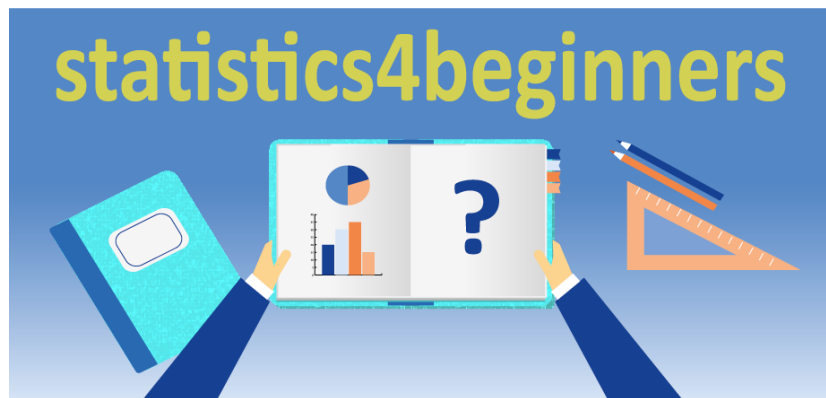


# Beginners: Trade in goods - products and partners

Statistics Explained



This article is part of [Statistics 4 beginners](#) , a section in [Statistics Explained](#) where indicators and [concepts](#) are described in a simple way to make the world of statistics a bit easier to understand.

At first sight statistics on **international trade in goods** (also known as **merchandise trade** ) seem relatively simple, measuring the amount of goods crossing national borders. In practice they can be quite complicated: this article on products and partners, along with the article on [general concepts](#) , aims to explain some of the issues. More detailed information can be found in the [International trade in goods statistics user guide](#) .

## Types of products

In the context of international trade statistics, goods are tangible, physical objects (including electricity) whose ownership can be established and transferred.

Several classifications are used to compile statistics on international trade in goods.

For the collection, compilation and dissemination of trade in goods data worldwide, a detailed classification is used, called the harmonised system (HS).

The EU has adopted a classification system based on the HS, called combined nomenclature (CN).

The CN is hierarchical: from the detailed 8-digit level there are several levels of product groups, eventually leading up to a total for all products.

### Example of hierarchical structure of the CN nomenclature:

- detail product code 01 04 10 10: pure-bred sheep for breeding;

- sub-heading 01 04 10: live sheep;
- heading 01 04: live sheep and goats;
- chapter 01: live animals;
- section I: live animals; animal products;
- total: sections I to XXI

Furthermore, the detailed data from CN can be aggregated to produce data according to a number of other classifications, such as:

- the **standard international trade classification (SITC)** which is used in Eurostat's monthly press releases on international trade and has at its highest level seven sections:
  - food & drink
    - raw materials
    - energy
    - chemicals
    - machinery & vehicles
    - other manufactured goods
    - other goods

These sections are subdivided in groups, divisions and subdivisions;

- the **broad economic categories (BEC)** which are based on the end use of goods. An aggregation of its categories can be used to distinguish 'capital goods', 'intermediate goods' and 'consumption goods';
- the **classification of products by activity (CPA)** which provides information on the main activity of origin of goods, for example 'products of agriculture, forestry and fishing', 'food products' or 'textiles';
- the **NSTR classification** (Standard Goods Classification for Transport Statistics/Revised) which is used in 'international trade statistics by mode of transport'.

### Which goods are specifically included or excluded in these statistics?

All of the **usual goods**, such as clothes, machinery, cars, etc. are **included**, however, **less obvious goods** are also included, such as:

- banknotes and coins not in circulation, for example as collectables;
- humanitarian aid, gifts and donations;
- media (including discs such as CDs, DVDs and Blu-ray discs), whether recorded or not;
- electricity, as well as water and fuels such as oil and gas;
- ships, aircraft, satellites and satellite launchers if they have been sold, not simply leaving the economic territory for ordinary operating purposes;
- fish catch when landed in a port from a vessel of another country;
- waste and scrap if it has a value.

All returned goods are included, whatever the reason for the return.

However, the following goods are **excluded**:

- financial items, such as monetary gold and money in circulation;

- goods transferred to or from international organisations and enclaves of foreign governments (such as embassies and military bases);
- goods acquired by travellers and carried from one economic territory to another in small quantities or values (treated as services);
- newspapers and periodicals sent under subscriptions (treated as services);
- media carrying customised software or originals of any nature, such as a manuscript for a publication (treated as services);
- goods lost or destroyed before entering the economic territory are excluded from imports; note that these are included in the exports of the country whose territory they lost;
- all content delivered electronically, such as by e-mail or streaming;
- goods entering or leaving illegally (such as by smuggling), regardless of whether the goods have been acquired legally or not and whether the goods themselves are illegal (such as some drugs) or not (such as cigarettes);
- goods temporarily crossing a border, for example art exhibits, items for use at trade fairs or exhibitions or animals for breeding;
- financial operations (in other words the change of ownership) between residents and non-residents of non-financial assets (such as land, buildings, equipment and stocks) that do not result in the asset crossing a border are not considered as international trade in goods, as the material resources remain in the same economic territory.

## What users do not get to see: confidentiality

In general terms, within the EU, statistics are **considered to be confidential when they allow businesses to be identified**. The considerable amount of detail provided by statistics for the international trade of goods (monthly data, for thousands of detailed products, for a large number of partner countries) means that the potential for data to be confidential is high.

*For example, the number of countries exporting oil is relatively limited and in some cases there may be a monopoly supplier in these countries: as a consequence, one company may provide nearly all oil imported by an individual country and is easily recognisable.*

**Confidentiality can apply to the product code and/or the partner country**. When confidentiality is granted, data are **hidden at the detailed level**, which means that the trade is not allocated to the real product code and/or the real partner. It is nevertheless **included in the total trade of the Member State** and wherever possible, allocated to the real heading or chapter.

## Valuation of goods

For every good, a statistical value should be recorded. This **value is normally based on the customs valuation** with some adjustments. The customs value is itself usually based on the transaction value (the price actually paid for the goods). However, for intra-EU trade, since there is no customs value, the taxable value (the value which is subject to value added tax (VAT)) is the reference for statistics.

The value recorded is the value at the moment that a good crosses the national border. As such, for a single transaction there are two valuations:

- one at the moment the good crosses the border of the exporting country;
- a second at the moment that it crosses the border of the importing country.

If these borders are the same — for example in the case of a common land border between Germany and Austria — the valuations should be the same.

If, however, they are separated by water or by one or more transit countries, there are costs involved in the service of moving and insuring the good between the export and import borders and so the valuations should be different.

As such, statistical values for international trade in goods are normally one of two types, referred to as **FOB** or **CIF** .

**FOB (Free-on-board)** : a valuation principle which includes the transaction value of the goods and the value of services (freight and insurance) performed to deliver goods *to the border of the exporting country* .

**CIF (Cost, insurance and freight)** : a valuation principle which includes the transaction value of the goods, the value of services (freight and insurance) performed to deliver goods *to the border of the exporting country* **AND** the value of the services performed to deliver the goods *from the border of the exporting country to the border of the importing country* .

If the valuation of traded goods is available in a foreign currency, this should be converted using an official exchange rate valid at the time of the trade.

As EU Member States compile data on international trade in goods in national currencies and Eurostat publishes data in euros, the monthly national trade data of Member States outside of the euro area are converted to euros using average monthly exchange rates.

## Quantity of goods

Statistics on the weight of traded goods in kilograms are compiled for nearly all goods. This should be the **net weight** , excluding packaging, and for statistics published by Eurostat it will be **net mass** . Goods for which no net mass is compiled are, for example, electricity and vessels.

an additional quantity is collected for some headings in the CN classification. Examples of this **supplementary quantity** are:

- pieces (e.g. for refrigerators)
- pairs (e.g. for shoes)
- litres (e.g. for wine) or
- square meters (e.g. for carpets)
- and many more!

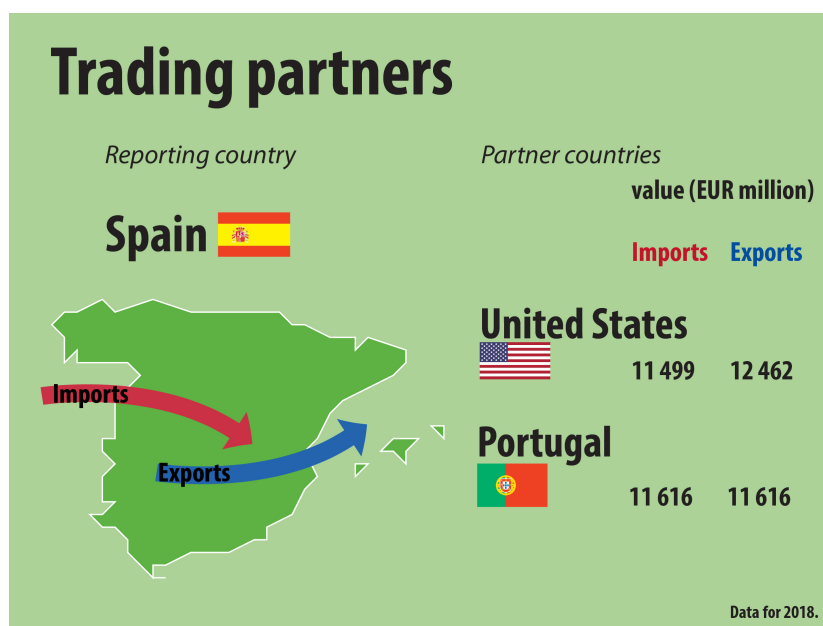
## Trading partners

### What are reporting and partner countries?

When an international trade in goods takes place there are at least two countries involved, the **reporting country** and the **partner country** .

For **exports** , the partner country is the last known country of destination. For **imports from non-EU countries** it is the country of origin.

For **imports from EU Member States** it is the country of consignment, meaning the Member States from where a commodity has arrived.



As well as reporting flows with each individual partner country, these data can be aggregated to produce trade flows with any **group of countries** that is of particular interest. The most obvious groups are **intra-EU** (trade with other EU Member States) and **extra-EU** (trade with non-EU countries) but other possibilities are trade blocs such as **Mercosur** , **EFTA** or **NAFTA** , as well as whole continents or the whole world.

## Asymmetries

Logically speaking, one country's exports should be another country's imports. For example, the value of goods reported by Portugal as imports from Spain is expected to be equal to the value of goods reported by Spain as exports to Portugal.

Comparisons like this are called **mirror exercises** and often show differences called **asymmetries** . However, there are many reasons for this, of which the most common are:

- imports are valued on a CIF basis whereas exports are valued on a FOB basis (see [Valuation of goods](#) );
- differences in compilation methods and estimations made for missing trade;
- triangular trade, where a business in country A sells a good to a business in country B which sells it on to a business in country C, with the goods shipped directly from country A to country C (the trade should be recorded in countries A (export) and C (import), but it is possible that the businesses in these countries mistakenly consider the trade to be with country B);
- differences in treatment of confidential data;
- countries using different trade systems, either general or specific trade (this is only possible in extra-EU trade, since for intra-EU trade all Member States should report according to the same relaxed version of the special trade system);
- the timing of recording trade, with an export being recorded in one month (or even year) and the related import recorded in another month (or year);
- at the most detailed level the classification of products can be difficult, and in customs declarations or surveys the exporters and importers may classify the same product in different ways;
- exporters and importers often need to declare data in different currencies, which can therefore be impacted by different practices for currency conversion;
- businesses may simply not provide the required data (this is known as non-response).

## Transit and quasi-transit

**Goods in transit** are goods entering and leaving a country with the exclusive purpose of reaching another country. They are excluded from the trade in goods statistics of the transit Member State if they are simply transported through the national territory or if they are stopped in that Member State but only for transport reasons ( **simple transit** ).

**Quasi-transit** occurs when goods are brought into or taken out of a Member State to be declared there as imports/exports for customs or tax purposes without this Member State having acquired ownership of the goods. In contrast to simple transit, **quasi-transit has to be recorded in European international trade in goods statistics** .

To illustrate these two concepts consider the following two trade flows:

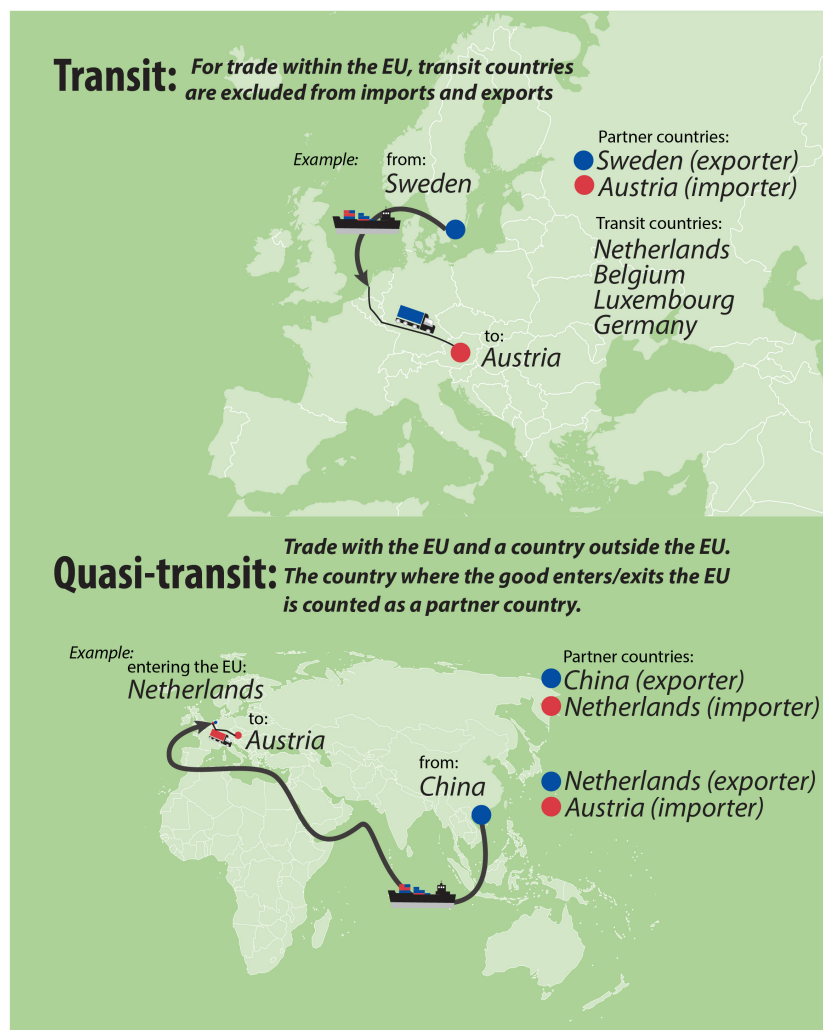
1. **Simple transit** : goods are shipped from Sweden to Austria, going over sea to the Netherlands and then overland through Belgium, Luxembourg and Germany before arriving in Austria;
2. **Quasi transit** : goods are shipped from China to Austria, going over sea to the Netherlands and then follow the same overland route as above before arriving in Austria.

The difference in the two cases is that as soon as the goods are cleared by customs when entering the EU from a non-EU country, they change from being non-EU goods to EU goods and are consequently in free circulation within the single market.

For that reason, in the first case only the transaction between Sweden and Austria is recorded.

In the

second case, two transactions must be recorded: from China to the Netherlands and from the Netherlands to Austria.



## Rotterdam effect

In the example for trade between Sweden or China and Austria, Rotterdam was deliberately chosen as the port of entry as it is the largest sea port in the EU. The impact of the high volumes of quasi-transit in the statistics for some EU Member States is known as the **Rotterdam effect**.

However, the same phenomenon can occur for any EU port (e.g. Antwerp or Riga) or airport (e.g. Luxembourg) that handles imports of extra-EU goods.

Trade flows reported by the Netherlands are regarded as being over-estimated because of quasi-transit trade:

1. Goods destined for other EU Member States arrive in Rotterdam and, according to EU rules, are recorded as extra-EU imports by the Netherlands (the country where goods are released for free circulation). This in turn increases the intra-EU exports from the Netherlands to those Member States to which the goods are re-exported;
2. The same happens for goods from other EU Member States destined for non-member countries that pass through Rotterdam; these goods are recorded in the Netherlands as intra-EU imports and then as extra-EU exports.

## Other articles

### Related articles:

- [All Statistics Explained articles concerning statistics on international trade in goods](#) .
- [Statistics 4 beginners](#)
  - [Trade in goods - general concepts](#)
  - [Consumer prices](#)
  - [GDP](#)
  - [Government finance statistics](#)
  - [Population](#)
  - [Statistical concepts](#)

### Glossary items in Statistics Explained:

- [European Union \(EU\)](#)
- [Harmonised system \(HS\)](#)
- [Combined nomenclature \(CN\)](#)
- [Standard international trade classification \(SITC\)](#)
- [Classification of products by activity \(CPA\)](#)
- [FOB \(Free-on-board\)](#)
- [CIF \(Cost, insurance and freight\)](#)
- [Intra-EU](#)
- [Extra-EU](#)
- [Mercosur](#)
- [EFTA](#)
- [NAFTA](#)

## Methodology

- [Compilers Guide on European Statistics on international trade in goods](#)
- [Differences between balance of payments and foreign trade statistics](#)
- [Frequently Asked Questions](#)
- [International Trade Data Reference Metadata in Euro SDMX Metadata Structure \(ESMS\)](#)
- [International trade in goods statistics – background](#)
- [User guide on European statistics on international trade in goods — 2016 edition](#)

## External links

- [International Merchandise Trade Statistics: Concepts and Definitions 2010](#)
- [Broad economic categories \(BEC\): UN trade statistics](#)