ECO311: Political Economy of Development in Africa

Fall 2016
Simon Halliday[1]

Project Overview

This document provides an overview of the empirical research project for ECO311, including the various steps and deadlines involved in the project. The rough draft and the final draft are worth 45% of your total grade, so they are important. Please do your best to follow the suggested formatting and structural guidelines that I provide, though you can certainly speak to me about changing them around depending on what you work on.

The paper should pose an original research question and execute an empirical analysis. You will write an empirical research paper on a Africa development and political economy topic of your choosing related to the country you're allocated. You are encouraged to focus on questions related to the topics that are being covered in class. However, you are not limited to these topics, but it must be related to an issue related to Africa development and political economy. You should feel free to be creative, taking advantage of the wide variety of variables that are included in these data sets.

The paper should include carefully constructed figures and tables that present the results of your analysis. These figures and tables should have titles and should be thoroughly explained and discussed in the text of the paper. The paper should include an explanation of the data set(s) you are using. You should be careful about explaining the sample characteristics and the variables you are working with, referring back to the original questionnaire if necessary to clarify the meaning of particular variables.

The paper is not intended to be a review of other papers or books written on a topic. In order to develop a clear research question and to decide on the key variables involved in answering that question you will want to read some of the literature in your proposed research area. However, any literature review should be a small part of the paper itself. The paper should draw heavily on the data. An important purpose of the project is to develop skills in the statistical analysis of data and the presentation of your results in a clear and effective written form.

The final product should be approximately 15-20 pages, double spaced, and ought to involve at least some original econometric analysis of data. You will build up your paper in stages over the course of the semester.

- Country fact sheets
- Draft ideas and development of question
- Consultation with professor about your question
- Initial literature review
- Drafts of regression specification and initial results tables
- Draft paper
- Presentation
- Response to reviewer & draft comments

---

[1] Many thanks to Susan Godlonton for her suggestions and improvements. Much of what I have used here comes out of her suggestions for her teaching in ECO381 at Williams College.

Tips for a Good Paper

- **Your goal:** Come up with a project that will ultimately produce convincing empirical evidence on an interesting, policy-relevant question, and where you can feasibly provide at least preliminary econometric evidence by the end of the semester.
- **Ideal world:** The more interesting your research question and the more convincing your research design, the better your grade will be. You should try hard to identify a "quasi-experiment" that enables you to make reasonably credible claims about causality, though I cannot make this a requirement.
- **Challenges:** I recognize that it is difficult to complete a thorough original econometric analysis in part of a semester when you are taking a full course load and also doing other reading and assignments for my course, and it requires a lucky combination of a good idea and good data. One way you could think of the final project that you hand in for this course as being a detailed research proposal, similar to a grant proposal. The proposal should present an original, convincing, and feasible strategy for answering an interesting empirical question related to economic development and should show at least some preliminary econometric analysis of the data that will be used to address it, and explain the next steps you would take were you to continue on with the project.
- **Use existing work:** One strategy is to identify an existing empirical article in the economics literature for which you can obtain the same or similar data, and then perform an extension of that paper. For articles that are already published, authors are often happy to share their data. Second, you would obtain the data and follow the original authors' empirical procedures as closely as possible. Ideally, your estimates would be similar to those in the original article, and if not, you need to figure out why. Third, you would make some meaningful change to the empirical specification, or extend the analysis in some way, and be able to make a case for why we learn something interesting from this exercise. For example, you might take a study that was done on data from one country, and try it using data from a different country. Even if you end up doing something well beyond a replication and extension, it's always a good idea to start with what someone else has already done and build from there – you can learn a lot about how research is done that way. Plus, if your results differ from the previous literature, you'll know why, which is important.
- **Do not procrastinate!** This project will take time to do correctly. Start thinking about your research ideas now and start looking at which datasets could be applicable. The week before the due date is not a good time to figure out that you don't know how to run a regression, or that you are missing a key variable. Similarly, plan to leave adequate time to edit, proofread, format your tables, etc. Grammatical errors will focus the reader's attention away from your amazing idea and generally make your argument less effective.
- **Read**: If you are having trouble coming up with an idea, papers are a great place to start. This will also have an educational externality in that it will help you prepare for your midterm and final.
- **Ask for help**: Talk with your friends about your ideas. Come to office hours or make an appointment.

Two useful readings posted on Moodle that might help:

- Wooldrige, Jeffrey. 2006. "Carrying Out an Empirical Project," Chapter 19 from Introductory Econometrics: A Modern Approach, 3rd edition, Mason OH; Thomson South-Western.

- King, Gary. 2006. “Publication, Publication,” by Gary King, PS: Political Science and Politics, January 2006, pp. 119-125.
- Talk with your classmates. As noted above, I encourage you to work in a team with up to one other classmate on your project, although it’s not required. You should start discussing ideas with classmates you might be interested in working with early on in the semester.

Examples of available data to use:

- Afrobarometer: http://afrobarometer.org/
- California pop center http://www.ccpr.ucla.edu/CCPRWebsite/services/data
- Data first in South Africa: https://www.datafirst.uct.ac.za/dataportal/index.php/catalog/central
- Demographic and Health Surveys: http://www.measuredhs.com/
- Devecondata: http://devecondata.blogspot.com/
- ICPSR at Michigan: https://www.icpsr.umich.edu/icpsrweb/ICPSR/index.jsp
- IFPRI: http://www.ifpri.org/datasets
- International IPUMS census project: https://international.ipums.org/international/
- JPAL: http://www.povertyactionlab.org/evaluations/data
- Millenium Challenge Corporation: http://data.mcc.gov/
- UK data archive: http://discover.ukdataservice.ac.uk/?sf=Data%20catalogue
- UNC population center: http://www.cpc.unc.edu/research/projects
- Upenn pop center: http://www.pop.upenn.edu/research-projects
- World Bank Microdata Collection: http://microdata.worldbank.org/index.php/catalog/central

Some country-specific suggestions:

- Malawi - Integrated Panel Data Survey
- Nigeria - General Household Survey
- Tanzania - National Panel Survey
- South Africa - National Income Dynamics Survey (NIDS), among many others available at DataFirst and SALDRU
- Uganda - National Panel Survey

Also, many of the academic journals now require authors to publish the data online, for example: American Economic Journal: Applied Economics: https://www.aeaweb.org/forthcoming/output/accepted_POL.php

Proposal

The two-page proposal is aimed at describing the paper you plan to write. This proposal should describe the question(s) you are interested in analyzing. What broad ***topic*** are you interested in? What is the ***problem*** you’re trying to confront? Clearly state your ***research question***, explain why it is interesting, and describe how you plan to go about investigating the question. What data set will you use? What econometric specification do you have in mind? It should indicate the data set(s) you plan to use for the analysis, including a description of some of the key variables you plan to use.

Ideally, your proposal should include at least two tables that begin to explore the questions you are interested in. Your proposal should consist of 1-2 pages of well-written text along with another 1-2 pages that present at least two tables. The tables should be thoughtfully constructed, should have numbers and titles, and should be discussed in the text.

Honor Code Guidelines

All of the normal Smith College Honor Code guidelines regarding proper use of citations and quotations will apply in this course. All writing submitted for this course must be your own, original, new writing. If you wish to build on a paper written for another course taken for credit, you must get my prior approval.

Students should use the University of Chicago Author-Date method of citation.
For further information, please see the tutorial available at: http://www.smith.edu/sao/handbook/socialconduct/honorcode.php

Structure and Presentation of the Paper

Structure & Organization

Your paper should be either double-spaced or 1.5 spaced, with 1" margins. Be sure to put page numbers in your paper. Your paper should have a title page with an informative title. Use headings and sub-headings to break up your paper. It will make the paper easier to read and help the reader follow the logic of your analysis.

Clearly describe the data sets you are working with, including the year the data was collected, the size of the sample, etc. Describe the variables clearly – don't just use the variable name in the data set. Write the paper so that someone can understand it without knowing what "inctot" refers to. In fact, you should not label variables in tables according to this kind of variable name.

Tables & Figures

Put a number and title on each figure and table. Refer to these in the text. For example, you should say things like "Figure 1 shows the relationship between ... ". Use the papers you read for the course for examples.

Make sure your figures and tables are effectively presented. Don't just paste in tables and figures from Stata without modification. You need to convert the Stata output into tables that make sense for the reader. Tables should contain key information, such as sample size, important sample restrictions (ages included, whether males, females, or both, etc.). Use the papers assigned for the lectures for good examples of tables and figures.

Use a reasonable number of decimal places in your tables and text. Don't just use the full number of decimals from the Stata output. Usually one or two decimal places are sufficient, depending on the variable. There are many useful Stata commands to help you with this, including the following:

- `estout`
- `esttab`
- `outreg2`

Data Analysis & Discussion

Be sure to consult the questionnaires associated with the data set you have chosen to work with to be sure you understand the variables you are working with. Explain important features of the variables in your paper, such as the definition of work, the time period for an income variable, or

the age restriction on an employment or fertility question. In general you should use the sample weights provided in the data in your analysis. You should make this clear in your paper.

Make sure it is always clear who is being included in a particular analysis. For example: are you including observations with zero in your measures of income or hours worked? Is your mean schooling measure for the entire population, or just adults? Are you using individuals or households as the unit of analysis? Does your table include both men and women?

Paper Components (suggestion for a 15-page breakdown)

The following suggestions are a guide. You do not have to include every single component listed in the outline. You can also move things around as appropriate for your paper.

1. Introduction (1 page)
    - Overview of
        - Questions/why important
        - Estimation strategy
        - Results
        - Conclusion/policy implication

2. Background/Literature Review (2 pages)
    - Give motivation: Why is this question important?
    - Discuss key articles only (2-3)
    - What are the shortcomings of these studies or what specific question is left unanswered (or not convincingly answered)? What external validity problems exist?

3. Setting (1 page)
    - Why did you choose this setting (i.e. this population, this part of the country)?
    - Describe relevant features of the setting key to interpretation?
    - What makes questions appropriate to this population?

4. Data description (1-2 pages)
    - What data set do you use (name)? Why did you choose these data? (if it's the only choice, say so)
    - Basic features of the data
        - Cross-section or panel?
        - Years, ages, gender, etc of sample
        - Description of sample technique
        - Overview of content
        - Obvious shortcomings (i.e. no income data, no men, only people attending school, etc)

5. Identification strategy [if possible] (2 pages)
    - What are biases of a "naïve" estimate (just regressing y on x, or using a full sample from any time or place)?
    - Basic features of the data
        - Chosen naïve estimate depends on your **identification strategy**. Examples: Pooling different types; ignoring a key regressor; excluding the **interaction term** you're using to identify effect; using cross-section instead of changes; looking *across* rather than *within* families, looking at wrong outcome, etc.

- Describe comparison groups, give intuition/justification for this comparison
- Present findings from Table 1 (basic summary statistics), discuss anything that stands out in comparison of means. You don't have to discuss every single mean in the table.

6. Econometric Specification
    - Describe precise sub-sample you use
    - Describe your outcome variable(s)
    - Specify your estimating equation
    - Give a list of your control variables (be precise about how anything is measured) Why is it necessary to include these control variables?

7. Results (1-2 pages)
    - Interpret coefficients on key variables only presented in Table 2
    - Note both statistical significance and point estimates, interpret ***magnitude*** of estimates effect
    - Note whether difference between naive and alternative estimates bigger or smaller
    - Are any other coefficients strange/large/unexpected? (i.e. ***contrary*** to the theory you employ)

8. Measurement issues (1-2 pages)
    - Discuss any potential remaining biases/shortcomings of your Table 2 results
    - Suggest ways to check these (i.e. describe columns in a new set of regressions, Table 3)
    - Present and interpret results from Table 3

9. Discussion (2 pages)
    - What are the ambiguities of your results?
    - What are different interpretations?
    - What are the stronger arguments for one or another interpretation?
    - What directions for future work do your results suggest?

10. Measurement issues (1-2 pages)
    - "Policy brief"
        - What are your main findings
        - Why are they important
        - What does this imply for policy?

Cover Letters

After you have received feedback on your rough draft and you have revised the draft, you will be responsible for writing a 1-2 page cover letter outlining the changes you have made to the rough draft. This should be clear and brief – in outline format. You will also include comments referring to changes you've made based on the referee report you received from your classmate.

Jacobson Center

Please contact the Jacobson Center (http://www.smith.edu/jacobsoncenter/) well in advance if you need assistance with improving your writing. As a general rule, you should allocate a lot of time to **revise** and **edit** your own writing.