UK Trade in Goods Statistics Methodology Statement

Overview of Asymmetries

Published: July 2012

uktradeinfo Customer Services: 01702 367458

e-mail: uktradeinfo@hmrc.gsi.gov.uk

website: www.uktradeinfo.com

1. WHO SHOULD READ THIS?

This report is aimed at users of the detailed UK Overseas Trade Statistics who want a better understanding of the international comparability of the data and who want to understand some of the analytical work carried out by HMRC to quality assure the data.

2. INTRODUCTION

Asymmetries are the differences between the trade statistics of partner countries. Because each country collects data on their own international trade-in-goods for both imports and exports, in theory, the 'mirror flow' collected by their partner countries should match. In reality, it is often the case that the figures do not match. In such cases an 'asymmetry' (e.g. a difference between what the United Kingdom (UK) records as arrivals[1] from France, and the recorded dispatches[2] by France to the UK for the same period) occurs. This difference can be measured.

For trade-in-goods between the European Union (EU) Member States, trade information is collected via the Intrastat survey[3] and is controlled by EC Statistical legislation which aims to harmonise the classifications and collection. However, there remain legitimate reasons why asymmetries still exist.

The Trade Statistics area in HM Revenue & Customs (HMRC) carry out regular analyses of the asymmetries between the UK and the rest of the EU, and occasional analyses of differences with other major trading partners. This information is used as part of the quality assurance work on the trade data and to alleviate discrepancies.

For more information on the methodology underpinning the UK Trade in Goods statistics, please refer to the Overseas Trade Statistics Methodology Paper.
The latest asymmetry studies results can be found on the Quality Assurance page of the HMRC Trade Statistics website under the Asymmetry section.

---

[1] Goods imported into an EU Member State from the rest of the EU.
[2] Goods exported from an EU Member State to the rest of the EU.
[3] Intrastat was introduced in 1993 to replace customs declarations for trade between EU Member States following the introduction of the EU single market.

3. WHY ARE THERE DIFFERENCES

Although the international guidelines and legislation[4] are intended to minimise differences in the coverage of trade data, there are still several reasons why differences exist. These can be classified into four main groups:

- methodological discrepancies;
- valuation discrepancies;
- partner country discrepancies; and
- other.

3.1 Methodological discrepancies

Specific movements of goods

The movement of some goods is particularly difficult to measure. Their treatment is specified under the EC legislation that controls the collection of trade between EU Member States. 'Specific movements' cover goods where it is difficult to apply the theory of the UN concepts and a more pragmatic solution is used. The characteristics may relate to the movement itself, the nature of the goods or the transaction which gives rise to the movement, from either the exporter's or importer's point of view. Examples include ships and aircraft; sea products; domestic and goods belonging to foreign armed forces; industrial plant; staggered consignments; ship's stores and bunker supplies; installations at sea; and energy supplies such as gas and electricity. For more details on specific movements, refer to section 3.3 of the Overseas Trade Statistics Methodology Paper.

Essentially, EU legislation allows the specific movement of goods to be recorded by different methodologies by Member States, which invariably lead to asymmetries.

Differences in recording leased goods and repairs

Trade declared as goods sent to another Member State to be processed and returned should be reported. However, this may wrongly include goods that have been sent for, and returned after, repair. It may also include goods on hire or operational leasing arrangements covering periods of less than 2 years which should, in fact, be excluded. If one Member States correctly excludes the movement of such goods from their Trade Statistics but the partner country incorrectly includes it, this will lead to an asymmetry.

Data disclosure control

Although trade statistics operates under 'passive confidentiality' rather than active[5], the suppression of sensitive data below chapter level (2-digit commodity classification) by each Member State will lead to some asymmetries between partner countries.

---

[4] The United Nations International Merchandise Trade Statistics Concepts and Definitions, Rev.2 and the EC Trade Statistics legislation

[5] The national statistical authority takes the initiative to introduce an active suppression whereas for passive confidentiality, the suppression is requested by a company or another Government Department.

3.2 Valuation discrepancies

National Thresholds

There are various declaration thresholds which may be used within Intrastat, but the actual value of the thresholds will vary from country to country. The main threshold is the Exemption Threshold, below which traders do not need to submit any Intrastat information.

- EC Legislation requires Member States to collect 95% of Intra-EU trade for arrivals and 97% of Intra-EU trade for dispatches. Member States set their Exemption Thresholds to enable these targets to be met. Therefore, a trader does not have to submit Intrastat declarations unless they have reached that amount for either arrivals or dispatches. They should then submit Intrastat declarations for that flow for the rest of the current calendar year and the whole of the next one.

  Therefore an item exported from the UK to France may appear in the UK dispatches trade but not in France's arrivals trade or vice versa due to threshold differences and/or trading patterns above and below the thresholds. This is because the UK dispatch trader could be required to complete UK dispatch declarations but the French arrivals trader is not required to submit arrivals documents as they are below the threshold. For example, if a large multi-national firm exports goods to a much smaller firm in the importing country, the former is almost certain to be above the threshold in the relevant country yet the latter below the threshold, so the trade will only be reported on one side. Even if the thresholds are of a similar size, an asymmetry can still arise if the one of the trading partners is above its national threshold and the other is below.

- The treatment of some low-valued shipments varies from country to country. They may be excluded from statistics, reported in less detail, or estimated instead of compiled from trader submissions. Although EC legislation states a single threshold, some EU Member States may have slightly different low value thresholds due to fluctuations in the exchange rates of EU countries outside the Eurozone.

- The country-to-country differences in the thresholds that determine the reporting of the value of transactions can often lead to differences in the coverage of transactions. Specifically, it is possible for those UK Intrastat trade transactions that are below the UK threshold to be aggregated and classified into a single 'pseudo' commodity code (99500000). However, this is optional. As such, some traders will not use the 'pseudo' code and will instead opt for the regular commodity code used for their specific goods. This inconsistent classification of below threshold trade leads to asymmetries at Combined Nomenclature (CN) 8 level.

- The majority of Member States calculate their total EU trade based on VAT-registered traders. This means that differences in VAT thresholds will add to the asymmetries between Member States.

Exchange Rate Variations

Fluctuation in exchange rates may be a source of differences, although they will not affect businesses trading in Euros within the Eurozone. However, discrepancies can arise when the trade involves countries outside the Eurozone, which includes EU Member States such as the UK. Individual items of trade are valued using daily exchange rates at the time of the movement of the goods. However, later comparisons made in mirror analyses will be based on the official monthly or annual exchange rates.

Determining Statistical Value

Trade is valued for statistical purposes using the 'statistical value' concept. The valuation of exports (dispatches) is on a free on board (fob) basis, i.e. the cost of goods to the purchaser abroad, including packaging; inland and coastal transport in the reporting country; dock dues; loading charges and all other costs such as profits, charges and expenses (e.g. insurance) accruing up to the point where the goods are deposited on board the exporting vessel or aircraft or at the land boundary.

The valuation of imports (arrivals) is on a cost, insurance and freight (c.i.f.) basis including the cost of the goods; charges for freight & insurance; and all other related expenses in moving the goods to the point of entry into the reporting country.

The statistical value may differ from the amount specified on the sales agreement (the invoice value) as a result of the delivery terms used in the transaction. Consequently, the statistical value for the same goods will differ between the exporter and the mirror importer, not only because they are based upon a different delivery term valuation, but also because different Member States calculate statistical value by different mechanisms.

Some Member States collect statistical value from the trader while other Member States (e.g. the UK) collect invoice value and estimate the statistical value. For UK trade, this estimation process uses delivery terms information, which is collected for larger traders, and data collected the Ancillary Costs Survey (ACS). The fact some member states collect statistical value directly whilst others use different methods of estimation will invariably lead to differences in recorded value and, as a result, asymmetries.

3.3 Partner country discrepancies

Transit trade

Goods may be allocated to the wrong partner country because they are in fact in transit from one country to another but declared in error by an intermediate Member State trader. Incorrect allocation may also be the result of the dispatches or arrivals trader incorrectly declaring the intermediate Member State as their partner country.

There are several different kinds of transit flow, and the precise method is dependent on the flow and whether the country of transit is EU or non-EU.

The three main kinds of transit trade are:

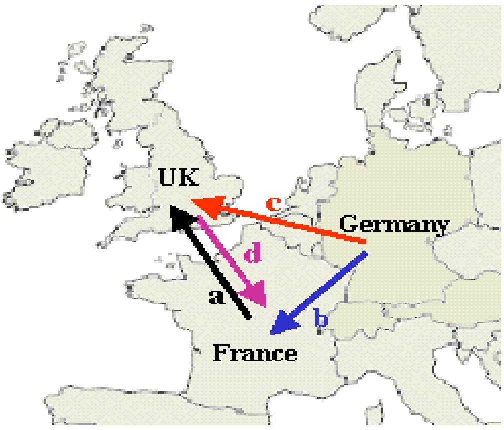
- simple transit, where the goods pass through a country and are not declared as arrivals or dispatches in the country of transit;
- indirect trade, where goods are cleared as arrivals and then subsequently exported again, but always in foreign ownership; and
- re-dispatches, similar to indirect trade, but where the goods become the property of a resident in the state of transit on import, and then resold on export.

Although all the routes are legitimate, each country involved may record the trade differently. This causes asymmetries.

Triangular trade

Triangulation is the term used to describe a chain of supplies of goods involving three parties when, instead of the goods physically passing from one party to the next, they are delivered directly from the first party to the last in the chain (see figure 1).

Figure 1: Demonstration of Triangular Trade



Key

a A UK company receives an order from a French company and sources the goods from a German company.

b The goods are sent directly from Germany to the French customer.

c The German company invoices the UK company for the goods.

d The UK company invoices the French company for the goods.

In this transaction, the Intrastat 'movement' takes place between Germany and France and (not withstanding any local interpretations):

- the German company will declare the transaction as a dispatch to France;
- the French company declares the transaction as an arrival from Germany; and
- the UK company has no obligation under Intrastat as the goods do not physically cross the frontiers of the UK.

More recently, this has been affected by the development of 'centralised clearance'[6]. This relates to provisions within the Customs environment, currently being piloted in a number of Member States, where traders (once registered) can centralise all of their EU import/export declarations in one supervising Member State. The payment of customs duties are collected in that Member State with reciprocal arrangements agreed between the supervising Member State and the Member State where the goods are actually imported (the 'Participating Member State'). As statistics and VAT remain 'destination based', these continue to be accounted for in the actual Member State concerned.

3.4 Other differences

Misclassification of commodity codes

[6] Provisions regarding additional information required on the customs declaration and procedures to be followed in Member States are incorporated in the revised Extrastat regulation No 471/2009 which was implemented on 1 January 2010 repealing Council Regulation (EC) No 1172/95.

Although all Member States use the standard Combined Nomenclature (CN) based on the Harmonised System (HS) for classification of goods, there can be differences in interpreting and applying codes and this may lead to the trader carrying out the dispatch assigning a different commodity code to the trader carrying out the arrival in the partner country. This does not affect the total value of trade but would cause differences at chapter level and below.

Fraud

Fraud which affects asymmetries includes acquisition fraud, carousel fraud, diversion fraud and trade-based money laundering.

The UK includes an adjustment for the impact of the largest type of fraud that affects EU trade statistics, i.e. Missing Trader Intra-Community (MTIC) fraud[7]. Before 2009, an estimate of the MTIC fraud was added to chapter 99 in the arrivals trade, but no partner country was allocated. From January 2009, the MTIC fraud estimate has been broken down at chapter level and included in the chapter totals rather than in chapter 99. At the time of publication, other Member States do not include an adjustment for the impact of MTIC fraud on their trade data.
Further information on MTIC fraud can be found in Annex 2.

Reporting time-lags

Reporting timing differences and movement of goods across year or month ends, result in movements of goods being reported in different months by exporting and importing countries.

[7] MTIC (Carousel) fraud is where the importing trader sells the goods on but disappears before paying VAT to the Treasury, and usually without submitting an Intrastat declaration.

4. GOVERNANCE

Although the United Kingdom is under no legal obligation, it does undertake a number of exercises in order to try to resolve some of the asymmetries on behalf of Eurostat. The most notable of these exercises is the annual Eurostat Asymmetry Reconciliation exercise.

5. FURTHER INFORMATION

HMRC Trade Statistics website

https://www.uktradeinfo.com

The Overseas Trade Statistics Methodology Paper - Overseas Trade Statistics Methodology Paper

The Latest Asymmetry Analytical Reports can be found on the Quality Assurance page of the HMRC Trade Statistics website under the Asymmetry section

Eurostat Database on EU External trade

http://epp.eurostat.ec.europa.eu/newxtweb/

MTIC

https://www.uktradeinfo.com/statistics/noneuoverseastrade/aboutoverseastradestatistics/user%20support/oecd_mtic06.pdf

6. ANNEXES

6.1 Annex 1: Glossary

Acquisition fraud	Goods are imported from another EU Member State by a trader who then goes missing without completing a VAT return after selling the goods to an internal buyer. The 'missing trader' therefore has a VAT free supply of goods, as no payment of the VAT due is made on the goods. See C*arousel fraud*
Arrivals	Goods imported into an EU Member State from another EU Member State.
Asymmetries	Differences between the trade recorded by countries, e.g. the difference between what the United Kingdom records as an arrival from Germany and what Germany records as a dispatch to the United Kingdom.
Carousel fraud	Similar to *Acquisition fraud* in the first stage, but the goods are not sold for consumption on the home market. Rather, they are sold through a series of companies and then re-exported to another country, hence the goods move in a circular pattern or 'carousel'.
Comext	Eurostat's Trade Statistics database, which contains standardised trade data from all EU Member States.
Dispatches	Goods exported from an EU Member State to another EU Member State.
Diversion Fraud	The ostensibly legitimate freight consignments of duty suspended excise goods moving between warehouses in different EU Member States but which never arrive at the stated destination, either in dispatch Member State (inward diversion) or in the partner Member State (outward diversion). Instead the goods are diverted on the home market without payment of duty.
Exports	Goods exported to non EU countries, but often used to describe EU trade as well.
Imports	Goods imported from non EU countries, but often used to describe EU trade as well.
Intrastat	Survey of trade in goods between EU Member States.
MTIC	Missing Trader Intra-Community (VAT Fraud), see *Carousel* fraud.

Relative Asymmetry	When comparing two reciprocal flows of trade the relative asymmetry is the largest value divided by the smallest.
Statistical value	On export, the value of the goods at the place and time they leave the statistical territory of the exporting Member State. On import, the value of goods at the place and time they enter the statistical territory of the importing Member State.
Threshold	The Intrastat system has thresholds including an exemption threshold (above which traders must submit declarations giving details of their trade with the rest of the EU). In the UK there is also a delivery terms threshold (a simplification where only traders above this threshold must submit details on delivery terms and costs in order to calculate *statistical value*).
Transit Trade	Goods may be allocated to the wrong partner country because they are in fact in transit from one country to another but declared in error by an intermediate Member State trader.
Triangular Trade	In triangular trade there are three countries involved, for example, A sells goods to B, B sells goods to C and A dispatches the goods to C. The goods go direct from the original seller to the final buyer and do not follow the financial flow.

6.2 Annex 2: What is MTIC trade?

Missing Trader Intra-Community (MTIC) fraud is a systematic criminal attack on the VAT system, which has been detected in many EU Member States. It relies on the VAT-free movement of goods between Member States. In essence, fraudsters obtain VAT registration to acquire goods VAT-free from other Member States. They then make a domestic sale of the goods at VAT inclusive prices and disappear without paying over to the tax authorities the VAT paid by their customers. The trade tends to be in high value, low volume goods such as mobile phones and computer components. The fraud is usually carried out very quickly, with the fraudsters disappearing by the time the tax authorities follow up the registration with their regular assurance activities.

There are two types of fraud:

Acquisition fraud is where the goods are imported from another EU state into the UK by a trader who then goes missing without completing a VAT return or Intrastat declaration. The 'missing trader' therefore has a VAT free supply of goods, as they make no payment of the VAT monies due on the goods. They sell the goods to a buyer in the UK and the goods are available on the home market for consumption.

Carousel fraud is similar to acquisition fraud in the early stages, but the goods are not sold for consumption on the home market. Rather, they are sold through a series of companies in the UK and then re-exported to another EU State, hence the goods moving in a circular pattern or 'carousel'.

VAT - reverse charge accounting for businesses trading in mobile telephones, computer chips and certain other goods:

The UK's reverse charge procedure was brought in on 1 June 2007. The aim of this was to reduce the amount of MTIC fraud. Under the reverse charge procedure the purchaser of these goods, rather than the seller, is liable to account for the VAT on the sale. The supplier will not charge VAT, but will have to specify on the invoice that the reverse charge applies. Provided that the purchaser has correctly accounted for the VAT under the reverse charge procedure, he will retain the right to input tax recovery, subject to the normal rules. This will mean the exporter of these goods from the UK will be unable to reclaim VAT unless they have paid it so reducing the opportunity to commit this type of fraud.