

Networks II: Market Design
Assignment: ('Blog style') writing exploration

Due: Thursday March 7, 2019 by 12 noon

In this exercise, you're going to have some fun thinking about markets, or (networked) economies, very broadly defined as institutions for exchange (refer back to Lecture 1 to refresh your memory!). You'll explore a particular 'market' that you find interesting in a blog-post style writeup, following the suggested questions below (if appropriate). Each post should be at least two paragraphs, and can discuss any topic that is related to markets in any form, from any application domain. Keep your posts clear and to the point, make sure that the connection to networked economies is evident, and very importantly, ***be sure to cite all source material (and write your own material!); not doing so is a violation of academic integrity and will be penalized as such.***

Note that the questions below are meant as guidelines only, to suggest questions that might help you explore a 'market' that interests you. It's entirely possible that some of these questions simply don't apply to your particular 'market' (or that you want to discuss an interesting issue outside of these guidelines). If so, you can explore the structure and design of this 'market' as is natural and appropriate for it: The primary point of this exercise is to stimulate your creativity and curiosity, and for you to have some fun doing so---so don't get too caught up thinking about 'getting it right'!

1. Identify one real-world situation which could be abstractly viewed as a market, very *broadly interpreted*¹. (Please include a link (or cite a source) to the market you're describing, unless your 'market' is very well-known).
 - a. What is being 'exchanged' or 'allocated'? (If nothing is being exchanged or allocated in your setting, that is absolutely fine; some rather interesting ideas might fall in this category! If so, please explain in what sense you think of it as a networked economy, and then proceed to discuss whatever issue got you interested in this economy.)
 - b. Currency:
 - i. What is the currency, if it is not real money? (Note that social-psychological rewards such as reputations could be thought of as a currency as well!)

¹It's a great time to shake off any one-sided-matching-markets-without-money blinkers that our current lecture topics might be inducing, and think (freely and wildly) beyond what we're doing in class!

- ii. If your market has a currency, real money or otherwise, what is the nature of the currency---can it only be given to a `seller' (broadly interpreted as the `giver' of the thing being exchanged) by `buyers' (broadly interpreted as the recipient of the thing being exchanged)? Or can it be (meaningfully) exchanged amongst an arbitrary pair of agents?
- iii. Or is your situation a market with no currency at all---and if so, why is that a `good'/'sensible'/'defensible' choice for your situation? What would be the tradeoffs in switching to an institution with money (or currency of some form)?

2. Market **design**:

- a. Identify one feature of this market that constitutes a ``design choice/feature/element". For example, in an auction market, this could be the rule used to allocate items, determine pricing, the *information structure* of the auction (open bidding or sealed bids), or *timing*². Facebook event invites offer a different kind of example---here `what happens' might constitute how many people sign up for your event, and a design feature might be whether a viewer can see who else is going, or only how many others are going, or ...
- b. What alternative is possible for this design element in your setting, and how might it change outcomes, i.e., `what happens' in the market?

NOTES:

- 1. Grading rubric: 3 points for clarity; 3 points for quality (soundness of arguments being made, conclusions drawn, etc). Up to a maximum of one additional bonus point *may* be awarded, in rare circumstances, for *exceptionally novel and insightful posts, if any such are submitted*. Note carefully, however, that these will be (a) very rare, and (b) awarded **solely** at the discretion of the TAs grading these posts (as also the points for clarity and quality). The only valid regrade requests for this assignment will be in the rather unlikely event that your assignment was not graded at all.
- 2. Do not omit any citations whatsoever, and certainly do not copy someone else's post---the TA staff will be especially alert to plagiarism detection, and academic integrity violations **will** be subjected to severe grade penalties of anywhere between 15-40 pts on the course grade depending on the extent of the violation.

² <https://web.stanford.edu/~alroth/papers/eBay.veryshortaer.pdf>