



How Have Gender Gaps in the Colombian Labor Market Changed during the Economic Recovery?

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This review verifies the reproducibility of the exhibits included in the paper “*How Have Gender Gaps in the Colombian Labor Market Changed during the Economic Recovery?*”.

Contents in this review:

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Main findings

1. We conducted our reproducibility analysis based on the code available on [Github repository](#) shared by the authors, and compared it to the paper they sent via email on April 2nd.
2. The code was successfully executed on a new computer after:
 - Updating the directory path
 - Commenting out first do file that prepares the intermediate dataset. (This is already implemented in the version shared).
3. The output generated by the Stata code was stable across two successive runs.
4. The Stata code takes about 5 hours to run.
5. The exhibits in the paper are reproducible.
6. **Reproducibility Summary:**
 - **Data:** All data sources are publicly available but not all are included in the package.
 - **Code:** All code files, from cleaning to analysis, are included in the package. The first cleaning codes are commented out as the raw yearly data sources are unavailable in the 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 package.

List of exhibits and reproducibility status

Results in the Main Section of the Paper

- **Table 1** Does not apply
- **Figure 1** Reproduced.
- **Figure 2** Reproduced. The 2021 value for women in the paper is 18.9, whereas in the code output it is 18.8
- **Figure 3** Reproduced.
- **Figure 4** Reproduced.
- **Figure 5** Reproduced.
- **Figure 6** Reproduced.
- **Figure 7** Reproduced.
- **Figure 8** Reproduced.
- **Figure 9** Reproduced.
- **Figure 10** Reproduced.
- **Figure 11** Results reproduced, but figure includes manual changes from code output. The figures were compared against the values in columns G to H of the "fig_11_12" sheet in the "Graph_excel.xlsx" file. The values match, however the figure was not generated by code.
- **Figure 12** Results reproduced, but figure includes manual changes from code output. The figures were compared against the values in columns C to F of the "fig_11_12" sheet in the "Graph_excel.xlsx" file. The values match, however the figure was not generated by code.
- **Figure 13** Reproduced.
- **Figure 14** Results reproduced, but figure includes manual changes from code output. The values depicted in the figures were cross-referenced with the variable values for 2019 found in the "fig_14_15" sheet of the "Graph_excel.xlsx" file. The values match, however the figure was not generated by code.
- **Figure 15** Results reproduced, but figure includes manual changes from code output. The values depicted in the figures were cross-referenced with the variable values for 2021 found in the "fig_14_15" sheet of the "Graph_excel.xlsx" file. The values match, however the figure was not generated by code.
- **Figure 16** Results reproduced, but figure includes manual changes from code output. The values for men were compared against columns F and J, while for women, they were compared against columns G and K of the "fig_16_19" sheet in the "Graph_excel.xlsx" file. The values match, however the figure was not generated by code.
- **Figure 17** Results reproduced, but figure includes manual changes from code output. The values were cross-referenced with the following columns of "fig_17" sheet in the "Graph_excel.xlsx" file. The values match, however the figure was not generated by code.

Statistics in the figure	Columns
Men Occupation UFW	C
Women Occupation UFW	F
Men GRUFW	I
Women GRUFW	J
Men IR	G
Women IR	H

- **Figure 18** Reproduced.
- **Figure 19** Results reproduced, but figure includes manual changes from code output. The values for men were compared against columns P and T, while for women, they were compared against columns Q and U of the "fig_16_19" sheet in the "Graph_excel.xlsx" file. The values match, however the figure was not generated by code.
- **Figure 20** Reproduced.
- **Figure 21** Reproduced.
- **Figure 22** Reproduced.
- **Figure 23** Reproduced.
- **Figure 24** Reproduced.
- **Figure 25** Reproduced.
- **Figure 26** Reproduced.
- **Figure 27** Reproduced.
- **Figure 28** Reproduced.
- **Figure 29** Reproduced.
- **Figure 30** Reproduced.
- **Figure 31** Reproduced.
- **Figure 32** Reproduced.
- **Figure 33** Results reproduced, but figure includes manual changes from code output. The values for "explained," "unexplained," and "estimated gap" were compared to the corresponding values in rows 7, 8, and 6, respectively, from the "OB_hecman_hourly" sheet in the "Table_results.xlsx" file. Before comparison, each value was adjusted by subtracting 1 and then multiplying by 100.
- **Figure 34** Results reproduced, but figure includes manual changes from code output. The values for "explained," "unexplained," and "estimated gap" were compared to the corresponding values in rows 7, 8, and 6, respectively, from the "OB_hecman_monthly" sheet in the "Table_results.xlsx" file. Before comparison, each value was adjusted by subtracting 1 and then multiplying by 100.

- **Table 2** Reproduced.
- **Table 3** Results reproduced, but table includes manual changes from code output. The values were compared with code output in "OB_hecman_hourly" sheet in the "Table_results.xlsx" file based on instructions provided by the authors.
- **Table 4** Results reproduced, but table includes manual changes from code output. The values in the paper are in percentage, whereas, the values in the code output are in decimals.
- **Table 5** Results reproduced, but table includes manual changes from code output. The values were compared with code output in "OB_hecman_monthly" sheet in the "Table_results.xlsx" file based on instructions provided by the authors.
- **Table 6** Does not apply

Reproduction Environment

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

- OS: Windows 10 Enterprise, version 21H2
- Processor: Intel(R) Xeon(R) Gold 6226R CPU @ 2.90GHz, 16 Core(s)
- Memory available: 109 GB
- Software version: Stata 17