

**The Reconfiguration of Social Structure: Change in Cross-Cuttingness in Germany, 1980-2016**

Yassine Khoudja, PhD, Goethe University Frankfurt am Main, [khoudja@soz.uni-frankfurt.de](mailto:khoudja@soz.uni-frankfurt.de)

Prof. Dr. Richard Traummüller, University of Mannheim

Prof. Dr. Daniela Grunow, Goethe University Frankfurt am Main

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**Research questions**

This study aims to understand the changes in social structure in Germany since 1980 from a multidimensional perspective. We propose that the concept of cross-cuttingness is well-suited to capture these multidimensional changes. Cross-cuttingness describes a social structure where members of a collective share the same status on some dimensions and differ along others. Higher levels of cross-cuttingness are usually associated with positive societal outcomes. But while the concept has received much attention in political science to study societal cohesion, it has rarely been applied to describe the social structure more generally. We focus on four dimensions of multidimensional social structural change: intersections of education, income, gender, and citizenship, asking two research questions: 1) How did uni-dimensional social-structural changes combine to shape cross-cuttingness of the German social structure since 1980? 2) Which multidimensional group(s) contributed most significantly to these changes in cross-cuttingness over time?

**Background**

The study builds on existing literatures on returns-to-education, gender relations, and migration, which have mainly focused on changes in different subsets of our key social structural dimensions, and often make conflicting assumptions about whether cross-cuttingness has increased or decreased over the last decades. A multidimensional view can help to dissolve contradictions between these literatures and provide a clearer picture of the social processes that have led to changing cross-cuttingness. We will use these literatures to formulate hypotheses in a multidimensional perspective and interpret our findings accordingly.

**Data and Methods**

We draw on Scientific Use Files of German Microcensuses from 1980-2016 (29 waves), which provides us with a total sample of 11.765.418 observations (only 16+ years old) over the observed period. First, we use Cramer's V, a measure of statistical independence, to show changes in cross-cuttingness between key categories of the social structure over time. In a second step, we use cell-specific standardized Pearson residuals, calculated by dividing the deviation between observed and (based on unidimensional margins) expected cell count by its estimated standard error, to identify which multidimensional groups are driving the observed changes in cross-cuttingness.

**Results**

Results show that cross-cuttingness in education, income, gender, and citizenship, has increased in Germany over the last decades, making it more difficult to know an individual's position in one of the social structural dimensions by knowing their position at one of the other dimensions. Trends in two- and three dimensional cross-cuttingness reveal that this is mainly due to an increase in cross-cuttingness between gender and the socio-economic dimensions education and income.

Analysis of the multidimensional groups driving these changes provide deeper insights:

The increasing cross-cuttingness is not driven by an improving socio-economic position of women in general. Gains to cross-cuttingness brought by the declining overrepresentation of women with German citizenship, low education, and low income are mostly offset by the increasing overrepresentation of women without German citizenship (of all educational levels) with low income.

In contrast, the trends in residuals of multidimensional male groups are less shaped by citizenship. Men with or without citizenship, low education and low income were underrepresented in 1980 but have become overrepresented in 2016. This means that they have initially contributed to an increasing cross-cuttingness but increased cross-cuttingness in the last observed years. Men with German citizenship, medium/high education, and high income have become consistently less overrepresented, contributing to increasing cross-cuttingness. But they remain among the most overrepresented group and an overall large contributor to low levels of cross-cuttingness.