

Obtaining Trade Data

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John Gilbert

Professor
Department of Economics and Finance
Jon M. Huntsman School of Business
Utah State University
jgilbert@usu.edu



Introduction

- In this session we will consider the structure of international trade data.
- We will also consider the various sources of data, and their advantages/disadvantages.
- Finally, we will work through the process of obtaining trade data from the UNCOMTRADE database.

The Structure of Trade Data

- International trade statistics record the flows of exports and imports from one country to another over a defined time period.
- With a few exceptions, the data are recorded as the value of the flow, not the volume.
- The countries between which trade is measured are referred to as the 'Reporter' (i.e., the country that provided the data) and the 'Partner'.
- Flows from the reporter to the partner are exports, while flows from the partner to the reporter are imports.

The Structure of Trade Data

- It is helpful to think about the trade data as a multi-dimensional array, the elements of which are the values of exports or imports between a country pair in a particular commodity.
- Because the export flows of one country are by definition the import flows of another, each trade flow is, in principle, recorded twice, although in different terms.
- Export data is recorded FOB, or free on board, and import data is recorded CIF, or cost, insurance, freight, i.e., including costs of transportation.

Mirroring and Reconciling

- The fact that the data is recorded twice confers a significant advantage: It allows for reporting gaps to be filled using the 'mirror' data.
- In other words, if exports from a particular reporter to a partner are not available, one can use the imports reported by the partner instead. Filling the data this way is called [mirroring](#).
- If both sides of a particular country pair do not report, the data is missing, and mirroring cannot be done. Instead a model must be created to predict the missing value. This process is called [reconciling](#).

- Advantages:** Free to access. Downloads are limited to 50,000 records at a time, but there is no limit on the number of data requests that can be made. Very detailed data for a long time period. Some services trade data is available. Some volume data is available. Can be accessed through both the COMTRADE interface and WITS.
- Disadvantages:** Many gaps in the data. The data is not reconciled (no accounting for missing data). Classification is based on what is reported, so data is not available for newer classifications for all countries.

- Advantages:** The data is updated regularly, this is generally the most recent trade data available. Monthly and quarterly data available. It is partially reconciled, with mirror data from trade partners used to fill reporter gaps. Cases where neither a reporter nor a partner provide data are not dealt with, however.
- Disadvantages:** Contains only aggregate trade flows. Available only by subscription.

- Advantages:** Data can be easily matched to a number of other important resources including tariffs, and indicators of export competition and other features. It is partially reconciled using mirror data. Some monthly and quarterly data is available.
- Disadvantages:** Available by subscription only (but free for developing economies). Relatively limited time span.

- Advantages:** Trade data is fully reconciled, including filling of missing trade flows. Services trade data is available for base years (although not considered very reliable). The database is a rich other economic data (on production, consumption, and protection patterns), all in a consistent form, which facilitates deeper economic analysis of some issues.
- Disadvantages:** The dataset must be purchased (at a discounted price for academic researchers and those in developing economies). The data is aggregated to a fairly high level, and is available for a limited number of years. Updates are relatively infrequent, so the data can be somewhat out of date.

COMTRADE Data Download Steps

- 1 Go to the COMTRADE website (comtrade.un.org) click the get trade data button.
- 2 Select the type of product (goods or services) and the frequency of the data (annual or monthly).
- 3 Select the data classification (HS, SITC or BEC), the the revision.
- 4 Select the period (up to five separate years, or the group 'all' which will return all available records).
- 5 Select the reporting country or countries in the same way. This is the country that provided the data. The shortcut 'all' can be used if all reporting countries are desired.
- 6 Select the partner country or countries. Special categories include 'all' and 'world' which select all partners and the world total, respectively.

COMTRADE Data Download Steps (Continued)

- 1 Select the trade flow, exports or imports, or re-exports and re-imports.
- 2 Select the commodity codes. Here there are a number of keys that can be used. 'Total' returns total trade, 'all' returns all commodities. It is also possible to specify various levels of aggregation, such as 'AG02', which will return all 2 digit classifications and so on. Note that the total trade does not necessarily equal the sum of trade over all commodity groups.
- 3 Click on the 'Download CSV' button to download the data in comma delimited format, which can be opened in Excel or other programs for further manipulation.

- You are generally limited to downloading 50,000 records at a time. Longer requests must be broken into parts and merged.
- Using the current interface, you can generally only select 5 categories (except for commodity groups, where you can select up to 20).
- There is a legacy interface that allows a bit more flexibility in terms of dimensions of requests.
- The World Bank WITS interface offers access to the same data with a more powerful interface, but requires registration.

COMTRADE Interface

UNITED NATIONS » DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS » STATISTICS DIVISION » TRADE STATISTICS

UN Comtrade Database Extract data Data Availability Metadata Reference Knowledge base API portal **new**

Welcome to the trade data extraction interface!

Keep an eye out for other [new features](#) being added based on your feedback!

1. Type of product & Frequency

Type of product

☒ Goods ☐ Services

Frequency

☒ Annual ☐ Monthly

2. Classification

HS

☒ As reported ☐ 92 ☐ 96 ☐ 02 ☐ 07 ☐ 12

SITC

☒ As reported * ☐ Rev. 1 ☐ Rev. 2 ☐ Rev. 3 ☐ Rev. 4

BEC

☐ BEC

3. Select desired data

Periods (year)

All or a valid period. Up to 5 may be selected.

Reporters

All or a valid reporter. Up to 5 may be selected. **All** may only be used if a partner is selected.

Partners

World, **All**, or a valid reporter. Up to 5 may be selected. **All** may only be used if a reporter is selected.

Trade flows

All or select multiple trade flows.

HS (as reported) commodity codes

All, **Total**, **AG[X]** or a valid code. Up to 20 may be selected. If you know the code number, e.g. **01 - Live animals**, type **01**. To search by description type a word, e.g. **rice**.

4. See the results

[Preview »](#)

[Download CSV](#)

Issues opening CSV in Excel? [See this Microsoft how-to](#).

- Using the COMTRADE database, download data for the total world exports of the member countries of ASEAN for in 2014.
- Using the COMTRADE database, download data for the exports of Cambodia to the world by 2-digit HS code in 2014.