

METHODOLOGICAL ASPECTS IN THE STUDY OF PERIOD AND COHORT FERTILITY (IN A PERIOD OF CHANGE OF PATTERN OF AGE-SPECIFIC FERTILITY)

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***Summary.** This study presents a review of traditional and latest fertility research methods, whereas more particular attention is focused on aspects, which are related to the process of childbirth postponement. As large part of the developed countries has shown low fertility levels over the last decades, we are witnessing the reoccurrence of the debate over the period fertility measures and the interpretation thereof. Studying the process of fertility just on the basis of period measures such as the total fertility rate would hurdle any in-depth studies of all its characteristics and determinants. This may lead to a distortion in the conclusions and inferences as to the present and even more so – the future women's fertility behaviour. As the issue concerning the process of postponement of parenthood and its long-term consequences on the level of fertility is so relevant, a number of methods were developed over the last years analysing this process in a variety of aspects. The objective of this study is to make a brief overview of the methods developed over the last years, not claiming, however, to be exhaustive, aimed at correcting the period and the cohort fertility measures and at projections of completed fertility of the cohorts of women still in reproductive age. The adjusted measures obtained are more precise fertility indicators than those observed in a given year. At the same time, the cohort fertility analysis in the context of transition to childbirth postponement and possible subsequent resumption of postponed childbirth would make a good fundament to develop precise fertility development projections and correct political decision making to alleviate the consequences of the now observed low levels of fertility through the decades to come.*

Key words: period and cohort fertility, childbirth postponement, adjusted indicators, completed cohort fertility, projections

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FOREWORD

As large part of the developed countries has shown low fertility levels over the last decades, we are witnessing the reoccurrence of the debate over the period fertility measures and the interpretation thereof. Studying the process of fertility just on the basis of period measures such as the total fertility rate would not allow to study in depth all its characteristics and determinants. This may lead to a distortion in the conclusions and inferences as to the present and even more so – the future women's fertility behaviour. The increase in the average age of women at first childbirth, which may be seen in the countries featuring decreasing fertility focuses our attention at the impact of “the time” factor over the changes seen in fertility behaviour. What is the extent to which many of the low period measures of fertility may be explained by the time fluctuations in the fertility pattern? If the level of fertility for each mother's age is a constant in time, there would be no difference between the cohort and the period measures. Hajnal (Hajnal, 1947) theoretically and empirically demonstrates that when we have a significant change in the period levels (increase or decrease) at the same time the cohort measures will remain relatively stable. Given the presence of widespread childbirth postponement, traditional period fertility indicators must be interpreted very carefully. The changes in the annual number of children born are often interpreted directly, i.e. as an indicator of “a positive” or “a negative” impact of socio-economic conditions and relevant policies carried out throughout a given period, respectively. The fertility as measured by the period total fertility rate (TFR) saw an increase in the bulk of European countries between 1998 and 2008. This trend is an unexpected twist from the historically lowest levels reached by most countries in the 1990s. This twist was particularly swift in populations where TFR reached unprecedented low values. An explanation to these changes may be sought in two directions: demographic or socio-economic. The demographic explanations would include the reduction of the so called “time” (tempo) effects, which lead to a distortion of TFR and, also, reduce its value when there is an increase in the average age of women at first childbirth and vice versa, an increase may be seen when the cohorts restore part of the childbirths, which were postponed from an earlier age.

The process of childbirth postponement has a social and economic significance and is closely related to the consequences at both individual (microlevel) and at community level. The childbirth postponement influences the completed cohort fertility in women and the size of the cohorts of children born. The process of postponement also has its specific consequences for population ageing, for its demographic structure and reproduction behaviour. Last but not least, influence has its significance for the technique according to which the fertility will be measured at aggregated level. Measuring postponed childbirth is of utter significance to the study of modern fertility as it has its analytical (and possibly political) consequences.

This leads to the need of introducing appropriate methods and indicators to analyse the dynamics in the fertility indicators, particularly when significant changes are observed in the age pattern of fertility as the time changes have their reflection upon the quantitative aspect both on the period and on the cohort fertility indicators. In order to make an evaluation of the long-term consequences from the postponement on the future level of fertility and to correctly set up hypotheses under projections of fu-