

Some brief comments on doing economic research

I. Picking a research question

When choosing a research question, you should ask yourself the following questions:

QUESTION 1: *Is it interesting from the point of view of Economics?*

- Does it have important implications to the models and assumptions that are studied and applied in Economics?
- Does it have any policy implications?

Example 1

(a) “What is the labor supply of NYC cabdrivers?”

(b) “Is it correct to assume that workers intertemporally substitute labor and leisure?”

While the 1st question may be interesting to New Yorkers, it has no direct relevance to Economics as a discipline. It is too specific and it would be difficult to draw any general conclusions from it.

The 2nd question has important implication to Economics since any analysis of the labor market over time makes this assumption. If this assumption has no support in real labor markets, then we – as economists – should question the conclusions we reach when we apply models that are based on this assumption.

If one wanted to address this question, it would be impossible to do it with regards to all labor markets. However, if we wanted to show that the assumption does not always hold, it is sufficient to give one example.

One way to test the assumption of intertemporal substitution is to test if a direct implication of this assumption is observed in labor markets.

One such implication is that work hours should respond positively to transitory positive wage changes: workers would work more when wages are high and consume more leisure when its price – the forgone wage – is low. However, it is not so easy to test this implication in many labor markets. The reason is that we cannot always verify whether the observed change in wages is transitory and if the participants in the market perceive it as such.

Therefore, the ideal test of labor supply responses to transitory wage increases would use a context in which wages are relatively constant within a day but uncorrelated across days. In such a situation all dynamic optimization models predict a positive relationship between wages and hours work, due to the negligible impact on life-cycle wealth of a one-day increase in wage.

Such data are readily available for at least one group of workers: NYC cabdrivers. Drivers face wages that fluctuate on a daily basis due to demand shocks caused by weather, subway breakdowns, day-of-the-week effects, holidays, etc. On busy days drivers spend less time searching for customers and thus earn higher hourly wages. These wages tend to be correlated within days and uncorrelated across days.

So the labor supply of cabdrivers can be “economically interesting”, but as a test case of a bigger, more important question.

In “Labor Supply of New York City Cabdrivers: One Day at a Time,” by Colin Camerer, Linda Babcock, George Lowenstein and Richard Thaler, published in the *Quarterly Journal of Economics* (May 1997), the authors find evidence against the assumption of intertemporal substitution: cabdrivers make labor supply decisions “one day at a time” and set a loose daily income target and quit working once they reach that target.

Example 2

- (a) "Is 'sniping' a good strategy to use on e-Bay or Amazon?"
- (b) "How do rules of ending an auction affect bidding behavior?"

While advice on how to bid on e-Bay or Amazon by itself is not sufficiently interesting for economics as a discipline, it can serve as a test case of how the fine details of an auction affect bidding behavior. Auction theory has a prominent role in economics and there is an enormous body of literature on it.

Most of the models used to study auctions in economic theory do not give rise to 'sniping' (the phenomenon of bidding very close to when the auction ends). Hence, if such a phenomenon is observed in many auctions it begs to be explained. In particular, it raises the question whether this phenomenon serves as evidence that people deviate from the way they are assumed to behave according to economic theory (they are not "rational", or they fail to coordinate on the Nash equilibria of games), or whether most auction models are missing some essential components that give rise to sniping in equilibrium.

These are some of the questions that are addressed in the following paper:

Roth, Alvin E. and Axel Ockenfels, "Last-Minute Bidding and the Rules for Ending Second-Price Auctions: Evidence from eBay and Amazon Auctions on the Internet," *American Economic Review*, 92 (4), September 2002, 1093-1103.

QUESTION 2: *Can your answer be refuted?*

Example 1

- "Will real estate prices continue to go up in Manhattan?"
- "Why is Manhattan so expensive?"

Whatever answer you give to the first question, it is simply cannot be verified. Any answer you give to the second question can be debated. Note that the second question still suffers from the problem that by itself, it is not sufficiently interesting to provide general insights into economics, unless it is placed in the context of a bigger question: "Why is Manhattan so expensive?: Regulation and the Rise in House Prices," by Edward L. Glaeser, Joseph Gyourko and Raven Saks, published in the *Journal of Law and Economics*, Volume 48(2), 2005, pp. 331-370.

Example 2

Recall the paper by Camerer et al. on NYC cabdrivers. Their findings can be debated by researchers in the field. Indeed, one researcher disagreed with their findings and argues that they are wrong:

Henry S. Farber, "Is Tomorrow Another Day? The Labor Supply of New York City Cabdrivers," *Journal of Political Economy*, 2005, Vol. 113, no. 1, 46-82.

QUESTION 3: *Do you have the tools to answer the question?*

II. Literature review

Performing a literature survey is important for two reasons:

(1) It allows you to verify whether the question you are interested in has been asked before, and if so, how was it answered. Even if someone has already asked your question, it could be that his approach is different from yours. In such a case your task is to argue what is the contribution of the approach that you will take (e.g. previous attempts to answer your question have failed to account for some things, which you believe are important).

(2) By summarizing the previous major findings related to your work, you allow the reader to understand and appreciate the contribution of your own research.

When performing a literature survey it is important to distinguish between PUBLISHED work and WORKING PAPERS. The former presents academic work that experts in the field deemed sufficiently important (and also correct) to be disseminated to other researchers in the field. Publication serves as an academic “seal of approval”. Working papers are research papers that are currently under review by journals or that have not been accepted for publication. Hence, their contribution and validity have yet to be “certified” by the academic profession.

Even within published work it is important to distinguish between GENERAL AUDIENCE journals and FIELD journals. The former represent a set of journals that publish work that is considered sufficiently important to spark an interest in a wide audience of researchers. These journals are considered the “top” journals of the field. In Economics it is customary to think of the following journals as belonging to this class:

1. Econometrica
2. American Economic Review
3. Journal of Political Economy
4. Quarterly Journal of Economics
5. Review of Economic Studies

The “field journals” belong to a second tier of journals that publish work that is considered to be of interest only to specialists on the field. This is because the contribution beyond previous work is not that big so as to constitute a “breakthrough” research that many will be interested. There are many, many field journals (which they themselves can be ranked from best to worst). Some of the better known field journals are:

1. Journal of Economic Theory
2. Games and Economic Behavior
3. RAND Journal of Economics
4. Journal of Monetary Economics
5. Journal of Economic Growth
6. Journal of Economic Development
7. Journal of International Economics
8. Journal of Public Economics
9. Journal of Money, Banking and Credit
10. International Economic Review

When conducting your literature survey you should first try to look at papers published in the previous list of top journals, and only later you should look at field journals. When browsing through field journals, limit yourself to the ones listed above. If you found relevant papers in a journal not listed here, you should contact me and we can discuss whether it should be included.

Only after you browse through published work, should you start looking through working papers.

The above order is only with regards to the way in which you should read the literature for your research. When you will eventually write the literature survey in your proposal

and later in the thesis, you should mention the papers in any order that is logically correct (say, according to different issues that are part of your question), without making the above distinction between published and unpublished work.

Tips on how to look for related papers

1. <http://scholar.google.com/> is an excellent source. Simply type some keywords (e.g., “real-estate prices”, “sniping”, “online auctions”, “labor supply”) and you get links to papers that have these keywords. Some of these papers may not be available for you to download since you may need subscription to the journal. In that case you should log in to the NYU library site (but from a campus computer) and check whether the journal is available for viewing on the web.

2. <http://www.jstor.org/> is a website that provides free access to journals and papers that were published several years ago (as opposed to papers published in the last year, which usually require subscription to the journal).

3. If you find an author that wrote a paper that is related to your question, then it is a good idea to google him. Sometimes his website provides access to published papers that you were not able to access. In addition, you may find other relevant papers written by the author on his site.