



Overseas Merchandise Trade

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Overseas Merchandise Trade

Abstract

Overseas Merchandise Trade statistics provide statistical information on the importing and exporting of merchandise goods between New Zealand and other countries. Merchandise trade includes goods which add to or subtract from the material resources in New Zealand as a result of their movement in or out of the country. Data is obtained from export and import entry documents lodged with the New Zealand Customs Service (NZCS).

Purpose

The purpose of Overseas Merchandise Trade statistics is to provide statistical information on the importing and exporting of merchandise goods between New Zealand and other countries

Overseas Merchandise Trade

Methodology

System of recording

Overseas merchandise trade statistics include all merchandise imported into or exported from New Zealand. This is known as the "general" system of recording trade statistics as defined by the UN Statistical Commission.

Merchandise trade

Merchandise trade includes goods that add to or subtract from the material resources in New Zealand as a result of their movement in or out of the country.

These exclude:

Exports:

- goods consigned to New Zealand forces overseas or diplomatic representatives overseas

•

goods consigned for modification or repair

•

currency transactions in gold, silver, current coin

•

consignments valued under \$1,000

•

second-hand clothing for foreign aid projects replacements, short-shipped or short-packed goods

•

returnable containers and returnable samples

•

aircraft parts for use in New Zealand aircraft overseas and unserviceable parts removed from foreign aircraft and being returned overseas

•

temporary trade items and tourist effects leaving New Zealand.

Imports:

- temporary imports into New Zealand such as tourist effects, returnable samples and containers, and transit goods

•

fish landed by New Zealand vessels

•

goods (other than motor vehicles) for officials of overseas countries

•

passenger baggage imported permanently

•

consignments valued under \$1,000

•

currency transactions in gold, silver, current coin

•

goods on loan

•

replacements, short-shipped or short packed goods recorded previously

•

goods imported for use by foreign armed forces.

Basis of valuation

Exports (including re-exports) are valued as free on board (fob), which is the value of goods at New Zealand ports before export, and are shown in New Zealand dollars.

Imports are valued as both value for duty (vfd) and cost including insurance and freight (cif), and are shown in New Zealand dollars. Customs duty is based on vfd, the value of imports before the addition of insurance and freight costs.

The vfd value equates approximately with the fob value of the goods in the exporting country. However, the cif value of imports is preferred for most economic analyses as it is the actual cost of the goods paid by importers.

Trade balance values are calculated by deducting imports (cif) from exports (fob). These two valuations are not entirely comparable, because the cif valuation includes insurance and freight to New Zealand while the fob valuation excludes insurance and freight from New Zealand.

Data source

We obtain data from export and import entry documents lodged with New Zealand Customs Service (NZCS).

We convert export values provided in foreign currencies by NZCS to New Zealand dollars (NZD), using weekly exchange rates when the statistics are compiled. For exports, a rise in the NZD has a downward influence on prices and, as a consequence, quantities and values reduce.

NZCS provides import values in NZD to Statistics NZ after converting from the foreign currency when import documents are processed. NZCS sets the exchange rates each fortnight. For imports, a rise in the NZD has a downward influence on prices and an upward influence on quantities. The combined influence on values can be either positive or negative.

Classifications

New Zealand Harmonised System Classification

From January 2022, we compile overseas merchandise trade (OMT) data using the updated Harmonised System classification (HS2022). We used HS2017 in OMT from January 2017, and before January 2017, HS2012 applies.

The classification changes mean that data users need to take care when analysing time-series data. As with the change from HS2012 to HS2017, a number of new codes were introduced and a number of codes became obsolete. These changes took effect from the January 2022 month.

We will use HS2022 within OMT statistics until the next five-yearly review in 2027. Minor amendments may still occur on an adhoc basis.

Although the classification change potentially affects the published seasonally adjusted and trend series, our investigations show a negligible effect. We will communicate any effects we find when conducting our normal seasonal adjustment or trend series review processes.

HS2022 changes have been implemented in overseas trade indexes (OTI).

See [Overview of 2022 updates to the New Zealand Harmonised System Classification](#) for information on how HS2022 has affected overseas merchandise trade data.

For a copy of the concordance from H2017 to HS2022, visit [Ariā](#).

Broad economic category groups

Broad economic category (BEC) groups are arranged, as far as practicable, to align with the System of National Accounts' three basic classes: capital goods, intermediate goods, and consumption goods. We categorise commodities in BEC groups on the basis of their main end use. This means, for example, that all video recorders are treated as consumption goods even though some are used in business. Similarly, all helicopters are treated as transport equipment even though some are military goods (and are treated as such in the national accounts).

Standard International Trade Classification

The Standard International Trade Classification (SITC) is an output classification that uses Harmonised System (HS) codes at the six-digit level as building blocks. It was designed by the United Nations as an analytical tool for economic analysis, and includes some simple implications regarding level of processing. Published figures are at a high level of aggregation; more disaggregated information is available on Infoshare.

Contact customer services at: info@stats.govt.nz for customised jobs using the SITC Rev 4 classification.

We compile OMT statistics in close accordance with the United Nations' International Merchandise Trade Statistics Concepts

and Definitions. OMT data, after adjustment, is used in the balance of payments and national accounts. The adjustments are for coverage, timing, valuation, and classification.

Seasonal adjustment

Seasonally adjusted series

We calculate seasonally adjusted series monthly and for calendar quarters using X-13ARIMA-SEATS, which adjusts for outlying values and uses a centred moving average. The X-13ARIMA-SEATS package is an updated version of X-12-ARIMA, developed by the U.S. Census Bureau.

Seasonal adjustment removes the estimated impact of regular seasonal events, such as pre-Christmas purchasing, from time series. This makes the figures for adjacent periods more comparable. Seasonally adjusted figures are estimates and are subject to revision each period, with the largest changes generally occurring in the latest periods.

[Seasonal adjustment in Statistics NZ](#) has more information.

Trend series

Time series can be split into trend, seasonal, and irregular components. Seasonal adjustment removes the seasonal component, while trend estimation removes the seasonal and irregular components. Trend estimates reveal the underlying direction of movement in a series and are used to identify turning points.

We calculate the trend series using X-13ARIMA-SEATS. The length of the centred moving average is selected automatically and can be 9, 13, or 23 months, depending on the relative variability of the irregular component compared with the trend. A long-moving average smoothes the trend series but slows the response to underlying changes in growth rates. A short-moving average produces a trend series that is less smooth but quicker to identify turning points.

To improve estimation of the underlying movement, we calculate the imports trend after removing individual import items that have cif values of \$100 million or more, such as large aircraft and ships. The trade-balance trend is calculated by subtracting the imports trend from the exports trend.

We recalculate trend figures each month. Using new monthly data means that previously published trend estimates are revised. These revisions mainly affect the latest months and can be large if a trade value is initially treated as an outlier but is later found to be part of the underlying trend.

Confidentiality

Under Section 37A (d) of the Statistics Act, the Government Statistician may disclose details of external trade, movement of ships, and cargo handled at ports. However, we understand that the release of merchandise trade commodity information can, in some cases, place commercially sensitive information in the public domain. We can provide a limited form of confidential status for commodity items (at the discretion of the Government Statistician), on application by a company or business.

In practice, all confidential HS codes are aggregated into the code 9809.00.00.00 to protect their confidentiality and to maintain total export and import values. The only aggregates that include the confidential codes are total exports, total imports, and the total exports and imports by country.

For more information about trade data confidentiality, see <https://www.stats.govt.nz/about-us/legislation-policies-and-guidelines/trade-confidentiality>.

Revisions

Overseas merchandise trade statistics, like all macro-economic statistics published by Stats NZ, are subject to revision and can change after publication. More information on [our revision policy](#) is available on our website.

Why overseas trade data changes

Overseas merchandise trade statistics are published monthly and made available to users as soon as possible, based on a pre-determined monthly release schedule. Statistics are generally released 15-18 working days after the reference month.

OMT data is published as provisional for the first three months so that late data (i.e. data received after publication) can be included and updates made as more information becomes available. This process helps to make published trade statistics more accurate. Data may change due to routine monthly or annual updates, classification changes, or revisions due to errors in the original data.

Monthly updates

Previously published data is revised each month. Late data is included in revised published statistics and amendments are made as more information becomes available. The data we publish remains provisional for the first three months after data is first released. Final figures are published in the fourth month after release. For example, July data is first published in August as provisional (version 1); it is then updated and published in September (version 2), updated and published again in October (version 3), with the fourth and final version published in November.

Annual review of suppressed data

At the request of an exporter or importer, confidential merchandise trade data can be suppressed for up to 24 months. The length of this suppression can be extended further on request. We review data each year and make previously suppressed data available if the suppression is lifted. More information on [overseas merchandise trade confidentiality](#) is available on our website.

Classification changes

OMT data is published according to country groups based on present day membership. Examples of country groupings are the Organisation for Economic Co-operation and Development (OECD), Asia-Pacific Economic Cooperation (APEC), and the

Association of Southeast Asian Network (ASEAN). If the members of a group change, the data for that group is revised back to the start of the series.

When other classifications used to publish OMT data change, such as the New Zealand Harmonised System Classification, existing data will not be amended.

Revisions due to errors

Revisions due to errors in published data are uncommon. Statistics NZ will consider revising the data only if it results in a substantial change to the chapter-level aggregate data.

Find out about changes to trade data in our monthly information releases

We publish updates to previous trade statistics in each monthly OMT information release. Individual amendments are not highlighted and are simply incorporated into the next release. Any revisions due to classification changes or errors in previously published data will usually occur at the same time as the regular monthly release of OMT data. These will be highlighted in the information release.

Time Method

Exports – timing of recording and undercoverage

Since 1 August 1997, exports are compiled by date of export, that is, when they leave the country. Before August 1997, exports were generally compiled according to date of clearance by NZCS. This meant that some goods were allocated to the month following their actual month of export. Exports up to July 1997 that were not processed until August 1997 were assigned to the month of August 1997.

Since 1 March 2004, NZCS has not allowed goods to be loaded for export until an export entry has been lodged and cleared. A study undertaken in 2001/02 indicated that unlodged export entries might account for between 1 and 3 percent of exports at that time. The change in NZCS processes may have reduced this undercoverage, although this has not been quantified.

Imports – effects of timing of recording

Imports are compiled by date-of-entry clearance by NZCS. NZCS entries are required from up to five days before to 20 working days after arrival of goods into New Zealand.

Significant events impacting this study series

1826

Export and import totals first became available in 1826.

1855

In 1855 country data for Australia, the United Kingdom and the United States of America, also became available.

From the late 1800s, more country data became available.

1961

The Customs Department compiled the export and import statistics until the end of 1961.

1962

In 1962 the Statistics Department began compiling the export and import statistics.

From 1 July 1962 to 30 June 1967, the New Zealand Customs Tariff was arranged in accordance with the Standard International Trade Classification (Revised). The statistics were published in an identical arrangement of the SITC (Revised).

1967

On 1 July 1967, a new Customs Tariff became effective and was based on a completely different classification - the Brussels Tariff Nomenclature (BTN).

Statistics were published according to the BTN (as adapted for New Zealand trade) and the SITC. The SITC was identical to the BTN at the international four digit level, but adapted to New Zealand requirements at the seven digit level.

In July 1978, the Customs Co-operation Council Nomenclature (CCCN) was introduced as the classification for the collection from source documentation and the standard International Trade Classification Revision 2 (SITC Revision 2) for the publication of the data.

Both these classifications were the expanded versions of the previously used BTN and SITC Revised, respectively.

1981

CASPER (Customs and Statistics processing of entries and retrieval system) - an automated system for capturing import data - was introduced in 1981. Export data entries were still recorded on paper.

1986

In 1986 the minimum value of export/import entries that were processed increased from \$200 to \$1,000.

1987

Until 31 December 1987, exports and imports were recorded using the CCCN (Customs Co-operation Council Nomenclature). They were subsequently converted on a one-to-one basis to the New Zealand Statistical Classification of export/imports.

Both statistical classifications were based on the SITC (Revision 2).

1988

From 1 January 1988 the international Harmonised System (HS) replaced the CCCN, and the SITC (Revision 2) was replaced by the SITC (Revision 3). From that date, the domestic HS customs tariff catered for both exports and imports.

The HS customs tariff used a 10 digit numeric and one digit alpha code to identify commodities at the statistical key (lowest) level and contained approximately 12,500 items.

1996

Effective from the January 1996 reference month, nearly 2,000 commodity codes in the New Zealand Harmonised System Classification (HS) were changed.

1997

In July 1997 the New Zealand Customs Service (NZCS) introduced its newly integrated information technology system. The Customs Modernisation project (CusMod) covered not only importing and exporting but also passenger clearance, revenue collection, and intelligence analysis. The major effect of the CusMod system on Trade statistics was new EDI export entries and enhanced import entries.

Since August 1997, exports have been recorded by month of export. This change was made when the NZCS introduced new processing systems. Exports up to July 1997 that were not processed until August 1997 fell between the old and new recording systems. To keep these exports in trade statistics they were assigned to the month of August 1997. Imports are still recorded in the calendar month in which documents are processed by NZCS.

2002

The New Zealand Harmonised System Classification (NZHSC) was revised to incorporate changes circulated by the World Customs Organisation (WCO). At the 10-digit commodity code level, 1,147 new codes were introduced while 909 codes became obsolete. Most code changes were effective from the January 2002 reference month. Changes to HS Chapters 48, 97 and 98 were delayed until the April 2002 reference month.

2007

Effective from 1 January 2007, the NZHSC was substantially revised to reflect changes made to the HS by the WCO. There were a considerable number of changes at the four, six and 10 digit levels of the classification, resulting in some change of coverage in 16 HS chapters: 28, 29, 30, 32, 35, 37, 38, 39, 41, 43, 60, 69, 74, 84, 85 and 90. These changes create some discontinuity in time series between data up to December 2006 and that from January 2007 onwards. It is impossible to estimate the extent of the change in values but it is expected to be minimal at the chapter level.

SITC (Revision 3) was replaced by the SITC (Revision 4), which concurs to the most recent versions of the Harmonised System (HS2002 and HS2007).

2008

The New Zealand Standard Trade Classification – Level of Processing (LOP) was approved in 2008 as a standard output classification for publishing overseas trade data. Its purpose is to indicate the level of processing that occurs to New Zealand's imports and exports, and whether value is being added to products domestically or overseas. The LOP classification was developed by Statistics NZ's overseas trade team in response to requests for this type of data breakdown from public and private sector stakeholders.

2010

In November 2010 the estimation process for the seasonally adjusted and trend series for imports and exports was updated. The estimates are based on data from March 1999, whereas previously data from January 1988 was used. This is to ensure that the time series outputs are not unduly influenced by data from too far in the past. As a result the series before March 1999 is no longer subject to revision.

The 23-month fixed filter that was used for the trend estimation for exports was removed. Due to these changes it is expected that the trend series will generally be able to indicate turning points earlier.

2012

Effective from 1 January 2012, the NZHSC was substantially revised to reflect changes made to the HS by the WCO. At the 10-digit commodity code level, 1,468 new codes were introduced and 1,050 codes became obsolete. All HS code changes were effective from the January 2012 reference month.

2017

Effective from 1 January 2017, the NZHSC was substantially revised to reflect changes made to the HS by the WCO. At the 10-digit commodity code level, 1,695 codes were introduced and 961 codes became obsolete. Changes primarily affected fish, wood, steel, and vehicle categories. All HS code changes were effective from the January 2017 reference month.

2022

Effective from 1 January 2022, the NZHSC was substantially revised to reflect changes made to the HS by the WCO. At the 10-digit commodity code level, 1,518 codes were introduced and 899 codes became obsolete. Changes primarily affected vehicle, wood, and machinery categories. All HS code changes were effective from the January 2022 reference month. For more

information in the HS2022 changes, see <https://www.stats.govt.nz/methods/overview-of-2022-updates-to-the-new-zealand-harmonised-system-classification>

Frequency

- Monthly

Usage and limitations of the data

Limitations of Overseas Trade Data

Considerable reliance is placed on exporters/importers and their agents providing correct data, but before it is compiled and released by Statistics New Zealand it is validated and detected errors are corrected. The focus of these checks is to authenticate the publication of trade data by harmonised system chapter level (two digit HS) and country totals in the monthly Statistics NZ information releases. Overseas merchandise trade data is available at lower levels of aggregation down to 10 digit HS code in many cases via Infoshare. Care should be taken in using trade data below the two digit HS chapter level or any of the lower levels within other trade classifications, as it may contain errors or omissions which have not been detected by editing processes within Statistics NZ.

The apportioned gross weight field is an estimate only and should be treated with caution. The need for estimation arises because gross weight is received at total consignment level (the total entry), rather than for each item (each line in an entry). We apportion this total gross weight across each item in the entry. This provides us with an estimated gross weight in kg for all lines, including those whose kg weight is supplied.

Variables