Reproducible Research Repository

Women, Business and the Law 2024

Second Submission: FR_WLD_2024_257
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This review verifies the reproducibility of the exhibits included in the paper *"Women, Business and the Law 2024"*.

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Main findings

- **Every exhibit has been reproduced accurately.**

- The code was successfully executed on a new computer after:

  1. Changing the file paths in the main do file and R script
  2. Setting the ado folder.
  3. Running renv::init() to initialize the R programming environment

- The output demonstrates consistent stability across multiple runs. Specifically, executing the code two times consecutively yielded identical results.

- The code takes approximately 1 hour to run.

- We conducted our reproducibility analysis based on the published report here.

- **Reproducibility Summary**:

  - **Data**: All data sources are publicly available and included in the reproducibility package.
  - **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 had access to the same materials in the public reproducibility package. The reviewers did not verify if publicly available data matches the data in the reproducibility package.
  - **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 Executive Summary

- **Figure ES.1** Does not show analysis results

- **Table ES.1** Does not show analysis results

- **Figure ES.2** Reproduced

- **Figure ES.3** Reproduced

- **Figure ES.4** Reproduced

- **Figure ES.5** Reproduced

- **Figure ES.6** Reproduced The formatting differs between the code and paper outputs, but the values match, so it is considered reproducible.

- **Figure ES.7** Reproduced The formatting differs between the code and paper outputs, but the values match, so it is considered reproducible.

- **Figure ES.8** Reproduced The formatting differs between the code and paper outputs, but the values match, so it is considered reproducible.

- **Figure ES.9** Reproduced

- **Figure ES.10** Does not show analysis results

- **Table ES.A.1** Does not show analysis results

- **Table ES.B.1** Reproduced

Results in Chapter 1

- **Figure B1.1.1** Does not show analysis results

- **Table 1.1** Reproduced

- **Figure 1.1** Reproduced

- **Figure 1.2** Reproduced

- **Figure 1.3** Reproduced The code output chart is organized (by percentage and N in the label) compared to the paper output chart (organized by N and percentage in the label).

- **Figure 1.4** Does not show analysis results

- **Table 1.2** Reproduced

- **Table 1.3** Does not show analysis results

Results in Chapter 2

- **Figure 2.1** Does not show analysis results
- **Table 2.1** Does not show analysis results
- **Figure 2.2** Reproduced
- **Figure 2.3** Reproduced
- **Figure 2.4** Reproduced
- **Figure 2.5** Reproduced
- **Figure 2.6** Reproduced
- **Table 2.2** Reproduced
- **Figure 2.7** Reproduced
- **Figure 2.8** Reproduced
- **Figure 2.9** Reproduced
- **Figure 2.10** Reproduced
- **Figure 2.11** Reproduced
- **Table 2.3** Does not show analysis results
- **Figure 2.12** Reproduced
- **Figure 2.13** Reproduced
- **Figure 2.14** Reproduced
- **Figure 2.15** Reproduced
- **Figure 2.16** Reproduced
- **Figure 2.17** Reproduced
- **Figure 2.18** Reproduced
- **Figure 2.19** Reproduced
- **Figure 2.20** Reproduced
- **Figure 2.21** Reproduced
- **Table 2.4** Reproduced
- **Figure 2.22** Does not show analysis results
- **Table 2A.1** Does not show analysis results

Results in Chapter 3

– **Figure 3.1** Does not show analysis results

– **Map 3.1** Reproduced

– **Figure 3.2** Reproduced

– **Figure 3.3** Reproduced

– **Figure 3.4** Reproduced

– **Figure 3.5** Reproduced The formatting differs between the code and paper outputs, but the values match, so it is considered reproducible.

– **Figure 3.6** Reproduced The percentage drop values reported in the paper are missing from the code output. We verified these values manually and they match, therefore, this exhibit is considered reproducible.

– **Map 3.2** Reproduced

– **Figure 3.7** Reproduced

– **Figure 3.8** Reproduced

– **Figure 3.9** Reproduced

– **Figure 3.10** Reproduced

– **Figure 3.11** Reproduced

– **Map 3.3** Reproduced

– **Figure 3.12** Reproduced

– **Figure 3.13** Reproduced

– **Figure 3.14** Reproduced

– **Figure 3.15** Reproduced

– **Figure 3.16** Reproduced

– **Figure 3.17** Reproduced The formatting differs between the code and paper outputs, but the values match, so it is considered reproducible.

– **Figure 3.18** Reproduced The formatting differs between the code and paper outputs, but the values match, so it is considered reproducible.

– **Figure 3.19** Reproduced

– **Table 3A.1** Reproduced

Results in the Annex

– **Table A.1** Does not show analysis results

– **Table A.2** Does not show analysis results

– **Table A.3** Does not show analysis results

– **Table A.4** Does not show analysis results

– **Table A.5** Does not show analysis results

Reproduction Environment

– Paper exhibits were reproduced in 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 18.0 MP, R studio 3.14