# Three Contributions to Experimental Economics

#### Dissertation

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vorgelegt von
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# **Essay I**

Rich man and Lazarus – Asymmetric endowments in publicgoods experiments

Joint work with Claudia Kesera, Andreas Markstädtera and Martin Schmidta

Abstract: In a series of experiments, we compare voluntary contributions to a public good in a symmetric setting to those in two asymmetric settings, where the players have different, randomly allocated endowments. We distinguish between a weakly and a strongly asymmetric situation. We observe that the group contribution levels are not significantly different between the symmetric and the weakly asymmetric situation. In both situations, participants tend to contribute the same percentage of their respective endowment. In the strongly asymmetric situation, where one of the players has a higher endowment than the three other players together, we observe a significantly lower group contribution level than in the other situations. The "rich" player in this situation does not contribute significantly more than the average contribution of the "poor" players and thus contributes a significantly lower percentage of his endowment. He is not as greedy as the rich man in the parable but leaves not more than "breadcrumbs" to the poor players.

**Keywords:** Experimental economics; public goods; asymmetric endowments.

The official version of the paper has been published as a discussion paper in the CIRANO Scientific Series and is available at http://www.cirano.gc.ca/pdf/publication/2013s-32.pdf

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## **Essay II**

## **Custom-made healthcare - An experimental investigation**

Joint work with Claudia Kesera, Claude Montmarquetteb and Martin Schmidta

Abstract: In this paper, we investigate in a controlled laboratory experiment physician behavior in the case of payment heterogeneity. In the experiment, each physician provides medical care to patients whose treatments are paid for either under fee-for-service (FFS) or capitation (CAP). We observe that physicians customize care in response to the payment system. A FFS patient receives considerably more medical care than the corresponding CAP patient with the same illness and treatment preference. Physicians over-serve FFS patients and under-serve CAP patients. After a CAP payment reduction in the experiment we observe neither a quantity reduction under CAP nor a spillover into the treatment of FFS patients.

**Keywords:** Experimental economics; physician reimbursement; capitation; FFS; customization; fee regulation.

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**Essay III** 

Money talks - Paying physicians for performance

Joint work with Claudia Kesera

Abstract: Pay-for-performance has been enjoying a growing popularity among healthcare policy

makers. It attempts to tie physician payment to quality of care. In a controlled laboratory

experiment, we investigate the effect of pay-for-performance on physician provision behavior and

patient benefit. For that purpose, we compare two payment systems, a traditional fee-for-service

payment system and a hybrid payment system that blends fee-for-service and pay-for-performance

incentives. Physicians are found to respond to pay-for-performance incentives. Approximately 89

percent of the participants qualify for a pay-for-performance bonus payment in the experiment. The

physicians' relative share of optimal treatment decisions is significantly larger under the hybrid

payment system than under fee-for-service. A patient treated under the hybrid payment system is

significantly more likely to receive optimal treatment than a fee-for-service patient of matching type

and illness. Pay-for-performance in many cases alleviates over- and under-provision behavior relative

to fee-for-service. We observe unethical treatment behavior (i.e., the provision of medical services

with no benefit to the patient), irrespective of the payment system.

**Keywords:** Experimental economics; physician remuneration; pay-for-performance (P4P).

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