

# Shedding Light on the Shadow of the Economy: Research Methods in Studies on Tax Behavior

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Different scientific disciplines focus on different topics in tax research and apply different methods to shed light on taxpayers' behavior. Law, political sciences, economics, psychology, and sociology are probably the disciplines which contributed most to the understanding of tax behavior. However, there is no unified theory, and scientific approaches to the complex phenomenon and the arsenal of research methods vary considerably, e.g., from historical text analyses, in-depth interview with stakeholders, surveys, laboratory experiments, field experiments, to simulation studies and normative models.

Research on tax behavior has gradually been established about the mid-1940s mainly in the field of economics not only investigating the impact of tax rates, tax audits, and sanctions for tax evasion (for an overview, see Niemirowski *et al.*, 2001), but also psychological concepts such as attitudes and social norms toward tax behavior have been investigated relatively early (e.g., Schmolders, 1960). Over time, other disciplines such as jurisprudence, sociology, political science, etc. have also begun to focus on this societally highly relevant issue, so that the body of research on tax behavior has been impressively growing, covering for instance, societal trust, progress of tax law, and the role of political institutions.

On this account, a special issue on research methods in studies on tax behavior has been overdue for a long time. Different research methods produce similar but not mandatorily identical results; in some cases, they even contradict each other, as Elffers *et al.* (1987) have shown (for differences in a normative economic model and experimental findings, see Kirchler *et al.*, 2009).

Divergences partly stem from the fact that research methods hold certain advantages as well as limitations. For instance, normative models constitute useful (mathematical) simulations of human behavior enabling a prognosis of citizens' tax evasion. Nevertheless, for simplicity, the models incorporate only a limited number of influence factors so that on an aggregated level predictions may be sound, but individual behavior is actually poorly explained. On the contrary, experimental research assesses individual human behavior; although this behavior might occur in an artificial setting, it is still human behavior

that reflects not only the experimentally manipulated but also all other factors relevant with regard to tax behavior. However, these additional relevant factors are neither assessed nor manipulated, and the assumption is that they are equally distributed over the experimental conditions. Thus, causal relations regarding tax relevant factors are only possible if they refer to experimental manipulations, whereby these manipulations have to be determined in advance, based on existing models and theories. Hence, recently popular field experiments may have high power to explain human behavior. In addition, it is important to reflect on benefits and limitations as well as the costs of different research methods in tax behavior. Comprehensive meta-analyses and reviews try to comprise varying study results (e.g., Blackwell, 2010); although they summarize consistent findings in research on tax behavior, they cannot hide the fact that it is essential for the interpretation of different study results to know about potentials and limits of respective methods yielding certain outcomes.

The current special issue consists of five articles illustrating several research methods in studies on tax behavior from various scientific fields. Starting with a historical analysis of taxation, Jane Frecknall-Hughes (2016) opens the topic from a historic legal perspective. The subsequent two papers by Prinz (2016) and Pape *et al.* (2016) introduce economic methods of simulations and of models focusing on the usefulness of simulations as a research method as well as a new model predicting voters' support for specific tax laws. The subsequent paper by Stark *et al.* (2016) presents a method used both in psychology and in sociology, i.e., the free association task, and focuses exemplarily on social representations of inheritance tax. The last paper of the special issue by Torgler (2016) identifies a research method that has not been established in tax research yet, but holds a big potential for comprehensive future research, i.e., the investigation of biological aspects of tax behavior. Overall, these five papers draw a bow from legal and historical methods, over economic models to empirical and social psychological techniques concluding with new methodological, biological approaches.

Frecknall-Hughes (2016) analyzes in her contribution the history of research methods in tax behavior. Specifically, she focuses on the history of tax legislation and methods from jurisprudence. She scholarly integrates the interdisciplinary approach of research methods in tax behavior and looks for similarities of methods from different fields. As an example for legal history research, she introduces the "research onion" and demonstrates its application by analyzing the establishment of the Magna Charta by King John. She concludes that in contrast to social sciences the legal history methods justify their approaches to a lesser extent and could just now realize that reflection of research methods is definitely necessary.

The paper by Prinz (2016) addresses a research method from economic sciences; he analyzes the potential of simulations to add significantly to tax behavior research. In particular, he investigates whether simulations allow to

answer the unsettled issues that cannot be clarified with the help of other methods such as theoretical or empirical research. Hereby, he further examines the possibility to substitute and complement theoretical and empirical research with simulations. Aloys Prinz describes simulations methods and also discusses their strength and weaknesses. For future research, standards for best practice how to apply simulations are developed. The author concludes that simulations are a suitable method to predict tax behavior, maybe superior to theoretical and empirical approaches, but that their limitations still do not allow for accurate forecasts.

Pape *et al.* (2016) develop a new method to investigate tax behavior. They generate an economic agent-based model integrating rational expectations voting to predict support for tax policies. With this model, the authors answer the question why citizens agree with laws to constrain government. Using property tax and votes for respective tax ceilings as an example, their model postulates that the property tax assessment regime and, as a consequence, the tax payment uncertainty are essential to predict voting behavior. They inform their model with data from households of two American cities: Binghamton and Minneapolis, both differing in property assessment regimes and find that citizens of Binghamton agree to a much higher extent with raising taxes beyond the median level compared to the citizens of Minneapolis.

Stark *et al.* (2016) focus on inheritance tax, a recently controversially debated topic in the field of tax research. Therefore, laypeople's social representations of relevant concepts are analyzed in order to shed light on the reasons for this ongoing debate. In this study, participants were asked to come up with spontaneous associations to the stimuli "wealth", "inherit," and "bequeath." Results show that while "wealth" and "bequeath" are evaluated rather positively, the stimulus "inherit" triggered ambivalent evaluations. This may be best explained by the outcome of a correspondence analysis which suggests that "inherit" is associated with negative personal consequences, negative emotions and traits, conflicts and – particularly interesting – taxation. These results affirm that laypeople not only have distinct social representations regarding different components of inheritance tax, but that these representations also differ compared to the representations of experts as inferable from scientific discourse.

In the last paper of this special issue, Torgler (2016) reflects on how research on tax compliance and tax evasion might benefit from biological science. He delineates what kind of biological knowledge might be useful for attaining further knowledge in the field of tax research. One important criticism of this paper is the lack of awareness about biology and biological methods in the tax research community, and thus it represents an attempt to offer a device to encourage constant rethinking of the methods used. Beside emphasizing the limited attention of biology in the tax literature and the huge potential

of a biological approach to various issues of tax research, the necessity of interdisciplinary collaboration in the near future is distinguished.

The collection of these five papers gives the readers of this special issue a broad overview of research methods applied in studies on tax behavior. It not only presents different methods and discusses their potentials and limitations, but also refers to these methods with concrete examples. Interpreting research results by taking into account the weaknesses and strengths of the respective research method may finally lead to the integration of findings in the interdisciplinary body of research on tax compliance and evasion.

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