Who Benefits from Online Privacy

Discussant: Alessandro Pavan

Northwestern University

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- This paper: very simple (yet insightful) theretical model that sheds light on important aspects of privacy

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- Monopolist cannot commit to future prices

Common (mis)perception

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  $\longrightarrow$ policy prescription: privacy-protecting laws + measures aimed at reducing cost of privacy

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- Yet, large body of research in IO, Contract Theory, and Information Economics
  $\longrightarrow$ firms would love to committ *not* to price discriminate on the basis of consumers' purchasing history (Coase, Baron and Besanko, Vickers, Laffont and Tirole,...)

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- Who (truly) benefits from privacy?

Privacy: who chooses?

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Assume: (a) upstream sellers are not personally interested in downstream trades; (b) consumers who value upstream products the most also tend to value downstream products the most (constant sign of SCC); (c) consumers have additively separable preferences. Then upstream sellers committ to full privacy, even if downstream sellers are willing to pay for information.

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  (i) information-trade effect
  (ii) rent-shifting effect
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- Both (i) and (ii) can be positive. However, when (a)-(c) hold, (i) and (ii) more than offset by (iii) $\longrightarrow$ full privacy.

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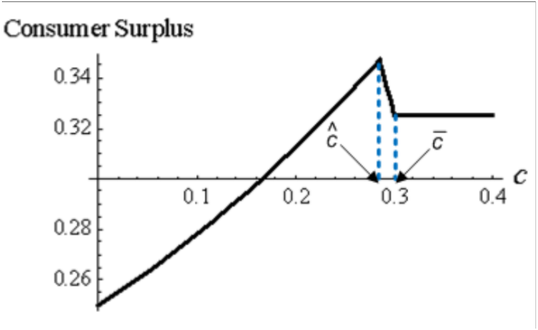
- Consumers do not internalize effect of their privacy choices on eq. prices

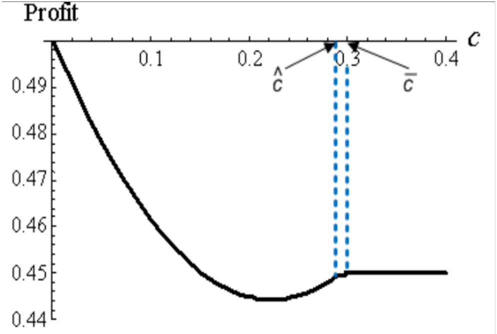
Privacy: who wins?

- Focus of this paper: effect of **cost of privacy** on CS, PS, TW



- Idea: if some consumers cannot afford full privacy $\longrightarrow$ firms drop prices

Privacy: who wins?



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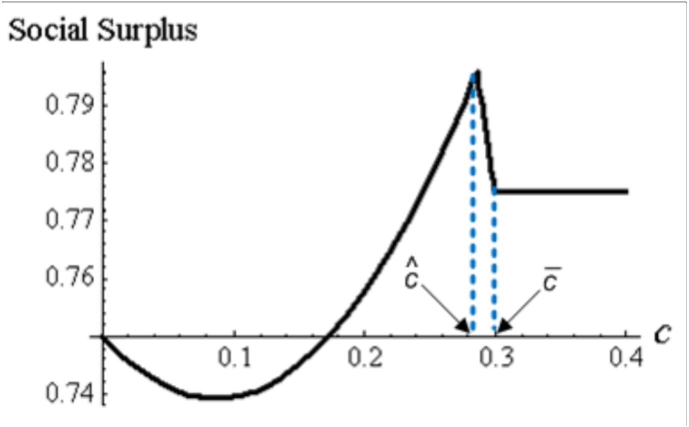

Privacy: alternative considerations

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- Against privacy: (i) complementarity/substitutability (Calzolari-Pavan, 2006)

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- Alternative to pooling equilibrium: privacy as a continuous choice
- Better illustration of off-equilibrium adjustments
- Excessive signaling: Daughety and Reinganum
- Better explanation of costs of privacy (endogenous?)
- Empirical tests