Comments of TechFreedom\textsuperscript{1} & the International Center for Law & Economics\textsuperscript{2}

Berin Szoka, President, TechFreedom
Tom Struble, Legal Fellow, TechFreedom
Geoffrey A. Manne, Executive Director, ICLE
Ben Sperry, Legal Fellow, ICLE

in response to

Big Data: A Tool for Inclusion or Exclusion?
Effects of Big Data on Low Income & Underserved Consumers

FTC Workshop, Project No. P145406

October 31, 2014

\textsuperscript{1} Berin Szoka is President of TechFreedom, a nonprofit, nonpartisan technology policy think tank. He can be reached at bszoka@techfreedom.org. Tom Struble is a Legal Fellow at TechFreedom. He can be reached at tstruble@techfreedom.org.

\textsuperscript{2} Geoffrey A. Manne is the founder and Executive Director of the International Center for Law and Economics (ICLE), based in Portland, Oregon. He is also a Lecturer in Law at Lewis & Clark Law School, and a Senior Fellow at TechFreedom. He can be reached at gmanne@laweconcenter.org. Ben Sperry is ICLE’s Associate Director. He can be reached at bsperry@laweconcenter.org.
dis-crim-i-na-tion noun \dis- kri-ma-ˈnä-shən\  
1) the practice of unfairly treating a person or group of people differently from other people or groups of people  
2) the ability to recognize the difference between things that are of good quality and those that are not  
3) the ability to understand that one thing is different from another thing³  
- Merriam Webster

At last Jane began, and though the first bars were feebly given, the powers of the instrument were gradually done full justice to. Mrs. Weston had been delighted before, and was delighted again; Emma joined her in all her praise; and the pianoforte, with every proper discrimination, was pronounced to be altogether of the highest promise.  
- Jane Austen, EMMA (1815)⁴

Introduction & Summary  
To the American ear, there is perhaps no uglier word than “discrimination.” The mere mention brings to mind Bull Connor, turning police dogs and fire hoses onto Martin Luther King, Jr.’s non-violent demonstrators against Jim Crow in Birmingham, back in the 1962. Or perhaps subtler manifestations of racism. We all want America to be that nation King spoke of, where everyone “will not be judged by the color of their skin, but by the content of their character.”⁵  
Yet this is precisely what “Big Data” offers: by studying correlations in larger data sets, “data scientists” can craft algorithms that distinguish better between superficial attributes like race, sex, and sexual orientation and deeper attributes like reliability, honesty, credit-worthiness and other aspects of the “content of our character.” In short, Big Data may mean less of the Bull Connor kind of discrimination and more of the kind that would have seemed natural to Jane Austen’s readers (Merriam-Webster’s second definition). This is precisely what credit scoring did: replacing the old system where bankers made lending decisions based on the banker’s personal judgment — and biases — with one that discriminated between good and bad credit risks, regardless of superficial attributes or the simple social proximity between banker and borrower.⁶  
Of course, no data set, no matter how big, is perfect; no algorithm will ever perfectly predict anyone’s character. Machines make decisions based on probabilities, and there will always be anomalies, so there

⁵ Martin Luther King, Jr., “I Have A Dream” Speech Delivered at the Lincoln Memorial in Washington, DC (Aug. 28, 1963), available at https://www.youtube.com/watch?v=3vDWWy4CMhE.  
will always be mistakes. Federal and state lawmakers have enacted a variety of laws that govern how data is used to make decisions about credit, insurance, employment, housing and so on. The Federal Trade Commission (“FTC” or “Commission”) has long played a key role in enforcing many of these laws.

This topic amply deserves the FTC’s attention — indeed, it deserves more careful consideration than the FTC has given it thus far. Neither the FTC’s initial request for comments nor the workshop itself sufficiently focused the attention of experts from the FTC, other government agencies, industry, civil rights advocates, discrimination law experts, economists, constitutional scholars and so on. The workshop suffered from a number of procedural failures, which can and should be avoided in the future. Most notably, the workshop:

1. Was unnecessarily politicized and lacking in the bipartisanship that allows the FTC, at its best, to rise above the normal clamor of Washington politics.
2. Failed to include representative expertise across the range of discrimination law, including from the FTC’s own Division of Financial Practices, civil rights advocates, and discrimination law experts.
3. Lacked technical rigor, such as peer review of the study presented by the FTC’s chief technologist, and a full discussion of the specific tradeoffs in regulating Big Data by outside technical experts and data scientists.\(^7\)
4. Made no mention of the critical First Amendment implications of regulating Big Data’s use for marketing purposes.
5. Failed to include representative expertise on the impact of potential regulation on competition values, which could have drawn from the FTC’s own Bureau of Competition.
6. Included no economists who could discuss properly the benefits of Big Data for consumers, and for competition or question the reigning assumption that Big Data will be used even it does not facilitate more accurate predictions, the idea that greater accuracy itself is a harm, or that price discrimination is harmful to consumers overall, or to the disadvantaged in particular.

As a result, the workshop failed to provide the building blocks needed to answer the basic legal questions of what the FTC could, or should, do about concerns raised around Big Data with its existing legal authority, where legal gaps might exist, what Congress should do (if anything), or what self-regulatory or multistakeholder processes could do to fill in such gaps in ways that would actually make consumers better off.

\(^7\) See, e.g., Fed. Trade Comm’n, Big Data: A Tool for Inclusion or Exclusion?: Transcript, at 269 (Sept. 15, 2014) [Transcript], available at http://www.ftc.gov/system/files/documents/public_events/313371/bigdata-transcript-9_15_14.pdf (“Mr. Castro: So, I’d say, you know, I think this is definitely the start of the conversation. We need many more voices here. I think it’s interesting. Today’s workshop has been fantastic, but, you know, across town, there’s a predictive analytics government conference going on with some of the best predictive analytics data scientists in the country, and they’re not in the room. So, you know, we need them here. They certainly should be part of the conversation.”).
Unnecessary Politicization

One of the FTC’s strengths is that, unlike executive branch agencies (e.g., the Department of Justice), it is bipartisan: with a Chairman and two Commissioners nominated by the President from his own party, and two Commissioners chosen (in practice) by the Senate leader of the opposite party. Nothing better removes the cloud of partisanship that hovers over so many policy debates in Washington than having a Commissioner of the opposite party speak at an event on what might be considered a controversial topic. The FTC has done this for many other workshops — for example, Commissioner Ohlhausen keynoted last year’s Internet of Things workshop.  

Yet in the Big Data workshop, only Democratic Commissioners spoke about their concerns, as neither Commissioner Wright nor Commissioner Ohlhausen, nor any of their staff attorneys, appear to have been invited to participate in any way. Further, the first speaker on the first panel was a Democratic Congressional staffer whose boss, Senator Jay Rockefeller, has demonstrated less willingness to listen to input from the other side of the aisle — indeed, from anyone that does not already agree with him — than any other Senate Commerce Committee Chairman in recent memory. Needless to say, no Republican Congressional staffer participated — and we are not aware of any having been invited.

Unfortunately, this extreme partisanship set the tone throughout the day of an unbalanced and incomplete view of the topic. As noted above, most of the first words uttered at the workshop by the FTC’s Chair cast Big Data in a sinister light, using emotionally charged language. This partisan approach leads one to wonder whether the FTC has already made up its mind about the prospect of Big Data discrimination, and whether the other process failures described below were intentional.

Lack of Expertise on Discrimination

The FTC’s Bureau of Consumer Protection (BCP) is already responsible for enforcing a variety of laws governing discrimination, including the Equal Credit Opportunity Act, Truth-in-Lending Act, Fair Credit Reporting Act, and Fair and Accurate Credit Transactions Act of 2003. BCP’s Division of Financial Practices (DFP), as the FTC unit that has long enforced these laws, thus has a wealth of expertise directly relevant to the subject of this workshop. Yet the Division of Privacy and Identity Protection (DPIP) failed to include anyone from DFP to speak on the FTC’s experience with these laws, where gaps might exist, what lessons should be learned from the FTC’s enforcement experience, and so on. DPIP might have, for

---

10 See id.
11 See Edith Ramirez, Chairwoman, Fed. Trade Comm’n, Opening Remarks at the FTC Big Data Workshop: Framing the Conversation, 3 (Sept. 15, 2014), available at http://www.ftc.gov/system/files/documents/videos/big-data-tool-inclusion-or-exclusion-part-1/ftc_big_data_workshop__transcript_segment_1.pdf (“[The] worry is that existing disparities will be exacerbated. Is this discrimination? In one sense, yes. By its nature that’s what Big Data does in the commercial sphere. It analyzes vast amounts of information to differentiate data at blinding speed. But is it unfair or biased or illegal [discrimination]? If so[,] can steps be taken to level the playing field? Those are the questions that we will be exploring today.”).
example, included a DFP representative as a co-moderator to facilitate discussion — since having dual moderators is a common practice for FTC workshops.12

Indeed, the agenda was notably lacking in expertise in discrimination law. The only panelist from a discrimination law enforcement agency was Carol Miaskoff from the Equal Employment Opportunity Commission (“EEOC”).13 Notably absent was a representative from the Department of Justice’s Civil Rights Division, the leading federal anti-discrimination agency. Ms. Miaskoff was asked little more than “Is the law sufficient?” — a question that the workshop did not actually resolve.14

The only full-time representative of a civil rights organization participating was Dr. Nicol Turner-Lee of the Minority Media Telecommunications Council, a specialty organization. By contrast, the Division of Financial Practices’ recent “Fraud Affects Every Community” workshop included no less than nine representatives from civil rights groups, most of whom had specific expertise in discrimination law.15

The unfortunate result from all of this is that this Workshop failed to answer what should have been the key questions addressed: (1) what lessons can be learned from the prior history of enforcing non-discrimination laws; (2) can existing laws continue to ensure non-discrimination in the wake of the rise of Big Data; and (3) if there are gaps in the laws that need to be filled in, what should new legislation look like?

Lack of Technical & Statistical Rigor

In her opening remarks, Chairwoman Ramirez cited “real world examples of possible risks,”16 including three studies. Each could mark an intriguing beginning of research into how to ensure that Big Data is, as the FTC’s Workshop title suggests, a tool for inclusion — but only a beginning. The workshop did little to advance discussion of these early forays, either by subjecting them to additional technical/statistical scrutiny or by integrating them into discussion by experts in other fields.

The first, conducted by Microsoft Research’s Kate Crawford in 2013, illustrated vividly what should be intuitively obvious: Big Data can produce disparate outcomes if it is not “Big” enough.17 Crawford studied Boston’s use of the Street Bump smartphone app to empower citizens to report service needs (e.g., potholes), concluding that relying solely on reporting through the app could skew city services towards wealthier areas, where users might be more likely to have a smartphone and use it in this fashion.18 Of course, this is no more an argument against using Big Data than was it an argument against opinion polling when, in 1936, pollsters famously predicted that Republican Alf Landon would trounce Franklin Roosevelt based on polling using telephone records — which, obviously (in hindsight), skewed

---

13 See id.
14 See Transcript at 162–213 (surveying the current legal landscape, but not answering whether the existing laws are sufficient or whether new legislation is needed).
16 Transcript at 11.
18 Id.
towards Republican voters. The answer, then as now, is to be aware of the limitations of any data set and the need to adjust inferences accordingly. Indeed, this is precisely how the Street Bump team addressed the problem after Crawford’s study: they monitored their product in the field and then made adjustments when they learned of its disparate effect. If anything this vindicates the use-and-iterate approach that is the essence of Silicon Valley’s success. Thus, the remedy is even Bigger Data to cure these data gaps, as Daniel Castro and Nicol Turner-Lee discussed at the workshop, or at least adjusting the model to account for the bias of the data. Michael Spadea briefly made this point at the FTC’s workshop, but since the FTC failed to include data ethicists or any additional data scientists in the workshop, the discussion of the critical question of how to ensure that Big Data is used well was not continued.

The second study cited by the Chairwoman was conducted by Latanya Sweeney, the FTC’s Chief Technologist, before joining the FTC. In 2013, Sweeney concluded that online searches for typically black names were significantly more likely to show ads for services referencing arrest records than were searches for typically white names. Yet Sweeney herself was cautious about the implications of her study, warning that it “raises more questions than it answers[.]” — in particular, as to whether “advertising technology exposes racial bias in society and how ad and search technology can develop to assure racial fairness.” For example, a 1997 Department of Justice study concluded that black males have a 28% likelihood of being incarcerated at some point in their lives, compared to only 4% for white males. This statistic has devastating implications for black communities, and should cause a serious re-examination of the criminal justice system in America and a re-consideration of our disastrous “War on Drugs.” But blaming Big Data for exposing this problem is a misdirection of energy — especially when the discussion of Sweeney’s study avoids specifics about what, if anything, should be done about cases where Big Data puts too clear a mirror to society’s inequities. Is this actually a Big Data problem? Or are advertisers simply bidding on black names because the market for their services is disproportionately focused on black names because of wildly disproportionate incarceration rates (and the broad public awareness of those disproportionalities)? A proper discussion of this issue would require data ethicists and First Amendment experts, as discussed below.

Also, in the middle of the workshop, Sweeney presented research conducted by graduate students. Their research, apparently very preliminary, showed that minority audiences were more likely to receive offers for more “criticized” credit cards and less likely to receive offers for more highly “praised” credit

20 Transcript at 259–60.
21 Id.
23 Id.
24 Id. at 1.
27 See infra, Lack of Discussion of the First Amendment.
28 Transcript at 155–61.
cards. This research, apparently very preliminary, was not peer-reviewed, nor did Sweeney address basic questions about her methodology.\textsuperscript{29} Despite the opportunity to blog about the students’ study on an official FTC blog \textit{after} the Workshop,\textsuperscript{30} key questions remain unanswered: Just how common were these objectionable ads (for criticized cards)? How many times did her researchers have to hit refresh in their study? What was the ratio of unobjectionable ads to objectionable ads? Just how rigorous of a metric is online praise of credit cards to assess ads against? Without answers to these questions, it is impossible to assess just how significant the problem of discriminatory advertising might be.

Even this would not be the end of the story. As discussed below, the next important question would still remain unanswered: To what extent did such marketing actually shape outcomes? Are other mechanisms readily available for consumers to find credit card offers? The more easily consumers are able to compare credit cards based on their credit score, the less important discriminatory marketing will be — indeed, the less likely it will happen at all, because it will likely not be profitable — and the more likely it is that existing laws governing credit scores will be adequate to protect consumers.

Lack of Discussion of the First Amendment

Among the many reasons why traditional discrimination law focuses on eligibility decisions (uses), rather than marketing, is that the First Amendment protects marketing as a form of speech — both for commercial and non-commercial purposes.\textsuperscript{31} Any attempt to expand traditional discrimination law to marketing must ultimately survive First Amendment review. The most obvious responses to concerns about Big Data are also the most inconsistent with America’s unique protection of free speech.

For example, Sweeney’s study of arrest record ads might be used to suggest that the U.S. should suppress publication of arrest records, as Germany’s highest court did in a landmark 1973 decision\textsuperscript{12} that has led Europe to attempt to impose a “Right to Be Forgotten” online.\textsuperscript{33} This kind of suppression of truthful information would be difficult to justify, given American courts’ strong insistence that the best response to objectionable or problematic speech is more speech, not less.\textsuperscript{34} That could mean speech by civil rights groups or even the government itself directed towards employers to caution them against drawing unfair inferences from the appearance of arrest record ads in response to searches for black names. Or it could mean civil rights or other minority groups helping their communities manage their online reputations so that effective counter-speech appears on search results for their names, such as a LinkedIn profile — the modern equivalent of a résumé. Neither Sweeney nor any other panelist

\begin{flushleft}
\textsuperscript{29} See \textit{id}.
\textsuperscript{34} See, e.g., Snyder v. Phelps, 131 S. Ct. 1207 (2011).
\end{flushleft}
discussed the kind of benefits that courts generally recognize as flowing from these types of speech, such as potentially making those whose names are associated with arrest records aware of the need and possibility for them to use such search services themselves — for example, to seal juvenile arrest records where state laws make that possible, to correct errors in their arrest records, to become aware of potential confusion with someone of the same name, etc. Having an arrest record search service ad appear next to your name may well harm your job prospects, at least with a potential employer who lacks the sophistication necessary to understand that the ad does not necessarily reflect on you. But the greater harm might well be that employers will use such services anyway, and potential employees from minority communities may not be aware of this possibility and thus fail to do what they can to mitigate such harms.

This is precisely the kind of analysis that the First Amendment requires. Yet only once was the First Amendment and its concomitant benefits even mentioned at the workshop, and then only obliquely. In response to Danah Boyd’s call for greater consumer control over marketing (“transparency and the tools and the mechanisms with which to hold ... systems of power accountable“35), David Robinson responded:

I think there are ... legislative and ultimately constitutional questions about how far the FCRA-style model could be extended into the marketing world that I think really do force us to — and I also — let’s — you know, law and regulation have a valuable role to play, but so does — but so does corporate citizenship potentially.36

This remark merely hints at the way the First Amendment analysis shapes regulation of speech in general, including marketing: forcing the government to work its way up a layered approach to addressing problems that generally begins with education, user empowerment, self-regulation and enforcement of existing laws. Given the importance piece that free speech principles should play in assessing consumer protection regulation,37 the FTC’s failure to have a First Amendment expert or even any discussion of the First Amendment left a critical hole in the overall discussion.

A thorough First Amendment analysis of this issue must also grapple with the implications of the Supreme Court’s recent decision in Sorrell v. IMS Health, recognizing that data itself deserves First Amendment Protection. As Justice Kenney put it, writing for the majority,

Facts, after all, are the beginning point for much of the speech that is most essential to advance human knowledge and to conduct human affairs. There is thus a strong argument that prescriber-identifying information is speech for First Amendment purposes.38

35 Transcript at 69.
36 Id. at 69–70.
Lack of Economic Rigor

An equally critical, and probably more pressing, analytical hole was the lack of economic discussion during the workshop. In the Big Data workshop, the FTC included only a single economist, Alessandro Acquisti, whose work has principally focused on a specific subset of economics: behavioral experiments designed to show how users make real choices about privacy. This is certainly a useful area of expertise, but it in no way compensated for the workshop’s failure to include an economist (or a few economists) who could have commented on the tradeoffs at play in regulating big data. The FTC has an entire Bureau of Economics (“BE”) full of talented economists who could have offered greater economic rigor — yet none of them were included in this workshop. Indeed, the Division of Privacy and Identity Protection (“DPIP”) has not included a BE economist, or any other economist (besides Acquisti), in any of its recent workshops — including those on the Internet of Things, Facial Recognition, Consumer Generated and Controlled Health Data, Alternative Scoring Products, and Mobile Device Tracking. Each of these workshops would have benefitted from the inclusion of an economist focused on the economics of information markets.

Many of the questions raised at the Big Data workshop were essentially economic questions. Some of the panelists (primarily from industry) offered sensible responses, providing a first approximation of what an economist might have said — but there was no one who could really delve into the issues properly. Among other economic questions, the FTC missed an opportunity to develop economic rigor on five key issues:

1. Is greater granularity in targeting a harm, a benefit, or both?
2. How will market forces play out to encourage accuracy or tolerate inaccuracy?
3. What are the economic benefits (as well as costs) of price discrimination?
4. To what extent and at what cost (if any) can consumers’ overcome potentially troubling aspects of Big Data marketing techniques?
5. What are the likely effects on competition from increased use of Big Data — and potential regulations of it?

Only by answering these questions can the FTC be sure that it is prioritizing the allocation of its limited resources on things that will actually benefit consumers. The FTC’s procedural failings in crafting its initial request for comments and the agenda for the workshop are primarily what led to the substantive failures described below.

How Well Do Market Forces Drive Accuracy?

What, exactly, is the problem the Commission is worried about here? In his comments filed before the workshop, James Cooper made a critical point that should have framed the entire workshop: “because the reduction in private information improves the efficiency of markets, the ability of big data to make

40 See Ohlhausen, 100 is the New 30, supra note 37.
more granular classifications — either through firm sorting or consumer signaling — should be considered a benefit rather than a harm.”

The conclusion need not have been taken as a given by the FTC’s workshop. But the workshop should have been driven almost singularly by investigation of the question of trade-offs inherent in the collection and use of data: At least as much time should have been devoted to understanding the benefits of Big Data in overcoming discrimination and improving economic outcomes as was spent seeking to highlight the possible risks that it presents. Having a few industry representatives share anecdotes and voice their points of view is no substitute for the kind of rigorous discussion driven by economists or other experts of trade-offs that should inform a law enforcement agency — especially one with such a distinguished history of leadership in law and economics.

Much of the discussion at the workshop revolved around speculation that Big Data would proliferate, even where it did not offer effective discrimination in the traditional sense of the word (i.e., accurate predictions of salient interests and characteristics, like credit-worthiness), thus causing, unintentionally, invidious discrimination based on race, sex, or other sensitive factors. Pam Dixon and Bob Gellman summarized this concern in their comments:

> Analytics tools will continue to come down in price, just as consumer data has become a commodity item. Widespread and inexpensive data and analytics have the potential to allow broader use of predictive analytics. Consumer scores may proliferate, especially in the absence of any need for accuracy, fairness, or transparency. Consumer scoring may expand just because it is cheap and fashionable. Merchants themselves may have little ability to judge the accuracy of consumer scoring.

There may be some truth in this. But just how much truth is far from clear. How many businesses will really use consumer scoring “just because it is cheap and fashionable[?]” Why should we not expect that the use of consumer scoring will depend primarily on its efficacy? If a consumer scoring tool claims to allow merchants to better predict who will buy their product, why would merchants pay for it if it doesn’t work — or doesn’t work as well as other tools? At the same time there are well-known costs to engaging in invidious discrimination, whether it is intentional or not. As Gary Becker famously demonstrated, those businesses that do not have a “taste” for discrimination — that, in other words, seek to minimize costs and maximize revenues without regard for the race, sex, etc. of their customers — will suffer from discrimination in the market. It is rational to conclude that such businesses will work to ferret out those costs.

It may well be true that individual merchants “may have little ability to judge the accuracy of consumer scoring,” but markets do not work through isolated individuals, bumping against each other like frenzied

---

43 Id.
45 Id.
atoms flying about in some kind of plasma. Instead, markets of all kinds work through intermediaries: Few individual consumers really understand how cars work or can discriminate effectively among cars in the many complicated dimensions of a vehicle’s performance — yet they can rely on countless third parties to filter information about quality to them, from Consumer Reports to Car and Driver Magazine.46 These third parties were clearly represented at the workshop, but there was no assessment on how their important work has disciplined the market — a subject so important that it has given birth to an entire subfield of economics focused on information and reputation markets.47 Individuals may be ignorant, yet the system may be rational — not perfectly, of course, but rational enough for good features delivered cost-effectively to succeed over time in the ongoing competitive process. Similarly, it is implausible to expect that merchants will buy consumer scoring — or any other product — merely because it is “cheap and fashionable.”48 They will buy it, if at all, because it works. The difficult question, hinted at by Dixon, Gellman and other commenters, but never really developed in an analytically rigorous way, boils down to this: To what extent can we rely on market forces to ensure that consumer scoring is accurate?

Effects on Competition
The FTC has a dual mandate: to protect consumers from unfair and deceptive practices while also protecting competition. This is reflected in the FTC’s division into two enforcement bureaus: the Bureau of Consumer Protection and the Bureau of Competition. Marketing has long been understood to drive competition, such as by allowing new entrants to overcome the heavy advantages of incumbents by cost-effectively identifying and communicating to customers likely to be interested in their products. Yet there was essentially no discussion of competition at the Big Data Workshop.

This is especially problematic because, as discussed below, the FTC’s Unfairness Policy Statement requires the FTC to weigh effects on competition in any use of its unfairness authority:

To justify a finding of unfairness the injury must satisfy three tests. It must be substantial; it must not be outweighed by any countervailing benefits to consumers or competition that the practice produces; and it must be an injury that consumers themselves could not reasonably have avoided.49

Thus, as discussed below, failing to weigh the effects on competition misses both a critical dimension of policy analysis and a part of the FTC’s own standards for exercising its Section 5 authority.

Is Price “Discrimination” Really a Problem?
Much of the concern about Big Data seems to be that it will facilitate price discrimination — or, to use a less charged term, price differentiation. Had there been even a single economist at the workshop with

---

48 Dixon & Gellman, The Scoring of America, supra note 42.
expertise beyond the narrow experimental economics of privacy, she would surely have explained that differential pricing is frequently a good thing: tailoring prices more closely to an individual’s willingness to pay means that more transactions will take place than otherwise would have, with more consumers having access to the product and more consumers’ desires being satisfied.\textsuperscript{50} And price differentiation generally means that the poor pay less, not more, for the same goods. That’s precisely why it was so extraordinary when, in late 2012, a Wall Street Journal study led by privacy activist Ashkan Soltani (recently named to be the FTC’s new chief technologist)\textsuperscript{51} found that Staples might be charging higher online prices to consumers who lived farther away from a Staples store — which would generally mean higher prices for poorer consumers:

What economists call price discrimination — when companies offer different prices to different people based on their perceived willingness to pay — is commonplace and can be beneficial…. But using geography as a pricing tool can also reinforce patterns that e-commerce had promised to erase: prices that are higher in areas with less competition, including rural or poor areas. It diminishes the Internet’s role as an equalizer.

In the Journal’s examination of Staples’ online pricing, the weighted average income among ZIP Codes that mostly received discount prices was roughly $59,900, based on Internal Revenue Service data. ZIP Codes that saw generally high prices had a lower weighted average income, $48,700.\textsuperscript{52}

For an economist, this highly anecdotal study would be merely the beginning of a larger inquiry. In particular, an economist would ask the obvious question: If customers are already shopping online, why would their proximity to a physical store matter? If they’re willing to make purchases online, why would they not comparison-shop to check prices on Staples’ online competitors? In other words, could consumers not easily circumvent such price differentiation? If so, why would we expect price differentiation to be effective?

This point was made by several industry representatives at the workshop. But it is a more complicated point that deserves greater discussion among specialists in the economics of information. The theoretical basis for concern about price differentiation appears to be that advertisers will use Big Data to take advantage of consumers through a greater information asymmetry, charging each consumer as much as he or she appears willing to bear. This idea is predicated on the idea that Internet users undervalue their data and overvalue the benefits of the content they receive access to.

This information asymmetry story has superficial plausibility — consumers in real-world markets never have the perfect information that certain models presume. But businesses also fail to have perfect information, and this fact is glossed over by critics. The market process is useful because it incentivizes


participants to gain information efficiently as the costs and benefits of decisions are borne by each decision-maker herself.\textsuperscript{53} Further, whatever information asymmetry persists is not likely in the favor of even most informed business. No one knows more about a consumer’s preferences than the consumer herself. All the tracking in the world will, at best, allow online advertising networks to play catch-up. It is surely overstated to claim that businesses in possession of information, even that enabled by Big Data, will be at an informational advantage compared to the consumers about whom they are supposedly informed. Indeed, consumers are often armed not only with their own ability to inform themselves, but also by companies seeking to provide information services about pricing and services through crowd surfing and other means, as popular apps like Gas Buddy and Yelp have shown.

Another plausible-sounding argument about the harm of price differentiation is that because major advertising networks are able to collect a great deal of data about their users for analysis, businesses could segment consumer groups based on certain characteristics and offer different deals. The resulting price differentiation could lead to many consumers paying more than they would have in the absence of Big Data. Therefore, it has been argued, Big Data facilitates price differentiation, and that harms consumer welfare.

This argument misses a large part of the story, though. The flip side is that price differentiation could have benefits to those who receive lower prices from the scheme than they would have in the absence of Big Data. If this group is as big as or bigger than the group that pays higher prices, then it is difficult to state with any certainty that the practice leads to a reduction in consumer welfare, even if this can be divorced from total welfare.

Further, this analysis fails to consider the dynamic efficiencies of price differentiation, as suggested above. In a static model of third-degree price differentiation, some buyers receive lower prices (and purchase higher quantities), while other buyers receive higher prices (and purchase lower quantities). Thus, the net impact of price differentiation on output is ambiguous.\textsuperscript{54} But, in a dynamic model, price differentiation may often be pro-competitive because the profits provide incentives for entry and allow for additional investments in innovation and increasing product variety, expanding retail outlets, or research and development.\textsuperscript{55} Price differentiation may allow for increased competition to all consumers, including previously unreached poorer consumers — a pro-competitive outcome.\textsuperscript{56} And contrary to the received wisdom,\textsuperscript{57} economists have more recently noticed that price differentiation is present even in competitive markets.\textsuperscript{58}

While critics of Big Data have focused on the possible negative effects of price differentiation to one subset of consumers, they usually ignore the positive effects of businesses being able to expand output by serving previously underserved consumers. It is unlikely that a business relying on metrics would

\textsuperscript{53} See F. A. Hayek, \textit{The Use of Knowledge in Society}, 35 AM. ECON. REV. 519 (1945).
\textsuperscript{55} \textit{Id.} at 350.
\textsuperscript{56} \textit{Id.}
\textsuperscript{58} See, e.g., 70 ANTITRUST L.J. 593 (2003) (symposium articles discussing competitive price discrimination).
want to serve only those who can pay more by charging them a lower price, while charging those who cannot afford it a larger one, as some of the anecdotes at the workshop suggested. If anything, price differentiation would likely promote egalitarian outcomes by allowing companies to offer lower prices to poorer segments of the population, which can be identified by data collection and analysis.

In an error cost framework, courts and antitrust regulators should refrain from declaring conduct anticompetitive unless the likelihood of procompetitive outcomes is extremely low. It may be difficult for the FTC to differentiate positive price differentiation from negative price differentiation. Here, it seems unlikely that the price differentiation “facilitated” by Big Data is anti-consumer welfare. Big Data helps drive the Internet ecosystem, and many businesses that previously did not compete with each other do now compete in the same Internet markets in an effort to offer the best deal to consumers through targeted advertising. It seems just as likely, if not more so, that Big Data is increasing consumer welfare by helping businesses find consumers interested in their products and serving up more relevant advertisements to those consumers — thus increasing the amount of positive sum transactions overall.

Lack of Legal Rigor

In the end, economic and technical rigor is useful because it helps to define what problem government needs to solve — and how to ensure that government intervention in the marketplace does more to help consumers than to harm them. Unfortunately, here, too, was a missed opportunity to explore the key legal questions raised by the workshop — specifically:

1. How should the FTC use its existing Section 5 authority over Big Data?
2. What gaps exist in the discrimination laws already enforced by the FTC and other federal agencies, and by states, regarding credit, lending, employment, housing, etc.?

Section 5: Unfairness

The Workshop featured surprisingly little discussion of the FTC’s broad Section 5 authority over practices it deems unfair. The only real explanation of how unfairness might apply to potentially discriminatory uses of Big Data came from Lee Peeler, a 33-year veteran of the Deputy Director of the Bureau of Consumer Protection and Associate Director of the Division of Advertising Practices.

First, as Peeler notes, this requires identifying a substantial harm. In his comments filed before the workshop, law professor Dennis Hirsch argues that Section 5’s “legal framework fits nicely with the issues that big data presents. As to the first factor, denial of employment, a loan or a similar benefit or

---

60 *Transcript* at 174–78.
61 *Id.* at 176.
opportunity can constitute a substantial harm.”62 These are, of course, examples of things already covered by existing discrimination law, which would therefore qualify easily as substantial injuries under 15 U.S.C. § 45(n), which provides that, in determining whether a given act or practice is unfair, the “Commission may consider established public policies as evidence to be considered with all other evidence,” although “[s]uch public policy considerations may not serve as a primary basis for such determination.”63 The FTC’s 1980 Unfairness Policy Statement explains that:

To the extent that the Commission relies heavily on public policy to support a finding of unfairness, the policy should be clear and well-established. In other words, the policy should be declared or embodied in formal sources such as statutes, judicial decisions, or the Constitution as interpreted by the courts, rather than being ascertained from the general sense of the national values. The policy should likewise be one that is widely shared, and not the isolated decision of a single state or a single court.64

In other words, before the FTC uses unfairness authority beyond the scope of existing laws and court decisions, it must clearly demonstrate consumer injury, which requires far more careful analysis than it has performed thus far. An FTC report or consent decree would not, for example, qualify as “established public policy.” Nor would laws that regulate credit, lending, employment and so on to protect against discrimination based on prohibited factors like race and gender suffice to allow the FTC to regulate marketing based on those same factors using Section 5. The point is not that regulation is necessarily inappropriate, but that Section 5 is not a blank check for the FTC to decide whether and how to regulate.

Second, the FTC must show that the unfair practice was not reasonably avoidable by consumers. As Peeler notes, this could be difficult to do where the conduct at issue is marketing rather than eligibility decisions already governed by existing discrimination law. Before bringing an unfairness case, the FTC would need to look at whether the ad is targeted to a specific group, but also what’s the consumer group’s access to alternative products, how easily can the group go on and find alternative products at better prices or at better terms?65

As discussed above, no one at the FTC workshop, or in filed comments, actually demonstrated that consumers could not reasonably find alternatives to the marketing they received. Yet this is precisely the burden the FTC would bear in any enforcement action predicated on unfairness. To the contrary, the marketplace appears to indicate that consumers are quite adept at comparison shopping across channels (a.k.a., “showrooming”), using the Internet to find bargains not clearly offered (e.g., by utilizing popular coupon code aggregators and interest rate comparison sites), and more. Thus, it is not enough to presume, as Dennis Hirsch does that:

---

64 Unfairness Policy Statement, supra note 49.
65 Transcript at 176–77.
most consumers will not understand data analytics, predictive profiles and how these growing practices will affect them. They cannot “reasonably avoid” the harm through their own actions in the marketplace.66

Finally, the FTC must weigh harms against countervailing benefits to consumers and, as noted above, to competition. This includes “the various costs that a remedy would entail. These include not only the costs to the parties directly before the agency, but also the burdens on society in general in the form of increased paperwork, increased regulatory burdens on the flow of information, reduced incentives to innovation and capital formation, and similar matters.”67 Hirsch proposes that:

The third component — whether these harms outweigh “countervailing benefits to consumers or to competition” — is exactly what society needs to sort out. It needs to identify core values — opportunity, free will, equality — and weigh them against the efficiencies and social benefits that big data can provide. The third prong provides a vehicle through which the FTC can undertake this crucial balancing.68

Hirsch is correct that harms need not necessarily be financial to be “substantial,” but they cannot be conjectural — and they must be sufficiently clear that they can be weighed meaningfully against countervailing benefits. As the Unfairness Policy Statement notes,

The Commission is not concerned with trivial or merely speculative harms. In most cases a substantial injury involves monetary harm, as when sellers coerce consumers into purchasing unwanted goods or services or when consumers buy defective goods or services on credit but are unable to assert against the creditor claims or defenses arising from the transaction. Unwarranted health and safety risks may also support a finding of unfairness. Emotional impact and other more subjective types of harm, on the other hand, will not ordinarily make a practice unfair.”69

The FTC thus bears a heavy evidentiary burden in defining non-monetary harms. This is not to say that values like “opportunity, free will [and] equality” are inappropriate objects of government intervention in the marketplace. We have, for example, an Equal Employment Opportunity Commission. But these values have been protected (and balanced with other competing values) through legislation enacted by democratically elected lawmakers in Congress — not by a vote of three unelected bureaucrats at the FTC.

And, of course, attempting to shoehorn non-monetary harms into Section 5 is precisely what got the FTC in trouble with Congress in the 1970s. The FTC became essentially a second national legislature, attempting to regulate a broad range values based on its assertions about public policy — from pollution to the advertising of sugared cereals to children to labor practices. A heavily Democratic Congress responded furiously in 1980, briefly shuttering the agency, imposing additional procedural safeguards

67 Unfairness Policy Statement, supra note 49.
68 Hirsch, Unfair! Or is it?, supra note 66.
69 Unfairness Policy Statement, supra note 49.
on its rulemaking powers under the 1975 Magnuson-Moss Warranty Improvements Act, and forcing it to issue the Unfairness Policy Statement to constrain its authority. Congress clearly expected the FTC to establish a robust factual record around each of the factors of unfairness — and for the FTC’s balancing of those factors to be subject to judicial review — not least because this is what the FTC itself promised in the Unfairness Policy Statement:

The present understanding of the unfairness standard is the result of an evolutionary process. The statute was deliberately framed in general terms since Congress recognized the impossibility of drafting a complete list of unfair trade practices that would not quickly become outdated or leave loopholes for easy evasion. The task of identifying unfair trade practices was therefore assigned to the Commission, subject to judicial review, in the expectation that the underlying criteria would evolve and develop over time. As the Supreme Court observed as early as 1931, the ban on unfairness “belongs to that class of phrases which do not admit of precise definition, but the meaning and application of which must be arrived at by what this court elsewhere has called ‘the gradual process of judicial inclusion and exclusion.”

Congress’s revisions to Magnuson-Moss clearly demonstrate just how high a bar it intended to set for the FTC to meet before the agency declared a practice unfair — the more abstract the injury, the greater the evidence that would be required. Of course, in practice, the FTC has abandoned Magnuson-Moss rulemaking altogether, preferring instead to regulate unfair and deceptive acts and practices through a mix of case-by-case enforcement (i.e., in cutting-edge areas of law, through unadjudicated consent decrees) and workshops and reports that roughly imitate the rulemaking process but produce only vague recommendations based on loose analysis of records formed around open-ended questions rather than specific queries or proposals — much like the one at issue here.

If the FTC concludes that Big Data creates some consumer injury that cannot adequately be addressed through existing laws, it has essentially four legally sound options:

1. Build a factual record adequate to justify the evidentiary requirements of Magnuson-Moss;
2. Build a similarly rigorous record but on a smaller scale, within the context of a specific fact pattern, and bring enforcement actions, at least some of which get litigated, thus ensuring that courts check the agency’s discretion in extending Section 5 into a new area of law;
3. Ask Congress for legislative authority over that practice, including the ability to issue rules tailored to that problem with the expedited rulemaking processes used by most agencies; and
4. Urge industry and other affected stakeholders (e.g. in the civil rights community) to convene a multistakeholder process to produce a code of conduct enforceable by the FTC.

In all four cases, but particularly the first three, the FTC would need to do far more than it has done in this process to produce an evidentiary record explaining why new regulation (or self-regulation) is necessary and why it would, on net, benefit consumers.

The FTC has two other options, which would be legally unsound and unwise, as a policy matter:

---

70 Unfairness Policy Statement, supra note 49.
1. Issue a report that does not actually explain the need for new regulation (or even self-regulation), or explore the trade-offs at stake, but which nonetheless pressures industry to adopt certain practices that are not legally required — extrapolating from the FTC’s recent “Privacy by Design” principles, these might be dubbed “Equity by Design” principles; and

2. Begin bringing Section 5 enforcement actions against companies that are willing to settle such actions out of court, thus avoiding judicial review but nonetheless enforcing “Equity by Design” principles as de facto regulations, or “soft law” — or, as some Commissioners have proudly admitted, “common law of consent decrees.”

Of course, the FTC may conclude that, like Mrs. Sweeney and her fellows' studies, the record generated by this workshop raises more questions than it answers. The proper response in that case would be to issue a request for comments more akin to a Notice of Inquiry (“NOI”). Instead of attempting to distill a consensus from the patchy record generated by comments filed this proceeding, such an NOI would ask clearer questions about what, precisely, it is that the FTC thinks might fall through the gaps of existing law, and what the trade-offs involved in various approaches to regulating such practices would be. The more of an evidentiary basis an agency can point to as proof of the existence of a problem, the more it can explain what seem to be the shortcomings in existing law, and the more helpful will be the responses received by the agency — not only in preparing to write a report, but even in picking speakers and topics for a workshop.

Conclusion

The Commission has limited resources. It can hold only so many workshops per year. Just as it must prioritize enforcement actions, it must also prioritize its policymaking exercises — and focus them on clearly defined problems. The purpose of workshops, of course, is to gather answers, but if the Commission cannot even clearly articulate the questions it is trying to answer, it risks wasting its own time and the time of the many organizations that respond to its request for comments — time that could have been spent responding to clear, focused questions on this topic, or on other pressing topics.

For example, identity theft is the clearest consumer protection problem facing the agency and has long been the leading source of complaints to the agency. Yet the FTC has not held a comprehensive workshop on this topic since 2007.  

---

71 See Julie Brill, Commissioner, Fed. Trade Comm’n, Privacy, Consumer Protection, and Competition: A Speech Delivered at the 12th Annual Loyola Antitrust Colloquium (Apr. 27, 2012), available at http://www.ftc.gov/sites/default/files/documents/public_statements/privacy-consumer-protection-and-competition/120427loyolasymposium.pdf ("Yet our privacy cases are also more generally informative about data collection and use practices that are acceptable, and those that cross the line, under Section 5 of the Federal Trade Commission Act creating what some have referred to as a common law of privacy in this country.")

Finally, the Commission should remember that it holds an enormous bully pulpit. It can certainly use that bully pulpit for good. Indeed, one of the most valuable things the Commission does is its competition advocacy work, filing on behalf of consumers to advocate the removal of barriers to competition — such as its recent comments to the D.C. Taxicab Commission opposing regulations that make it difficult for new entrants like Uber and Lyft to compete with regulated taxis. Such work relies for its effect on the FTC’s moral authority as a defender of competition. The FTC has used the same authority in the consumer protection context to encourage self-regulatory efforts, such as the Digital Advertising Alliance’s regulation of online advertising and data use.

But anytime the FTC talks about the “risks” (Chairwoman Ramirez’s term) posed by new technologies, it inevitably shapes the public discourse about that topic. Given the extreme sensitivity of this topic — the deep emotional legacy of Bull Connor-style discrimination in America — the FTC should tread carefully in this area. It ought not be shy about asking difficult questions, but it should ask them not merely for the sake of asking them — and frame them in a way that actually produces clear, specific answers. Otherwise, the FTC risks inflaming public sentiment against a technology that the FTC itself admits has enormous potential help consumers. At worst, this could be a kind of technopanic — a subset of the moral panic well documented by social scientists and first defined by British sociologist Stanley Cohen in the 1970s:

> panic as a moment when a condition, episode, person or group of persons emerges to become defined as a threat to societal values and interests; its nature is presented in a stylized and stereotypical fashion by the mass media; the moral barricades are manned by editors, bishops, politicians and other right-thinking people; socially accredited experts pronounce their diagnoses and solutions; ways of coping are evolved or resorted to. . . Sometimes the panic passes over and is forgotten, except in folklore and collective memory; at other times it has more serious and long-lasting repercussions and might produce such changes as those in legal and social policy or even the way the society conceives itself.

Mercatus scholar Adam Thierer has written extensively about technopanics, warning against the threat inflation that drives policymakers to overreach or misdirect their reactions to new technologies, rather than to calmly weigh the costs and benefits, both seen and unseen. In particular, Thierer warns against the resort to the precautionary principle, which heavily weights seen costs over unseen benefits, and drives public reaction in a feedback loop of increasingly panicked reaction to new unsettling new technologies.

---


76 Id.
To ensure that Big Data fulfills its promise as “a tool for inclusion,” for positive discrimination in the best sense of that word, the FTC must itself be more discriminating in its approach to the tradeoffs posed by Big Data, and the difficult questions of how to regulate its use beyond existing laws.