Better Later than Never. The Increase of Late Childbearing in Europe.

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Extended abstract

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Introduction and main research questions

European societies have experienced a pronounced shift towards later childbearing. This fertility 'postponement' had started in many countries of Western and Northern Europe already in the early 1970s, and it has become one of the most characteristic features of contemporary fertility trends in advanced societies. While the overall shift to later childbearing has been studied extensively (see e.g., Beets et al. 2001, Frejka and Calot 2001, Bongaarts 2002, Kohler, Billari, and Ortega 2002, Sobotka 2004, Ní Bhrolcháin and Toulemon 2005), the issue of childbearing at late reproductive ages remains largely explored. One notable exception is the analysis of late childbearing in Sweden by Billari et al. (2003). Our study aims to bridge this gap and provide a comprehensive exploration of late (in our definition, ages 40+) and very late (ages 45+) childbearing in Europe. Besides mapping general trends in late childbearing, we aim to address several specific issues pertaining to this analysis:

- Is the increase in fertility rates among women aged 40+ primarily a cohort phenomenon or do period influences play a stronger role? In the former case, we would expect that birth cohorts that 'initiated' the overall shift to later childbearing were also instrumental in initiating fertility increase at high reproductive ages.
- Is the increase in the frequency of late childbearing linked to the changing parity composition of women aged 40+, or is it also detectable for women at different parities?
- Does the frequency of late childbearing differ by parity? Are women who are still childless by age 40 more likely to have a child than women who have one or two children at that age?
- Given the biological limitations to late childbearing, can the increase in fertility rates at high reproductive ages be sustained in the next decades?

Relevance of this study

In Europe, a high mean age at childbearing was in the past primarily linked with larger family size. The long-term trend towards small family size, initiated with the (first) demographic transition, implied a considerable reduction in fertility at birth orders 3+ as well as falling fertility rates at higher ages. In many countries fertility rates among women past age 40 had declined so markedly that late motherhood became rare. However, last two decades brought a clear reversal of this long-term trend and most European countries recorded increasing fertility rates among women aged 40+.

This process has a number of important consequences. Increasing number of women who wish to have children at late reproductive ages implies increasing demand for infertility treatment, which is frequently linked with considerable psychological and financial costs, as well as high failure rates. Furthermore, increasing frequency of late childbearing is also likely to lead to an increase in the number of miscarriages, birth deformations and negative health effects both for mothers and their children (Stein and Susser 2000, de la Rochebrochard and Thonneau 2002). Potentially, this may also lead to the reversal of trend in infant mortality, which has been declining for many decades. However, late childbearing might also be beneficial for mothers' health (Mirowsky 2002), although the causality of this association remains questionable (Mueller 2004). In a more general perspective, late parenthood may imply not only increasing need for careful monitoring of women's during their pregnancy, but also increasing demand for specialised childcare and child-related services, as older mothers tend to have higher income.

The study of late childbearing also touches a number of theoretical issues. Kohler, Billari, and Ortega (2002) hypothesized, referring to economic models on the optimal age at childbearing, that the shift to later childbearing might eventually lead to a 'rectangularisation' of fertility, i.e., an increasing concentration of childbearing to a relatively narrow interval during a late stage of reproductive span. This development would be in line with a general extension of the life span and corresponding 'postponement' of many important life-course transitions, including the transition to adulthood, leaving parental home, transition from education to work, or the entry into union and parenthood. However, the idea of 'rectangularisation' is in conflict with the arguments that many important life transitions have become increasingly *deinstitutionalised* and *de-standardised* (Lesthaeghe 1995, Settersen 2003), a development which also implies an increasing variability in the timing of these transitions.

Biology still constitutes a decisive force setting the age limits of childbearing. Although specialised treatments have enabled childbearing in the cases of post-menopausal women, the ultimate deadline to childbearing is fixed for the overwhelming majority of women by the timing of their menopause, which typically occurs before reaching age 50. According to Leridon (2005), permanent sterility affects 17 % of couples with woman aged 40, 55% of couples with women aged 45, and 92% of couples with women aged 50. In relationship with this given biological limitation, our study aims to investigate what is the scope for further increase in the frequency of late childbearing.

Data and methods

An introductory analysis of changes in fertility rates among women aged 40+ in most European countries in the period 1960-2004 is based on the data collected by the Council of Europe (2005) and Eurostat (2005). A detailed investigation of parity-specific trends in late childbearing is based on age-parity period fertility tables, which estimate the probability of having (a)nother child by current age and parity status. So far these indicators have been computed for seven European countries (Austria, Czech Republic, Finland, the Netherlands, Norway, Spain, and Sweden) and pertain to varying time periods between 1975 and 2004. These indicators have been computed with the use of Eurostat (2005) database and various country-specific sources. We plan to include more European countries and possibly also Japan and the United States into this detailed analysis.

Selected preliminary findings

The trend reversal in fertility rates among women aged 40-50 occurred considerably later than the onset of the overall shift towards later childbearing. An increase in fertility rates among women after age 40 first occurred in the late 1970s in Northern Europe, in the mid-1980s in

Western Europe, in the mid-1990s in Southern Europe and after year 2000 in the former communist countries of Central Europe. There is no evidence yet of any increase in the frequency of late childbearing in south-eastern and eastern European countries. The time lag between the initiation of fertility 'postponement' and the increase in fertility rates at late reproductive ages supports the argument that the increase in late childbearing was primarily a cohort-driven process, i.e., it has been initiated by the cohorts who had previously initiated the shift towards later childbearing. Although the relative increase in fertility rates at age 40+ has been rather steep in many countries, usually it has not surpassed the pace of increase in fertility among women in their 30s. In most countries, the relative increase in fertility has been steeper at age 40-44 and relatively slow at age 45-49, indicating that while late childbearing has become more common, 'very late' childbearing remains rare. The share of fertility rates at ages 40+ on the overall total fertility still remains relatively small in comparison with the historical records. For instance, in the Netherlands 3.0 % of fertility rates were realized among women aged 40-49 in 2003 as compared with 8.5 % in 1950.

Although the absolute frequency of late childbearing is not yet very high, our study shows that only a portion of the ongoing increase can be attributed to the effect of changes in the parity composition. The analysis of detailed age-parity data, which take into account exposure population, reveals that in most countries there has been a real shift in childbearing behaviour among women in a later stage of reproductive span, manifested by increasing probabilities of having a(nother) child among women aged 40+. This evidence shows that the reversal in the frequency of late childbearing is attributable to the behavioural change among nulliparous women and women at parity 1, who have increasingly postponed childbearing to the latest stage of reproductive life. This effect of behavioural change, coupled with the increasing share of women at parity 0 and 1, indicates that the frequency of late childbearing is likely to increase markedly in the future. In contrast, the contribution of higher-order fertility to the overall fertility rates at advanced reproductive ages has been declining during the analysed period, although it still remains important.

Surprisingly, many countries registered most marked increase in late childbearing among women at parity 1. Especially in the societies with 'higher' fertility level—judged by the European standards of low fertility—the orientation towards a two-child family is also manifested in the probabilities of having a child at higher ages. In Finland, the Netherlands, and Sweden, women aged 40 who have one child thus have considerably higher probability of ever having another one than the childless women. Furthermore, in all the countries analysed, the probability of having (a)nother child past age 40 is much higher among women at parities 0 and 1 than among women at parities 2+.