

Wholesale Trade Survey: June 2015 quarter

Embargoed until 10:45am – 07 September 2015

Key facts

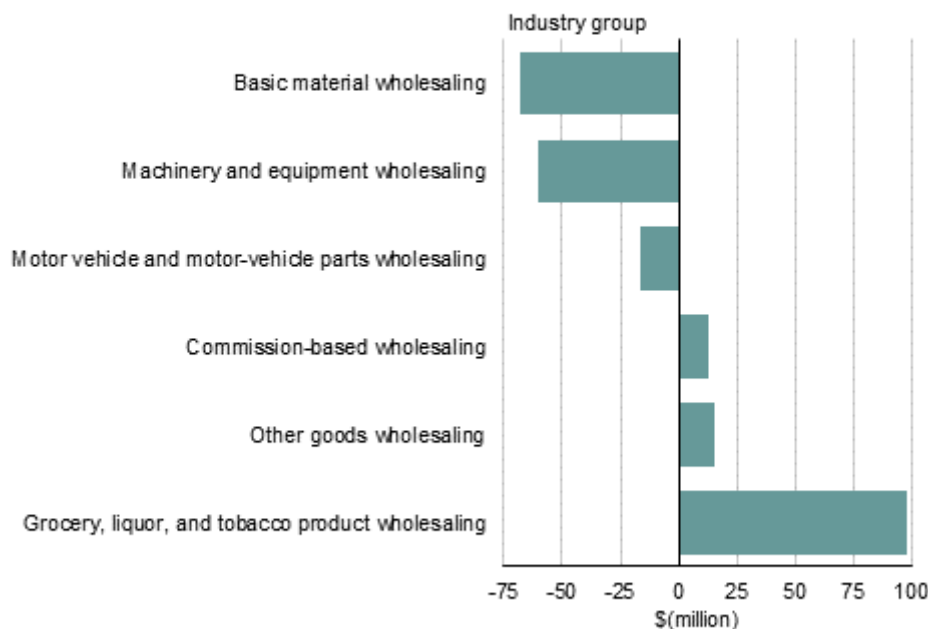
For the June 2015 quarter, compared with the March 2015 quarter (on a seasonally adjusted basis):

- Total wholesale trade sales **fell** 0.1 percent (\$16 million).
- Three of the six industries had lower sales, and three had higher sales.
- The largest fall in sales was in basic material wholesaling, **down** 1.4 percent (\$68 million).
- The largest rise in sales was in grocery, liquor, and tobacco products wholesaling, **up** 1.4 percent (\$98 million).

Total actual wholesale stocks were **up** 3.7 percent (\$353 million) when compared with the June 2014 quarter.

Industry contributions to change in seasonally adjusted sales

Change from the March 2015 quarter



Source: Statistics New Zealand

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Commentary

- Wholesale sales fall in June quarter
- Mixed results in industry sales
- Actual sales down from June 2014 quarter
- Stock values rise
- Changes to methodology and questionnaire

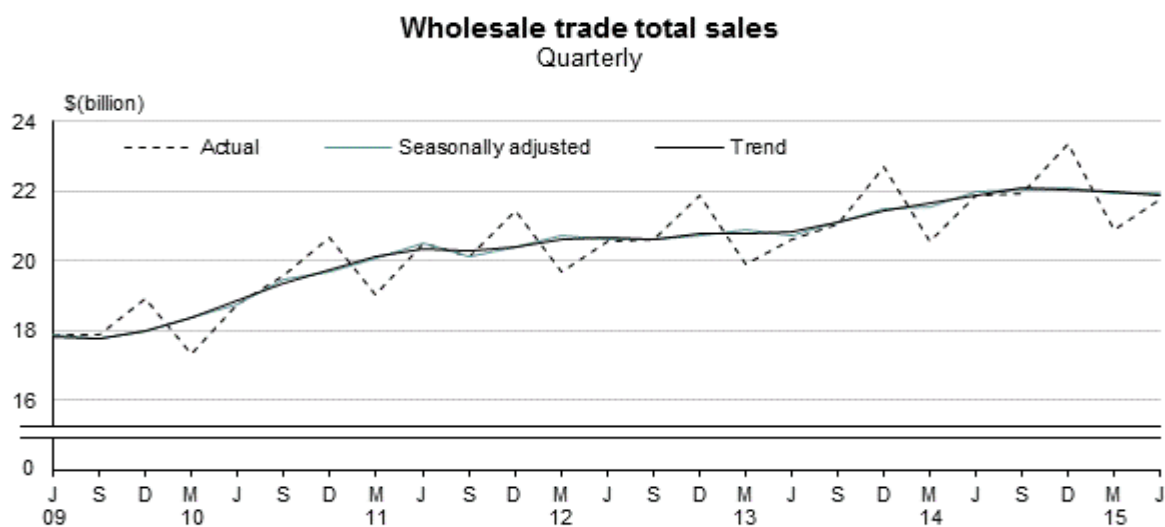
Sales figures are seasonally adjusted unless otherwise stated. We make no adjustment for changes in price level in this release.

Wholesale sales fall in June quarter

Total wholesale trade sales fell 0.1 percent (\$16 million) in the June 2015 quarter. This follows a 0.7 percent fall (\$153 million) in the March 2015 quarter, and a 0.2 percent rise (\$35 million) in the December 2014 quarter.



The trend for wholesale trade sales has generally been rising since the September 2009 quarter, but it has fallen in recent quarters. However, the trend remains at a high level.



Source: Statistics New Zealand

Mixed results in industry sales

Three of the six wholesale industries had lower sales this quarter, and three had higher sales.

The industries with lower sales were:

- basic material – down 1.4 percent (\$68 million)
- machinery and equipment – down 1.4 percent (\$61 million), due to agricultural and construction machinery.
- motor vehicle and motor-vehicle parts – down 0.8 percent (\$16 million).

The industries with higher sales were:

- grocery, liquor, and tobacco products – up 1.4 percent (\$98 million), led by increased sales from fruit exporters. Overseas Merchandise Trade: June 2015 reported a 13 percent (\$64 million) increase in seasonally adjusted fruit exports for the June 2015 quarter. The value of fruit exports in the June 2015 quarter was the highest ever.
- other goods – up 0.5 percent (\$15 million)
- commission-based – up 3.2 percent (\$13 million).

See [data quality](#) for details about the industries.

Actual sales down from June 2014 quarter

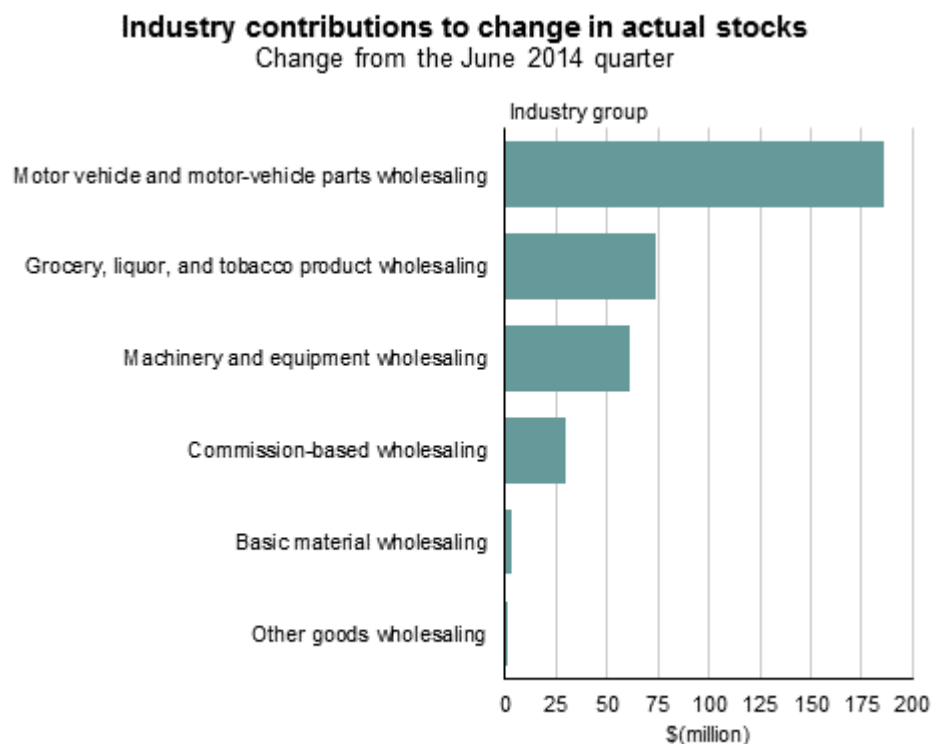
The actual value of wholesale trade sales was \$21.8 billion in the June 2015 quarter, down \$71 million (0.3 percent) from the June 2014 quarter.

Stock values rise

Stock figures are not adjusted for seasonal effects unless otherwise specified.

The total value of wholesale trade stocks held at 30 June 2015 was \$9.8 billion, up 3.7 percent (\$353 million) when compared with 30 June 2014.

Stocks rose in all six of the wholesale industries in the June 2015 quarter, compared with the June 2014 quarter.



Source: Statistics New Zealand

The largest annual increase was in the motor vehicle and motor-vehicle parts wholesaling industry, **up 12 percent** (\$186 million).

When adjusted for seasonal effects, total wholesale trade stocks were worth \$9.7 billion at 30 June 2015, **up 0.4 percent** (\$40 million) from 31 March 2015.

For more detailed data, see the Excel tables in the 'Downloads' box.

Changes to methodology and questionnaire

From the September 2015 quarter, we will be making the following changes to the Wholesale Trade Survey:

- We will change our methodology to make more use of administrative data and less use of survey data.
- We will collect total stocks and cease the raw materials and finished goods stock split.

More information about the changes, including back data, will be published before the next release (*Wholesale Trade Survey: September 2015 quarter* – published on 7 December 2015).

Definitions

About the Wholesale Trade Survey

The Wholesale Trade Survey (WTS) provides short-term economic indicators for the wholesale trade sector. We also use WTS data to compile the wholesale trade sector component of quarterly national accounts. The survey was last redesigned in the September 2002 quarter.

More definitions

ANZSIC06: Australian and New Zealand Standard Industrial Classification 2006.

Business Frame: a register of all economically significant businesses operating in New Zealand. The WTS population is drawn from the Business Frame.

Enterprise: a business entity operating in New Zealand either as a legally constituted body such as a company, partnership, trust, local or central government trading organisation, or as a self-employed individual.

Kind-of-activity unit (KAU): an enterprise subdivision that is engaged in predominantly one activity and for which a single set of accounting records is available.

NZSIOC: New Zealand Standard Industrial Output Categories. NZSIOC is the primary output view for all aggregated outputs for industry data collected using ANZSIC06.

Operating income: income from total sales. This includes:

- sales of processed goods
- sales of goods purchased for resale
- sales of services
- repair services
- processing fees
- management fees
- rental income
- leasing income
- royalties
- patent fees.

Operating income excludes:

- interest/dividends received
- donations
- insurance claims
- subsidies
- government grants
- exchange rate gains
- extraordinary items
- gains on sales of fixed assets
- excise duties
- bad debts.

Rolling mean employment (RME): a 12-month moving average of the monthly employee-count figure.

Total stocks: closing stocks of raw materials for use in production, plus the closing stocks of finished goods, work in progress, and trading stocks.

Related links

Next release

Wholesale Trade Survey: September 2015 quarter will be released on 7 December 2015.

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Past releases

See [Wholesale Trade Survey](#) for links to past releases.

Data quality

Period-specific information

This section contains information about data that has changed since the last release.

- [Measurement errors](#)
- [Postal response rate](#)

General information

This section contains information about data that does not change between releases.

- [Population](#)
- [Industry descriptions](#)
- [Sample information](#)
- [Measurement errors](#)
- [Seasonally adjusted series](#)
- [Estimated trend](#)
- [More information](#)

Period-specific information

Measurement errors

All statistical estimates are subject to measurement errors. These include both sampling errors and non-sampling errors. In addition, we apply imputation methodologies to cope with small firms and non-response. These measurement errors should be considered when analysing the survey results.

Sampling errors

At the industry level, we recorded the following sample errors in the June 2015 quarter, at the 95 percent confidence interval limit.

Wholesale Trade Survey sampling errors for operating income		
June 2015 quarter		
Industry group	Level (relative percent)	Movement (absolute percent)
Basic material wholesaling	3.8	2.7
Machinery and equipment wholesaling	4.4	3.4
Motor vehicle and motor-vehicle parts wholesaling	3.6	1.8
Grocery, liquor, and tobacco product wholesaling	5.1	3.6
Other goods wholesaling	4.1	3.1
Commission-based wholesaling	8.1	2.8
Total wholesale trade	2.2	1.5

The postal survey is designed to give statistics at the following levels of accuracy (at the 95 percent confidence interval):

- 5 percent for operating income and stocks at the total wholesale trade level
- 10 percent for operating income and stocks at the published industry level.

This means, for example, that there is a 95 percent chance that the true value of total wholesale trade operating income lies within 5 percent of the published estimate.

Imputation

Small firms

Small- to medium-sized firms are generally not surveyed. Instead, we model their variables from administrative data (GST and employer monthly schedule) sourced from Inland Revenue. We apply ratios calculated from the postal sample units to the administrative data to provide an estimate of small firms' variables.

Non-response imputation

Although we make every attempt to achieve a 100 percent response rate, in practice this does not occur. We estimate values for non-responding businesses by methods that include:

- regression imputation
- historic imputation
- mean imputation.

Regression imputation involves estimating the variable of interest from the unit's administrative data (GST sales), based on the relationship shown by similar businesses. Historic imputation involves multiplying the unit's response in the previous period by a non-response factor. The non-response factor is the average movement over the quarter by similar businesses. Mean imputation involves estimating a value for a unit by using the average value for a set of similar businesses.

Wholesale Trade Survey operating income imputed		
June 2015 quarter		
Industry group	Tax modelled	Non-response
	Percentage of operating income	
Basic material wholesaling	10.0	8.3
Machinery and equipment wholesaling	12.8	11.0
Motor vehicle and motor-vehicle parts wholesaling	9.5	14.4
Grocery, liquor, and tobacco product wholesaling	11.9	6.5
Other goods wholesaling	12.3	13.0
Commission-based wholesaling	14.9	12.1
Total wholesale trade	11.6	9.8

Postal response rate

June 2015 quarter response rate: 90.2 percent

The Wholesale Trade Survey has a target response rate of 85 percent. The response rate describes the proportion of operating income that actual survey responses provided. Note that we calculate this response rate from the postal sample data only.

General information

Population

The target population for this survey is all kind-of-activity units (KAUs) operating in New Zealand that are classified as Wholesale Trade (Australian and New Zealand Standard Industrial Classification – ANZSIC06 Division F) on Statistics NZ's Business Frame.

Industry descriptions

We include a KAU in an industry based on its main activity for its operating income.

The six industries are defined as follows:

ANZSIC06 group name	ANZSIC06 group number
Basic material wholesaling	
Agricultural product wholesaling	331
Mineral, metal, and chemical wholesaling	332
Timber and hardware goods wholesaling	333
Machinery and equipment wholesaling	
Specialised industrial machinery and equipment wholesaling	341
Other machinery and equipment wholesaling	349
Motor vehicle and motor-vehicle parts wholesaling	
Motor vehicle and motor-vehicle parts wholesaling	350
Grocery, liquor, and tobacco product wholesaling	
Grocery, liquor, and tobacco product wholesaling	360
Other goods wholesaling	
Textile, clothing, and footwear wholesaling	371
Pharmaceutical and toiletry goods wholesaling	372
Furniture, floor covering, and other goods wholesaling	373
Commission-based wholesaling	
Commission-based wholesaling	380

Sample information

We stratify the survey population according to:

- industries defined by the ANZSIC-based NZSIOC output categories
- size (in terms of the rolling-mean employment number)
- turnover (annualised GST sales).

Each NZSIOC industry category contains two to four substrata. Because of the contribution large units make to the economic activity within each industry group, we include them all in the sample. A portion of the remaining medium to large units is also included in the sample. In addition, we model small- to medium-sized businesses' data from administrative data (GST and employer monthly schedule) sourced from Inland Revenue.

All wholesaling KAUs belonging to a selected 'enterprise' are included. We select about 650 units from the entire population for the postal sample, and model the data for approximately 14,500 units from tax data.

Sample maintenance is the process we use to maintain the sample over time, to reflect births, deaths, and other structural changes identified on the Business Frame. The information for Business Frame changes can be from a variety of sources, including GST registrations and respondent contact.

We identify new enterprises when they register for GST. Once a quarter, the new enterprises are selected into the sample using the same criteria as for the original sample. These are referred to as 'births'. When an enterprise ceases trading, its wholesaling KAUs are removed from the survey. These are referred to as 'deaths'.

Enterprises can also enter or leave the survey sample if they are reclassifications from another industry to wholesaling. Reclassifications occur when an enterprise changes its main form of activity (eg from manufacturing to wholesale trade). These are usually identified in the Annual Frame Update Survey conducted in February each year.

We reselect the WTS sample each quarter to ensure that the sample reflects changes occurring in the wholesale trade population.

Measurement errors

Errors in the survey are divided into two classes: non-sampling error and sampling error.

Non-sampling error

Non-sampling error includes errors arising from biases in the patterns of response and non-response, inaccuracies in reporting by respondents, and errors in recording and coding data. The size of these errors is difficult to quantify. We revise data if significant errors are detected in subsequent quarters.

Sampling error

Sampling error is a measure of the variability that occurs by chance because a sample, rather than an entire population, is surveyed.

Seasonally adjusted series

We produce the seasonally adjusted and trend series using the X-13ARIMA-SEATS package developed by the U.S. Census Bureau, to comply with international best practice.

Seasonal adjustment aims to eliminate the impact of regular seasonal events (such as annual cycles in agricultural production, winter, or annual holidays) on time series. This makes the data for adjacent quarters more comparable.

We revise all seasonally adjusted figures each quarter. This enables the seasonal component to be better estimated and removed from the series.

The X-13ARIMA-SEATS seasonal adjustment package is very robust. However, problems occur when there is an abrupt change in the seasonal variation, as with other seasonal adjustment packages.

Estimated trend

For any series, we can break the survey estimates down into three components: trend, seasonal, and irregular. While seasonally adjusted series have the seasonal component removed, trend series have both the seasonal and the irregular components removed. Trend estimates reveal the underlying direction of movement in a series, and are likely to indicate turning points more accurately than seasonally adjusted estimates.

We calculate the trend series using the X-13ARIMA-SEATS seasonal adjustment package. They are based on a five-term moving average of the seasonally adjusted series, with an adjustment for outlying values.

Trend estimates towards the end of the series incorporate new data as it becomes available. Therefore, they can change as we add more observations to the series. Revisions can be particularly large if an observation is treated as an outlier in one quarter, but we find it to be part of the underlying trend as we add further observations to the series. Typically, only the estimates for the most-recent quarter are substantially revised.

More information

Statistics in the release have been produced in accordance with the Official Statistics System principles and protocols for producers of Tier 1 statistics for quality. They conform to the Statistics NZ Methodological Standard for Reporting for Data Quality.

See Wholesale Trade Survey for more information.

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Tables

See the following tables in the 'Downloads' box on this page. If you have problems viewing the files, see [opening files and PDFs](#).

1. Wholesale trade, ANZSIC Division F
2. Actual wholesale sales, by industry
3. Seasonally adjusted wholesale sales, by industry
4. Wholesale sales trend, by industry
5. Actual wholesale stocks, by industry
6. Seasonally adjusted wholesale stocks, by industry
7. Wholesale stocks trend, by industry

Machine-readable zipped csv file

A machine-readable zipped csv file is also available. This is a way for technical users to download our data.

Access more data on Infoshare

Use [Infoshare](#) to access time-series data specific to your needs, including the **ANZSIC96 forward-cast series** up to the March 2012 quarter. Select the following category from the Infoshare homepage:

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Group: **Wholesale Trade Survey**

Next release

Wholesale Trade Survey: September 2015 quarter will be released on 7 December 2015.