

## How to get started on research in economics?

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Also see: <http://econ.lse.ac.uk/staff/spischke/phds/>

### *Research is hard!*

It is hard for everyone, even the best researchers. There is no template: you have to learn it by trial and error. Mostly error! There are no clear rules (including any of the ones below!)

Most ideas fail. This means it's important to generate many ideas, sort out the good from the bad ones quickly, and not be frustrated. If you can't handle failure, and academic career may not be for you.

Talk to people: your fellow students, faculty, but also non-economists, etc.

### *What makes a good project, research question?*

It should be interesting – original – feasible. Tradeoff: the more novel is what you are doing, the lower the standards for execution you will get away with.

Three broad categories of research in economics:

- real theory: contribute a mechanism for others
- applied theory: illuminate the economics of a particular issues
- empirical work: test a model or estimate a parameter

Both theory and empirics: don't just change an assumption compared to previous work at will, motivate why you expect this particular change in assumptions to make a big difference in terms of insights gained. A good topic will have a strong motivation that appeals to a lot of economists (not just yourself).

### *How do I find a topic, idea?*

- Go to seminars but not too many (go to at least one real seminar and one Ph.D. work-in-progress seminar a week).
- Read but don't read too much (look at abstracts of JPE, QJE, AER, or NBER working papers, etc.)
- Read survey articles in your research field (Journal of Economic Literature, Handbooks of Economics); but grad students elsewhere will read those too!
- Read old journals
- Read bad journals
- Read journals in other social sciences
- Read the newspaper
- Talk to each other
- Talk to non-economists about issues that interest you as an economist
- Find datasets/read codebooks
- For empirical work: you come across a good instrument

- Never take anything for granted
- Why did you study economics in the first place?

You should from very early on work on a concrete project (i.e. something with the potential to lead to a research paper), however modest. Working on a project in a clearly defined research area is typically the best way to see new questions, avenues, etc. Just going to the library, browsing the internet, doing literature reviews, etc., while sometimes necessary, should never be an occupation for more than a few days, particularly after your first summer of research. Which does not mean that you shouldn't constantly be thinking about new research ideas (in the shower, in the bus, in seminars, ...).

Don't expect to get a good topic from your supervisor. If it's a good topic, I will work on it myself.

*Triaging ideas:*

Talk to others about your ideas. You might be either

- over-optimistic about your ideas (after all, they were yours!)
- too pessimistic (if it was a good idea, wouldn't somebody have done it already?)

Remember a topic should be interesting to others in the profession and not just to you.

Talking to your supervisor: Your supervisor (and other faculty) will shoot down many of your ideas but remember: we are your friends, and we help you save time. You don't want your ideas being shot down in a job market seminar or a thesis exam!

Triaging takes work:

- What is the best case scenario for a project?
- What is the worst case scenario for a project? (Would it still result in a publishable paper?)
- What are the costs of a project? Finding data or data entry, programming work, proving a theorem, etc.
- How much insight can you get on a project from two weeks of work? Simple analysis of the easiest available data, write down the simplest possible model, etc. If it takes you longer to find out, make sure your supervisor (and better other faculty as well) feel it is a worthwhile investment of time.

*Working on your research project*

Remember the forest for the trees. Work on the big picture first and don't get bogged down in details early on. Once you get to the details, set aside some time to think about the big picture once a week. Questions can change: sometimes your research may suggest it is more interesting to answer a question different from the one you started on.

Be prepared to throw stuff away if it doesn't work or detracts from the big picture. You want the end product to contain your best work, not everything you have ever done during your PhD (nobody else will be interested in hearing about all the things you did which didn't work).

Progress on research is often non-linear: there are often big hurdles, and periods where nothing seems to go forward, but there are also big leaps.

Early on, it might be good to think about more than one idea at a time. Sometimes you are stuck with something, and it's good to put it aside and do something else. If you have a good project, and it's clear that it's feasible, drop everything else and work on this one only.

When you are stuck with a problem on your research, talk to people. Of course, do try to solve your problem yourself but if you don't make progress (for a week or so) talk to other students about it and of course to your supervisor. That's what your supervisor is there for (although often we won't have the solution either). But it is important not to spend weeks or months in a dead end without making any progress. If there is no way out, try a different alley. Your supervisor can give advice on these things.

### *Organizing your life*

Research takes time, make sure you set aside enough time to work on your research every week. Your research should pervade your life—it's really an activity that never stops.

Don't let other activities take over: Because research is hard it is easy to spend time on more immediately satisfying activities: teaching, RA work, taking another course, reading too much, the internet. DON'T!

Don't be a perfectionist: Once you have started on a good question, a typical project in economics should yield a draft within six months. Then go on to the next project (But do the best you can on a project)

Don't procrastinate: Set realistic goals, something you can accomplish. Make sure you are working on SOMETHING all the time, even if it is a modest project.

### *Giving a presentation in the work-in-progress seminars*

Remember the goal: to get feedback on your work from others. This is different from an academic seminar you will give later, which also is used to showcase your work.

- Tell us about your work, not the work of others (skip literature reviews)
- Keep the introduction short (5 minutes!)
- Encourage us to make comments (here I am stuck, could I do this better?, which alternative approach should I take to this issue?). Think about some questions you would like answers to before you give your presentation
- Manage your time. Make sure we have an opportunity to comment on the aspects of your work you would like feedback on
- Getting feedback means being open to making changes, doing things differently. This sometimes may involve throwing out something you have worked on for weeks (which might strike you as wasteful – but remember sunk costs!). The goal is to do things better in the end even if it involves more work
- Did I mention to skip the literature review?

### *What is all for? The thesis and the job market*

The thesis has to consist of three chapters.

- Each chapter should be a paper that can be an academic journal article. A literature review does not count as a chapter. So your call should be to write one paper each year.
- A thesis can contain co-authored work. One chapter should be solo authored, better two.
- The decision whether a thesis is acceptable is up to the examiners. Ask your supervisor for advice when your work is ready for the thesis.

If you want an academic job what matters most is your job market paper: one single paper which shows what type of work you are capable of. Focus on trying to write that paper from the beginning; the other chapters will typically appear as by-products. But be prepared that your first attempt may not turn into your job market paper.

*The academic job market process:*

- Your preparation should start in spring prior to the AY when you want to be on the job market. At this point you will be working hard on your job market paper.
- In October, you will give a practice job market presentation in the department, so your paper has to be ready.
- In November, you will send a large number of job applications to potential employers. These consist of
  - Your job market paper
  - Another paper only if it is very good (a single paper is the norm).
  - A CV
  - Reference letters from three faculty. Develop contacts with three potential letter writers during your PhD.
- Most academic institution interview candidates at the US AEA meeting at the beginning of January. You will get invitations for interviews in December. There are other interview venues, the RES job market in the UK, a Spanish job market, other smaller ones.
- At the beginning of January you will go to interviews. They typically last for 30 minutes and mostly consist of your brief description of your job market paper with questions from the interviewers. The interviewers are typically not specialists in your field. Within a week or two, you will receive invitations for campus visits.
- Between January and March you will visit universities who are thinking of offering you a job. A visit typically lasts a day. You give a 90 min. presentation of your job market paper, and you meet with individual faculty for the rest of the day. Your job talk is the core piece in trying to get a job: both content and presentation matter. Both parties advertise each other at those visits, i.e. they are also your option to learn about the departments.
- In February and March candidates receive job offers and decide. Since some candidates and vacancies may remain unmatched a further round may happen at this point, typically at lower ranking departments and for less successful candidates.

*The most important things to keep in mind for the job market now:*

- Write a good paper! A job market paper will have to appeal to a broad set of economists. You will have to motivate your work for that audience. Don't choose a very narrow niche or esoteric style for your job market paper.
- Practice how to present well. Grab opportunities to present where you can. Better make mistakes in front of LSE faculty than on the job market.
- During later stages of your PhD: present at conferences, summer schools (only once you have a good paper).
- Practice talking about your research to non-specialists in brief conversations. You will need this for job interviews, and throughout your academic career as you meet other economists. Talk to PhDs in your cohort outside your field, have lunch with each other, etc. Get used to summarizing what you are working on in a five minute presentation.
- Try to become a general economist during your PhD, not just a specialist in your field. Follow what is going on in the profession outside your immediate field. Think about policy.