

The modeling of parallel family and occupational careers with Bayesian methods

The objective of this project is the analysis of parallel family and occupational careers being the parts of life cycles of the persons. This analysis will use survival models in Bayesian approach, with particular emphasis on parametric competing risks models. In the recent years, a growing number of works in the field of micro-demographic research and concentrating on the research into the behaviour of individuals and the driving factors influencing them is observed. The research planned in this project is a part of this stream.

The careers being considered in this research proceed at the same time. Hence, when searching for the mechanisms governing their reasons and consequences, it is important to analyse the relations and dependencies between different careers, apart from analysing each of the careers separately. The analysis of parallel careers will be performed with the use of selected statistical models, mostly being survival models in Bayesian approach. Life cycle of an individual and a family encompasses many careers, which includes family, migration, professional and educational careers. Some of these careers proceed at the same time and influence each other. As far as the sequence of individual events is concerned, complementary and competitive careers can be distinguished. Sample competitive careers are professional and family career. Lower professional activity of women, combined with their lower employment rate and higher unemployment rate, can be caused by the problems with combining professional career and family life. Women interested in professional development decide to bear a child later. Hence they have less children.

An attempt to explain the procreative behaviours, caused by parallel professional and family careers, in the context of economic fertility theory, will be made in the project. The combination of professional and family career is a very important issue for proper functioning of the state. This is because the demographic situation in Poland will result in a major challenge for labour market. Results attained in this project can contribute to the development of state policy, including in an integrated form, not only demographic development, but also family and labour development policies.