

Replication package for: Zarach Z.H., Parteka A. (2023). Export diversification and dependence on natural resources. *Economic Modelling* Volume 126, September 2023, 106436. <https://doi.org/10.1016/j.econmod.2023.106436>

### **Version**

This version (1.0): July 2023

### **Overview**

This replication package contains data and codes needed to replicate the analysis described in Zarach and Parteka (2023) using STATA. The folder consists of six STATA do.files with codes and four 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](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 Commodity Price Data Annual Indices: we use version 032023. Public-Use Datasets (freely available). The data can be downloaded at: <https://www.worldbank.org/en/research/commodity-markets>
- Worldwide Governance Indicators (Kaufmann et al., 2011): we use version 092022. Public-Use Datasets (freely available). The data can be downloaded at: <https://databank.worldbank.org/source/worldwide-governance-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.Economic Modelling - creation of database.do**

this do.file creates the database based on country-level data on GDP, productivity per employee (PWT: version 10.0), quality of governance (Worldwide Governance Indicators: version 092022), yearly data on prices of natural resources (World Bank Commodity Price Data Annual Indices: version 072023) 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. Economic Modelling - data preparation.do**

this do.file prepares the final database, used in the regression part of analysis, creation of figures and tables, as well as calculation of summary statistics.

#### **2. Economic Modelling - main models.do**

this do.file replicates the key estimation results (included in the main text).

### **3. Economic Modelling - robustness checks models.do**

this do.file replicates robustness checks estimation results (included in Appendix B).

### **4. Economic Modelling - figures.do**

this do.file creates figures (included both in the main text and in Appendix B).

### **5. Economic Modelling - tables.do**

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

#### **classifications.xlsx**

this file assigns product codes to all (six) classifications used in the analysis and includes detailed information regarding their sources: five natural resource taxonomies (separately for fuel, forestry, metal, mineral and for all natural resource products; based on WTOs International Statistics classification) and one taxonomy of technologically advanced exports (middle & high tech products – based on Lall (2000)).

#### **commodity\_prices.xlsx**

this file includes annual price indices of selected natural resources (used in estimations as a substitution for time fixed effects) from the World Bank Commodity Price Data Annual Indices (the 'Pink Sheet' Data).

*important note:* The 'Pink Sheet' Annual Data spreadsheet includes many various commodity price indices, which are not used in our analysis. Therefore to simplify the replication of our results, we provide file with only five selected natural resource price indices. Full version of 'Pink Sheet' Data can be found at: <https://www.worldbank.org/en/research/commodity-markets>

#### **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.

*important note:* The files with country codes and product codes are originally released along with the latest update of core BACI files (as of July 2023: the 202301 version) and are subject to change between revisions. Previous country\_codes file and product codes file 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](http://www.cepii.fr/CEPII/en/bdd_modele/bdd_modele_item.asp?id=37)

### ***Citation***

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<https://doi.org/10.1016/j.econmod.2023.106436>

Please cite the replication files as:

Zarach, Z.H., & Parteka, A. (2023). Data accompanying the paper: "Export diversification and dependence on natural resources" (Zarach and Parteka, *Economic Modelling Volume 126*, 2023) [Data set]. Gdańsk University of Technology. <https://doi.org/10.34808/844p-8614>

### ***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](http://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.

Kaufmann, D., Kraay, A., & Mastruzzi, M. (2011). The worldwide governance indicators: Methodology and analytical issues<sup>1</sup>. *Hague journal on the rule of law*, 3(2), 220-246.