



"Crowding In" Effect of Public Investment on Private Investment Revisited

Third Submission: RR_WLD_2024_187

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This review verifies the reproducibility of the exhibits included in the paper *"Crowding In" Effect of Public Investment on Private Investment Revisited*.

Contents in this review:

1. Main findings
2. List of exhibits and reproducibility status
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Main findings

- The code was successfully executed on a new computer after:
 1. Changing the file path in the main dofile
- Part of the verification was conducted during a virtual reproducibility verification session on November 27, 2024. During this session, the authors executed the code to generate the intermediate data from the raw data, starting from a clean slate with no package dependencies. Once the code finished running, the authors shared the intermediate data (*Aggregated_DRS.dta*) and exhibits derived from the raw data with the reproducibility team. These were validated against the corresponding exhibits in their paper. This aggregated data is the input of the reproducibility package.
- The output demonstrates consistent stability across multiple runs. Specifically, executing the code two times consecutively yielded identical results.
- The code takes approximately 15 minutes to run
- We conducted our reproducibility analysis based on the paper shared by the authors in the reproducibility package on November 25th.
- Every exhibit reproduced accurately.
- **Reproducibility Summary:**
 - **Data:** Some data is restricted and has not been included in the reproducibility package. For more details, please refer to the README file.
 - **Code:** Some code files are restricted (details provided in the README file).
 - **Outputs:** Some outputs are not generated by code (virtually verified). For more details, please refer to the README file.

- **Reproducibility verification:** Reviewers used data provided directly by the authors to conduct the reproducibility verification, and this is not included in the public reproducibility package. The reviewers did not verify if publicly available data matches the data provided by the authors.
- **Dependencies environment:** The reviewers created a new environment for dependencies using the latest versions available for each dependency at the moment of the review.

List of exhibits and reproducibility status

Results in the Main Section of the Paper

- **Figure 1a** **Redproduced** The figure in the paper was verified against Figure 14B from "An Agenda for Action - Emerging Insights from World Bank Group 2021-22 Country Climate and Development Reports."
- **Figure 1b** **Redproduced** The figure in the paper was verified against Figure 0.2C from "Kose, M.A. and Ohnsorge, F. eds., 2024. Falling long-term growth prospects: trends, expectations, and policies."
- **Figure 2a** **Reproduced** Reviewers verified this figure via virtual verification and did not have access to the data.
- **Figure 2b** **Reproduced** Reviewers verified this figure via virtual verification and did not have access to the data.
- **Table 1** **Reproduced**
- **Table 2** **Reproduced**
- **Table 3** **Reproduced**
- **Table 4** **Reproduced**
- **Table 5** **Reproduced**
- **Table 6** **Reproduced**
- **Table 7** **Reproduced**
- **Figure 3a** **Reproduced**
- **Figure 3b** **Reproduced**
- **Figure 3c** **Reproduced**
- **Figure 3d** **Reproduced**
- **Figure 3e** **Reproduced**
- **Figure 3f** **Reproduced**
- **Figure 4a** **Reproduced**
- **Figure 4b** **Reproduced**

- **Figure 4c** Reproduced
- **Figure 4d** Reproduced
- **Figure 4e** Reproduced
- **Figure 4f** Reproduced

Results in the Annex

- **Table B1** Reproduced Reviewers verified this table via virtual verification and did not have access to the data.
- **Table C1** Reproduced
- **Table C2** Reproduced
- **Table D1** Reproduced

Reproduction Environment

- Paper exhibits were reproduced in a computer with the following specifications:
 - OS: Windows 11 Enterprise
 - Processor: Intel(R) Core(TM) i5-1145G7 CPU @ 2.60GHz
 - Memory available: 15.7 GB
 - Software version: Stata 18.0 MP