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Leibniz Association



BCCP NEWSLETTER Research results for policy

May 2017 | Issue 1





About BCCP

The Berlin Centre for Consumer Policies (BCCP) is a Leibniz ScienceCampus, established September 2015, and co-funded by the German Leibniz Association and its member institutions. Leibniz ScienceCampuses promote cooperation between Leibniz institutions and universities via regional, thematic research and policy partnerships.

The Centre builds on the cooperation between two Leibniz institutes – the German Institute for Economic Research (DIW Berlin) and the Berlin Social Science Center (WZB) – and faculties of the Humboldt-University Berlin, Free University Berlin, Technical University Berlin, the European School of Management and Technology (ESMT), and the Hertie School of Governance.

A strong focus on Behavioral Economics, Industrial Organization, as well as Consumer and Competition Law – all combined with established policy expertise – makes Berlin an ideal location for a ScienceCampus focusing on consumer policies.

BCCP reinforces and institutionalizes this exceptional environment to create an enduring international platform in the broad area of competition and consumer policies. This platform strengthens the academic environment, encourages interdisciplinary research, and increases the visibility of Berlin as a center of excellent academic research and evidence-informed policy advice.

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Dear readers,

A warm welcome to the first issue of the BCCP Newsletters, which aims to make relevant research results available to policymakers, businesses, the media, and the public as well as our academic colleagues.

The BCCP Newsletters are a collection of short notes discussing the main findings of scientific papers produced by BCCP Fellows. They emphasize, in accessible terms,



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the policy implications of our academic research. Such information – which we also publish on the BCCP website (http://www.bccpberlin.de/news) should help facilitate the "translation" of technical research output into actionable policy interventions. In this way, we hope to shape the policy debate and contribute to putting political discussions on sound footing.

This edition reflects the variety of topical research undertaken by BCCP fellows regarding a large range of issues. For instance, we ask whether consumers' increasing tendency to buy ecological and fair trade products is driven by a desire in improving their social reputation as opposed to a genuine interest in sustainable production processes. In a similar vein, we discuss how buyers avoid a negative self-image when asked to donate, what this means for fundraisers, and how matching methods for donation should be designed to avoid crowding out. We then discuss how to design markets to benefit consumers, touching upon topics such as the regulation of data-driven markets and broadband networks as well as the optimal design of electronic systems for public procurement under the threat of corruption. This first edition reveals the breadth of research carried out by BCCP Fellows - and there is more to come, so stay tuned. We hope that the BCCP Newsletters will not only make for a "good read," but also that it might inform and stimulate discussions around issues related to consumer policies. With this in mind, we welcome any comments or feedback you might have on the subjects we raise.

Tomaso Duso BCCP speaker

New Regulatory Strategies for Data-Driven Markets

N O R T H W E S T E R N JOURNAL OF TECHNOLOGY INTELLECTUAL PROPERTY

Reining in the Big Promise of Big Data: Transparenc Inequality, and New Regulatory Frontiers

Philip Hacker & Bilyana Petkova



The ubiquitous use of advanced data mining technology in consumer markets not only threatens privacy, but it may also unfairly disadvantage certain protected groups by various forms of algorithmic discrimination. However, simultaneously, data technology may be used by the regulator to mitigate privacy and discrimination concerns. Generally, the growing differentiation of services based on Big Data thus harbors the potential for both greater societal inequality and for greater equality. Anti-discrimination law and transparency alone, however, cannot do the job of curbing Big Data's negative externalities while fostering its positive effects.

To rein in Big Data's potential, BCCP Fellow Philipp Hacker and NYU's Bilyana Petkova argue that regulatory strategies from behavioral economics, contract and criminal law theory should be adapted to data-driven market environments.

Four strategies stand out: First, an active choice regime should be mandated, for services offered in the digital economy, that enables users to choose between data collecting services (paid by data) and data free services (paid by money). It would give consumers a real and salient choice between exposure to data analytics - with potential harm for privacy and discrimination - and simple monetary payment. Second, the authors propose using an expost judicial control of unfair privacy policies to prevent contracts that unreasonably favor data collecting companies. Third, they suggest democratizing data collection by regular user surveys and data compliance officers partially elected by users. Fourth, concerning use of Big Data analytics by regulators for enforcement purposes, they trace personalization techniques to the old precept of treating like cases alike and different cases - differently. The income and wealth-responsive fines powered by Big Data that they suggest offer a glimpse into the future of the mitigation of economic and legal inequality by personalized law.

Throughout these different strategies, the authors show how salience of data collection can be coupled with attempts to prevent discrimination against and exploitation of users. Finally, they discuss all four proposals in the context of different test cases: social media, student education software and credit and cell phone markets.

The article "Reining in the Big Promise of Big Data: Transparency, Inequality, and New Regulatory Frontiers" is forthcoming at the *Northwestern Journal of Technology and Intellectual Property*.

Matching donations without crowding out?

Matched fundraising, in which a large donor tops up individual donations according to some scheme, is popular among charitable organizations. Recent studies based on lab or field experiments demonstrate, however, that matched fundraising has a downside: it generates substantial crowding out and appears inferior to solicitation schemes that simply announce a lead gift.

Is there a way of matching donations that avoids crowding out? In a recent article, BCCP fellows Maja Adena and Steffen Huck introduce a novel matching method where the matched amount is allocated to a different project. They also present some simple theoretical considerations that predict reduced crowding out or crowding in (depending on the degree of substitutability between the two projects) and present evidence from a large-scale natural field experiment and a laboratory experiment. Similar to findings in the literature, conventional matching for the same project results in partial crowding out in the field experiment and, as predicted, crowding out is reduced under the novel matching scheme. The lab experiment provides more fine-tuned evidence for the change in crowding and yields further support for the theory: the novel matching method works best when the two projects are complements rather than substitutes.



The article "Matching donations without crowding out? Some theoretical considerations a field, and a lab experiment" has been published in the *Journal of Public Economics*, Volume 148 (April), 2017, pp. 32-42.

Should we enforce strict network neutrality?



In November 2015 the European Union passed regulation on open internet access providing a legislative answer to the European side of the ongoing debate on "network neutrality" - a concept that broadly requires that all traffic should be treated equally. This regulation was accompanied in August 2016 by guidelines set up by the Body of European Regulators for Electronic Communications (BEREC) which provide a framework for national regulators on how to execute the regulation in domestic markets. While neutral treatment of internet traffic is a central pillar of the new regulation, internet service providers (ISP) may still offer differentiated Quality-of-Service (QoS) to content providers (CPs) under certain conditions.

In a recent study, BCCP fellows Pio Baake and Slobodan Sudaric focus on the QoS practice of "paid prioritization" and analyze how prioritization affects competition and interconnection between ISPs. They show that prioritization increases the average traffic quality and intensifies competition for consumers which leaves consumers as the main beneficiaries from prioritization.

These results are based on a theoretical model with two symmetric ISPs connecting CPs as well as consumers to their networks. Quality of traffic is determined within a queueinq model allowing for congestion and prioritization. The ISPs can offer two quality classes: A "priority lane" which is associated with higher quality and a "non-priority" lane with lower quality but free of charge. Regarding traffic across networks, the ISPs are free to charge each other interconnection charges for handling traffic dedicated to consumers connected to their own network. Prioritization leads to an overall more efficient use of the network as CPs with more quality sensitive applications will opt for prioritization. Furthermore, interconnection charges create an additional revenue stream for ISPs incentivizing networks to increase incoming traffic by attracting consumers. Since this intensifies competition on the consumer side, it is optimal for ISPs to set interconnection charges equal to zero. Prioritized interconnection is therefore unlikely to affect existing peering agreements between networks. Finally, the possibility to offer different service classes increases the ISPs' investment incentives which leads to higher network capacities and enhances the traffic quality even further. These results therefore suggest that a total ban of QoS differentiation would have detrimental effects.

The research paper "Interconnection and Prioritization" has been published as DIW Discussion Paper 1629.

Legal uncertainty as a selective deterrent

Legal uncertainty is prevalent. Consider uncertainty about the legality of a specific action: when taking the action, a firm does not know with certainty whether this action would be judged to be legal. For example, it is uncertain which evidence would be allowed and how it would be assessed. Previous literature has shown that legal uncertainty might deter the wrong actions – over-deterring socially beneficial actions, while under-deterring socially detrimental ones.

In his recently published paper, BCCP fellow Matthias Lang studies welfare effects of legal uncertainty and shows that legal uncertainty can increase welfare – contradicting conventional wisdom. Governments can use legal uncertainty as a welfare-enhancing screening device with respect to firms' private information. Consequently, legal uncertainty can make a norm more selective and increase social welfare.

7

This reasoning applies to many settings. A competition policy example are vertical restraints, like exclusive dealings, which are prohibited in the European Union under Article 101 (TFEU). Due to a Block Exemption Regulation, however, this rule does not apply if market shares of involved firms are below 30%. Although the European Commission gives guidelines how market shares are determined, it is extremely difficult to predict correctly market shares determined by competition authorities. Thus, a firm with market shares of 25% anticipates with some probability an estimate above 30% and to face a penalty. On the contrary, a firm with market shares of 35% anticipates with some probability an estimate below 30% and not to face a penalty. The paper shows that this legal uncertainty can be socially beneficial. Other examples for which the results are relevant are pollution thresholds in environmental law or transfer pricing in tax law. In privacy law, there are uncertain privacy thresholds for social networks and other internet businesses. Copyright and patent law similarly contain uncertain thresholds of originality for works to be eligible for protection.

Suppose that the threshold of legality is uncertain and depends on the circumstances of the action. Courts cannot perfectly distinguish between these circumstances. An optimal threshold of legality balances – on average – the action's external, social costs and private benefits. Hence, there are some legal actions that reduce welfare and some illegal actions that raise welfare, because welfare depends not only on circumstances, but also on other properties of the action. Legal uncertainty affects deterrence around the threshold in opposite directions: Probabilities of conviction increase for firms below the threshold, while probabilities of conviction decrease for firms above the threshold. Therefore, legal uncertainty deters welfare-reducing actions and encourages welfare-increasing actions. Both effects are socially beneficial.

The case for legal uncertainty made here is just one argument in a large debate. On the one hand, legal uncertainty may reduce the accountability of enforcement authorities. On the other hand, precise legal norms often imply huge social costs, for example, in lengthy court cases about conceptual futilities. Legal uncertainty allows to save these costs in addition to the screening effects scrutinized here.

WZB

Maja Adena Steffen Huck

Discussion Pap SP II 2016-306

Research Area Markets and Choice Research Unit Francomics of Chang

The article "Legal uncertainty as a welfare enhancing screen" has been published in the *European Economic Review*, Volume 91 (January), 2017, pp. 274-289.

How buyers avoid a negative self-image when asked to donate and what it means for fundraisers

How we behave when asked for donations while buying concert tickets online

People like to think about themselves in good terms. When asked for donations they have difficulty turning down the ask. Sometimes they engage in actions to avoid being asked in the first place. It reminds me of kids playing "If I Don't See You, You Don't See Me!" They pretend to have not seen the ask or, in the long-term, avoid the situation which they associate with fundraising. This behavior has consequences for fundraisers, as our new paper shows. First, our study provided field evidence for the role of pure self-image, independent of social image, in charitable giving. We conducted our study in conjunction with an opera house. It was the first time that the company asked for online donations to support a social youth program enabling poor schoolchildren to visit the opera. Examining the online fundraising campaign run on their ticket booking platform with over 13,000 visits, we documented how individuals engage in self-deception to preserve their self-image.

Registered customers who had made their choice of opera tickets and proceeded to the payment stage were asked to donate additional money. We slightly manipulated the way people were solicited and traced their subsequent behavior.

In one treatment, opera customers asked to donate could click on the "proceed" button, while in the other customers were forced to check one of two boxes—"I have donated already" or "No, thank you"—if

they wanted to proceed without a donation. Going straight to the check-out page implies the decision not to donate can potentially be conveniently overlooked and can function as a form of self-deception. Non-donors are not forced to admit to themselves that they are non-donors. This treatment resulted in meager response rates and donations. In the second treatment, this option was shut down, which had a huge positive effect on donations. The magnitude of the detected self-image motive in charitable giving in this study is quite meaningful – increasing the return from fundraising six- to sevenfold.

In the second step, we also document how customers "learn to avoid the ask." In the next opera season, we compared the ticket-purchasing behavior between two groups of customers: those who previously faced the online fundraising campaign and those who visited the platform before or after the campaign. Non-frequent customers who faced the online fundraising campaign return less often to the opera in the next season and spend on average ϵ_{16-32} less on tickets than those who were not exposed to the fundraising campaign. This compares to average donations of just $\epsilon_{0.26}$ per person from the same group of customers raised during the campaign. We present evidence that this effect did not fade over time but became permanent.

Beyond that, we also analyzed grid setting in fundraising. In our context, the customers choose donation "tickets" that make up the total donation. Increasing "ticket" prices from ϵ_{10} , ϵ_{20} , ϵ_{50} , and ϵ_{100} to ϵ_{20} , ϵ_{50} , ϵ_{100} , and ϵ_{200} had dramatically negative effects: customers donated less often and the overall return from them was significantly lower.

This suggests that similar types of arts companies tied with charities might be better off by rethinking their fundraising strategies. Our findings imply that asking for less could be potentially better in two respects. On the one hand, it increases the return rate, while not necessarily lowering the donation values. At least it seems to be worthwhile to experiment a bit to find out the optimal ask value, or maybe even better, to custom it on an individual basis. On the other hand, turning many people into donors reduces the risk that non-donors, who feel guilty for not responding to the ask, avoid spending money at all on the organization. Finally, the charities should take into account the potential trade-off between losing a potential donor and being more persuasive in the short term, and potential longterm effects on company's revenues from ticket sales.

The full paper "Online fundraising, self-deception, and the longterm impact of ask avoidance" has been published as WZB Discussion Paper SP II 2016-306.

How to design e-procurement systems for public procurement under the threat of corruption?

Many essential goods such as infrastructure, security or health services are provided by public institutions. The consumers of these goods want public production to be efficient as they cover costs either directly through fees or indirectly through taxes. Effective procurement processes are of central importance in this respect as public procurement accounts for 15 to 20 % of total GDP in OECD countries.

Corruption between procurement officers and private suppliers is a key concern threatening the efficiency of public procurement processes. To fight corruption, international organizations such as the OECD or the World Bank promote the use of digitalized procurement processes that allow suppliers to upload required documents online and offer the possibility to gather information about public projects or the past performances of suppliers in a systematic way. E-procurement systems therefore provide the tools to determine the information available to a procurement officer.

In a recent study, BCCP Fellow Andreas Asseyer analyzes what information a procurement officer should receive about production costs of a private supplier if there is a risk that the procurement officer and the supplier may engage in corruption. If a procurement officer receives information about costs, she may use it to ensure that an adequate price is paid to the supplier. However, she may also misuse the information to organize corruption with the supplier more effectively. Due to these different effects of information, it is optimal to reveal some and to withhold other information from a procurement officer to control the threat of corruption.

Andreas' analysis is based on a theoretical model that captures the problem of the public that delegates the task of purchasing a good to a public procurement officer who may engage in corruption with the supplier of the good. His results suggest that it may often be helpful to give a procurement officer only information about the good to be purchased and to withhold information about past performances of the supplier that would enable the procurement officer to exactly induce the supplier's production costs.

Crowdfunding reduces demand uncertainty but entrepreneurial moral hazard remains

In a forthcoming research article, BCCP Director Roland Strausz investigates the efficiency effects of reward-based crowdfunding platforms. Consumers are usually directly involved in the crowdfunding process. Contrary to conventional forms of financing, this allows for inferences on the expected demand for the planned product. For market research, crowdfunding therefore has an informative component. The improved information on market demand aids in improving financing decisions. Ideas and products that attract large consumer participation signal high demand and are realized.

A typical problem in financing relationships, however, remains in crowdfunding: moral hazard. Moral hazard means the threat of financially irresponsible behavior by the borrower. Conventional financing schemes include mechanisms such as control and intervention rights to limit moral hazard. These are absent in crowdfunding campaigns. The specific conditions of a crowdfunding platform are crucial for the relevance of moral hazard.

Ultimately, venture capital financing and crowdfunding can be expected to blend more strongly. In combination, the two systems can

both provide better information on the market as well as reduce moral hazard problems.

The full article "A Theory of Crowdfunding - A Mechanism Design Approach with Demand Uncertainty and Moral Hazard" is forthcoming in the *American Economic Review*.

"Shopping for a better world" only partially effective

More and more consumers are turning to ecological and fair trade products. In Germany, sales of organic products amounted to 8.62 billion Euro in 2015, a plus of 11 percent as compared to 2014. The market for Fair Trade products, with a size of 978 million Euro in 2015, has grown by 18 percent compared to 2014. Correspondingly, more and more stores are expanding their product ranges to include organic and Fair Trade alternatives. But is it always a genuine interest in sustainable production processes that is the driving force behind these developments?

In a recent study, BCCP fellow Jana Friedrichsen argues that this development can also be related to consumers' interest in their social reputation. Purchasing environmentally friendly or socially responsible products is certainly intrinsically valued by some consumers but it is also a means of improving one's social reputation, and some customers are willing to pay a premium for this image boost. This in turn may make it more profitable for vendors to offer products that are more geared toward building up the customer's ego than actually supporting sustainable production.

Jana's analysis is based on a theoretical model that allows to investigate the optimal pricing and product design when consumers consider "image" and "sustainability" in their decision-making processes. The model analysis shows that consumers who place more importance on their "green" image than on the underlying production processes incentivize vendors to sell products that prioritize image over fully exploiting the potential for sustainable production. Measures to promote sustainable consumption – such as the national program that was adopted by the German federal cabinet in February 2016 – should therefore take the motives of vendors and customers into account. In order to optimally promote the market share of truly sustainable products, there needs to be a shift in values when it comes to production conditions. Such campaigns should therefore be tailored specifically to information on sustainable production methods.

The full paper "Signals sell: Designing a product line when consumers have social image concerns" has been published as WZB Discussion Paper SP II 2016-202.

Review: BCCP Conference and Policy Forum 2016

Focusing on digital markets and consumer privacy, the first annual Conference and Policy Forum of the Berlin Centre for Consumer Policies (BCCP) was held in Berlin on June 17, 2016.

Touching upon an issue at the forefront of current European and US policy debates, over 150 participants, including academics from law and economics, policy makers, professionals, BCCP Fellows, and the interested public came together at the Senatssaal of Humboldt University Berlin.

Big data is transforming the world we live in. The instant availability of information impacts how individuals consume, how businesses thrive or fail, how society makes scientific discoveries, as well as how governments design and implement informed policies. At a pace and scale unanticipated just 20 years ago, information technology is enabling consumers globally. Uncountable services make use of a wealth of information that is largely generated by recording consumer actions. As a result, privacy concerns have been growing and there is a call to identify ways to regulate those businesses handling sensitive information. The conference highlighted the benefits and challenges related to consumer privacy concerns triggered by the big data revolution, as well as two important policy areas where the tremendous growth of information and analytic capabilities have had a major impact: competition policy and consumer protection.

Session reviews



Panel with Alessandro Acquisti (Carnegie Mellon University), Dorothea Kübler (WZB) and Dirk Engelmann (Humboldt University Berlin) on "Privacy Preferences in Digital Markets"

Alessandro Acquisti (Carnegie Mellon University) and Dorothea Kübler (WZB Berlin) started the first session, in which they presented their research on the economics of privacy and privacy preferences. While individuals value privacy, socializing, and disclosing, what reliable empirical evidence do we have, not only regarding the existence of such preferences, but also their respective importance? How much do consumers value privacy? Do (or should) consumers unambiguously strive for stronger privacy protection? Can notice and consent regulation even be effective?

In the second session, Florencia Marotta-Wurgler (New York University) and Deirdre Mulligan (University of California, Berkeley) discussed their research insights on privacy compliance. Privacy regulation is becoming increasingly important for firms. What are firms doing to protect the privacy of their customers? Are firms responding to market forces more or less than to regulatory pressure? Florencia Marotta-Wurgler showed that formal compliance with US FTC guidelines



Panel on "Privacy Compliance: Regulation vs. Market Forces" with Deirdre K. Mulligan (University of California, Berkeley), Florencia Marotta-Wurgler (New York University) and Oren Bar-Gill (Havard University)

has been rather low overall and, in particular, with respect to data practices and privacy by design. On the other hand, Deirdre Mulligan emphasized informal practices in her research, pointing out that different countries have very different privacy and data protection cultures and institutions, leading to very different actual compliance outcomes. In particular, she noted that empowering privacy and data protection experts within firms may, in places, be more effective than focusing narrowly on formal compliance to externally set regulations.

Susan Athey (Stanford University) and Hal Varian (Google) concluded the academic part of the conference by discussing the tremendous benefits and challenges facing data-driven businesses and regulators. Online platforms play a key role in revolutionizing our interactions in society as they shape the way consumers and firms use and commercialize the Internet. On data-driven platforms, product quality is improved as the amount of available data increases; for example search results and the targeting of advertisements. Real-time experimentation to improve products and innovate is a reality in many firms today. However, big data alone are not sufficient to provide a firm with monopolistic market power. In order to reap returns to data-scale, businesses must the technologies necessary to analyze and monetize data, which is typically achieved via learning by doing. At the same time, for example in internet search, demand-size network effects are likely to play a role in generating market power as, in order to serve the tremendous variety of potentially niche search terms, big data are essential. Ultimately, market



Panel on "Data-Driven Innovation" with Hal Varian (Google), Susan Athey (Stanford University) and Paul Heidhues (ESMT)

fundamentals will determine whether harmful market power can arise in specific industries.

During the concluding policy roundtable, State Secretary Gerd Billen (German Federal Ministry of Justice and Consumer Protection), Julie Brill (Hogan Lovells, former US FTC Commissioner), and Elisabeth Kotthaus (European Commission) provided a lively discussion about the political process leading up to the recent Privacy Shield agreement between the EU and the USA. While a political compromise, the Privacy Shield promises improvements to data



Policy Round Table on "Privacy in Competition and Consumer Policy" with Gerd Billen (BMJV), Julie Brill (Hogan Lovells, Former FTC Commissioner), Elisabeth Kotthaus (European Commission) and Moderator Amelia Fletcher (University of East Anglia)

protections, increased legal certainty and stability for European and US businesses, as well more empowered consumers. Finally, the panelists agreed that competition on privacy will become an increasingly important phenomenon. Antitrust authorities may then have reasons to evaluate competition cases focusing on privacy concerns, an area typically within the realm of consumer protection. In particular, the distinct separation of consumer protection and competition policy in the EU will continue to trigger political discussions about the issues at the intersection between these crucial consumer policy areas, including privacy protection.