Department of Economics University of California, Berkeley Last updated: 8/28/22 Fall 2022 Economics 140 Prof. Ryan D. Edwards

ECON 140 — Econometrics

Short Project Overview and Waypoints

In ECON 140, our aim is to set you to conduct original econometric analysis and writing, perhaps for an honors thesis, perhaps for an ECON 191 paper, or for other pursuits.

The final deliverable for this short project is **one page of written text in paragraphs** that:

- 1. explains a specific empirical question
- 2. describes data you will use to answer this question
- 3. discusses what your analysis finds, and maybe also what it set out to find

One page means just one page of legible text. You can and probably should include additional pages with a figure or table, references if appropriate, and any appendices. One figure or table is required. But the first page should tell your entire story outlined above in items 1, 2, and 3, with callouts to the figure or table and appendices, etc.

Below are specific instructions for the three deliverables that we need from you during the term:

- I. The research question in the form of three sentences
 - A. The question you seek to answer
 - B. The data you will examine to answer it
 - C. What you think you will find
- II. A revised version of the research question if appropriate, otherwise resubmit the same
- III. The final short project

You should consult the suggested format below <u>and the rubric</u>, which will be visible on bCourses

Fall 2022 Economics 140 Prof. Ryan D. Edwards

1 — Topic statement with 3 sentences

Sentence 1 states the **question** you're seeking to answer Sentence 2 describes the data you're going to analyze: their source and nature Sentence 3 states the answer to the **question** that you expect to find

Here is an example:

- 1. Are people with spouses who smoke more likely to be smokers themselves, and are they in worse health than people whose spouses do not smoke?
- To assess these questions, I will examine data on current smoking and self-reported health status from the U.S. Health and Retirement Study (HRS), a survey of older households that includes information on spouses.
- 3. I expect to find that respondents whose spouses currently smoke are more likely to be smoking currently, and that their self-reported health is worse. This seems consistent with the likely effects of secondhand smoke and with patterns of assortative mating.

Not sure how to start? You could write about:

- Something that you see in a data set that you like. You could examine a dataset we have seen already in ECON 140, or you could consult the <u>Wooldridge datasets</u> that we saw in the Class 01 Jupyter hands-on and in Problem Set 1.
- A concept or relationship you learned in another Economics class, and what you found compelling or questionable about it
- A recent change in law in the city or country you are from, and how an economist might frame or analyze the issue
- One of the <u>IGM Expert Panel Statements</u>; use your own words to explain the prompt, offer a position and defend it, or think of a new question related to the topic
- Topics you might find in recent <u>NBER working papers</u> (start with the abstracts) and write about ones you found interesting. Or check out #EconTwitter

Department of Economics University of California, Berkeley Last updated: 8/28/22 Fall 2022 Economics 140 Prof. Ryan D. Edwards

2 — Revised topic statement

Now that you have thought about it some more, do you need to change topics?

If no, just resubmit your original topic statement for full credit.

If yes, please submit a revised topic statement.

Department of Economics University of California, Berkeley Last updated: 8/28/22 Fall 2022 Economics 140 Prof. Ryan D. Edwards

3 — Final short project

On <u>one page</u>, state your research question, describe the data you found to answer the question, and discuss your initial expectations and your final results.

Write in any style you like, as long as it gets the job done in a page and is clear and legible. One obvious format you could choose for this one-page writeup is:

<u>Paragraph 1</u> states the question you identified and motivates why it is an interesting question. Then it briefly explains the data set you found, and it states your initial hypothesis about the answer to the research question.

<u>Paragraph 2</u> describes the data set you found in greater detail. This can be a formal, dry explanation of where the data came from, what variables they measured, maybe how the data were collected in the first place if you find that interesting, and so on.

<u>Paragraph 3</u> motivates the regression(s) you ran and reveals the regression results. (You could also write a separate paragraph before this that motivates the regression model you use.) Explain what the results reveal and what they do not or cannot reveal. Discuss causality. Perhaps compare what you can do to what you would ideally do if you could run an experiment.

<u>Paragraph 4</u> returns to the original hypothesis you laid out and assesses whether your guesses were correct or not. Here, you should draw some careful conclusions about what you found. What are the policy implications, if any, of your results? And like all good scientists, call for more research on the matter!

Pages 2-3 can include a table, a figure, some citations as needed, and appendix material. This is not a term paper; please keep these to a bare minimum. Do not ask to put 10 tables and figures into this document. Do not conduct a vast literature review and quote everyone. Just identify a question, get some data to answer it, and write about what your results imply. Profit.