



From Disparity to Equality: Strategic Targeting to Close Gender Gaps in Business Upgrading Programs

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This review verifies the reproducibility of the exhibits included in the paper “*From Disparity to Equality: Strategic Targeting to Close Gender Gaps in Business Upgrading Programs*”.

Contents in this review:

1. Main findings
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Main findings

- **Every exhibit in the main section of the paper and 10 randomly selected exhibits in the appendix were reproduced accurately**
- The code was successfully executed on a new computer after:
 1. Changing the file path in the main dofile.
- The output demonstrates consistent stability across multiple runs. Specifically, executing the code two times consecutively yielded identical results.
- The code takes approximately 2 hours to run.
- We conducted our reproducibility analysis based on the paper shared by the authors in the reproducibility package.
- **Verification Process and Data Handling:**
 - The reproducibility package relies on 1 type of data: temporarily embargoed data (expected to be made public in the future)
 - Reviewers used embargoed data provided directly by the authors to conduct the reproducibility verification, and this is not included in the public reproducibility package. The data is forthcoming on the World Bank Microdata Library.
 - *data_hash_report.csv* lists the SHA256 hashes of all files in the Data folder to support data integrity checks. Users who acquire the forthcoming data can use this file to verify that the data has not been altered.
- **Reproducibility Summary:**

- **Data:** All data is temporarily embargoed by the authors (expected to be made public in the future)
- **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.
- **Dependencies environment:** The reviewers created a new environment using the latest versions of dependencies available 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.
- **Table 1** Reproduced.
- **Table 2** Reproduced.
- **Figure 3** Reproduced.

Results in the Annex

For the Appendix, we did not review every exhibit. Instead, we randomly selected 10 exhibits from the remaining datasets to assess the appendix. Our review was based on those 10 exhibits. 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 [132906], the Stata version used was [18.5], and the exhibits selected were: Table A4, Table B1, Table C1, Table C2, Table C3, Figure C1, Table C4, Table C6, Table C8 and Table D2.

- **Table A4** Reproduced.
- **Table B1** Reproduced.
- **Table C1** Reproduced.
- **Table C2** Reproduced.
- **Table C3** Reproduced.
- **Figure C1** Reproduced. There are some formatting differences, but they do not affect reproducibility.
- **Table C4** Reproduced.
- **Table C6** Reproduced.
- **Table C8** Reproduced.
- **Table D2** Reproduced.

Reproduction Environment

Paper exhibits were reproduced on a computer with the following specifications:

- OS: Windows 11 Enterprise
- Processor: Intel(R) Core(TM) i5-1145G7 CPU @ 2.60GHz
- Memory available: 15.7 GB
- Software version: Stata 19.0 MP