The Economics of Peer-to-Peer Internet Markets

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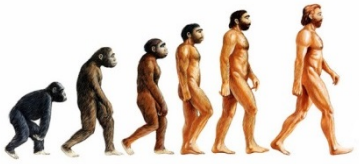
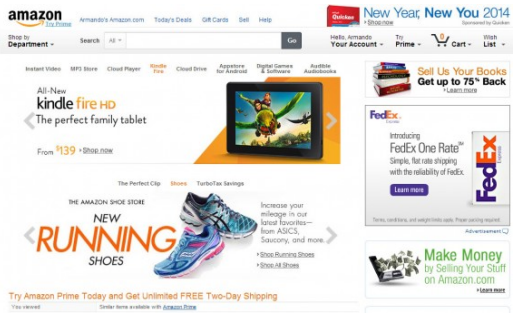
The “Sharing” Economy
FTC, June 9, 2015



Why are we here?



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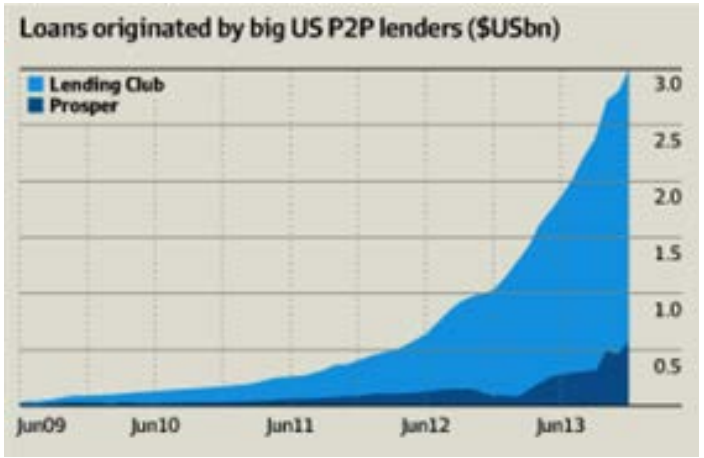

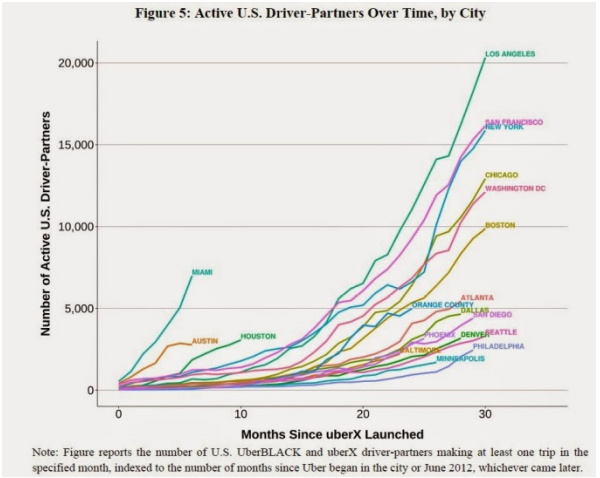

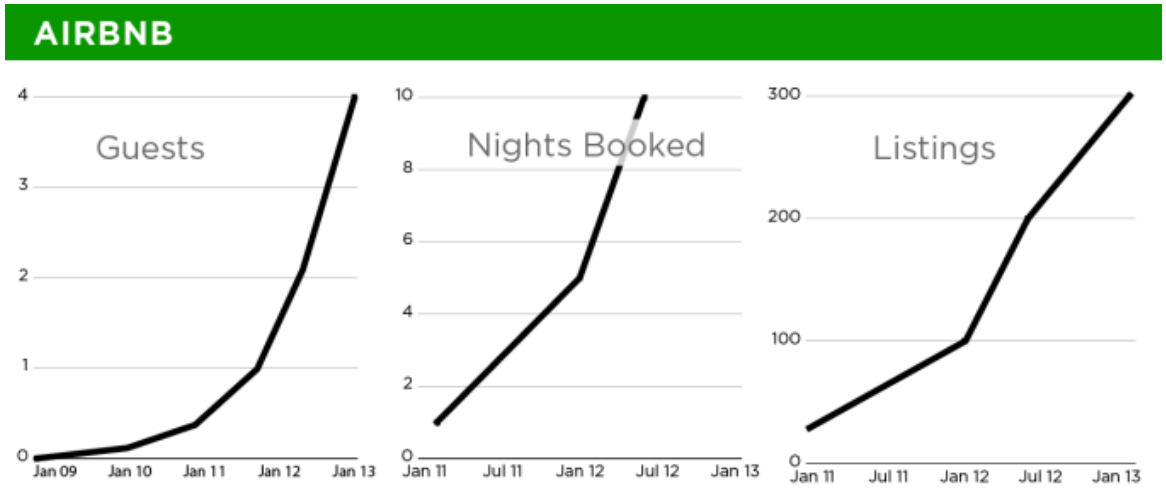

Why so successful?

1. Taking thin local markets and making them thick and global
   - E.g., eBay, Etsy, Sitter.com

2. Creating new markets
   - E.g., Instacart, Lyft, Taskrabbit

3. Replacing/expanding existing markets
   - Airbnb, Uber, Prosper and Lending Club

How?

- Using technology to facilitate better matching of sellers and buyers
  - Big data, search, mobile
- Cutting cost by eliminating intermediation
- Cutting cost by bypassing (good or bad) regulation
  - "Bad" regulation? NYC cabs coming back empty from EWR
  - "Good" regulation? Zoning laws
  - "Neutral" regulation? State variation in usury laws
- Shifting from high FC and low VC of dedicated resources to no FC and higher VC of non-dedicated resources
  - Particularly useful for markets with sharp changes in demand

What makes it work?

1. Market institutions
   - Search and matching
   - Pricing
   - Trust and reputation

2. Market evolution
   - Platform growth: network effects and scale economies
   - Changes in what gets transacted, how, and by whom
   - Standardization and professionalization

3. Market risks and externalities
   - After lunch!

Market Institutions and Platform Design I

Matching demand and supply

- Canonical problem: facilitate search and matching when people have heterogeneous preferences and the set of products is large, diverse, and unstructured
  - Markets can be thin in different ways: product definition (eBay), geographically (Uber), temporally (Taskrabbit)

- Different kinds of frictions platforms try to solve
  - Search: Buyers know what they want, but need help to find it
  - Congestion: Buyers know what they want, but crowd the best sellers/products
  - Informational: Buyers don't quite know what they want, and need informational help (on what they are likely to like, on quality, or availability)

Market Institutions and Platform Design II

Pricing

- Two distinct roles for the platform
  - Define the transactable unit
  - Provide a mechanism to establish terms of trade
- Transactable unit
  - What is a product? Trading off between “too narrow” or “too coarse”
  - On Taskrabbit and oDesk – originally price by task, then by hour
  - In advertising – price by impression vs. click vs. conversion
- Internet facilitates wider range of pricing mechanisms
  - Auctions, dynamic pricing, posted prices, risk scoring on lending sites
  - Common trade-off between more sophisticated pricing mechanisms and speed/convenience

Market Institutions and Platform Design III

Trust and reputation

- Transactions need to be "safe" for buyers and sellers
  - Early concern: problems of asymmetric info would be worse online where you couldn't "inspect" goods, and payment + delivery were asynchronous
- Solution: reputation and review systems
  - Reputation systems, grouping (oDesk's agencies), diversification strategies (Prosper), and platform guarantees
  - Lots of design issues: One-sided vs. two sided reviews, Anonymous vs. non-anonymous, Who is eligible to post a review? Is it mandatory?, Review "inflation" (oDesk), Detail and granularity
- Platform decision: set up institutions and let the market play out, or "take over" some of the quality verification / execution?
- As we will probably hear in the second panel today, there is a lot of focus on the imperfections of reputation systems
  - Yet the growth of P2P markets suggests that overall the existing systems are doing quite well …

Market evolution

Platform problem a bit different early on and later

- Initially market may be inherently thin, so need to find a way for balanced growth; may be less of an issue later, where activity driven more by intensive rather than extensive margins
- Key issue: where does the supply / demand elasticity come from to equilibrate the market?
- E.g., on Taskrabbit: some markets work out, while others don't. Why?

Changes in what gets traded, by whom, and how:

- Auction decline on eBay
- Prosper and oDesk also moved toward more standardized trades once they have enough volume
- As P2P markets become larger and more successful, suppliers can organize into professional "firms" – e.g. businesses on eBay, organized groups on oDesk, professional entertainers on YouTube

Suggests that optimal regulation may also be different early vs later

Final slide

- Peer-to-peer markets are taking over our lives … and thus getting attention

- But they are still at an early stage, and 10 years from now it would be interesting to look at a video of today's conference and see what fraction of the statements ended up about right

  - E.g., early view of e-commerce (The *Economist,* Feb. 2000):

  "What is truly new about the Internet is its ability to generate different pricing mechanisms, and in particular … various kinds of auctions and exchanges to take place …. The Internet seems to be creating the possibility of a permanent worldwide bazaar in which no prices are ever fixed for long, all information is instantly available, and buyers and sellers spend their lives haggling to try to get the best deals."

Final slide

- Peer-to-peer markets are taking over our lives … and thus getting attention
- But they are still at an early stage, and 10 years from now it would be interesting to look at a video of today's conference and see what fraction of the statements ended up about right
  - My subjective prediction – 40% ?
- But a talk or a panel or a paper doesn't have to be right in order to be interesting … ☺
- Looking forward for a fun day!