



Competing In The Face Of Climate Risks: Evidence From Firms And Policy Priorities In MENAAP

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This review verifies the reproducibility of the exhibits included in the paper "*Competing In The Face Of Climate Risks: Evidence From Firms And Policy Priorities In MENAAP*".

Contents in this review:

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Main findings

- **Every exhibit in the main section of the paper and 10 randomly selected exhibits in the appendix were reproduced accurately**
- The code was successfully executed on a new computer after:
 1. Obtaining acces to the restricted datasets "mena_recent_v2.dta" and "fDi Markets" datasets
 2. Running R script "install_packages.R" in Chapter 1 > Figure_1.1-1.6 folder
 3. Opening "mena_main.R" script in Chapter 1 > Figure_1.1-1.6 folder , updating the directory and running it
 4. Opening R script "o_master.R", in Chapter 1 > Figure_1.7-1.8 folder, updating the directory and running it
 5. Opening "main.do" script in Chapter 2 > Figure_2.2-2.4, updating the directories and running it
 6. Opening "o_directories_and_packages.R" R script in Chapter 2 > Figure_2.5 - 2.9 folder, editing the directory and running the script
- The output demonstrates consistent stability across multiple runs. Specifically, executing the code two times consecutively yielded identical results.
- The code takes approximately 1.5 hours to run.
- We conducted our reproducibility analysis based on the paper shared by the authors
- **Verification Process and Data Handling:**
 - The reproducibility package relies on 3 types of data: open, accessible (public but not included in the reproducibility package) and restricted data (available only from the data owners).

- Open data is included in the public reproducibility package.
- *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 restricted and has not been included in the reproducibility package. For more details, refer to the README file..
 - **Code:** All code files are included in the reproducibility package but operate from intermediate data, not raw data.
 - **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

- **Map 1.1** Reproduced.
- **Figure 1.1** Reproduced.
- **Figure 1.2** Reproduced.
- **Figure 1.3** Reproduced.
- **Figure 1.4** Reproduced manually in excel
- **Figure 1.5 a** Reproduced, manual steps Data for this figure were directly taken from IEA Energy and Carbon Tracker 2023 (<https://www.iea.org/data-and-statistics/data-product/iea-energy-and-carbon-tracker>) and the figure was done manually in Excel.
- **Figure 1.5 b** Reproduced, manual steps
- **Figure 1.6 a** Reproduced.
- **Figure 1.6 b** Reproduced.
- **Figure 1.7 a** Reproduced.
- **Figure 1.7 b** Reproduced.
- **Figure 1.8** Reproduced.
- **Figure 2.1** Does not apply
- **Figure 2.2 a** Reproduced.
- **Figure 2.2 b** Reproduced.

- **Figure 2.2 c** Reproduced.
- **Figure 2.2 d** Reproduced.
- **Figure 2.2 e** Reproduced.
- **Figure 2.2 f** Reproduced.
- **Figure 2.2 g** Reproduced.
- **Figure 2.2 h** Reproduced.
- **Figure 2.2 i** Reproduced.
- **Figure 2.2 j** Reproduced.
- **Figure 2.2 k** Reproduced.
- **Figure 2.2 l** Reproduced.
- **Table 2.1** Reproduced.
- **Figure 2.3 a** Reproduced.
- **Figure 2.3 b** Reproduced.
- **Figure 2.3 c** Reproduced.
- **Figure 2.4** Reproduced.
- **Figure 2.5** Reproduced.
- **Figure 2.6** Reproduced.
- **Figure 2.7** Reproduced.
- **Figure 2.8 a** Reproduced. There is a slight difference in scales
- **Figure 2.8 b** Reproduced. There is a slight difference in scales
- **Figure 2.9 a** Reproduced.
- **Figure 2.9 b** Reproduced.
- **Figure 3.1** Reproduced, manual steps This figure was created in Excel by the authors using data from The Climate Policy Assessment Tool.
- **Figure 3.2** Does not apply This figure was taken from UNEP and IFC 2024 (<https://www.ifc.org/content/dam/ifc/doc/2024/cooler-finance-report.pdf>)

Results in the Annex

For the Appendix, we did not review every exhibit. Instead, we randomly selected 10 exhibits from the remaining datasets to assess the appendix. Our review was based on those 10 exhibits. Since they were chosen randomly, we are operating under the assumption that if all randomly selected exhibits are reproducible, then the rest should be as well. The seed used to generate the random selection was 399269, the Stata version used was 19.5, and the exhibits selected were: Table 1e.3, Table 1e.4, Table 1e.6, Table 1f.1, Figure 1f.8, Table 2a.1, Figure 2e.1, Table 2f.1, Figure 3a.2, Figure 3a.3.

- **Table 1e.3** Reproduced.
- **Table 1e.4** Reproduced.
- **Table 1e.6** Reproduced.
- **Table 1f.1** Reproduced.
- **Figure 1f.8** Reproduced.
- **Table 2a.1** Reproduced.
- **Figure 2e.1** Reproduced.
- **Table 2f.1** Reproduced.
- **Figure 3a.2** Reproduced Manually created in excel
- **Figure 3a.3** Reproduced Manually created in excel

Reproduction Environment

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

- OS: Windows 11 Enterprise
- Processor: Intel(R) Xeon(R) Gold 5218 CPU @ 2.30GHz (2.30 GHz) (2 processors)
- Memory available: 16 GB
- Software version: R version 4.5.2