# Fertility recuperation strategies: are women from different social backgrounds able to catch up at later ages?

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#### Introduction

During the last decades all major efforts to explain below replacement fertility have focused on timing issues. This is quite understandable as the initial fertility decline could be readily explained by the rise in female education and the entry of women into the labour force. Competing interests increasingly led women to postpone their childbearing in favour of a professional career. Combined with an overhaul of the ideational system and the emergence of new patterns of household formation, fertility declined in a manner most western countries hadn't experienced since the end of the 20th century.

Nevertheless, the very low fertility levels experienced by most western countries are to a large extent an artefact of the postponement of childbearing. The sensitivity of period indicators to variations in timing has already been pointed out by Ryder in a series of influential papers (e.g. Ryder, 1956). This paved the way for other studies in search for period indicators that are free of tempo distortions. The most major breakthrough in recent years has been accomplished by Bongaarts and Feeney (1998) who proposed a model that could effectively remove the most obvious tempo distortions from the total fertility rate. Despite the fact that this model works very well retrospectively, its usefulness in the assessment of future fertility has been questioned. For example, Lesthaeghe and Willems (1999) argue that the future course of the total fertility rate is equally dependent on recuperation at later ages than further developments with respect to timing. Moreover, the attention will increasingly shift to the former issue given the fact that some countries are experiencing a slowing down or even a trend reversal of postponement. Nevertheless, the high mean age at first birth in most western countries is cause of concern as the time left to realise another birth is significantly curtailed. Evidence suggests that final parity size is negatively affected by postponement (Kohler, Billari and Ortega, 2002).

The question whether women will be able to recuperate fertility remains largely unanswered for lack of a sound theoretical and empirical framework. This is all the more evident when it comes down to explanations about the differential strategies adopted by women from different social backgrounds to catch up at later ages. Given the fact that the future course of the total fertility rate is to a large extent determined by recuperation behaviour, Lesthaeghe (2001) is right to point out that the literature is remarkably silent on this subject. So far only a handful of studies have tackled this topic by studying cohort fertility profiles. The general conclusion seems to be that there is a considerable amount of variation with respect to recuperation across countries. The Netherlands, for example, are able to combine a very late age pattern of childbearing with an almost complete catching up of fertility at later ages. Spain on the other hand exhibits a steady postponement rate across generations with virtually no recuperation afterwards (Frejka and Calot, 2001). This suggests that the difference between countries with moderately below replacement fertility and low fertility in the future will be increasingly determined by the ability to catch up at later ages.

Looking at cohort fertility profiles is a great way for describing trends in postponement and recuperation strategies across generations. They also provide a sound basis for making assumptions about the future fertility behaviour of younger cohorts who have yet to realise most or part of their fertility. Nevertheless there is still very little micro-level evidence about the differential strategies adopted by women from different social backgrounds for catching up at later ages. This paper aims to tackle this issue by an analysis of second births.

### Data and methods

The analyses will make use of anonymized individual level data for Belgium drawn from the 1991 and 2001 census. The link between both censuses results in a prospective research design that will assess the impact of 1991 socio-economic characteristics on subsequent fertility behaviour. Knowledge about the maternity history up to the 12<sup>th</sup> birth for women aged 14 years and older makes a deconstruction possible of the parity distribution. For the purposes of this paper we restrict ourselves to an analysis of second births and the impact of education, occupation and current marital status. The focus on the last decade of the 20<sup>th</sup> century is of particular interest as the forerunners of the postponement transition in Belgium (i.e. 1961-1965 cohorts) are in the midst or at the end of their prime childbearing years. As such, they are the trendsetters regarding fertility recuperation behaviour for younger cohorts.

We will make use of event history analysis within the framework of a late-entry design. The main difficulty when analyzing prospective data lies in the fact that women from different birth cohorts find themselves in a different stage of their fertility career during the period of observation. For example, consider women born in 1961 who are aged 29 in completed years by the end of 1990 and who are still childless at the start of the observation window. They are at risk for a first birth during ages 30 to 39. Next, consider women born in 1971 who are aged 19 in completed years by the end of 1990 and who are also childless at the start of the observation window. They are at risk for a first birth during ages 20 to 29. This setting makes a direct comparison of birth probabilities erratic. A late entry approach on the other hand overcomes this problem by stating that the risk set at each observed event time should consist of women who are actually observed at that moment (Singer and Willett, 2003).

## Research questions and results of explorative analyses

As already mentioned in the introduction there is a striking lack of knowledge about factors associated with the recuperation of fertility at later ages. Some tentative hypotheses have been put forward by Lesthaeghe (2001). On the one hand, it can be expected that high divorce and separation rates bear a detrimental impact on catching up behaviour as the time left to realise another birth is significantly curtailed. For instance, women might experience some difficulties in finding a new partner after a divorce or separation. Moreover, relatively little is known about the fertility behaviour of women who have started a new relationship. On the other hand, we can expect countries with a tradition of late family formation and a higher concentration of fertility at later ages to have an edge in recuperation behaviour. Nevertheless, no conclusive evidence has been found in support of either of these hypotheses. We desperately need to tackle these questions further with longitudinal micro-level data.

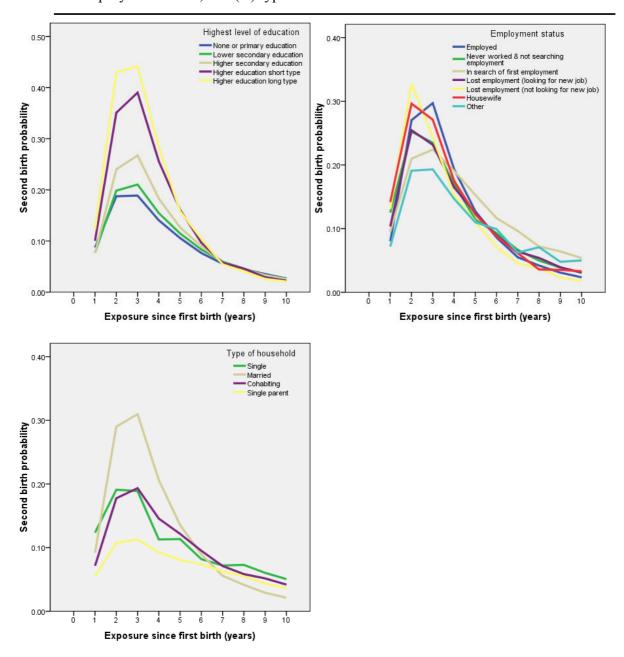
In the next paragraphs we will give an overview of our research plan through a discussion of some explorative analyses.

So far an extensive body of research has documented a general shift towards late childbearing among highly educated women. It remains unclear however whether this will result in a significant reduction of the final parity size. Explorative analyses by highest level of education reveal that there is substantial variation in the probability of having a second child. From figure 1 (panel A) it appears that higher educated women more frequently make the transition to a second child compared to their lower educated counterparts. This is an important finding given the fact that higher educated women exhibit strong postponement behaviour whereas lower educated women have their children generally earlier in life. The same pattern can be observed with respect to the transition to a third birth where the differences between higher and lower educated women are even more pronounced (results not shown here). From the results it appears that mechanisms leading to postponement do not necessarily have a negative impact on recuperation.

Although most studies at the individual level corroborate the finding that working women generally postpone their childbearing, the connection between fertility and female labour force participation appears to be very complex. For example, recent analysis for Flanders suggests that motherhood is typically postponed among three groups of women: unemployed women, women with very busy jobs, and women with an ordinary job they fear to lose. Furthermore, regional characteristics also appear to play a role: fertility postponement seems to be more pronounced in districts with high gender inequality and high female unemployment (Van Bavel and De Wachter, 2007). What the implications of these findings are with respect to fertility recuperation behaviour remains unclear. However, the results from the explorative analyses suggest that women who find themselves in different stages of the professional career exhibit differential recuperation strategies. From figure 1 (panel B) we see that employed women have relatively few difficulties in realising a second birth despite their general tendency to postpone childbearing. Furthermore we find an interesting differentiation with respect to women who lost or quit there jobs. A transition to a second birth is frequently made in case women are not seeking new employment. Probably these women have quit their jobs in anticipation of childbearing. On the other hand, second birth probabilities are significantly lower if these women are seeking new employment. It would seem that these women are more prepared to forego another pregnancy in favour of finding a new job. Finally, the trade-off between a second child and investments in a professional career manifests itself fullest for women who are looking for a first employment.

A final issue that will be addressed in the paper has to do with the differential recuperation strategies among women from different types of household. The destandardization of the life course and the emergence of new kinds of living arrangements raised many questions about the impact it would have on fertility. From the results from figure 1 (panel C) it appears that the transition to a second child in Belgium is still strongly connected to marriage. Second birth probabilities are significantly lower among singles and cohobating women. Furthermore we have added the results for single mothers as well. Not surprisingly they exhibit the lowest probabilities of having a second child.

Figure 1. Second birth probabilities by (A) highest level of education, (B) employment status, and (C) type of household



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