

The Propensity to Having a Second Child in Romania.

An Event History Analysis Approach

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Romania is among the countries with medium-low fertility rates (1.41 children/woman in 2013). According to both statistical data and previous studies, the main cause for the decrease in the total fertility rate (TFR) is the drastic reduction in the number of live births, which has practically halved during 1990 and 2014. This is a consequence of the highly inertial mechanism put in motion by the combination between low parity progression rates (PPRs) from first to second birth, and especially from second to higher parities, combined with decreasing population size (particularly for the reproductive segment, which the baby-boomers are preparing to leave). In more detail, first births represent about half of the total number of births during 1990 and 2014 (ranging between 43% and 56%), while the other half is divided between second births, which account for less than a third of total births (between 25% and 30%) and three or higher parity births (17%-28%). During the same period, the reproductive female contingent (15-49 years) decreased by 15% to 9.6 millions on January 1st, 2014. Under such circumstances, attempts to slow down population decline should aim at stimulating second and even higher parity births.

With the view to analyse the factors that might influence parity progression to second births, a team of researchers from the Polls and Surveys Research Centre of the Bucharest University of Economic Studies developed a questionnaire that was applied during face-to-face interviews on more than 1000 female respondents aged 15 years and more, using quota sampling on age and residence area. The obtained database has 15.7% childless respondents, 39.1% respondents with one child, 33.1% respondents with two children and 12.1% respondents with three or more children. Based on this small-scale survey, the present paper aims at using event history analysis for simulating summary fertility measures like the TFR or parity progression rates for women who gave birth to a second child, taking into account time-varying covariates. The main purpose of this analysis is to attempt to

shed light on possible measures to be taken in order to encourage second births among young Romanian women.

The data collected will be transformed into person-years records. A record will consist of each year of a respondent's life since the earliest reported age at first birth either until the event (giving birth to a second child) or until censored (study ends or the respondent ended her fertile period before the event). Logistic regression will be used to estimate the probability that a woman who gave birth to one child will also give birth to the second one. In order to understand how certain socio-economic factors influence second parity progression, various time-variant (value changes across time) predictors will be used. Among these factors, we will include in the model parents' age, educational attainment and marital status at the time of birth, influence of birth stimulation measures and factors that the respondent considered important in deciding to give birth to a second child. The results obtained from the logistic regression will then be translated into summary measures of fertility in the analysed sample.