



Reproducible Research Repository

Small Emerging Markets: A New Asset Class

First Submission: RR_WLD_2025_524

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This review verifies the reproducibility of the exhibits included in the paper “*Small Emerging Markets: A New Asset Class*”.

Contents in this review:

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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 *Main.do* do-file 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 2 minutes to run.
- We conducted our reproducibility analysis based on the paper shared by the authors by email on December 22nd, 2025.
- **Verification Process and Data Handling:**
 - The reproducibility package relies on two types of data: open, and limited-access (available to researchers with Bloomberg access).
 - Open data is included in the public reproducibility package. Limited-access data has not been included in the reproducibility package
 - Reviewers used limited-access data provided directly by the authors to conduct the reproducibility verification, and this is not 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 limited-access 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

- **Table 1 Reproduced.** Verified against `sum_stats.csv`. Minor formatting differences.
- **Table 2 Reproduced.** Verified against `Correlation_Matrix.xlsx`. Minor formatting differences.
- **Table 3 Reproduced.** Verified against `Findings.xlsx`. Minor formatting differences.
- **Figure 1 - Panel A Reproduced.** Verified against `correlation3.pdf`.
- **Figure 1 - Panel B Reproduced.** Verified against `alpha_eme.pdf`.
- **Figure 2 - Panel A Reproduced.** Verified against `covariance_pop_lmic.pdf`.
- **Figure 2 - Panel B Reproduced.** Verified against `beta_pop_lmic.pdf`.
- **Figure 3 Reproduced.** Verified against `alpha_pop_lmic.pdf`.
- **Figure 4 Reproduced.** Verified against `covariance_pop_treynor.pdf`.
- **Figure 5 - Panel A Reproduced.** Verified against `covariance_pop_hic.csv`.
- **Figure 5 - Panel B Reproduced.** Verified against `beta_pop_hic.csv`.
- **Figure 6 - Panel A Reproduced.** Verified against `alpha_GDP.pdf`.
- **Figure 6 - Panel B Reproduced.** Verified against `covar_GDP.pdf`.
- **Figure 6 - Panel C Reproduced.** Verified against `alpha_GDPpercapita.pdf`.
- **Figure 6 - Panel D Reproduced.** Verified against `covar_GDPpercapita.pdf`.
- **Figure 6 - Panel E Reproduced.** Verified against `alpha_area.pdf`.
- **Figure 6 - Panel F Reproduced.** Verified against `covar_area.pdf`.
- **Figure 6 - Panel G Reproduced.** Verified against `alpha_vulnerability.pdf`.
- **Figure 6 - Panel H Reproduced.** Verified against `covar_vulnerability.pdf`.
- **Figure 7 Reproduced.** Verified against `time_correlation.pdf`.

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: 16.0 GB
- Software version: Stata 19.5 MP