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# Cohort childbearing age patterns in low-fertility countries in the late 20th century: Is the postponement of births an inherent element?

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# Cohort childbearing age patterns in low-fertility countries in the late 20th century: Is the postponement of births an inherent element?

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## *Abstract*

Major changes in the age patterns of fertility were characteristic of fertility trends following the Second World War. The paper provides an overview and analysis of changes in age patterns of cohort childbearing in low-fertility countries during the second half of the 20th century. In Western countries cohorts born around 1940 had earlier childbearing than those of 1930. Early childbearing persisted among cohorts born during the 1940s, although generally at a lower level. Major shifts occurred among the cohorts born during the 1950s. These women incurred considerable fertility deficits when young and compensated, at least in part if not totally, with surpluses when they reached their upper twenties and thirties. Many of the postponed births were made up. The decline in fertility among young women continues in the cohorts born during the 1960s and 1970s. In the formerly socialist countries the fertility decline among young women commenced with those born in the late 1950s and is continuing among those born in the 1960s and 1970s. In almost all low-fertility countries each cohort of young women born in the 1960s and 1970s is having fewer children than preceding ones. It appears unrealistic to expect that these cohorts will eventually attain replacement levels because of the considerable deficits incurred when young. Their fertility when older would have to be extraordinarily high even to realize completed fertility of the cohorts born around 1960, which on average was below replacement. A postponement of births regarded as temporary by the couples involved with many of the postponed births never being born, as well as conscious decisions to have fewer births than previous cohorts, appear to be continuing processes in most countries.

## *Introduction*

The 20th century is distinguished by larger changes in fertility behavior than humanity has ever experienced (Calot 1999; Chesnais 1992; Landry 1933, 1934; Notestein 1945).

Towards the end of the 19th century and during the first three decades of the 20th, in one industrializing country after another, fertility declined precipitously. So much so that within intervals of a few decades total period fertility rates (TPFRs) descended from the order of about 5 to around 2 children per woman. Given the level of mortality in the 1920s and 1930s in Europe, more than half of its population was reproducing at below replacement (Kirk 1946). Following the Second World War (WW2), many of these countries experienced a significant rise in fertility, generally known as the "baby boom." The formerly socialist countries of Central and Eastern Europe did not experience this baby boom and fertility started a considerable descent to around replacement within a few years after WW2. In the remainder of Europe and in overseas English speaking developed countries considerable fertility declines took place starting in the 1960s. Even sharper fertility declines, essentially from "traditional" levels, occurred in a number of large and small populations in East Asia also since the 1960s. By the late 1990s all of these countries reached unprecedented low period fertility; all of them below replacement and almost half of them below a TPFR of 1.5 children per woman (Frejka, Ross forthcoming).

Taking the cohort perspective, Frejka and Calot (2001) showed that in the low-fertility countries generations, which started their childbearing after WW2 and ended it in the 1970s, had an average total cohort fertility rate (TCFR) decidedly above replacement at 2.5 children per woman. Those that ended childbearing during the 1990s had an average TCFR of replacement at 2.1, and robust estimates indicate that those who will conclude their childbearing around 2010 will have an average TCFR of 1.9 children per woman. Furthermore, the fertility trends of cohorts that are in the middle of -- or initiating -- their childbearing indicate a tendency for further decrease. Will the analysis of changes in age patterns of childbearing confirm or refute this conclusion?

As will become evident, major changes in the age patterns of fertility were an inherent part of the fertility trends following WW2. The objective of this paper is to provide *an overview and analysis of changes in age patterns of cohort childbearing in low-fertility countries during the second half of the 20th century*. The paper is part of an extensive project exploring in detail cohort fertility behavior in approximately 30 populations of Europe, North America, Oceania and East Asia[1].

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[1] The working title of the project is "Contemporary cohort reproductive patterns: Low fertility countries in the second half of the 20th and in the early 21st century." In the paper "Cohort Reproductive Patterns in Low-Fertility Countries" (Population and Development Review 27:1, 103-132, March 2001) the methodology is described, a general analysis as well as an analysis of a small number of reasonably representative countries is conducted, and a series of conclusions is presented. The focus on

The general fertility decline of the last several decades of the 20th century in the low-fertility countries has been a complex process. A number of scholars have and are exploring the demographic complexities (for instance, Bongaarts, Feeney 1998; Kohler, Ortega 2001) and others have and are investigating the societal circumstances that brought about this decline (for instance, Kirk 1996; Macura 2000; van de Kaa 1987). The analysis in this paper falls into the former category.

The strength of the paper is that it provides an overview of the most important features of the subject matter utilizing data for 30 countries. It has, however, a number of limitations. Because the paper provides an overview it cannot capture various subtleties and it presents the overall picture in broad strokes. Given the restrictions on its size, it cannot cover crucial structural details, such as a breakdown of changes in the age patterns of individual parities, or related issues, such as changes in parity progression ratios, parity distributions and childlessness. Work on these issues is in progress and will be reported on in other papers.

### Basic changes of cohort age patterns of fertility in the second half of the 20th century

We start with the example of one country to illustrate typical changes of the age structure. In Denmark the TCFRs of the 1930-31 and the 1940-41 cohorts were quite similar, 2.37 and 2.22, respectively, yet their age patterns of fertility were remarkably different (see Figure 1a). Compared to the 1930-31 cohort, women of the 1940-41 cohort were having more children when they were young, and once they reached age 27, they were having fewer children than the cohort born 10 years earlier. Childbearing shifted into the younger ages.

Among the cohorts born during the decade of the 1940s, completed cohort fertility declined from 2.22 to 1.90 which was also accompanied by a change in the age pattern. At the youngest and oldest ages fertility remained fairly constant, but there was a substantial drop when women were in their 20s.

Subsequently, among the cohorts born during the 1950s, TCFRs remained unchanged at 1.90 children per woman, however, the age pattern changed considerably. Compared to the cohort of 1950-51, those of the 1960-61 cohort were having fewer children as teenagers and in their early twenties, but once they reached their late twenties, they had many more children (see Figure 1a). Fertility shifted significantly into the older ages. In graphical terms, the fertility curve of age-specific rates and of cumulated cohort rates shifted to the right in Figure 1a as well as in Figure 1b.

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cohort fertility represents an effort to complement other research and by no means implies that cohort analysis is superior to period analysis.

### *A methodological note: the dividing point between young and older women*

As shown in Figure 1, the *crossover* from relatively high fertility in the older ages in the 1930-31 cohort to relatively higher fertility among young women in the 1940-41 cohort occurred in Denmark between ages 25 and 26. Subsequently, the crossover from relatively high fertility at young ages in the 1950-51 cohort to relatively high fertility at the older ages in the 1960-61 cohort took place between the ages of 26 and 27. Similar crossovers occurred at much the same ages in most "Western" countries[2]. That was the first substantive reason why *completed age 26 was chosen as the divider* between fertility at young and older ages for the age structural analysis in the remainder of this paper. Furthermore, almost invariably among cohorts born during the 1950s and 1960s in the Western countries fertility was lower than in previously born cohorts up to about age 26 or 27, which tended to be the turning point from whence fertility was higher than in previous cohorts (see Frejka, Calot 2001, Figures 4 and 13).

Another reason for selecting completed age 26 as a divider is purely formal. Completed age 26 is half way between the ages of 15 and 40, the latter having been the effective age of completed childbearing in the countries of our concern during the second half of the 20th century.

Last but not least, at the time when our explorations started, the childbearing age patterns for the 1970 cohorts in most countries were available up to completed age 26. These cohorts will be the subject of analysis later in the paper.

### *Shift of fertility between the young and the older ages*

The changes described above for Denmark when expressed as changes in the *proportion* of total cohort fertility that occurs before completed age 26, irrespective of the absolute value of the TCFR, provide the following picture. In the 1930-31 birth cohort 56 percent of fertility was realized when this cohort was young, i.e. by completed age 26 (see Table 1). The cohorts born during the late 1930s and early 1940s -- represented by the 1940-41 birth cohort – advanced their childbearing even more than previous cohorts and thus contributed to the tail-end of the baby boom. Not only did these cohorts have relatively high fertility, they also had a comparatively large proportion of their children early, 65 percent before age 27.

Even though one cohort after another of those born during the 1940s had lower total fertility than the previous one, the pattern of early childbearing persisted. The 1950-51 birth cohort still had 60 percent of its children in their teens and early to mid-twenties. Subsequently, while TCFRs remained stable

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[2] The principal exceptions were three of the four countries of Southern Europe: Greece, Portugal and Spain. In Greece and Spain we lack data for the cohorts born in the 1930s and 1940s. Taking the known data, the trends of total cohort fertility and of the childbearing age patterns were different from the other Western countries.

at about 1.90 among the cohorts born during the 1950s and early 1960s, a continuously smaller proportion of children were borne by young women; in the 1960-61 cohort only 40 percent.

Similar changes occurred in most Western countries, although at somewhat different levels (see Table 1). In the Netherlands the proportions of children borne by young women were relatively small for all cohorts concerned, their childbearing was relatively late in the reproductive period. In contrast, in the United States women tended to bear children early. But the differences between successive cohorts were similar from country to country.

In Southern Europe, with the exception of Italy, the trends of the TCFRs as well as the childbearing age patterns differed from the other Western countries. As far as is known and can be implied, the decline of TCFRs started with cohorts born around 1940, i. e. with cohorts born later than in the other Western countries (see Frejka, Calot 2001). The trends of the TCFR decline were steeper and the changes of the childbearing age patterns were predominantly fertility declines of older women not only among the cohorts of the 1930s, but also the ones of the 1940s.

The levels and nature of the changes were quite different in the formerly socialist countries of Central and Eastern Europe and in the formerly socialist Baltic countries. Already among the cohorts born around 1930 childbearing was early. The proportions of children born to these cohorts before age 27 were about 60 percent and larger. For the subsequent cohorts the proportions of early childbearing continued to increase. In the cohorts born around 1960 in most of these countries the proportion of children born before age 27 were 70 percent or higher.

The changes in the childbearing age patterns were somewhat unique in Japan. Essentially TCFRs and the age distribution of childbearing were level from the cohorts born around 1930 to those born in the mid-1950s. At least part of the reason was that Japan did not experience a post-WW2 baby boom. Among the cohorts born since the mid-1950s there has been a TCFR descent. As in the Western countries this has been accompanied by a decline in the proportion of childbearing in the young ages.

In the next section the trends indicated in the last column of Table 1 will be analyzed. In principal, these consist of a shift in the proportion of total cohort fertility from the young to the older ages in the Western countries and a mild further increase in the proportion of the younger population in the formerly socialist countries among the cohorts of the 1950s. In particular, *trends of the magnitudes of childbearing* in the young and in the older age groups will be analyzed, as these are not directly evident from changes in the proportions.

### *A second methodological note: postponement*

Many authors have referred to the shift of births (or childbearing) from lower to higher ages as *postponement of births (or childbearing)*. The term

"postponement" means that what is being postponed will take place in the future. That is inherent in the definition Hajnal (1947: 151) introduced, namely "[B]y 'postponement' of childbearing I mean a fall in fertility rates balanced by a subsequent rise so that the size of the family remains relatively constant." This can be considered a formal demography definition. In reality frequently there is not a good match between the fall and the subsequent rise of fertility. The latter can be smaller or larger than the earlier fertility decline. Hajnal leaves some leeway in his formulation: " …so that the size of the family remains *relatively* constant" (emphasis added). Should the profession use the term "postponement" even when the subsequent rise is far smaller or larger than the initial fall in fertility rates?

The issue gets further complicated when individual subjective decision-making is taken into consideration. In a paper reporting on fertility expectations in the United States in the early 1960s, Freedman and Bumpass (1966: 189) say: " … the recently lower birth rates of the younger groups were mainly due to a *postponement of births regarded as temporary by the couples involved*, although it may turn out to have been permanent or at least to have involved fewer births than expected" (emphasis added). This is a "social demography" use of the concept.

An additional issue is measurement, mainly the selection of the base against which the change is measured. In this paper periods 5 or 10 years apart are used.

An even more complex issue is when cohorts that are at the beginning or in the middle of their childbearing periods and they have lower fertility than previous ones. Are these cohorts postponing their childbearing? In-depth sociological knowledge, for instance, may inform about whether the process is perceived by the majority of the couples involved as birth postponement or as clear decisions to have less or even no children.

At times authors use the concept without specifying what is really meant.

In this paper whenever the concept "postponement of births" is used, its meaning is clearly stated in line with the above definitions.

### Were women born during the 1950s postponing their births?

When comparing the 1950 birth cohorts with those of 1960, as a rule to which there were very few exceptions, fertility declined among women below age 27 in the Western countries, in Southern Europe and in the formerly socialist countries. In the 1950 birth cohorts by completed age 26 on average women had borne at least around 1 child and up to as many as 1.7 children (see Table 2). In the 1960 birth cohort in practically all Western countries on average women had borne considerably less than one child by age 27. Fertility of young women had also declined considerably in Italy and Spain,

Australia and New Zealand, as well as in Japan. Smaller declines had taken place in the US, Portugal and Greece, and in the formerly socialist countries.

In Table 2 the differences in the values of fertility rates experienced by young women (before they reached age 27) between the 1950 and the 1960 cohorts are compared with the differences in fertility rates when these women were older (after their age of 26). This illustrates the extent to which the 1960 cohort compensated in the second part of its reproductive period the fertility deficit incurred when these women were young (see Table 2).

In all the countries of Northern Europe as well as in Belgium, the Federal Republic of Yugoslavia and the US when in their late 20s and in their 30s women actually bore all the children they did not have when they were young. In Finland they even overcompensated. In quite a number of the Western countries only a fraction of the lower fertility of the 1960 cohort was realized when women were in the second part of their reproductive period.

In most of the countries of Southern Europe as well as in the formerly socialist countries fertility was lower throughout the reproductive life of the 1960 cohort compared to the 1950 one. In Eastern Germany and in Russia the 1960 cohort had elevated fertility when young and relatively low fertility later in life.

Then there was the case of Hungary where the 1960 cohort had only slightly lower fertility below age 27 and therefore the somewhat elevated fertility after age 26 appeared as a more than four-fold, large overcompensation.

In terms of "postponement of births" it is justified to consider the 1960 cohorts in the Nordic countries, Belgium and the US as having done so when young and made up the postponed births when older. These cohorts did so in the formal demographic and the social demographic sense. In the remainder of the Western countries if at a young age much of the low fertility was an expression of the subjective intention of postponing births, only a fraction of them were actually born. The intention was not realized. In these countries a proportion of women or couples were postponing some births in the social demographic sense.

The 1960 cohorts in the Central and East European countries had borne most of their children before the collapse of the socialist political and economic system around 1990. The relatively fertility stabilizing effect of the system was apparent in that there were minor declines, which might have been postponements perceived as such by the young women, but no making up took place when they were older.

In the next sections the above analysis will be utilized to provide some insights on the fertility behavior in general, and the age patterns thereof, among cohorts that in the 1990s were in the middle or at the beginning of their childbearing periods.

### *A third methodological note: structural changes*

In the strict sense of the concept "structural changes," one can observe and analyze these if the whole of any entity and the values of its individual components are known. With regard to the cohorts starting with those born around 1930 to the ones of around 1960, that is much of what has been done in this paper so far.

We now turn to the information about the childbearing age patterns of women who -- in the mid- to late 1990s -- were in the middle of their reproductive period. Generally, these had completed age 26. This means that only a part of their eventual completed fertility was known, yet it is our desire to utilize this knowledge and evaluate their childbearing trajectory to date. This can be done by conducting a preliminary exploration of what can happen, what might occur or what is unlikely to occur during the remainder of their reproductive life span, i.e. by the time they will have effectively concluded their childbearing.

One way to proceed is to set target total cohort fertility rates and to evaluate or to engage in educated speculations on whether the implied age fertility patterns after age 26 needed to attain the stipulated targets are realistic.

### *What is known about future cohort age trajectories?*

### *A. Fertility patterns of young women in cohorts midway in their childbearing in the mid-1990s*

A considerable decline in cumulated cohort fertility by age 27 has been the rule in almost all the countries of the sample comparing the 1970 with the 1960 cohorts (see Table 3). There were two exceptions: A distinct one, the United States, and another, weaker one, New Zealand.

In the "Western" countries, the fertility decline of the young cohorts born during the 1960s was a continuation of the descent among the cohorts born during the 1950s. On average, in the 18 "Western" countries the level of fertility of the young fell by almost 50 percent within the span of the 20 cohorts born between 1950 and 1970. The decline was particularly large in Italy, Spain and the Netherlands. In these countries only about 0.3 of a child was born per woman by the time the women in the 1970 cohort reached age 27; down from 0.9, 1.0 and 1.1 in the Netherlands, Italy and Spain, respectively (see Table 3).

Comparing the cohorts born in 1970 to those born in 1960 in the formerly socialist countries the descent was of a similar order of magnitude as in the Western countries. Despite this large drop, their fertility while young is still at a high level, because these countries previously had a pattern of very young childbearing. In almost all the formerly socialist countries, young women of the 1970 cohort were still having approximately one child by the

time they reached age 27 and their childbearing peak continues to be in the early twenties.

## B. Estimated future fertility patterns of older women in cohorts midway in their childbearing in the mid-1990s

Since the childbearing patterns of the 1970 birth cohorts in the countries of the sample were known up to completed age 26 (in exceptional cases 27 or 28), alternative target total cohort fertility rates could be stipulated, and characteristics of fertility patterns after age 26 could be estimated on this basis.

Two such general target TCFRs were selected: the *TCFR of 1960* in the respective country, and the *TCFR of replacement* defined as 2.1 children per woman.

Taking the example of Denmark:

1. The children per woman that were already born by age 27 to the 1970-71 cohort represent 32 percent of the target TCFR of the 1960-61 cohort.

2. If the 1970-71 cohort were eventually to attain the same TCFR as that of the 1960-61 cohort, another 68 percent still remain to be born (see Table 4).

3. For the 1970-71 cohort to attain fertility of replacement (= 2.1), another 71 percent of children of that cohort would have to be born (see Table 4).

4. These resulting values of 68 and 71 percent are subsequently compared with the proportion of childbearing that was realized after age 26 in the 1960-61 cohort. By doing so, the relative magnitude or difference between the amount of children that "need to be born" to achieve the target TCFRs and the actual amount of children that were borne by the 1960-61 cohorts is demonstrated (see last two columns of Table 4). Fertility of the 1970-71 cohort would have to increase by 14 percent for the TCFR of the 1960-61 cohort to be attained, and by 19 percent to attain replacement.

## A rough evaluation

The results of the calculations show that in practically every country the proportion or amount of childbearing needed to attain the stipulated targets for the 1970-71 birth cohorts are larger, in many cases formidably so, than the respective amounts in the 1960-61 cohorts (see Table 4).

In order to be able to appraise this information, a criterion has to be defined so that relevant precise-quantitative or vague-qualitative evaluations

can be made. Given the relatively general level of analysis in this paper it appears difficult to devise the former. For the latter it is proposed to inquire whether it appears likely or unlikely for fertility to increase as much as indicated by the numbers in Table 4 among the cohorts under consideration when they will be in their late twenties and in their thirties.

As a first approximation one can say that as long as the values in the last two columns of Table 4 are relatively small, for instance, less than a 30 percent growth, it might be possible to achieve such an increase of childbearing after age 26. Obviously, the larger the number the less likely such a development.

One can also examine the values of the "proportions of childbearing needed after completed age 26 in the 1970-71 cohort to attain either the TCFR of 1960-61, or of replacement" (the third and fourth column from the right hand side in Table 4). If such values have been experienced in other countries before, they can be considered attainable.

This procedure does not lead to very satisfactory results and is blurry.

### A more detailed evaluation

Taking the example of *Denmark*, instead of merely considering the overall ratio of needed increase, age-specific curves are plotted which illustrate scenarios of augmented fertility rates that would be needed to reach the desired elevated fertility after age 26. A visual inspection of Figure 2a illustrates that it would be rather unlikely for Danish women born in 1970-71 to decide to have so many children in their late twenties and early thirties that would result in the TCFR of the 1960-61 cohort, or even less so a TCFR of replacement.

It is not totally out of the realm of the possible for the 1970-71 cohort to reach the target TCFRs. If, for instance, the elevated curves after age 26 are compared with the real cohort fertility age trajectory of Swiss women born in 1930[3] who achieved a TCFR of 2.18 (see Figure 2b), a reasonable similarity of the Danish and Swiss curves can be observed. Detailed calculations show that age-specific fertility rates needed to attain the TCFR of the 1960-61 cohort are consistently lower than those of the 1930 Swiss cohort. To attain cohort replacement would obviously be more difficult. Up to age 38 the estimated Danish age-specific fertility rates are higher than those of the 1930 cohort of Swiss women.

Data in Table 4 show that *Bulgarian* women born in 1970-71 would have to have more than twice as many children after age 26 than the women of the 1960-61 cohort. At first sight that appears implausible. An examination

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[3] The 1930 Swiss birth cohort was selected for comparison because it represented a real age pattern of late cohort fertility of the recent past with a TCFR around replacement. A 1960 cohort would have been preferable but any that had a sufficiently high TCFR had age patterns almost identical to Denmark's.

of Figure 3a illustrates scenarios of age-specific fertility behavior that would be needed to attain the TCFRs of the 1960-61 cohort or the TCFR of replacement. The peak of childbearing in Bulgaria for the 1970-71 birth cohort was at age 20. By completed age 26 the majority of Bulgarian women of that cohort will have completed their childbearing. Among the cohort of 1960-61 it was 81 percent (see Table 1). In their late twenties women of the 1970-71 cohort would have to have age-specific fertility rates about as high as they had in their early twenties to attain the TCFR of the 1960-61 cohort. Such a drastic reversal of the fertility age pattern is not likely to occur. This reflection leads to a conclusion that a major proportion of childbearing of the 1970-71 cohort has already occurred before age 27. It is unrealistic to expect that this cohort will reach either of the target cohort fertility rates.

Interesting reflections are generated by superimposing the age fertility trajectory of the Swiss 1930 birth cohort. The difference between childbearing patterns of European countries stand out. The cohorts born around 1970 in the formerly socialist countries of Central and Eastern Europe still had a very young age pattern of fertility. These were cohorts which started their childbearing approximately five years before the collapse of the authoritarian systems in those countries. It is conceivable that the cohorts born more recently will adopt childbearing age patterns more similar to those of the Western countries.

### What do the childbearing age patterns of the youngest cohorts indicate?

The cumulated cohort fertility rates (CCFRs) up to completed age 21 have been on the decline in practically all the Western countries for 25 recent birth cohorts, starting with those born in 1950-51 through those born in 1975-76 (see Table 5). The overall decline has been between 60 and 80 percent in the majority of these countries (not shown separately in Table 5). The decline has been continuing among the youngest cohorts, namely those born during the 1970s. In some countries this descent has been faster than among the older cohorts and in others slower. In the 1975-76 cohorts the absolute levels of this fertility are, as a rule, very low, namely below 0.2 children per woman. The outstanding exception is the United States, with a relatively stable CCFR over the 25 cohorts of about 0.5 children per woman.

Note that there are signs of the fertility decline among young women in some countries coming to an end. In West Germany, the 1975-76 cohort even had a fertility rate higher than that of the 1970-71 cohort.

In the formerly socialist countries the trends as well as the absolute levels were different. In many of them, the 1960-61 cohort had higher CCFRs up to completed age 21 than the 1950-51 cohort. Subsequently, a decline began in practically all of these countries since the cohort of 1960-61, which accelerated between the cohorts born in 1970-71 and 1975-76 (see Table 5). The level of fertility by completed age 21 in the 1975-76 cohorts in practically all the formerly socialist countries was still generally about twice as high as in the Western countries.

The general CCFR trend throughout the low fertility countries among the cohorts born in the 1970s was a continuing decline. What does this imply?

**Was the postponement of births an inherent element of childbearing age trajectories in the late 20$^{th}$ century?**

A. *A recapitulation of what can be stated with certainty*

1. Comparing fertility of young with that of older women[4] of the 1960 contrasted with the 1950 cohorts, there were a number of countries in which the deficits incurred when young, were compensated or even over-compensated, when these women were older (see Table 2). If a compensation of 85 percent[5] and more is considered an appropriate cutoff point, there were 11 such countries. There was another group of countries in which only a fraction of the 1960 deficit at young ages was compensated in the second part of their reproductive period. There were 7 such cases. In yet other countries fertility was lower throughout the reproductive life span of the 1960 cohort compared to the 1950 one. There were 7 countries of this type. Finally, there were 2 countries in which fertility was higher among young women and lower among older ones in the 1960 compared to the 1950 cohort.

2. The trend of a decline in fertility of young women among the cohorts born during the 1960s has continued (see Table 3). Comparing CCFRs up to age 26 in the 1970 with the 1960 cohorts, in almost all countries young women incurred a deficit of around 20 percent or more.

3. The trend of a decline in fertility of the youngest among young women in the cohorts born during the early to mid-1970s has continued (see Table 4). Comparing CCFRs up to age 21 in the 1975 with the 1970 cohorts, considering the span between the cohorts is only 5 years, in almost all countries the fertility decline was of a similar magnitude if not steeper as when observing the cohorts born in the 1950s and 1960s.

B. *An evaluation of the facts*

The evaluation will be conducted taking as a basis the requirements of the formal demography and the social demography definitions of postponement of births (see section "Second methodological note: postponement").

1. In the 11 countries in which the fertility deficits when young were compensated for later in reproductive life, the childbearing age patterns of the 1960 cohorts meet the requirements of both the formal and the social

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[4] The dividing point = completed age 26.

[5] This appears to capture the spirit of the Hajnal's formal demography definition of postponement, i.e. ".... so that the size of the family remains relatively constant."

demography definitions of postponement. In the 16 other countries the requirements of the formal demography definition are not met, i. e. postponement was not taking place, because the fertility decline early in the reproductive period was not compensated for by a surplus later when these women were older.

It can be assumed that some postponement of births was taking place among women of the 1960 birth cohorts in the spirit of the social demography definition. The lower fertility of the young women may have been at least in part "due to a postponement of births regarded as temporary by the couples involved." To what extent this is so, is a subject matter for other -- say, sociological, psychological or modern anthropological -- research, but cannot be explored with the information available in this project.

2. The analysis in the above section "What is known about future cohort age trajectories?" dealt with women born towards the end of the 1960s, represented by the 1970 birth cohorts. Before discussing the results of the analysis, the qualification has to be made that the future is unknown. Nevertheless, the analysis made a convincing argument that in a number of countries, especially the formerly socialist ones which had an age pattern concentrated early in the reproductive period, it would be impossible for formal demographic postponement to occur. Even in most Western countries it appears unlikely for formal demographic postponement to take place. The analysis demonstrated that it might be feasible in some countries for fertility of the 1970 cohort to catch up with the 1960 TCFRs. Note however, that the majority of these were already considerably below replacement. *Formal demographic postponement and catching up to the replacement level appears unrealistic in almost all low-fertility countries for the 1970 cohorts.*

What was said above about how couples or women viewed their fertility decisions when they were young, the social demographic type of postponement, applies also to the 1970 cohort. This project is not equipped to provide such insights.

3. The amount of information that is available for the cohorts born around 1975 is too limited to allow any analysis of postponement of births. Nevertheless, the knowledge that in almost all countries fertility of the 1975 cohorts was significantly lower than that of the 1970 ones is very important for the following reason. *It will be an even greater challenge for the 1975 cohorts to attain fertility surpluses later in their reproductive periods to compensate for the deficits they were incurring when young,* because the youngest of the young in the 1975 cohorts are having less children than any previous cohorts.

## *Overall conclusions*

1. Irrespective of trends in the TCFRs, the age patterns of cohort fertility are continuously changing in all low fertility countries.

2. The answer to the question posed in the subtitle of the paper is a qualified "yes." *The postponement of births is an inherent element of childbearing age trajectories in the late 20th century*. However, the postponement of childbearing in the formal demographic sense applies only some of the times in some countries. In the social demographic sense the postponement of births is probably taking place in all countries most of the time. This appears as an eminently plausible hypothesis, however, it cannot be explored with the data analyzed in this paper, but has to be confirmed or refuted by the help of other social science research.

3. The analysis in this paper supports and strengthens conclusions reached in an earlier paper by the authors (Frejka, Calot 2001):
    a. There was a distinct difference between cohort fertility patterns in the formerly socialist countries and those of the "Western" countries.
    b. Cohorts born during the 1960s and early 1970s in the low-fertility countries are likely to have lower completed fertility than previous cohorts and this is going to be considerably below replacement; and
    c. In most countries it appears likely that only a fraction of the shortfall in fertility being incurred by the young women of the cohorts born during the 1960s and early to mid-1970s will be made up when these women will be older.

In sum, in almost all low-fertility countries each cohort of young women born in the 1960s and 1970s is having fewer children than preceding ones. Consequently, below replacement and possibly declining period fertility can be expected in the low-fertility countries in the foreseeable future. In other words, thus far it does not appear that an increase in fertility is likely in the near future.

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**Figure 1a. Age-specific fertility rates , Denmark, birth cohorts 1930-31, 1940-41, 1950-51 and 1960-61**
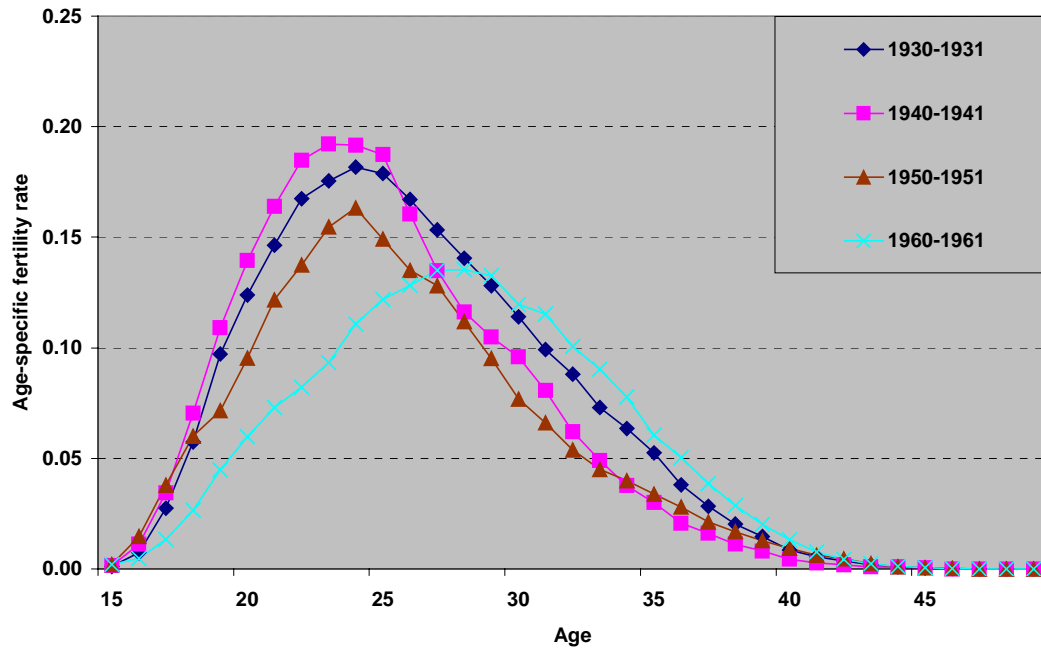


**Figure 1b. Cumulated age-specific fertility rates, Denmark, birth cohorts 1930-31, 1940-41, 1950-51 and 1960-61**
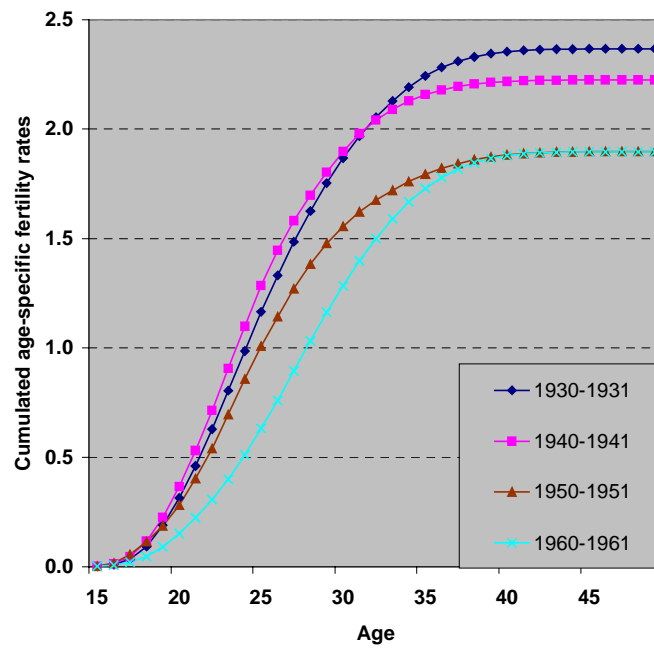
*Table 1*
The proportion of childbearing realized by completed age 26, selected countries, birth cohorts 1930-31, 1940-41, 1950-51 and 1960-61

| Country | Proportion of childbearing of birth cohort by completed age 26 | | | | Relative change of proportions between cohorts 10 years apart (in percent) | | |
|---|---|---|---|---|---|---|---|
| | *1930-31* | *1940-41* | *1950-51* | *1960-61* | *1940-41/ 1930-31* | *1950-51/ 1940-41* | *1960-61/ 1950-51* |
| **Northern Europe** | | | | | | | |
| Denmark | 56.3 | 65.0 | 60.3 | 40.1 | 15 | -7 | -33 |
| Finland | 51.8 | 61.9 | 51.0 | 39.2 | 19 | -18 | -23 |
| Norway | 46.1 | 61.3 | 60.3 | 43.6 | 33 | -2 | -28 |
| Sweden | 52.2 | 59.3 | 52.5 | 39.2 | 14 | -11 | -25 |
| **Western Europe** | | | | | | | |
| Belgium | 43.9 | 57.5 | 56.5 | 45.0 | 31 | -2 | -20 |
| France | 48.4 | 56.2 | 55.6 | 45.9 | 16 | -1 | -17 |
| England & Wales | 47.4 | 62.5 | 56.1 | 46.8 | 32 | -10 | -17 |
| Netherlands | 31.3 | 48.2 | 48.4 | 30.6 | 54 | 0 | -37 |
| **Central Europe** | | | | | | | |
| Austria | 44.1 | 60.1 | 62.0 | 53.3 | 36 | 3 | -14 |
| Switzerland | 36.4 | 51.8 | 47.9 | 35.3 | 42 | -8 | -26 |
| Former FRG | 43.0 | 57.0 | 55.5 | 41.5 | 33 | -3 | -25 |
| Former GDR | n.a. | 68.1 | 70.0 | 74.0 | n.a. | 3 | 6 |
| **Formerly socialist countries (Central and Eastern Europe)** | | | | | | | |
| Bulgaria | 69.2 | 73.4 | 77.9 | 81.0 | 6 | 6 | 4 |
| Czech Republic | 68.9 | 71.1 | 73.8 | 74.6 | 3 | 4 | 1 |
| Hungary | 65.7 | 62.7 | 68.5 | 65.3 | -5 | 9 | -5 |
| Romania | n.a. | 56.3 | 69.4 | 75.0 | n.a. | 23 | 8 |
| Russian Fed. | n.a. | 59.1 | 62.3 | 71.8 | n.a. | 5 | 15 |
| Slovak Republic | 60.3 | 66.8 | 69.2 | 72.0 | 11 | 4 | 4 |
| FR Yugoslavia | n.a. | 62.5 | 64.0 | 62.6 | n.a. | 2 | -2 |
| **Baltic countries** | | | | | | | |
| Estonia | n.a. | 54.6 | 62.1 | 69.9 | n.a. | 14 | 13 |
| Latvia | n.a. | 53.2 | 61.2 | 68.8 | n.a. | 15 | 12 |
| Lithuania | n.a. | 51.9a | 59.9 | 65.5 | n.a. | 15 | 9 |
| **Southern Europe** | | | | | | | |
| Greece | n.a. | n.a. | 61.1 | 61.9 | n.a. | n.a. | 1 |
| Italy | 39.0 | 48.6 | 55.9 | 46.2 | 25 | 15 | -17 |
| Portugal | 39.7 | 48.6 | 57.3 | 56.4 | 22 | 18 | -2 |
| Spain | n.a. | n.a. | 51.8 | 46.1 | n.a. | n.a. | -11 |
| **Non-European countries** | | | | | | | |
| Australia | 51.3 | 60.6 | 57.9 | 43.4 | 18 | -4 | -25 |
| Japan | 51.8 | 47.5 | 48.4 | 37.2 | -8 | 2 | -23 |
| New Zealand | 49.1 | 63.8 | 64.2 | 46.7 | 30 | 1 | -27 |
| USA | 59.9 | 71.2 | 59.8 | 52.6 | 19 | -16 | -12 |

Note: [a] 1943-1944

*Table 2*
Cumulated cohort fertility rates (CCFRs), by completed age 26 and after age 26, selected countries, birth cohorts 1950-51, 1960-61, 1970-71 and 1975-76

| Country | CCFR of birth cohort at completed age 26 | | | CCFR of birth cohort after completed age 26 | | | Measure of compensation of fertility after age 26 |
|---|---|---|---|---|---|---|---|
| | *1950-51* | *1960-61* | *1960-61 minus 1950-51* | *1950-51* | *1960-61* | *1960-61 minus 1950-51* | |
| **Northern Europe** | | | | | | | |
| Denmark | 1.143 | 0.761 | -0.382 | 0.754 | 1.135 | 0.381 | 100 |
| Finland | 0.946 | 0.761 | -0.185 | 0.907 | 1.180 | 0.273 | 148 |
| Norway | 1.258 | 0.908 | -0.350 | 0.828 | 1.177 | 0.349 | 100 |
| Sweden | 1.052 | 0.793 | -0.259 | 0.953 | 1.230 | 0.277 | 107 |
| **Western Europe** | | | | | | | |
| Belgium | 1.028 | 0.822 | -0.206 | 0.792 | 1.003 | 0.211 | 102 |
| France | 1.174 | 0.962 | -0.212 | 0.935 | 1.132 | 0.197 | 93 |
| England & Wales | 1.151 | 0.911 | -0.240 | 0.901 | 1.034 | 0.133 | 55 |
| Netherlands | 0.914 | 0.563 | -0.351 | 0.975 | 1.276 | 0.301 | 86 |
| **Central Europe** | | | | | | | |
| Austria | 1.136 | 0.885 | -0.251 | 0.696 | 0.777 | 0.081 | 32 |
| Switzerland | 0.860 | 0.624 | -0.236 | 0.934 | 1.144 | 0.210 | 89 |
| Former FRG | 0.940 | 0.662 | -0.278 | 0.753 | 0.932 | 0.179 | 64 |
| Former GDR | 1.255 | 1.326 | 0.071 | 0.538 | 0.465 | -0.073 | reversed |
| **Formerly socialist countries (Central and Eastern Europe)** | | | | | | | |
| Bulgaria | 1.590 | 1.528 | -0.062 | 0.450 | 0.359 | -0.091 | fertdecl >&<27 |
| Czech Republic | 1.547 | 1.502 | -0.045 | 0.550 | 0.510 | -0.040 | fertdecl >&<27 |
| Hungary | 1.336 | 1.317 | -0.019 | 0.615 | 0.701 | 0.086 | 453 |
| Romania | 1.669 | 1.591 | -0.078 | 0.735 | 0.531 | -0.204 | fertdecl >&<27 |
| Russian Fed. | 1.166 | 1.307 | 0.141 | 0.707 | 0.514 | -0.193 | reversed |
| Slovak Republic | 1.592 | 1.562 | -0.030 | 0.708 | 0.606 | -0.102 | fertdecl >&<27 |
| FR Yugoslavia | 1.447 | 1.416 | -0.031 | 0.813 | 0.846 | 0.033 | 106 |
| **Baltic countries** | | | | | | | |
| Estonia | 1.205 | 1.376 | 0.171 | 0.736 | 0.592 | -0.144 | reversed |
| Latvia | 1.144 | 1.295 | 0.151 | 0.725 | 0.587 | -0.138 | reversed |
| Lithuania | 1.201 | 1.210 | 0.009 | 0.804 | 0.638 | -0.166 | reversed |
| **Southern Europe** | | | | | | | |
| Greece | 1.264 | 1.184 | -0.080 | 0.805 | 0.728 | -0.077 | fertdecl >&<27 |
| Italy | 1.037 | 0.744 | -0.293 | 0.819 | 0.868 | 0.049 | 17 |
| Portugal | 1.183 | 1.057 | -0.126 | 0.881 | 0.815 | -0.066 | fertdecl >&<27 |
| Spain | 1.086 | 0.783 | -0.303 | 1.009 | 0.916 | -0.093 | fertdecl >&<27 |
| **Non-European countries** | | | | | | | |
| Australia | 1.349 | 0.918 | -0.431 | 0.982 | 1.198 | 0.216 | 50 |
| Japan | 0.977 | 0.668 | -0.309 | 1.044 | 1.126 | 0.082 | 27 |
| New Zealand | 1.635 | 1.091 | -0.544 | 0.911 | 1.246 | 0.335 | 62 |
| USA | 1.201 | 1.057 | -0.144 | 0.814 | 0.960 | 0.146 | 101 |

*Table 3*

Cumulated cohort fertility rates (CCFRs) by completed age 26, selected countries, birth cohorts 1950-51, 1960-61 and 1970-71

| Country | CCFR of birth cohort by completed age 26 | | | Difference of CCFRs between birth cohorts (in percent) | | | Difference of CCFRs between birth cohorts (in children per woman) | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1950-51 | 1960-61 | 1970-71 | 1960-61/ 1950-51 | 1970-71/ 1960-61 | 1970-71/ 1950-51 | 1960-61/ 1950-51 | 1970-71/ 1960-61 | 1970-71/ 1950-51 |
| **Northern Europe** | | | | | | | | | |
| Denmark | 1.143 | 0.761 | 0.600 | -33 | -21 | -48 | -0.38 | -0.16 | -0.54 |
| Finland | 0.946 | 0.761 | 0.638 | -20 | -16 | -33 | -0.19 | -0.12 | -0.31 |
| Norway | 1.258 | 0.908 | 0.743 | -28 | -18 | -41 | -0.35 | -0.17 | -0.52 |
| Sweden | 1.052 | 0.793 | 0.665 | -25 | -16 | -37 | -0.26 | -0.13 | -0.39 |
| **Western Europe** | | | | | | | | | |
| Belgium | 1.028 | 0.822 | 0.572a | -20 | -30 | -44 | -0.21 | -0.25 | -0.46 |
| France | 1.174 | 0.962 | 0.597 | -18 | -38 | -49 | -0.21 | -0.36 | -0.58 |
| England & Wales | 1.151 | 0.911 | 0.755 | -21 | -17 | -34 | -0.24 | -0.16 | -0.40 |
| Netherlands | 0.914 | 0.563 | 0.352 | -38 | -38 | -62 | -0.35 | -0.21 | -0.56 |
| **Central Europe** | | | | | | | | | |
| Austria | 1.136 | 0.885 | 0.666 | -22 | -25 | -41 | -0.25 | -0.22 | -0.47 |
| Switzerland | 0.860 | 0.624 | 0.427 | -27 | -32 | -50 | -0.24 | -0.20 | -0.43 |
| Former FRG | 0.940 | 0.662 | 0.478 | -30 | -28 | -49 | -0.28 | -0.18 | -0.46 |
| Former GDR | 1.255 | 1.326 | 0.668 | 6 | -50 | -47 | 0.07 | -0.66 | -0.59 |
| **Formerly socialist countries (Central and Eastern Europe)** | | | | | | | | | |
| Bulgaria | 1.590 | 1.528 | 1.167 | -4 | -24 | -27 | -0.06 | -0.36 | -0.42 |
| Czech Republic | 1.547 | 1.502 | 1.160 | -3 | -23 | -25 | -0.04 | -0.34 | -0.39 |
| Hungary | 1.336 | 1.317 | 1.054 | -1 | -20 | -21 | -0.02 | -0.26 | -0.28 |
| Romania | 1.669 | 1.591 | 1.097 | -5 | -31 | -34 | -0.08 | -0.49 | -0.57 |
| Russian Fed. | 1.166 | 1.307 | 1.062 | 12 | -19 | -9 | 0.14 | -0.25 | -0.10 |
| Slovak Republic | 1.592 | 1.562 | 1.151 | -2 | -26 | -28 | -0.03 | -0.41 | -0.44 |
| FR Yugoslavia | 1.447 | 1.416 | 1.139a | -2 | -20 | -21 | -0.03 | -0.28 | -0.31 |
| **Baltic countries** | | | | | | | | | |
| Estonia | 1.205 | 1.376 | 1.038 | 14 | -25 | -14 | 0.17 | -0.34 | -0.17 |
| Latvia | 1.144 | 1.295 | 0.986 | 13 | -24 | -14 | 0.15 | -0.31 | -0.16 |
| Lithuania | 1.201 | 1.210 | 1.081 | 1 | -11 | -10 | 0.01 | -0.13 | -0.12 |
| **Southern Europe** | | | | | | | | | |
| Greece | 1.264 | 1.183 | 0.644 | n.a. | -46 | n.a. | n.a. | -0.54 | n.a. |
| Italy | 1.037 | 0.744 | 0.257 | -28 | -65 | -75 | -0.29 | -0.49 | -0.78 |
| Portugal | 1.183 | 1.057 | 0.678 | -11 | -36 | -43 | -0.13 | -0.38 | -0.51 |
| Spain | 1.086 | 0.783 | 0.294 | -28 | -62 | -73 | -0.30 | -0.49 | -0.79 |
| **Non-European countries** | | | | | | | | | |
| Australia | 1.349 | 0.918 | 0.646 | -32 | -30 | -52 | -0.43 | -0.27 | -0.70 |
| Japan | 0.977 | 0.668 | 0.410 | -32 | -39 | -58 | -0.31 | -0.26 | -0.57 |
| New Zealand | 1.635 | 1.091 | 1.007 | -33 | -8 | -38 | -0.54 | -0.08 | -0.63 |
| USA | 1.201 | 1.057 | 1.072 | -12 | 1 | -11 | -0.14 | 0.02 | -0.13 |

a

*Table 4*
Childbearing needed after age 26 for 1970-71 cohort to attain total cohort fertility rate of 1960-61 cohort or to attain replacement fertility, selected countries.

| Country | *Proportion of child-bearing after age 26 in the 1960-61 cohort* | *Estimated total cohort fertility rate for the 1960-61 cohort* | *Cumulated cohort fertility rate by completed age 26 in the 1970-71 cohort* | *Proportion of childbearing needed after completed age 26 in the 1970-71 cohort to attain* | | *Relative difference (in%) between 1960-61 proportion and the one needed for cohort 1970-71 to attain* | |
|---|---|---|---|---|---|---|---|
| | | | | *Total cohort fertility rate of 1960-61* | *Replacement total cohort fertility rate=2.10* | *Total cohort fertility rate of 1960-61* | *Replacement total cohort fertility rate=2.10* |
| **Northern Europe** | | | | | | | |
| Denmark | 59.9 | 1.90 | 0.600 | 68 | 71 | 14 | 19 |
| Finland | 60.8 | 1.94 | 0.638 | 67 | 70 | 10 | 15 |
| Norway | 56.4 | 2.09 | 0.743 | 64 | 65 | 14 | 15 |
| Sweden | 60.8 | 2.02 | 0.665 | 67 | 68 | 10 | 12 |
| **Western Europe** | | | | | | | |
| Belgium | 55.0 | 1.83 | 0.572a | 69 | 73 | 25 | 32 |
| France | 54.1 | 2.09 | 0.597 | 71 | 72 | 32 | 32 |
| England & Wales | 53.2 | 1.94 | 0.755 | 61 | 64 | 15 | 20 |
| Netherlands | 69.4 | 1.84 | 0.352 | 81 | 83 | 17 | 20 |
| **Central Europe** | | | | | | | |
| Austria | 46.7 | 1.66 | 0.666 | 60 | 68 | 28 | 46 |
| Switzerland | 64.7 | 1.77 | 0.427 | 76 | 80 | 17 | 23 |
| Former FRG | 58.5 | 1.59 | 0.478 | 70 | 77 | 20 | 32 |
| Former GDR | 26.0 | 1.79 | 0.668 | 63 | 68 | 141 | 162 |
| **Formerly socialist countries (Central and Eastern Europe)** | | | | | | | |
| Bulgaria | 19.0 | 1.90 | 1.167 | 39 | 44 | 103 | 134 |
| Czech Republic | 25.4 | 2.01 | 1.160 | 42 | 45 | 66 | 76 |
| Hungary | 34.7 | 2.02 | 1.054 | 48 | 50 | 38 | 44 |
| Romania | 25.0 | 2.12 | 1.097 | 48 | 48 | 93 | 91 |
| Russian Fed. | 28.2 | 1.82 | 1.062 | 42 | 49 | 48 | 75 |
| Slovak Republic | 28.0 | 2.17 | 1.151 | 47 | 45 | 68 | 61 |
| FR Yugoslavia | 37.4 | 2.26 | 1.139a | 50 | 46 | 33 | 22 |
| **Baltic countries** | | | | | | | |
| Estonia | 30.1 | 1.97 | 1.038 | 47 | 51 | 57 | 68 |
| Latvia | 31.2 | 1.88 | 0.986 | 48 | 53 | 53 | 70 |
| Lithuania | 34.5 | 1.85 | 1.081 | 41 | 49 | 20 | 41 |
| **Southern Europe** | | | | | | | |
| Greece | 38.1 | 1.91 | 0.664 | 65 | 68 | 71 | 79 |
| Italy | 53.8 | 1.61 | 0.318 | 80 | 85 | 49 | 58 |
| Portugal | 43.6 | 1.87 | 0.678 | 64 | 68 | 46 | 55 |
| Spain | 55.9 | 1.70 | 0.294 | 83 | 86 | 48 | 54 |
| **Non-European countries** | | | | | | | |
| Australia | 56.6 | 2.12 | 0.646 | 70 | 69 | 23 | 22 |
| Japan | 62.8 | 1.79 | 0.410 | 77 | 80 | 23 | 28 |
| New Zealand | 53.3 | 2.34 | 0.751 | 68 | 64 | 27 | 21 |
| USA | 47.4 | 2.02 | 1.072 | 47 | 49 | -1 | 3 |

ote: [a] Estimate based on CCFR completed age 25 multiplied by ratio CCFR26/CCFR25 of previous cohort

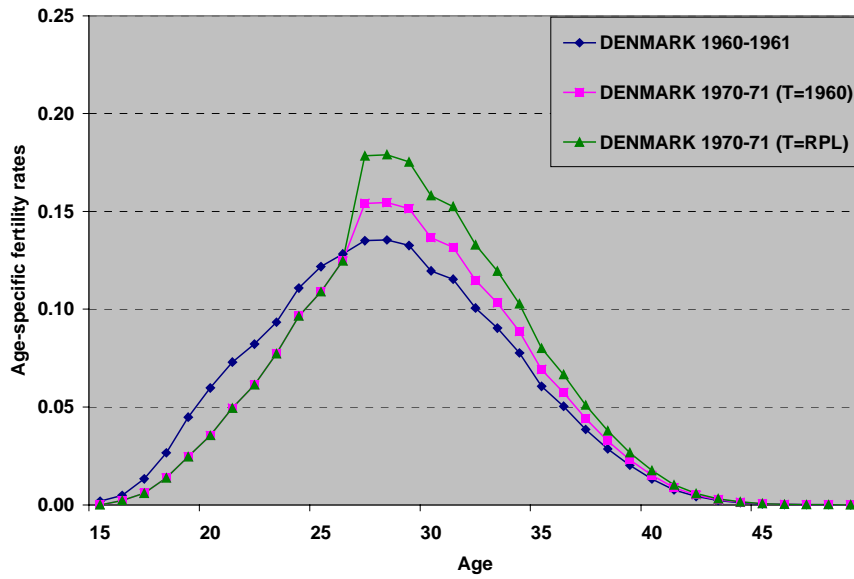**Figure 2a. Age-specific fertility rates, recorded and assumed, Denmark, birth cohorts, 1960-61 and 1970-71**



**Figure 2b. Age-specific fertility rates, recorded and estimated, Denmark and Switzerland, birth cohorts 1930, 1960-61 and 1970-71**
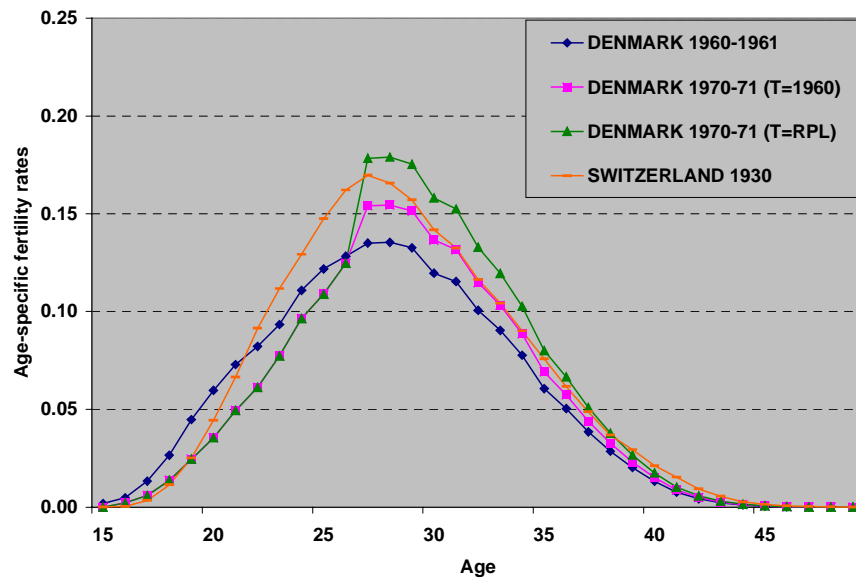
**Figure 3a. Age-specific fertility rates, recorded and estimated, Bulgaria, birth cohorts 1960-61 and 1970-71**
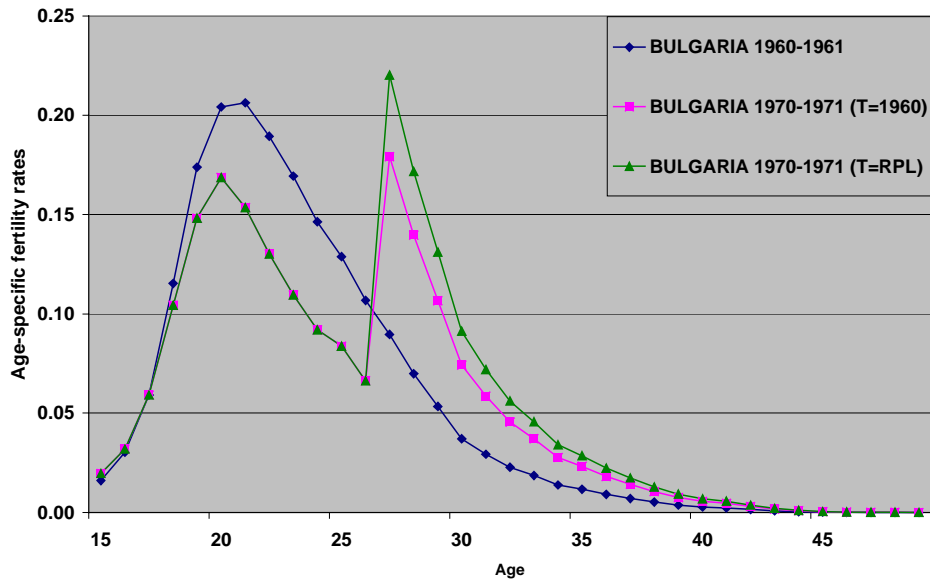


**Figure 3b. Age-specific fertility rates, recorded and estimated, Bulgaria and Switzerland, 1930, 1960-61 and 1970-71**
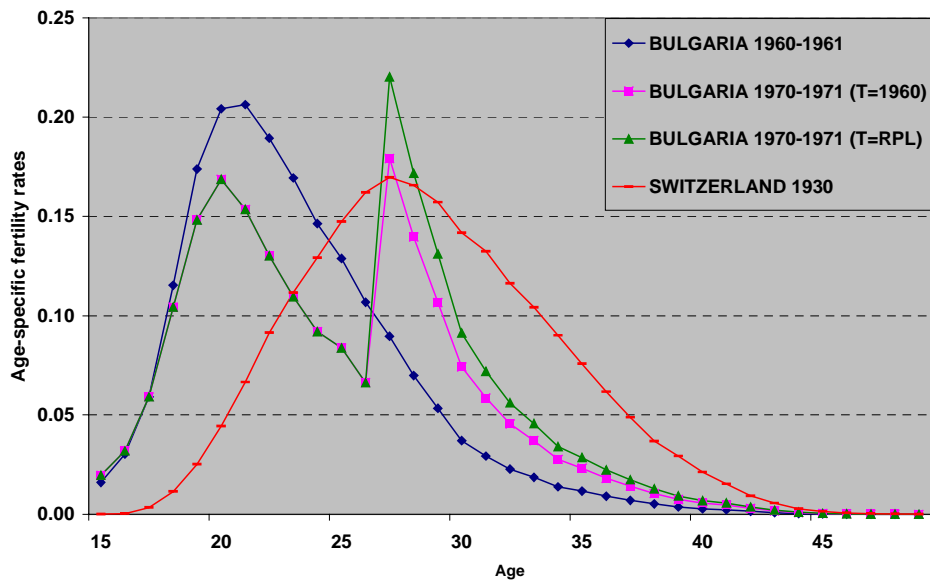
*Table 5*
Cumulated cohort fertility rates (CCFRs), completed age 21, selected countries, birth cohorts
1950-51, 1960-61, 1970-71 and 1975-76

| Country | CCFR of birth cohort by completed age 21 | | | | Difference of CCFRs between birth cohorts (in percent) | | |
|---|---|---|---|---|---|---|---|
| | *1950-51* | *1960-61* | *1970-71* | *1975-76* | *1975-76/ 1970-71* | *1970-71/ 1960-61* | *1960-61/ 1950-51* |
| **Northern Europe** | | | | | | | |
| Denmark | 0.403 | 0.224 | 0.132 | 0.120 | -9 | -41 | -44 |
| Finland | 0.352 | 0.236 | 0.162 | 0.140 | -14 | -31 | -33 |
| Norway | 0.515 | 0.307 | 0.216 | 0.174 | -19 | -30 | -40 |
| Sweden | 0.387 | 0.220 | 0.189 | 0.118 | -38 | -14 | -43 |
| **Western Europe** | | | | | | | |
| Belgium | 0.327 | 0.228 | 0.121 | 0.100a | -17 | -47 | -30 |
| France | 0.386 | 0.270 | 0.136 | 0.106 | -22 | -50 | -30 |
| England & Wales | 0.494 | 0.326 | 0.300 | 0.285 | -5 | -8 | -34 |
| Netherlands | 0.229 | 0.106 | 0.075 | 0.067 | -11 | -29 | -54 |
| **Central Europe** | | | | | | | |
| Austria | 0.532 | 0.340 | 0.198 | 0.182 | -8 | -42 | -36 |
| Switzerland | 0.245 | 0.125 | 0.080 | 0.073 | -9 | -36 | -49 |
| Former FRG | 0.396 | 0.206 | 0.133 | 0.140 | 5 | -35 | -48 |
| Former GDR | 0.590 | 0.532 | 0.300 | 0.121 | -60 | -44 | -10 |
| **Formerly socialist countries (Central and Eastern Europe)** | | | | | | | |
| Bulgaria | 0.746 | 0.805 | 0.685 | 0.389 | -43 | -15 | 8 |
| Czech Republic | 0.600 | 0.694 | 0.585 | 0.294 | -50 | -16 | 16 |
| Hungary | 0.509 | 0.585 | 0.413 | 0.274 | -34 | -29 | 15 |
| Romania | 0.745 | 0.734 | 0.554 | 0.415 | -25 | -25 | -1 |
| Russian Fed. | 0.453 | 0.532 | 0.582 | 0.453 | -22 | 9 | 17 |
| Slovak Republic | 0.578 | 0.644 | 0.606 | 0.284 | -53 | -6 | 11 |
| FR Yugoslavia | 0.654 | 0.579 | 0.474 | 0.377a | -20 | -18 | -11 |
| **Baltic countries** | | | | | | | |
| Estonia | 0.447 | 0.557 | 0.540 | 0.344 | -36 | -3 | 24 |
| Latvia | 0.410 | 0.489 | 0.518 | 0.327 | -37 | 6 | 19 |
| Lithuania | 0.403 | 0.385 | 0.504 | 0.404 | -20 | 31 | -4 |
| **Southern Europe** | | | | | | | |
| Greece | n.a. | 0.547 | 0.237 | 0.153 | -35 | -57 | n.a. |
| Italy | 0.324 | 0.261 | 0.109 | 0.077 | -29 | -58 | -19 |
| Portugal | 0.366 | 0.456 | 0.260 | 0.202 | -22 | -43 | 25 |
| Spain | 0.189 | 0.278 | 0.127 | 0.076 | -40 | -54 | 47 |
| **Non-European countries** | | | | | | | |
| Australia | 0.533 | 0.298 | 0.213 | 0.199 | -7 | -29 | -44 |
| Japan | 0.111 | 0.079 | 0.066 | 0.062 | -6 | -16 | -29 |
| New Zealand | 0.323 | 0.223 | 0.166 | 0.157 | -5 | -26 | -31 |
| USA | 0.600 | 0.491 | 0.513 | 0.528 | 3 | 4 | -18 |

Note: [a] Estimate based on CCFR completed age 20 multiplied by ratio CCFR21/CCFR20 of previous cohort