



## *The Effects of Regulatory Information Systems on Credit Allocation: Evidence from Brazil's Rural Credit Bureau*

First Submission: RR\_BRA\_2025\_508

Camila Ayala

[reproducibility@worldbank.org](mailto:reproducibility@worldbank.org)

February 10, 2026

This review verifies the reproducibility of the exhibits included in the paper “*The Effects of Regulatory Information Systems on Credit Allocation: Evidence from Brazil's Rural Credit Bureau*”.

### Contents in this review:

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

### *Main findings*

- **Every exhibit in the main section of the paper has been reproduced accurately.**
- The code was successfully executed on a new computer after:
  1. Updating the file path in `0_master_dataset.do` do-file and running the code.
  2. Updating the file path in `1_create_data.do` do-file and running the code.
  3. Updating the file path in `2_analysis.do` do-file and running the code.
  4. Updating the file path in `QGIS_Figure2.py` script and running the code.
- The output demonstrates consistent stability across multiple runs. Specifically, executing the code two times consecutively yielded identical results.
- The code takes approximately 45 minutes 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 one type of data: open.
  - Data is publicly available but not all data is included in the reproducibility package due to file size constraints.
  - Reviewers used data provided directly by the authors to conduct the reproducibility verification.
  - `data_hash_report.csv` lists the SHA256 hashes of all files in the Data folder to support data integrity checks. Users who acquire the open data can use this file to verify that the data has not been altered.

- **Reproducibility Summary:**

- **Data:** Data is publicly available but not all is included in the reproducibility package due to file size constraints.
- **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 Panel A Reproduced.** Verified against Fig1A.gph.
- **Figure 1 Panel B Reproduced.** Verified against Fig1B.gph.
- **Figure 2 Reproduced.** Verified against Fig2.png.
- **Figure 3 Panel A Reproduced.** Verified against Fig3A.gph.
- **Figure 3 Panel B Reproduced.** Verified against Fig3B.gph.
- **Figure 3 Panel C Reproduced.** Verified against Fig3C.gph.
- **Figure 3 Panel D Reproduced.** Verified against Fig3D.gph.
- **Figure 4 Panel A Reproduced.** Verified against Fig4A.gph.
- **Figure 4 Panel B Reproduced.** Verified against Fig4B.gph.
- **Figure 4 Panel C Reproduced.** Verified against Fig4C.gph.
- **Figure 4 Panel D Reproduced.** Verified against Fig4D.gph.
- **Figure 4 Panel E Reproduced.** Verified against Fig4E.gph.
- **Figure 4 Panel F Reproduced.** Verified against Fig4F.gph.
- **Figure 5 Panel A Reproduced.** Verified against Fig5A.gph.
- **Figure 5 Panel B Reproduced.** Verified against Fig5B.gph.
- **Table 1 Reproduced.** Verified against sheet T1 of Tables.xlsx.
- **Table 2 Reproduced.** Verified against sheet T2 of Tables.xlsx.
- **Table 3 Reproduced.** Verified against sheet T3 of Tables.xlsx.
- **Table 4 Reproduced.** Verified against sheet T4 of Tables.xlsx.

### *Reproduction Environment*

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

- OS: Windows 11 Enterprise
- Processor: Intel(R) Xeon(R) Gold 6226R CPU @ 2.90GHz
- Memory available: 32.0 GB
- Software version: Stata 19.5 MP; Python 3.12.4 (used with QGIS 3.38.1).