Trends in Academic Publishing in Experimental Economics

Charles Noussair
Tilburg University
What I do here

- Study is in the spirit of the *Journal of Economic Surveys*, and the conference theme of *Current and Future Trends*.
- I try to give some broad perspective about research trends within a field, in this case experimental economics.
- Analyze what has been published in the area in 9 leading outlets. Consider trends within the 10 year period, topics covered, and geographical location of research.
The type of articles considered

- I consider laboratory experiments only. The unit of observation is the journal article.
- Include only studies conducted using traditional laboratory techniques. If this methodology is employed to gather at least some of the data reported in the paper, it is included in the data set.
- Features of the methodology
  - Student subjects as participants
  - Conducted in a controlled laboratory setting
Typical Physical Layout of an Experimental Laboratory
What is not included

- I leave out field experiments. These are experimental studies that relax one or more of the aforementioned aspects of the methodology.
  - The boundary between field experimental and non-experimental research is hard to precisely establish.
- I also leave out neuroeconomic studies, since they arguably involve a new methodology, and their prime focus is on physiological data.
- I leave out comments, and replies, as well as surveys and meta-analyses that do not report new data.
The data set

- Consists of all experimental papers published in nine prominent journals.
- Six of these are prestigious general interest journals.
- The three others are prestigious specialized journals that publish many articles in experimental economics.
- A total number of 716 experimental papers identified
The number of published papers in experimental economics is increasing (75% increase in 2006 – 2010 over 2001-2005).

Number of articles published

- **Six general journals**
- **Three specialized journals**

Trends in publication: Experimental Economics
The percentage of journal articles that report experiments is also increasing.
The denominator: Overall number of papers in general interest journals is not increasing. However, it is increasing in GEB, JEBO, and EE.
What topics do the experiments consider?

95% of studies can be put into four categories

Distribution of Topics Studied

- Individual Decisions
- Social Preferences
- Markets
- Games
- Macro/Political Economy
- Other

Trends in publication: Experimental Economics
The most popular topics

- Social Preferences (35.4% of all papers)
  - Investigate dependence of preferences on payoffs of other individuals and history of play.
  - Rather than preferences of the form $u_i(x_i)$, assume that they are of the form $u_i(x_1, \ldots, x_n, H)$.
  - Try to uncover nature of $u_i(x_1, \ldots, x_n, H)$, including the role of altruism, envy, reciprocity, and efficiency.

- Three very popular areas within social preferences:
  - (1) Social dilemmas (13.1% of all papers): These are settings in which self-interest and group interest lead to different behavior.
    - Two-principal paradigms, the Prisoner’s Dilemma and Voluntary Contributions to a Public Good, are used.
    - In these games, individuals choose between cooperation and defection (decision is all-or nothing in Prisoners’ Dilemma; intermediate choices are possible in Voluntary Contributions).
    - Used to study the determinants of cooperation.
Dictator/Ultimatum games (9.6%):
- Two parties have an endowment to divide. One party proposes a division.
- In the ultimatum game, the other party can reject. If she rejects, both players receive zero. If she accepts, the proposed division is implemented.
- In the dictator game the other party cannot reject and the proposal is implemented.
- Used to study altruism, envy, and reciprocity.

Trust/Gift exchange games (9.5%):
- In a trust game one individual can transfer a portion of her endowment to another player.
- The amount transferred gains value.
- Then the second party can return any portion of what he received. Used to study reciprocity.
- A gift exchange game has similar incentives but in a worker/employer context.
The most popular topics

- **Individual decision making (14.2% of all papers)**
  - Risk (4.6%)
    - Testing theories, measuring risk tolerance
  - Consumer Behavior/ Willingness-to-pay (2.9%)
    - Preference over products, how to elicit WTP information

- **Markets (24.3% of papers)**
  - Auctions (9.9%)
    - Testing theories, comparing auction types
  - Asset Markets (4.7%)
    - Bubbles, Informational efficiency
  - Industrial Organization (5.5%)
    - Testing models of interaction between firms

- **Games (21.0% of papers)**
  - Coordination (6.2%)
    - Equilibrium selection
  - Beauty contest (1.9%)
    - Measures to what extent rationality is common knowledge within a group

Trends in publication: Experimental Economics
How is interest in these topics changing over time within the field?

- Consider within the journal *Experimental Economics*.
  - Level playing field between topics
  - Barometer of what the field itself is interested in.
- Each of the four major areas listed above is increasing in coverage.
What topics interest the broader profession? Consider the six general interest journals.

Topics: Six General Interest Journals

<table>
<thead>
<tr>
<th>Topic</th>
<th>2001-2005</th>
<th>2006-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Decisions</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>Social Preferences</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Markets</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Games</td>
<td>20</td>
<td>25</td>
</tr>
</tbody>
</table>

Trends in publication: Experimental Economics

Interest growing in Social Preferences, Individual Choice, and Games.
Geographical distribution

Geographical distribution of research conducted

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage of all articles 2001-2005</th>
<th>Percentage of all articles 2006-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia-Pacific</td>
<td>53.6</td>
<td>47.8</td>
</tr>
<tr>
<td>Europe</td>
<td>43.1</td>
<td>47.8</td>
</tr>
<tr>
<td>North America</td>
<td>3.3</td>
<td>4.2</td>
</tr>
</tbody>
</table>

Trends in publication: Experimental Economics
Conclusions

- The number of articles reporting laboratory experimental studies has been increasing over the last decade.
- The percentage of articles appearing in major journals reporting laboratory experiments is also increasing.
- Four topics dominate the field: Social preferences, individual decision making, games, and markets.
- There has been a modest increase in the share of research conducted in European laboratories and a modest decrease in the share done in North America.