Ideas for papers

Updated 23 March, 2017

On democracy

- Gather data on stock market indices across countries and over time. See if AJRY's FE regressions hold with log levels of index, instead of log GDP/capita.
- Same stock market index data, similar exercise as ANRR, but see if switch to democracy has effect on growth in stock values.
- Find new data to add as control in some (panel) regression in AJRY or ANRR. Weather (say average annual temperature); fertility/mortality.
- Simulate some data generating process, like the critical juncture process in AJRY. Run some regressions on that; compare to those run on actual data.

On simulating growth models (Monte Carlo related)

- Add shocks to the Galor-Weil model, or the Hansen-Prescott, or two-sector, models, discussed in class; simulate; regress. Compare to other regression results based in data.
- Try finding a different functional form for h in GW simulation; simulate; regress. Compare to other regression results.
- Use some other, related, model (e.g. Galor and Weil 1996; simulate; regress. Compare to other regression results.

On deeper roots

- In Problem S2, we merged state antiquity data on 50-year intervals after 1800 with Polity IV. Merge also with data over levels of GDP/capita from Maddison. Run some FE regressions. Interpret. (This may be difficult because countries only come with names in the Maddison data, not codes.)
- Create your own mini dataset on state antiquity, for say 10 countries, using different criteria than Putterman et al., or cities instead of countries. Run some FE regressions. Interpret.
- Run panel regressions with levels of log GDP/capita as dependent variable, and some time-dependent measure of world trade as independent variable, and interact world trade with countries' state history scores. Run some FE regressions. Interpret.
- See what happens to Hariri's results when ancestry adjusting the state history variable.

Other

- Find data elsewhere, e.g., IPUMS, World Bank, OECD. Merge with data from one of the papers discussed in the course. Regress. Interpret.
- Look at cross-regional historic data from within a country (e.g., US Census data from IPUMS, the ifo Prussian Economic History Database) and merge with data on modern outcomes.
- Take some baseline regression in one of the papers we discussed where the estimated relationship is assumed to be linear. See what happens if you add a quadratic term. Think of stories for why the relationship might be non-linear. For example, can you find a non-linear relationship between state history and democracy in Hariri's specifications?

Tips about how to write papers

Find online advice by googling, e.g.: http://www.people.fas.harvard.edu/~pnikolov/resources/writingtips.pdf

Reading journal articles

- For the paper component of Econ7110 you should not spend much time reading papers, beyond what you have already read in the course. (Remember your paper should be close to the topics of the course.)
- But for the rest of your PhD you will have to read a lot.
- Start with articles that are written by well-known researchers, or published in topranked journals, or both. Then you can read other papers that they cite.
- Well-cited papers in the profession can teach you how to write text, equations, propositions, proofs, appendices, organization of tables and figures, and much more.
- You cannot read everything at once. Keep a list of papers you intend to read to some point. If not sure what to do with your time, read papers on your list.
- Overview articles can be useful when you are new to a field. These you can find in, e.g., the Journal of Economic Perspectives, Journal of Economic Literature, and the Handbooks in Economics series published by Elsevier.

Journals rankings

- Research in economics is communicated almost exclusively in academic journals (and working papers before they are published). Not books, newspapers, or blogs.
- There are hundreds of journals out there. Many are more or less fake. It is good to know something about journal rankings to assess what journal is worth reading and submitting your own work to. (Also useful to know if someone's CV is impressive, or not.)
- It is impossible not being a little subjective about journal rankings. It takes time to form one's own understanding of what the profession values.
- Top-five general journals: American Economic Review, Econometrica, Journal of Political Economy, Quarterly Journal of Economics, Review of Economic Studies.
- Many field journals. In macro there is JME, AEJ Macro, RED, JEG, JEDC, MD, JMCB, and more. (Do you know the acronyms?)
- For explicit rankings, see, e.g., repec/ideas: https://ideas.repec.org/top/old/0702/top.journals.simple.html

Concrete tips

About using theory

- Know what a model is. A model is *not* the same as reality, or the real world. It is rather an *approximation* of the real world. We use models because we can understand them more easily than the real world itself. Make sure you have a deep understanding of this distinction when you write.
- If you use the words *prove* or *proof*, do so only in the context of mathematical proofs of propositions, lemmas, theorems, or such. (You can find specific rules for writing proofs elsewhere.) Never claim that your model proves anything about reality. Your results follow from assumptions, which the reader may, or may not, agree with.
- Usually a model should have agents, firms, or households that maximize some sort of objective function (e.g., a utility function, or a profit function), subject to some constraint.
- A "regression model" (like $y = \alpha + \beta x + \varepsilon$) is not really the same as a model to most economists, but often called a Data Generating Process.
- A conceptual framework, without any mathematical representation at all, is not what most economists would call a model, although that type of language is used elsewhere, e.g., among political scientists and historians.
- Explain every variable in words, and be precise about the meaning of all indices. For example, write: " $y_{i,t}$ is output per worker in region *i* and period *t*," rather than just "*y* is output."
- When you have a result, describe it to yourself in words. This is what we usually call the "intuition" behind the result.
- Once you know which assumptions matter for the result, you can better motivate and explain why you make those assumptions. The assumptions that drive the result are sometimes called "the rabbits that go into the hat" (meaning the result is where you pull the rabbit out of the hat, like a magician).
- When writing your first theoretical paper, follow some structure that you already know well. Start off with a *workhorse model*, as commonly used models are sometimes called, rather than inventing something completely new. Be clear from the start about which model you use, and what you add to it.

About using data

• Be meticulous with your data and code. Check that there are no mistakes anywhere, conceptual or otherwise. If you know two ways to code something, try both and make sure you get the same results.

- Create descriptive charts, histograms, and plots to understand your data and what drives your regression results. This is also useful to explain your findings to others.
- Compile tables and figures professionally: headings, alignments, fonts, caption texts, number of decimals, etc. Look at tables in articles in top-five journals. Remember all tables must be in LaTex format for Econ7110.

Other tips

- Know how to structure your paper (introduction, other sections, conclusion, appendix, bibliography etc.) Look at how top-five journal articles are structured. (But remember your Econ7110 paper should only be around 10 pages.)
- Remember all papers must be in LaTex format for Econ7110. I recommend you use LaTex whenever you write something academic from now on.
- At some point, you will need to "sell" a paper you have written to, e.g., an editor, a seminar audience, or your own thesis advisor. It really does matter what people think about it.
- If people don't like what you present or write, that is valuable information. Negative comments on your existing work can give you ideas for improvements, and/or new projects.
- It is easy to disagree with other people's opinions about your work, but you will be have to listen to at least some of them at some point, at least if you want to find an academic or research-related job. If you do not take comments well people will stop commenting, which makes it harder to improve your paper.
- Writing a good paper takes time. It involves years of modeling, data compilation, coding, writing, reading, and much more. The number of weeks you have to finish your PhD is a finite resource. Make use of each week.
- One paper in your dissertation is usually used as a Job-Market Paper. The JMP is a big factor determining what job you can find, if any, after your PhD. Think of the other papers you write as training for your JMP.
- When you go on the job-market you will be competing with hundreds of PhD candidates from top-ranked universities around the world. Coming from York University in Toronto is a disadvantage compared to candidates from better schools. A good JMP can mitigate that disadvantage. A really good JMP can trump many other factors.
- The economics profession is egalitarian. In the long run, if you are able to write papers that publish well, little else matters. Your CV determines your destiny.