

Report on further research into the impact of Missing Trader Fraud on UK Trade Statistics, Balance of Payments and National Accounts

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Summary

This article is a follow-up to the article published previously in the August 2003 edition of Economic Trends and on the National Statistics website; and summarises work carried out since July 2003 to review the estimates of the impact of Missing Trader Intra-Community (MTIC) VAT Fraud on the Overseas Trade Statistics, Balance of Payments and National Accounts, and to investigate potential methods of estimating acquisition fraud.

By way of a brief recap, there are two main types of VAT MTIC fraud: acquisition and carousel fraud:

Acquisition fraud is where the goods are imported VAT-free from the EU into the UK by a VAT registered trader who then sells the goods to a buyer in the UK and the goods become available on the home market for consumption. The importer goes missing without completing a VAT return or Intrastat declaration, and/or without paying the VAT monies due on his onward supply of the goods.

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 Member State, hence the goods moving in a circular pattern or 'carousel'.

The ONS introduced the estimates into the UK Trade Statistics to take account of the impact of carousel fraud, they were made to the Balance of Payments as aggregate adjustments. These were not incorporated into the detailed transaction-based Overseas Trade Statistics (OTS) data published by HM Customs & Excise (HMCE). These adjustments could not be broken down and published at a detailed level in the OTS, because they do not fit with a micro-dataset based on detailed transactions and also because any detailed publication of the adjustments could affect HMCE's ability to tackle the fraud effectively.

Following the publication of the first estimates of the impact of MTIC carousel fraud on the Trade Statistics, on 9 July 2003, a team comprising representatives of both HMCE and ONS reviewed the methodology and researched additional data sources to determine if the estimates could be refined. The existing estimates account for the known impact of carousel fraud on the statistics, so the project included work to investigate if it was possible to estimate the impact of other VAT Fraud (notably acquisition fraud) on Intra-Community trade statistics.

The team concluded that it was not possible to extend or refine the estimates for the impact of fraud on the statistics using the currently available sources.

Introduction

Data for UK trade released on 9 July 2003 included revisions to imports and the balance of trade in goods for the period from 1999, to incorporate new adjustments for the impact of VAT Missing Trader Intra-Community (MTIC) carousel fraud.

The project was extended to focus on the continuing elements of this work. The main objectives of the project were to:

- Continue to estimate for the impact of MTIC on the trade statistics;
- Continue to research alternative methodologies to estimate for the impact of MTIC fraud on the UK's Overseas Trade Statistics (OTS); and
- Agree the best methodology to give the most reliable estimates of the MTIC fraud impact on trade statistics.

The further research focused on UK imports (arrivals) from the EU, but also looked at UK exports (dispatches) to the EU. In assessing if the current methodology could be improved, alternative data sources were examined.

Background

The VAT system and EU trade statistics

As part of the VAT return which firms over the VAT threshold complete each quarter, there is a declaration of the total value of dispatches of goods (Box 8) to customers in other EU Member States and the total value of arrivals of goods (Box 9) from suppliers in other EU Member States. These returns provide a direct estimate of the size of UK dispatches to and arrivals from the EU.

The detailed measurement of trade in goods within the European Union is based on the Intrastat system. Any trader whose annual trade for either arrivals or dispatches is above a given threshold (£221,000 in 2004) is required to submit an Intrastat form each month. This Intrastat form has a more detailed breakdown of the trade including a commodity code, which is used to classify goods at a detailed eight-digit level. The threshold is set such that a required percentage of all trade is collected; presently this level is 97.5 per cent in the UK (reduced to at least 97 per cent from January 2005). Trade below this threshold is estimated for in Below Threshold Trade Allocations (BTTAs) using information from the VAT returns and known similarities with those just above threshold.

In MTIC fraud, the importing missing trader does not submit VAT returns, and in virtually all cases these traders also submit no Intrastat returns. This has a corresponding impact on the trade statistics.

European Sales List (ESL)

In addition, there is a mandatory document known as the **European Sales List (ESL)** that all VAT registered traders are required by VAT legislation to complete. The trader is required to supply the details of each dispatch transaction that they have made with a trader in another Member State stating the partner trader's VAT Registration Number (VRN) and the value of the goods (but with no product description). In addition, EU legislation sets out the VAT control arrangements for administrative co-operation between Member States. This requires each Member State to maintain an electronic database of data from ESLs and to share and exchange this data with Member States in order to confirm the validity of VAT registration numbers. This exchange scheme is known as VIES (VAT Information Exchange System).

It is a condition of zero-rating that the exporters supply the correct VAT registration number of his EU customer. Since the completion of an ESL is mandatory, it should be a comprehensive list as it

will record dispatches by every VAT registered trader. However, the extent to which this requirement is regulated and enforced is likely to vary considerably across Member States.

Information from ESLs is also used to prevent the wrongful diversion of home-use goods that traders have zero-rated as dispatches.

Comparisons and Analyses

A substantial part of the project has involved comparing data sources and investigating reasons for the differences between them; as any significant unexplained differences could be due to the impact of MTIC fraud, and potentially give us an upper bound for the estimates.

Pooling together data from various sources from HMCE and from Other EU Member States (OMS) means it is possible to derive five different versions of UK dispatches to and arrivals from Other Member States. These are:

- i. HMCE data for UK trade published in Overseas Trade Statistics
- ii. UK Vat Box 9 for Arrivals and Box 8 for Dispatches
- iii. Intrastat data for UK trade with Other Member States, from Eurostat's COMEXT database of trade statistics from all Member States
- iv. Other Member States Intrastat data on trade with UK, from Eurostat's COMEXT database
- v. Data from UK ESLs (for UK dispatches) and data from Other Member States ESLs (for UK arrivals)

All five versions showed slightly different aggregate numbers, so it was essential to understand the differences (even though in most cases the specific causes cannot be quantified).

Firstly, looking at differences between data on dispatches to Other Member States from VAT returns, European Sales Lists and Intrastat declarations, we identified some legitimate reasons for differences:

- i. The value declared on Intrastat declarations can be greater or less than the value declared for VAT purposes
- ii. The value shown on a European Sales List may be less than the value declared for VAT purposes

Secondly, looking at differences between data on UK recorded arrivals from Other Member States and Other Member States recorded dispatches from Other Member States (and vice versa) using Eurostat's COMEXT database. Differences are to be expected due to different recording systems, treatment of goods such as gold and other recognised discrepancies between countries trade figures including the calculation of 'statistical value' for trade in goods.

The findings from this broad analysis are that while there are these differences nevertheless:

- i. There is a common theme of under-recording of UK arrivals with comparisons between VAT Box 9 and OMSs ESLs that compares well with asymmetries (i.e. differences between what UK says 'arrives' and what other Member States say they dispatch to the UK)
- ii. The differences between the UK's annual OTS data on a general trade basis and the UK's data on a special trade basis supplied to Eurostat for its COMEXT database are small
- iii. The differences caused by the inclusion of trade in gold in the COMEXT database but not in the annual OTS are insignificant
- iv. The differences between invoice value and statistical value are small in the UK

While investigations into asymmetries had previously relied on COMEXT data, the comparative work identified above demonstrated the potential for other data sources to be used as well. The focus of the next stage of research was on the European Sales Lists with a view to:

- i. Seeking assurance about the quality of the European Sales Lists
- ii. Gaining an understanding of its relationship to VAT returns; and
- iii. Establishing the relationship between the European Sales Lists and COMEXT data

The outcome of this research is contained in Annex A in the form of summary tables showing the links and differences between the various data sources.

Additional work

HMCE and ONS held a workshop with Eurostat to share UK experience of incorporating adjustments to the Balance of Payments. We also made presentations to Eurostat's Trade Statistics and Balance of Payments Committee meetings. This has raised awareness of the effect of MTIC fraud on the trade statistics with all Other Member States. As a result, Eurostat asked all Member States to investigate this topic and report to the Trade Statistics Committee meeting in June 2004. Those who reported had made little real progress other than to acknowledge fraud as an issue and to say they were investigating. However, it is unlikely that other Member States could replicate the UK's work precisely - it is the relatively unique co-location of HMCE Law Enforcement and statistical activity in one department that has enabled the UK to develop its methodology.

A presentation was also made to the OECD's International Trade Statistics Expert Group meeting in April 2004, to inform others outside of the EU about the issue. In addition to the OECD, there were delegates present from the other main international organisations with an interest in trade statistics namely the UN, IMF and WTO as well as most OECD member countries.

Conclusions

No individual piece of research could be used to make improvements to the methodology for MTIC carousel fraud adjustments to the trade statistics, but collectively all the research undertaken as part of the project supports the size of the current adjustments, which are in turn in line with HMCE published estimates.

Although there is recognition that acquisition fraud exists, we have not found any reliable way to estimate for its impact on the import figures. With so many legitimate but unquantifiable causes of differences between the various available data sources it has proved impossible to develop a robust methodology for estimating even an aggregate estimate for acquisition fraud let alone a commodity by country breakdown. This is unlike the MTIC carousel fraud adjustments, where the method used includes information uncovered during HMCE's operational activity. However, it is HMCE's view that acquisition fraud levels are far below the peak levels seen in carousel fraud, so the impact of acquisition fraud on the trade figures is likely to be smaller.

We have been able to confirm that there is no overlap with other estimations used in the compilation of the trade statistics - i.e. no double counting with estimates of Below Threshold Trade nor with estimates for net under-recording of trade derived from the Local VAT Office (LVO) survey (a survey of traders conducted by the Local VAT Office field staff).

We also agreed the methodology for incorporating updates to the information on which the estimates are based.

We continue to work with colleagues across HMCE to make sure that the estimates reflect the impact of MTIC fraud on the trade statistics as accurately as possible.

HMCE on-going asymmetries studies - comparing another country's declared trade with the UK's trade statistics - have been enhanced. HMCE now produce an analysis of annual asymmetries for the ONS, updated each quarter, which provides indications of changes in the reported discrepancy, which could be fuelled by MTIC. It can also identify changes in the product make-up of any discrepancies.

Consideration was given to producing asymmetry analyses on a monthly basis. However, given that data for the current period are provisional, and prone to large amendments from one month to the next depending on when other Member States submit their data to Eurostat, the conclusion was that very little would be gained from increasing the frequency of these analyses, compared to the large resource this would entail.

There are a number of concerns about the quality of ESL data throughout the EU, particularly regarding compliance, the use of agents, and the possible impact of triangular trade and fraudulent declarations of dispatches.

There are also concerns about asymmetries in Intrastat data, in particular issues about possible fraud in other Member States, inconsistencies between Member States in the calculation of statistical value, estimation of Below Threshold Trade and late/partial response. The UK will continue to be active in the European meetings at which these issues are addressed.

While further research by HMCE into the various data sources is possible, it is very resource intensive. In addition, because of concerns about the overall quality of those data sources, in the judgement of the HMCE/ONS team it is unlikely to yield robust estimates for the impact on the trade statistics of either carousel fraud in other goods or of acquisition fraud. This situation could change should research in other Member States prove fruitful. Accordingly, HMCE and ONS will remain in close contact with Eurostat on this issue but results are not expected in the short-term.

However, a possible avenue to explore in more depth would be the supply-demand imbalances, which point to carousel fraud possibly starting in 1998 rather than 1999 and give an indication of goods where acquisition fraud may have taken place over several years. This has been incorporated into the continuing work (see below).

Continuing work

The main work of the project has now been completed, however work will continue in a number of areas:

- Introducing adjustments for the impact of MTIC fraud into the Overseas Trade Statistics published by HMCE
- Liaising with other Member States, to monitor any progress with development of their estimates and methodology
- ONS' Balance of Payments asymmetries analyses
- HMCE's Overseas Trade Statistics asymmetry studies
- Monitoring changes to commodities used in MTIC fraud
- ONS' Input-Output supply balance analyses
- Monitoring changes/developments in the Pre-Budget Report (PBR) estimates of VAT Revenue Loss

This on-going work will be kept under review at regular 6-monthly HMCE/ONS liaison meetings.

Glossary

Acquisition fraud	Where the goods are imported from the EU by a trader who then goes missing without completing a VAT return or Intrastat declaration after selling the goods to an internal buyer. The 'missing trader' therefore has a VAT free supply of goods, as they make no payment of the VAT monies due on the goods. See <i>Carousel fraud</i>
Arrivals	Goods sent from the rest of the EU to the UK, commonly referred to as imports.
Assimilation Threshold	See Threshold.
Asymmetries	Differences between the trade recorded by countries. e.g. the difference between what the UK records as an import from Germany and what Germany records as the dispatches to the UK.
Box 8	Box on VAT form for recording the total value of dispatches (dispatches) from the UK to the rest of the EU.
Box 9	Box on VAT form for recording the total value of arrivals (arrivals) from the rest of the EU to the UK.
Carousel fraud	Is similar to <i>Acquisition fraud</i> 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 Member State, hence the goods moving in a circular pattern or 'carousel'.
COMEXT	Eurostat's public statistical database, which contains standardised trade data from all EU members
Dispatches	Goods sent from the UK to the rest of the EU, commonly referred to as exports.
ESL	European Sales List: information required from VAT registered traders on the value of their trade with the rest of the EU.
Eurostat	The European Statistical Agency
Exports	Goods sent from the UK to non EU countries, but often used to describe EU trade as well.
IMF	The International Monetary Fund (IMF) is an organization of 184 countries, working to foster global monetary cooperation, secure financial stability, facilitate international trade, promote high employment and sustainable economic growth, and reduce poverty.
Imports	Goods sent from non EU countries to the UK, but often used to describe EU trade as well.
Input-Output Supply-Use tables	Balances that provide a single framework showing the relationship between components of value added, industry inputs and outputs, and product supply and demand. These can be used to identify possible areas to investigate for MTIC activity.
Intrastat	Survey of trade in goods between EU Member States.
LVO	Local VAT Office
MTIC	Missing Trader Intra-Community (VAT Fraud)
OECD	Organization for Economic Cooperation and Development. An organization that acts as a meeting ground for 30 countries.
OMS	Other Member States (within the EU)
PBR	Pre-Budget Report

Statistical value	On export, the value of the goods at the place and time where they leave the statistical territory of the exporting Member State. On import, the value of goods at the place and time where they enter the statistical territory of the importing Member State.
Threshold	The Intrastat system has two thresholds, an assimilation threshold (above which traders must submit details of their trade with the rest of the EU) and a delivery terms threshold (above which traders additionally submit details on delivery terms and costs).
Triangular Trade	Where goods are sold from Member state A to B and onto C, but the goods move directly from A to C. The term triangular trade is often used to symbolize the fact that most foreign trade is more complicated than the simple assumption of an even balance of the dispatches and arrivals moving between two countries trading with each other.
VAT	Value Added Tax
VAT returns	Submissions from VAT registered traders – all traders above a predetermined threshold must submit information about their business transactions.
VIES	VAT information exchange system: EU wide system to monitor trade from VAT registered businesses
WTO	The World Trade Organization (WTO) is the global international organization dealing with the rules of trade between nations
Zero rated	A positive Taxable VAT rate which has been suspended.

Annex A Reconciling VAT and Intrastat Statistical Declarations

Normally the figures declared on VAT return for EU supplies and acquisitions of goods should agree with the totals of the values declared on Intrastat declarations. It is a basic principle of Intrastat that the VAT figures should be used as control totals, providing a check that Intrastat declarations are complete and accurate. However, there are a number of legitimate reasons for the figures to be different. The following table highlights cases where the figures declared on VAT returns may be different from the values declared on Intrastat declarations.

Relationship between Intrastat declarations and VAT

Origin of difference			Value in VAT return (Box 8 or Box 9)	Intrastat Value	Relationship between Intrastat and VAT
Processing/repairs			nil	Total value of goods	Intrastat greater than VAT
Financial leasing			Remaining Balance due at end of contract if option taken up and transfer of ownership occurs.	Total value of goods	Intrastat greater than VAT
Hire-purchase			invoice	Total value of goods	Intrastat = VAT
Credit notes	For supplies	Goods returned (acquisitions)	Nothing in box 9	Total value of goods	Intrastat greater than VAT
		Invoice corrections	value of goods excluding correction	Total value of goods including correction	Intrastat less than VAT
	For acquisitions	Goods returned (supplies)	Nothing in box 8	Total value of goods	Intrastat greater than VAT
		Invoice corrections	value of goods including correction	Total value of goods including correction	Intrastat = VAT
Triangular trade reported by intermediary (i.e. goods do not enter or leave country of intermediary)			Value of goods	nil	Intrastat less than VAT
Supplies or acquisitions of goods include charge for installation or assembly (i.e. goods supplied as an integral part of a supply of services)			Nil	Value of goods only	Intrastat greater than VAT
Indirect exports			Nil	Total value of goods	Intrastat greater than VAT
Distance selling (i.e. a supplier in one Member State supplies goods, and is responsible for their delivery, to any person in another Member State who is not registered for VAT - including supplies to public bodies, charities and businesses too small to register for VAT or with activities that are entirely exempt from VAT)			nil	Total value of goods once value exceeds distance selling threshold in purchasers Member State	Intrastat greater than VAT

Note Transactions where Intrastat reference date is not the same as the VAT tax point, for example:

- goods arriving in an excise warehouse, where the Intrastat reference period is the period the goods are received into the warehouse but the VAT acquisition point is when the goods leave the warehouse for home use (sales made within the warehouse prior to removal do not create an acquisition)
- goods invoiced in advance of the month in which the goods are physically dispatched or received.

In such cases the tax point for VAT will be the invoice date, but the reference period for Intrastat will be the month of the physical movement of the goods or the calendar month of the VAT taxpoint.

The following table looks at the various VAT procedures that correspond to different categories of sales and how these impact on Intrastat declarations and on the information appearing on the European Sales Lists.

Summary of links between VAT returns, European Sales Lists (ESL) and Intrastat declarations

	Member State of departure		Member State of destination		
	VAT	ESL	Intrastat VAT	Intra-stat	
Goods other than means of transport, goods subject to excise duty and goods supplied with supplier carrying out assembly and installation					
<u>Sales to VAT registered businesses</u>					
Seller arranges transport	Y	Y	Y	Y	Y
Purchaser arranges transport	Y	Y	Y	Y	Y
<u>Sales to private individuals</u>					
Seller arranges transport (distance selling)					
Below distance selling threshold	N	N	N	N	N
Above distance selling threshold	Y	N	Y	Y*	Y*
Purchaser arranges transport (regarded as internal supply in Member State of departure)	N	N	N	N	N
<u>Sales to zero-rated VAT businesses and non-taxable bodies such as public authorities</u>					
Seller arranges transport (distance selling)					
Purchaser below VAT threshold					
Seller below distance selling threshold	N	N	N	N	N
Seller above distance selling threshold	Y	N	Y	Y*	Y*
Purchaser above VAT threshold	Y	Y	Y	Y	Y
Purchaser arranges transport					
Purchaser below VAT threshold	N	N	N	N	N
Purchaser above VAT threshold	Y	Y	Y	Y	Y
New means of transport					
Sales to VAT registered businesses	Y	Y	Y	Y	Y
Sales to private individuals	Y	N	Y	N	N
Sales to zero-rated VAT businesses and non-taxable bodies such as public authorities					
Below VAT threshold	Y	Y	Y	N	N
Above VAT threshold	Y	Y	Y	Y	Y
Goods subject to excise duty					
Sales to VAT registered businesses	Y	Y	Y	Y	Y
Sales to private individuals					
Seller arranges transport (distance selling)	Y	N	Y	Y*	Y*
Purchaser arranges transport	N	N	N	N	N
Sales to zero-rated VAT businesses and non-taxable bodies such as public authorities					
Seller arranges transport (distance selling)	Y	Y	Y	Y	Y
Purchaser arranges transport	Y	Y	Y	Y	Y
Goods delivered with supplier arranging assembly or installation	Y	Y	Y	Y*	Y*

*The seller acts through a tax representative in the Member State of destination