

Public goods (such as national parks, or highways) are goods that can be used by an unlimited number of individuals and no individual can be excluded from using them. The problem with public goods is that **the free market is a mechanism that does not ensure that their efficient quantities are delivered**. People generally believe that others will contribute to public goods and consequently, they can free-ride (use the good once that is provided by others). Therefore, it is one of the commonly accepted cases in which **a government should intervene and become a provider of those goods**. However, **what quantity should be provided?**

The theory of economics has developed several methods that allow the value of non-market goods (goods that are not bought and sold in markets; for example, public goods) to be estimated. The most comprehensive of these methods is **the contingent valuation method**. This method is based on respondents' stated preferences, which implies that data regarding how much consumers are willing to pay for having a specific good (for example, a new public good) is obtained through specially designed surveys. In these surveys, respondents are presented with scenarios of delivering a public good (its characteristics and costs per person that are related to its delivery) and asked to assign a value to the scenarios; for example, through choosing their most preferred option from a set of alternatives. The data collected via such surveys allows the modeling of consumer preferences and their willingness to pay for each of the considered programs or (in certain variants of the contingent valuation method) each of the programs' components.

Our ground-breaking research project addresses the incentive compatibility of questions that are used in contingent valuation surveys. An incentive compatible question is a question that is constructed in such a manner that a respondent provides a truthful answer to the question, or more specifically, aligns with his/her personal preferences. When responding to an incentive compatible question, a self-interested respondent will not benefit from understating or overstating his/her willingness to pay for a considered program. The theoretical literature suggests that there are numerous **necessary conditions to maintain incentive compatibility** of contingent valuation surveys. However, **their practical significance has not yet been adequately verified**. Our project seeks to address this gap.

Specifically, our research project will answer the following questions:

1. **Are incentive compatibility conditions necessary for respondents to truthfully reveal their preferences in contingent valuation surveys and if so, are these conditions sufficient?**
2. **Do any of these conditions (consequentiality, the number of choice situations, or the number of choice alternatives) play a dominant role for truthful preference revelation?**
3. **How to econometrically account for the extent, to which these conditions are satisfied, to potentially correct biased estimates?**
4. **What is the extent of the bias that results from violating these conditions in a typical (field) study using contingent valuation?**

Our research will **verify the importance of theoretically proposed conditions for the incentive compatibility** of studies that use the contingent valuation method. Furthermore, this study will provide empirical evidence to evaluate the practical limitations due to the **trade-off between incentive compatibility and statistical efficiency**. Surveys that include more than one choice situation per respondent or more than two alternatives in a single question reveal broader information about the respondent's preferences and considerably reduce the costs of conducting the survey. Despite growing interest in this topic that is related to the fundamental role of the contingent valuation method for cost-benefit analyses of investment projects or government regulations, **extant literature does not provide a comprehensive empirical analysis, econometric solutions and the common practice** of designing valuation studies significantly **diverges from the postulated conditions** of incentive compatibility. Our project will fill this gap. Our **results will prove meaningful for the top academic journals** that are devoted to the economics of public goods, environment, health and transport. **The results of our novel research project may be ground-breaking for current practices**.

Our project will provide valuable methodological recommendations that are necessary for properly designing surveys that are used for consumer preference modeling. This project will allow scholars to **formulate clear practical guidelines regarding how contingent valuation surveys should be constructed**; therefore, this project will promote a more precise valuation of non-market goods.