

# Data and Incentives

Annie Liang<sup>1</sup> and Erik Madsen<sup>2</sup>

<sup>1</sup>Department of Economics, University of Pennsylvania

<sup>2</sup>Department of Economics, New York University

EC 2020

Information and Incentives session

9-11 am ET on July 14, 2020

# Regulating data usage

Consumer data from online activity is widely collected for commercial use.

Policymakers are considering regulating data usage to...

- ▶ Protect consumer privacy
- ▶ Ensure transparency about what data is collected
- ▶ Give consumers control over their data

We study a less-emphasized regulatory criterion:

- ▶ **Incentivize good consumer behavior**

**Prototypical example:** the market for auto insurance.

- ▶ Auto insurance rates depend on a driver's history of past accidents
- ▶ Drivers are incentivized to drive carefully to keep rates low

If firms begin using new consumer data to set rates, how do incentives for safe driving change?

# Our findings

1. Data can move consumer effort in either direction
  - ▶ “Quality-linked” data correlated with **long-run** outcomes **decreases** effort
  - ▶ “Circumstance-linked” data correlated with **short-run** outcomes **increases** effort
2. Good data policy treats quality- and circumstance-linked data differently
  - ▶ At least one data category should be restricted, but which one depends on market conditions