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BCCP Newsletter

Research results for policy

December 2017 | Issue 2

www.bccp-berlin.de

Leibniz Association

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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.

Imprint

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Dear readers,

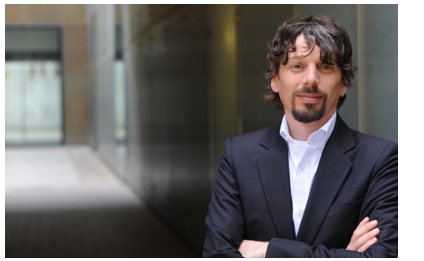


Photo credit: DIW Berlin | B. Dietl

Welcome to the second issue of the BCCP Newsletter.

The newsletters aim at presenting and discussing in accessible terms some of the main findings of scientific papers recently published by BCCP Fellows. Most of the news published in this issue is also found on the BCCP website *(http://www.bccp-berlin.de/news)*.

Once again, the newsletter reflects the variety of topical research undertaken by BCCP Fellows. For instance, we discuss why, in presence of group consumption, products preferred by a majority might end up only consumed by a minority. A good example of this are non-smoking restaurants, which were highly unpopular before the enforcement of smoking bans and nowadays are the norm. We then explore the role of deadlines and show that individuals with limited memory or attention might be more likely to execute a given task under a shorter rather than a longer deadline. We also discuss how to optimally pack a bag with a limited weight capacity when the available items differ in value and weight. The proposed solution to this intriguing ›knapsack problem‹ is a descending-clock auction. A further contribution shows how to design mechanisms that use information asymmetries to break down collusive and corruptive agreements between firms and regulatory bodies or external auditors, a topical issue in procurement. Finally, we return to the topic of donations and show that quality certificates increase trust in a charity, and that there is a positive correlation between trust and donations.

The breadth of research carried out by BCCP Fellows is remarkable and we hope that you are able to use the BCCP Newsletters to inform and stimulate discussions around all 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

On the Behavioral Effects of Deadlines – and their Implications for Policy Design

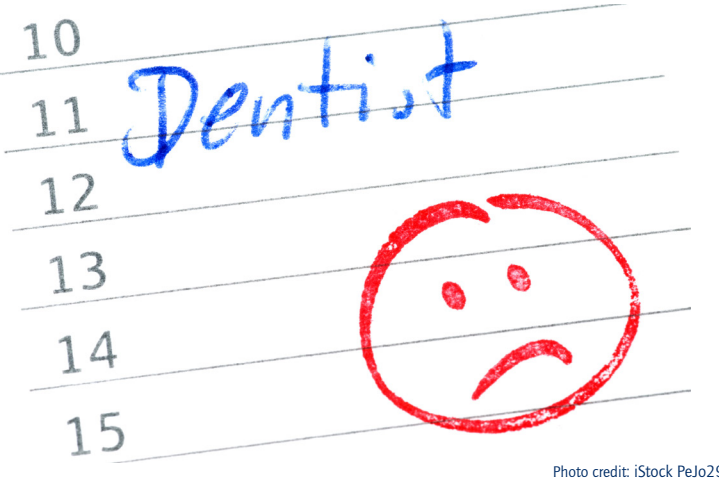
Deadlines are omnipresent and govern important economic decisions in the workplace and in consumer markets. While deadlines are crucial to coordinate complex teamwork in organizations, they also impose clear constraints on our choice sets. Deadlines restrict, for instance, our options to redeem a time-limited coupon or to return a product purchased online. Thus, from a consumer perspective, tight deadlines might appear unattractive.

In this recent working paper, BCCP Senior Fellow Christian Traxler, Steffen Altmann, and Philipp Weinschenk explore the role of deadlines when people face cognitive limitations. Using a simple analytical framework, they show that an individual with limited memory or attention might be *more* likely to execute a given task under a *shorter* rather than a longer deadline. The intuition is that a shorter deadline ›forces‹ the individual to act earlier, i.e., at a point in time where she is still likely to pay full attention to the task at hand.

To test this and further predictions from their model, the authors conducted two field experiments at a dental clinic. The experiments vary patients' deadlines and economic incentives for calling and arranging preventive check-ups. The results document that relatively tight deadlines exert strong effects on the timing of actions. Imposing a one- or three-week deadline also increase *overall* response rates relative to a situation in which patients face no deadline. After 100 days, cumulative response rates in the deadline conditions remain significantly above those with no deadline.

In a second trial that tested longer deadlines, the authors find *more* pre-deadline responses under short deadlines as opposed to much longer ones. Under a relatively tight three-week deadline, patients were *more* likely to call the dentist *within* the short time frame, compared to their likelihood of calling under longer deadlines of *six or ten weeks*. Thus, the evidence suggests that tight deadlines may trigger earlier responses as well as overall higher response rates.

BCCP Newsletter 2/2017



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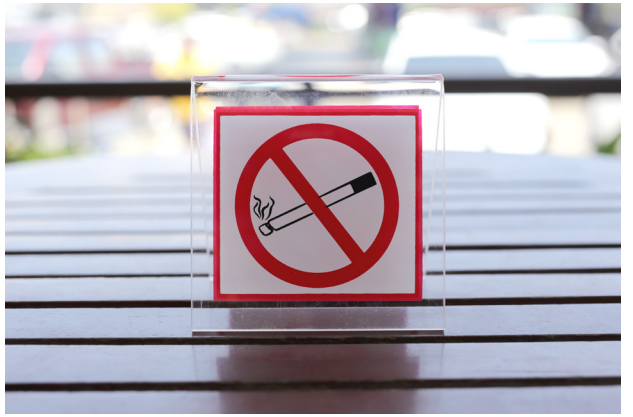
While it is up to further research to assess the external validity of these findings for other settings, it is seems important to highlight two potential policy implications. On the one hand, there is a wide range of applications for which institutions could impose deadlines in order to increase people's responsiveness. For instance, when asking potential recipients to apply for support programs (a grant, subsidy or tax advantage, etc.), adding a deadline could actually *increase* take-up. In the domain of consumer policy, on the other hand, one must carefully consider whether prolonging deadlines is indeed beneficial for all consumers. For instance, if a company offered seemingly generous extensions of rights to its customers – e.g., very long deadlines for cancellations or product returns – this offer might ultimately not be consumer friendly, at least *not* for individuals with cognitive limitations.

The full paper ›Deadlines and Cognitive Limitations‹ is available as IZA Discussion Paper No. 11129.

What Smoking Bans Tell Us About Optimal Product Diversity

Is it possible that a competitive market fails to supply the type of good or service desired by a majority of people? There is at least one well-documented example where this was the case: non-smoking bars and restaurants. When the first smoking bans were implemented in the nineties, a large majority of consumers were already non-smokers. Yet, the market barely supplied non-smoking premises. Even non-smoking areas were only the result of legal requirements and not something the market naturally offered.



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In his recently published article, BCCP Fellow Renaud Foucart argues that this result is consistent with standard economic assumptions. It also applies to all markets where consumers buy in possibly heterogeneous groups and have to bear some information costs to experience a product.

Smokers and non-smokers belong to three types of groups: smokers only, non-smokers only, and mixed groups. Assume that for historical reasons all restaurants used to allow smoking. Suppose also that a majority of consumers do not smoke. If a few restaurants decide to ban smoking, in principle they become more attractive to non-smokers. As there is little competition within the non-smoking market, it is in the interest of non-smoking restaurants to charge a higher price for a given quality. Hence, a mixed group finds better deals in the market for smoking restaurants and never patronizes a non-smoking one. Thus, there is a market equilibrium in which non-smoking restaurants are niche products that only cater to some non-smoking consumers, while smoking restaurants are mainstream and competitive, attracting both smokers and non-smokers.

In this world, smoking bans may not sound very attractive: few people enjoy the existing non-smoking restaurants and are willing to force the ones they like to become similar to the non-smoking ones. However, once a smoking ban is in place, the market for non-smoking restaurants becomes more competitive and it is in the interest of their owners to cater to everyone. This explains another well-documented fact: the support for smoking bans increases in the presence of bans. The bans are not very popular before being enforced but few people question them once they are implemented, as long as they apply to all premises.

The model also makes the following prediction: the worst possible policy is to ban smoking only in specific places. Such a partial ban does not work without strong enforcement, hurts the profit of owners, and remains unpopular, as it does not modify the nature of the market equilibrium. Either governments should ban smoking (almost) everywhere, or not ban it at all.

More generally, the model shows that, in the presence of group consumption, a ›wrong‹ product diversity, in which the product preferred by a majority is consumed by a minority, is a likely market outcome. Hence, it is not always true that the mainstream product actually corresponds to the mainstream taste.

The article ›Group Consumption and Product Diversity: The Case of Smoking Bans‹ is published in the *Journal of Industrial Economics,* Volume 65 (September), 2017, pp. 559-584.

BCCP Newsletter 2/2017

Lemons against Bribes – How Game Theory Can Prevent Collusion

Many economic problems are caused by information being asymmetrically distributed among the agents involved. For example, policy-makers seek to regulate an industry but cannot monitor agreements between firms within this sector. Similarly, shareholders of a firm would like to control the work of the management, but cannot observe all of its actions. In many of these cases, a third party is employed to obtain this information: policy-makers create regulatory bodies, shareholders commission an external auditor. However, these ›inspectors‹ can decide to enter side agreements with the parties they are supposed to monitor or even accept bribes – collusion or corruption – often to the detriment of society. The World Bank estimates that global bribe payments amount to approximately one trillion US Dollars per year.

In their article, BCCP Doctoral Student Colin von Negenborn and Martin Pollrich theoretically assess methods to tackle such collusion. They model the agreement between inspector and inspectee as a bilateral trade relationship. The inspector can, for example, offer the ›service‹ to overlook certain irregularities in exchange for a price, i.e. a bribe.

Trade is impeded if the parties involved have different perceptions of the value of the goods being traded – so-called frictions arise. The most famous example is G. Akerlof's work on the used car market: buyers believe that sellers offer cars of low quality (so-called lemons) and, therefore, have a lower willingness-to-pay. Sellers, on the other hand, seek to vend high-quality models (at an accordingly higher price) but are unable to do so because they cannot credibly convey the superior quality of the car. In the extreme case, trade breaks down completely because the parties cannot agree on a price due to the asymmetry of information.

Hence, while asymmetric information has undesired consequences in the context of the used-car market, it can be put to positive use in the case of collusion, as Pollrich and von Negenborn show. They artificially generate an informational asymmetry between the colluding parties. In practice, inspectors often obtain

BCCP Newsletter 2/2017

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bonus payments for pointing out irregularities in the firm. At the same time, wilfully hiding such findings can result in legal consequences and fines for both sides. These rewards and punishments, as the authors suggest, should be varied randomly by the principal – while the colluding parties obtain information with different degrees of precision on the magnitude of this variation. Consequently, the two parties have different perceptions of the gains and risks from collusion.

As in the used-car example, this information asymmetry can lead to the collapse of any ›trade‹ since the two parties cannot agree on a ›price,‹ i.e. the size of the bribe. This way, collusion and corruption are prevented. Hence, the analysis shows that asymmetric information is not necessarily the *source* of problems in economics; rather it can also be part of the *solution*.

Impact of a Quality Certificate on Donations for a Charity

When donating to charities, people expect their money to be spent wisely. However, since donors are not the recipients of final goods and services, they cannot easily assess their quality. Several certifying agencies award quality certificates to charities based on a set of known criteria.

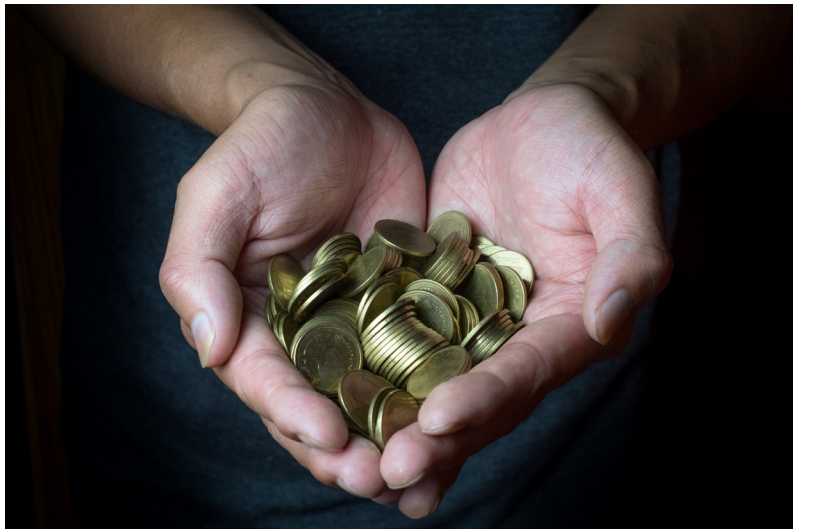
This recent working paper, by BCCP Fellow Maja Adena, Julian Harke, and others, studies experimentally to what extent such certificates for a charity are perceived as signal of quality.

To study the impact of quality certificates on donations to a charity, the authors worked with a real local charity. They compared the amounts donated by participants who were presented with a standard solicitation letter versus a letter that additionally mentioned that the charity had received a quality certificate (DZI Spendensiegel). On average, participants informed about the certificate donated 10% more than participants who received the letter without the certificate.

In a second step, half of the participants were additionally informed about the fees that a charity has to pay to the certifying agency for the certificate. In light of this information, the participants could revise their decision to give. The authors expected that people who read the information about the fee for the certificate could interpret the reported expenses as a ›diversion of resources‹ from the actual cause and, thus, provide smaller donations on average than participants who were not informed about the costs. However, only a small decrease that was not significant was observed.

BCCP Newsletter 2/2017

In a survey following the experiment, the authors found that a certificate increases trust in a charity and that there is a positive correlation between trust and donations. They also present some preliminary evidence pointing to the causal role of trust for donation probability.



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The relevance of the topic goes beyond the nonprofit sector since the results likely carry over to other goods and services whose quality is not easy for customers to assess, and where the relationship between the seller and buyer has to be trust-based.

The full paper ›Quality certifications for nonprofits, charitable giving, and donor's trust: experimental evidence‹ is available as WZB Discussion Paper SP II 2017–302.

The Quantity-Quality Tradeoff in Procurement under Budget Constraints

In many settings, a procurer has a fixed budget to spend on projects that differ in their value and cost. Under full information, this problem is known as the knapsack problem: what is the value-maximizing way to pack a bag with a limited weight capacity when the available items differ in value and weight? This combinatorial problem dates back as far as 1897 and is one of the classical NP-hard problems.

In their recently published article, Felix Jarman (German Ministry of Finance) and BCCP Fellow Vincent Meisner study a mechanism design variant of this problem in which the costs (the items' weights) are private information of the projects' managers. They derive a mechanism that maximizes the expected aggregate value of implemented projects under *ex post* constraints. That is, a manager only has to implement her project if her costs are at least fully covered, it must be a dominant strategy to report these costs truthfully, and the sum of compensation payments must never exceed a fixed budget.

They find that the optimal allocation is implementable with a descending-clock auction: each manager faces a clock with a continuously decreasing price on it and she indicates whether she is willing to implement the project for the price currently shown on the clock. The optimal allocation takes a simple form in the symmetric case, in which all projects have the same value and costs are drawn from the same distribution: all implemented projects obtain the same transfer and as many projects as the budget allows are implemented. This is implementable with a single price clock and projects drop out over time in order of their cost.

However, when projects are asymmetric, in the optimal implementation, every project gets an individual clock. Clocks not only descend asynchronously, sometimes individual clocks have to stop. This is due to a quantity-quality trade-off: the procurer not only prefers high-value projects over low-value projects, but also prefers more over fewer projects. Consequently, out of two rival projects, sometimes only the inferior one is implemented. If the

BCCP Newsletter 2/2017

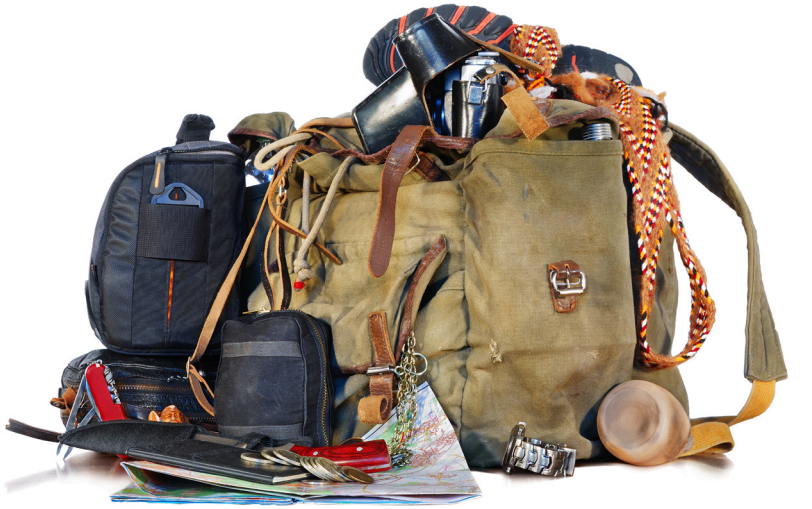


Photo credit: iStock Asergieiev

procurer always greenlights the superior project, the properties of the allocation rule imply a reduced probability of implementing both projects together. This paper is one of the first to consider purely ex post constrained mechanism design and it is also one of the first to show the optimality of clock auctions under complex constraints.

The article ›Ex-post optimal knapsack procurement‹ is published in the *Journal of Economic Theory,* Volume 171 (June), 2017, pp. 35-63.

Review: BCCP Conference and Policy Forum 2017

Focusing on the regulatory challenges in digital markets, algorithms and platform competition, the second annual Conference and Policy Forum of the Berlin Centre for Consumer Policies (BCCP) was held in Berlin on June 1st, 2017.

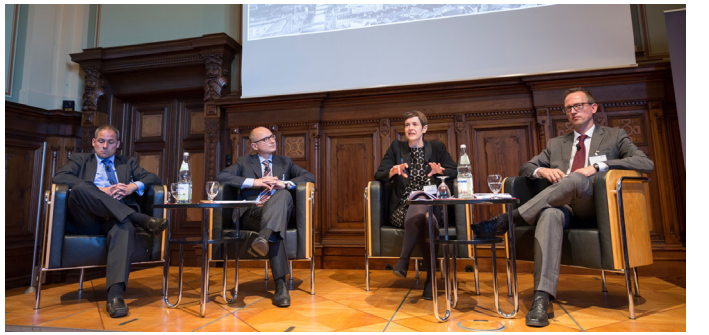
Touching upon an issue at the forefront of current European and US policy debates, over 100 participants, including academics from law and economics, policy makers, professionals, BCCP Fellows, and the interested public came together at the *Wissenschaftszentrum Berlin für Sozialforschung* (WZB).

The tremendous growth of digital transactions – mainly through online platforms - has profoundly affected the way we interact and has opened vast opportunities to improve our lives. The disruptive impact of this process is driven by one core feature: its ability to reduce inefficiencies. Consumers have benefited from an unprecedented proliferation of new services and products that previously were simply too costly to be developed and marketed to customers. At the same time, network effects in platform business models have brought market power concerns back to centre stage.

The conference panellists and participants discussed the need for, and appropriateness of, policy interventions in such quickly evolving markets, focusing in particular on regulatory issues related to the development of sharing economy platforms and the use of algorithms by online platforms.

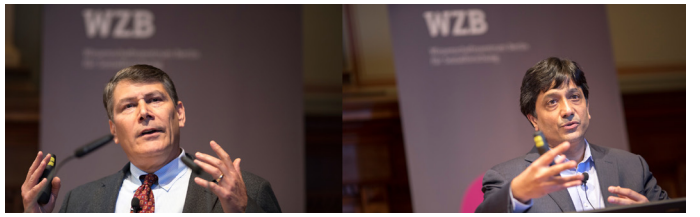
Session reviews

In the opening policy roundtable about platform markets and the arising issues in consumer and competition policy, panellists Andrea Coscelli (UK Competition and Markets Authority), Christian D'Cunha (Office of the European Data Protection Supervisor), Konrad Ost (German Federal Cartel Office), and moderator Amelia Fletcher (Centre for Competition Policy, University of East Anglia) engaged in a lively discussion about the potential of, and challenges arising from, emergent online platforms. On the one hand, online platforms can decrease transaction costs and increase price transparency, thus enabling consumers to more easily compare and purchase products and services. On the other hand, data and privacy protection issues as well as market power concerns may arise on these online platform markets. Challenges in understanding the overlap between consumer and competition policy in digital markets persist and regulatory action varies, sometimes depending on the structure of national regulatory and competition agencies. While some agencies have a long-standing responsibility for both consumer and competition policy, others are beginning to undergo structural changes. For example, the German Federal Cartel Office will begin carrying out consumer policy inquiries in 2018. In general, the panellists agreed that existing competition and consumer protection laws and regulations are flexible enough to deal with the issues arising in digital markets.



Policy roundtable with Andrea Coscelli (UK Competition and Markets Authority), Christian D'Cunha (Office of the European Data Protection Supervisor), Konrad Ost (German Federal Cartel Office), and Amelia Fletcher (Centre for Competition Policy, University of East Anglia)
Photo credit: DIW Berlin

In the first afternoon session, Michael Baye (Indiana University) and Arun Sundararajan (New York University) presented their research on the sharing economy. While sharing is, of course, not new, what is new in the so-called ›sharing economy‹ is that individuals are providing these services to strangers for money. In most cases, the sharing economy relies on online platforms to bring together the providers and consumers of goods and services. While Michael Baye focused on how online platforms compete and set prices in these two-sided markets characterized by direct and indirect network effects, Arun Sundararajan stressed how these new digital technologies transform business models and the way firms compete. What will be the major future challenges for the sharing economy, regulators, and consumer policy if economic activity moves towards what Arun Sundararajan calls ›crowd-based capitalism‹?



Panelists Michael Baye (Indiana University) and Arun Sundararajan (New York University).
Photo credit: DIW Berlin

Following the first afternoon session, State Secretary Gerd Billen (Federal Ministry of Justice and Consumer Protection) was awarded the BCCP Distinguished Policy Fellow Award by Gerhard Wagner (Humboldt University Berlin).

State Secretary Gerd Billen (Federal Ministry of Justice and Consumer Protection), awarded the BCCP Distinguished Policy Fellow Award by Gerhard Wagner (Humboldt University Berlin).
Photo credit: DIW Berlin

In the second afternoon session, Maurice E. Stucke (University of Tennessee) and Catherine Tucker (MIT) discussed how digital markets are characterized by consumer targeting and customization of products and services. Firms, such as Amazon, Facebook, and Google, use algorithms to increase their product quality, such as search results or the targeting of advertising. These algorithms rely on past consumer search and browsing behaviour to learn and improve results in real-time. However, the use of algorithms could also harm consumers by behavioural discrimination and lead to biases – not only in the things we buy but also in the news and entertainment we receive – in ways that might not be in the interests of society. Maurice E. Stucke highlighted that the amount of personal data collected by super platforms raises concerns not just about potential abuse of market power and market tipping due to data driven network effects, but also important data protection and consumer privacy issues. The research presented by Catherine Tucker showed how the use of such algorithms can result in unintended consequences, such as gender-based discrimination in the type of advertisements displayed to men and women.

Panelists Maurice E. Stucke (University of Tennessee) and Catherine Tucker (MIT).
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