

Project title: Behavioral factors in stated preference valuation methodology and their impact on the value of statistical life (VSL), the value of statistical life year (VSLY), and the value of quality-adjusted life year (VQALY)

The issue of finding the value of human life has been known for ages, and from a philosophical point of view it is a complex, multi-level problem. However, it is possible and necessary to estimate the economic value of life in order to conduct a cost-benefit analysis that will inform policymakers whether proposed actions or policies (regarding human health) are socially desirable. Therefore, in my research project, I focus on a very important issue of **checking the reliability and validity of the value of statistical life (VSL), the value of statistical life year (VSLY), and the value of quality-adjusted life year (VQALY) estimates**, measures that are widely known and are destined to inform policy-makers regarding the implementation of new policies or various interventions.

Currently, the most common approaches regarding estimating willingness to pay for mortality (or morbidity) risk reductions concern the use of **revealed preferences (RP)** and **stated preferences (SP)** valuation methods. The RP studies concern observing actual data from the real world, while the SP studies concern creating hypothetical questions in order to elicit respondents' preferences. Both of these methods have advantages and disadvantages. For instance, RP methods inform researchers about actual decisions in real choice situations. However, these methods do not allow to control for many factors that are present in the real world, and sometimes it is very costly to obtain necessary data. On the contrary, the SP method allows the researcher to create a hypothetical setting and, therefore, get rid of all of the factors that are affecting human behavior and focus on only several of them (that are the main focus of the study). Moreover, obtaining SP data is usually often much cheaper than obtaining RP data. However, conducting a valid SP study is not an easy task because, if done improperly, it can completely distort the results. Therefore, in my research, I will focus on SP valuation methodology that concerns estimating VSL, VSLY, and VQALY (with an emphasis on the **discrete choice experiment method**) and how to improve the validity and robustness of obtained estimates.

This research project is devoted to increasing the validity of VSL, VSLY, and VQALY estimates obtained from SP valuation methods by testing how various behavioral factors affect the estimates. The main goal concerns the examination of the **anchoring effect** (information faced earlier, e.g., before or in the question, can have a profound influence on a given answer), **altruism** (which is revealed through the observation of selfless actions for the benefit of others), observing **differences between direct and indirect questioning**, and the **impact of time on preferences** (hyperbolic discounting and present-focus preferences; e.g., it was observed that people prefer a smaller reward sooner than a bigger reward later, which contradicts the neoclassical theory, where units should maximize their utility over extended periods of time). While the aforementioned behavioral factors have already been examined in other fields, their inclusion in studies referring to the valuation of health or life is scarce. Moreover, they have not been inspected jointly so far (at least, in relation to health economics stated preference studies).

While hundreds of SP studies regarding health emerge every year, only a few of them concern the problem of improving their reliability. It is a crucial aspect because without such certainty, the obtained results might not be robust, and many findings can be mischievous. In my opinion, the inclusion of behavioral factors in stated preference studies has not been adequately done yet (especially in the case of health economics studies), while the behavioral economics literature has been prevalent in recent years. This project will try to fill this gap. Therefore, in my research project, I will focus on a very important issue of checking the reliability and validity of VSL, VSLY, and VQALY estimates, measures that are widely known and are destined to inform policy-makers regarding the implementation of new policies or various interventions. Nonetheless, the conclusions from this project might not only concern health stated preference studies but can be applied to other areas (including transportation, behavioral economics, or environmental studies).