



Design of Partial Population Experiments with an Application to Spillovers in Tax Compliance

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Marina Visintini

reproducibility@worldbank.org

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This review verifies the reproducibility of the exhibits included in the paper “*Design of Partial Population Experiments with an Application to Spillovers in Tax Compliance*”.

Contents in this review:

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Main findings

- The code was successfully executed on a new computer after:
 1. Editing directory paths in the `o_master.do` file
 2. Editing the csv file path in the `1_Table_1.R` script
- The output demonstrates consistent stability across multiple runs. Specifically, executing the code two times consecutively yielded identical results.
- The code takes approximately 75 minutes to run.
- We conducted our reproducibility analysis based on the paper shared by the authors by mail on January 23, 2025.
- Every exhibit has been reproduced accurately.
- **Reproducibility Summary:**
 - **Data:** Some data is restricted and has not been included in the reproducibility package. For more details, please refer to the README file.
 - **Code:** All code files (from cleaning to analysis) are included in the reproducibility package.
 - **Outputs:** All outputs are generated by code included in the reproducibility package.
 - **Reproducibility verification:** Reviewers used data provided directly by the authors to conduct the reproducibility verification, and this is not included in the public reproducibility package. The reviewers did not verify if publicly available data matches the data provided by the authors.
 - **Dependencies environment:** The reviewers created a new environment for dependencies using the latest versions available for each dependency at the moment of the review.

*List of exhibits and reproducibility status***Results in the Main Section of the Paper**

- **Figure 1** Reproduced
- **Figure 2** Reproduced.
- **Figure 3** Reproduced.
- **Table 1** Reproduced.
- **Table 2** Reproduced.

Results in the Annex

For the Appendix, we did not review every exhibit. Instead, we randomly selected 10 exhibits from a total of 23. Our review was based on those 10 exhibits, in order of appearance in the paper. Since they were chosen randomly, we are operating under the assumption that if all randomly selected exhibits are reproducible, then the rest should be as well. The seed used to generate the random selection was 539174, the Stata version used was 18, and the exhibits selected were: Figure A.2, Figure A.3, Figure B.7, Figure B.8, Figure B.9, Table A4, Figure B.10, Table A5, Figure B.12, Figure B.16.

- **Figure A.2** Does not apply: the map was produced by municipality employees using GIS tools, as explained in the README.
- **Figure A.3** Does not apply: figure is a manually-created flowchart.
- **Figure B.7** Reproduced.
- **Figure B.8** Reproduced.
- **Figure B.9** Reproduced.
- **Table A4** Reproduced.
- **Figure B.10** Reproduced.
- **Table A5** Reproduced.
- **Figure B.12** Reproduced. Top panel is an illustration, as described in the README.
- **Figure B.16** Reproduced.

Reproduction Environment

- Paper exhibits were reproduced in a computer with the following specifications:
 - OS: Windows 10 Enterprise 22H2
 - Processor: Intel(R) Xeon(R) CPU E7- 4860 @ 2.27GHz 2.26 GHz (2 processors)
 - Memory available: 16 GB
 - Software version: Stata 17 MP Parallel Edition for Windows (64-bit x86-64), R version 4.4.2