Replication package for: Zarach Z.H., Parteka A. (2023). Productivity effects of trade in natural resources - comparison with mechanisms of technological. *The World Economy.* **https://doi.org/10.1111/twec.13456**

Version
This version (1.0) : August 2023

Overview
This replication package contains data and codes needed to replicate the analysis described in Zarach and Parteka (2023) using STATA software. The folder consists of one supplementary material file, six STATA do.files with codes and three files with source data (xlsx and csv). The remaining data needs to be downloaded from the original sources (detailed information is provided below).

Data sources
- BACI CEPII (Gaulier and Zignago, 2010): we use version 202102. Public-Use Datasets (freely available). The data can be downloaded at: http://www.cepii.fr/CEPII/en/bdd_modele/bdd_modele_item.asp?id=37
- Penn World Table, PWT (Feenstra et al., 2015): we use version 10.0. Public-Use Datasets (freely available). The data can be downloaded at: https://www.rug.nl/ggdc/productivity/pwt/?lang=en
- World Bank World Development Indicators, WDI: we use version 012022. Public-Use Datasets (freely available). The data can be downloaded at: https://databank.worldbank.org/source/world-development-indicators
- World Bank Country and Lending Groups: we use version 122021. Public-Use Datasets (freely available). The data can be downloaded at: https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups

Files description

0.The World Economy - creation of database.do
this do.file creates the database based on country-level data on productivity per employee (PWT: version 10.0), natural resource rents, R&D expenditures, Human Capital Index and level of investment (WDI) and product-level trade flows (BACI CEPII: version 202102).

> *important note:* Given different editions/revisions of the databases, there might occur differences between the data used in the paper and the data downloaded later on. Therefore, some minor disparities in estimation results and/or summary statistics may emerge, compared to the results reported in the paper.

1.The World Economy - data preparation.do
this do.file creates final database, used in the regression part of analysis, creation of figures and tables, as well as calculation of summary statistics.

2.The World Economy - figures.do
this do.file creates figures (included both in the main text and in Appendix A).

3.The World Economy - tables.do
this do.file creates tables with descriptive statistics (included both in the main text and in Appendix A).

4. The World Economy - main models.do
this do.file replicates the key estimation results (included in the main text).

5. The World Economy - robustness checks models.do
this do.file replicates robustness checks estimation results (included in Appendix B).

supplementary materials – taxonomies.xlsx
this Excel file contains information on product-level taxonomies of natural resources and technologically advanced products. It includes detailed source of every classification as well as a list of all product codes assigned to the respective taxonomies.

classifications.xlsx
this file assigns product codes to all (eight) classifications used in the analysis: five natural resource taxonomies (separately for fuel, forestry, metal, mineral and for all natural resource products) and three taxonomies of technologically advanced exports (products associated with the 4th Industrial Revolution – built upon Domini et al. (2021) and Foster-McGregor et al. (2019), ICT related products - based on UNCTADSTAT taxonomy and middle & high tech products – based on Lall (2000)).

country_codes_V202102.csv
this file links ISO 3-digit numeric codes used in BACI databases with country full names and 3-letter country name abbreviation used in other source databases.

product_codes_HS96_V202102.csv
this file links the HS 6-digit product codes to product names.
> <u>*important note:*</u> The files with country codes and product codes are originally released along with the latest update of core BACI files (as of August 2023: the 202301 version) and are subject to change between revisions. Previous country_codes file and product_codes files are no longer available in archive versions of BACI. To simplify the replication of our results, based on BACI 202102, we provide here the codes' files V202102.csv (downloaded in April 2021)– both used in the analysis described in the paper.
> The corresponding 202102 version of BACI database (only core trade data files) can be downloaded from "Archives" tab at:
> http://www.cepii.fr/CEPII/en/bdd_modele/bdd_modele_item.asp?id=37

References

Feenstra, Robert C., Robert Inklaar and Marcel P. Timmer (2015), "The Next Generation of the Penn World Table" American Economic Review, 105(10), 3150-3182, available for download at www.ggdc.net/pwt

Gaulier, G. and Zignago, S. (2010) BACI: International Trade Database at the Product-Level. The 1994-2007 Version. CEPII Working Paper, N°2010-23.