

BA Project, Spring 2018

Microeconomics

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November 9, 2017

Three broad types of microeconomics essays

Empirical paper

- Empirical question using **econometrics** and an **existing data set**.
- Data sources: Statistics Denmark, OECD, etc; published articles; some teachers.
- Alternative: gather own data using **survey** or **experiment**.

Model-building paper

- Like an **extended problem set**. But you are yourself both formulating the problem and solving it.
- Must also include interpretation and broad economic discussion.
- Variation: To **simulate a model** using Excel or Matlab.

Verbal-analytical paper

- A **broader reasoning** using verbal arguments, graphs and tables.
- Advantage: It can be broader and therefore more interesting than a model-building essay.
- Disadvantage: If the student fails to actually provide the own verbal analysis, the essay may end up being very thin.

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How original does your work have to be?

- I would say:
 - The important thing is that your work is **independent**.
 - To contribute with something that is truly original is hard for any undergraduate student, even more so with the limited amount of time you have.
- The originality of an **empirical paper**:
 - It should be enough to extend a data set by, for example, adding the last few years or one or more right-hand side variables.
 - Or study another geographic region.
- The originality of a **theoretical (model-building) paper**:
 - A small extension or variation of an existing model is fine.
 - The student shouldn't have access to the solutions to this particular formulation of the problem, but be forced to formulate and solve a model without having access to the right answer.

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The research process (1/2)

My idea of how a good research process may look like

- 1 Thinking—in broad terms— about what topic to write about and what kind of essay to write: empirical, model-building or verbal-analytical?
 - This choice matters for which supervisor that could be appropriate.
- 2 Finding a more specific research question.
 - Supervisor can, possibly, help with suggestions and by taking part in brainstorming.
 - Given an idea, a supervisor can certainly take part in discussing and assessing it.
- 3 (Assuming a model-building paper:) Building a model and solving it.
 - (i) The simplest possible model is often the best. (ii) Often good to add extensions step by step, both in work and in essay. (iii) Normal that model building/solving goes hand in hand with finding exact question and understanding its answer.
 - Supervisor cannot be expected to check your algebra or teach you the methodology.
 - But he/she can try to answer broader questions and suggest avenues for modeling.
- 4 Finding and reading literature; writing the paper; polishing it (language matters).
 - I offer to read and comment on draft of most or all parts of the paper, but not to read the same thing twice. Student chooses to give me one part at a time or all in one go.

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Other things about the research process

- For practical reasons, you are committed to your chosen project broadly defined.
 - But, in my opinion, it is perfectly OK to let your project change direction depending on what ideas work and what results you find or don't find.
- Plan your work and give yourself deadlines.
- Leave time for polishing.

Research question (1/1)

Finding a research question

- Strategies for finding a topic or a research question:
 - Read **newspapers** and search for events, policy debates or even small anecdotes that raise questions.
 - To find inspiration, go through the **list of contents of textbooks or handbooks** of various areas of microeconomics.
- **Example 1:** An article in Fyns Amts Avis, March 2005, by John Wagner from De Samvirkende Købmænd.
 - “[...] For det tredje er lukkeloven med til at begrænse omkostningerne i dansk detailhandel. Hvis alle butikker skal hold åbent yderligere 39 søndage om året, vil det alt andet lige medføre større omkostninger uden garanti for, at omsætningen stiger. Risikoen er altså prisstigninger til ugunst for forbrugerne!”
 - My interpretation of the argument, in terms of game theory:
 - *“If shops are allowed to be open on Sundays, all shops will choose to be open due to the competitive pressure. Therefore all shops’ costs go up, as Sunday salaries are higher. This leads to higher prices”.*
 - Does this logic at all work? Could be explored in formal model.
- **Example 2** (attached article):
 - Article from Politiken.dk about regional price differences for bread across Denmark.

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■ Example 2 (attached article):

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Be pragmatic...

- It's good to read the literature, but don't do it too much early on.
- If you get stuck in your search for a research question:
 - An empirical project could start with a data set. Given this data set, you search for a question that you could answer.
 - A theoretical project could start with an existing model that you are familiar with and like. You extend or vary this—ideally in a way that makes you curious about the results.

Some advice from others

- Essay advice by my colleagues Christoph Schottmüller and Christian Groth:
 - https://schottmueller.github.io/thesis_guidelines.html
 - <http://www.econ.ku.dk/okocg/>

Appendix: Some possible topics (1/3)

Note that this is just a list of broad areas within microeconomics. You would need a more specific idea of a research question that you could study.

- Public economics:
 - Optimal taxation.
 - Tax competition, tax havens.
- Development economics:
 - Micro credit.
 - Measurement of poverty/inequality.
 - Child labor.
- Health economics:
 - Economic evaluation of health care programs.
 - Public vs private health care.
- Political economy:
 - Political institutions and the size of the public sector.
 - Lobbying.
 - Polarization, voter information.
 - Conflicts, terrorism, security.

Appendix: Some possible topics (2/3)

- Behavioral economics:
 - Social preferences, cooperation, trust.
 - Time inconsistent preferences.
 - “Optimal paternalism”, sin taxes.
- Industrial organization:
 - Collusion and cartels, regulation.
 - Research and development, patents.
 - Digital goods, piracy.
- Market design and auctions:
 - Optimal auctions.
 - Internet auctions.
 - Designing matching markets (medical internships, organ transplants, students-schools).

Appendix: Some possible topics (3/3)

- Environmental and resource economics:
 - Climate change: Economic consequences, cost benefit analysis.
 - Modelling climate talks/negotiations.
 - Biodiversity.
 - Energy markets.
- Games and decision theory (more theoretical)
 - Decisions under uncertainty.
 - Cheap talk games.
 - Equilibrium refinements.
 - Bargaining.