

## Editorial

### **From Panel Data to Longitudinal Analytical Designs: a Note on Contemporary Research Based on Data from the Socio Economic Panel Study (SOEP)**

By Marco Giesselmann, Carsten Schröder,  
Johannes Giesecke, John Haisken-DeNew,  
Anika Rasner, and Jule Specht

## Introduction

Records of contemporary research reveal that panel data is becoming increasingly relevant in social science: In 2014, 32% of all 471 empirical articles in the top-ten economic journals<sup>1</sup> analyzed panel-data. This quota is fairly stable across journals: while only one top-ten Journal has a panel-ratio below 25% (*Journal of Financial Economics*), in the *American Economic Review* and *Econometrica* more than one-third of all empirical articles are based on panel data. Referring to the relevance of panel data in sociology, Young/Johnson (2015) show that 61% of all articles published between 2010 and 2014 in the *Journal of marriage and the family* (JMF), a sociological top-ten journal with about 90 citable articles per year, use longitudinal research designs. Finally, Giesselmann/Windzio (2014) counted 62 articles based on panel data in the two top German sociological journals (*Zeitschrift für Soziologie* and *Kölner Zeitschrift für Soziologie und Sozialpsychologie*) between 2000 and 2009, of which 56% use data from the Socio-Economic Panel Study (SOEP).

This popularity of longitudinal data is primarily driven by a strong focus on causal modeling in contemporary economics (Imbens/Wooldridge, 2009) and sociology (Sobel, 2000). In respective methodological discourses, panel data usually is discussed as a powerful source to validate causal interpretations of coefficients (Giesselmann/Windzio, 2014; Gangl, 2010). These discourses, in turn, are accompanied by a research infrastructure that increasingly produces data in longitudinal form, with numerous long-running and complex panel-datasets available to the research community (Schupp, 2014).

---

<sup>1</sup> For our inquiry, we used the index provided by IDEAS/RePEc (<https://ideas.repec.org/top/top.journals.all.html>) as basis. We owe thanks to Teresa Backhaus (DIW Berlin) for her help with recording and counting articles.