## Conferentie Mechanism Design in Actie: Het Ontwerpen van Maatschappelijke Instituties 11. April 2014

## Summary and conclusions of the Workshop Game Theory and Mechanism Design

During the workshop three aspects were discussed:

- The possibilities to learn from experimental research about how to design mechanisms that make use of non-price interventions to stimulate pro-social behavior.
- The external validity of results of mechanism design theory in the laboratory and the field for the example of charity donations.
- The methodological challenges of experimental research to meet standards of internal validity.

Stephanie Rosenkranz present a study on the effect of nudges to increase energy efficiency. Choice architecture has been identified by policymakers as an attractive subfield of mechanism design. Behavioural economists have pointed out that people can be "nudged" by positive reinforcement and indirect suggestions that influence motives and incentives to make decisions that are better aligned with individual or collective interests, at least as effectively than by direct instruction, legislation, or enforcement. Understandably this insight has triggered the interest of policymakers, as the prospect of enhancing sustainable decision making more effectively and more efficiently is compelling. The presented study on nudging energy consumers towards energy efficiency behaviour takes stock of the current state-of-the-art regarding the effects of non-price interventions on energy efficiency, and suggests and tests ways in which nudges that have shown to be promising can be further improved upon in their effectiveness. The confrontation with social norms seem to be less promising in strategic settings than addressing individuals' image concern by public ranking of prosocial. As the major part of energy in industrialized countries is consumed by firms, the study also focusses on how to nudge decisions of individuals that are in a "managerial" position. Despite the promising findings in the laboratory there are several reason to assume that causal mechanisms may not be transposable from the lab to the real world and from isolated field studies in one country to effective policies in other countries. Only field studies (randomized controlled trials) in a given country that study behavior for a longer period, and that use nudges that are related to the discussed policy instruments and consciously designed, will allow to draw quantitative conclusions about the potential effect on changes in energy efficiency of such non-price interventions.

Sander Onderstaal presented the results of a study on optimal mechanisms for charity fund raising. In a theoretical study he showed that the optimal fund-raising mechanism is an all-pay auction augmented with an entry fee and reserve price. This result was then tested experimentally by comparing three mechanisms used to raise money for charities: first-price winner-pay auctions, first-price all-pay auctions, and lotteries. The environment with incomplete information and independent private values aimed at mimicking the characteristics of most charity auctions. The results support theoretical predictions by showing that the all-pay format raises substantially higher revenue than the other mechanisms. In a subsequent door-to-door fundraising field experiment about 4500 households were approached, each participating in either an all-pay auction, a lottery, a non-anonymous voluntary contribution mechanism (VCM), or an anonymous VCM. Although the all-pay auction is the superior fundraising mechanism both in theory and in the laboratory, it raised the lowest revenue per household in the field. Next to the possibility that competition might crowed out intrinsic motivation, the non-anonymity may have had a negative effect: conditional on donating, households contribute less in the non-anonymous VCM than in the anonymous VCM. Among the

non-anonymous mechanisms, the lottery raises the largest revenue per household. Notably, the method that scored best, the anonymous VCM, is the one most used by door-to-door fund raisers in the Netherlands.

Godfried van den Wittenboer presented critical thoughts on the quality of experimental research in the area on economics and behavioural economics. In most methodological papers, it is concluded that the extent to which the measurement permits comparison is the main methodological problem of the comparative social science. Similar problems arise in the various branches of the comparative social science. Godfried van den Wittenboer's presentation provided a clear explanation of the conditions required for valid comparison of treatment effects among groups and stimulated discussion about the internal and external validity of experimental research.