# Three Essays on Experimental Economics

By

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#### **THESIS**

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#### **Abstract**

This thesis consists of three essays using experimental economics to empirically study human behaviors in different economic contexts. Each essay is a self-contained paper.

In the first paper, we try to address a puzzle of an unanticipated stoppage observed during houses auctions in Australia. Although no new information is revealed during the suspension, sellers perhaps intend by suspending the auction to trigger some psychological process which would lead to more aggressive bidding and therefore higher revenues. The stoppage allows bidders the time to imagine how they would live in their future home as if they were owning the house. The feeling of having the house can potentially trigger endowment effects, which generate additional attachment value to the object. In order to test this conjecture, we computerize an English auction for a real good in the laboratory with and without a stoppage. When the auction was stopped, we targeted the highest bidders by placing the object in front of them and informing them that they could keep the good if they won the auction. Unexpectedly, we observe a similar average auction price between the control treatment and the treatment with the stoppage. A deeper exploration shows that the targeted subjects won less frequently in the stop treatment than their counterparts in the control treatment. We conclude that there must be two opposite effects taking place in the stop treatment such that the same average auction price is observed as in the control treatment. A cooling-off effect makes the targeted subjects less aggressive in bidding while a heating-up effect induces the waiting subjects to bid more aggressively.

In the second paper, we study experimentally how informative cheap talk is in a delegation game where information is asymmetric and incentives are misaligned. We are particularly interested in the efficiency of delegation when we alter the cardinality of the message space. This paper contributes to the cheap talk literature by a novel delegation scenario that studies how different forms of messages affect the degree of information transmission. The one-shot

three-person delegation game is based on a repeated real-effort task. Two players can simultaneously send a costless message about their past performance along with their avatar to the delegator of their group. A delegator then can choose a player and delegate. Delegation replaces the delegator's performance in the profit function by the future performance of the chosen person. In order to misalign preferences, the delegator has to pay a fixed bonus to the person she chooses. In the baseline treatment, we adopt a structured massage space which consists of integers to represent how well a player has performed in the addition task (i.e. Precise Message Treatment, PMT). Then, we introduce noise by partitioning the massage space into intervals (i.e. Fuzzy Message Treatment, FMT). Lastly, we implement free text communication to allow subjects any message they want (i.e. Free Communication Treatment, FCT). In line with the lie-aversion literature, truthful reports and moderate lies are observed across all treatments. Surprisingly, information is transmitted in both the FMT and the FCT but not in the PMT. We find that on average delegators ignored messages in the PMT, but increased the frequency of delegation when they received messages indicating better performances in both the FMT and the FCT. Compared to the situation where no delegation options are allowed, the joint channel of cheap talk and delegation improve social welfare to some degree. The highest efficiency is obtained in the FMT, where players can express freely how competent they are. An important reason is that delegators are able to extract information contained in messages of different styles.

In the third paper, we investigate the social welfare enhancing effect of costly contracts used to resolve future distributional conflicts. A recent study by Bayer (2016) shows that subjects still cooperate to a certain extent in social dilemma situations, but welfare losses from competition in distributional contests destroy welfare gains from voluntary cooperation. We extend this study by providing a costly contract option before the two-stage cooperation and contest game. If a mutual agreement is made to implement the contract, the second stage distributional contest is avoided. As the baseline treatment, we adopt a simple equal split sharing rule and calibrate the contract cost to be the average effort incurred in Bayer's

contest game. Interestingly, we find that the costly equal split contract can stabilize individual contributions among those who opt in. Moreover, we find a significant improvement in the average profit compared to the control treatment where no contract option exists. However, the frequency of contracting declines dramatically in early periods. We further vary the type and the cost of a contract in two dimensions. Along the first dimension, we change the sharing rule to a proportional split conditional on individual contributions. This removes the social dilemma dimension of the cooperation game and theoretically allows for the implementation of the first-best. As expected, the majority of subjects opted for the contract with full cooperation following in most cases. Along the second dimension, we decrease the cost of an equal split contract. The lower contracting cost helps to delay the decline of the average contracting frequency. It seems that an equal split contract selects subjects who are more cooperative into signing the contract, which increases average welfare.

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