

README for the paper

Tariffs as Catalysts: The Potential Development Dividend

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Overview

This file contains the instructions to replicate the original figures and tables included in the note “Tariffs as Catalysts: The Potential Development Dividend”. This note includes some original research and some figures directly taken from other sources. Specifically, figures 1, 5, 6, 7, 10, 11 and 12, as well as tables A1, A2, A3, are original for this publication, while figures 2, 3, 4, 8, 9, and 13 as well as table A.4 are simply reproduced from other sources.

Data Availability

While most of the data used in this paper are available from public sources, one particular dataset was shared with us from the data originator (UNCTAD, UNCTADGTAP11_AVEborder.xls) and cannot be shared.

Data Sources

Detailed information about the data sources:

- 1) BACI_measures_2025.dta. Append all the bilateral HS6 trade data from 2012 to 2023. The raw files are available at:
https://www.cepii.fr/cepii/en/bdd_modele/bdd_modele_item.asp?id=37
Accessed in February 2025.
- 2) NEW_01_WB-WTO_STRI_240110.xls the STRI data are available here:
<https://itip-services-worldbank.wto.org/SearchApplied.aspx> (select STRI and then download all countries all sectors). Accessed January 2024

¹ World Bank. This work does not reflect the views of the World Bank, its Executive Directors or the countries they represent.

- 3) GDP_2022.xls and GDP_2023.xls are from the World Development Indicators: <https://databank.worldbank.org/source/world-development-indicators> Select All countries, then GDP current dollars, then 2022 and 2023. Accessed in 2025
- 4) WITS_Imports_2018_2024: this is downloaded from WITS <https://wits.worldbank.org/WITS/WITS/Restricted/Login.aspx> In the query select reporter USA and China, all partners, years 2018 and 2024 and product all the chapters HS2. Accessed in 2025.
- 5) TARIFFS_2022.xls is downloaded from the World Development Indicators: <https://databank.worldbank.org/source/world-development-indicators>. Select “All countries”, 2022 and “Tariff rate, applied, weighted mean, all products (%)”.
- 6) DVARX.csv is downloaded from the TIVA database: [https://data-explorer.oecd.org/vis?pg=0&bp=true&tm=%22%28TIVA%29%202025%20edition%22&snb=5&df\[ds\]=dsDisseminateFinalDMZ&df\[id\]=DSD_TIVA_MAINLV%40DF_MAINLV&df\[ag\]=OECD.STI.PIE&df\[vs\]=1.1&dq=FFD_DVA.AUS..W..A&pd=2015%2C&to\[TIME_PERIOD\]=false](https://data-explorer.oecd.org/vis?pg=0&bp=true&tm=%22%28TIVA%29%202025%20edition%22&snb=5&df[ds]=dsDisseminateFinalDMZ&df[id]=DSD_TIVA_MAINLV%40DF_MAINLV&df[ag]=OECD.STI.PIE&df[vs]=1.1&dq=FFD_DVA.AUS..W..A&pd=2015%2C&to[TIME_PERIOD]=false) Select all reference areas, Unites States counterpart, EXGR_DVA variable and 2022 time period. Downloaded in October 2025.
- 7) UNCTADGTAP11_AVEborder.xls. The data are currently restricted, but they can be asked to the data manager: alessandro.nicita@unctad.org
- 8) There are few auxiliary databases that get overwritten every time the code runs: BACI_measures_rca.dta, GDP_2023.dta, GDP_2022.dta, DVAX.dta, WDI_MANUF_TARIFFS_2022.dta, STRI_TOMERGE.dta,
- 9) Two auxiliary datasets contain the World Bank classification of countries in 2021 (Classification-economies-21.dta) and shortened versions of the HS2 names (HS2_NAMES).
- 10) Baseline data for CGE simulation analysis: basedata.har in /raw subfolder
 - o Source: Global Trade Analysis Project: <https://www.gtap.agecon.purdue.edu/databases/v11/>
 - o Access year: 2025
 - o Availability: Order form for standard GTAP database from GTAP Center
 - o Description: Global database of trade, production, and protection at country and sector level
 - o Note: Version V11.1, with reference year 2017, used

Statement about Rights

- X I certify that the author(s) of the manuscript have legitimate access to and permission to use the data used in this manuscript.

Instructions for Replicators

The folder 2_do-files includes all the single do-files needed to reproduce Figures 1, 6, 11, 12. For simplicity, these do-files are run through a main_dofile.do placed in the same directory as this readme file.

The folder 3_codes contains the necessary codes to reproduce figures 5, 7, 10, as well as Tables A.1, A.2, A.3

To carry out the CGE simulation analysis, the 3_code folder contains all necessary computer files to carry the simulation analysis from the raw data to the estimated economics effects of policy scenarios. Proceed as follows:

- Copy the data file in folder 1-data/raw called basedata.har that refers to the GTAP database into a folder where all code programs in folder 0-code are also copied.
- Run file RunSims.bat that automates all steps: calibrates a general equilibrium model over the initial equilibrium in basedata.har; calculates various levels of tariffs shocks; run ~~four~~ five separate policy scenarios (described next); and retrieves solution values from *.sl4 files. The ~~four~~ five scenarios refer to:
 - Tariff tensions arising from new tariffs in the United States related to reciprocal and sectoral tariff measures referenced as August 7, 2025 (scen01_nodeals)
 - Tariff tensions arising from new tariffs in the United States ~~related to sectoral tariff measures only, with others omitted~~ updated to reflect the suspension of IEEPA tariffs referenced as February 20, 2026 (~~scen01_nodeals~~ scen feb20)
 - Tariff tension arising from new tariffs in the United States updated to reflect the introduction of global tariffs under Section 122 authority referenced as February 24, 2026 (scen feb24)
 - Tariff tension from reciprocal and sectoral measures (scen01) accompanied by selected bilateral deals (scen01_selected)
 - Tariff war resolution by all trading regions dropping tariff barriers on a non-discriminatorily, MFN basis (scen01_mfnwld)
- After solving the policy scenarios, the batch file will open the solutions in program ViewSOL for each scenario in sequence (as numbered above). From the ViewSOL window, browse the effects for the follow three main variable "qTradeRS" (effects on bilateral real exports from region r to region s; "u" (effects on real income per capital in each model region); and "qgdp" (effect on real GDP in each model region).

When browsing "qTradeRS" (two-dimensional), trade destined to the United States should be read by looking at column number 16 for the US region.

List of Exhibits

Exhibit name	Output filename	Script	Note
Figure 1a	Figure 1a.png	Figure1.do	Found in Results
Figure 1b	Figure 1b.png	Figure1.do	Found in Results
Figure 5			
Figure 6a	Figure 6a.png	Figure6.do	Found in Results
Figure 6b	Figure 6b.png	Figure6.do	Found in Results
Figure 7a	01_scen01_node als.sl4; 02a_scen02_node eals_feb20.sl4; 02b_scen_feb24. sl4		For each solution file included in Results, retrieve <i>qTradeRS</i>
Figure 7b	01_scen01_node als.sl4; 02a_scen02_node eals_feb20.sl4; 02b_scen_feb24. sl4		For each solution file included in Results, retrieve <i>u</i>
Figure 10	01_scen01_node als.sl4; 03_scen01_selected.sl4; 04_scen01_mfn wld.sl4		For each solution file included in Results, retrieve <i>qgdp</i>
Figure 11	Figure 11.png	Figure 11.do	Found in Results
Figure 12a	Figure 12a.png	Figure 12.do	Found in Results
Figure 12b	Figure 12b.png	Figure 12.do	Found in Results

Requirements

Computational Requirements

Software Requirements

List all software requirements, including versions, dependencies, libraries, environment setup, and packages installed. Using different versions of the same software could lead to variations in results. If multiple software are used, include details for all.

- **Stata version 17**
- **For the CGE simulation analysis:** Run the RunSims.bat from a command prompt (DOS box). The computer should have the GEMPACK software and a FORTRAN compiler installed to execute.

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Memory and Runtime and Storage Requirements

Memory requirements: about 4GB.

Running time: 3.5 minutes for Figures 1, 5, 6, 11, 12. Batch for sims in Figures 7 and 10, 31+ hours.

Folder Structure

Details about folder structure are as follows:

Readme

Main_dofile.do

1_Data

2_Do-files

3_Codes

4_Results