



HM Revenue
& Customs

UK Trade in Goods Statistics Methodology Statement

Enhancements to Estimation Methodology

Published:

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1. WHO SHOULD READ THIS?

This paper should be read by all users of EU data from the Overseas Trade Statistics (OTS). The method by which estimations are made for undeclared trade is being enhanced for January 2010 monthly OTS EU data onwards.

2. INTRODUCTION

HM Revenue & Customs (HMRC) collects information relating to the trade between the UK and EU Member States. This is conducted via the Intrastat Survey. These declarations form a key component of the Overseas Trade Statistics (OTS), which are published on a regular monthly basis. While it is mandatory for traders above the Intrastat threshold to submit monthly returns by the legal deadline (with traders that do not supply their returns risking a financial penalty), some traders do not meet their legal obligations. For this reason HMRC includes an estimate into the published OTS to take account of trade yet to be declared. This is termed 'non-response', and is estimated based on the trade reported by these businesses in previous periods. A growth factor broken down by Standard International Trade Classification (SITC) is also used to aid in estimating a meaningful value by commodity type.

We have identified that there is a revision bias in the OTS EU data. This means that on average the first provisional published estimates of total Arrivals from and Dispatches to the EU are lower than the final published total. It has been identified that the main cause of this bias relates to incomplete Intrastat declarations by businesses. Although non-response estimates are made when a business has not submitted a declaration for the month in time, no estimate is made when a potentially incomplete declaration is submitted. For example, a business may make an initial declaration for January within the expected timeframe, then make an additional declaration for January several months later. This is termed 'partial response'. Since a declaration has been made, no estimate for non-response is included and so when they declare the remainder of their trade 'late', the published OTS trade totals increase.

3. AIM

For January 2010 monthly OTS EU data onwards the current non-response estimation methodology will be enhanced to include a short term additional estimate to account for partial response. This is to increase the accuracy of the earliest provisional releases of OTS EU data.

4. METHODOLOGY DETAIL

4.1 Partial Response Method

The partial response estimate will be calculated on a per business basis and aggregated in a similar method as the current non-response methodology. When a business declares their EU trade on their Intrastat return, the value of this trade will be compared to the level of trade predicted by the

current non-response methodology. If the declared trade is substantially lower than that expected, a certain amount of the shortfall will be retained to create the partial response estimate. Additionally, beyond the first provisional OTS release the partial response estimates will be scaled down to reflect the increased confidence that declarant businesses have made complete declarations. By the sixth provisional OTS release for a particular month, no partial response estimate will be made, only the non-response estimate consistent with current practices will remain.

4.2 Data Products Affected

The introduction of a partial response methodology to enhance the current mechanism for estimating EU trade yet to be declared, is designed to specifically increase the accuracy of provisional high level aggregate totals for EU Arrivals and Dispatches.

As an enhancement of the current non-response methodology, the only data products affected by the partial response estimate will be those which currently include the non-response estimates i.e. high level aggregate totals. This estimate is made at the SITC division level, with no country breakdown. In particular the monthly OTS2 hard copy publication of trade with the EU will include partial response estimates. **Note:** This additional estimate will not be separately identified in publications from non-response. No commodity code (8-digit) detailed data products will be impacted by partial response.

Since partial response estimates will only be made for the first six months' provisional releases of the OTS EU data, the HMRC finalised trade data will be unaffected, e.g. the OTSA hard copy publication and other Annual products.

5. FURTHER INFORMATION

If you have any queries regarding the application of partial response estimates to the Overseas Trade Statistics data, please contact our Customer Service team via uktradeinfo@hmrc.gov.uk.