Measuring is knowing?

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Impact Paragraph

In this thesis, methods from behavioral economics and psychology are used to elicit preferences of Dutch self-employed workers and employees. In addition to contributing to the academic literature, the thesis provides insights relevant to ongoing policy debates in the Netherlands surrounding self-employment and the new pension agreement. The work is relevant for researchers and practitioners interested in risk preferences and the role of measurement error (Chapter 2), the role of life events on risk, time, and social preferences (Chapter 3), the effect of exogenous crises, such as COVID-19, on risk, time, and social preferences (Chapter 4), and the differences between self-employed workers and employees in the Netherlands in terms of their preferences and traits (Chapter 5).

The study "The Validity of Risk Preference Elicitation Methods" in Chapter 2 addresses whether several commonly used stated and revealed risk preference elicitation methods correlate with each other (convergent validity) and with behavior in the field (external validity). A key contribution of the study is that we apply the recently proposed "obviously related instrumental variable approach" to control for measurement error. Our results suggest that controlling for measurement error improves the correlation between revealed risk preference elicitation methods, but that the external validity of these methods remains low. At the same time, stated methods perform better than revealed methods on both convergent and external validity. The findings contribute to an ongoing academic discussion about the validity of risk preference elicitation methods and the differences between revealed and stated methods. Most importantly, it suggests that measurement error alone is insufficient to explain why the external validity of revealed risk preference elicitation methods is generally found to be low.

The results from Chapter 2 are highly relevant for ongoing policy debates in the Netherlands surrounding the measurement of risk preferences. Eliciting risk preferences is required by law in the Netherlands for financial institutions that offer financial products and services.[1] Moreover, in the recent pension agreement it is stated that pension funds should invest according to

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[1] Similar recommendations are made by the Financial Industry Regulatory Authority in the US (see https://bit.ly/45bNJhr, last retrieved August 17, 2023) and the European Securities and Markets Authority (see https://bit.ly/3qqi5xG, last retrieved August 17, 2023).

the risk preferences of their participants.[2] Pension funds, therefore, have the responsibility to measure risk preferences accurately to ensure that the investment policies are in the best interest of the pension participants. While measuring risk preferences is a requirement, the regulations do not stipulate how to measure them. Our results suggest that more research is needed to assess the validity of revealed risk preference elicitation methods before they can properly be used by practitioners.

The studies "Personal Life Events and the Stability of Preferences" in Chapters 3 and "The Robustness of Preferences During a Crisis" in Chapter 4 investigate the stability of preferences after personal life events and during the COVID-19 crisis, respectively. Stable preferences are often implicitly assumed, but it is important that this assumption is validated empirically. From a practical point of view, studying temporal stability is relevant because it gives input into when preferences should be elicited and whether they should be re-elicited at some point in time. The results from both studies are encouraging from a theoretical and a practical point of view, as we find that preferences generally remain stable. However, as discussed in these chapters, it is important that more research is undertaken, in order to arrive at more conclusive results.

The study "A Comparison of Dutch Self-Employed Workers and Employees" in Chapter 5 addresses the question "Who are the self-employed?" and provides insight into the preferences and traits of self-employed workers in the Netherlands compared to employees. The work provides input for policy debates surrounding self-employment in the Netherlands. Over the past decade, the number of self-employed increased, particularly due to a growing group of solo self-employed. As the number of self-employed keeps rising, there is a growing concern about the socioeconomic position of this group, including the adequacy of their retirement savings. In response to this concern, the adequacy of retirement savings by the self-employed is addressed in the proposed pension reform in the Netherlands. In particular, the new pension agreement contains a clause that stipulates that pension funds may experiment with the simplification of retirement savings for the self-employed in the second pillar.[3] Having a better understanding of who the Dutch self-employed are provides critical insights for the design and success of these experiments. For example, self-employed workers may prefer different investment strategies than employees given their higher stated willingness to

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[2]See https://bit.ly/3KL8Tur (last retrieved August 17, 2023).
[3]See https://bit.ly/3E1lLZW (last retrieved August 17, 2023).

take risks and optimism. Moreover, it will be important to address the lower levels of trust in pension institutions that self-employed workers have to increase the willingness of this group in order to voluntarily join such experiments.

Public debate and promotion of Maastricht University (UM)

The research in this thesis has been presented and discussed at research meetings and seminars at UM (2019-2023), Statistics Netherlands (2022), Caltech (2022), and the University of Kassel (2023). The work has also been presented at (inter)national conferences, including TIBER (Tilburg, 2021), CESifo Summer Institute (Venice, 2022), Foundations of Utility and Risk Conference (Gent, 2022), Spring School in Behavioral Economics (San Diego, 2022), Economic Science Association Meetings (Santa Barbara, 2022; Lyon 2023), and Maastricht Behavioral and Experimental Policy Symposium (Maastricht, 2023). In addition, presentations and discussions were held at practitioner events, including the Netspar Pension Day (Online 2020-2021; Utrecht, 2023), Netspar Pension Workshop (Online, 2021; Leiden, 2023), Netspar After Lunch Meetings (Online, 2021-2022), Behavioural Insights Day (Online, 2020), ICPM Virtual Fall Discussion Forum Session (Online, 2021), Society for Risk Analysis Europe 6th Benelux Annual Meeting (Bilthoven, 2022), UM-SBE Science Slam (Maastricht, 2023), and Nederlandse Economendag (Den Haag, 2023).

The work in this thesis has been published by Netspar as industry and discussion papers, which are targeted at financial institutions and researchers, and has been picked up by the popular press. In particular, Chapters 2 and 4 have been published as Netspar Discussion Papers (Bokern et al., 2023; Bokern, Linde, Riedl, & Werner, 2021). Chapter 3 is based on a Netspar Design Paper (Bokern et al., 2022b), which was featured in PensioenPro (van Alphen, 2022) as well as "Het Financieele Dagblad" (van Hoeflaken, 2022). Chapter 5 is based on a Netspar Design Paper (Bokern et al., 2022a). Moreover, a related publication (not included in this thesis) in which we review selected literature on risk preference elicitation methods and their external validity (Bokern, Linde, Riedl, Schmeets, et al., 2021) was also covered by PensioenPro (van Wijk, 2021).

Software and data analyses

All data analysis was performed in Stata Version 16.0. The codes are available upon request.