

# International trade statistics - background

Statistics Explained

This article provides background information on issues relating to international trade, such as [intra](#) and [extra EU](#) -trade, comparisons with other sources, asymmetries in the data, quality issues and revisions policies.

This article is part of an [online publication](#) providing recent statistics on international trade in goods, covering information on the EU's main partners, main products traded, specific characteristics of trade as well as background information.

## Data collection

### Intra-EU trade

Intra-EU trade statistics record the movement of goods between [Member States](#) . By convention, goods entering the Member State are called [arrivals](#) (intra-EU imports) and those leaving the territory are [dispatches](#) (intra-EU exports).

**Arrivals** in a given Member State include goods entering which:

- are in free circulation; or
- were placed under the customs procedures for inward processing or processing under customs control in another Member State.

**Dispatches** from a given Member State include goods destined for another Member State which:

- are in free circulation; or
- have been placed under the customs procedures for inward processing or processing under customs control in the given Member State.

Intra-EU trade statistics do not cover transactions between private individuals or very small businesses which are not subject to [VAT](#) obligations.

The advent of the [Single market](#) on 1 January 1993, with its removal of customs formalities between Member States and subsequent loss of trade statistics data sources, required the establishment of a new data collection system: Intrastat. The Intrastat system can be characterised as follows:

- data are directly collected from traders;
- it is closely interlinked with the VAT system relating to intra-EU trade to ensure the completeness and quality of the statistical data; and
- a system of thresholds is established to simplify data provision and reduce the overall burden on traders, particularly small ones.

For intra-EU trade, the providers of statistical information are all taxable persons reporting an intra-EU transaction whose annual trade value exceeds a certain threshold. This threshold is known as the 'exemption threshold' in the Intrastat system. Each Member State fixes its national thresholds, applicable separately to arrivals and dispatches.

## Extra-EU trade

Extra EU trade statistics record goods imported and exported by the EU from and to non-EU countries (note that movements of goods 'in transit' through a Member State are not recorded).

**Imports** into a given Member State include goods entering which are placed:

- under the customs procedure for release into free circulation, either immediately or after a period in a customs warehouse, either in the Member State of entry or after transfer to another Member State; or
- under the customs procedure for inward processing or processing under customs control (usually goods destined to be processed for subsequent re-export), either immediately or after a period in a customs warehouse.

**Exports** from a given Member State include goods which have been placed:

- under the customs procedure for export (final export, re-export following inward processing, etc.) in the originating Member State or following transfer to another Member State where customs procedures are carried out; or
- under the customs procedure for outward processing (usually goods destined to be processed for subsequent re import).

Therefore, goods from a non-EU country imported into customs warehouses are not recorded unless they subsequently go into free circulation in the country of receipt (or are placed under the customs procedures for inward processing or processing under customs control). Conversely, outgoing goods from customs warehouses are not recorded as exports. This method of measuring international trade in goods is referred to as the **special trade system**.

Extrastat data on trade in goods with non-EU countries are collected by customs authorities and are based on the records of trade transactions in customs declarations. Extra-EU trade statistics do not cover goods declared orally to customs authorities which are non-commercial, or which are of a commercial nature but have a value not exceeding the statistical threshold of EUR 1 000 and 1 000 kg. The providers of statistical information are all natural or legal persons lodging a customs declaration in a Member State on condition that the customs procedure is of statistical relevance.

Statistical procedure and preferential treatment (for imports only) are additional data collected for extra EU trade. The first relates to customs procedures and distinguishes between different types of imports and exports, while the preferential treatment (according to the EU Generalised Scheme of Preferences - GSP) indicates whether reduced or zero rates of customs duty apply to a transaction.

## Comparison with other sources

### National data

Discrepancies between Eurostat data and national data may exist due to the application of different concepts and definitions. The table shows the methodological discrepancies by Member State. The conceptual differences in the column "other" are the following:

- Belgium - Returned goods are excluded from national statistics.
- Germany - Additional statistical procedures are included in national statistics.
- Estonia - Extra-EU imports at national level are by country of consignment.
- Spain - Ceuta and Melilla are included in national statistics.
- France - Goods delivered to sea-going vessels and aircraft are excluded from national statistics.

- Hungary - Extra-EU imports at national level are by country of consignment.
- Austria - Goods covered by Single Authorisation for Simplified Procedures (SASP) are included in national statistics.
- Slovenia - Trade by non-residents which is not connected with activity on the Slovenian market is excluded from national statistics.
- Slovakia - Import data are FOB.
- United Kingdom - Extra-EU imports at national level are by country of consignment; non-monetary gold is excluded from national statistics until December 2013 as reference month.

When there is no methodological reason for discrepancies, it should nevertheless be kept in mind that data revisions may also alter the comparability of European and national data, at least for a transitional period.

According to the EU legisla-

tion, revised data should be communicated to Eurostat within one month each time a revision occurs at national level.

	General Trade System	Exclusion of quasi transit	Inclusion of repairs	Country of origin	Other (1)
Belgium		*			*
Bulgaria		*		*	
Czech Republic				*	
Denmark	*	*			
Germany				*	*
Estonia					*
Ireland	*		*	*	
Greece					
Spain	*			*	*
France				*	*
Italy					
Cyprus	*				
Latvia		*			
Lithuania					
Luxembourg		*	*		
Hungary		*			*
Malta	*	*		*	
Netherlands		*			
Austria		*		*	*
Poland		*		*	
Portugal					
Romania					
Slovenia		*			*
Slovakia		*		*	*
Finland				*	
Sweden					
United Kingdom	*	*	*		*

## Methodological differences between European statistics and national statistics - Source: Member States' national quality reports

### Balance of payments

Although most Member States compile the goods account of their [balance of payments](#) from their international trade in goods statistics (ITGS), adjustments need to be made to meet the different definitions. In practice, these adjustments aim to convert trade in goods statistics to the basis required for the national accounts. This is because flows of goods and services are defined, in terms of coverage, in virtually identical fashion in the manuals relating to national accounts and balance of payments. The adjustments needed address differences in coverage, the treatment of particular operations, the valuation of transactions (conversion of import value from [cost, insurance and freight \(CIF\)](#) to [free-on-board \(FOB\)](#) ) and the time the transactions are recorded. In addition, as already mentioned, some Member States make adjustments to deal with the incomplete coverage of their trade statistics. These adjustments are not discussed further in this guide but are set out in the publication [Differences between Balance of Payments and Foreign Trade Statistics](#) . It should, however, be stressed that it is necessary to distinguish carefully between the two methods of calculation to avoid confusion and to note that ITGS provide the most suitable dataset for the measurement of physical flows of goods.

## Asymmetries

Asymmetries occur when the declaration of the importer in country A is not consistent with the declaration of the exporter in country B. Asymmetries come either from errors in reporting or from differences in the concepts and definitions applied by the partner countries. Some of the asymmetries of a methodological nature could disappear thanks to further harmonisation in national practices; others will continue as they are linked to basic principles for compiling ITGS which are unlikely to change (e.g. CIF/FOB valuation). The most common causes of methodological asymmetries are the following:

- simplified product reporting: Where the EU legislation allows simplified codification of goods for certain transactions, some Member States apply the simplifications but others do not;
- different approaches to estimating or compiling trade data for specific goods and movements not covered by customs or statistical declarations, such as gas, electricity, vessels or aircraft;
- confidentiality: It is possible that data are considered confidential by only one of the two partners. However, the application of the confidentiality procedures should not impact the results at total trade level;
- time lag: the same operation can be recorded under a different reference period because of transport times or processing delays;
- CIF/FOB valuation: imports are valued on a CIF basis and exports on a FOB basis. This causes a systematic asymmetry as the value of the imports should then be higher than the value of the mirror exports;
- differences in methods and data used to estimate missing trade;
- different practices in the treatment of revisions;
- problems of currency conversion; and
- other methodological differences such as definition of partner country, definition of statistical territory, trade system (special or general).

Another possible source of asymmetries is the different application of thresholds for Intrastat declaration. The Intrastat legislation completely exempts traders with a low intra-EU trade value from any statistical reporting or allows the collection of simplified information. Member States nevertheless have to achieve the coverage rate required by the legislation: data must be collected directly from traders for 97 % of the dispatches in value and 95 % of the arrivals (93 % from 2014 onwards). The data not collected must be estimated but not at the most detailed level. The EU legislation states that estimates are to be allocated at least by chapter (HS2 codes) and partner Member States. Traders may also be given the possibility to report simplified information for small transactions below EUR 200. All these measures affect the data accuracy at the most detailed level, but full coverage of trade is still ensured. This amounts to a trade-off between data accuracy and the burden on businesses.

Users should be aware of these possible causes of asymmetry. Comparison of the sources selected may also be affected by other factors such as how old, how detailed or how up to date the information available is. It is worth noting that Eurostat's database is based on a monthly data flow that allows revisions to be included on a regular basis.

## Data quality issues

### Why is the intra-EU trade balance not equal to zero?

Considering that the intra-EU trade data are based on common and largely harmonised rules, one might expect the intra-EU [trade balance](#) to be zero or at least close to it. However, it is worth underlining that a perfect match is made impossible first of all by the CIF/FOB approach: the import value should be higher than the mirror export value as it includes extra transport costs.

A close match could nevertheless be legitimately expected given that trading partners within the EU are often neighbouring countries, but deliveries to vessels and aircraft are another methodological reason preventing this: such movements of goods create asymmetries in intra-EU ITGS as specific legal provisions state that only dispatches are to be reported.

At global level, most methodological reasons for asymmetries disappear. The remaining issues are in data reporting (e.g. missing Intrastat declarations, and trade in specific goods like sea-going vessels and aircraft not being properly captured).

### **What is the 'Rotterdam effect'?**

Dutch trade flows are over-estimated because of the so-called 'Rotterdam effect' (or [quasi-transit](#) trade): that is goods bound for other EU countries arrive in Dutch ports 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 flows from the Netherlands to those Member States to which the goods are re-exported. To a lesser extent, Belgian figures are similarly overestimated.

## **Data revision**

### **When are data revised and considered as final by the countries?**

International trade in goods statistics, like many published statistics, must balance the need for timely information with the need for accuracy. Inevitably, the detailed data sent for a given month are subject to the possibility of later revision as a consequence of errors, omissions or — particularly with the Intrastat system — late declarations by the providers of the statistical information. When monthly results already sent to Eurostat are subject to revision, revised results are to be sent no later than the month after they become available.

Data are revised frequently according to national needs and practices. However, Member States should provide Eurostat with final detailed data at the latest by October following the reference year. At that time data become 'final' and should not be revised further except in exceptional and well-justified cases. The importance of a revision will depend very much on the data user and what use they make of the data. To aid both the monitoring of revisions and users' understanding of their impact, Eurostat and Member States have agreed on thresholds to define different levels of revision at the aggregate level.

Metadata reports are published each month showing the revision to EU and euro area aggregates and to individual Member State data. The reports show how much the data have changed since their previous publication ('Subsequent data publications') as well as since they were first published ('first and last data publications'). The reports contain explanations of the agreed revision levels and indicate for individual Member States which level the revision is classified as.

The effect of revisions on the EU and euro area aggregates is also disseminated in a report updated each month showing all of the vintages, and the percentage change between the different vintages, for the following indicators:

- Extra-EU imports
- Extra-EU exports
- Intra-EU dispatches
- Extra-euro area imports
- Extra-euro area exports
- Intra-euro area dispatches

Both the report containing the different vintages for the abovementioned aggregates and the metadata reports (Subsequent revision level and Revision level from first release) are available at this [text link](#) .

All the latest revisions sent by the Member States are included in the monthly updates.

### **When disseminated data are updated?**

- Short-term indicators are updated monthly on the date of the news release (about 46 days after the end of the reference month). The first release of short-term indicators is announced in advance in the [Release calendar for Euro Indicators](#) . The specific [Comext update calendar](#) can also be consulted.

- Long-term indicators are updated generally twice a year — once when complete results are available for the last reference year (usually in March of the following year) and once when the annual data become more stable (towards the end of the following year).
- Statistics by statistical procedure, mode of transport and Generalised Scheme of Preferences (GSP) are updated every month on the date of the news release. In addition, the [Comext](#) database contains a separate dataset which is updated daily, giving users immediate access to the most recently revised data.
- Statistics by tariff regime are updated twice a year and include monthly data for the latest half-year.
- Statistics by enterprise characteristics are in general not updated unless Member States need to revise some figures substantially or amend them.
- Statistics by invoicing currency are not updated, except for data to be amended.

## Explore further

### Other articles

- [Economic globalisation indicators](#)

### Database

- [International trade](#) , see:

[International trade data](#)

[International trade detailed data](#)

### Thematic section

- [International trade](#)

### Publications

- [Quality report on international trade statistics](#)
- [Differences between Balance of Payments and Foreign Trade Statistics](#)

### Selected datasets

- [International trade](#) , see:

[International trade data](#)

[International trade long-term indicators](#)

[International trade short-term indicators](#)

### Methodology

- [International trade in goods](#) (ESMS metadata file — ext\_go\_agg\_esms)

### Legislation

- [Legislation for trade in goods statistics](#)