



Growth, Structural Transformation and Carbon Emissions

First Submission: RR_WLD_2025_395

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This review verifies the reproducibility of the exhibits included in the paper “*Growth, Structural Transformation and Carbon Emissions*”.

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Main findings

- **Every exhibit has been reproduced accurately.**
- The code was successfully executed on a new computer after:
 1. Updating the working directory
- The output demonstrates consistent stability across multiple runs. Specifically, executing the code two times consecutively yielded identical results.
- The code takes approximately 30 minutes to run.
- We conducted our reproducibility analysis based on the paper shared by the authors in the package.
- **Verification Process and Data Handling:**
 - The Reviewers had access to the same materials in the public reproducibility package.
 - All data needed to reproduce the results is included in the published package. Reviewers found that currently available datasets from the listed data sources do not match the data in the reproducibility package, likely due to version changes.
 - *data_hash_report.csv* lists the SHA256 hashes of all files in the Data folder to support data integrity checks.
- **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.
 - **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 1a** Reproduced.
- **Figure 1b** Reproduced.
- **Figure 2a** Reproduced.
- **Figure 2b** Reproduced.
- **Figure 3** Reproduced.
- **Figure 4a** Reproduced.
- **Figure 4b** Reproduced.
- **Figure 5a** Reproduced.
- **Figure 5b** Reproduced.
- **Figure 6a** Reproduced.
- **Figure 6b** Reproduced.
- **Table 1** Reproduced.
- **Figure 7a** Reproduced.
- **Figure 7b** Reproduced.
- **Figure 7c** Reproduced.
- **Figure 7d** Reproduced.
- **Table 2** Reproduced.
- **Figure 8** Reproduced.
- **Table 3** Reproduced.
- **Table 4** Reproduced.
- **Table 6 Panel A** Reproduced.
- **Table 6 Panel B** Reproduced.
- **Figure 9** Reproduced.
- **Figure 10** Reproduced.
- **Table 7** Reproduced.

Reproduction Environment

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

- OS: Windows 11 Enterprise
- Processor: INTEL(R) XEON(R) PLATINUM 8562Y+ 2.80 GHz (4 processors)
- Memory available: 32.0 GB
- Software version: Stata 18.0 MP