

README for EXIM's Exit: The Real Effects of Trade Financing by Export Credit Agencies

August 2024

1 Overview

This document describes the contents of the replication package for “EXIM’s Exit: The Real Effects of Trade Financing by Export Credit Agencies” by Adrien Matray, Karsten Müller, Chenzi Xu, and Poorya Kabir. We discuss the data sources, the associated data sets included in the replication package, and the files included that reproduce all tables and figures in the paper and appendix.

The launcher dofile (`0_launcher.do`) will automatically create all the different subfolders needed to run the replication. One main file runs all this code to generate the data for the figures and tables. The user should expect this code to run for approximately 2 hours. Because the code directly downloads all the datasets needed for the replication, it is important that anyone running the replication code has a fast and stable internet connection. **Having a connection that is too slow may cause the code to break at the beginning.**

This project relies on publicly available data that are downloaded from the internet by the do-files as well as proprietary datasets that require users to enter into data usage agreements with the providers. **The do-files only access datasets in the public domain. Datasets that are not readily available to the public are not part of the replication package.** All of the code that cleans the data and creates the figures and tables assume that users have access to all of the data. Therefore, while the code is complete, it is not designed to run for users who do not have access to all necessary datasets. We detail how to access each data source.

2 Data Availability and Provenance Statements

2.1 Statement about Rights

- We certify that the authors of the manuscript have legitimate access to and permission to use the data used in this manuscript.
- We certify that the authors of the manuscript have documented permission to redistribute/publish the data contained within this replication package.

2.2 License for Data

The data are licensed by the original creators.

2.3 Summary of Availability

- Some data are not in the public domain and **cannot be made** publicly available.
- Data in the public domain will be noted as such.

2.4 Details on each Data Source

Compustat/WRDS data

- **Location:** data/source/wrds
- **Data file name:** Compustat_CustomerSegments.dta; Compustat2024.dta; CompustatQuarterly2024.dta; peters_taylor.dta; crsp_monthly.dta; crsp_compustat_linking_table.dta
- **Data description:** Compustat Segments Data provides business and geographic details, product information and customer data for over 70% of the companies in the North American (NA) database. Compustat NA contains annual and quarterly fundamentals data for publicly listed companies incorporated in the United States and Canada between 2010 and 2019. This data provides firm outcomes.

peters_taylor.dta provides data on firms' 'Total q' ratio and the replacement cost of firms' intangible capital. Total q is an improved Tobin's q proxy that includes intangible capital in the denominator, i.e., in the replacement cost of firms' capital.

- **Access Compustat from WRDS website:** to download the different datasets related to Compustat, go to WRDS website, then click on **Compustat - Capital IQ → North America**.

Fundamental Annual: name the downloaded data `Compustat2024.dta`

Fundamental Quarterly: name the downloaded data

`CompustatQuarterly2024.dta`

Compustat customer segment: Click on **Compustat - Capital IQ → North America → Customer Segments** (careful this is the option under “Historical Segments,” not the one “Segments (Non-Historical)-Customer”). Save the download as `Compustat_CustomerSegments.dta`

- **Access Peters and Taylor data from WRDS website:** To download `peters_taylor.dta`, go to WRDS website, then click on “**Peters and Taylor Total Q**”.
- **Access CRSP related data from WRDS website:** From WRDS website, click on **Compustat - Capital IQ → North America**

Security Monthly: Will allow you to download the monthly stock price. Save the downloaded data as “`crsp_monthly.dta`”

- **Access CRPS-Compustat linking table from WRDS website:** To download the CRSP-Compustat linking table that contains permno–gvkey correspondance, click on **CRSP → CRSP/Compustat Merged → CRSP/Compustat Merged Database - Linking Table**. Save the dataset as `crsp_compustat_linking_table.dta`

Once all these datasets have been downloaded and saved, place them in the folder “`_data/source/wrds`”.

Datamyne data

- **Location:** `data/source/datamyne`
- **Data file name:** `2010–01.csv` to `2019–12.csv`
- **Data description:** One file per month year between 01/2010 up to 12/2019. Datamyne collects and consolidates the cross-border commerce and import and export trade of more than 230 markets around the world. Datamyne covers all major markets such as South America and Mexico, China, and Southeast Asia. It provides company and contact details, bills of lading and customs declaration data, HS codes, quantity traded, TEUs, and product descriptions. The period covered is 2013-2019.

- **Data access:** To obtain a licence, you will need to contact a Datamyne representative. Once you obtain the data, you will just have to put all the raw files in the folder “_data/source/trade/datamyne”

EXIM data

- **Location:** data/source/EXIM
- **Data file name:** Authorizations_From_10_01_2006_Thru_12_31_2022.csv
- **Data description:** EXIM loan data provides information on all the loan authorizations given to firms by EXIM between October 2006 and December 2022.
- **Data access:** This data can be obtained from a FOIA request.

EXIM Report data

- **Location:** data/source/EXIM_report
- **Data file name:** different files in the folder
- **Data description:** EXIM’s annual reports provide information on EXIM’s yearly activities and balance sheet statements. The period covered is 2006-2022.
- **Data access:** This data can be accessed at <https://www.exim.gov/news/reports>.
- **Data availability:** This data is publicly available.

Financial constraints data

- **Location:** data/source/Financial_constraints/ConstraintsDatabase_ext2015
- **Data file name:** ConstraintsDatabase_ext2015.txt
- **Data description:** The Hoberg and Maksimovic text-based measures of financial constraints are based on firm disclosures in the capitalization and liquidity discussion of firm 10-Ks. The measures include four different constraint variables. (1) A general measure of the extent to which firms are constrained, (2) a measure that is specific to constrained firms attempting to access the equity market, (3) a measure that is specific to constrained firms attempting to access the debt market, and (4) an analogous measure specific to private placements of equity.

- **Data access:** This data can be accessed at <https://faculty.marshall.usc.edu/Gerard-Hoberg/MaxDataSite/>.
- **Data availability:** This data is publicly available.

BACI data

- **Location:** data/source/Trade/BACI
- **Data file name:** different files in the folder.
- **Data description:** BACI provides data on bilateral trade flows for 200 countries at the product level (5000 products). Products correspond to the “Harmonized System” nomenclature (6 digit code). We use the 2024 versions.
- **Data access:** This data can be accessed at http://www.cepii.fr/CEPII/en/bdd_modele/bdd_modele_item.asp?id=37.
- **Data availability:** This data is publicly available.

Gravity data

- **Location:** data/source/Trade/Gravity_dta_V202211
- **Data file name:** Gravity_V202211.dta
- **Data description:** For any pair of countries, from 1948 to 2020, Gravity data provides all the information required to estimate gravity equations: trade flows, geographical distances, trade facilitation measures, macroeconomic indicators, etc. We use the 2022 version.
- **Data access:** This data can be accessed at http://www.cepii.fr/CEPII/en/bdd_modele/bdd_modele_item.asp?id=8.
- **Data availability:** This data is publicly available.

Offshoring data

- **Location:** data/source/Trade/Offshoringdatabase_V1_all
- **Data file name:** Offshoringdatabase_V3_all.txt

- **Data description:** The Hoberg and Moon text-based offshoring database is based on annually updated firm disclosures in the regarding their international activities in 10-Ks. The offshoring database is best described as a dynamic firm-nation-year network summarizing the international activities of publicly traded U.S. firms that file 10-Ks. The network summarizes four specific activities: (1) Offshore Output (firm sells goods to given nation), (2) Offshore Input (firm purchases inputs from given nation), (3) Offshore External Input (firm purchases inputs from given nation but does not own assets there), and (4) Offshore Internal Input (firm purchases inputs from given nation and the firm does own assets in the given nation).
- **Data access:** This data can be accessed at <https://faculty.marshall.usc.edu/Gerard-Hoberg/HobergMoonDataSite/>.
- **Data availability:** This data is publicly available.

US HS-level imports and exports (1989-2021) data

- **Location:** data/source/Trade/Schott_UScustoms
- **Data file name:** different files in the folder
- **Data description:** The US HS-level imports and exports (1989-2021) database by Peter K. Schott records the customs value of all US imports by exporting country and year from 1989 to 2021 according to thousands of finely detailed categories, referred to as ‘products’ or ‘goods’. Imports are classified according to the ten-digit Harmonized System (HS) codes from 1989 through 2005.
- **Data access:** This data can be accessed at https://sompks4.github.io/sub_data.html.
- **Data availability:** This data is publicly available.

LobbyView data

- **Location:** data/source/lobby view
- **Data file name:** different files in the folder.
- **Data description:** LobbyView is a comprehensive lobbying database that is based on the universe of lobbying reports filed under the Lobbying Disclosure Act of 1995. LobbyView bridges provides information on congressional bills in two dimensions: (1) sponsorship by politicians, and (2) reported lobbying by interest groups.

- **Data access:** This data can be accessed at <https://www.lobbyview.org/data-download>.
- **Data availability:** This data is publicly available.

Global financial development data

- **Location:** data/source/Trade
- **Data file name:** 20220909–global–financial–development–database.xlsx
Global–Financial–Development–Database–11–1–2021.xlsx
- **Data description:** The Global Financial Development Database is an extensive dataset of financial system characteristics for 214 economies. It contains annual data, starting from 1960 up to 2021. It contains data for 108 indicators, capturing various aspects of financial institutions and markets. The Global Financial Development Database is based on a “4x2 framework”. Specifically, it includes measures of (1) depth, (2) access, (3) efficiency, and (4) stability of financial systems. Each of these characteristics is captured both for (1) financial institutions (for example banks and insurance companies), and (2) financial markets (such as stock markets and bond markets). The database builds on, updates, and extends previous efforts, in particular the data collected for the World Bank database ‘Financial Development and Structure’.
- **Data access:** This data can be accessed at <https://www.worldbank.org/en/publication/gfdr/data/global-financial-development-database>.
- **Data availability:** This data is publicly available.

Penn World Table data

- **Location:** data/source/Trade/International
- **Data file name:** pwt1001.dta
- **Data description:** Penn World Table (PWT) is a database with information on relative levels of income, output, input and productivity, covering 183 countries between 1950 and 2019. We use PWT version 10.01.
- **Data access:** This data can be accessed at <https://www.rug.nl/ggdc/productivity/pwt/?lang=en>.
- **Data availability:** This data is publicly available.

Correspondences HS-SITC-BEC data

- **Location:** data/source/Trade
- **Data file name:** HS-SITC-BEC_Correlations_2022_bis.xlsx
- **Data description:** Complete correspondence table between HS, SITC, and BEC classifications.
- **Data access:** This data can be accessed at <https://unstats.un.org/unsd/classifications/econ/>.
- **Data availability:** This data is publicly available.

Quality government data

- **Location:** data/source/Trade
- **Data file name:** qog_oecd_cs_jan24_stata14.dta
- **Data description:** The Quality of Government (QoG) OECD dataset consists of approximately 1300 variables from 100 data sources. The dataset includes OECD member countries and has high data coverage in terms of geography and time. The QoG data provides information on government quality. We use the cross-sectional version.
- **Data access:** This data can be accessed at <https://www.gu.se/en/quality-government/qog-data/data-downloads/oecd-dataset>.
- **Data availability:** This data is publicly available.

Country risk data

- **Location:** data/source/EXIM_report/temp
- **Data file name:** CountryRisk.dta
- **Data description:** The measures of country risk are constructed by Hassan, Schreger, Schwedeler, and Tahoun (2023). These measures are based on analyzing earnings call transcripts from all publicly traded firms around the world and proxy for firms' perceptions of the riskiness of each country.
- **Data access:** This data can be accessed at <https://www.country-risk.net/download>.
- **Data availability:** This data is publicly available.

ISO list codes data

- **Location:** data/source/Trade
- **Data file name:** UNSD_Methodology.xlsx
- **Data description:** This dataset provides a mapping of country names to ISO 3 and ISO 2 codes.
- **Data access:** This data can be accessed at <https://unstats.un.org/unsd/methodology/m49/overview/>.
- **Data availability:** This data is publicly available.

OECD list data

- **Location:** data/source/Trade
- **Data file name:** qog_oecd_cs_jan24_stata14
- **Data description:** This dataset provides list of countries in the OECD
- **Data access:** This data can be accessed at <https://www.gu.se/en/quality-government/qog-data/data-downloads/oecd-dataset>.
- **Data availability:** This data is publicly available.

NAICS classifications and crosswalks across versions data

- **Location:** data/source/US_industry/Classification
- **Data file name:** different files in the folder
- **Data description:** We use NAICS classification codes for 1997, 2002, 2007, 2012, 2017, 2022 versions. We also use crosswalks between the NAICS 1997-2002, 2002-2007, 2012-2007, 2012-2017, 2022-2017 versions. We also include a NAICS-SIC.
- **Data access:** The NAICS classification data can be accessed at <https://www.census.gov/naics/?48967>. The SIC to NAICS crosswalks comes from Schaller and DeCelles (2021) and can be downloaded at: <https://doi.org/10.3886/E145101V1-123260>
- **Data availability:** This data is publicly available.

County business patterns data

- **Location:** data/source/US_industry/CBP
- **Data file name:** different files in the folder
- **Data description:** County Business Patterns (CBP) is an annual series that provides subnational economic data for establishments with paid employees by industry and employment size. This series includes the number of establishments, employment during the week of March 12, first quarter payroll, and annual payroll. We use the raw files for 2002, 2003, 2007, 2008, 2011, and 2016. We also include the Fabian Eckert, Teresa Fort, Peter Schott, and Natalie Yang, NAICS long panel. The NAICS long panel records employment at the most detailed industry-county level of aggregation possible.
- **Data access:** This data can be accessed at <http://fpeckert.me/cbp/>.
- **Data availability:** This data is publicly available.

3 Computational requirements

3.1 Software Requirements

- Stata (code was last run with version 16)
- In addition, the following list of stata programs need to be downloaded: `binscatter`, `fillmissing`, `keeporder`, `winsor2`, `coefplot`, `erepost`, `estout`, `gtools`, `ftools`, `reghdfe`, `spmap`, `shp2dta`, `mif2dta`, `palettes`, `colrspace`, `splitvallabels`, `labutil`, `rangestat`, `_gwtmean`, `unique`

The program “`0_launcher.do`” will install all dependencies locally, and should be run once.

3.2 Memory and Runtime Requirements

Summary: The code was last run using Stata16 on MacOS version 14.5 with 64GB RAM and a 4.05 GHz 16-core processor. Approximate time needed to reproduce the analyses: 1 hour 40 minutes.

4 Description of programs/code

- Do-file `0_launcher.do` runs all the code: defines globals, extracts data, cleans data, assembles the final datasets, and generates all tables and figures in the manuscript.
- Do-file `00a_own_programs.do` installs our own programs.
- Do-file `00b_programEventStudy.do` additional program for event study.
- Do-file `00c_extract_data.do` extracts all the datasets from the Internet
- Do-file `01_ComplementDatasets.do` opens and simplifies a series of datasets related to Compustat, cleans Compustat Segment, Compustat Fundamentals Quarterly, Hoberg and Moon Offshoring database, LobbyView database
- Do-file `02_Xwalks_industry_hs.do` creates crosswalks between NAICS versions, and HS codes.
- Do-file `03_EXIM_datasets.do` creates a dataset with EXIM's loan dependence at the industry level.
- Do-file `04a_BACI.do` cleans different BACI versions. Creates dataset at the origin-product level.
- Do-file `04b_destinationCharacteristics.do` assembles a dataset with exports' destinations country characteristics.
- Do-file `05_Datamyne.do` cleans Datamyne export data.
- Do-file `06a_Clean_Compustat_CRSP.do` cleans Compustat Fundamentals annual.
- Do-file `06b_main_sample_firm.do` builds the main sample at the firm level with Compustat and EXIM information.
- Do-file `07_Tables.do` produces all the tables in the main body of the paper.
- Do-file `08_Graphs.do` produces all the figures in the main body of the paper.
- Do-file `09_AppendixResults.do` produces all the tables and figures in the Appendix of the paper.
- Do-file `10_DatamyneResults.do` produces all the results using the Datamyne data.

4.1 License for Code

The code is licensed by the authors under CC-BY 4.0.

5 Instructions to Replicators

- Edit `dofile/0_launcher.do` lines 19-20 to adjust the output paths.
- Run `dofile/0_launcher.do` to run all code in one click and produce all figures and tables in the paper.

The authors' complete log file is included in this replication package.