

Salil Mehra, comment

**Comment re Topic 9** – “The consumer welfare implications associated with the use of algorithmic decision tools, artificial intelligence, and predictive analytics.”

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My name is Salil Mehra and I am a law professor at Temple University’s law school in Philadelphia. In 2014, I was the first author to publish legal scholarship on the challenge that algorithms posed for antitrust law: *De-Humanizing Antitrust: The Rise of the Machines and the Regulation of Competition*, Temple Univ. Legal Studs.

Research Paper No. 2014-43 (Sept. 3, 2014), available at [https://papers.ssrn.com/sol3/Delivery.cfm/SSRN\\_ID2520232\\_code497260.pdf?abstractid=2490651&mirid=1](https://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID2520232_code497260.pdf?abstractid=2490651&mirid=1) (later published in hard copy as *Antitrust and the Robo-Seller: Competition in the Time of Algorithms*, 100 MINN. L. REV. 1323 (2016)).

My comments draw substantially on this paper and my subsequent work, and I would be happy to discuss them more. I am submitting this comment on the issue of algorithms and antitrust law, including algorithmic collusion, in response to the FTC’s call for comments in connection with its hearings on Competition and Consumer Protection in the 21<sup>st</sup> Century.

My opinion can be divided into 3 key points. First, algorithmic competition can be a tremendous boon to consumer welfare. Regarding static welfare, it can reduce inefficient allocation by providing better matching between supply and demand. More importantly, the dynamic improvements through innovation – especially the potential to increase output at less cost – could be tremendous. Because of these benefits, we should not let overly zealous enforcement chill algorithmic competition.

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As a result, it would be potentially very harmful to consumer welfare to punish algorithmic competition without a better understanding of its impacts. There has been scaremongering based on fears that artificial intelligence will somehow destroy competition as we know it, and that corporate use of mass data collection may, for consumers, drive “a descent from king to slave on the data treadmill.”<sup>1</sup> However, these fears are premature, first off because technological development is still far from creating some sort of autonomous algorithmic cartel robot.

Moreover, the truth is that algorithmic competition promises real efficiencies and synergies for producers that, in competitive markets, can be passed on to consumers, as well as large improvements in service and product quality. As an example, consider the massive consumer benefits in increased supply, better pricing and improved quality that Uber’s matching and pricing algorithm has provided to urban commuters – notwithstanding claims in federal district court that Uber’s algorithm may foster collusion. Premature antitrust enforcement regarding algorithmic competition could inflict real harm to static and dynamic welfare.

Second, while it is true that, all things being equal, in a world with algorithmic competition, Cournot models suggest that parallel/interdependent pricing may become easier for firms to carry out, that alone does not justify imminent enforcement in this area, or new legislation, at this time. Algorithmic competition, or “robo-selling,” involves using mass data collection, computer-driven algorithmic processing, and automated pricing to digest and respond to market

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<sup>1</sup>Ezrachi and Stucke, *Virtual Competition* (2016) ((start of section entitled “Final Reflections”).

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changes at high speed. Drawing a legally enforceable line between parallel pricing that, without more, could be actionable as tacit collusion on the one hand, versus a benign normal response to observable market prices, on the other, will be impossible to do for the foreseeable future without substantial error costs. In other words, how can a regulator decide whether a firm is using technology to monitor and respond to a competitor's prices in a way that fosters coordination versus competition? The problem is the same as described by the Supreme Court in *Twombly*, but in a new context – without more, it is difficult to tell whether firms charging the same price are colluding or competing.

That said, it makes sense for antitrust enforcers to stay on top of and build competencies in the area of algorithmic competition. Because algorithmic competition involves mass data collection and processing, it potentially will provide more data for competition enforcers to analyze. This data may help enforcers ferret out violations of existing law. It may uncover concerns that may lead to reevaluation of law and policy for the future. *See* Salil Mehra, *Robo-Seller Prosecutions and Antitrust's Error-Cost Framework*, Competition Policy International Chronicle (May 2017).

Third, and finally, algorithmic collusion should nonetheless be a focus for enforcement based on traditional antitrust theories. Antitrust enforcers across the political, ideological and academic spectrum agree on the desirability of deterring explicit agreements to fix prices and restrict output. In cases such as *United States v. Topkins* and *United States v. Aston*, we have seen geographically-distant conspirators

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use algorithm-driven software to fix prices on differentiated products with infrequent sales.

These prosecutions demonstrate that software that fosters anticompetitive collusion could open the possibility of anticompetitive collusion to a wider range of firms in three key ways. First, a wider scope of players may be capable of colluding on price or output across geographic distance. In the 20<sup>th</sup> century, such coordination might have been limited to representatives of deep-pocketed firms – but, as in other areas, the Internet may lower transaction costs and shrink distances for price fixers.

Second, individuals or firms with an inclination to fix prices or outputs may find it easier to do so over a larger array of goods. As the wall décor prosecutions suggest, algorithmic price fixing may make cartelization possible in industries that have previously not been thought conducive – such as those with infrequent sales and differentiated products.

Finally, algorithmic collusion has the potential to grease the skids towards price fixing conduct for those individuals with a weak or wavering inclination to pursue such illegal conduct. To some degree, software-powered algorithmic collusion carries the risk of playing a similar role vis-à-vis price fixing as, starting about a generation ago, Internet-based file sharing did vis-à-vis copyright infringement. That is, people who ordinarily would not consider committing crimes “IRL”<sup>2</sup> may be more likely to do so with a screen and a keyboard connection. Off-the-rack pricing software that makes price fixing “only a click away” may exacerbate this tendency. While this concern goes beyond antitrust, the tendency for Internet-

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<sup>2</sup>“In real life” a/k/a away from the Internet, social media, etc.

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powered interaction to lower inhibitions towards socially harmful behavior could give rise to more cases like *Topkins*.

In sum, I believe that antitrust enforcers should build their understanding and stay alert to the potential disruptive force of algorithmic competition. However, there is reason for cautious optimism that following traditional patterns of enforcement may work well for now.