Reproducible Research Repository

At the Edge of Risk: Assessing Mongolia's 'Plausible Worst-Case' Scenario

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This review verifies the reproducibility of the exhibits included in the paper *"At the Edge of Risk: Assessing Mongolia's 'Plausible Worst-Case' Scenario"*.

Contents in this review:

Main findings

- **Every exhibit of the paper has been reproduced accurately.**
- The code was successfully executed on a new computer after:
  1. Recreate the environment using the requirenments.txt file and run the file run.cmd.
- 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 paper shared by the authors by email on March 5th, 2026.
- **Verification Process and Data Handling**:
  - The reproducibility package relies on 2 types of data: open, and limited-access. The two limited-access datasets are the GLORIA database, available upon request with human approval, and the scenario input files, which are forthcoming on the Development Data Hub and will be available to World Bank staff.
  - Open data is included in the public reproducibility package.
  - Reviewers used forthcoming/accessible/restricted data provided directly by the authors to conduct the reproducibility verification, and this is not included in the public reproducibility package. The data is forthcoming on the World Bank Development Data Hub.
  - *data_hash_report.csv* lists the SHA256 hashes of all files in the Data folder to support data integrity checks. Users who acquire the forthcoming/accessible/limited-access/restricted data can use this file to verify that the data has not been altered.

- **Reproducibility Summary**:
  - **Data**: Some data is limited-access and has not been included in the reproducibility package. For more details, please refer to the README file.
  - **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** Does not apply.
- **Figure 2** Results reproduced. The figure was manually prepared using the data in gdp_results_overall.csv
- **Figure 3** Reproduced.
- **Table 1** Does not apply.

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 GB
- Software version: Python 3.11.7