CCC Economics and Fairness: Platforms

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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

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On the internet, nobody knows you're a dog

"On the Internet, nobody knows you're a dog."

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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

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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

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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?

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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

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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