CCC Economics and Fairness: Platforms
Ayelet Israeli, Discussion
Equality of earning opportunities for drivers on Uber
Centralized pricing platform – market outcomes

• Hall, Horton, Knoepfle – market level
  
  • On average the price increases do not substantially change the hourly earning rate of drivers in the long run.
  
  • There has to be heterogeneity in preferences for low/high utilization. Prices might affect equality via this channel.

• Cook, Diamond, Hall, List, Oyer – gender earning gap (7%) despite centralized pricing
  
  • Due to: experience on platform, preferences over where to work, driving speed

• Ge, Knittel, MacKenzie, Zoepf 2016 – higher cancellation, longer wait time for African Americans. Longer, more expensive rides for women (old pricing system)
Centralized pricing platform – market outcomes

• Pre-Uber - taxis:
  • Documented discrimination and access issues in certain neighborhoods
  • Less transparency on route, prices, driver, etc
  • No penalty for bad behavior (via ratings)
  • Unavailability during high demand periods
Discrimination in online Markets / Airbnb
On the internet, nobody knows you’re a dog

Source: 1993 New Yorker Cartoon,
Also in: Scott-Morton, Zettelmeyer, Silva-Risso, 2003
Enter platforms. Phase 1: “third party” sellers

• No longer a legitimate / known business selling a product
  • Most of the risk on the buyer side

• Platforms resolve by:
  • Service and guarantees to protect the buyer
  • Seller ratings and reviews
Platforms phase 2: online p2p / sharing / matching markets

- No longer a business selling a product
  - Individual selling service (Dating - matching individuals)
  - Risk on both ”seller” and “buyer” side (asset / life)
  - Want to figure out who is a “dog”

- Platforms resolve by:
  - Transparency of self reported information
  - Verified information
  - Ratings and reviews

- But discrimination / inequality persists
Simple model to rationalize discrimination

- 2 types of buyers (L/H, wrt some underlying quality)
- Seller doesn’t know type
- Receives information signals instead
- Signal D is a demographic characteristic. Noisy signal corresponding with some biases or beliefs or stereotypes wrt the underlying characteristic
- Signal Q is highly correlated with underlying characteristic
- Turns out, that when sellers only have D, they use D as a proxy (resulting in discrimination), when they have both D and Q, they update to Q (resulting in equality)

Spirit of: Busse, Israeli, Zettelmeyer, 2017
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Question: how to ensure receiving the Q signal?
Some solutions

• Suggestion 1 (Edelman, Luca, Svirsky): eliminate (or postpone) D signal
  • Issue: might still be revealed later / backfire later / impact reviews

• Suggestion 2 (Edelman, Luca, Svirsky): no deliberation – auto booking

• Suggestion 3 (Fishman and Luca, Levy & Barocas): make discrimination policies top of mind / collect information / disable certain filtering

• Suggestion 4 (Uber type model): centralized pricing
  • Issue: same + inherent differences might still generate inequality (e.g. gender pay-gap in Uber)
Some solutions

• Suggestion 5: add Q signal if doesn’t exist
  • Issue in platforms – how do you get the first review if no one wants to rate you?

• Suggestion 6: “Affirmative action”, e.g. a bonus for diverse hosts / female drivers or “diversity badge”
  • Issue: usual criticisms of affirmative action; badge can backfire for bigot guests

• Suggestion 7: Weed out discriminating individuals from platform
  • Issue: what is the portion of discriminators? Will market thickness be affected?

• Suggestion 8: Reveal D later + cancellation penalty
  • Issue: might be less optimal than current cancellation practices
Regulation: Fair Housing

- Hotels (and public accommodations) in the U.S. are not allowed to discriminate based on race, color, religion, national origin.
- Fair housing act (FHA) prohibits discrimination in housing specifically, usually for longer-term rentals and sales.
- Private accommodations: owner with 4 or less units, renting an entire apartment or a room is exempt from FHA (can’t advertise is some states, but allowed to discriminate).
  - Pick a roommate / tenant based on gender / race / similar characteristics.
- Is Airbnb public or private accommodation?
  - Airbnb has separate properties and bed/room within apartment. Should these be regulated similarly or are differentially?
Regulation: Disabilities Act

- Regulation around disabilities
  - The Americans with Disabilities Act (ADA) extends protected status in public transportation and accommodations to people with both mental and physical disabilities
  - In most cities, proportion of vehicles/hotel rooms should accommodate wheelchairs
- Both Uber and Airbnb compliance with this regulation is problematic – many owners/drivers own one unit
Should we regulate these platforms?

• Possible objection to regulation of software platforms is that current laws protect these platforms and they cannot be regulated, or as a matter of law they should not be liable for conduct of others

• Most "providers" are individuals, not businesses

• But is legal intervention required?

• What are the priorities for regulation?

• Are offline / legal / societal norms sensible for these platforms?

Source: Edelman and Geradin 2016
Other fairness considerations

- Low income consumers are priced out
- Individuals with no access to smartphone / network don’t have access
- Indirect effects:
  - Incumbent industry (hotels/taxi/public transport)
  - Affordable housing
  - Societal effects (short term renters, public transport)
- Licensing and taxation