The Idea of a Second Demographic Transition in Industrialized Countries

Paper presented at the Sixth Welfare Policy Seminar of the National Institute of Population and Social Security, Tokyo, Japan, 29 January 2002

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1. The basic idea

At the end of the 19th century several French scholars noted that a remarkable change was taking place in the population of their country. The number of children per family declined, clearly as the result of deliberate efforts to reduce fertility within marriage. It was soon understood that the voluntary limitation of marital fertility was a revolutionary novelty and the term 'demographic revolution' was, in fact, the original term used to describe it. Efforts to explain what was happening began almost immediately. Interestingly enough these first explanations assumed the phenomenon reflected what people wanted out of life. Dumont (1890:130) argued that the desire to be upwardly mobile was the root cause. When climbing the social ladder having a large family would be, no doubt, a hindrance. Dumont concluded that, as a result, the birth rate would decline as social mobility increased. Other French authors, such as Leroy-Beaulieu (1896) and Landry (1909) attributed it to changes in the moral order. Towards the end of the Second World War, and also after it, American scholars took de lead in the discussions about the demographic changes that were taking place. As a result the explanations preferred became more economic in nature and the term 'transition' replaced the term revolution. The changes in demographic behaviour were considered to be mainly a function of progress in society (Kirk, 1944:28). Notestein (1945), who played a crucial part in the formulation of the demographic transition theory, stressed the overriding importance of mortality decline and the impact of the modernization process in people's lives and in society as a whole. He concluded that the demographic transition was likely to be a universal phenomenon; all countries were bound to pass through it once they had achieved the level of development required.

It was understood by all knowledgeable people that the decline in fertility was an adjustment made necessary by the decline in mortality. The latter had resulted in unsustainably high levels of natural population growth. The long-term demographic balance had been upset; consequently a new balance had to be established at low levels of both mortality and fertility. The very appealing assumption was that we would move from one long-term quasi-equilibrium to another. As Bongaarts recently stated in a paper (2001:260):

'If fertility in contemporary post-transitional societies had indeed levelled off at or near the replacement level, there would have been limited interest in the subject because this would have been expected.' He then continues as follows: 'However, fertility has dropped below the replacement level -sometimes by a substantial margin- in virtually every population that has moved through the demographic transition. If future fertility remains at these low levels, population will decline in size and age rapidly.'

The basic idea behind the concept of the Second Demographic Transition as launched in 1986 is that industrialized countries have indeed reached a new stage in their demographic

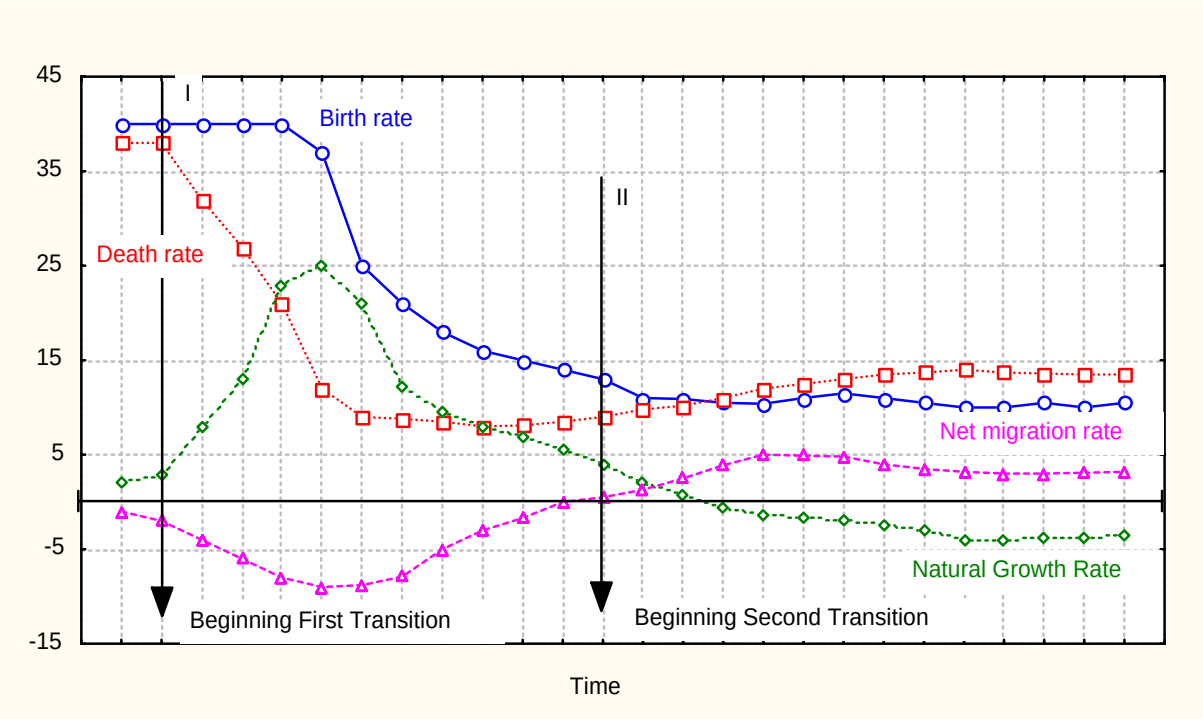
development. A stage characterized by full control over fertility. And, as couples appear to lack the motivation to have more than one or two children, fertility declined below replacement level. While there may be an element of postponement of births involved in the very low levels of fertility currently observed, signs are that fertility will continue to stay at a level below that required for the replacement of generations. This will result in a new demographic imbalance. The effects of this new imbalance are already becoming visible. The gradually increasing disequilibrium apparently generates a compensatory trend in the third demographic factor of the classical demographic balancing equation: migration.

If now asked to define the essential difference between the first and second demographic transitions, I would simply say that while the first, the traditional demographic transition, was a long term consequence of the decline in mortality, the second transition should be interpreted as a consequence of fertility declining way below the levels long thought plausible.

2. A model of two successive demographic transitions

To illustrate the processes involved I have proposed a model of the two successive transitions. It has some novel features.

Figure 1. Model of First and Second Demographic Transitions



Source: Van de Kaa (1999)

It should, first, be noted that the part of the model which relates to the classical, if one so wishes, the traditional demographic transition, differs from earlier sketches in that (international) migration has been included. While earlier models simply showed that growth rates were increasing rapidly when the death rate declined and the birth rate was slow to follow, they omitted to indicate that during that period of rapid growth the European

populations fanned out over the world and populated ‘new worlds’. Jean-Claude Chesnais, who has presented one of the nicest of the models thus simplified (Chesnais, 1986), did in fact calculate himself that between 1846 and 1932 in excess of 50 million migrants left Europe to settle in the United States, Canada, Latin America, and Oceania. Evidently, international migration, served as a safety valve to release some of the pressure on resources caused by far too rapid population growth on the continent. At the same time the continent was in turmoil for a great many years. The two successive world wars (1914-18) and (1939-45) which initiated here have, hopefully, been the last manifestations of this quest for hegemony.

The sketch of the second transition which has been added to the model of the first is, obviously, largely prospective. No one can be sure what the future will look like, but when one builds on experience to date, a plausible conjecture can be developed. The assumptions underlying the second part of the model are that in the industrialized countries experiencing the second transition the death rate will exceed the birth rate for quite some time to come. This because the former will further increase as a result of the ageing process, while the latter will remain low as a consequence of the fact that the number of women of reproductive age will be comparatively small and the number of children born to them will, most likely, remain below replacement level. Three decades of fertility decline have already affected the age structure of most industrialized countries to a noticeable extent. In Western Europe labour shortages in a number of industrial sectors occurred during the 1960s. These were resolved through the recruitment of guest workers, mainly from Southern Europe, Turkey, and Morocco. Contrary to what the policy makers of the time had envisaged, most of the guest workers had come to stay. In fact, through the practice of family reunification a steady stream of new entrants joined the migrants already present. Immigration became even more of a determinant of population growth when, from the early 1990s onward, the number of applicants for political asylum rose to unprecedented high levels. Many countries have taken steps to curb their number but, on the whole, with limited effect. Moreover, illegal migration has gained in importance. The following assumption underlies the migration curve in the model of the second transition: advanced industrialized countries will, for a very long period to come and whether they like it or not, be countries of immigration. They will, individually and jointly, attempt to keep the influx of migrants under some sort of control. Net migration in the most industrialized countries of the world is, consequently, assumed to remain positive but fairly modest. Thus, the influx of migrants, whether they come in the guise of internationally recognized refugees, tourists overstaying their visa, asylum seekers, undocumented migrants brought in through trafficking, seasonal labourers, or as economic migrants allowed entry under an official immigration scheme, will be a crucial factor in their population structure and growth.

3. First use of the concept ‘Second Demographic Transition’

The idea that the countries of Western Europe, and, *mutatis mutandis*, the other industrialized countries of the world, were facing a new stage in their demographic history, was first suggested by Lesthaeghe and myself in 1986. In the summer of 1985 the Editors of the leading sociological journal of The Netherlands *Mens en Maatschappij* invited me to act as guest editor of a special volume on the demographic situation in the Low Countries. They

further suggested that I seek the co-operation of Ron Lesthaeghe of Belgium in that endeavour. That was both fortunate and sensible; the book issue was to be published in Dutch, the mother tongue of both of us, and together we could easily cover both of the Low Countries: Belgium and the Netherlands.

We prepared the outline of the volume and decided upon the list of potential contributors during an intense half day of discussions in Brussels (29 August 1985). To our growing amazement and excitement we noted that in both countries almost every variable in the field of fertility and family formation had undergone very significant changes since the mid-1960s. It seemed as if a new transition had been taking place under our very eyes! We toyed with that concept for a while and agreed we would use the term 'second transition' in the title of our introductory chapter to the volume, but then with a question mark (Lesthaeghe and Van de Kaa, 1986: 9). We were not sure, and we did not want to hide that uncertainty.

It so happened that toward the end of the same year a further request arrived. It came from the Population Reference Bureau in Washington DC: 'Could I write a bulletin on the demographic situation in Europe?' I agreed, and during 1986 I spent a great deal of time editing chapters for the volume on The Netherlands and Belgium and drafting the bulletin on the whole of Europe. By the time I submitted the manuscript to undergo the careful editorial process of the Bureau, I had become sufficiently certain of the matter to argue that *Europe's Second Demographic Transition* should be the bulletin's title (Van de Kaa, 1987).

4. Germination of the idea

To place the previous paragraph in proper perspective it should be noted that the idea about a new demographic situation in our region of origin did not come out of the blue. Both Lesthaeghe and I were quite familiar with recent literature on fertility change in Europe and, individually, had already contributed comparative papers to it (Van de Kaa, 1978/1980; Lesthaeghe, 1980; Lesthaeghe and Wilson, 1982; Lesthaeghe, 1983; Lesthaeghe, 1985; Van de Kaa, 1985). In our thinking about it, we were greatly indebted to Philippe Ariès and that author's wonderful paper: *Two successive motivations for the declining of the birth rate in the West*. In that paper, first presented at the IUSSP-seminar Determinants of Fertility Trends: Major Theories and New Directions for Research (Bad Homburg, 14-17 April 1980), Ariès argues that something of great significance happened in the mid-1960s which '... brought a renewed decline in the birth rate, which had temporarily stopped dropping and had even begun to rise' (Ariès, 1980:125). In his view the reasons usually ' ...evoked in guise of explanation...' are unconvincing. They are '...too direct, too immediate.'(op. cit.: 129). He then continues as follows:

'The ways people look at life usually are determined by more mysterious, more indirect causes, I feel that a profound, hidden, but intense relationship exists between the long-term pattern of the birth rate and attitudes towards the child. The decline in the birth rate that began at the end of the eighteenth century and continued until the 1930s was unleashed by an enormous sentimental and financial investment in the child. I see the current decrease in the birth rate as being, on the contrary, provoked by exactly the opposite attitude. The days of the

child-king are over. The under-forty generation is leading us into a new epoch, one in which *the child, to say the least, occupies a smaller place.*'

The wording of this passage suggests that the original was drafted in French; consequently some nuance may have been lost in translation. Nevertheless, even if that were the case, it is difficult not to read the last sentence - with italics as in the published version - as heralding a second demographic transition. As an absolute minimum it suggests an important, clearly distinct phase in the classical transition. In presenting this view, Ariès refers to an observation made by Alfred Sauvy - whom he knew quite well - where the latter reportedly stated that *the* important new phenomenon involved in the renewed decline of fertility was that people refused to have an undesired child. If carelessness or an accident results in a pregnancy '... this triggers a violent rejection reaction; an abortion is sought' (op. cit.: 130). Anyone familiar with Sauvy's work (1960) and his characterization of the classical demographic transition as 'an altruistic transition' will recognize that in a further paragraph Ariès highlights another important contrast between the demographic situation before and after the mid-1960s. In the life plans of couples and individuals, so Ariès notes, the child is not absent, but '... he fits into them as one of the various components that make it possible for adults to blossom as individuals '(loc. cit.). In our joint paper Lesthaeghe and I explicitly refer to the work of these two scholars and I paid an obvious tribute to them when in 1987 I wrote that the two keywords which best characterized the norms and attitudes behind the first and second demographic transition were 'altruistic' and 'individualistic', respectively (Van de Kaa, 1987:5).

5. Comparable and parallel ideas

Several comparative studies carried out in the framework of the Committee of Demographic Experts of the Council of Europe had, similarly, alerted the European demographic community to the fact that something exceptional was taking place. As early as 1976 that Committee organised a seminar on the implications of a stationary or declining population in Europe. In the preface to the published volume of papers Grebenik states in so many words that the sharp decline in the fertility rates in many European countries had created '... a new situation' (Grebenik, 1978:VII). The year after that two French demographers reviewed recent attitudes and behaviour affecting the family for the Committee (Roussel and Festy, 1977). In their description and analysis of these changes they distinguished four phases - without, however, dating them - through which all countries appeared to be going and which implied a marked departure from past trends. In the essay prepared for the Committee on the background of these changes, Schmid (1984) focussed on the likely impact of shifts in value systems. Just as Ariès he emphasized that having meaningful personal relations had become of prime importance in people's lives. Coupled with rising expectations and a desire for status goods, that phenomenon gave special significance to the sudden decline in fertility. Evidently several European demographers writing on fertility and the family sensed at an early stage that the renewed downturn in the birth rate represented more than a temporary fluctuation. That it was not followed immediately by expressions of great concern is not surprising given the direction of international and national discussions about world population growth at the time. Many demographers and population scientists had sympathy for the idea that developed societies should, ultimately, aim at zero population growth, better

still try to reach a stationary population.

Understandably, the well-documented changes in contraceptive methods and practice played a crucial role in the search for explanations of the fertility decline. The striking simultaneity with which the birth rates came down in the countries of Western Europe, suggested a common cause. The availability of new, highly effective means of contraception had created a sort of 'second contraceptive revolution' as it was later called (Leridon et.al., 1987); it could obviously have exerted a major influence on the observed trends. Opinions differed in that regard. Some stressed its possible catalytic effect. Others, Ariès amongst them, argued that the improvement in contraceptive means and methods was secondary; decisive was the change that had occurred in people's minds, since that determined their usage.

6. Initial focus of the concept

The spectacular decline of period total fertility rates in Europe immediately after 1965 struck the region as unexpectedly as a bolt of lightning coming from a blue, clear sky. No one had predicted that sudden shift. In fact, the population projections of the time customarily assumed a continuation of the, in hindsight, unusually high fertility levels of the early 1960s[1]. That within a few years fertility would drop below replacement level had not been imagined. So, when Lesthaeghe and I first presented the idea of a second demographic transition, many equated the concept with 'fertility falling and staying well below replacement'. However, even the initial focus of the concept had been broader than that. In keeping with the approach taken by Ariès we argued that the changes in trends were the result of two successive motivations. Not solely with regard to 'having children' but, much more generally, with regard to 'the family'. The two transitions appeared to be founded on different family models. The 'bourgeois family model' underlying the first transition apparently was giving way to the 'individualistic family model'. That important change in attitude toward the family was seen to affect the whole process of family formation, including the dissolution of unions (Lesthaeghe and Van de Kaa, 1986:19). In fact, while during the first transition the family became a stronger institution, the weakening of that institution was considered to be characteristic of the second transition. We identified the increase in divorce as the first manifestation of that weakening. The changed attitudes towards abortion, the increase in cohabitation in countries outside the Nordic region, the easy acceptance of modern contraceptives amongst the more orthodox sections of the population, and the decline in -higher order- births were, however, also interpreted in that context.

This focus was fully in line with our earlier statements on the matter. In 1983 Lesthaeghe stated in so many words that he agreed with Ariès '...but with the addendum that the two sets of transformations with respect to nuptiality and fertility form a logical sequence along a continuum leading to increasing freedom of choice' (1983:430). And when, early in January1978, I addressed the British Society for Population Studies, I used the following paragraph to describe the changes in institutional arrangements (1980:76):

[1]The Netherlands offers a good illustration in that regard. The projections with 1965 as the base year concluded that the total size of the population would increase rapidly. A growth from 12.38 to nearly 21 million by the year 2000 appeared likely. The observed figure on 1 January 2000 was 15.9 million.

‘What appears to be a crucial element from a demographic point of view in the changes noted, is that man-woman relations are increasingly seen as a means of reciprocal emotional enrichment to which the birth of children may, or may not, be considered to be contributing. The personal value, dignity and freedom of the individuals involved in such relations are often stressed, as are the rights to self-fulfilment. The relationships are expected to be based on love and mutual attraction, are entered into freely and come to an end once they are lastingly disrupted, the latter independent of whether they have the form of a stable union or a marriage. Marriage as an institution providing economic security and as an essentially permanent arrangement aimed at reproduction and enabling the rearing of children is no longer universally felt to be necessary.’

Clearly we were convinced at an early stage that the issue we were dealing with was not simply that of a declining birth rate. Nevertheless, in our first presentation of the concept we did not venture to go beyond fertility and the family. Even when posing the question whether, as a result of the renewed transition, the prospect of reaching a new population balance had vanished, we did not suggest a possible relationship with the other determinants of growth: mortality and migration (op. cit.: 15). The broadening of the concept dates from a later period.

7. Broadening of the concept

The classical model of the first demographic transition customarily only displays the interplay of two population growth factors: mortality and fertility. The third line in the same graph then depicts the difference between the birth and death rates: the rate of natural population growth (see, for a nice example Chesnais (1986). In pre-industrial times mortality and fertility are usually assumed to have been roughly in balance, with epidemics wiping out periodically most of the population growth that might have resulted over a more extended period of time. This is, as McKeown (1976:156) observed, ‘... consistent with the conclusion that the main restraint on population growth was a high level of mortality determined directly or indirectly by the available food’. In his article on the social control of human reproduction, Lesthaeghe (1980:528) expressed much the same idea when he described the force of mortality as the ‘... central factor in demographic homeostatis...’ The assumption is that populations had built-in mechanisms, ‘preventive checks’ such as delaying age at marriage, to counteract the effects of declines in mortality. It is only after the decline in mortality resulted in an uncomfortably high rate of population growth that marital fertility became deliberately limited. It is understandable, perhaps, that in such a frame of mind mortality and migration were not immediately introduced as components in the concept of the Second Demographic Transition. My thinking on the matter altered while lecturing to my students on the demographic situation in Europe. And, when I prepared a paper for a small conference held in Florence in December 1988, I attempted to make the concept more comprehensive. I offered an explanatory framework and posed the question whether it gave ‘... insight into the relation between fertility, nuptiality, mortality and migration in the second demographic transition?’ My own answer: ‘Sufficient, no doubt, to realize that the processes of change they underwent, were not independent of one another’ (1988:27).

The reasons for attempting to include mortality and international migration in the concept stemmed from empirical observations of the trends in these variables. An unexpected rise in

the life expectancy at birth, and more particularly at advanced ages, surprised demographers nearly as much as the decline in fertility had done. Evidently the life expectancy at birth for women could reach 80 years or more, as the figures for several countries, Japan included, demonstrated. And, as far as migration was concerned, there was the example of several Western European countries where guest worker schemes had been initiated in the 1960s and early 1970s. At first the movements were limited to the continent: labour from the south travelling north. But these streams dried up quickly once social and economic developments in the south gained momentum. Recruitment of unskilled labour in relatively backward areas of Morocco and Turkey followed. They were expected to leave upon completion of the contracts. Instead many guests preferred to act as a vanguard for their families and village. Family reunification and family formation generated a steady inflow, while from the early 1990s onward asylum migration gave an important new dimension to the phenomenon of international migration towards the continent. In the history of population development in Europe the second half of the 20th century apparently constitutes an important divide. This was driven home to me during the preparation of a plenary address for the European Population Conference held in The Hague in 1999. It was then that I developed the model of the two transitions presented as Figure 1 (Van de Kaa, 1999).

It is important to note that while all the lines in the graph are continuous, the relationship between the variables is not. Mortality is the driving force in the first transition, with emigration acting as a safety valve. In the second transition fertility and mortality are both strongly influenced by normative changes in advanced industrialized societies. That shift in value system stresses individual freedoms and personal choice. Campaigns emphasizing the responsibility of individuals in staying healthy and in preventing a premature death are likely to be relatively effective in societies where seeking self-fulfilment is the generally accepted behavioural principle. Its effect on death rates and the life expectancy at successive ages will, obviously, only manifest itself after a certain time. Hence the response of mortality is lagged in comparison with fertility. Both the renewed decline of the birth rate and the marked increase in survival at advanced ages, accentuated the ageing process already taking place in industrialized societies. Reductions in the number young people seeking entry on the labour market, and the changes in age composition of the population will, directly and indirectly, have led to an increased demand for foreign labour. And, as in the world as a whole high population growth is associated with a low standard of living and shortages of capital, the industrialized counties became ‘epicentres’ of migration. This is the more problematic, because they are committed to the free movement of capital and labour, at least in principle if not in practice.

8. Proving a transition’s existence

Many hundreds of articles and books have been published on the topic of the demographic transition since that particular process of demographic change was first recognized early in the 19th century. The phenomenon has been studied from a great variety of angles and in a wide range of countries. Even so, it is still poorly understood. Take the central tenet that it is mortality decline that has triggered the whole process of change and that it should, as a rule, therefore precede the decline in fertility. The Princeton project established that at a sub-national level there were many cases in which fertility declined first (Francien van de Walle,

1986). In addition, the search for regulatory mechanisms at the individual or aggregate level has been singularly unsuccessful. Cleland (2001:62), in a recently published review, concludes to the absence of any mechanical relationship between mortality and fertility decline. He further observes that a causal link between the two cannot be empirically tested. 'Too many mediating factors obscure any mechanical dose-response relationship between probabilities of survival and fertility trends (op. cit.: 87). It is also apparent that the onset of the transition has occurred at very different levels of fertility. Decisive, so Casterline argues, is '... the spread through a population of the conviction that achievable economic aspirations are undermined by continued childbearing' (2001:42). He adds, that this conviction might arise in situations where escalating aspirations outstrip economic growth as well as in a situation where economic contraction threatens the achievement of existing aspirations. It is fair to say, that nearly all statements of a general kind about the classical - for me now the first - demographic transition, can be easily contradicted. Nevertheless, as I heard Paul Demeny once argue, there appear to be no counter-examples to the rule that the transition is a universal phenomenon that affects all countries in the course of their development from a pre-industrial to a more modern society.

I do not believe that the search for a precise set of relationships between fertility, mortality, and migration during the second demographic transition will be more successful. And neither can I think of any good reason why one should expect to be presented with firmer prove for the existence of the second than for the first transition. Each transition requires a plausible narrative anchored, to the extent possible, in empirical data.

9. Anchoring in empirical evidence

9.1 General aspects of fertility and family formation

As changes in fertility and family formation manifested themselves first, I will address these first. It is possible to distinguish at least 15 different steps in the full transition in fertility and family formation as experienced by a number of West European countries. Together these steps constitute a fairly neat sequence of events, meaning that each event, or step taken by a government, has led to a new option then chosen by part of the population (Van de Kaa 1997: 10). Figure 2 gives an overview of these steps.

Figure 2. Overview of demographic sequences in the Second Demographic Transition
(based on observations covering the period 1965-1995)

1. Decline in TFR due to reduction in fertility at higher ages: decline higher order birth rates
2. Avoidance of pre-marital pregnancies and 'forced' marriages
3. Notwithstanding that, the mean age at first marriage continues to decline for a while
4. Postponement of childbearing within marriage, fertility among young women declines, lower order birth rates decline, this accentuates decline in period TFR
5. Increase in judicial separation and divorce (when allowed)
6. Postponement of marriage largely replaced by pre-marital cohabitation, increase in age at first marriage
7. Cohabitation becomes more popular, marriage postponed until bride is pregnant, increase in pre-marital births, increase in mean age at first birth

8. Legislation permitting sterilization and abortion further reduce unwanted fertility: fertility at border ages of childbearing declines further
9. Cohabitation gains further support, is frequently also preferred by the widowed and the divorced
10. Cohabitation increasingly seen as alternative to marriage, extra-marital fertility increases
11. TFR's tend to stabilize at low levels
12. TFR's increase slightly where women who postponed births start their fertility careers; increase of lower order birth rates at higher ages of childbearing
13. Not all postponed births can be born in years of childbearing remaining
14. 'Voluntary' childlessness becomes increasingly significant
15. Cohort fertility appears to stabilize below replacement level

Source: van de Kaa, 1997

From a purely demographic perspective the list can be collapsed to comprise the following main features, these are:

- Substantial decline in period fertility, partly resulting from postponement of births, so that (estimated) cohort fertility of currently reproducing women is expected to reach a maximum value well below replacement
- Substantial decline in the total first marriage rate associated with an increase in mean age at first marriage
- Strong increase in divorce (where allowed) and in the dissolution of unions
- Strong increase in cohabitation, even in countries where this was not a traditional practice
- Strong increase in the proportion of extra-marital births
- Catalytic shift in contraceptive behaviour with modern means replacing traditional methods.

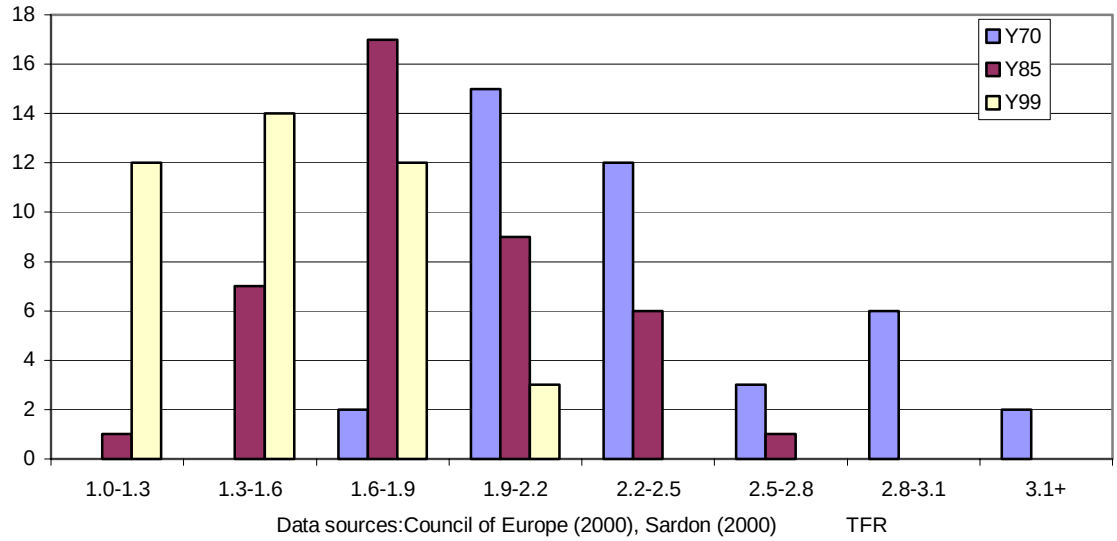
According to the United Nations the 'more developed regions' comprise Europe, Northern America, Australia/New Zealand and Japan (UN, 2001:41). To avoid having to make arbitrary decisions I shall equate these regions to represent the 'industrialized world'. The list of countries/entities in these regions is rather long: it contains 52 names. However, ten of these are so small in size that it is usually extremely difficult to find internationally comparative data for them, while their characteristics are such that frequently there is little reason in comparing them with larger countries. I will, therefore, exclude these areas from further consideration.[2] In 1999 all of the remaining 42 countries had a period total fertility rate (TFR) below replacement level, with the probable exception of Albania (about 2.60 per woman). The United States (2.05), Iceland (1.99), New Zealand and Ireland, are still quite close to it. Averages below 1.20 are found in the Czech Republic (1.13), Latvia (1.16) and the Russian Federation (1.17). The figure recorded for the former German Democratic Republic - now part of Germany- is the lowest of all: 1.11. But, equally low figures may well be found in sub-regions of some other large countries, such as Italy.

Figure 3 illustrates the spectacular shift in period fertility that has occurred in the

[2]These territories are: Channel Islands, Faeroe Islands, Isle of Man, Andorra, Gibraltar, Holy See, Malta, San Marino, Liechtenstein, and Monaco.

industrialized societies in the thirty years from 1970 to 2000. Its amazing simultaneity, first in the countries of Northern and Western Europe, slightly later in Southern Europe, and after the fall of the Berlin Wall in 1989 also in the former socialist countries, cannot possibly be accidental. It is precisely because the decline in period fertility was such an international and pan-European phenomenon, that one searches for a common explanation.

Figure 3. Distribution of 40 industrialized countries by level of period total fertility rate 1970, 1985, 1999



It is informative to list the countries by year before which a total fertility rate below replacement - taken to be 2.10 - was first experienced. Japan obviously belonged to the trend-setters, two former socialist countries providing it with company.

Table 1. Industrialized countries by date below replacement fertility was first experienced

On/before 1965	Idem 1970	Idem 1975	Idem 1980	Idem 1985	Idem 1990	Idem 1995
Japan Hungary Latvia	Germany Denmark Finland Luxembourg Sweden Czech R. Croatia Russia Ukraine	Austria Belgium France Norway Netherlands United Kingdom Switzerland Estonia United States	Italy Bosnia-H. Bulgaria Lithuania Belarus Australia New-Zealand Canada	Iceland Spain Greece Portugal Slovenia	Macedonia Yugoslavia Poland Romania Slovak R.	Ireland Moldova
3	9	9	8	5	5	2

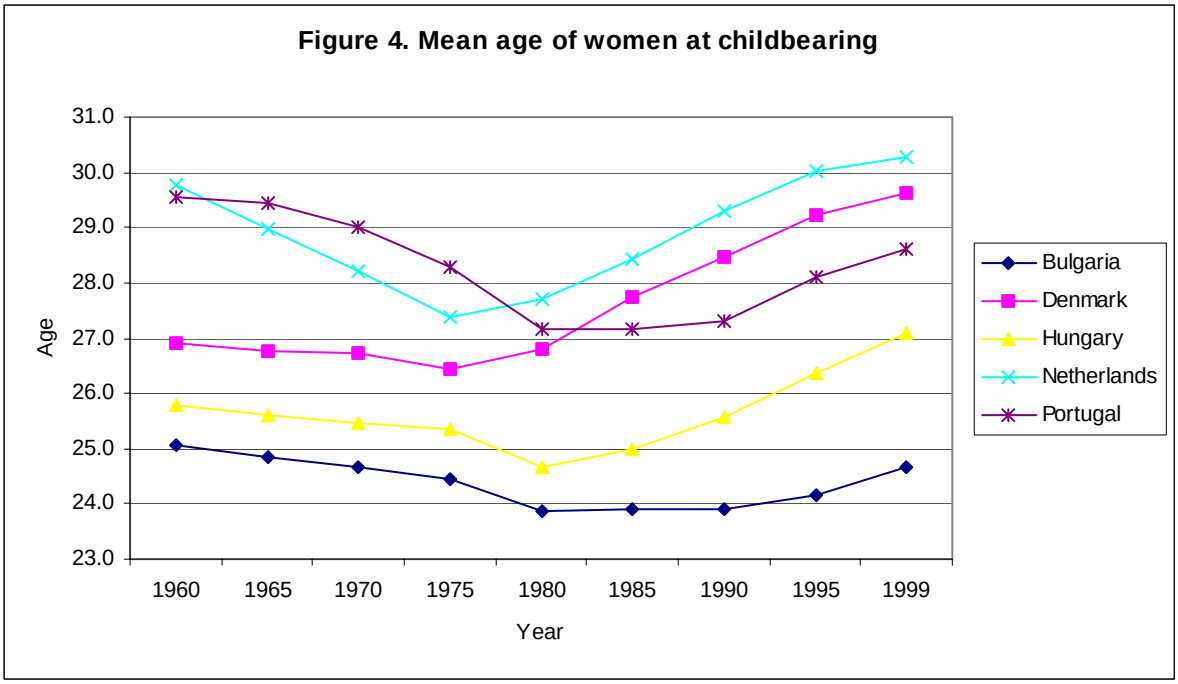
Source: Sardon (2001), Frejka and Ross (2001), Council of Europe (2000).

Obviously the decade and a half between 1965 and 1980 were the most crucial. By 1990 only a few of the more traditional counties had not seen their fertility drop below replacement. In many countries the decline has been somewhat irregular or was punctuated by brief periods in which the TFR rose. However, a reversal of the steady downward trend has not been observed anywhere.

9.2 The ageing of fertility

There is no doubt that changes in the tempo of fertility play a role in the decline after the mid-1960s. The postponement of births can be demonstrated in various ways. The average age of women giving birth to their first child, and the mean age at childbearing have risen everywhere. And while these are relatively recent phenomena in Central and Eastern Europe, elsewhere it may be observed from the mid-1970s. In 1999 the average age at birth of the first child exceeded 28 years in Luxembourg, The Netherlands, Switzerland, and the United Kingdom; values below 24 now are exceptional. Figure 4 shows the pattern of change in the mean age at childbearing for a number of selected European countries for which a time series from the 1960s is available. In Ireland and the Netherlands that mean age is now well over 30 years.

Figure 4. Mean age of women at childbearing



Source: data from Council of Europe (2000)

Data on trends in the age specific fertility rates as published by the Council of Europe (2000) show a clear contrast between the younger and older age groups. In Table 2 results for a few countries, each more or less typical for a region, have been brought together. They show that the fertility rates in the age group 20-24 have declined steadily, while in the age group 35-39 an initial decline was in usually followed by an increase. In the Netherlands women aged 35-39 now contribute more to the TFR than women aged 20-24. Obviously, the prime child-bearing ages have shifted. Women decided to have fewer children and to have them later.

Table 2. The shift in age specific fertility rates in selected European countries and age groups of women.

Year	Bulgaria		Denmark		Hungary		Netherlands		Portugal	
	20-24	35-39	20-24	35-39	20-24	35-39	20-24	35-39	20-24	35-38
1960	940	98	858	196	797	126	612	444	756	473
1970	938	73	651	124	796	93	684	246	768	399
1980	968	48	508	78	796	68	404	85	731	187
1985	890	47	385	92	763	66	305	97	532	139
1990	826	49	356	137	737	80	242	153	451	117
1995	502	38	308	192	529	88	189	192	316	125
1999	454	42	262	212	357	89	194	228	300	170

Source: Council of Europe (2000)

9.3 Completed family size

An important question for the longer term is whether the postponement of births will ultimately result in a level of completed cohort fertility that will also be lower than needed for replacement purposes. In time the matter will become crystal clear. In the meantime views on this issue differ. Beginning the reproductive career late and postponing births within a union will, *ceteris paribus*, lower fertility. That issue is not in contention. But, how much will it be? Frejka and Calot (2001) have attempted to estimate the completed family size of the female birth cohort 1960-1961 in 29 industrialized countries, Japan included. Expected averages clearly above 2.10 were calculated for New Zealand (2.34) and Yugoslavia (2.26). In Northern and Western Europe, in the former socialist countries, in Australia and the United States the results suggest that average completed family size of that cohort will be close to replacement. It is mainly in Southern, and Central Europe and in Japan that figures below 1.80 are likely to occur. The same authors have also calculated the average family size reached at age 27 of women born in 1970-1971 in the countries concerned. These are shown in Table 3 together with the proportion of their children they would still have to give birth to in order to reach replacement level. I have ranked them according to observed level and have added for each country the proportion of extra-marital births amongst all births. The implicit suggestion, obviously, is that in a number of cases fertility may be especially low because cohabitation and giving birth to children in informal unions are (still?) rare.

It is, obviously, possible for women to have 75% of their births after age 27. If the decline in fertility at the lower ages of childbearing comes to a halt and the increase at the higher ages earlier observed in a number of countries continues, a completed fertility level close to 2.10 could result. Toulemon and Mazuy (2001) have demonstrated that recently for France, admittedly a country which experienced relatively high TFR's in comparison with other parts of the region. But whether the age specific birth rates will indeed change in that fashion is uncertain. When after 1983 the period TFR in Sweden rapidly rose to reach 2.13 per woman in 1990, some interpreted this as a sign that a reversal of trends was near. However, after that year period fertility declined to even lower levels than before (1.50 in 1999). I therefore share Bongaarts' view that fertility may well move upward a bit, but that it ' ... is unlikely that fertility may rise all the way to replacement level even in countries where couples continue to want two children' (Bongaarts, 1998).

Table 3. Average family size achieved at age 27 by birth cohort of women 1970-1971, proportion still needed to reach replacement level (2.10), and proportion of extra-marital births amongst all births in the countries concerned

Country	Cumulative fertility at age 27	% still needed to reach replacement level	% extra-marital birth amongst all births		
			1965	1980	1999 or latest available date
Netherlands	.352	83	1.8	4.1	22.8
Spain	.352	83	1.4*	3.9	14.5
Italy	.383	82	2.0	4.3	8.7
Japan	.410	80	0.9*	0.8	1.1
Switzerland	.427	80	3.9	4.7	10.0
W. Germany	.478	77	4.7	7.6	14.3
Belgium	.572	73	2.4	4.1	11.6
France	.597	72	5.9	11.4	40.7
Denmark	.600	71	9.5	33.2	44.9
Finland	.638	70	4.6	13.1	38.7
Greece	.644	69	1.1*	1.5	4.0
Australia	.646	69	8.3*	12.4	23.0
Sweden	.665	68	13.8	39.7	55.3
E. Germany	.668	68	9.8	22.8	44.1
Portugal	.678	68	7.8	9.2	20.1
Norway	.743	65	4.6	14.5	49.0
England/Wales	.755	64	8.3*	11.8	37.8
Latvia	.986	53	13.3	12.5	39.1
New Zealand	1.000	52	13.9*	21.5	42.5
Estonia	1.038	51	14.8	18.3	54.0
Hungary	1.054	50	5.2	7.1	28.0
Russia	1.062	49	13.0	10.8	27.9
United States	1.072	49	10.7*	18.4	33.0
Lithuania	1.081	49	3.7*	4.6	19.8
Romania	1.097	48	3.5	2.8	24.1
Yugoslavia	1.139	46	11.6	10.1	19.0
Czech R.	1.160	45	5.0	5.6	20.6
Bulgaria	1.167	44	9.4	10.9	35.1
Slovak R.	1.250	40	5.3	5.7	16.9

Sources: Frejka and Calot(2001), Council of Europe (2000), Sardon (2001); * 1970

9.4 Marriage, cohabitation, and divorce

A further consideration here is that in almost all countries marriage has become more unstable than it was a couple of decades ago (Hobcraft and Kiernan, 1995; Huinink, 1995). So, many men and women saying they might want to have two or more children will be confronted with the harsh reality of a separation or a divorce. In fact, marriage as a status is itself also considerably less attractive than around the mid-1960s when almost everyone ever entered into it. That 'golden age of marriage', as Festy once characterized it, is long behind us. Some even predicted the family's demise (Hoffmann-Nowotny, 1987). There is really no industrialized country at all where total first marriage rates have not declined and an increase in the mean age at first marriage has not been documented. There is variation in timing and speed. But as, Table 4 shows, the trends are unmistakable. While in 1970 values between 800 and 1000 first marriages per 1000 women were standard, several countries now register values below 400. The third column in that table lists the most recent data available.

Table 4. Levels of cohabitation, changes in total first marriage rates during 1970-1999, and current total divorce rates in industrialized societies.

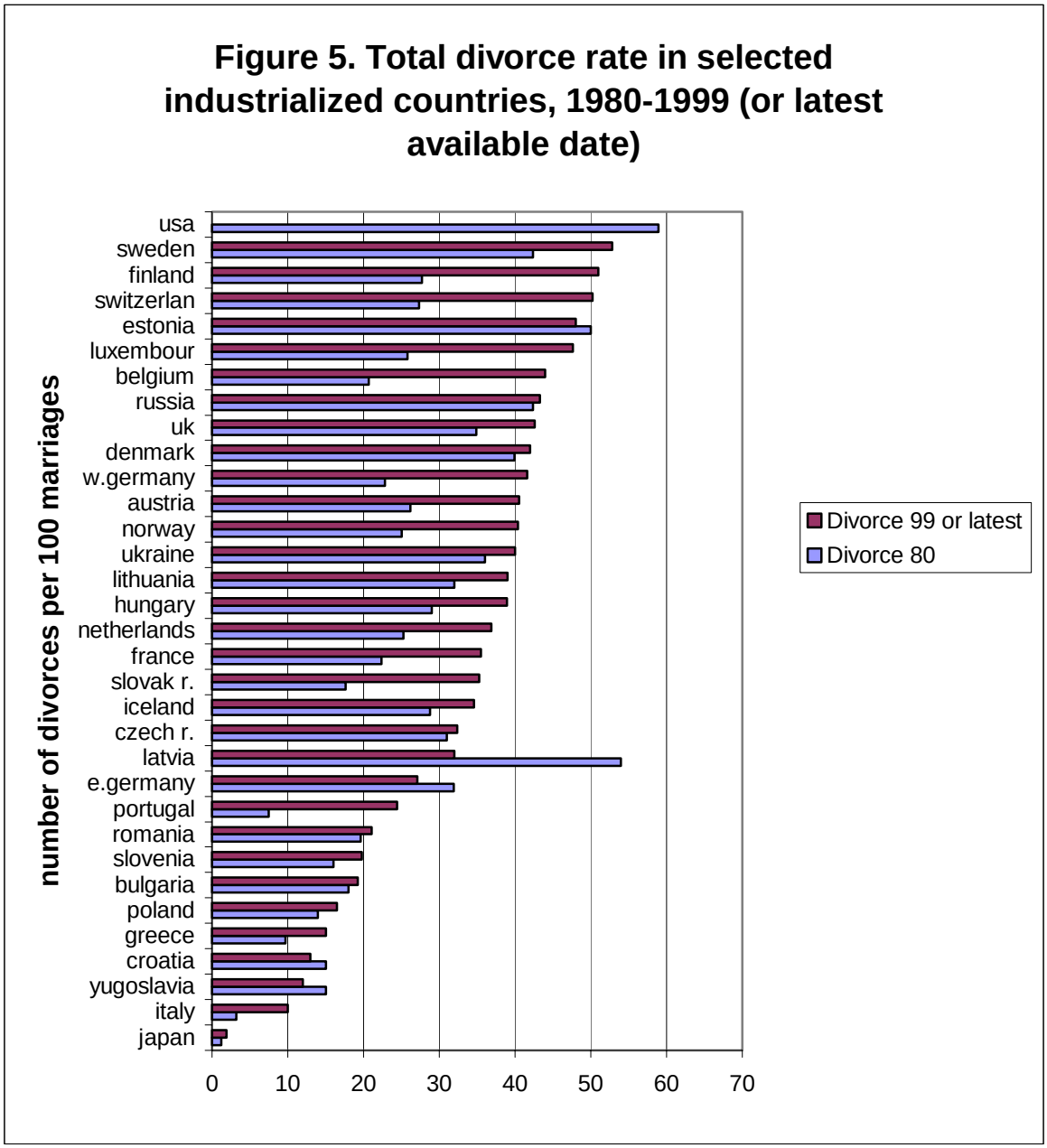
Country	% of women aged 25-29 cohabiting (1991-1993)	Total First Marriage Rates per 1000 women		Total Divorce Rates per 100 marriages
		1999 or 1998	As % of rate around 1970	1999 or 1998
Australia	n.a.	661d	n.c	n.a
Austria	12	534	58	40.5
Belarus	4	740	n.a.	n.a
Belgium	10	504	51	44.0
Bulgaria	0	530	55	19.2
Croatia	Na	680	78	13.0
Czech R.	11	477	52	32.4
Denmark	41	670	82	42.0
E. Germany	6	475	48	27.1a
England/Wales	12*	524	51	46.0c
Estonia	6	351	31est	48.0
Finland	25	580	62	51.0
France	23	567	62	35.5a
Greece	n.a.	713	68	15.0
Hungary	2	462	48	38.9
Iceland	35	622	n.c.	34.6
Ireland	2	591	52est	n.a.

Italy	2	612	59est	10.0a
Japan	n.a.		n.a.	1.9
Latvia	8	397	46	32.0
Lithuania	0	546	48	39.0
Luxembourg	n.a.	532	60	47.6
Macedonia	n.a.	838	87	5.0d
Netherlands	15	605	57	36.9
New Zealand	13	610e	n.c.	n.a.
Norway	28	600	61est	40.4
Poland	3	629	69	16.5
Portugal	0	827	69	24.4
Romania	4	656	78	21.1
Russia	3	598b	51est	43.3b
Slovak R.	n.a.	508	59	35.3
Slovenia	14	481	87	19.8
Spain	4	609	60	14.8c
Sweden	17	464	74	52.8
Switzerland	12	656	75	50.2
United States	8	776e	n.c	54.8e
W. Germany	20	636	65	41.6a
Yugoslavia	n.a.	630b	64est	12.0b

Sources: as Table 3, and Van de Kaa (1998). n.a= not available; a1997; b1996;c1995;d1990;e1985; n.c.= calculation can not be made as suitable data not available; est=estimated

The current position of marriage in the different societies can also be ascertained by looking at the total divorce rate and the frequency with which cohabitation occurs. Since cohabitation as a 'marital' status is not registered by official registrars one has to rely on surveys to obtain comparable statistics. Kiernan (1996:66) collated information on cohabitation amongst all women living in union in 10 European countries. Where data are available for more than one surveyed year these invariably, and for all age groups, show a strong increase from the 1980s to the 1990s. In the Nordic countries the vast majority - 80-90% - of women in union are cohabiting. Unfortunately the surveys were limited to countries in Western and Northern Europe, and in these regions cohabitation is no longer a deviant form of behaviour. The numbers of men and women now entering marriage without having cohabited first appear to be steadily declining (Klijzing and Macura, 1997). The information presented for women aged 24-29 in Table 4 was mainly calculated from the World Value Surveys (Van de Kaa, 1998) and covers a wider range of countries. It is informative to look at the figures on extra-marital fertility in the various countries in conjunction with those on marriage and cohabitation. It is easy to see that in a number of countries, in the meanwhile fairly small,

cohabiting and having children in an informal union are (still?) 'not done'. The list is not very long and has Japan and a number of Southern European countries, e.g. Greece and Italy - as its most notable examples (Carmichael, 1995). No doubt, the cultural characteristics of these countries are mainly responsible. Nevertheless, it raises the question whether the Second Demographic Transition will be so universal and ubiquitous as the first. Perhaps it is 'too early to tell', but I can point at Spain, Portugal and Slovenia (8.5 % extra-marital births in 1970 and 35.4 % in 1999) as examples of Roman Catholic, Mediterranean countries where the institution of marriage now appears to be changing rapidly as it earlier did in France.



Source of data: Sardon (2000)

Figure 5 presents information on the mean total divorce rate per 100 marriages for a large

number of industrialized societies. The countries are ranked by the level reported for 1999, or latest available date. The range in level is the very considerable; divorce being almost absent in a few of the countries and, most notably, in Japan. While the general trend is one of increase, there are a few countries where the 1999 data are lower than nearly two decades before.

9.5 Contraceptive practices and abortion

A characteristic feature of highly industrialized countries is that survey data show a decline in the age of first sexual intercourse for both men and women. Leridon (1999:53) gives a tabular overview of such data based on Bozon and Kontula to show that the men born in1972-73 tended to experience their sexual initiation below the age of 18 and invariably at a lower age than the men born in the period 1932-1941. The same comparison for women tends to show stronger declines. With a few exceptions women of the generation born 1932-1941 were over 20 when they had their first sexual encounter, for women born in the early 1970s the average ages frequently were not higher than 16 or 17. Data for students in Japan also show that over the years the proportion that had experienced sexual intercourse increased (Atoh, 2001). Leridon argues that in industrialized societies having sexual relations outside a formal marriage has more generally become acceptable and does no longer elicit a great deal of comment.

Two simultaneous developments affected contraception. The proportion of couples in the reproductive age groups using contraception to prevent a pregnancy increased (Frejka and Ross, 2001:235). That has been established for a variety of countries, including Japan. At the same time the more traditional means of contraception were driven out by more effective means and methods. This is not to say that a uniform pattern of use and methods is now found across countries or that usage patterns have now become stable. There is, on the contrary, still a substantial amount of difference and change within industrialized societies, with some relying heavily on male and female sterilization, while in others the condom, the IUD and the pill are preferred. In a number of countries, the Netherlands for example, the use of oral contraception increased extremely rapidly after the mid-1960s to be replaced by sterilization once the family was considered to be complete. Coleman (1996:35) has published a table on contraceptive usage and abortion for most of the European countries. The information relates to various dates around the 1980s and thus is now rather dated. He arrives at a mean of 73 % for current usage amongst married women. The pill was used by 34 %, the condom by 18 and the IUD by 16%. Sterilization accounted for 11 %, while a slightly larger fraction, 14%, relied on withdrawal. The latter means was particularly popular in Italy (46%), Portugal (39%) and Spain (27%). This late shift toward modern contraception may well have contributed to the relatively late onset of the second transition in these countries. See the complete and more recent overview as provided by Iwasawa (2001:10/11). Evidently, there are still marked contrasts in contraceptive use across the more developed countries. Sterilization is of prime importance in North America and Oceania, and also in a few Western European societies. In Southern Europe the reliance on traditional methods has declined over time, but they are still of considerable importance in Eastern Europe, for example in Romania and Bulgaria. In Japan, the condom predominates (76% in 1997).

The empirical evidence available allows the conclusion that Japan is not only exceptional as far as method of contraception is concerned, but also as regards the practice of abortion (Atoh, 2001; Iwasawa, 2001). The promulgation in 1948 of the Eugenics Protection Law permitted abortion in cases where, from different points of view, the health of the woman could be seriously affected by continuation of the pregnancy. This made abortion relatively widely available and in the early 1950s it was much more widely used in Japan than in some of the Nordic and socialist countries where abortion legislation had also been liberalized (see Frejka and Ross, op. cit.: 241). Until very recently even the use of low-dose oral contraceptives was not authorized in Japan, with the result that an overwhelming proportion of couples use the condom as their preferred means of planning their families. Atoh (op. cit.: Table 1) reports that the reliance on the condom amongst married women increased from 58.3 % in 1959 to 75.3 % in 2000.

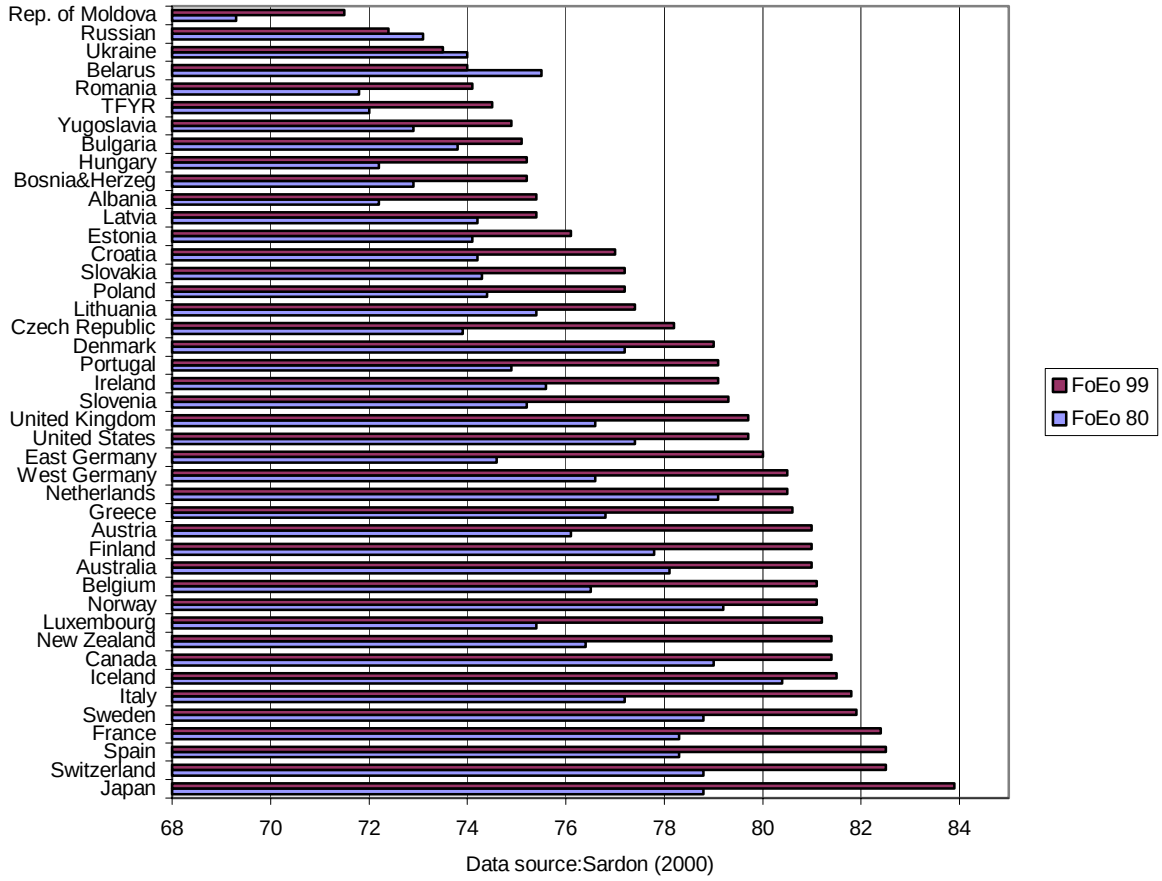
9.6 Findings on marriage and fertility

The empirical findings reveal a distinct difference in degree of universality between the changes in the patterns of fertility and family formation. While the decline in fertility has occurred, or seems to be occurring everywhere, the matrimonial transition is a considerably less general phenomenon. It is most notably in Japan and a few Southern European countries that cohabitation and extra-marital births remain the exception. This may be a simple question of lags and leads. Conceivably a weakening of the link between marriage and fertility is also in the offing in these countries. Some information clearly points in that direction. It is important to note further that the use of female dominated oral contraception in these countries is only gaining ground very gradually, or has only just been permitted. So far, women in the countries concerned only have had little or no opportunity to experience the potential benefits of that method in their sexual lives.

9.7 Mortality

Specialists in the field of mortality are convinced that about 1970 a third phase in mortality decline began. That phase is characterized by the emphasis individual people place on efforts to prevent an early death. It is each individual’s right, if not responsibility, to live in a sensible fashion. That is to say; to take regular exercise, to be a bit frugal when eating, not to drink too much, not to smoke and, if smoking, to stop doing so. And indeed, such changes in habit appear to be paying off. In the last few decades the life expectancy at birth has risen sharply in most industrialized societies. Between 1970 and the late 1990s life expectancy at birth for women rose to well above 80 years, for males 75 years has become the standard. Figure 6 ranks a large number of more developed countries by level of female life expectancy at birth. Japan, with 84.9 years tops the list; Moldova and Russia close it.

Figure 6. Life expectancy at birth for women, 1980-1999 or latest available date)



Where an increase in life expectancy has not occurred - as is the case in a number of former socialist countries - it can clearly be blamed on crisis conditions, the lack of proper medical care and services. The lifestyle in these countries probably was a contributing factor. Meslé (1996:141) specifically mentions dietary habits based on heavy consumption of pork and animal fats, and increases in alcohol consumption and cigarette smoking as contributing to a widening of the gap in life expectancy between these and the other industrialized countries. In the latter countries the end of the improvement in life expectancy is not yet in sight. Nizard (1997) has, in fact, argued that a fourth phase has just begun. A phase during which mortality from malignant tumours will decrease and the incidence of such illnesses will decline as a consequence of improved nutritional information. Ever since Jeanne Calment died in France in August 1997 at the ripe old age of 122 years and 5 months (Allard et. al., 1994), discussions about 'the expiry date of man' have restarted. Kannisto and his colleagues have researched the survival of the so-called 'oldest-old' and found that even amongst those older than 100 years the proportion dying each year has declined steadily (Kannisto et. al., 1994:802). Vaupel (2001) thinks it likely that children now born will, on average, be able to celebrate their 100th birthday. In fact, his sternly worded warning to governments of highly

industrialized societies that they are woefully unprepared for the massive ageing that these societies will experience. Table 5 gives an overview of the increase in life expectancy at age 45 in a number of more developed European societies. In Northern, Western, and Southern Europe the rise in longevity between 1965 and 1999 frequently amounts to 6 years or more. The occasional decline can be observed in Eastern Europe. This may be a temporary setback. As is evident from recent data, life expectancies in the former German Democratic Republic rose immediately after unification with the Bundesrepublik. The highest life expectancies at age 45 for women are found in France and Switzerland, with Spain and Italy doing better than the Western and Northern European countries.

Table 5. Life expectancy at birth, and at age 45, of women in selected European countries: 1965-1999

Country	Life expectancy in			Country	Life expectancy in		
	1965	1980	1999		1965	1980	1999
Belarus		33.4	31.6	U.K.		33.9	36.1
Bulgaria	32	31.7	32.6	Bosnia/H.		31.6	32.5d
Czech R.	31.5	31.3	34.4	Croatia		32.1	33.0d
Hungary	30.9	30.9	32.2	Greece		34.2	36.9a
Poland	32	32.4	34.1	Italy	32.2	34.4	38.0b
Moldova	30.9f	29.3	29.7a	Portugal	31.6	33.5	35.8
Romania	30.1	30.9	32.2	Slovenia	31.3	32.6	35.6
Russia			31.1	Spain	32.9	35.3	38.4a
Slovakia	31.7	32.1	33.9	Macedonia		32.5	32.1a
Ukraine		32.2	31.2c	Yugoslavia		32.2	32.2b
Denmark	32.48i	34.2	35.2	Austria	31.6	33.4	37.3
Estonia		32.2	33.5	Belgium	32	33.9	37.6a
Finland	30.6	34.4	37.3	France	33	35.6	38.8
Iceland	34.0h	36.6	37.4	W.Germany	31.8	33.9	36.8b
Ireland		32.6	35.4	E. Germany	31.5	31.9	35.9b
Latvia	32.5g	32.6e	33.2	Luxembourg		33.1	37.3
Lithuania		33.4	34.5	Netherlands	33.5	35.8	36.8
Norway	34	35.7	37.3	Switzerland	32.7	35.7	38.8
Sweden	33.4	35.4	37.9				

Source: Council of Europe (2000) a1998;b1997;c1994;d1990;e1981; f1973;g1969;h1966;i1963.

The conclusion seems warranted that, more or less in step with the changes in fertility and family formation, a further transition in mortality levels and patterns took place in industrialized countries. The trends in mortality and fertility probably have their foundation in common; to a large extent both reflect behavioural changes stressing individual freedoms and responsibilities. However, their linkage is likely to be indirect and the diffusion of individual preventive health principles will be hampered if the general social-economic situation in a country is unfavourable.

9.8 International migration

North America, Australia, and New Zealand have been regions of immigration ever since the

peopling of these ‘new worlds’ by Europeans began. Over time the countries of origin of their immigrants have, of course, changed substantially. For most of the European countries immigration is, similarly, not a particularly new phenomenon. The post-war years saw massive movements of refugees and displaced persons, returning political prisoners, of population groups evicted from their homes following a re-definition of boundaries. The former colonial powers usually experienced a ‘revenge of history’ or, as the case might be, a ‘revenge of the empire’ during the de-colonization process. But, these influxes were largely of limited duration lasting not more than a few years. A real turnabout was generated by the governments of Western and Northern Europe themselves when they attempted to solve shortages of unskilled labour through the recruitment of guest workers from outside the region. And, while the movement north from Portugal, Spain, Italy and other Mediterranean countries had indeed turned out to be temporary and most migrants returned when the European Union was enlarged and their countries of origin experienced an economic boom, the guests from Morocco and Turkey decided that leaving was not in their best interest. A lack of economic, social, and political development in the home countries greatly contributed to that. And, even when the industries in which they were employed failed (textiles, for example) and the workers were laid off, no significant return migration occurred. The European migration scene changed fundamentally in 1998. The collapse of the Berlin Wall and the many political changes that followed in Central and Eastern Europe, as well as inside the Soviet Union, generated completely new patterns of migration (Okolski, 1999,UN ECE, 1995) in the region as well as in the continent. The international competition between the socialist bloc and the West in the less developed part of the world came to an end. This influenced international migration flows both directly and indirectly. Directly because people from the socialist countries could now move to the West much easier than before, and indirectly, because the whole of Europe now became an area of destination for would-be immigrants from other parts of the world. However, the European governments chose to adhere to the principle that, while they would honour international obligations and responsibilities, their countries were not, and also did not want to be, ‘countries of immigration’. This did not stop potential permanent migrants from seeking entry by whatever means feasible. From the early 1990s on a new phenomenon can therefore be observed. A sizeable stream of would-be immigrants from all over the world is seeking entry by claiming political asylum. The social, economic, political, and administrative problems this creates appear insurmountable. They become particular acute when (undocumented) migrants seek to put politicians under pressure by going on a hunger strike to forestall eviction or when, after years of litigation and after having settled in well in a certain neighbourhood, a family which applied for asylum hear their request to be allowed to stay has been rejected.

Meanwhile, the rate of net migration has acquired a positive sign in an increasingly large number of industrialized countries. In quite a few instances it is, in fact, the inflow of migrants that keeps the total population from declining. In Table 6 most member states of the Council of Europe are grouped by rate of net migration. Countries where the number of deaths exceeds the number of births are listed in italics.

Evidently, a majority of Western and Northern European countries see their populations grow as a result of net migration, frequently by more than 20 per 1000 of the population per year. As against that the countries with ‘economies in transition’ tend to lose population sometimes both through emigration and an excess of deaths over births. As soon as the economic

situation in Central and Eastern European countries improves somewhat they, in turn, become attractive to international migrants (cf. Slovenia). Moreover, the promise of better times to come may be sufficient to give the inhabitants of a number of countries, e.g. those expected to join the European Union in 2004, the idea that it is wiser to stay put for a little while longer. Emigration slows down, and immigration gains ground. And, as the United States, Canada, Australia and New Zealand continue to absorb migrants, Japan seems to constitute an exception amongst the highly industrialized societies of the world in that it is, as yet, hardly touched by migration.

Table 6. The countries of Europe listed by their most recent rate of net migration, in %

Rate of net migration in 1999				
-0.2 and <	-0.1 and -0.0	0.0 and 0.1	0.2 and 0.3	0.4 and 0.5+
Belarus	*Croatia** *Estonia* *E. Germany* *Hungary* *Latvia* *Lithuania* *Moldova* Macedonia* Poland *Romania*	*Czech R.* *Bulgaria* Finland France *Russia* Slovak R. Spain	*Austria* Belgium Denmark *W. Germany* *Greece* *Italy* Netherlands *Sweden* Switzerland United Kingdom	Iceland Ireland Luxembourg Norway *Slovenia*
1	10	7	10	5

Source: Council of Europe (2000); * figure for 1998; Countries with a negative rate of natural increase in italics

10. Explanations

It is a truism to observe that just as social change was the underlying cause of the first demographic transition, it is the underlying cause of the second. Social change has three distinct dimensions and comes in various guises. The dimensions are structural, cultural, and technological in nature. The first encompasses social-economic change and progress in society, the second refers to a population's cultural endowment and the changes in value systems, while the third dimension is that of technological improvements and their application. Depending on the perspective chosen, social change is sometimes equated with 'modernization', sometimes with 'westernization' or 'technological civilization'. Nowadays the term 'post-modernization' is also frequently encountered; it is then used to describe a form of social change considered specific for the present era.

There is no doubt at all, that all three dimensions of social change have played a role, and will continue to play a role, in the important demographic shifts just reviewed. The very significant increase in GDP per capita after the recovery from the damage caused by the Second World War and the development of the welfare state in many European countries, are good examples of such enabling changes. Specific mention should also be made of the changing nature of the process of industrialization, which in a number of countries was

followed by an extensive shift of economic activities to the tertiary or services sector. This is sometimes called post-industrialization, and includes improvements in communication technology and the processing of information. I have no quarrel at all with scholars who point at such structural shifts when they search for an explanation of the population trends observed since the mid-sixties. But, with Ariès I feel that there is more on people's mind than concern about economic wellbeing, income, and material resources. Etienne van de Walle, expressed these sentiments very well when he argued that what we see in demographic behaviour is a 'translation' of cultural representations. Decisive, so it would seem to me, is what people want out of life. What is the end state they aspire to? How do look upon themselves as human beings? Do they live life in order to gain an ever blissful and happy afterlife? Or do they only recognize the one life as it is to be lived here and now? How important is having a partner and a family when going through life in comparison to the other goals a person might have, such as making a career, or using one's artistic talents to the full? And, what is the priority accorded to such goals when they are brought in competition with seeing a bit of the world, possessing luxury goods, and being able to have access to the newest technologies? In the search for explanations of the Second Demographic Transition I therefore favour directions that may lead us to a better understanding of the demographic and, consequently, the life shaping choices people make.

There are two particular aspects of contemporary industrialized societies I should like to emphasize in this regard. The first is the 'liberating' effect engendered by effective contraception and, probably to a lesser extent, by having access to medically safe abortion. Both allow people, at least in principle, to conceive and/or carry a pregnancy to term only when the birth of a child is welcomed and is expected to enrich the life of the couple or woman concerned. Moreover, being able to have sexual relations without fear of becoming involved in the life long care for children, weakened the otherwise necessary, and thus strong link between a legal marriage and fertility. I have earlier attributed a catalytic effect to the advent of modern oral contraception and the pill in this regard, in particular because they were almost invariably followed by a liberalization of legislation on divorce, abortion, and sterilization (Van de Kaa, 1997). I now feel that I should have recognized that being allowed free access to abortion, at least in principle, may also have had a certain liberalizing influence in those societies where that rule became the established practice well before the new contraceptives were marketed. At a minimum it must have given women the certainty that if an unintended pregnancy occurred, for example because efforts at contraception failed, there would be an alternative to carrying the pregnancy to term. The method of contraception then practised was probably mainly withdrawal or the condom. Thus contraception remained largely male dominated, and in that respect the position of women will not have changed much. However, particularly in such a setting, legalizing abortion must have been an important step.

It is relevant to recall that the legal prohibition of abortion in Europe is of a relatively recent date and was meant to help curb the decline in the birth rate. To quote Frejka and Ross on this: 'During the first half of the twentieth century when numerous European countries were approaching replacement level fertility, induced abortions were restricted everywhere...' (Frejka and Ross, 2001:237). The Soviet Union was the exception to this rule, while, as noted before, about the 1950s the ban was lifted first in a number of other socialist countries (Bulgaria, Czech Republic, GDR, Hungary, Poland), in some of the Nordic countries

(Denmark, Finland and Sweden), and in Japan. However, as data on the estimated legal total abortion rates indicate, there must have been wide variations in rules and regulations and, consequently, in the practical access to abortion. In the early 1950s the total abortion rate in Japan exceeded that in the other countries by a factor of 3 to 6. Nevertheless, it is hardly accidental that several of the countries that allowed women to have recourse to abortion, are also the countries where fertility dropped below replacement level quite early. It is, similarly, hardly accidental that in a further selection of these countries pro-natalist population policies were repeatedly introduced in attempts to halt the decline in the birth rate, while in some others again, exceptionally high levels of cohabitation and extra-marital fertility are now characteristic. Should the early lifting of the restrictions on induced abortion be interpreted as a reflection of gender equity, at least within the European region and in theory?

The second aspect refers to the generalized change in value systems to which the new contraceptive technology contributed and of which it, in turn, forms part. That has been described in more than one way. In an early attempt at identification Simons (1977) argues it should be seen as a shift in '...the relative appeal of two opposing sets of ideas... Fundamentalist and Pragmatist'. In my address to the British Association for Population Studies of 1978 I used the terms 'conservative' and 'progressive' to describe a similar shift in emphasis in two successive value orientations. From an orientation stressing continuity and the importance of maintaining traditions and decorum, to one that welcomes the new and the different, and does not cultivate deep feelings of empathy with the past. At the time these terms were widely used in the Netherlands and were appreciated as useful in the discourse on normative and political changes. Later on Lesthaeghe and I discussed it in the terminology employed by Felling et. al. (1983) in their interesting study entitled *Burgerlijk en Onburgerlijk Nederland*, which may be translated roughly as 'Bourgeois and Non-Bourgeois in the Netherlands'. But in our joint publication we also refer to the terminology that by then had gained a certain degree of international respectability, if not notoriety. We argued that the shift from 'materialism' to 'post-materialism' as defined by Inglehart[3], gave a good indication as to the direction in which the explanation of the second transition should be sought. For the shift to post-materialism accentuated the growing importance of anti-establishment orientations and of individual and social emancipation. The second transition, so it appeared to us, was grounded in an ideology of self-development or self-fulfilment (op. cit.: 17).

In his most recent publication Inglehart (1997) incorporates the shift towards post-materialism in a much broader shift he defines as 'postmodernization'. At first sight that does not simplify the matter a great deal, since the use of the term 'postmodern', and of its numerous derivatives, is not without problems. It has been characterized as 'an exasperating term' surrounded by a 'massive but also exhilarating confusion' (Bertens, 1995:10). Its central tenet can best be remembered in the terminology used by Lyotard (1984: XXIV), when he wrote: 'Simplifying to the extreme, I define postmodern as incredulity to

[3] Inglehart basically asks respondents to make a choice of their first and second priority from among four items, formulated as follows: 1. maintaining order in the nation. 2. Giving people more say in important government decisions. 3. Fighting rising prices. 4. Protecting freedom of speech. Respondents selecting 1 and 3 as their priorities are classified as materialists, those giving priority to 2 and 4 as postmaterialists. Others form the category 'mixed'.

metanarratives'. It is a state of mind, whereby people question the validity of the metanarratives, the grand stories, underpinning the modern period. The belief in progress, in the value of working diligently, in the need to honour the elderly, in the nation state and its sovereignty, and so on and so forth, weakens or evaporates even.

But, when I had reason to study the concept following an invitation to write a paper on the topic 'postmodern fertility preferences', I found that in demography 'postmodernity'was probably relevant at two conceptual levels (Van de Kaa, 2001a:292/3). It can, first, be taken to denote a certain worldview; to use the internationalized German terms, to denote a specific value orientation (*Weltsanschauung),* or spirit of the age *(Zeitgeist).* It can, secondly, be used to describe a new era in society, the era of postmodernity. That is the era succeeding the era of modernity, which has brought the citizens of industrialized societies an unparalleled degree of economic security, very high living standards, and the opportunity to elect those who govern them in a democratic fashion.

Inglehart argues that in the past few decades advanced industrialized societies have reached an inflection point and having begun moving on a new trajectory, that of postmodernization. To quote him:

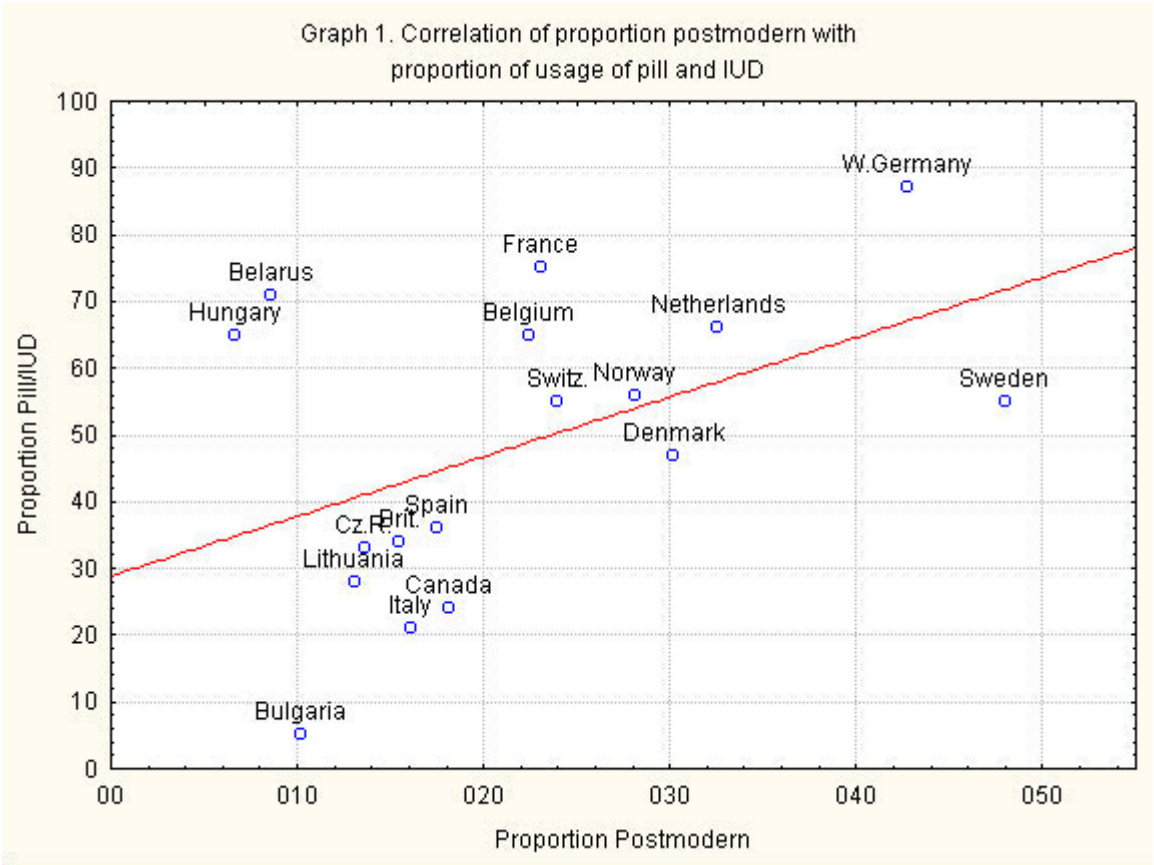
'With Postmodernization, a new worldview is gradually replacing the outlook that has dominated industrializing societies since the Industrial Revolution ... It is transforming basic norms governing politics, work, religion, family, and sexual behavior. Thus, the process of economic development leads to two successive trajectories, Modernization and Postmodernization (op. cit.: 8).

As far as the timing is concerned, this process clearly coincides with what Lesthaeghe and I have called the Second Demographic Transition. That changes in value system constitute an essential dimension of postmodernization is also important and in line with the earliest suggestions for the direction in which the explanation for the phenomenon should be sought. Moreover, it does not separate value change from the structural and technological factors involved in any social change. It is a question of putting the emphasis on the cultural dimension of social change, on people's cultural representations, as Van de Walle called them. And also that fits the bill very well. Does that resolve the issue? Not quite. An important problem remains; no demographically useful operationalization of 'postmodernity' appears to exist and, as far as I know, no surveys with the specific intent of trying to measure the concept, have been undertaken. Moreover, one has to conceive of postmodernity in a 'bourgeois' guise to make it demographically worthwhile. I would give the following concise description of such 'Bourgeois Postmodernists', that is of people who find their outlook on life has been influenced by postmodern thinking without being aware of the philosophical or ideological underpinnings the 'true postmodernists' associate with it:

'Bourgois postmodernists have a strong postmaterialist leaning or orientation, aim at self-realization, value their personal freedom greatly, place well-being above material assets, and question meta-narratives in the sense of not adhering to the tenets of a religion and of wanting to determine their own life style and pattern of personal relations. Bourgeois postmodernists similarly do not accept authority without question, are tolerant of the behavior of others, seek to express themselves freely, support emancipatory (human rights,

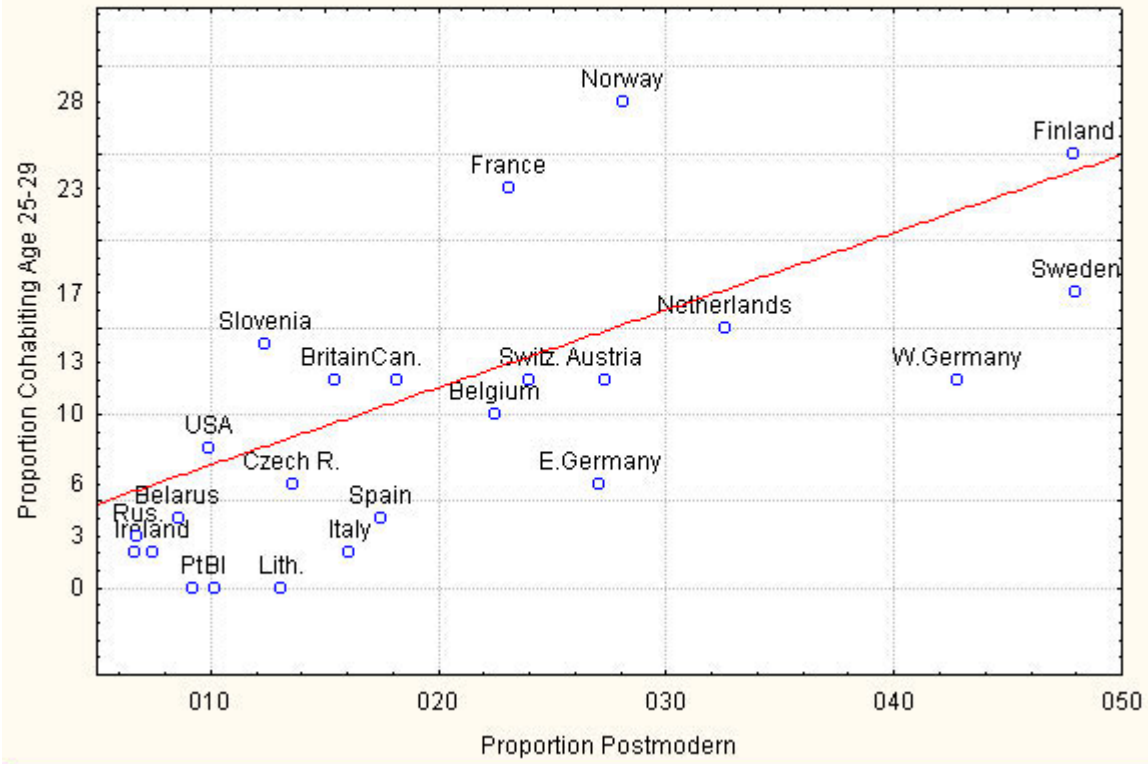
ecological, gender) movements, favor diversity, and look without prejudice at developments leading to multiculturalism' (2001a: 327).

I made an attempt to operationalize the concept using data from the World Values Surveys[4]. The results are not fully satisfactory; the data points obtained for ostensibly very similar countries vary considerably. Nevertheless, as Graph 1 illustrates, the level of postmodernism as measured for the early 1990s is positively associated with the proportion of pill users amongst all married (and cohabiting) women using contraception about the same time (data as reported by Iwasawa, 2001). Moreover, it has the expected negative sign when related to the proportion using traditional means, such as periodic abstinence, withdrawal and the douche. Women with a bourgeois postmodern value orientation also cohabit more than those who maintained a more traditional outlook on life. That is evident from Graph 2, which shows the scatter plot, and it is, obviously, in line with expectations in that regard. When regressed against the level of cumulated fertility at age 27 as calculated for the generation of women 1970-1971 by Frejka and Calot (op.cit.) The conclusion can be that postmodern women tend to have their children late. That does not imply that they also want few, but simply that early in their adult life they prefer to spend more time on study and professional activities (Van de Kaa, 2001).

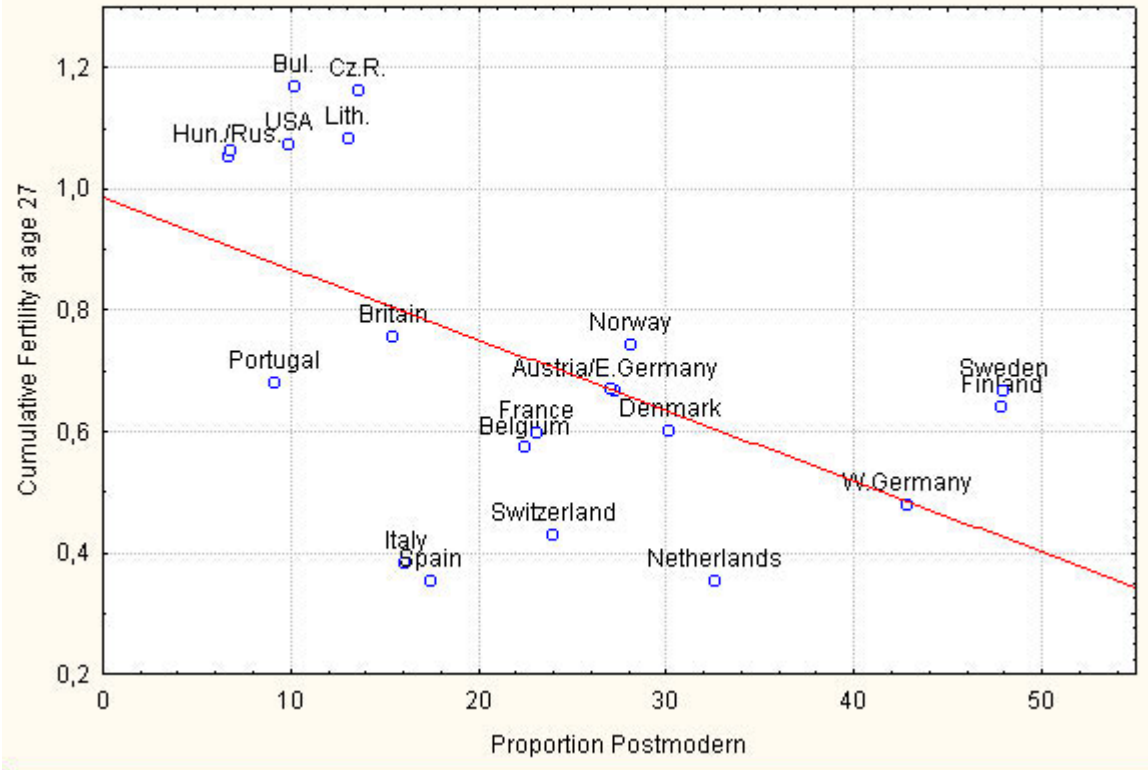


[4] Classified as 'postmodern' were all respondents who would qualify as postmaterialists on Inglehart's scale who replied that religion was not very, or not at all important in their life, and/or that greater respect for authority would be a bad thing. Those who replied that religion was not very, or not at all important in their life, and/or that greater respect for authority would be a bad thing, and had shown a leaning towards postmaterialism, by giving one postmaterialist item priority, were similarly classified as 'postmodern'.

Graph 2. Correlation of proportion postmodern with proportion cohabiting at age 25-29

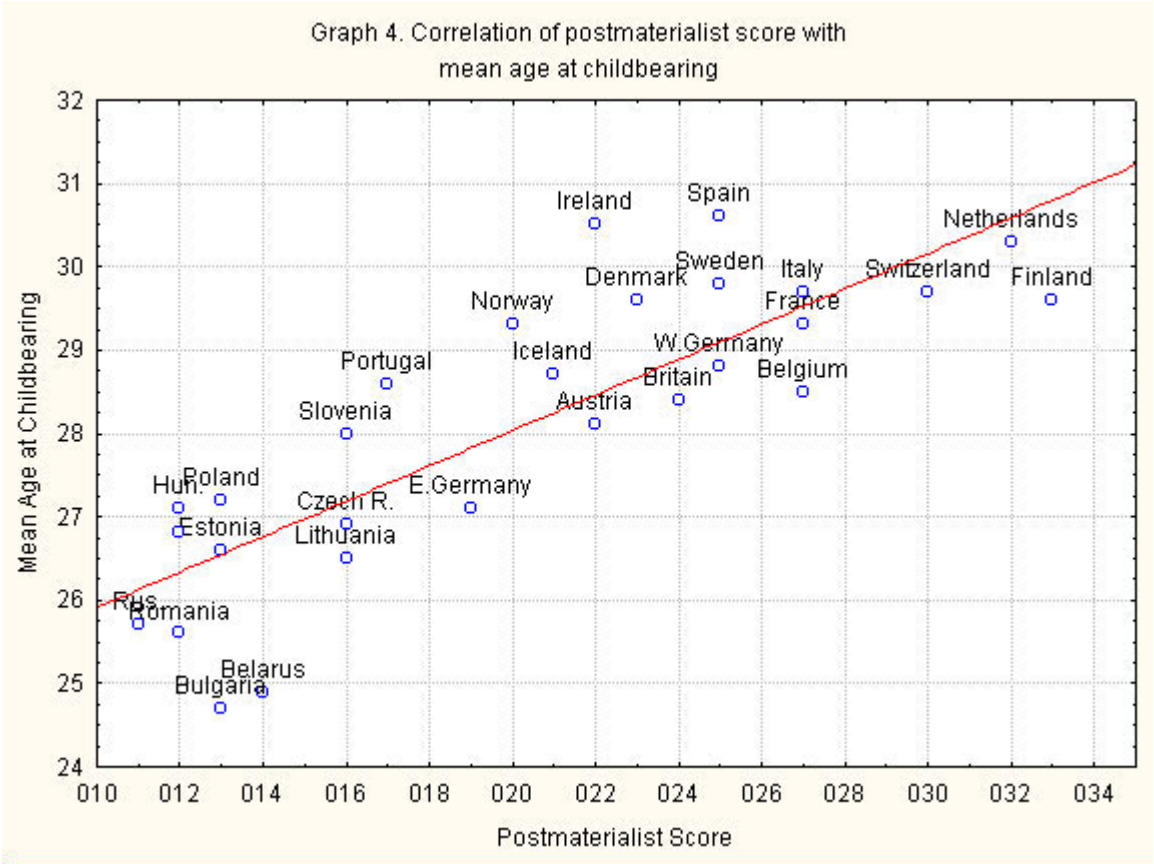


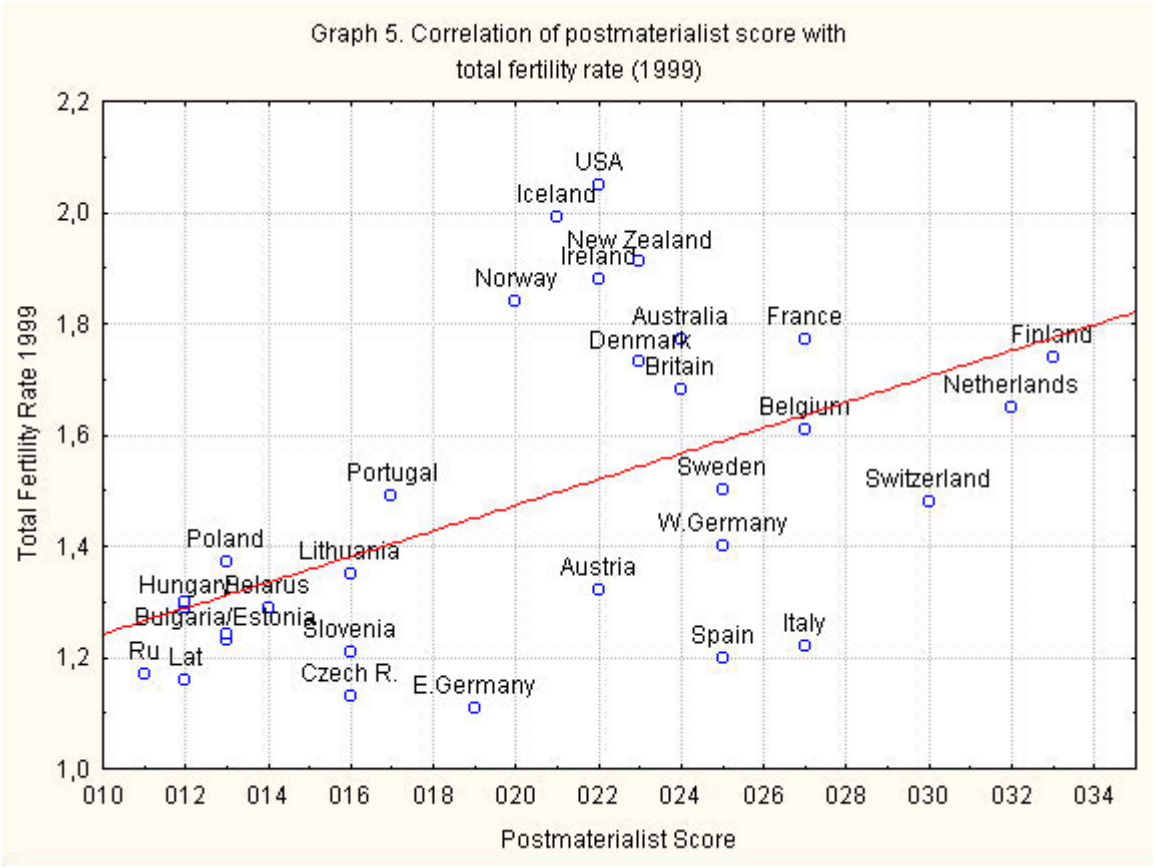
Graph 3. Correlation of proportion postmodern with cumulative fertility at age 27



Th

e proportion of extra-marital births appears not to be associated with postmodernism and neither with postmaterialism. Presumably, because having children before/outside marriage was a traditional practice in a number of European societies. Graphs 4 and 5 are based on the postmaterialist scores as defined by Inglehart. These scores have been tested over a longer period of time and appear to be more consistent across countries than the proportion postmodern. Nevertheless, both measurement attempt to assess the degree of value change and have the same general relationship with demographic variables. That postmaterialism is positively associated with the mean age at childbearing, does not, therefore, come as a great surprise. What is, at least initially, a bit surprising perhaps, is that the postmaterialist score is positively associated with the total fertility rate as reported for 1999. However, when one studies Graph 5 in detail, it becomes apparent that it are the so-called 'countries in transition' where postmaterialism is least advanced and period fertility is low. It is probable that in these countries fertility will rise a little once crisis conditions have abated. Moreover, postmaterialism and postmodernism do not necessarily imply having a negative appreciation of children. In fact, bearing and rearing children may well form part of a postmodern outlook on life. There are clear indications that the desire for children amongst the postmodern is at least at par with those not sharing that worldview. Understandably so, becoming a parent may be considered the sort of event that leads to greater self-fulfilment. So, while below replacement fertility currently is a crucial element of the Second Transition, this need not be a permanent state. The essential point is, that fertility will rise only when couples feel it is their best interest and that caring for (more) children will enrich their life.





11. In Conclusion

When Lesthaeghe and I formulated the concept of a Second Demographic Transition the phenomenon could '... be compared to a cyclone irresistibly sweeping south from Scandinavia and gradually engulfing the South of Europe before turning East and, most probably, to other parts of the developed world (Van de Kaa 2001b: 3487). It is now less clear that such a metaphor is appropriate. The empirical evidence presented above shows that at any point in time each country or region has its own demographic heritage and cultural endowment. The reaction to the diffusion of innovative forms of behaviour will depend partly on how well new ideas can be incorporated into existing patterns and traditions (Micheli, 1996). In particular in cases where the adherence to new ideas involves some sort of public behavioural manifestation if one wants to follow them, the 'translation' of cultural preferences into specific action might be much delayed. Cohabiting, having a child outside marriage, not seeking religious or communal approval of a relationship, and ending a marriage through divorce, are good examples of new behaviour which is spreading more slowly in some of the countries of Southern Europe and Japan, than in Western or Northern Europe. But, as figures for Portugal, Greece, Spain and Slovenia show, the new behaviour is spreading! It is also evident, that the economic, social, and cultural conditions with which people are confronted when making life style decisions matter a great deal. The differences in demographic trends found between the former socialist countries and the rest of the developed world, and well as the rapid changes in population trends in Central and Eastern Europe, are almost certainly attributable to the strikingly different environments in

which people had, and have, to make their behavioural choices (Katus and Zakharov, 1997; Philipov and Kohler, 2001).

Further, it is apparent that when confronted with the same problem couples and individuals may find very different solutions, at least for a while. This, most probably, explains the apparent contrasts between advanced industrial societies regarding specific aspects of the Second Demographic Transition. Japan, was trendsetting as far as the renewed fertility transition is concerned. But cohabitation, and extra-marital births are rare. Marriages are 'late and less'. This not because 'bourgeois postmodern' value change did not occur or because the age at sexual initiation did not decline. In fact, one finds such shifts documented in the recent literature. But because, as Retherford, Ogawa and Matsukura (2001) convincingly argue, under current circumstances marriage is not a very attractive proposition for Japanese women, while a non-cohabiting relationship offers a good alternative (Iwasawa, 2001). The second fertility transition was late in coming in Southern Europe. Now fertility levels are exceptionally low, while cohabitation, divorce, and extra-marital fertility have barely risen. It is, again, not for lack of value change, but because expressing it overtly is socially still too complicated a matter. In Central and Eastern Europe the timing and amplitude of the demographic shifts are different again. Before 1989 people had more basic concerns and finding a place to up a household as a cohabiting couple was well nigh impossible. After 1989 many new problems arose, they affected demographic behaviour and, in turn, made new behavioural choices possible. The advanced industrial societies represent a harlequin's mantle of experience and conditions. Consequently, their demographic patterns are rich in variations. But, it all are variations on the common themes: major changes in fertility, a redefinition of the model of the family, improvements in mortality, and becoming countries of immigration. It is our inability to explain these changes as a purely temporary disturbance, which convinces me that describing them as a 'Second Demographic Transition' is warranted.

Acknowledgment. I gratefully acknowledge the advice and support received from Drs. Yves de Roo in the preparation of the illustrations for this paper.

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