

Replication package for:

The Scars of Global Growth Shocks: Uneven Recovery in FDI Announcements (August 2026)

Overview

To replicate the paper, run files in the order presented below. All files can also be called with “wp_replication\master_file.do”. To run the master file, set the local directory to the location of the project’s main folder: **global path "<update here>\wp_replication"**

Running the master script produces the data used to generate all of the figures and tables in the paper. Total runtime is approximately 7 minutes using Stata MP 19.5. In the master file, a log file records the run as “log_replication.smcl”. The master file ensures that the following programs are installed for the rest of the files to run smoothly: egenmore, grc1leg, outreg2, and xtsc. All output can be checked in “wp_replication\output”.

Data

All raw publicly accessible datasets should be stored in the data folder. The raw datasets are named as the following in “wp_replication\data\raw”, in alphabetical order of file name:

- blocs.dta (from Gopinath et al. 2025 and Presbitero 2024)
- data_gpr_export.dta (from Caldara and Iacoviello 2022)
- fdi_wdi_july2026.csv (from World Bank’s World Development Indicators)
- gfi_data_fernandezvilla.dta (from Fernandez-Villaverde et al. 2024)
- IdealpointsJuly2025.dta (from Voeten 2009)
- kaopen_2020.dta (from Chinn and Ito 2008)
- POLCON_2021_VDEM.xlsx (from Henisz and Zelner 2016)
- RIFPFFNA.xlsx (from Board of Governors of the Federal Reserve System)
- vix_data_daily.dta (from Chicago Board Options Exchange (CBOE))
- WEOhistorical_oct2025.xlsx (from IMF)
- WEOOct2024alla.xlsx (from IMF)
- wui.xlsx (from Ahir et al. 2022)

Country classification files are included in the package. We rely on the World Bank Prospect’s Group classification. Separate files are used to merge an indicator for economies that are EMDEs (wb_classification24_ifscode.dta) and to merge the list of economies that are classified as advanced economies (PG_AEs_Feb2024.dta). A separate

file merges indicators for names and 3-character codes (country_namescode.dta) to help in merging various datasets.

Restricted datasets from fDi Markets and International Country Risk Guide (ICRG) are accessible through subscriptions.¹

- fDi Markets: We use country-level data on the number of FDI projects. The dataset we use includes countries, dates, sectors, and indicators for projects related to environmental technologies. A data file with sector mapping between sectors in the fDi Markets database and ISIC codes is also used. The website to request access is here: <https://www.fdimarkets.com/>. In our replication files the fDi markets data are named as: “fDi Markets data Jan 10 - Dec 25 including company ID (IC Unit internal use only).xlsx”, “fDi Markets data Jan2003-Dec2022 (excluding intrastate).xlsx”, and “sectors_fdimarkets_2010.dta”.
- ICRG: We use country-level data for the “Political Risk Rating” variable. The dataset we use includes countries, dates, and a value for political risk. The website to request access is here: <https://www.prsgroup.com/explore-our-products/icrg/>. The file we use is named as: “ICRG_ANNUAL_Feb_21_2022.dta”.

File "wp_replication\do-files\data_prep\0_data_prep_all.do" imports raw data, cleans, and transforms the data for analysis. That file refers to six sub-do files that setup the following:

- (1) FDI markets data,
 - a. “wp_replication\do-files\data_prep\1_setup_fdi_announcements.do”
- (2) WEO data,
 - a. “wp_replication\do-files\data_prep\2_setup_weo_dataents.do”
- (3) control variables,
 - a. “wp_replication\do-files\data_prep\3_setup_global.do”
 - b. “wp_replication\do-files\data_prep\4_setup_domestic.do”

¹ Detailed information on data availability and access rights is provided at the end of this file. Importantly, note that some files used for the analysis **cannot be publicly shared**. These include International Country Risk Guide (ICRG) data and fDi Markets data. From ICRG, we use their political risk index which is needed for Figures 3a and 3b in the main paper. For fDi Markets data, we use it in the following descriptives and in all of the regression results: Figures 1-5 in the main paper (including all sub-figures); Appendix Table A2 in the appendix; and all sub-figure within Appendix Figures A3 and A5-A14 in the appendix.

(4) actual FDI,

a. "wp_replication\do-files\data_prep\5_setup_fdi_wdi.do"

(5) combines and transforms the data for analysis.

a. "wp_replication\do-files\data_prep\6_data_prep_final.do"

Output

Descriptive figures and regression results are all saved to: "wp_replication\output" with names that correspond to numbering in the paper. A sub-folder, "wp_replication\output\appendix", stores figures and tables as presented in the appendix.

1. For each figure in the main paper:

- Figure 1: "wp_replication\do-files\figure_1.do"
- Figure 2: "wp_replication\do-files\figure_2.do"
- Figure 3: "wp_replication\do-files\figure_3.do"
- Figure 4:
 - o 4a: "wp_replication\do-files\figure_4a.do"
 - o 4b: "wp_replication\do-files\figure_4b.do"
 - o 4c: "wp_replication\do-files\figure_4c.do"
 - o 4d: "wp_replication\do-files\figure_4d.do"
- Figure 5: "wp_replication\do-files\figure_5.do"

2. For each figure in the appendix:

- Figure A1: "wp_replication\do-files\appendix\figure_a1.do"
- Figure A2: "wp_replication\do-files\appendix\figure_a2.do"
- Figure A3: "wp_replication\do-files\appendix\figure_a3.do"
- Figure A4: "wp_replication\do-files\appendix\figure_a4.do"
- Figure A5:
 - o A5a: "wp_replication\do-files\appendix\figure_a5a.do"
 - o A5b: "wp_replication\do-files\appendix\figure_a5b.do"
 - o A5c: "wp_replication\do-files\appendix\figure_a5c.do"
 - o A5d: "wp_replication\do-files\appendix\figure_a5d.do"
 - o A5e and A5f: "wp_replication\do-files\appendix\figure_a5e_a5f.do"
- Figure A6: "wp_replication\do-files\appendix\figure_a6.do"
- Figure A7:

- A7a and A7b: "wp_replication\do-files\appendix\figure_a7a_a7b.do"
 - A7c and A7d: "wp_replication\do-files\appendix\figure_a7c_a7d.do"
- Figure A8: "wp_replication\do-files\appendix\figure_a8.do"
- Figure A9:
 - A9a and A9b: "wp_replication\do-files\appendix\figure_a9a_a9b.do"
 - A9c and A9d: "wp_replication\do-files\appendix\figure_a9c_a9d.do"
 - A9e and A9f: "wp_replication\do-files\appendix\figure_a9e_a9f.do"
- Figure A10: "wp_replication\do-files\appendix\figure_a10.do"
- Figure A11:
 - A11a and A11b: "wp_replication\do-files\appendix\figure_a11a_a11b.do"
 - A11a and A11b: "wp_replication\do-files\appendix\figure_a11c_a11d.do"
- Figure A12:
 - A12a-c: "wp_replication\do-files\appendix\figure_a12a-c.do"
 - A12d: "wp_replication\do-files\appendix\figure_a12d.do"
- Figure A13: "wp_replication\do-files\appendix\figure_a13.do"
- Figure A14:
 - A14a and A14b: "wp_replication\do-files\appendix\figure_a14a-b.do"
 - A14c and A14d: "wp_replication\do-files\appendix\figure_a14c-d.do"

3. For each table in the appendix:

- Table A1: This is a list of variables and sources.
- Table A2: "wp_replication\do-files\appendix\table_a2.do"
- Table A3: This is a list of countries and classifications.

Data Availability Statement

1. World Bank Prospects Group country classifications

Source: World Bank

Year: 2024

URL: <https://www.worldbank.org/en/research/brief/prospects-group-analysis>

Access Date (Month-Year): February 2024

Access Type: Open

Citation: World Bank. 2024. *Global Economic Prospects*. January. Washington, DC: World Bank.

2. fDi Markets

Source: fDi Markets

Year: 2026

URL: <https://www.fdimarkets.com/>

Access Date (Month-Year): March 2026

Access Type: Restricted

Citation: fDi Markets. 2026. [dataset]. Accessed March 2026.

3. World Development Indicators

Source: World Bank

Year: 2025

URL: <https://databank.worldbank.org/source/world-development-indicators>

Access Date (Month-Year): November 2025

Access Type: Open

Citation: World Bank. 2025. "World Development indicators" [dataset]. <https://databank.worldbank.org/source/world-development-indicators>. Accessed November 2025.

4. World Economic Outlook Database

Source: IMF

Year: 2025

URL: <https://data.imf.org/en/datasets/IMF.RES:WEO>

Access Date (Month-Year): October 2025

Access Type: Accessible

Citation: IMF. 2025. "World Economic Outlook Database" [dataset]. <https://data.imf.org/en/datasets/IMF.RES:WEO>. Accessed October 2025.

1. Measuring Geopolitical Risk

Source: Caldara and Iacoviello

Year: 2022

URL: <https://www.matteoiacoviello.com/gpr.htm>

Access Date (Month-Year): June 2026

Access Type: Accessible

Citation: Caldara, D., and M. Iacoviello. 2022. Measuring Geopolitical Risk. *American Economic Review* 112 (4): 1194–225.

2. Federal Funds Effective Rate

Source: Board of Governors of the Federal Reserve System

Year: 2026

URL: <https://fred.stlouisfed.org/series/fedfunds>

Access Date (Month-Year): June 2026

Access Type: Accessible

Citation: Board of Governors of the Federal Reserve System (US), Federal Funds Effective Rate [FEDFUNDS], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/FEDFUNDS>.

3. CBOE Volatility Index

Source: Chicago Board Options Exchange (CBOE)

Year: 2026

Access Date (Month-Year): June 2026

URL: <https://www.cboe.com/tradable-products/vix/vix-historical-data/>

Access Type: Accessible

Citation: Chicago Board Options Exchange (CBOE). CBOE Volatility Index (VIX). <https://www.cboe.com/tradable-products/vix/vix-historical-data/>

4. Are We Fragmented Yet? Measuring Geopolitical Fragmentation and its Causal Effects

Source: Fernandez-Villaverde, Mineyama, and Song

Year: 2024

Access Date (Month-Year): January 2025

URL: <https://geopol-fragmentation-index.com/>

Access Type: Accessible

Citation: Fernández-Villaverde, J., T. Mineyama, and D. Song. 2024. Are We Fragmented Yet? Measuring Geopolitical Fragmentation and Its Causal Effect. NBER Working Paper No. w32638. Cambridge, MA: National Bureau of Economic Research.

5. The World Uncertainty Index

Source: Ahir, Bloom, and Furceri

Year: 2022

Access Date (Month-Year): January 2025

URL: <https://worlduncertaintyindex.com/>

Access Type: Accessible

Citation: Ahir, H., N. Bloom, and D. Furceri. 2022. The World Uncertainty Index. NBER Working Paper No. w29763. Cambridge, MA: National Bureau of Economic Research.

6. The International Country Risk Guide

Source: The PRS Group

Year: 2022

URL: <https://www.prsgroup.com/explore-our-products/icrg/>

Access Date (Month-Year): February 2022

Access Type: Restricted

Citation: The PRS Group. 2022. "The International Country Risk Guide" [dataset]. <https://www.prsgroup.com/explore-our-products/icrg/>. Accessed February 2022.

7. Measures of Political Risk

Source: Henisz and Zelner.

Year: 2016

Access Date (Month-Year): June 2026

URL: <https://mgmt.wharton.upenn.edu/faculty/heniszpolcon/polcondataset/>

Access Type: Accessible

Citation: Henisz, W. J., and B. A. Zelner. 2016. Measures of Political Risk. Philadelphia: Wharton School, University of Pennsylvania.

8. A New Measure of Financial Openness

Source: Chinn and Ito

Year: 2008 (2021 version)

URL: web.pdx.edu/~ito/

Access Type: Accessible

Citation: Chinn and Ito. 2008. A New Measure of Financial Openness. Journal of Comparative Policy Analysis 10 (3): 309–22.

9. Changing Global Linkages: A New Cold War?

Source: Gopinath, Gourinchas, Presbitero, and Topalova

Year: 2025

Access Date (Month-Year): June 2026

URL: <https://www.sciencedirect.com/science/article/pii/S0022199624001697>

Access Type: Accessible

Citation: Gopinath, Gourinchas, Presbitero, and Topalova. 2025. Changing Global Linkages: A New Cold War? [dataset].

Note: The full replication package for Gopinath et al. (2025) is accessible as Presbitero, A. 2024. Data for "Changing Global Linkages: A New Cold War?", Mendeley Data, V1, <https://data.mendeley.com/datasets/hvxf2ghb38/1>

10. United Nations General Assembly Ideal Points

Source: Voeten

Year: 2009 (2026 update)

Access Date (Month-Year): June 2026

URL: <https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/LEJUQZ>

Access Type: Accessible

Citation: Voeten, Erik, 2009, "United Nations General Assembly Ideal Points", Harvard Dataverse, V38.

Statement about Rights

I certify that the author(s) of the manuscript have legitimate access to the data used in this manuscript.