## Welcome to ARE 256B Sections!

Mahdi Shams

February 1, 2024

# Outline I

### Introduction I

- ▶ I'm Mahdi Shams, your TA for this course.
- I'm a second-year PhD student in Davis ARE.
- Originally from Tehran, Iran, I pursued my undergraduate studies in engineering there and later earned my master's degree in economics in Toulouse, France.
- I'm interested in the intersection of environmental policy and public economics, and I believe econometrics plays a crucial role in my work.
- I'm here to assist you, so feel free to reach out with any questions or concerns!
- my email is mashams[at]ucdavis[dot]edu.

## Introduction I

It's your turn now!

### Announcements I

### Announcements:

- ► Sections: Fridays 9:00-9:50 am at Veihmeyer Hall 116
- ▶ Mahdi OHs: Fridays 10:00-11:00 am at SSH 2136

## Setup I

### Access to Stata:

- option 1: https://stata-support.ucdavis.edu/
- option 2: https://virtuallab.ucdavis.edu/
- option 3: ARE Computer Lab

### Week 1: Stata Basics I

- type doed in the command window to open the do-file editor
- asking help 1: help "command"
- ▶ asking help 2: google help "command" stata
- basic stata syntax: command varlist if in, options
- setting working directory
- importing data
- browse, describe, ...
- operators
- ▶ getting summary statistics: summ, tabulate|, ...
- ▶ gen, replace, drop, keep, ...
- using functions: log(x)

# Week2: Lectures 1 to 3 (limited dep. variable) and presentation I

#### Lectures

- 1. estimating linear models
- 2. estimating probit models
- 3. plotting the scatter plot
- 4. computing the rmse

### Presentation

Motivation: Fixed costs + now you have more time

- 1. template do file
- 2. making log file and converting it to pdf
- 3. making the tex file (look at the example.tex)

## Week 3 I

- creating a random subsample
- Censoring
- Sample Selection
- exporting plots
- exporting regression tables using estout –
- ► HA1 Questions!

# Censoring I

- ➤ Y is known exactly if some criterion defined in terms of Y is met.
- X variables are observed for the entire sample
- ► Example: Determinants of income; income is measured exactly only if it is above the poverty line. All other incomes are reported at the poverty line (the lower threshold).

# Sample Selection I

- ▶ is observed only if a criteria defined in terms of some other random variables (B) is met (e.g. In our example, the criteria is employment status).
- We observe the determinants of B (which we call by Q) for the entire sample.
- Example: Survey data with item or unit non-response

### Week 4 I

- ► 'Locals' and \$globals in Stata
- ► Loops in Stata
- ► MT 2022 Review?

### Links I

- Example .do file
- Example .tex file
- Stata Visual overview for creating graphs
- exporting regression tables using estout
- ► LATEXin 30 Minutes