

VID Colloquium

Increasing Childlessness or fewer Families with many Children - A Decomposition Method for Changes between (Cohort) Fertility Rates

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The decline of fertility in the course of the Second Demographic Transition is mainly caused by both an increase in childlessness and a decline of large families (three or more children). Additionally, in some countries the spread of one parent families reduced fertility rates. Each of these three phenomena has different causes and needs to be explained by different theories. Their contribution to fertility changes varies between different countries and regions. An exact quantification of the contribution of each of these effects to fertility changes is still missing. Existing delimitation often is dualistic; it only distinguishes between childlessness and the average number of children per mother. I suggest a decomposition method which allows calculating the effects of the particular parity changes between cohort total fertility rates (CTFR) of different cohorts. The CFR decline can be separated into four components: increasing childlessness, decreasing shares of higher order births (3+), an interaction effect and a changing relation of first and second births. This method is applied in order to compare German CTFRs between 1933 and 1970 based on Micro Census data of 2008 and 2012. The analyses are differentiated by regions, periods and educational groups. The effect of the increasing childlessness accounts for 27.1 per cent of the CFR decline, the decreasing higher order births for 66.6 per cent and the interaction effect for 6.3 per cent. Germany turns out to be a special case because the relation of parity 1 and 2 has not changed. Remarkably, these figures are based on two entirely different periods: The CFR decline between the cohorts of 1933 and 1947 is solely based on the decline of families with three or more children. However, two thirds of the CFR decline between 1947 and 1970 is caused by an increasing childlessness. Differentiated by educational groups, the contribution of increasing childlessness begun earlier in is stronger for low educated women. The decomposition method is suitable for the analysis of dynamics ending in low fertility. Its application for an international comparison of CTFR-decline and for adjusted TFR measures is still to be tested but seems promising.

About the presenter

Martin Bujard is research director of the group "Family and Fertility" at the Federal Institute for Population Research (BiB), Wiesbaden, Germany. He holds a PhD from the Ruprecht-Karls-University Heidelberg, Faculty of Economics and Social Sciences. Before working in the sciences, he was manager of a catalogue selling business and scientific assistant at the German Federal Parliament in Berlin. 2009 until 2011 he worked at the Humboldt University as scientific coordinator in the Group »Future with Children« established at Leopoldina and BBAW. Since August 2011 he works at the BiB. His research lies in the intersection between demography, family policy, and family sociology. Research fields are parental leave, determinants of fertility in OECD countries, childlessness and large families.

