Freshman Seminar 72K Marvelous Markets: From Airbnb to Feeding the Hungry

Scott Duke Kominers

Overview

Description. Markets are everywhere, but they don't always work the way we want them to. While economists' "ideal" markets are supposed to find their way to socially optimal outcomes, real-world markets often fall far short. Valuable goods don't always reach the people who want to buy them; prices don't always match up across venues; and jobs can be hard to find even when the labor market isn't tight.

This seminar explores the purpose and potential of markets, drawing on classical ideas in economic theory. At the same time, we look at the pitfalls: how and when markets lead to inequitable outcomes, or just fail to create value overall.

Then, we ask: *How should markets work—and how can economists and entrepreneurs help bring them there?* We learn what makes marketplace platforms successful: How Uber and Airbnb create value from slack capacity; how social crowdfunding platforms like GoFundMe create trust; and how both dating sites and Craigslist thicken thin markets. And we see how marketplace design creates opportunities even in settings we might find surprising, such as when the nonprofit Feeding America uses a marketplace mechanism to distribute food to its nationwide network of food banks. Finally, we explore how better marketplace design can help address some of the deepest problems today's markets have created—including inequality, the decline of labor, and climate change. Readings include research and philosophy papers, economics journalism, business case studies, and even a bit of fiction. Yes, we will discuss cryptocurrency/blockchain.

Time & Location.

• Tuesdays, 1545-1745 (beginning September 8, 2020); via Zoom. [tentative, subject to change]

Course Webpage.

• https://canvas.harvard.edu/courses/75433.

Requirements. Evaluation will be based upon class participation and discussion, as well as four writing exercises (three short, and one long).

Participation and Discussion. For each session (except the first), students should read the listed materials in advance; I will provide a couple of framing questions as a guide. I will provide details about the format and structure of class discussions in the first session, as well as some strategic guidance on how to prepare. In particular, I will explain about case studies, and how we will use them in class.

Written Assignments. Over the course of the semester, students will write three short (1–3 page) papers, respectively sketching out

- an idea for an academic article,
- an idea for a policy article, and
- an idea for an entrepreneurial venture,

all on marketplace design. Then, for the final course project, each student will choose one of their three short papers to extend into a full article (or, in the case of the entrepreneurial venture, a business plan).

Harvard University, Fall 2020.

Academic Integrity and Group Work. Students may work on the written projects in small teams with my permission (especially on the entrepreneurial venture); the expected detail and thoroughness of the project scales linearly with the size of the group. More broadly, students are welcome (and encouraged) to discuss readings and ideas with each other, so long as in the end every student/team turns in their own work.

As a mechanism to incentivize students to get to know each other, I will generally discourage the same students from collaborating with each other on multiple papers.

Schedule & Readings

Week 1 – Markets & Market Design – September 8, 2020.

- Scott Duke Kominers, Alexander Teytelboym, and Vincent P. Crawford. An invitation to market design. Oxford Review of Economic Policy, 33:541–571, 2017.
- Scott Duke Kominers. Good markets (really do) make good neighbors. SIGecom Exchanges, 16:12–26, 2018.
- Alvin E. Roth. The economist as engineer: Game theory, experimentation, and computation as tools for design economics. *Econometrica*, 70:1341–1378, 2002.
- David Gale and Lloyd S. Shapley. College admissions and the stability of marriage. American Mathematical Monthly, 69:9–15, 1962.

Week 2 – Market Failures – September 15, 2020.

- Ronald H. Coase. The problem of social cost. *Journal of Law and Economics*, 3:1–44, 1960.
- Gary S. Becker. The economic way of looking at behavior. *Journal of Political Economy*, 101:385–409, 1993.

Excerpts From.

Ray Fisman and Tim Sullivan. The Inner Lives of Markets: How People Shape Them – And They Shape Us. PublicAffairs, 2016.

Case Study.

Thomas R Eisenmann, Scott Duke Kominers, and Alan Lam. Updating dating. Harvard Business School Case 818-052, 2017.

Week 3 – Marketplaces – September 22, 2020.

- Thomas R. Eisenmann and Scott Duke Kominers. Making markets. Harvard Business School Technical Note 818-096, 2018.
- Lars Börner and John William Hatfield. The design of debt-clearing markets: Clearinghouse mechanisms in pre-industrial Europe. Journal of Political Economy, 125:1991– 2037, 2017.

Note. We'll Zoom with the Harvard Art Museums to look at historical representations of marketplaces.

Week 4 – The Sharing Economy – September 29, 2020.

Excerpts From.

Mike Isaac. Super Pumped: The Battle for Uber. WW Norton & Co., 2019.

Case Studies.

- Benjamin Edelman and Michael Luca. Airbnb (A). Harvard Business School Case 912-019, 2011.
- Jill Avery, Anat Keinan, and Liz Kind. onefinestay: Building a luxury experience in the sharing economy. Harvard Business School Case 515-072, 2015.

Week 5 – Feeding America – October 6, 2020.

Canice Prendergast. How food banks use markets to feed the poor. Journal of Economic Perspectives, 31:145–162, 2017.

Excerpts From.

Ray Fisman and Tim Sullivan. The Inner Lives of Markets: How People Shape Them – And They Shape Us. PublicAffairs, 2016.

Case Study.

Scott Duke Kominers and Alan Lam. Feeding America (A) and (B). Harvard Business School Case 818-130 and Supplement 818-131, 2018.

Week 6 – Policy & Inequality – October 13, 2020.

- Alberto Alesina, Stefanie Stantcheva, and Edoardo Teso. Intergenerational mobility and preferences for redistribution. *American Economic Review*, 108:521–54, 2018.
- Piotr Dworczak (R) Scott Duke Kominers (R) Mohammad Akbarpour. Redistribution through markets. *Econometrica*, forthcoming.

Excerpts From.

Michael Harrington. The Other America. Simon and Schuster, 1997.

- Arlie Russell Hochschild. Strangers in Their Own Land: Anger and Mourning on the American Right. The New Press, 2016.
- Note. Further readings to be selected from recent policy proposals.

Week 7 – Imagining Markets – October 20, 2020.

Note. Readings on blockchain to be selected from recent white papers and policy proposals. *Case Study.*

Scott Duke Kominers and Nicole Tempest Keller. Halliday's OASIS. Harvard Business School Case 819-106, 2019.

Week 8 – The Future of Work– October 27, 2020.

- David Autor. Why are there still so many jobs? The history and future of workplace automation. *Journal of Economic Perspectives*, 29:3–30, 2015.
- Seth D. Harris and Alan B. Krueger. A proposal for modernizing labor laws for twentyfirst-century work: The "independent worker". Hamilton Project Discussion Paper 2015-10, 2015.
- Li Jin. The passion economy and the future of work. a16z.com, 2019.
- Jay Peters. Instacart's shoppers probably qualify as employees, judge rules. *The Verge*, 2020.

Week 9 – Marketplaces and COVID-19 – November 3, 2020.

- Scott Duke Kominers and Ian Macomber. Delivery apps need to start treating suppliers as partners. *Harvard Business Review*, 2020.
- Alexander W. Bartik, Zoë B. Cullen, Edward L. Glaeser, Michael Luca, and Christopher T. Stanton. What jobs are being done at home during the COVID-19 crisis? Evidence from firm-level surveys. NBER Working Paper No. 27422, 2020.

Case Study.

Scott Duke Kominers, Masahiro Kotosaka, Nobuo Sato, and Akiko Kanno. Raksul. Harvard Business School Case 819-115, 2019.

Note. Further readings to be announced.

Week 10 – Climate Change – November 10, 2020.

- J. Doyne Farmer, Cameron Hepburn, Penny Mealy, and Alexander Teytelboym. A third wave in the economics of climate change. *Environmental and Resource Economics*, 62: 329–357, 2015.
- Alexander Teytelboym. Natural capital market design. Oxford Review of Economic Policy, 35:138–161, 2019.

Week 11 – Students' Choice – November 17, 2020.

Note. This week's global challenge will be selected based on student proposal + vote.

Week 12 – Thanksgiving Holiday – NO MEETING – November 24, 2020.

Note. We may have an unofficial, optional Thanksgiving event.

Week 13 – Course Wrap – December 1, 2020.

Scott Duke Kominers. Making markets matter. 2021.

Excerpts From.

Lin-Manuel Miranda. *Hamilton: An American Musical*. Atlantic Recording Corporation, 2015.

Miscellany

Food for Thought.

Robert A. Caro. Working. Penguin, 2019.

A Useful Book.

David Allen. Getting Things Done: The Art of Stress-Free Productivity. Penguin, 2015.

Interesting Properties of the Course Number.

- 72000 is the number of 2-step self-avoiding walks on a $10 \times 10 \times 10 \times 10$ cube (summed over all possible starting positions).
- The set of distinct prime divisors of 72000 is equal to the set of distinct prime divisors of the arithmetic derivative 72000'.
- 72000 is the total number of digits in all the palindromes with 8 digits.
- The divisor set of 72000 contains a Pythagorean triple.
- 792 can be expressed as the difference of squares of primes in exactly four distinct ways.
- 792 is the number of partitions of 21.
- $792 = \binom{12}{5}$.
- Plus, 7200 (which admittedly is not quite the course number) is the largest highly abundant number that is also powerful.