

## Deliverable 3: Code Improvements

Due: April 29th at 6 pm on Bloque Neón

The third deliverable will focus on the initial improvement stage of the paper's reproduction, and as with every deliverable, we will lean on the [ACRe Guidelines](#). In this deliverable we will focus on understanding and improving the code.

The task here is to improve documentation by adding comments to the code. You are **expected** to contribute substantially to the reproduction code, i.e., add *lots* of comments. What are *lots*? It will depend on your path since this deliverable will be a choose your own adventure type::

1. The first path you can choose is to work on the original code. If you choose this path, I expect at least 20 substantial additions. These additions must be done in the estimation portion of the code.
2. If the code was written using proprietary statistical software (e.g., Stata or Matlab), you can choose to re-write some parts of it using open-source statistical software (e.g., R, Python, or Julia). For this path your additions have to be at least 10 since you are already translating code. These additions must be done in the estimation portion of the code.

What type of comments I'm expecting? I expect you to engage with the work and explain in your own words what is going on. These questions may guide you:

- Why have they made the choices they made?
- What other approaches might be worth trying?
- What is the correspondence between the estimation code and the estimating equations?
- What don't you understand?

We will evaluate this deliverable by looking at your commits on GitHub. Please provide a document with the links to the identifiers (tags) for each commit. For example, if you went on the first path, you need to turn in 20 links. The first link should be to the reproduction package before you initiate any changes, and the subsequent links to the additions you made.

### Bonus

- Re-organize the reproduction package into a set of folders and sub-folders that follow standardized best practices. See [AEA's reproduction template](#).

- Integrate the documentation with the code by adapting the paper into a literate programming environment (e.g., using Jupyter notebooks, RMarkdown, or a Stata Dynamic Doc).
- If you are contributing to [SSRP](#), use the tags to describe a specific improvement in the [SSRP](#).