

Article

# Impact of trade in goods data collection changes on UK trade statistics: 2020 to 2022

Interpretation of the latest HM Revenue and Customs data collection changes resulting from EU exit and the impact on UK trade statistics.

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# 1 . Overview

Since the UK left the EU, the arrangements for how the UK trades with the EU have changed. We are keen at the Office for National Statistics (ONS), working with colleagues in HM Revenue and Customs (HMRC) and elsewhere, to keep users updated on the changes to trade data collection and how it may impact our trade statistics.

In March 2022, we wrote about the latest HMRC collection changes in [our blog, Understanding the latest changes to UK trade figures with the EU](#). These changes had an impact on trade data uncertainty, notably goods imports, which we have been exploring.

This article concludes and summarises the recent HMRC investigations and provides users with an update on the estimated effect the data changes have had and how to use trade figures following these changes.

## 2 . UK exports to the EU

### For January 2022 and Quarter 1 2022

In January 2022, [HM Revenue and Customs \(HMRC\) implemented an operational change](#), which amended the assumed departure period of goods exports from 5 to 15 days. An automated departure is now triggered if a trader does not submit a departure notification within 15 days (previously five days) of pre-lodging the export with HMRC.

Because of this change, there were 10 fewer days of EU exports data (where there is an assumed departure date) recorded in January 2022. This resulted in a break in the data time series for UK exports to the EU. The following months were not affected as the equivalent number of days that were moved into the month have also been moved out.

Of the [£2.9 billion \(19.4%\) decrease in exports to EU countries in January 2022](#), HMRC analysis estimates that approximately £2 billion was attributed to this operational change. When analysing the impact across Quarter 1 (Jan to Mar) 2022, this is reduced to approximately £800 million. It is not possible to break down the effects to country or commodity level data. Therefore, caution should be taken when interpreting UK exports to the EU for periods that include January 2022 data.

## For the year 2021

Prior to 2021, data on UK exports to the EU was collected through the [Intrastat survey](#). In 2021, [HMRC moved their data collection](#) of Great Britain (GB) exports to the EU to customs declarations and maintained the existing Intrastat survey for collecting Northern Ireland (NI) exports to the EU. EU member states also moved their data collection to customs declarations to capture trade between the EU and GB.

HMRC has investigated the change in data collection methods for UK exports to the EU, comparing the components of trade for 2021 with 2020 (Table 1).

Table 1: 82.8% of UK exports to the EU in 2021 were conducted by UK traders who responded to the Intrastat survey in 2020

UK exports to the EU, percentage share of components

Component	Average January 2020 to December 2020	Average January 2021 to December 2021
<b>Intrastat 2021 traders who responded</b>	91.8	82.8
<b>Below Threshold Trade Allocation (BTТА) estimate</b>	2.3	0.1
<b>Non-response estimate</b>	1.7	0.1
<b>All other traders</b>	N/A	12.3
	<b>Of which:</b>	
	<b>Previous BTТА traders</b>	N/A 3.4
	<b>EORI non-VAT registered</b>	N/A 1.2
	<b>EORI VAT registered</b>	N/A 7.5
<b>Parcel Post</b>	N/A	0.3
<b>Low Value trade</b>	N/A	3.3
<b>External data (Gas, Electricity, Oil)</b>	4.2	1.1
<b>Total</b>	100	100

Source: HM Revenue and Customs

In 2021, 82.8% of trade by value was carried out by the same Intrastat traders as in 2020. This covers traders exporting from GB to the EU collected from the customs declaration, and traders completing Intrastat returns for exports from NI to the EU. A further 0.2% came from the estimation of Below Threshold Trade Allocations (BTТА) and non-response, still required for NI exports to the EU.

We also know that the "all other traders" component, 12.3% of the trade value in 2021, is a mix of:

- BTTA that was previously estimated and is now being drawn directly from customs declarations; identifying the traders who would have been in the below threshold pre-2021 shows this accounts for 3.4% in 2021, this confirms that the BTTA monthly proportions are broadly consistent with the estimates used pre-2021 under the Intrastat survey (approximately 7.0%)
- traders who are non-Value Added Tax (VAT) Economic Operators Registration and Identification (EORI) registered, which is approximately 1.2%; this group would not have been accounted for under the Intrastat survey, as it was designed to only measure trade by VAT-registered businesses
- traders who are VAT registered and using a new or different EORI number that does not match a previous Intrastat identifier and are either: new businesses trading for the first time in 2021; established businesses who never registered or responded to Intrastat in 2020; or established businesses who had responded to Intrastat in 2020 but using a different identifier

The EORI VAT registered component accounts for 7.5% of the trade value in 2021. HMRC investigations confirm there is evidence that around half of this group are existing traders that are using a new EORI number.

Approximately 0.3% is categorised as Parcel Post, which is collected through the customs system but was not previously collected through the Intrastat survey.

Around 3.3% is low-value trade, which are customs declarations under £873 and under 1,000 kilogrammes, and are aggregated into a single commodity code for trade statistics. This may or may not have been captured within the Intrastat survey, as it would depend on whether the trader was registered for Intrastat.

The remaining 1.1% consists of external data sources for gas, electricity and some crude oil movements, which have always been included.

The conclusion of these investigations suggests that, when comparing the components that form the trade in goods data in 2020 and 2021, there is a discontinuity of around 5% by value between the two compilation methods. This discontinuity is a combination of data not previously collected under the Intrastat survey, such as Parcel Post (0.3%) and non-VAT registered traders (1.2%), along with a group of traders using a new or different identifier for their customs declarations (approximately 3.5%).

### 3 . UK imports from the EU

In 2021, UK imports from the EU continued to be collected through the [Intrastat survey](#). EU member states moved their data collection to customs declarations. However, HM Revenue and Customs (HMRC) maintained the Intrastat survey because of the introduction of [Staged Customs Controls](#) (SCC). The purpose of SCC was to ease the friction of importing non-controlled goods after the end of the EU transition period by allowing the customs declaration to be delayed up to 175 days from the point of import. This potential delay in the customs declaration would have resulted in a data gap for UK trade statistics in 2021.

HMRC stopped updating the Intrastat register in 2021. The sample for Intrastat is identified from Value Added Tax (VAT) data, which, prior to 2021, were updated at the beginning of each year, and then monitored throughout as traders trigger the Intrastat thresholds. However, a further consequence of the new trading relationship was that the VAT data source changed, meaning HMRC was unable to identify new traders to update the Intrastat register. For 2021, around 700 traders were added to the sample where, typically, we can expect around 1,700 traders to be added or removed.

With the ending of SCC at the start of 2022, Great Britain (GB) imports from the EU moved from the Intrastat survey to customs import declarations. However, Northern Ireland (NI) imports from the EU continued to be collected through the existing Intrastat survey.

HMRC has investigated the change in data collection methods for UK imports from the EU, comparing the components of trade for January to March 2022 with January to December 2021 (Table 2).

Table 2: 80.6% of UK imports from the EU in 2022 were conducted by UK traders who responded to the Intrastat survey in 2021

UK imports from the EU, percentage share of components

Component	Average January 2021 to December 2021	Average January 2022 to March 2022
<b>Intrastat 2021 traders who responded</b>	90.1	80.6
<b>Below Threshold Trade Allocation (BTTA) estimate</b>	6.6	0.2
<b>Non-response estimate</b>	1.7	0.1
<b>All other traders</b>	N/A	14.2
<b>Of which:</b>		
<b>Previous BTTA traders</b>	N/A	5.8
<b>EORI non-VAT registered</b>	N/A	1.5
<b>EORI VAT registered</b>	N/A	6.9
<b>Parcel Post</b>	N/A	0.5
<b>Low Value trade</b>	N/A	3.1
<b>External data (Gas, Electricity, Oil)</b>	1.6	1.3
<b>Total</b>	100.0	100.0

Source: HM Revenue and Customs

Using the same analysis of components outlined for exports to the EU in [Section 2: UK exports to the EU](#), the conclusion of these investigations suggests that, when comparing the components that form the trade in goods data in 2022, there is a discontinuity of around 6% by value between the two compilation methods.

This discontinuity is a combination of:

- traders who are non-VAT Economic Operators Registration and Identification (EORI) registered (contributing approximately 1.5%)
- traders who are VAT registered and using a new or different EORI number that does not match a previous Intrastat identifier and are either: new businesses trading for the first time after 2022; established businesses who never registered or responded to Intrastat in 2021; or established businesses who had responded to Intrastat in 2021 but using a different identifier
- because HMRC investigations confirm there is evidence that around half of this group are existing traders that are using a new EORI number, this group is estimated to contribute around 3.5%
- data not previously collected under the Intrastat survey, such as Parcel Post (contributing an estimated 0.5%)

Note that this conclusion is unchanged from our [previous article](#) in this series (published 13 July 2022).

## 4 . Other changes to UK Trade

Users should be aware of the potential impact of Staged Customs Controls (SCC) for the compilation of UK trade statistics in 2022.

In 2021, the introduction of SCC allowed the customs declaration of Great Britain (GB) imports of non-controlled goods from the EU to be reported up to 175 days after the date of import. There is a potential for the over-recording of imports in 2022, when the delayed customs declarations under SCC are submitted. It is not possible to distinguish which customs declarations are associated with SCC and therefore we are unable to remove or make adjustments to the trade statistics.

## 5 . Trends in UK trade: Quarter 1 2022

As well as the data collection changes occurring in the first quarter of 2022, several commodities also performed strongly during Quarter 1 (Jan to Mar) 2022. We highlighted the higher levels of uncertainty around UK trade in the latest [UK balance of payments bulletin](#). This showed a provisional estimate of the UK current account deficit position excluding precious metals of £44.2 billion or 7.1% of gross domestic product (GDP) in Quarter 1 2022.

### Machinery and transport equipment

Increases in [imports of several commodities from the EU](#) occurred in Quarter 1 2022, with machinery and transport equipment being the largest at £6.4 billion. The [global shortage of semiconductor chips](#) affected the production of transport vehicles, resulting in decreased imports and exports throughout most of 2020 and 2021. There was evidence to suggest that [EU manufacturers suffered more from the global semiconductor chip shortage than non-EU countries](#) in 2021, slowing the recovery of imports of machinery and transport equipment from the EU.

Ongoing analysis confirms strong imports of machinery and transport equipment from the EU in 2022. This reflects a recovery following lower levels throughout much of 2021 and early signs of an easing of the global semiconductor chip shortage. HM Revenue and Customs (HMRC) is continuing to assess any effects of this change and drivers of the current import trends.

### Fuels

Increasing imports from non-EU countries in Quarter 1 2022 were driven by a £4.7 billion increase in imports of fuels. The [large increase in imports of fuels since mid-2021 has been driven by increasing gas imports](#), linked to rising wholesale gas prices. The increase in gas prices at the end of 2021 was because of increased global gas demand following the easing of coronavirus (COVID-19) pandemic restrictions and lower domestic renewable energy production, among other factors. Additionally, the Russian invasion of Ukraine has destabilised existing European gas supply chains, leading to European economies seeking alternatives to Russian gas imports, which has further pushed up gas prices in 2022.

## 6 . Comparing customs declaration data with the Intrastat survey data

The customs declaration is an enhanced data source compared with the Intrastat survey. This includes wider coverage, for example:

- including declarations from traders below the Intrastat and Value Added Tax (VAT) thresholds
- collecting more data elements such as country of origin on imports
- removing the need to estimate for non-response and for Below Threshold Trade Allocations (BTTA)

HM Revenue and Customs (HMRC) has concluded its investigations in assessing the transition from the Intrastat survey to customs declarations data. There is little evidence that maintaining the Intrastat survey into 2021 for Great Britain (GB) imports from the EU led to under recording of trade.

Therefore, 2020 and 2021 data, as published, remain our best estimates of trade for those periods. There are broad, comparable overlaps between traders and values reported when comparing results from the Intrastat survey and customs declarations. The overall discontinuity for trade with the EU is around 5% to 6% of trade by value.

## 7 . Future developments

We recognise that there are heightened levels of uncertainty around our latest estimates of trade flows. There have been multiple changes in data collection and operational procedures since the UK left the EU, which make it difficult to cleanly compare trends over time. This article aims to give users a sense of the likely size of the changes in how data are collected. These, along with supply chain impacts and ongoing challenges arising from the global coronavirus (COVID-19) pandemic results in a complicated trade narrative. We are continuing to assess the effect these impacts are having on our trade estimates, and on the estimate of the UK economy, and will provide an update in autumn 2022. We will keep users informed of any further changes in continuing to provide our best estimates of trade.

## 8 . Related links

### [UK trade: July 2022](#)

Bulletin | Released 12 September 2022

Total value of UK exports and imports of goods and services in current prices, chained volume measures and implied deflators.

### [Focus on UK trade](#)

Article series | Released 24 August 2022

A series of articles taking a closer look at emerging themes in UK trade statistics.

### [Understanding the latest changes to the UK trade figures with the EU](#)

Blog | Released 11 March 2022

A blog detailing the latest changes to the way HM Revenue and Customs collect data for both imports from and exports to the EU.

### [In the balance: Identifying differences between UK and EU trade figures](#)

Blog | Released 8 July 2021

A blog exploring the disparities between EU and UK trade statistics.

### [Trade off: different ways of measuring imports and exports](#)

Blog | Released 14 May 2021

A blog detailing how imports and exports are measured.

### [Impact of the coronavirus and EU exit on the collection and compilation of UK trade statistics](#)

Article | Released 8 March 2021

How the global coronavirus (COVID-19) pandemic and the end of the EU exit transition period impacted on the compilation of UK trade.

## 9 . Cite this article

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