

Economics 2: Spring 2014

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<http://delong.typepad.com/sdj/econ-2-spring-2014/>

Economics 2: Spring 2014: Scarcity and Choice

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How Much Does Market Organization Matter?

- We have a 20th century “natural experiment”
- High Stalinist central planning
 - Marx’s suspicion of markets as surplus-extraction devices
 - Hence, the communists said, we won’t have any
 - We will reproduce the Rathenau-Ludendorff World War I Imperial German war economy
 - Communes, economies of scale, GOSPLAN, etc.
- Effect: you throw away a five-fold amplification of productivity by eschewing the market



Economic Models and Thought Experiments

- A deliberately oversimplified world
- Analyze it to death, in the hope that the principles revealed will have much broader application to the real world
- So let's set up a grossly oversimplified economy: ten people, two commodities.
 - Our commodities: espresso and yoga lessons
 - Our people: Black Widow, Tyrion Lannister, Captain America, Hannah Horvath, Arnold Schwarzenegger, WyldStyle, Beyoncé, Macklemore, Adam Sackler, and Jerry Brown

Ten People Who Do Nothing But Drink Espresso and Give (or Take) Individual Yoga Lessons...

- Yoga Teachers
 - Black Widow (25)
 - Tyrion Lannister (15)
 - Captain America (10)
 - Hannah Horvath (5)
 - Arnold Schwarzenegger (0)
- Yoga Students
 - WyldStyle (20)
 - Beyoncé (16)
 - Macklemore (12)
 - Adam Sackler (8)
 - Jerry Brown (4)

Concept of a “Reservation Price”

- For sellers, the price below which you think you got a really bad deal if you sell—you really, after thinking about it, would rather not have sold at all...
- For buyers, the price above which you think you got a really bad deal—you really, after thinking about it, would rather not have bought at all...

Ways of Organizing Yoga Lessons

- Bureaucratic command-and-control
 - Some bureaucrat decides how many lessons to offer
 - Some bureaucrat picks suppliers
 - Some bureaucrat picks clients
- Thick-tie reciprocity
 - Along social networks
- Market

Bureaucratic Command and Control

- Pick a random number from 0-5:



Bureaucratic Command and Control

- Pick a random number from 0-5: 2



Bureaucratic Command and Control

- Pick a random number from 0-5: 2
- Pick two teachers:



Bureaucratic Command and Control

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Bureaucratic Command and Control

- Pick a random number from 0-5: 2
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Bureaucratic Command and Control

- Pick a random number from 0-5: 2
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- Pick two students



Bureaucratic Command and Control

- Pick a random number from 0-5:
2
- Pick two teachers:
Tyrion Lannister
and Arnold
Schwarzenegger
- Pick two students:
Macklemore and
Adam Sackler



Bureaucratic Command and Control

- Pick a random number from 0-5: 2
- Pick two teachers: Tyrion Lannister and Arnold Schwarzenegger
- Pick two students: Macklemore and Adam Sackler
- What's the outcome?
 - Macklemore happy (+12), Adam happy (+8)
 - Tyrion annoyed (-15), Arnold meh (0)



To Your iClickers...

- Why is Macklemore happy?
 - A. Because WyldStyle didn't get to take a yoga lesson
 - B. Because he is being taught by Tyrion, who is a better yoga teacher (15) than he is a student (12)
 - C. Because he is getting something he values as much as 12 cups of espresso, but he doesn't have to give anything up for it because it's a command-and-control rather than a market-price world.
 - D. Because Jerry Brown, who doesn't like yoga, doesn't have to take a yoga lesson.
 - E. Because Black Widow, who really does not like teaching yoga, does not have to teach a lesson.

Bureaucratic Command and Control

- Pick a random number from 0-5: 2
- Pick two teachers: Tyrion Lannister and Arnold Schwarzenegger
- Pick two students: Macklemore and Adam Sackler
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 - Macklemore happy (+12), Adam happy (+8)
 - Tyrion annoyed (-15), Arnold meh (0)
- Net hedonic calculus: +4



“Thick Tie” Social Network Reciprocity

- How many students are there with thick ties to and owed favors by teachers?
- At random...



“Thick Tie” Social Network Reciprocity

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- At random...
 - Black Widow owes Beyoncé a favor...
 - Hannah Horvath owes WyldStyle a favor...



“Thick Tie” Social Network

Reciprocity

- How many students are there with thick ties to and owed favors by teachers?
- At random...
 - Black Widow (-25) owes Beyoncé (+16) a favor...
 - Hannah Horvath (-5) owes WyldStyle (+20) a favor...



“Thick Tie” Social Network Reciprocity

- How many students are there with thick ties to and owed favors by teachers?
- At random...
 - Black Widow (-25) owes Beyoncé (+16) a favor...
 - Hannah Horvath (-5) owes WyldStyle (+20) a favor...
- Net hedonic calculus: + 6



Notice the Pairings...

- Bureaucracy
 - Adam-Arnold (+8)
 - Macklemore-Tyrion (-3)
 - Where are Beyoncé and WyldStyle?
- Reciprocity
 - Black Widow-Beyoncé (-9)
 - Hannah Horvath-Wyldstyle (+15)
 - Where is Arnold?

To Your iClickers...

- Would the bureaucracy be better if it found a way to get Beyonce and WyldStyle into the yoga lesson taking group?
 - A. Yes. They value it the most.
 - B. No. Just because they value it the most doesn't mean they deserve the opportunity.
 - C. I don't know.
 - D. I don't think the question makes sense. Where does this "better" come from? What's "better" here?

To Your iClickers...

- Would the reciprocity system be better if it found a way to get Arnold teaching yoga?
 - A. Yes. The fact that he would give it away for free and not feel put upon is a big reason why he ought to be teaching yoga.
 - B. No. We shouldn't impose upon him just because we don't have to pay him to make him happy teaching yoga.
 - C. I don't know.
 - D. I don't think the question makes sense. Where does this "better" come from? What's "better" here?

Is There a System?

- That would avoid the defects of:
 - Bureaucracy
 - Adam-Arnold (+8)
 - Macklemore-Tyrion (-3)
 - Where are Beyoncé and WyldStyle?
 - Reciprocity
 - Black Widow-Beyoncé (-9)
 - Hannah Horvath-Wyldstyle (+15)
 - Where is Arnold?
- And get the right people teaching and the right people taking yoga lessons?

There Is: A Competitive Market

- At a price of 21: 4 teachers (everyone except Black Widow), 0 students: excess supply of 4...

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- At a price of 16: 4 teachers (everyone except Black Widow), 1 student (WyldStyle): excess supply of 3...

There Is: A Competitive Market

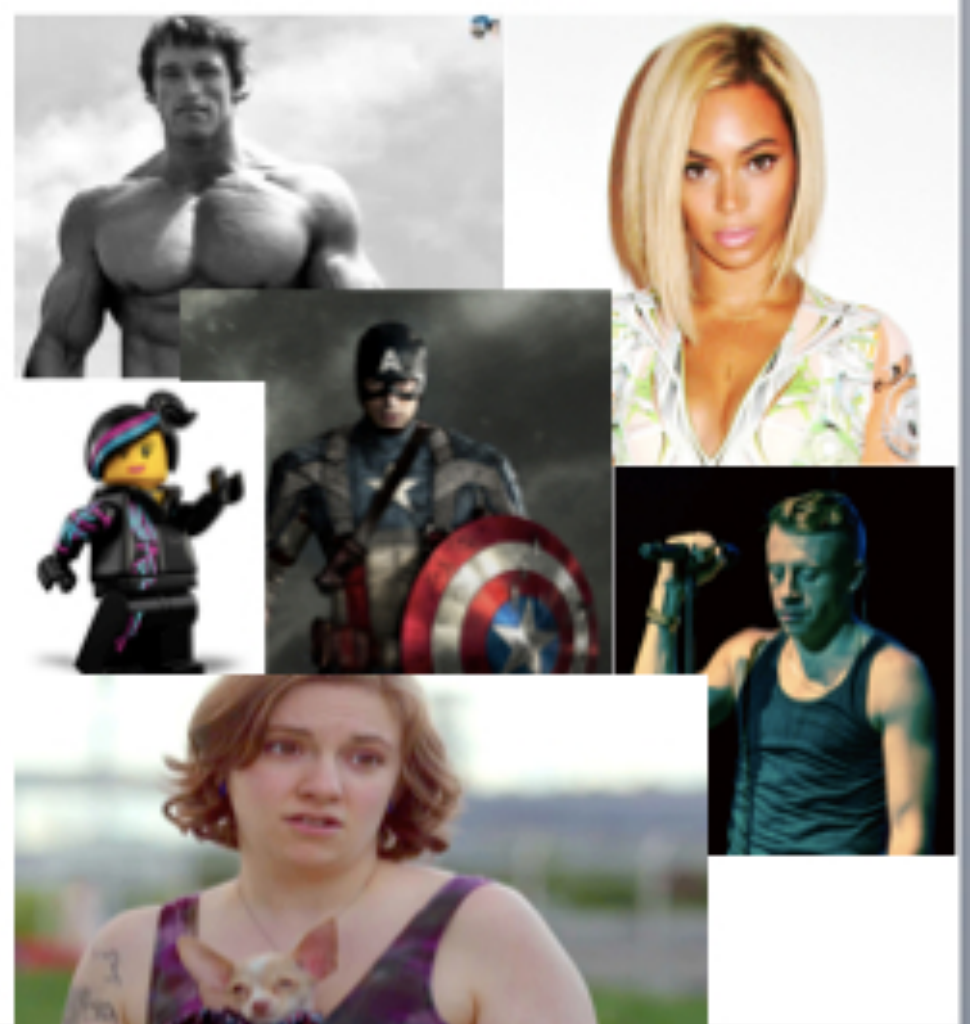
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- At a price of 6: 2 teachers (Hannah and Arnold), 4 students (everyone except Jerry Brown): excess demand of 2...

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- At a price of 6: 2 teachers (Hannah and Arnold), 4 students (everyone except Jerry Brown): excess demand of 2...
- At a price of 11: 3 teachers (Hannah, Arnold, and Captain America), 3 students (WyldStyle, Beyoncé, and Macklemore): excess demand and excess supply of 0!

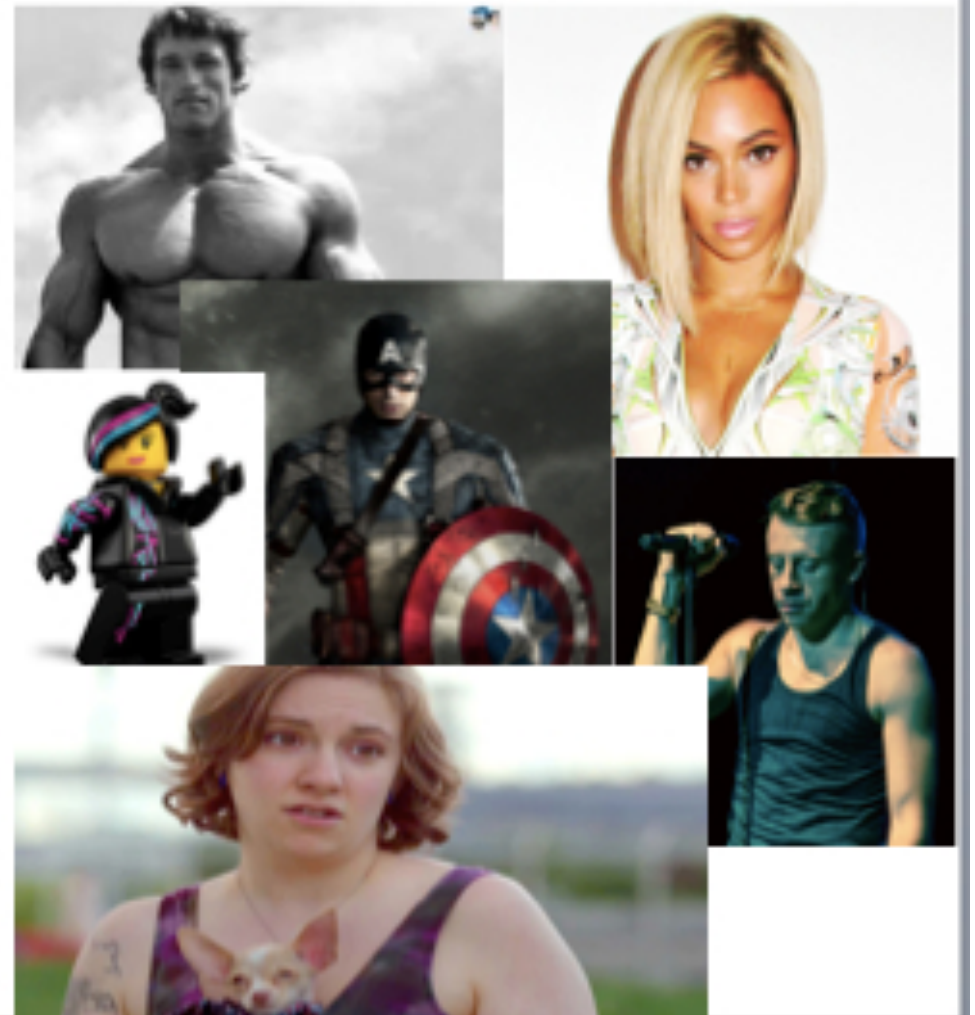
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 - At a price of 16: 4 teachers (everyone except Black Widow), 1 student (WyldStyle): excess supply of 3...
 - At a price of 6: 2 teachers (Hannah and Arnold), 4 students (everyone except Jerry Brown): excess demand of 2...
 - At a price of 11: 3 teachers (Hannah (-5), Arnold (0), and Captain America(-10)), 3 students (WyldStyle (20), Beyoncé (16), and Macklemore (12)): excess demand and excess supply of 0!
- Net hedonic calculus: +33



Properties of a Competitive Market

- Everyone teaching has a reservation price lower than the market equilibrium price.
- Everyone taking lessons has a reservation price higher than the MEP.
- Every teacher with a reservation price lower than the MEP is teaching.
- Every student with a reservation price higher than the MEP is taking lessons.
- A higher price would have someone teaching someone with a lower reservation price than they have.
- A lower price would leave a deal to be made—a potential student would be left with a higher reservation price than a potential teacher.



Properties of a Competitive Market

- It does the very best we can do...
- It (almost) enforces itself...
- WyldStyle and Arnold think it's great!
- Captain America and Macklemore think it's nothing special
- Black Widow, Tyrion Lannister, Adam Sackler, and Jerry Brown don't understand the excitement

