Workshop on
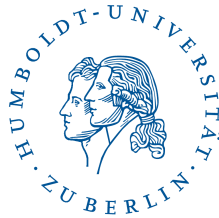# "Transparency and Consumer Behavior"
at HU Berlin

October 13 and 14, 2022

About the Workshop

The workshop is intended as a forum for researchers to share and discuss current research related to information transparency and consumer behavior. The event benefits from a diverse set of researchers with vast expertise and different backgrounds. The German Research Foundation (DFG) supports the workshop through the Collaborative Research Center (CRC)/Transregio 190 "Rationality and Competition". We are pleased to welcome you in Berlin.

About the Collaborative Research Center

The CRC/Transregio "Rationality and Competition" combines the research programs of behavioral and neoclassical economists to study applied economic questions that are of high policy relevance. The focus is on the economic behavior and performance of individuals and firms: How do systematic biases in expectations, decision processes, and preferences affect the most important economic decisions of households – about education, health, labor supply, financial investments, and the purchase of durable consumption goods? How do firms respond to behavioral biases of their customers and their employees, for example by adjusting their marketing strategies, their organizational design, their incentive schemes, and their innovation activities? What economic policy interventions are effective to protect consumers and employees from exploitation and how can they prevent the destabilization of markets (due to bubbles and crashes)? The LMU Munich and the HU Berlin are the leading institutions, complemented by additional research institutions like the ifo Institute or the Max-Planck Institute.

Project A05

Project A05 within the CRC sets out to improve the understanding of the impact of transparency, i.e., the quantity and the quality of information made available to consumers and its effect on their decision-making. In many of today's (online) choice environments, consumers are exposed to a vast amount of information. Consumer protection regulation affects this large amount by promoting and reinforcing high levels of transparency. Whereas transparency should improve the decisions of perfectly rational consumers, its effects are less obvious in the face of behavioral biases. Increasing transparency may not always result in the desired outcome. For example, providing too much information due to increased transparency may overwhelm consumers regarding decision difficulty, and less

information may enable consumers to make less-biased decisions. Therefore, the optimal level of transparency in a given decision situation is likely to depend on several aspects, including situational factors (e.g., context), the decision architecture, and the consumer's cognitive abilities and experience.

Co-Organizers

Daniel Guhl (HU Berlin) and Lucas Stich (LMU)

Speakers

Maja Adena (WZB Berlin Social Science Center)
Alexander Bleier (Frankfurt School of Finance & Management)
Ana Martinovici (Erasmus University)
Anita Rao (Georgetown University)
Nadia Streletskaya (Oregon State University)
Michel Tolksdorf (Technische Universität Berlin)
Christoph Ungemach (Technische Universität München)

Location

Humboldt University of Berlin
School of Business and Economics
Spandauer Str. 1, Room 21B
10178 Berlin

Program

Thursday October 13, 2022

Chair: Daniel Guhl (HU Berlin)

11:00	*Registration*
11:30	*Opening* Daniel Klapper (Dean, HU Berlin)
11:45	*On the Viability of Contextual Advertising as a Privacy-Preserving Alternative to Behavioral Advertising on the Web* Alexander Bleier (Frankfurt School of Finance & Management)
12:30	*Lunch (Sandwiches)*
13:15	*Labor Cost Transparency and Consumer Preferences* Christoph Ungemach (TUM)
14:15	*Revealing Attention* Ana Martinovici (Erasmus University)
15:15	*Coffee Break*
15:45	*We Value Your Privacy: Behavior-based Pricing under Endogenous Privacy* Michel Tolksdorf (TU Berlin)
16:45	*Discussion*
18:00	*End of Day 1*
19:30	*Dinner (by invitation)*

Friday October 14, 2022

Chair: Lucas Stich (LMU)

09:00	*Debunking Misinformation: Effects on Beliefs and Purchase Behavior* Anita Rao (Georgetown University)
10:00	*Transparency, Information and Food Choice: Moving from Individual Biases and Heuristics to More Flexible and General Models of Consumer Behavior* Nadia Streletskaya (Oregon State University)
11:00	*Coffee Break*
11:30	*Hooked on Apps: Framed Field Experiment on Addictive and Transparent App Design* Maja Adena (WZB Berlin Social Science Center)
12:15	*Lunch (Sandwiches)*
13:00	*Breakout Sessions in Groups*
15:00	*Coffee Break*
15:30	*Discussion*
17:00	*End of Workshop*

Abstracts

On the Viability of Contextual Advertising as a Privacy-Preserving Alternative to Behavioral Advertising on the Web

Alexander Bleier (Frankfurt School of Finance & Management)

Increasing privacy concerns regarding online behavioral advertising have sparked a renewed interest in online contextual advertising. However, while giving up on behavioral advertising may cede economic gains, adopting novel methods of contextual advertising may not cure consumer privacy. In fact, as such methods often extend far beyond the traditional matching of ads to keywords on a web page, they allow ads to become increasingly targeted to consumer information which may also violate consumer privacy and trigger privacy concerns. Firms and regulators should thus be careful not to inflict economic costs while failing to protect consumer privacy.

Labor Cost Transparency and Consumer Preferences

Christoph Ungemach (TUM)

Firms are usually reluctant to disclose information about the production costs for their goods and services; however, some firms have recently started to disclose cost information to consumers. This research examines the consequences of disclosing labor cost information on consumer preferences. Six experiments, in both field and lab settings across multiple service domains, show that disclosing a service worker's compensation (if said compensation is perceived as fair by consumers) can increase consumer preference and willingness to pay for that firm's service. In addition to higher expectations with respect to quality, this greater preference for services provided in a fair-wage setting is driven by consumers' feelings of anticipated guilt. Available social norms regarding fair compensation and the nature of the service worker (human vs. non-human) are both identified as important boundary conditions of the psychological process. This research offers a first step toward understanding the psychological and behavioral consequences of disclosing labor cost information to consumers, thereby enabling managers to better identify when they should disclose wage information as part of their marketing strategy. This research also informs policymakers on how to encourage social preferences and consumer choices in order to promote fair outcomes for consumers, firms, and workers.

Revealing Attention

Ana Martinovici (Erasmus University)

Performing decision-making tasks in online environments provides consumers with easy access to large amounts of information (e.g., product descriptions, privacy policies). Acquiring all the available information requires time and effort, which motivates consumers to focus their attention only on a subset of features that are relevant enough to justify the costs. As a result, models that account for attention allocation during a task are better able to capture decision-making processes. When

information is acquired by reading or looking at a display, the moment-to-moment allocation of attention is revealed by the sequence of eye-movements that each consumer makes. In this talk, I will discuss how eye-tracking studies provide insights into otherwise unobservable consumer behavior processes.

We Value Your Privacy: Behavior-based Pricing under Endogenous Privacy
Michel Tolksdorf (TU Berlin)

We study a duopoly model of behavior-based pricing where consumers decide whether they reveal their data or remain anonymous. We contrast two data policies: in an open data policy, revealed data is accessible by both sellers in the market. The unique equilibrium displays that all consumers reveal their data, while firms price discriminate causing welfare losses due to poaching. In an exclusive data policy, revealed data is only accessible by the one firm a consumer bought from. In equilibrium, consumers anonymize, prices are uniform and the market is efficient. We test these contrasting predictions in an experiment. In the open data treatment, subjects predominantly act as predicted. In the exclusive data treatment, buyers initially reveal their data as sellers reward loyalty. Subsequently, buyers adjust more towards anonymization, when sellers begin to employ poaching strategies.

Debunking Misinformation: Effects on Beliefs and Purchase Behavior
Anita Rao (Georgetown University)

The prevalence of misinformation has spurred various interested parties—regulators, the media, and competing firms—to debunk false claims in the marketplace. This paper studies whether such debunking messages provided by these parties can impact consumer purchase behavior. If so, does debunking effectively correct consumers' misinformed beliefs—an ideal outcome from a policy-maker's perspective—or does it merely reinforce correct beliefs, as predicted by biased belief updating? With theory providing contradictory predictions, we design and implement a conjoint experiment that enables us to measure willingness-to-pay under exposure to real-world misinformation and debunking messages. Focusing on three ingredients in product categories where misinformation is prevalent (aluminum in deodorants, fluoride in toothpastes, and GMOs in food), we find that debunking plays an important role in mitigating the impact of misinformation. More specifically, debunking can repair the decrease in willingness-to-pay caused by misinformation by correcting misbeliefs, a promising finding for policy-makers. We discuss the incentives for firms to debunk misinformation or to introduce new products that conform to misinformation.

Transparency, Information and Food Choice: Moving from Individual Biases and Heuristics to More Flexible and General Models of Consumer Behavior
Nadia Streletskaya (Oregon State University)

Consumers sometimes have strong beliefs about food. While there is significant heterogeneity in what matters to different consumers, calls for increased transparency in the food industry have abounded, with a corresponding increase in mandatory and

voluntary labeling variety, number of available certification schemes and quantity of popular press and blogging titles, often complete with conflicting or outright incorrect information. In this context, I discuss some examples of behavioral biases and heuristics that affect consumer food choice, based on previous work: halo and spillover effects of labels, confirmation bias in peer or expert rating evaluations, and purchase avoidance due to price fairness concerns or fear of missing out on options out of the choice set. Building on these examples, I outline some of the exciting potential directions for future research, from the integration of prospect theory into models with nutritional concerns and perceived health risks, to the introduction of the recent insights from experience-weighted attraction and social learning models to consumer food beliefs formation and food choice.

Hooked on Apps: Framed Field Experiment on Addictive and Transparent App Design

Maja Adena (WZB Berlin Social Science Center)

Smartphone apps commonly apply designs to influence user behavior and, especially, to increase engagement and form usage habits. Those behavioral designs rely on elements ranging from app appearance over rewarding and social features to black-box algorithms and personalization. Consumers might not be aware and usually have no control of the underlying design. Aiming to protect consumers from manipulative behavioral designs, the recently enacted European Digital Services Act requires app design to be more transparent and self-adjustable. In a framed field experiment, we evaluate how the change in design that adds transparency affects individual behavior and whether those features are actually demanded by consumers. Study participants interacted with a news app over two weeks under one of three designs: a baseline version of the app, with no behavioral design and no protection measures (No design), a version with typical behavioral design but no protection measures (Hidden design), or a transparent version with both behavioral design and protection measures (Transparent design). Protection measures provided short explanations of the design mechanisms and their risks and enabled participants to adjust design settings. In the Hidden design group, participants used the app twice as long than in No design group. In the Transparent design group, usage time was between that of the other two treatment groups and awareness of being 'object' to behavioral design was the highest. Moreover, 70% of the participants in the transparent design group made some active use of protection measures suggesting their value to consumers. Willingness to pay for the app was lowest in the Hidden design group. Our results suggest that the positive effects of app transparency might materialize not only on the demand side but also be viable for the supply side, at least for the sellers whose business model does not (only) rely on maximizing usage time.

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