## THE INTERPLAY OF CONSUMER PRIVACY, COMPETITION, AND REGULATION

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My 12 minute plan: To convince you that economics has a lot to add to the privacy debate

# Why is Economics Important: A Shift in Costs of Data Storage

- In 2001, 1 GB cost \$19.70 to store
- In 2010, 1 GB cost \$0.06 to store
- In 2022, 1 GB cost \$0.0023/GB to store



### **Two Challenges**

- People can like privacy for its extrinsic value, or because as an input it makes them better off
- Not all people value privacy in the same way, making this hard

### And Even Worse



Athey, Susan, Christian Catalini, and Catherine Tucker. The digital privacy paradox: Small money, small costs, small talk. No. w23488. National Bureau of Economic Research. 2017.

Let us dispel some myths - economists do see value in privacy regulation

## Privacy Regulation Might Halt The Spread of Data Associated With Unfounded Stigma

- Mental Health
- Reproductive Health
- Past Crimes

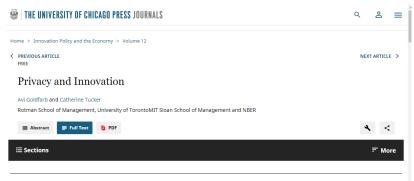
But these are instances where you can most easily characterize the preferences of the average consumer,.... generally this is hard



### Achieving the Benefits of Privacy Regulation Imposes Costs

- Privacy regulation imposes costs on
  - (Advertising effectiveness)
  - Health outcomes
  - Ability to apply to mortgages
  - VC funding

### A Summary



#### Abstract

Information and communication technologies now enable firms to collect detailed and potentially intrusive data about their customers both easily and cheaply. Privacy concerns are thus no longer limited to government surveillance and public figures 'privative lives. The empirical literature shows that privacy regulation may affect the extent and direction of data-based innovation. We also show that the impacts of privacy regulation can be extremely heterogeneous. We therefore argue that digitization has made privacy policy a part of innovation policy.

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### A Simple Model

- Privacy regulation empirically tends to impose a fixed costs on firms
- Larger firms are better able to bear these costs

### Customers May Trust Large Firms More



### Figure: Time travel: Which firm would you choose?

### Evidence

- Privacy regulations affect smaller tech firms disproportionately more than larger and more established firms and led to decreased entry (e.g., Congiu et al. (2022); Janßen et al. (2021))
- Increase in concentration in technology sectors (e.g., Johnson et al. (2020); Peukert et al. (2020))
- Enhanced consent requirements of the GDPR in telecommunications sector disproportionately benefitted well-established firms (e.g., Adjerid and de Matos (2022))
- We see these effects in sectors where privacy really matters health and education



### Punchline

- People have different privacy preferences
- Privacy regulations impose costs
- These costs shape competition, sometimes in unintended ways

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