

Changes in fertility characteristics and population structures in Southern and Eastern Europe: interrelationships and contexts

Abstract

There were significant changes in fertility characteristics and population structures between 1970 and 2020 in both Southern and Eastern Europe. This transition is associated with the concept of the second demographic transition by some authors. An unconventional methodology is used for its research in this thesis. Two three-dimensional scatter plots, which at the same time form unit cubes, are constructed using three selected indicators of both changes (fertility and structures). The distance between individual observations by examined years is interpreted as the dynamics of the transition of the given decades. The dynamics values from both scatter plots are then analyzed and compared with the others. The results show that changes between fertility characteristics and population structures are related to a certain extent, but the observed differences between regions or the specifics of some states complicate the generalization of this relationship. These conclusions also agree with the literature published so far.

Key words: fertility, population structures, second demographic transition, data visualization, three-dimensional scatter plot