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Externalities, impact beliefs, and behavior in markets

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Summary

This thesis investigates in various ways how consumers and firms behave in settings where more than the price of a product matters to consumers. In Chapter 2, Peter Werner and I investigate experimentally how people react to negative externalities their consumption choices have on others. In particular, we test whether participants are willing to abstain from consumption because of the externality. We then introduce compensation, which allows participants to reduce their negative externality by paying some of their surplus. Across three treatment conditions, we additionally examine whether the willingness to voluntarily internalize externalities either through a reduction of consumption or through compensation depends on the tangibility of the externality. We find that in all conditions there are participants who are willing to voluntarily internalize externalities. However, diffusion of responsibility in the creation of the externality (and hence the responsibility for compensation) reduces compensation amounts and leads to larger net externalities.

In Chapter 3, I investigate what role impact belief formation plays in determining the adoption of high impact other-regarding behavior, for example in volunteering, donating or pro-environmental behavior. I build on the observation that high impact behaviors are typically more costly than low impact behaviors. This cost differential may lead to self-servingly biased impact beliefs in the following way: people may want to under-estimate the (in fact high) impact of expensive actions, as a justification for not engaging in these actions. At the same time, they may want to over-estimate the (in fact low) impact of their cheap actions, to be able to convince themselves why they are already doing a lot by engaging in these behaviors. In the experiment, I confirm that subjects indeed over-estimate low impact levels (slightly) and under-estimate high impact levels. Across a variety of tests, however, I cannot find evidence supporting the hypothesis that this pattern is driven by motivated beliefs. Rather, it seems that bounded rationality in the perception of the impact signals drives the bias.

In Chapter 4, Markus Reisinger, Christian Seel and I analyse competition between two firms, in a setting where consumers care not only about prices, but also about other horizontal product characteristics, such as style. Examples for such markets could be the market for lunch menus in business restaurants, newspaper markets or the market for simple art, such as posters or printed t-shirts. Using a theoretical framework, we analyze how firms in such a setting choose their prices and taste-based quality (called location). When firms' production costs are sufficiently different, there is an equilibrium in which firms pick prices deterministically, but randomly choose location. In particular, the stronger firm (i.e., the one with lower production costs) will cater to the most average tastes by randomizing around the middle of the Hotelling line. The weaker firm (i.e. the one with higher production costs) will then secure itself a positive demand by catering to more obscure tastes. These strategies allow firms to dampen price competition and secure themselves positive profits, despite competing in prices.