Cost over Content: Information Choice in Trade

Kristóf Madarász
London School of Economics, United Kingdom

Marek Pycia
University of Zurich, Switzerland

Abstract

How much would buyers pay to have some control over what a seller knows about them? When deciding what information to provide to her counterpart, a privately-informed trader chooses between options that may differ both in their contents and in their costs. For a large class of static and dynamic trading environments where buyers choose from arbitrary sets of signal processes that reveal or obfuscate information to a seller, we establish a "cost-over-content" theorem. In equilibrium, buyers only choose cheapest processes, regardless of the information content they provide. Pooling on any cheapest process is an equilibrium. Our paper uncovers a general source of market failure linked to the direct cost of information choice with consequences for the role of information defaults. We explore applications to bargaining, signaling, disclosure, consumer privacy, and data trade.

At the FORC presentation we focus on the privacy application. Our cost-over-content results explain why consumers may choose little protection of their private information even when protecting it would improve their welfare; we show that this so-called privacy paradox is an equilibrium phenomenon driven by market power. Our results also lead to predictions on how an online-shopping platform provider designs the information flows between sellers and the buyers. While the platform can charge both the buyer and the seller for its offering of information structures, following the logic of our cost-over-content theorem, we show that the platform neither charges nor compensates the buyer for choosing an information structure. At the same time, the platform charges the seller and maximizes the value of the information passed to the seller, as measured in the seller's direct profit from interacting with the buyer. This asymmetry is relevant for the impact of the widespread ability to track consumers on economic outcomes and the distribution of gains from trade, and it is relevant for the effectiveness of various consumer-protection policies.

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