Lesthaeghe and Surkyn 1988; van de Kaa 2001). The economic crisis of the mid-1970s helped to instil low-fertility attitudes (Teitelbaum and Winter 1985, p. 115) as did the implementation of new liberal economic policies intended to prevent the recurrence of such crises.

These developments, which were of course part of the continuing changes wrought by the Industrial Revolution, had not been foreseen, except perhaps for the possible inability of society to reproduce itself. Kingsley Davis (1997, p. 623), as early as 1937 and influenced by low fertility in the world economic depression, wrote: ‘the family is not indefinitely adaptable to modern society, and this explains the declining birth rate’. In 1984 he returned to the subject of declining fertility, which he saw as arising from the demise of the ‘breadwinner system’, and driven by the pressures of a sexual egalitarian revolution, which, although not yet complete, was already producing conflict of fundamental demographic importance between women’s roles as workers and their roles as bearers and raisers of children (Davis 1984). Davis, with van den Oever (1982, p. 511), had already warned that if ‘women in industrial societies today are not motivated to achieve replacement fertility . . . the social order that gave rise to it will be replaced by another—either one that supports traditional sex roles or some new order that rewards women adequately for reproduction’. Ryder (1979, p. 366) had already concluded: ‘Perhaps the principal reason for the recent decline in fertility is the possibility now gradually opening for women to derive legitimate rewards in the pursuit of activities other than motherhood . . . our past success at population replacement, throughout all of human history, has been conditioned on the discriminatory treatment of women.’

Ariès (1980) placed responsibility for the failure of societies to replace themselves more squarely on both sexes, assuming, as few theorists in this area seem to have done, that young husbands and wives are largely in agreement about their reproductive performance. In his 1962 book, *Centuries of Childhood*, he had explained the development of the small family over the previous century or more as the desire of the married couple to achieve family generational social capillarity (Dumont’s 1890 usage) by

concentrating their resources on a small number of children and so preparing them, mainly by extended education, to reach socio-economic levels higher than they themselves had been able to attain. By the time the couple had married they were no longer in a position to raise themselves to a higher social level, but the strategy of enabling their children to rise was a way of making gains in a kind of class war. In his 1980 paper Ariès saw a great change underway that would possibly lead to societies which could not—or would not—replace themselves. The contraceptive revolution of the 1960s meant that young adults could have sexual relations without the need for early marriage, and married couples could postpone or forgo children. They could employ their early adult years to develop as individuals, and, in the increasingly affluent society, gain further education and work experience leading to promotion and safer tenure. Thus the days of the ‘Child King’ were over: ‘His existence . . . is related to plans for a future in which he is no longer the essential variable . . . his role is changing today . . . It is diminishing’ (Ariès 1980, p. 650).

Caldwell (1982), in a chapter entitled ‘An explanation of the continued fertility decline in the West: stages, succession and crisis’, argued that increasing affluence had accelerated the move toward equality embodied in the modern West’s commitment to egalitarianism in the generations and the sexes. The early marriages of the ‘baby boom’ period were an example of the former, while the move toward women’s work having at least the same priority as childbearing was an example of the latter. He concluded that the battle to erase the ‘breadwinner’ system was far from over, and that there would be a shrinking population in developed countries early in the twenty-first century and more universally by the end of the century (Caldwell 1982, pp. 264–6). Caldwell thought pressure was placed on the family and its size by industrial society erecting a series of achievement ladders: first, a series of educational rungs for children; secondly, an occupational succession for men as white-collar employment spread; and finally a similar series of challenges for women (Caldwell 1982, p. 241). To this we could now add the attempt to secure a companionate partnership while both male and female partners were climbing the occupational ladders and creating a lifestyle to demonstrate their occupational success. According to Demeny (1997), these conclusions still held good. Subsequently Caldwell et al. (2002, pp. 19–20) modified their views by saying that they thought it likely that, in the course of the twenty-first century, governments would increasingly aim at achieving

stationary population and might ultimately succeed. McDonald (2002, pp. 431–2) maintained that governments must inevitably realize that there was no market solution to the failure in social reproduction.

Population theorists tended to split into two camps, those whose explanations were largely in terms of the clash between women's work and their childbearing, and those who saw the situation in terms of an escape from traditional occupations, centring on farming, and from religious, parental, and community constraints. Summarizing the papers presented to the 1981 IUSSP General Conference on the subject, Wulf (1982) said all were agreeing that below-replacement fertility was a product of women working. Westoff (1983, p. 103) argued that 'The successful combination of women's working with childbearing and child rearing still has to be achieved, but some institutional solutions will probably emerge.' Lesthaeghe (1977, 1980, 1983), Lesthaeghe and Meekers (1986), and Lesthaeghe and Wilson (1986) stressed the changes in outlook and behaviour associated with urbanization, industrialization, the growth of secularism, and 'the deinstitutionalization of the family'. There are shades here of both Kingsley Davis and Frank Notestein. Van de Kaa (1987, 1997, 2001) emphasized changing values and attitudes as constituting a *second demographic transition* driven by 'post-modern fertility preferences' (van de Kaa 2001, p. 290).

This rapid survey summarizes low-fertility theory up to about 1990. Everyone agreed that the fertility decline was basically driven by the Industrial Revolution, much as Notestein (1945, 1953) had described. There was an emphasis on the dissolution of old family structures and on the likelihood that the transition would end with below-replacement fertility. These views were strengthened when the first country to attain very low fertility, in the early 1980s, was West Germany, with its booming economy and high average income. The challenge to existing theory was first felt in the early 1990s when it was realized that equally low fertility was being attained in the Mediterranean countries, Italy, Spain, and Greece. These were not among the earliest countries to industrialize (only Italy exhibited an average income comparable to those of Northern Europe or the Western Offshoots) and all were believed to be societies where women were primarily wives and mothers.

Subsequently, low-fertility theory began to concentrate on South–North differences in Europe. The South was most commonly represented by Italy, probably because of its substantial numbers of social scientists presenting analyses, while the North was most often represented by Scandinavia or Britain and

the Western Offshoots. Defining the North in this way was attractive because none of the countries recorded very low fertility (total fertility in the range 1.5–2.1 in 2002), they were comparatively rich (median income per head in 2000 US\$26,000 compared with US\$19,000 in the South), and, as measured by the levels of cohabitation, divorce, and ex-nuptial births, much further along the road to postmodern values and behaviour. In fact, it appeared to be possible that postmodern values might prove to be a buffer against very low fertility.

There remained problems that were largely ignored. One was that the division was not clear cut: Canada's fertility was the same as Portugal's (total fertility 1.5 in 2002) although the fertility outside Quebec Province would have been higher and Quebec lower (Pollard and Wu 1998); fertility in Britain and Sweden was only a little higher (total fertility 1.6 in 2002). By the beginning of the 1990s Japan's fertility was as low as that found in the Mediterranean countries, which resulted in it often being compared with those countries. By the end of the 1990s Eastern Europe constituted the largest bloc of very-low-fertility countries, but the situation there was usually treated as being a reaction, and possibly a transient one, to sudden political and economic change. Finally, long-term explanations might be being sought for short-term situations. If the focus had been on the lowest fertility in the late 1970s, the explanations would first have addressed the situation in Germany, Austria, Finland, and the Netherlands (total fertility 1.5–1.6) and then Sweden, Denmark, Britain, and Canada (total fertility 1.7). Indeed, at the 1981 IUSSP conference's session on low fertility in Europe most of the emphasis was on West Germany, with only scant interest in the countries of the Mediterranean (Wulf 1982). In contrast, much of the current debate on causation largely ignores Germany and Austria, where almost as many people live in a very-low-fertility situation as in the Mediterranean (see Kohler et al. 2002).

Underlying the whole debate were two further problems. The first was whether *ideal family size* measures were indicative of the future. Bongaarts (2001, p. 278) believes that the trend of ideal family size 'is the most critical determinant of future fertility', that it has nowhere gone significantly below two, and that it is highly likely that desired and actual fertility will converge. The last point is debatable. Australian fertility has for decades been significantly below ideal fertility, and surveys show that this is a stable situation with the gap explained by couples as due to intervening problems or competing desires. Only 20 per cent of the gap was attributed to

economic difficulties, with the rest being social in nature—the desire to travel or first to enjoy a relationship untrammelled by children, a situation likely to characterize the future world increasingly (Caldwell et al. 1988).

The second problem is whether the forces delaying marriage are the same as those lowering marital fertility, and whether late age at marriage, especially for women, is itself a determinant of the decision to curb family growth early. Anderson (1998, p. 179) has shown that historically in Britain higher age at marriage for women was a powerful determinant of very low fertility. This is an important point because age at marriage has risen in all industrialized countries since the 1970s.

### **Explanations offered**

Economic determinism has not disappeared, and some analysts emphasize the economic crisis in the West during the mid-1970s and the subsequent victory of liberal over Keynesian economics. Economic growth resumed but the new world was one with greater job insecurity, especially at the younger and older ends of the labour force. Hobcraft (1996, p. 523) blamed these changes, accompanied by a partial roll-back of the welfare state, high housing prices, inflation, and high interest rates, for the fall in British fertility during the 1970s and for its level remaining moderately low (although not declining further). McDonald (2000b) took this approach further, taking the welfare system into account too:

In continental Europe, accommodation to the workings of the new market economy has been particularly problematic because of the prior existence of high fixed costs of labor and low labor force participation, both outcomes of the organization of continental European welfare states.

There is a strong tendency among those in mainstream jobs to protect their rights in the welfare system. The result is an insider–outsider labor market in which the insiders tend to be middle-aged males and the outsiders are women and younger people. The safest strategy for women and young people is to become an ‘insider’ and to delay or eschew family formation. The system is one of a conservative, family-wage, welfare state still based on the presumption of the male breadwinner model of the family.

In other words, the victory of liberal economics, at least as defined in Anglo-Saxon countries, had only been half achieved.

Demographers had drawn on the debate among economists about the sustainability of the European

welfare state, a debate which in its origins and for many of its participants had little to do with the causes of low fertility. Some, like the contributors to Jones (1993), were interested in low fertility not as a consequence of the welfare state, but because of its consequences for age structure and the strain this would throw on the welfare state. The Continental welfare state originated in Germany in the 1880s and quickly spread to Austria and Hungary (see Kaelble 1989). It had been fashioned by Otto Bismarck under the shadow of the Paris Commune to provide assistance in old age and to help those suffering from sickness and accidents, with the aim of stabilizing existing families, and hence the state, rather than helping those most in need. William Beveridge and the British supplied a post-1945 model more egalitarian and more focused on need, which was also to influence the Continent, especially Scandinavia. Therborn (1995, p. 96) classified the British/Scandinavian system as ‘Universal’ and that of the rest of Western Europe (including Ireland) as ‘Particular’, giving rewards in proportion to work and earnings record, thus placing the young in an invidious position. He also divided the European countries by whether their expenditure on welfare was large, medium, or small. Employing this sixfold classification, which demographers do not seem to have used previously, one finds average total fertility in 2002 to vary as follows: 1.7 where welfare systems are Universal, irrespective of whether expenditure is large (Denmark, Sweden) or medium (Finland, Norway, UK); 1.8 with Particular systems and large expenditure (Belgium, France, the Netherlands); and 1.3 for Particular systems both with medium expenditure (Austria, Czechoslovakia, Germany, Hungary, Ireland, Italy) and low expenditure (Greece, Portugal, Spain, Switzerland). The only country that does not fit neatly into this scheme is Ireland with a total fertility of 1.9, which is probably a consequence of religious pronatalism and the discouragement of contraception. ‘Low expenditure’ is a relative term and even the European Mediterranean countries spent a higher proportion of their Gross Domestic Product (GDP) on welfare than did the USA or Japan (Therborn 1995, pp. 88ff.). Although the paradigm works in that it offers an explanation for very low fertility, its structure depends on definitions of social expenditure; according to George (1996, p. 5) Germany’s social expenditure as a percentage of GDP is second only to that of the Netherlands, and Italy’s expenditure is similar to that of Sweden.

In the same year Esping-Andersen (1996, p. 66, fn. 1) divided Europe into Britain and the Scandinavian countries to be contrasted with ‘Southern European

states', defined as Germany, France, Italy, Austria, Belgium, Spain, Portugal, and, to a lesser extent, the Netherlands. The latter group, he maintained, had been strongly influenced by the Catholic Church (p. 66). They are generous with cash transfers but their supply of social services is almost non-existent (p. 66). Expecting the mother with children to stay at home as the primary carer, they lack childcare provisions (p. 67). France and Belgium are hybrids because they have developed universal child allowances (p. 68). So the hybrids total the Netherlands, France, and Belgium, and the division equates with that of Thernborn. The position is starkest of all in Italy because of the absence of a social insurance unemployment system (p. 67). In all the Southern countries, 'The conservative, Catholic imprint affects the policy of crisis and retrenchment . . . The kind of ideologically fuelled partisan battles that are fought in Anglo-Saxon nations, and even in Scandinavia, are conspicuously absent' (p. 66). In the South there is little in the way of transfers between the socio-economic classes (p. 71): 'perhaps the most sensitive measure of labor market exclusion, youth unemployment rates, tend to be extremely high in countries like Italy (33 per cent), Spain (35 per cent), France (22 per cent) and Belgium (20 per cent)' (p. 79). While good Government day-care facilities look after 50 per cent of Swedish pre-school children, this is the case for less than 5 per cent of pre-schoolers in the Netherlands, Germany, Italy, and France (p. 79). Esping-Andersen concluded: 'If the combination of familism and suboptimum activity rates defines a crucial element of the Continental European welfare state crisis, it is not easy to see a positive-sum solution in the short to medium run. Since a surge of costly social services is an unrealistic prospect, while women's integration into the economy is likely to rise, Europe's low fertility rates are likely to continue' (p. 84).

Myles (1996, p. 118) saw employment conditions rather than the welfare state as being the nub of the Continent's problem: 'The high-wages/low-employment model of Continental Europe limits the growth of an American-style underclass but at the price of creating an insider-outsider problem between those with and without jobs.' There is a link, however, between the Continental welfare system and employment in that employers contribute to unemployment and redundancy payments which are scaled to wage levels and years of employment so that they are more likely to retain their long-term employees in order to avoid expensive payments. Castles (2002, pp. 13–4) reported from a multivariate analysis of 21 OECD countries that the significant policy variables associated with higher fertility are the provision of formal

childcare and employers allowing mothers of young children to work flexible hours.

Gauthier (2002, p. 453) tried to refine this analysis further by dividing the industrialized countries into four groups: 1. Social democratic (universal welfare, good leave conditions for mothers, good childcare); 2. Conservative (support according to employment status, sex differences, limited childcare); 3. Southern European (no guaranteed minimum income, little provision of childcare); and 4. Liberal (support targeted to needy families, little provision of childcare). Group 1 contained only the Scandinavian countries (average total fertility 1.7); Group 2 contained most of the rest of Central and Western Europe (average total fertility 1.7); Group 3 was Southern Europe (average total fertility 1.3); and Group 4 contained Britain, all the Western Offshoots, Japan, and Switzerland (average total fertility 1.7). This implies that only Southern Europe requires an explanation. However, the fit is not as good as it looks at first sight. The predominantly Germanic countries (Germany, Austria, Switzerland) and Japan, all with very low fertility, are all misfits and challenge the classification. So does Portugal by having higher fertility than the rest of Southern Europe. We will return to these issues but note here that 100 million people in Central Europe cannot be treated just as an anomaly. Chesnais (1996) solved the problem by omitting them from his north/south contrasts. Kohler et al. (2002) found a similar solution by concentrating on 'lowest-low' fertility, defined as total fertilities below 1.3, thus just omitting Germany and Austria where total fertilities of 1.3 were to be explained not by higher cohort fertility but by earlier fertility decline.

Advocates of this model, still the predominant one, argue that unnecessarily low fertility is the by-product of industrial policies that militate against the ability of the young to secure employment that offers wages and security comparable with those of older persons, and welfare policies that are inadequate in helping the young to marry early and have children. Other explanations have been put forward to replace or complement the model. Delgado Pérez and Livi-Bacci (1992, p. 171) placed an emphasis on the speed of change in Italy and Spain, with soaring incomes, huge movements out of agriculture, an unusually rapid increase in girls' schooling, and an unprecedented demand for employment by young women. It is true that real income per head multiplied between 1950 and 1998 by about six in Southern and Central Europe and by ten in Japan and Hong Kong, in contrast to the increase in income by a factor of two to three in the previously richer countries, Britain,



the Western Offshoots, and Scandinavia (Maddison 2001). Delgado Pérez and Livi-Bacci see the very low fertility as transitory, as Southern Europe's welfare system adjusts to modern times. Others focus very largely on the speed with which women began to enter the workforce in countries where families were conservative in their attitudes to sex equality. Bernhardt (1993, p. 25) states: 'From a feminist viewpoint, it may be argued that the incompatibility of work and motherhood is mainly a consequence of existing gender structures in society and ensuing power relations within marriage. Countries with modified gender structures would therefore seem to stand a better chance of achieving a birth rate near replacement level.' Hakim (1991, 1998) has attempted to modify this picture by suggesting a typical distribution of women, at the time of her analysis and in the countries she analysed, among three categories: 20 per cent in a home-centred category, 20 per cent in a work-centred category, and 60 per cent in an adaptive category (Hakim 1998, p. 138). Priority is given by the home-centred to raising children, while the work-centred are usually content not to bear them. It is the adaptive group who bend to circumstance and presumably would be more likely to bear children if adequately assisted by husbands and governments. Bagavos and Martin (2001, p. 22) present evidence to show that in Germany and the Netherlands mothers stay in the workforce only if well educated.

The competing theory to that of welfare provision is a theory of family structure that implies that welfare changes in Southern Europe may not raise fertility. Its proponents usually compare Mediterranean Europe with Anglo-Saxon countries and Scandinavia, once again avoiding Central Europe. The recognition that the Mediterranean family is different goes back a long time, and dispute usually centres on whether it is converging with the Northern European family. Peristiany (1965, 1976) maintained that basically similar families existed all around the Mediterranean whether Catholic, Orthodox, or Muslim. The close parallel in fertility between Orthodox Greece and Catholic Italy and Spain provides some support for this contention. Goody (1976) seemed to imply that this distinctiveness went back to the Neolithic Revolution, but his 1983 book dates the divergence of Southern and Northern Europe from the era of the late Roman Empire. By 1996 (pp. 13ff.) he is suspecting that Hajnal (1965, 1982) and the Cambridge Historical Demography group had overstated the differences between the family of Northwest Europe and the families of the rest of the world. Certainly, Banfield (1958) found the Italian family different, and to be disapproved of

because it put the interests of its members first and was guilty of 'familism'. Important recent sources have been Kuijsten (1996) on the family dichotomy in Europe, Reher (1997, 1998) on Spain, and Santow and Bracher (1999) who surveyed both Mediterranean and Balkan literature. Reher (1998, pp. 213–4) regards the North–South division in the European family as having been ancient but reinforced by the Reformation.

The major characteristics of the Mediterranean family have been described often, with much of the material concentrating on Italy, especially its South. Bettio and Villa (1998, p. 138) identify the 'Mediterranean path' as 'a family-centred welfare system, a family-biased production system, and a family-oriented value system'. The family is a kind of corporate body, and unmarried adults have a right of their own to live in the family house rather than merely staying on at their parents' sufferance. Indeed it is difficult for them to leave except for marriage. This prolonged stay at home makes children expensive and makes it more difficult for the mother to work outside the home. The unemployed young cannot get unemployment benefits but, as members of the household, they share whatever state benefits their father receives. The family is often likely to be the means by which the young get employment; indeed the family itself is often a business in the service or tertiary sector where children have the first rights of employment. Thus, there is a very limited supply of jobs to be obtained in the non-family tertiary sector and this situation seriously affects the employment opportunities and economic independence of young women. At least in Italy, young adults have achieved a great deal of freedom in the home, which may include an implicit license to bring partners home for sexual activity if their parents are out. This type of residential structure maintains strong sex divisions because domestic work is undertaken entirely by the mother and daughters, and sometimes the grandmother. As a consequence sons expect to do little in the way of housework or childcare when they marry. Young husbands usually live in the neighbourhood of their fathers and married brothers and they reinforce each others' attitudes to sexual differentiation in work. The proportion of employed young adults who obtained their job within the family or through family links is 58–69 per cent in the four Mediterranean countries compared with 18–21 per cent in the Netherlands, Denmark, and Germany (Bettio and Villa 1998, p. 163). Such employment would be unlikely to come the young person's way if he or she had insisted on living alone. This is, however, uncommon: 1 per cent of Spaniards under 30 years of age live alone,

compared with 15 per cent of the French and 20 per cent of the Swedes (Bagavos and Martin 2001, p. 9). In Italy the proportion living outside the family has been falling and, by 1995, constituted only 4 per cent of 15–24 year olds (Dalla Zuanna 2001, p. 144). Kaelble (1989, pp. 14–5), writing from Germany, regarded the two-generational family where children usually left the family well before marriage as essentially Northwestern European (including Germany), in contrast to Southern and Eastern Europe. But Bagavos and Martin (2001, p. 15) revealed that husbands helped wives in the home in Scandinavia, Britain, and the Netherlands, partly in France, but not in Germany or Southern Europe.

Low fertility has been related to changing social, family, and reproductive values, sometimes termed 'post-modern values' (Lesthaeghe 1980, 1983, 1995; Lesthaeghe and Meekers 1986; van de Kaa 1987, 1996, 2001), defined by Lesthaeghe and Meekers (1986, p. 225) as 'tolerance of non-conformism in family formation, and the meaning attached to parenthood'. The proofs presented for these new values were mainly behavioural and hence measurable: rising divorce levels, high levels of premarital sexual activity, and cohabitation especially among the young, many ex-nuptial births, women employed even when children are still babies, and the postponement of births. By 1990 lone-parent families constituted 18–25 per cent of all families in Denmark, Sweden, Britain, and the USA, 10–12 per cent in Germany, France, and the Netherlands, and 5–7 per cent in Greece, Italy, and Spain (George 1996, p. 12). Those believing that one could feel fulfilled while never parenting a child comprised 51–54 per cent by 1997 in Germany and the USA, 40–43 per cent in Britain and Spain, and 27 per cent in France (Gallup Organization 1997). These measures might help to explain declining fertility in Northern Europe, but could not explain the Continent's fertility divide, unless one wished to argue that once Southern European young women kicked over the traces they would more easily combine work and childbearing and thus raise fertility. Some saw the divide as that between Protestantism turning into secularism on the one hand and Catholicism on the other (Castles 1994; Reher 1998, pp. 213–4). In the USA, Rindfuss et al. (1996) argued that American fertility stayed comparatively high because of a strong movement away from the view that young children suffered from their mothers' absence at work, a change that followed rather than preceded women's greater work involvement.

McDonald (2000a, p. 11) put particular emphasis on one aspect of the family, 'gender inequity', which was mirrored also at all levels of society:

... low fertility, as observed in many advanced countries today, is the result of incoherence in the levels of gender equity inherent in social and economic institutions. Institutions which deal with women as individuals are more advanced in terms of gender equity than institutions which deal with women as mothers or members of families. There has been considerable advance in gender equity in the institutions of education and market employment. On the other hand, the male breadwinner model often remains paramount in the family itself, in services provision, in tax-transfer systems and in industrial relations. This leaves women with stark choices between children and employment ...

### **The regional fit of very-low-fertility theory**

In the theoretical discussion we have so far considered, the arguments have usually been based on a comparison between countries or regions with different fertility levels. The process is usually selective and would gain, though perhaps become less clear cut, by being more comprehensive. Accordingly, we now survey the very-low-fertility populations. In searching for reasons for the lowest fertility recorded, one has to be conscious of the date. In the mid-eighteenth century we would focus on England, in the mid-nineteenth century on France, in the 1950s on Sweden, in the 1960s on Eastern Europe, in the 1970s on such Western European countries as Germany and the UK. Even if we rigidly confine ourselves to total fertilities below 1.5 (as in Table 1) there are five different regions: Central Europe, Southern Europe, Eastern Europe, ex-USSR Asia (the Caucasus), and Other Asia (Japan and two special areas) comprising 26 countries. Do the dominant explanations worked out for Southern Europe and specifically Italy and Spain fit these other regions, and indeed do the explanations completely fit all of Southern Europe?

### *Southern Europe*

From the following sources, a clear picture is emerging of the forces that have created current very low fertility in the countries of Southern Europe: for Italy, Pinnelli (1995), Dalla Zuanna et al. (1998), Palomba (2001), Dalla Zuanna and Mencarini (2002); for Spain, Reher (1997), Delgado and Castro Martin (1999), Holdsworth and Dale (1999), Irazoqui (2000), Puy (2001); for Italy and Spain, Delgado Pérez and Livi-Bacci (1992), Billari et al. (2000), Dalla Zuanna (2001); for Greece, Georges (1996), Hondroyiannis and Papapetrou (2001), Symeonidou

(2002); for all Southern European countries, sometimes in a general European comparison, Bettio and Villa (1998), Reher (1998), Bagavos and Martin (2001), Pinnelli and De Rose (2001).

All stress the following features: a spectacular rise in incomes and the emergence of a consumer society; rapid rises in educational levels with girls catching up with boys and a consequent increased demand by young women for employment; household work and childcare undertaken almost exclusively by women thus creating a clash with working outside the home; and the young—especially females—finding it hard to gain employment, and ill-supported by employers or the state in taking time off to give birth or care for children, or in returning to the workplace. On the other hand young adults are welcome, almost forced, to stay with their parents, not only until employed but until married. This situation may be somewhat restrictive but it is much more comfortable than living alone on unemployment relief as is so often the case in English-speaking countries. These circumstances may well encourage some of the young to remain unemployed until a good or secure job is found and an acceptable and (at least in the case of women) an employed spouse is identified. There is evidence that employment hastens a man's marriage but delays that of a woman (Billari et al. 2000). Once married a wife has to undertake nearly all the housework and childcare, as well as providing meals for the families of her husband's brothers and care for the husband's parents, all of whom usually live close by. This makes it hard to work and have a large family, not only when the children are young but also when they continue staying at home as young adults. This is a continuing situation in so far as few marriages end in divorce—10 per cent in Italy, Spain, and Greece compared with several times that proportion in Northern Europe (Pinnelli 1995, p. 82). There is little premarital cohabitation and births out of wedlock are rare. Age at first sexual intercourse in Italy, and possibly elsewhere in the Mediterranean but in contrast to Northern Europe, has risen moderately for men but more steeply for women (de Sandre 2000, pp. 23, 32ff.). Unemployment is greater among women than men and among the young than the old, and is greatest among young women. Employers have little compunction about turning down job applications from women who are or appear to be pregnant or have already had a child. The extended family still expects parenthood from young couples but will now settle for only two children or even one. Ahn and Mira (2001) reported that in Spain, with its low premarital fertility rate, deferred marriage wholly explained the fertility decline.

Some qualifications must be made. Portugal, a Southern European but not a Mediterranean country, fits only loosely into the above description (Bettio and Villa 1998, p. 166) and this probably partly explains its total fertility of 1.5. Cohabitation and ex-nuptial pregnancy are more tolerated in Greece provided that birth out of wedlock does not follow (Symeonidou 2002, pp. 26–7). Women marry earlier in Greece and Portugal, the majority before 25 years of age, than in Italy and Spain. In all these countries, the extended family expects to house young adults whether employed or unemployed or still being educated, and older women expect to look after their grandchildren while their daughters or daughters-in-law are working. There appears to be little demand for unemployment relief payments for young adults or for state childcare facilities for the very young, although a high level of Italian 3–5 year olds attend pre-school (Gauthier 1996, p. 181), and there is little evidence that such assistance would raise the birth rate. On the other hand, there is strong evidence that women's birth strike is caused by employer unwillingness to introduce flexible working hours, and to employ or re-employ pregnant women or those who are mothers. Legislation or pressure on employers could probably help here. So should a continued improvement of the economy from the harsh days of the early 1990s, helped by the fact that wages and employee benefits are still among the lowest in the European Union (*Economist* 2002a). There is also strong evidence that more help from husbands within the home might mitigate the pressure against childbearing, although husbands, after long years of their mothers meeting every domestic need, might well acquiesce instead in settling for a single child. Eventually, social pressure or working grandmothers might lead to change.

Nevertheless, the Mediterranean family will probably continue to be distinctive as it has been for centuries. Indeed, little convergence may at present be taking place as both Billari and Kohler (2000) and Billari et al. (2000) argue. Evidence of its stability is that even in Australia, where Mediterranean immigrants share the same industrial and formal childcare framework as people originating in Northern Europe, convergence has been slow. The rates of in-marriage among Australian Greeks and Italians have consistently been considerably higher than for those of Northern European origin (Price 1994; Penny and Khoo 1996). Australian Greek girls and young women are constantly, and largely successfully, harassed not to take up Northern European sexual mores, and, although there is some resentment, there is also conformity to their own traditions and even

pleasure that the family cares for them and will continue to embrace them (Packer et al. 1976). All Southern European families are prepared to have low fertility and, if necessary, to settle for a single successful child (Santow and Bracher 1999), and, by 1987–91, the total fertility of Australian Greeks was 1.5, and of Australian Italians and Yugoslavs 1.6, compared with 1.8 for the native born (Abbasi-Shavazi and McDonald 2002, p. 61).

### *Eastern Europe*

The decline to very low fertility in Eastern Europe and the former USSR began in the early 1990s, and became precipitous in the late 1990s, with laggards after 2000 (see Table 1). They now form the majority of very-low-fertility countries both in number and combined population, and, apart from the two cities now termed Chinese Special Administrative Regions, include the three lowest-fertility countries in the world, the Czech Republic, Ukraine, and Armenia, all with total fertility of 1.1. Until now comparatively little attention has been paid to the causes of their fertility decline, and almost none to whether they fit into the Southern European very-low-fertility model. The explanation may have been merely the belief that this was a reaction, perhaps temporary, to a fearful crisis. Sources used here in seeking explanations for fertility change include the following: for East Germany, Eberstadt (1994), Witte and Wagner (1995), and Conrad et al. (1996); for the Czech Republic, Kalibová (2001) and Rychtaříková and Kraus (2001); for Hungary, Kamarás (1999); for Bulgaria, Philipov (2001); for Latvia, Zvidrins et al. (1998); for Poland, Holzer and Kowalska (1997); for Armenia, DHS (2001); and for Eastern Europe as a whole, Standing (1996) and Sobotka (2001).

In one sense, that of changes in real income per head, the Eastern European crisis remains very variable. Maddison (2001, p. 185), employing fixed US dollars on a parity purchasing power basis, showed that between 1990 and 1998, although average income in the old USSR had fallen by 43 per cent, that of the rest of Eastern Europe was at about the same level at the end of the decade as at the beginning. There were exceptional cases in both areas. In the ex-USSR, Georgia's average income had fallen by 64 per cent and that of Ukraine and Moldova by 58 per cent. In Romania, Bulgaria, and ex-Yugoslavia it had declined by only 15–22 per cent, while the Czech Republic and Hungary altered little and Poland's income rose substantially. What is noteworthy is that the extent of average income change

had little association with fertility, for in nearly all cases total fertility plummeted to the 1.1–1.3 range (see Table 1). This means that, if economic factors are important, we must look for other changes such as increased job insecurity and unemployment, a changed distribution of incomes, the loss of benefits for those newly married or newly pregnant, and a marked rise in the cost of health and educational services. Eberstadt (1994, p. 150) wrote that 'the path back from Communism is *terra incognita*' and that the 'transition to a liberal market order might be expected to entail far-reaching, often traumatic adjustments . . .'. He supported the argument of trauma in East Germany by attempting to demonstrate steep rises in mortality (p. 146) even though there (alone among Eastern European countries) health services had actually improved because of immediate coverage by West Germany's system (p. 149). Later analysis of more complete data showed that the mortality rise had not occurred (Conrad et al. 1996, p. 332). We shall argue here that the fertility declines in Eastern Europe and the former Soviet Union were a rational adjustment to a new situation and may prove to be partly transient.

Standing (1996, p. 230) reported that the crisis in Eastern Europe had been caused by the removal of the three pillars of the former system: guaranteed employment from the time when full-time education was complete, social protection by stable low prices achieved through government subsidies, and enterprise-based social benefits, mostly in the form of goods and services. The sudden changes were shaped by international financial agencies that, even if they were not trying to traumatize the populations, believed in 'shock therapy' for previously 'overprotected populations' (Standing 1996, pp. 230–1). The preceding protection included massive assistance, especially after low fertility in the late 1960s and 1970s, to encourage early marriages and childbearing. Sobotka (2001, p. 2) described this as a totally distinct social system characterized by 'limited opportunities, uniformity, and a high degree of "familism"'. The latter had historical roots but it had been furthered by cheap formal childcare, progressive child payments, and housing linked both to childbearing and to marriage (pp. 25ff.). It was this system that kept the average age of women at first birth in Eastern Europe at 23 years during the 1980s while that in the rest of Europe rose from 25 to 28 years (p. 10). As the system was dismantled in the 1990s, ex-nuptial births rose to Northwestern European levels. Non-marital pregnancy levels rose even higher, but those pregnancies that were not aborted were usually followed by marriage, thus limiting the

rise in marriage age but placing great stress on not having a second child (pp. 10ff.). Throughout the region there is anxiety over the future, especially about employment prospects for males and females, but also about the health, education, housing, and other costs that children will incur. There appears to be little employment discrimination against women who are pregnant or have children, and instead a tradition of their returning to the workforce.

We will now fill out this picture, starting with the case of East Germany which, although different in many ways, is the best documented. The East German government, in an at least partly successful attempt to raise the birth rate, provided massive assistance to young married couples, especially if they had children, and even to unmarried women who bore children. By 1989, the state paid around 80 per cent of the costs of children, through such direct and indirect measures as childcare, holiday facilities, and many subsidies (Ostner 1997, p. 39). With the birth of a child a young woman could obtain an apartment, and, with comprehensive childcare, enter the labour force or continue her education (Witte and Wagner 1995, p. 393). In contrast to the position in West Germany, the 1949 constitution prohibited discrimination against illegitimate children, and subsequent legislation such as the 1950 *Law for the Protection of Mothers and Children* emphasized non-discrimination as one of its guiding principles. With unification, the generous support for single mothers disappeared, maternity benefits for all declined sharply, the organized childcare system disappeared, employment conditions became less flexible, unemployment levels soared, and workforces were put on shortened hours (Witte and Wagner 1995, p. 394). By 1994 the marriage rate had fallen by 57 per cent and total fertility by 51 per cent. Eberstadt (1994), Witte and Wagner (1995), and Conrad et al. (1996) tend to regard these changes as a rational reaction to a change in economic regimes. The ages at marriage and first birth moved upward toward those of West Germany. Total fertility fell below that of West Germany, but, given that it had earlier been higher, it is not yet certain that completed cohort fertility will be lower.

The situation in, and explanations for, the rest of Eastern Europe are similar, except that these countries do not have the economic and social guarantees that came automatically to East Germany by its fusion with rich, stable West Germany. The Czech Republic is an interesting case because external investment—mostly German into a neighbouring country with a tradition of good workmanship—meant that incomes actually rose and unemployment

was minimal. Nevertheless, there was a fear of greater unemployment and a deep apprehension about the loss of certainty of continued employment. Family benefits were abandoned in 1990 to be partly restored in 1995. Rychtařiková and Kraus (2001, p. xi) explain the fertility decline as being a reaction to ‘the new phenomenon of unemployment and an appalling—and until quite recently unknown—feeling of uncertainty and insecurity’. In Hungary, state help at the start of marriage and childbearing, especially in the form of housing, had produced a ‘baby boom’ for several years from the mid-1970s, but even before 1990 there was some drop in fertility rates and a rise in divorce rates and cohabitation (Carlson and Omori 1998; Kamarás 1999). Thereafter, marriage and fertility rates collapsed. Poland, in spite of its large Catholic population, has followed a similar path, with rapid fertility decline during the 1990s and a rise in ex-nuptial births as marriage prospects became bleaker (Holzer and Kowalska 1997).

The situation was more acute in those countries where income levels had fallen more steeply, but the fall in fertility was similar. Philipov (2001) provides an interesting description of Bulgaria, where in the 1960s and 1970s pronatalism had taken the form not only of help to young married couples but also of an effort to change mindsets. ‘There were attempts to create intolerance toward couples who had no children or had only one child, as well as toward unmarried persons. These groups were characterized as “consumerists”, and they had to pay a “bachelor tax”’ (Philipov 2001, p. 17). After 1990 the pronatalist policies collapsed, child allowances were rendered almost worthless by inflation, and charges rose steeply in the previously low-cost nurseries. Armenia experienced a similar collapse in health and care facilities, as well as in employment, and, like the other trans-Caucasian state, Georgia, it experienced a steep fertility decline (DHS 2001, pp. 4, 56).

Zvidrins et al. (1998) present a revealing portrait of Latvia, a country originally predominantly Protestant with substantial Catholic and Orthodox minorities. Before its incorporation into the USSR in 1940, it was characterized by late marriage and substantial birth control; indeed, the Lutheran north and west had achieved a net reproduction rate of one by 1914 (Zvidrins et al. 1998, p. 14). After 1940, with the adoption of Soviet social services, the proportions marrying increased and the age at marriage fell, and pronatalist measures in the 1980s lifted fertility above long-term replacement level. After 1990, average income fell more steeply than anywhere else in Eastern Europe and in 5 years the number of employed persons declined by 18 per cent (pp. 3–5).

Abortions exceeded births. Zvidrins et al. concluded: 'Naturally, in a period of economic crisis, values related to the subjective appreciation of life and most indicators of demographic development have been falling. Marriage and fertility rates have dropped very sharply' (p. x).

The situation in Eastern Europe has some ingredients of socio-economic shock but what has happened is an enormous transformation in the populations' circumstances, a rapid change from a super-welfare state with guaranteed employment to regimes of particularly liberal economics. The reaction has been to halt or postpone marriages and births. Marriage age is moving towards 30 years as in much of the rest of Europe, use of contraception is increasing, and abortion levels remain high. In short, Latvians have moved to marriage ages and proportions that the rest of Europe has found to be required in an age of liberal economics. Because the situation is new there is a greater feeling of insecurity than in the West, even in former Czechoslovakia and Hungary where the economic collapse has been limited and where there are attempts to rebuild some of the welfare state. The ancient familism of Eastern Europe, reinforced by Communism, is splintering. Because of the quick transition from moderate to very low fertility it is not certain how far completed cohort fertility will go below replacement level but it may need faster economic growth and the rebuilding of some of the welfare state to reverse the demographic situation.

The complexity of the situation is revealed by recent micro-economic research on the Russian situation by Kohler and Kohler (2002), which shows that unemployed women or those in areas of exceptionally high unemployment are the most likely to bear a child. Although the authors appear to think that this is at odds with the insecurity explanation of low fertility, it may merely mean that those with a job are terrified of pregnancy, while those who judge that it will be long before there is an employment opportunity conclude that childbearing should take place before it conflicts with holding down a job.

### *Central Europe*

The greatest test of low-fertility theory is provided by Central Europe: West Germany, Austria, and (and especially the German-speaking majority in) Switzerland. These are among the richest populations in the world, with, in the 1980s, low unemployment and only moderate change towards further liberalizing their economies. That change had been slowly proceeding and there had been no great social and

economic jolts since the period after the Second World War, which was characterized by rising fertility with total fertility reaching 2.5 in Germany and 2.8 in Austria in the 1960s. Nevertheless, they were the first populations to attain very low fertility (see Table 1), and have been close to that situation since the early 1970s. Germany's cohort fertility is probably the lowest in Europe (Prioux 2002, p. 721). A central question is how their society and welfare systems differ from those of the rest of Northern Europe where moderately low fertility prevailed. Their near omission from theoretical analysis of the causes of very low fertility justifies a disproportionate concentration here.

Reher (1998), drawing partly on Hajnal (1982), concluded that there were individualistic societies in Northwest Europe and familial ones in Southern Europe, and that Germany and France were intermediate between the two (Reher 1998, p. 212). Although holding that some differences went back a millennium or more, he stressed the importance of the Protestant Reformation, with Germany split and France secularizing, and regarded the Industrial Revolution both as a product of the Reformation and as strengthening its effect on socially differentiating Europe into a North and a South (p. 214). Delgado Pérez and Livi-Bacci (1992, p. 162) pointed out that pre-transitional fertility levels in Germany, as well as in Belgium and the Netherlands, had been higher than those not only of Sweden, Denmark, and Britain but also of Italy and Spain. Among European migrants to Australia at the beginning of the twentieth century, the German and Irish arrivals alone were shown by the census to be maintaining high fertility (Coghlan 1903).

The family has long been the cornerstone of German society and the institution of marriage was long considered sacrosanct. Both were enshrined into the 1949 *Grundgesetz* (Basic Law), in the only sections not drafted by the victorious Allies. The Christian Democrats formulated Article 6, which places marriage, motherhood, and the family under state protection. Article 6(5) states that illegitimate children should receive the same opportunities as legitimate children, but does not offer them equal rights. These articles rest uneasily with the socialist-inspired Article 3(2) giving women equal status with men. This contradiction in the constitution was for long unresolved and implicitly maintained sex differences.

The state stressed conservative family values, a response to the abuse of the family under the Nazis (Lawson 1996, p. 35), and the perception that the family as repository of German values was at risk.

Newly found female emancipation, as well as long separations, difficulties of post-war reunions, and a large number of non-returning soldiers fuelled the notion of a 'family crisis' (Moeller 1995, p. 150). The state regularly focused its efforts on married women at the expense of unmarried women. Evidence for this mindset is found in a number of pieces of legislation such as the 1950 Housing laws offering housing only to married couples. The large *Frauenüberschuß* (female surplus) at the end of the Second World War did not condemn a whole cohort of women to be without a husband, for by the early 1960s three-quarters of women born between 1915 and 1925 were married. Heinemann (1999, p. 211), however, contends that the surplus of women had a 'dramatic influence on single women's life-style'. The Civil Code was brought into line with the Basic Law in 1969 with the introduction of the *Gesetz über die rechtliche Stellung nichtehelicher Kinder* (Illegitimate Children's Act).

Arguably, by addressing social inequalities between various types of families, West Germany's welfare provisions benefited only low and high-income earners, not the middle-class majority (Ostner 1997, p. 41). Kaufmann (1993, p. 151) maintains that this significantly contributed to lower fertility. Family policies were purposively Christian, formulated by Christian Democratic administrations which governed for most of the past half-century (Lawson 1996, p. 32). Successive governments felt it was inappropriate for them to intervene in marriage and family issues. As a result childcare is scarce and expensive, employers do not provide flexible working hours, and the restriction of school hours to mornings only means that childcare problems stretch into school-going ages (see Huinink and Mayer 1995, p. 195). Eligibility rules for *Kindergeld* (child support), for example, changed. When it was first introduced in 1954 only those with three or more children were entitled. In 1961 this was changed to include two children and in 1975 to one (Köhler and Zacher 1981, pp. 147–8). The significant changes were in place before very low fertility was attained. Chesnais (1996, p. 736) described this as 'a socio-psychological environment . . . not conducive to childbearing'.

There is no parallel to the rise of ex-nuptial births in the rest of Europe north of the Alps, partly because of restricted welfare payments to single mothers. Esping-Andersen (1996, p. 68) described Germany and Italy as the extreme examples of the 'Southern Europe [or Catholic] social welfare model' in contrast to the universalistic system of Britain and Scandinavia and the partly universalistic systems (at

least in terms of child allowances) that developed in France and Belgium.

Certainly West Germany's fertility was low, with the 1950–54 birth cohorts of females having Europe's highest level of childlessness at 21 per cent, and with 48 per cent having 0–1 children compared with 27 per cent in Norway, 29 per cent in England and France, and 31–34 per cent in Sweden, Denmark, and the Netherlands (Bettio and Villa 1998, p. 153). Heilig et al. (1990) described modern Germany's fertility as having a 'turbulent past, uncertain future', yet despite their German and Austrian nationalities, they offered no explanation. German cultural practices encourage women to care for children aged under 3, rather than seek employment. This poses problems for those mothers wishing to work and needing care for children under 3 years of age (Ondrich and Spiess 1998), and, in spite of those who draw parallels between Germany and Italy, there is in Germany no equivalent of the Mediterranean extended family expecting and expected to look after young children of working mothers. Childcare for children under 3 has long been in short supply (Schaffer 1981, p. 103; Kreyenfeld and Hank 2000, p. 321), and this remains a reason why women do not have children. Until the 1970s, only a limited number of pre-schoolers attended kindergarten and studies suggested that low-income families used them least. As most kindergartens were non-public institutions they were either too expensive or as cooperatives required the mother to help as a part-time volunteer (Schaffer 1981, p. 103). Since then there have come into being many more places run by local communities, but still not enough of them to meet demand (Kreyenfeld and Hank 2000, p. 334). Nevertheless, in recent years welfare payments have risen, especially those paid to religious and other organizations to provide childcare.

Germany, then, has a welfare and social system that does not make it easy for women to combine work with motherhood. However, there is evidence that the decision to have a second child depends less on the wife's characteristics than on those of the husband, so that it is couples where husbands are more qualified and better providers that go on to have a second child (Kreyenfeld 2002). Bagavos and Martin (2001, p. 22) add that German mothers remain in employment only if highly educated. This suggests that very low fertility in Germany is related to an orientation toward a consumption society with the lifestyle of the married couple being paramount, although there has been a skewed welfare system that offered assistance for educated mothers. It is possible that both Germany and Austria are unique in that

their long period of insecurity on the frontier of the cold war led to a 'live for the present' mentality. Their marriages are essentially partnerships of the Northern European type that, in a consumerist age, can be regarded as a family even without children. So it is possible that the Germanic pattern may be typical of future very affluent countries.

### *Northwest Europe and the English-speaking world*

The models explaining very low fertility in Europe depend upon a comparison between very low fertility in Southern, Eastern, and Central Europe and higher fertility in Northwest Europe and the English-speaking European Offshoots. The dividing line is not clear cut: in 2002 total fertility in Canada was 1.5 and in Britain and Sweden 1.6. These are lower levels than in some countries with intermediate-type families or welfare systems: Belgium and the Netherlands 1.7 and France 1.9 (Population Reference Bureau 2002). There is a clearer comparison with the total fertility of Australia 1.7, New Zealand 2.0, and the USA 2.1, but the latter two incorporate the higher fertility of the indigenous minority and recent Hispanic immigrants, respectively. The explanation given for higher fertility in Scandinavia is support for unmarried mothers, good and cheap childcare services, and the fact that the first pregnancy often occurs outside marriage (see Granström 1997 on Sweden; Cameiro and Knudsen 2001 on Denmark; Frejka and Calot 2001 on Scandinavia). The explanation implied for the English-speaking countries is partly a universalistic welfare system, although that argument is hard to sustain for the USA (Myles 1996). Perhaps more important is the implication that their economies are more liberal both in the changes that occurred over the last three decades and in a tradition stretching back to Adam Smith and David Ricardo. This system at present provides lower unemployment and a greater chance of the young finding jobs. Yet there is an anomaly here because the application of liberal economics has been blamed for causing greater uncertainty and hence lower birth rates everywhere. One could argue that this uncertainty now characterizes English-speaking peoples for a working lifetime in contrast to the relative security of Central and Southern Europe once a secure job is obtained, or that their populations have become inured to being economic and demographic risk-takers. France remains a problem for the model builders. Its labour structure is fairly rigid and current unemployment relatively high, but it has moderately

high fertility, perhaps explained by single-parent allowances, means-tested housing assistance, paid maternity leave, and subsidized childcare (Toulemon and de Guibert-Lantoine 1998, pp. 17–8).

### *Asia*

The development of models to explain very low fertility has been further confused by the attainment of such levels in non-Western societies—Japan, Taiwan, Hong Kong, and Macau (with South Korea's total fertility at 1.5). The explanations tend to mirror those for the Mediterranean except that none of these societies has experienced the trauma of high unemployment levels. In contrast, it is the availability of female employment that has provided explanations.

Most of those explanations have concentrated on Japan. Retherford et al. (2001, p. 65) focused on the rising age of marriage: the singulate mean age for the marriage of females (SMAM) was stable for about 20 years before 1975 at around 24.5 years and then rose in the next 20 years by 3.2 years to 27.7 years, while over the same period the SMAM for males climbed from 27.6 to 30.7 years. By 1995 5 per cent of women and 9 per cent of men were remaining unmarried for at least their reproductive lifetimes and these figures were likely to rise to 10 and 20 per cent, respectively, by 2010 (Retherford et al. 2001, pp. 69–70). These changes were driven by huge increases in the proportion of women working before marriage, from 50 to 96 per cent between 1955 and 1995, and the proportion working for pay from perhaps 30 to 90 per cent (pp. 79–81). These changes in turn were the product of massive urbanization and a steep increase in education, among females from 7 per cent completing either junior college or university in 1965 to 40 per cent in 1997. Retherford et al. (1996, p. 25) concluded that 'Many of the more important value changes affecting fertility are bound up with major educational and job gains by women, which have led to greater economic independence and increasing emphasis on values of individualism and equality between the sexes.' By 2001 Retherford et al. had drawn the conclusion that the rising age of marriage for women in Japan could be attributed to the collapse of arranged marriages, the increasing acceptability of premarital sexual relations for females, and the fact that single women (and men) could continue to live in the parental family home and enjoy a good lifestyle. The increased sexual freedom did not extend to cohabitation and extramarital births (Dalla Zuanna et al. 1998, pp. 187–8).



As in the Mediterranean too, but perhaps even more so, Japanese women receive little help from husbands in household maintenance and childcare, so there are advantages in the postponement of marriage or its non-occurrence (Tsuya and Mason 1995, p. 162).

Japan's social welfare system was originally fashioned after that of Bismarck's Germany and has been sustained by a strong feeling that the multi-generational family should be the main provider of welfare. This is the model now adopted widely in Asia, notably in Japan, Taiwan, South Korea, Hong Kong, and Singapore, where a full welfare state is seen as essentially a Western necessity (Goodman and Peng 1996, pp. 200–4). It is noteworthy that very low fertility was postponed in Singapore and probably avoided in Malaysia by government exhortation and action.

### **Toward a comprehensive theory of very low fertility**

As industrialization spreads and incomes rise, the evidence grows that rich, highly urbanized and educated countries with few families working in agriculture may not reproduce themselves. Simply, the family is no longer the production unit. The explanatory models showing why the postmodern values of Northern Europe led to low fertility, and how the high rates of unemployment among Italian and Spanish young adults did the same, are impressive. But Northern Europe is now being used, somewhat dubiously, as an example of relatively high fertility, and the fact is ignored that the huge mid-1990s unemployment differentials between Spain (and, to a lesser extent, Italy) and Northern Europe have largely disappeared (*Economist* 2002b). They may never return, for demographic reasons: in Italy, for example, new entrants to the labour force constituted annually about 2.5 per cent of the total in 1960 and 1.5 per cent in 2000, compared with a probable 1.0 per cent in 2030, while their ratio to retirements for those three dates can be calculated as 2.1, 1.0, and 0.9 per cent, respectively (United Nations 2001b).

Too many problems arise from using a single model based on welfare systems or family type. Central Europe and Japan do not easily fit the Italian model, and the fertility differential between Northwestern Europe and the rest of Europe is too small to be taken very seriously. Perhaps what needs explanation is the curiously high fertility of the USA, and even that may be largely ascribable to a highly fertile immigration stream from Latin America.

It is clear that rich, well-educated, urbanized

countries do not necessarily exhibit replacement-level fertility, and many may never do so again. Consumerism, a focus on job satisfaction, increasing need for dual incomes, a perception among many young people that raising children is simply too expensive, and a tendency for partnering rather than parenting to provide the family core are likely to reduce fertility. Better contraception and easier access to sterilization and abortion have provided the means for achieving any level of fertility, no matter how low. The population debate of the second half of the twentieth century provided the young with justification for not replacing themselves. Fertility has not been declining particularly smoothly, but then forces supporting replacement fertility are no longer strong enough to resist sudden crises. All young adults were affected by the contraceptive and attitudinal revolutions of the 1960s. Most were jolted by the economic crisis of the 1970s and have been left insecure by the liberal economic revolution that attempted to answer that crisis. This solution, together with the continuing integration into the European Union, led to widespread unemployment in Southern Europe as did the even more severe economic solutions that provided shock therapy for post-Communist Eastern Europe. Some of these crises may prove to be temporary, but fertility is unlikely to return to the pre-crisis level. One guarantee of that is the probable survival of liberal economics, seemingly necessary to provide the continuing economic growth expected by all societies, and the associated limitations placed on the welfare state and the consequent widespread feeling of insecurity among young adults. And young adults are not more likely to be listened to by politicians, as the fertility decline ensures that they are a diminishing proportion of the electorate. The new economic order is unlikely to divert the proportion of national income that Eastern Europe found necessary to raise its fertility modestly in the 1970s and 1980s. It is possible that the temptations of the consumer society, a sufficiently emotionally fulfilling partnership between husband and wife, and societal insecurity arising from the Second World War with a long subsequent period next to the Iron Curtain are all that is needed to explain Germany's descent into very low fertility.

It would be unwise to overemphasize sexual or generational conflict in the path to overcoming very low fertility. Mediterranean and East Asian husbands are probably more reluctant to undertake housework and childcare or to forgo their wives' earnings than they are to argue for more children. Similarly, parents are often more likely to take pride in their daughters' successful careers than to demand grandchildren.

In the long run Davis and van den Oever (1982, p. 511) may be right in stating that a social order that does not reproduce itself will be replaced by another, and it may be, as Westoff maintained (1983, p. 103), that some institutional solution will emerge. If the required major institutional change occurs it will probably do so only as the result of promoted national hysteria about the passing of peoples and cultures and the dire consequences for national security, accompanied by fairly lucrative rewards for childbearing. This is not at all certain, since conservationists' claims, with varying degrees of proof, of an overuse of resources or deteriorating lifestyles may provide sufficient offsetting resistance.

At present, there is little public consensus on whether low fertility is a concern and how best to confront it, if at all. A study for the years 1998–99 of 417 newspapers and magazines in 11 countries (USA, UK, Australia, New Zealand, Germany, Austria, Switzerland, France, Spain, Italy, and Japan) showed that as yet there is only limited discussion of low fertility, but more on the impact of women working, changing lifestyles, limited government support for families, and controversy about the move towards liberal economics (Stark and Kohler 2002). People used to living for the here and now may have difficulties appreciating the long-term consequences beyond their immediate horizon.

Furthermore, if the explanations provided by the Mediterranean, largely the Italian model, centred on patriarchy and the breadwinner, are correct, then the tendency to fall below replacement-level fertility as incomes rise will eventually occur throughout much of the rest of the world because patriarchy is widespread throughout Asia and Africa.

More generally, a global economy governed by liberal economics creating a high degree of economic individual insecurity may be incompatible with societal replacement. Cohort fertility levels are quite likely to move to ever-lower plateaux, each transition being governed by some severe shock to the system. The mechanisms may be ever fewer couples planning to have more than two children, some deliberately remaining childless or settling for one child, but more failing to achieve a two-child family because of intervening temptations for education, occupational advance, travel, companionate pleasures, or expensive housing.

There are too many different groups of countries with very low fertility and different specific explanations for their situations for us not to conclude that there must be a common deeper explanation for all their conditions. Over-arching conditions common to all developed countries determine fertility decline,

but local and sometimes transient idiosyncrasies shape the timing and tempo (see Watkins 1990). That explanation at its broadest must be the creation of a world economic system where children are of no immediate economic value to their parents. Related integral factors include, among other things, rising educational attainment for women and labour force participation. Yet, differences at the national level in legislation, policies, and the response of the population to these institutional settings, as well as family structures, partner relations, childcare expenses, and attitudes towards children determine the shape of the decline. Certainly at present the situation is aggravated by many peoples feeling the cold blasts of liberal economics to a greater extent than previously, but the acceptance of liberal economic policies is largely the outcome of the decision to award economic growth a higher priority than demographic growth. It may be a system to which the world will adjust, much as it is claimed the Anglo-Saxon world has.

The broadest explanation would echo the 1937 view of Kingsley Davis (1997) that ultimately the reproduction of the species is not easily compatible with advanced industrial society. This is a consequence of that society's rewards in the form of a career for women outside the home and the almost measureless temptations of the modern consumer society. The example of the richest countries, and the impact of modern advertising in the context of a global economy and a near-global political system, makes people in poorer countries yearn for the same possessions, especially motor cars, often giving the desire for such possessions priority over children. There is an extraordinary simultaneity in the contemporary world. Children do not easily fit in with a great deal of travel, and the entertainment they provide can be replaced by the electronic media and other pleasures. Yet couples will probably continue to regard two children as 'ideal', partly because they provide a unique and different kind of fulfilment, and usually admire even parents who make little impression on their peers. There is an awareness too that children will ultimately build up a network of relatives, the only adequate network many people may possess; and that, even in a well-insured welfare state, children may be needed in old age for company as well as physical and financial assistance. These advantages may prove to be sufficient to raise fertility to replacement level or higher in nationalistic states facing declining numbers and with a mandate from their electorate to spend hugely to overcome the difficulties faced by women or couples who want all the modern world

can provide but who, if that provision can be maintained, are willing to have children as well. This time may not come for decades but it is likely that proto-types will begin to develop.

## Notes

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