Robo-Selling, Big Data and Antitrust's Error-Cost Framework

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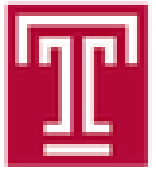
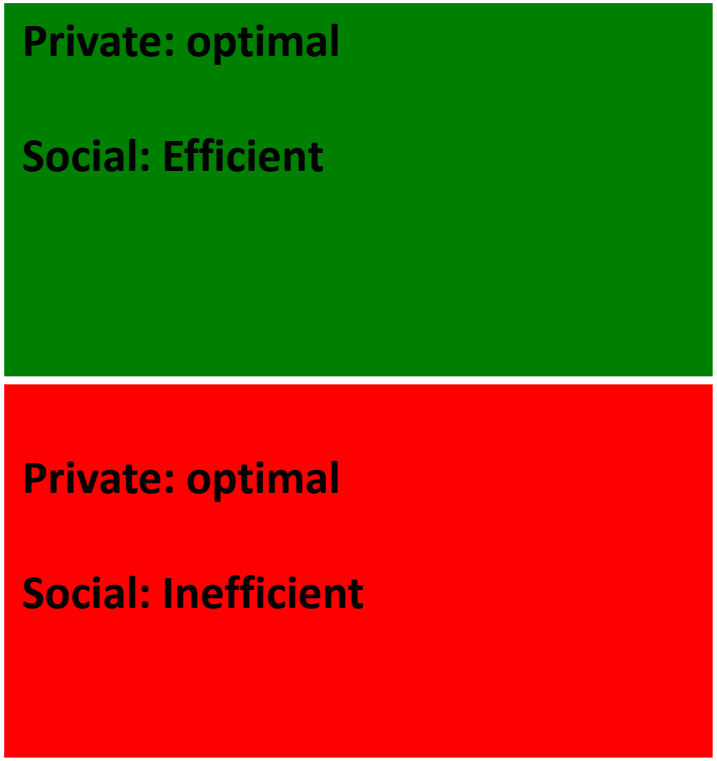


Error-cost

Private: NOT optimal **Social: Efficient**	**Private: optimal** **Social: Efficient**
Private: NOT optimal **Social: Inefficient**	**Private: optimal** **Social: Inefficient**

Error-cost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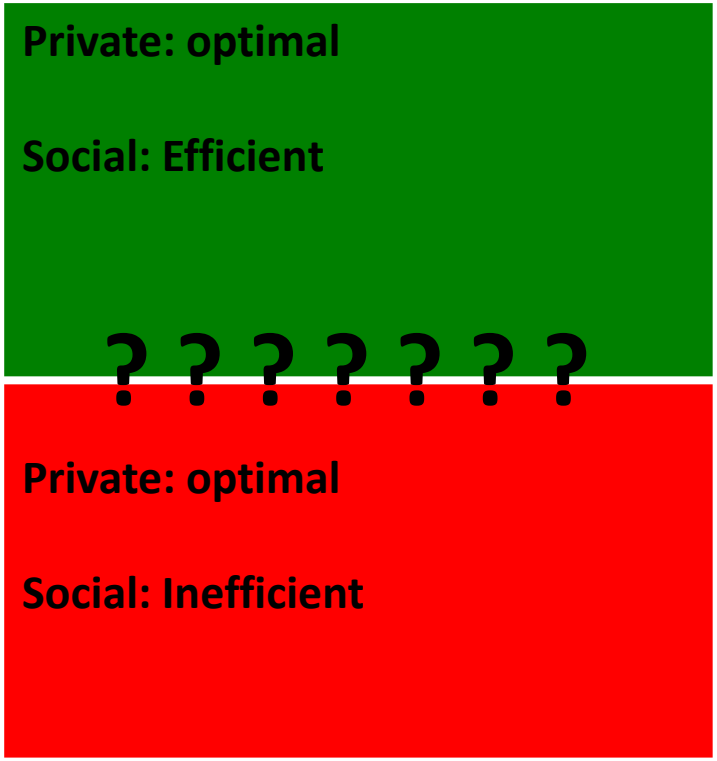
Error-cost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Mehra, 100 Minn. L. Rev. 1323

Article

Antitrust and the Robo-Seller: Competition in the Time of Algorithms

Salil K. Mehra[†]

INTRODUCTION

Disruptive innovation can turn users into newly-minted economists. Consider the controversial practice of "surge pricing" enabled by the ride-sharing service Uber.[1] Confronted on occasions such as New Year's Eve by prices six to seven times as much as normal, users tend to ask for an explanation. On the one hand, surge pricing resembles basic market economics—many people want a ride, market demand pushes the price up, and those higher prices attract more drivers until the price falls to a new level.[2] But as Uber's own marketing recognizes, this is a market whose price signals act within a proprietary

Robo-selling

Product of:

- Interconnectivity (smartphones, IoT)
- Mass Data Collection ("Big Data")
- Algorithmic Processing (mass crunching → true AI/machine learning, e.g., the transition from "sound wave" matching to computers capable of natural language processing)

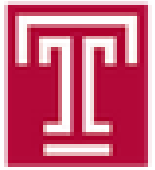
→**competitive intelligence/automated pricing**

Robo-selling

- Mass data collection, algorithmic processing, automated price setting
- Allows better price coordination and "learning" about market conditions
- Can make explicit price fixing or tacit collusion more stable because: less mistake, quicker detection (Cournot), less "human factor"
- Cost reductions / increased allocative efficiency

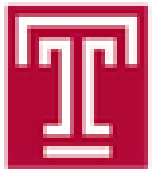
US v. *Topkins*

- Agreement to use software algorithm to fix prices . . .
- on Amazon Marketplace . . .
- for wall décor (movie posters) (discontinuous sales, heterogeneous products, not ideal situation for price fixing)



Meyer v. *Kalanick* [Uber] (SDNY 2016)

- Hub and spoke allegation
- Horizontal allegation
- Ancillary procompetitive benefit
- Consumer welfare gain vs. before (taxi)
- But less restrictive alternative/"directly related and reasonably necessary" to the effect (§ 45)



Uber study (Cohen et al.)

Use of massive data set:

- Specific: Uber helps consumers
- Systemic: mass data analysis can make enforcement more accurate?

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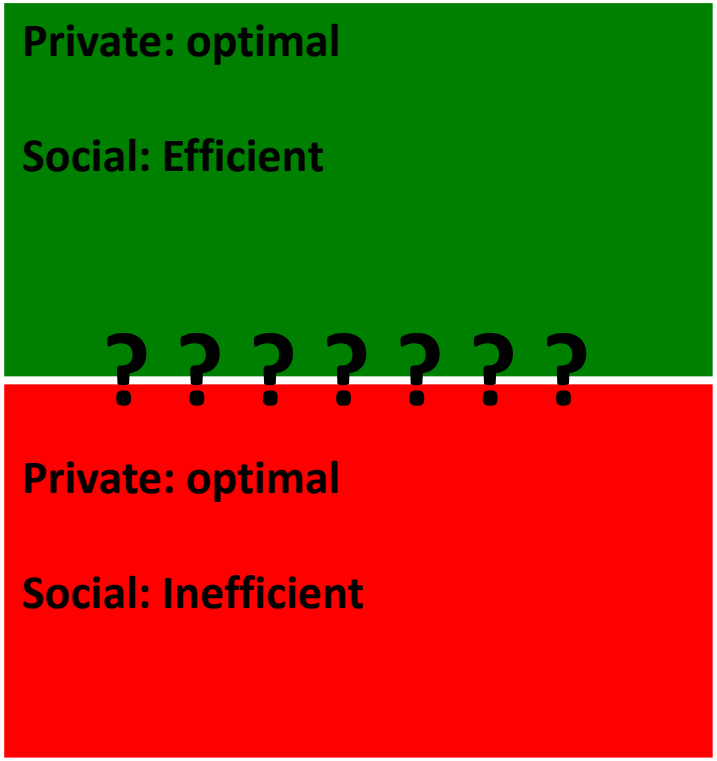
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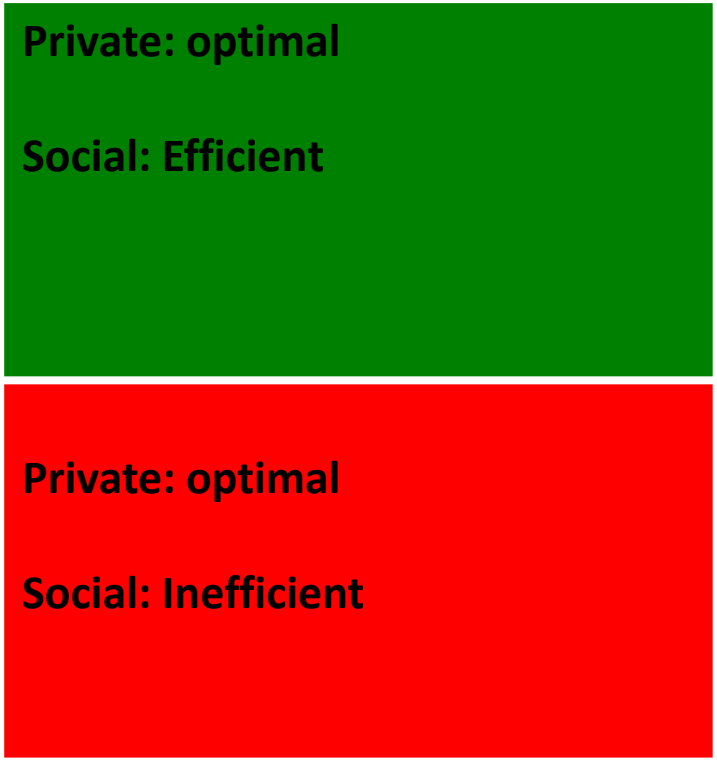
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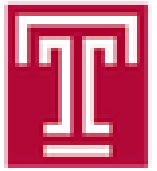
Proposal

- Competition enforcement should not stay static, should use data to fine-tool
- Proactive “competition by design”
- Regulator/industry discussion of standards for robo-selling technologies
- “rules of the road” rather than aggressive post-hoc enforcement

THANKS! I look forward to questions, comments.



Thanks!

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