



## *“The Role of Technology in Reducing the Gender Gap in Productivity”*

*First Submission: RR\_WLD\_2024\_130*

*María Reyes Retana, Mahin Tariq*

*reproducibility@worldbank.org*

*May 14th, 2024*

This review verifies the reproducibility of the exhibits included in the paper *“The Role of Technology in Reducing the Gender Gap in Productivity”*.

### **Contents in this review:**

1. Main findings
2. List of exhibits and reproducibility status
3. Reproduction Environment

### *Main findings*

- This verification was conducted through a virtual reproducibility verification session on Friday May 3rd, 2024. The authors executed the code during this session, starting from a clean slate with no package dependency. After the code finished running the authors shared with the reproducibility team the exhibits generated and we validated them against their paper exhibits.
- The code in the author’s computer was successfully executed after:
  1. Changing the file path.
  2. Setting the ado folder.
  3. Running the line: `sysdir set PLUS "path"`
- The output demonstrates consistent stability across multiple runs. Specifically, executing the code two times consecutively yielded identical results.
- The code takes approximately 16 minutes to run.
- We conducted our reproducibility analysis based on the paper shared by the authors in their reproducibility package.
- Every exhibit was reproduced with accuracy.
- **Reproducibility Summary:**
  - **Data:** All data is confidential and not included in the package (details provided in README).
  - **Code:** All code files are included in the package.
  - **Outputs:** All outputs are generated by code included in the reproducibility package.
  - **Reproducibility verification:** Reviewers verified the package via virtual verification and did not have access to the data.

*List of exhibits and reproducibility status*

**Results in the Main Section of the Paper**

- **Table 1** Reproduced
- **Table 2** Reproduced
- **Figure 1** Reproduced
- **Table 3** Reproduced
- **Figure 2** Reproduced
- **Table 4** Reproduced
- **Table 5** Reproduced
- **Table 6** Reproduced
- **Table 7** Reproduced
- **Table 8** Reproduced
- **Table 9** Reproduced Values for "Controls", "Sector" and "Country" are missing from the code output.
- **Figure 3a** Reproduced
- **Figure 3b** Reproduced
- **Figure 3c** Reproduced
- **Figure 3d** Reproduced
- **Figure 4** Reproduced.
- **Figure 5** Reproduced
- **Table 10** Reproduced

**Results in the Annex**

- **Table B1** Reproduced
- **Table B2** Reproduced
- **Table B3** Reproduced
- **Table B4** Reproduced
- **Table B5** Reproduced
- **Table B6** Reproduced
- **Table B7** Reproduced
- **Table B8** Reproduced
- **Table C1** Reproduced
- **Table C2** Reproduced
- **Table C3** Reproduced
- **Table C4** Reproduced Values for "Controls" and "Sector X Region" are missing from the code output
- **Table D1** Reproduced
- **Table D2** Reproduced Significance indicators (\*) are missing from the code output.

*Reproduction Environment*

- Paper exhibits were reproduced in a computer with the following specifications:
  - OS: Windows 11 Enterprise
  - Processor: 13th Gen Intel(R) Core(TM) i7-1365U 1.80 GHz
  - Memory available: 31.3 GB usable
  - Software version: Stata version 18