Replication File Guide for: "Data Task for Research Assistant (RA) Candidates"

Overview

This document includes ado files, Stata code, data (including raw data and result data), and charts of the results. To reproduce the results, run `code/master.do`. Note that you need to change the paths before running.

The File Structure

The folder has the following structure:

```
project_root/
  ado/
  code/
      master.do                    # Main execution file
      stata_dofile/
          0_Data_Preparation.do    # Data cleaning and outcome construction
          1_Tables.do              # Regression analysis and table creation
          2_Figures.do             # Monthly coefficient plots
  data/
      simulated_CBdata_for_RAtask.csv   # Raw experiment data
      simulated_CBdata_for_RAtask.csv   # Raw bank transaction data
      simulated_experiment_dta          # .dta format of the experimental data
      simulated_CB_data.dta             # .dta format of the transaction data
      firm_level_outcomes.dta           # Processed results of firm-level data
      firm_to_firm_level_outcomes.dta   # Processed results of firm-to-firm level data
  results/
      tables/
          firm_level_results.csv
          firm_to_firm_level_results.csv
      figures/
          monthly_treatment_effects.pdf     # This PDF compiles all figures
```

How to Run the Code

To run: all of the code in this folder can be executed at once via `code/master.do`. Before running, you need to change the paths by modifying the global `dir`. The spots where paths need to be

changed are clearly marked. The `master.do` file will set up the working environment and install the necessary ado files.

Additionally, if you want to run each dofile separately, a separate option is provided. You need to change the paths at the beginning of that dofile to run it independently.

Approximate Time Needed

The analyses on a standard (CURRENT YEAR) desktop machine take approximately:

- The main analysis: 5 minutes. **Note:** the last few figures in the final dofile may take longer to generate; please be patient.
- Machine specifications: CPU: 12th Gen Intel® Core™ i7-12700H, 2.30 GHz; Memory: 16 GB; GPU: NVIDIA GeForce RTX 3060 Laptop GPU 6 GB; Model: Legion Y9000P IAH7H.

Other Notes

1. You can see the construction of the outcome variables in `0_Data_Preparation.do`. Since the task instructions did not specify in detail how to construct the outcomes and were rather general, I chose what I considered to be a reasonable method.

AI Usage Acknowledgement

The vast majority of this data task was completed independently by me. However, I acknowledge using AI during the process, mainly in the following parts:

- Translation and writing.
- Troubleshooting some difficult errors, such as plotting failures. I used AI tools' web search capabilities to look up error messages and the correct usage of certain commands.