

## INTERNATIONAL TRADE REVIEW: DATA QUALITY AND CLIENT QUERIES

### INTRODUCTION

The ABS has recently introduced changes to some of its procedures for compiling international merchandise trade statistics. The changes were made following a review of its international trade program.

The Review covered all elements of the program, including:

- user needs and priorities;
- the efficiency of data receipt and processing;
- possible alternative data dissemination options; and
- broad strategic directions for the next 3 years.

The Review concluded that, to meet core internal and international statistical requirements, the ABS needed to maintain and release international merchandise trade statistics to at least the six digit level of the Harmonized System (HS) commodity classification. It also needed to undertake sufficient editing to ensure the quality requirements for macro-economic statistics, such as the Balance of Payments and the National Accounts.

The Review recognised the need to continue to produce more detailed commodity estimates to meet the demonstrated needs of both private sector and government users. However, while there is a clear demand for detailed trade data beyond the six digit HS level, its provision could not be considered ABS core business and, as such, there needed to be full recovery of the direct costs associated with this service.

The Review determined that there was not full recovery of the direct costs and proposed actions to bring costs and revenue into approximate balance. These are detailed in this article. It is anticipated that these measures will have very limited impact on the usefulness of trade data or on its overall quality.

### DATA QUALITY CHECKS

The Review found that significant resources were being expended on amendments to small value records which rarely, if ever, impacted on the broad aggregates used for macro-economic statistics. Most of the amendments related to quantity or classification, rather than value.

The ABS has never had the resources to comprehensively assure the quality of all import and export data. The large bulk of transactions included in international merchandise trade statistics are 'as reported to Customs' and this will continue to be the case in the future.

ABS procedures are designed to ensure that sufficient editing is undertaken to guarantee the quality and integrity of trade data to at least the six digit HS level. Most of the limited resources available are directed at ensuring that large value transactions are correct.

### CHANGES

From 1 July 2000, the ABS has:

- ceased unit value editing of export records valued below \$250,000;
- ceased unit value editing of import records valued below \$1million; and
- introduced automatic adjustment of quantity for import records valued below \$1million, where the source of error relates to known areas of misreported quantity, such as tonnes instead of kilograms, litres instead of kilolitres (or vice versa) or the misplacement of decimal points.

## EDITING

Unit value editing involves checking the unit value (value divided by quantity) for each transaction that has a reported quantity. The ABS international trade system stores unit value ranges, calculated from previously edited transactions, for every commodity code for which a quantity is required.

New transactions with unit values outside the specified range for the commodity are flagged for examination by an editor. The changes implemented on 1 July 2000 only affect records with values below the unit value editing thresholds stated i.e. unit value editing will continue for records valued above the specified thresholds.

All other editing procedures currently undertaken by the ABS will continue. These include:

- identification of all transactions with a value of \$2million or more. The details (including commodity code, country, state, value and quantity) of these transactions are checked, and where necessary, confirmed with the exporter, importer or agent;
- legality checks on all transactions to ensure that valid and up-to-date commodity, country, state and port codes are reported, and all mandatory fields are completed and in the correct format;
- internal consistency checks e.g. to identify records where the gross weight is less than the net quantity, or to ensure that an export of aviation fuel for consumption on an international route has air as its mode of transport and an airport as its Australian port;
- tailored edits for specific commodities and / or countries and / or states. Examples include checks of minerals which are only mined in certain states; prohibited or illegal imports; and exports of commodities not manufactured in Australia;
- automatic adjustment of known recurring reporting errors. These may be applied as a result of an investigation which identified misreporting of commodity, country, state or quantity by particular exporters, importers or their agents. Recurring errors are also referred to Customs for audit action;
- analyses of monthly aggregates to explain and, if necessary, correct any unusual movements or features. For example, duplicate records may be detected and deleted, or significant commodity movements may be explained by price or volume changes; and
- compilation of validation tables to account for all data received from Customs and all editing changes.

## SPECIAL INVESTIGATIONS

The ABS may examine the quality of data reported for particular commodities or chapters of the HS classification. After contact with the relevant exporters or importers, a variety of solutions, including tailored edit checks, may be implemented. These investigations are time consuming and resource intensive and will only be undertaken for significant commodities or chapters, where there are known to be frequent and serious reporting problems.

The ABS has participated in bilateral reconciliation studies with the United States, the European Union, Japan and New Zealand. These studies involve comparing partner countries' estimates of their transactions with Australia with Australia's estimates of its transactions with those countries. The purpose is to identify the causes of data discrepancies and to quantify any major coverage or quality deficiencies, after taking into account known conceptual and methodological differences.

## CLIENT DATA QUERIES

After the release of monthly trade statistics, the ABS usually receives a number of client requests to investigate cases of possible misreporting. Most relate to potential errors at the most detailed level of the commodity classification. The most frequently amended field is quantity, followed by classification and country details.

Previously, where data errors were suspected by clients, an investigation was undertaken free of charge, regardless of the value or volume of trade involved. Where errors were identified, the data were amended and the revisions incorporated in the next release of trade statistics.

## CHANGES

Client requests for data investigations will now only be considered, if the value of the aggregate data queried exceeds \$250,000 in each month queried, and the cost of the investigation is met by the client.

Clients interested in this service should be aware that the following factors will limit the ability of the ABS to confirm / amend trade data:

- the goods descriptions provided on export and import documentation is often not sufficient to determine the correct code at the most detailed level of the commodity classification. In these cases, the ABS is usually unable to obtain sufficient information to amend the classification code originally provided; and
- transaction records are processed for a limited period, due to the costs involved in storing and processing large amounts of data. After trade data are published, the latest month's export and import transactions are subject to amendment by further processing for six months and three months respectively, before the records are archived. As a result, data quality queries which are not identified within those periods cannot be investigated.

Additional criteria are used to assess requests for detailed data investigations. These include the significance of the potential amendments to value or classification, the seriousness or evidence of systemic reporting problems, evidence of data error, and the burden the investigation would place on data providers.

Clients who wish to request data queries, or better understand the process and charges involved, should obtain a copy of an ABS booklet titled *International Trade: Ensuring Data Quality*. Copies can be obtained from the Exports or Imports Managers on telephone (02) 6252 5401 (exports) or (02) 6252 5108 (imports), by faxing (02) 6252 7438, or by sending an email message to [international.trade@abs.gov.au](mailto:international.trade@abs.gov.au).

## CONCLUSION

The changes made to unit value editing practices will have virtually no impact on the broad commodity and country aggregates released by the ABS in this and other publications. Their impact on more detailed statistics provided to ABS clients is expected to be minimal.

The changes to client data query investigations mean that queries on low value aggregates will not be investigated. Other queries will only be considered if the client is willing to pay for the cost of the service. There may, therefore, be some reduction in the usefulness of very fine level data to clients who use it at that level e.g. low value commodity details by country and / or state.