

ECON 0150 | Spring 2025 | Homework 11

Due: Tuesday, April 8, 5PM

This homework builds on your previous submission and moves your final project forward by refining your research question, producing more advanced visualizations, and developing a more refined statistical model. You'll work with your assigned project partner(s) to complete this assignment and upload your pdf documents separately.

Some of the following will be similar to your work in Homework 10. Create a document with the following sections:

Section 1. Research question: Based on feedback from HW_10 and discussions with your project partner(s), refine your research question. This does not lock you into a topic. You're more than welcome to change in the future. Your question should:

- Be specific and answerable with the data you have.
- Potentially connect to economic theory or policy.
- Be feasible to address within the scope of the class.

Section 2. Data and sources: Describe the data sources you're using:

- What the variables represent (name, definition, units)
- Any data cleaning or transformations you're performing
- Descriptive figures of the most important variables.

Section 3. Use the data to visualize the data in a way that is relevant to your research question and describe the relationship.

- Use appropriate visualization techniques from Part 1 and Part 2.
- Include clear titles, labels, and a brief caption (1-2 sentences) explaining what the visualization reveals.

Section 4. Develop and run your statistical model to analyze your research question.

- Specify your predictor and outcome variables.
- Write out the your statistical model.
- Run the regression and present the results in a table.

Section 5. Interpretation:

- Interpret the key findings from your model
- Explain how these results address your research question
- Identify at least a potential limitation of your current analysis