Difference-in-Differences Estimators of Intertemporal Treatment Effects

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Instructions for replication

This document presents the material, and describes the steps to follow to replicate the results in «Difference-in-Differences Estimators of Intertemporal Treatment Effects, Clément de Chaisemartin, Xavier D'Haultfoeuille, (2023)» (the paper in what follows).

Access to the data

To replicate the results, first, you need to download the original data by clicking on this link. We use the three following datasets (a detailed description of each of them can be found on the data download website):

- **hmda.dta**
- **hp_dereg_controls.dta**
- **call.dta**

1 Description of the material

The content of the replication package is as follows:

1. The folder "**data**" is empty. **You need to put the three downloaded datasets in that folder.**

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2. The folder "**outputs**" stores the outputs provided by the dofiles, especially Figure 1, in Section 5.2.

3. The folder "**dofiles**" contains all the dofiles needed. The dofiles are:

   (a) "**1_data and design processing.do**" : which imports the data from the folder "data", does the merge, and generates all the variables that are needed for the description of the design.

   (b) "**2_LP weights analysis.do**" : this dofile details and presents the different steps to replicate the Weights analysis described in Section 5.2 of the paper.

   (c) "**3_Figure 1.do**" : this do file creates Figure 1 of the paper.

4. The dofile "**toRun.do**", which is the **ONLY ONE THAT NEEDS TO BE RUN**, sets the working directories, and the paths leading to the different folders described above, before calling each dofile in the folder "**dofiles**" successively (**1_data and design processing.do**, **2_LP weights analysis.do**, and **3_Figure 1.do**).

2 Software version and execution

After having access to the data from the website provided above (make sure you've already put the three datasets in the folder "**data**"), use STATA[1], and open and run the dofile "**toRun.do**" in the main folder of the replication package.

3 Main variables

- The units of analysis are the counties. **county** is the identifier in the dataset, and **state_n** the identifier of the state the county belongs to.
- The outcomes are the logarithm of houses price growth (**Dl_hpi**), and the logarithm of the growth rate of loan volume (**Dl_vloans_b**).
- **inter_bra** is the treatment variable and corresponds to the number of deregulations implemented by the county.
- The inverse number of counties in each state is used as weights (**w1** in the datasets).

[1] install the package did_multiplegt_dyn ***(ssc install did_multiplegt_dyn)*** if not installed yet