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Retail Trade Survey: September 2009 quarter

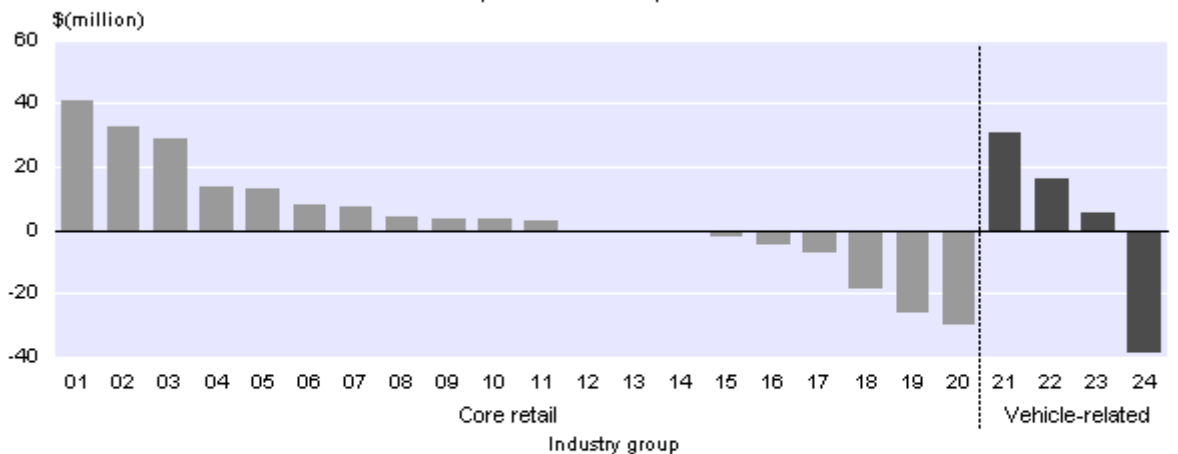
Highlights

For the September 2009 quarter compared with the June 2009 quarter (seasonally adjusted):

- Total retail sales value rose 0.5 percent (\$82 million).
- Total retail sales volume rose 0.1 percent.
- Core retail sales value rose 0.6 percent (\$69 million).
- Core retail sales volume rose 0.5 percent.
- Appliance retailing had the biggest volume rise, up 6.5 percent, and second-biggest value rise, up 5.1 percent (\$32 million).
- Motor vehicle retailing had the biggest volume fall, down 2.0 percent, but third-highest value rise, up 1.9 percent (\$31 million).

Retail Industry Contributions to the Change in Seasonally Adjusted Sales Values

Change from previous quarter
September 2009 quarter



01 Supermarket and grocery stores	09 Other personal services	17 Chemist retailing
02 Appliance retailing	10 Takeaway food retailing	18 Other retailing
03 Clothing and softgoods retailing	11 Bars and clubs	19 Cafes and restaurants
04 Recreational goods retailing	12 Household equipment repair services	20 Department stores
05 Accommodation	13 Personal and household goods hiring	21 Motor vehicle retailing
06 Furniture and floor coverings	14 Footwear retailing	22 Automotive repair and services nec
07 Hardware retailing	15 Fresh produce retailing	23 Auto electrical, smash repair, tyres
08 Other food retailing	16 Liquor retailing	24 Automotive fuel retailing

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Commentary

All references to sales movements are to seasonally adjusted series unless otherwise stated.

September 2009 quarter sales value summary

In the September 2009 quarter the value of total retail sales rose 0.5 percent (\$82 million), following a 1.1 percent increase in the June 2009 quarter. This was preceded by four quarters of decreases.

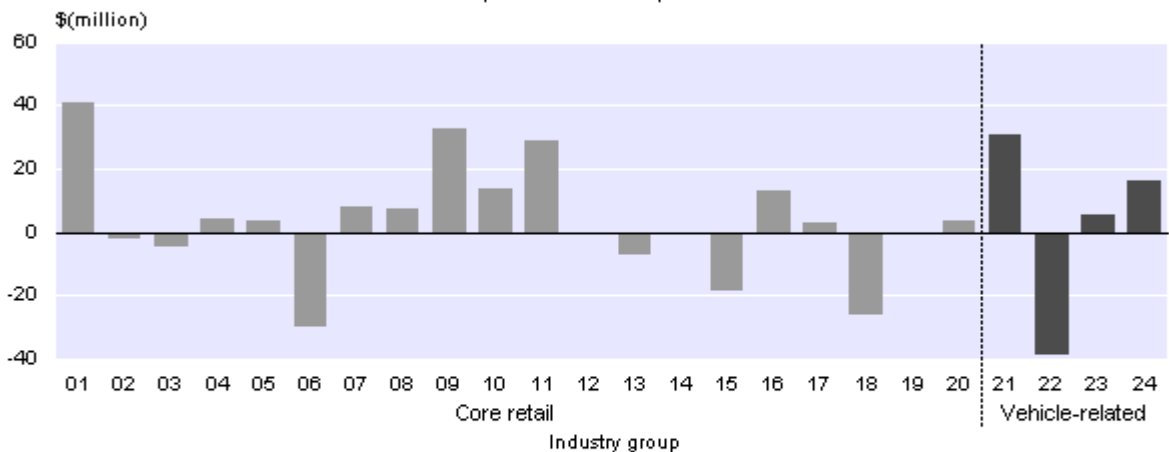
The value of core retail sales (which excludes the four vehicle-related industries) rose 0.6 percent (\$69 million) in the September 2009 quarter.

In the September 2009 quarter, 14 of the 24 retail industries recorded increased sales. The biggest increases were for supermarket and grocery stores (up 1.1 percent or \$41 million), appliance retailing (up 5.1 percent or \$32 million), motor vehicle retailing (up 1.9 percent or \$31 million), and clothing and softgoods retailing (up 4.5 percent or \$29 million).

The biggest decreases were in automotive fuel retailing (down 2.5 percent or \$38 million), department stores (down 3.2 percent or \$30 million), and cafes and restaurants (down 2.6 percent or \$26 million).

Retail Industry Contributions to the Change in Seasonally Adjusted Sales Values

Change from previous quarter
September 2009 quarter



- | | | |
|-----------------------------------|--|---|
| 01 Supermarket and grocery stores | 09 Appliance retailing | 17 Bars and clubs |
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| 07 Furniture and floor coverings | 15 Other retailing | 23 Auto electrical, smash repair, tyres |
| 08 Hardware retailing | 16 Accommodation | 24 Automotive repair and services nec |

September 2009 quarter sales volume summary

All references to dollar values in this section are at September 1995 quarter prices.

After an increase last quarter, the volume of total retail sales was flat, up just 0.1 percent in the September 2009 quarter. This followed a five-quarter period of decreases, that culminated in a record fall of 2.8 percent in the March 2009 quarter.

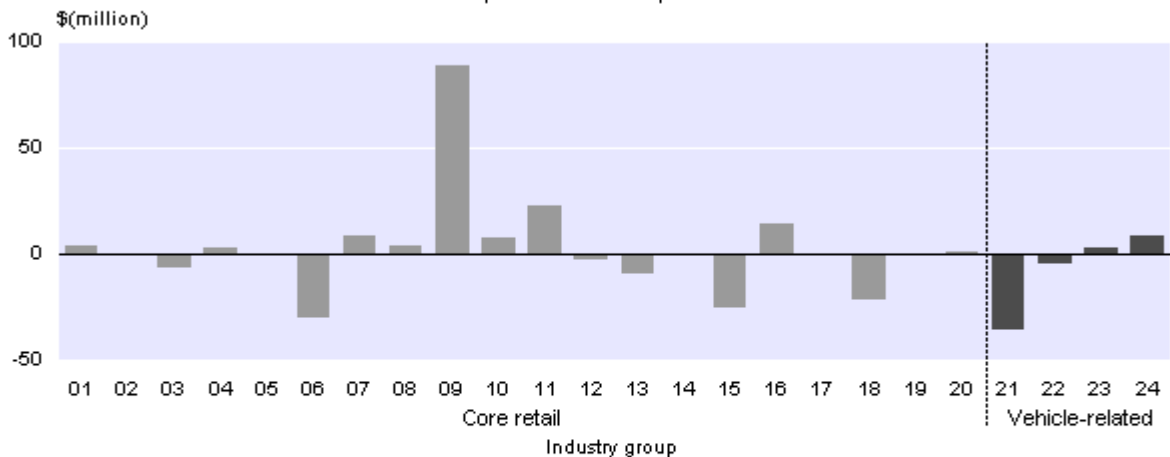
Core retail sales went up 0.5 percent, following a 0.3 percent increase in the June 2009 quarter.

Ten of the 20 core retail industries recorded increases in sales volumes. As illustrated in the following graph, by far the biggest contributor to the volume increase this quarter was appliance retailing (up 6.5 percent). This was followed by clothing and softgoods retailing (up 3.8 percent) and accommodation (up 3.1 percent).

The increases in sales volumes were offset partly by decreases in motor vehicle retailing (down 2.0 percent), department stores (down 3.1 percent), and other retailing (down 4.4 percent).

Retail Industry Contributions to the Change in Seasonally Adjusted Sales Volumes⁽¹⁾

Change from previous quarter
September 2009 quarter



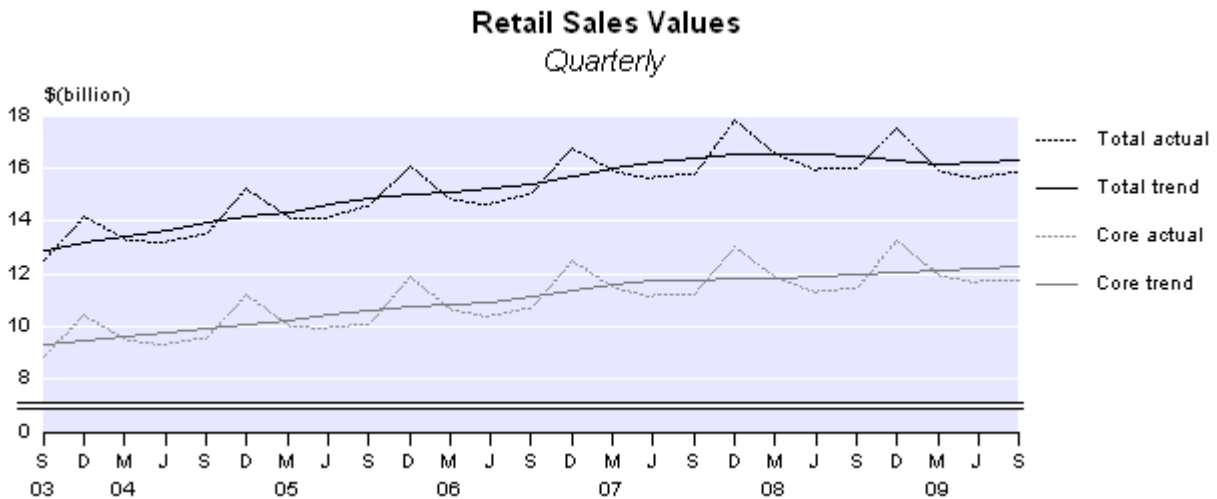
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| 01 Supermarket and grocery stores | 09 Appliance retailing | 17 Bars and clubs |
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| 08 Hardware retailing | 16 Accommodation | 24 Automotive repair and services nec |

(1) At September 1995 quarter prices.

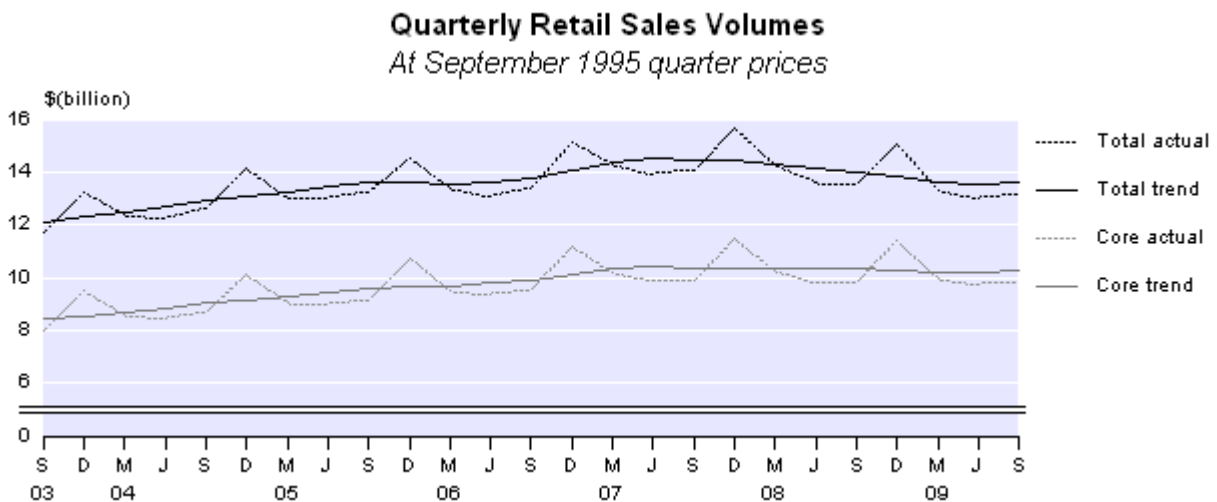
September 2009 quarter trends

The trends in both total and core retail sales values rose again in the September 2009 quarter. The total retail sales trend has risen 1.1 percent since March 2009, after a period of decline between the June 2008 quarter and the March 2009 quarter, when it fell 2.3 percent. In core retailing, the trend in the sales value has been rising since the start of the series in September 1995.

Falling sales in motor vehicle retailing were the major driver of the decline in the total sales value trend. The trend in motor vehicle retailing has been declining since June 2007 but latest data indicates the fall has stopped.



The trend in the volume of total retail sales fell 6.6 percent between September 2007 and June 2009, but appears to have stopped falling as the September 2009 quarter shows a slight lift (0.2 percent). The trend in the core retail volume has risen 0.7 percent since March 2009, after falling 1.9 percent between September 2007 and March 2009. These recent falls, in the total and the core retail trends, have been the longest periods of decline since the beginning of the series in September 1995.



Actual sales September 2009 quarter

In the September 2009 quarter compared with the September 2008 quarter:

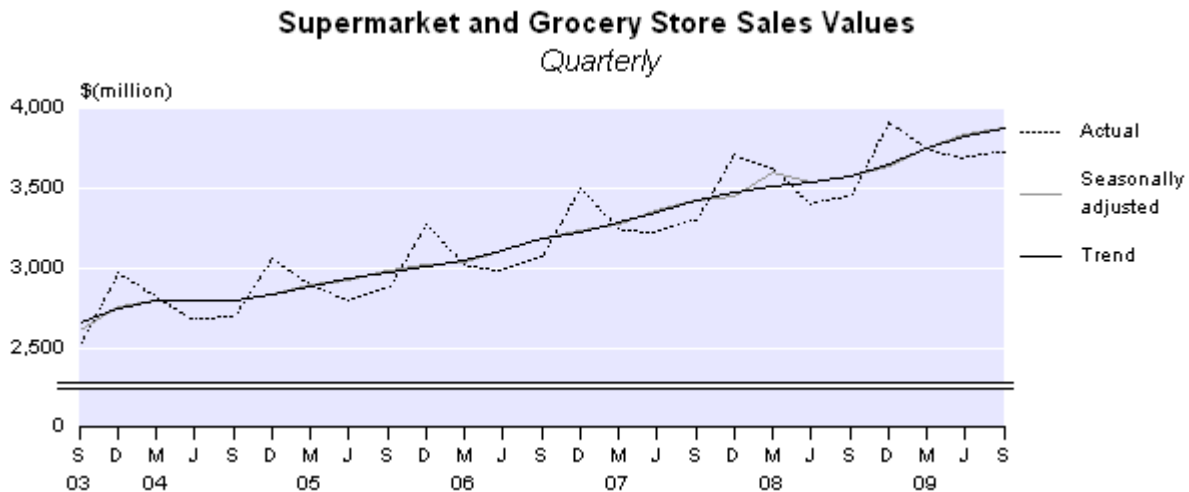
- the value of actual retail sales was \$15.8 billion, down 1.0 percent
- the volume of actual retail sales, expressed in September 1995 quarter prices, was \$13.2 billion, down 2.9 percent.

Supermarket and grocery stores

Supermarket and grocery stores had the largest increase in value in the September 2009 quarter, with sales up 1.1 percent (\$41 million). The increase was primarily the result of a rise in prices, with volumes up just 0.2 percent from the June 2009 quarter.

The trend in sales values has been rising since the series began in September 1995, at an average of 1.5 percent per quarter. The rate of increase had slowed in mid-2008, but has since picked up.

The trend in the volume of sales has been rising since September 2008, up 2.9 percent since then, after falling between March 2008 and September 2008. The September 2009 quarter's increase brings the volume level back to the March 2008 quarter level.

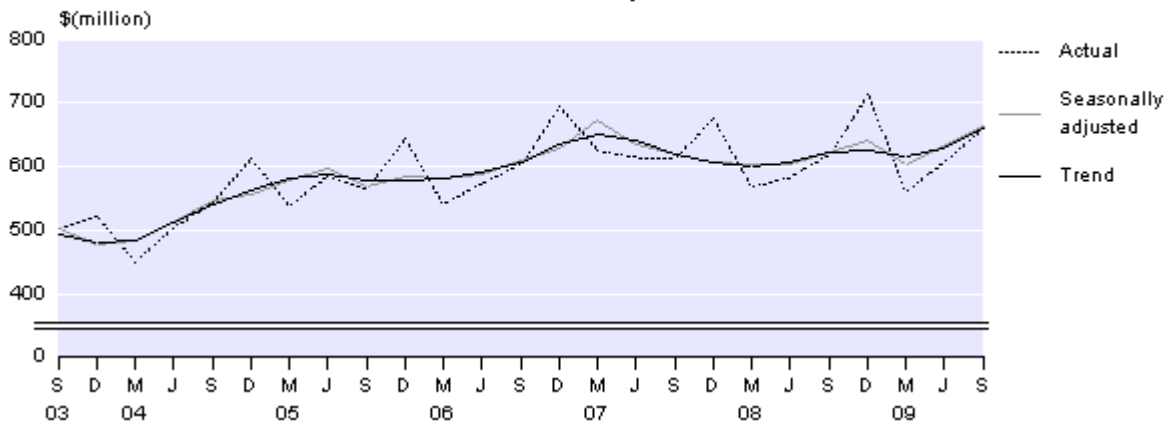


Appliance retailing

The value of appliance retailing sales rose 5.1 percent (\$32 million) in the September 2009 quarter, making this industry the second-largest contributor to the increase in total sales this quarter. This industry also had by far the largest increase in the volume of sales (up 6.5 percent), which drove the increase in sales values.

The trends for both the value and volume of sales are showing strength, with increases of 7.4 percent and 8.4 percent, respectively, since they began rising in the March 2009 quarter.

Appliance Retailing Sales Values Quarterly



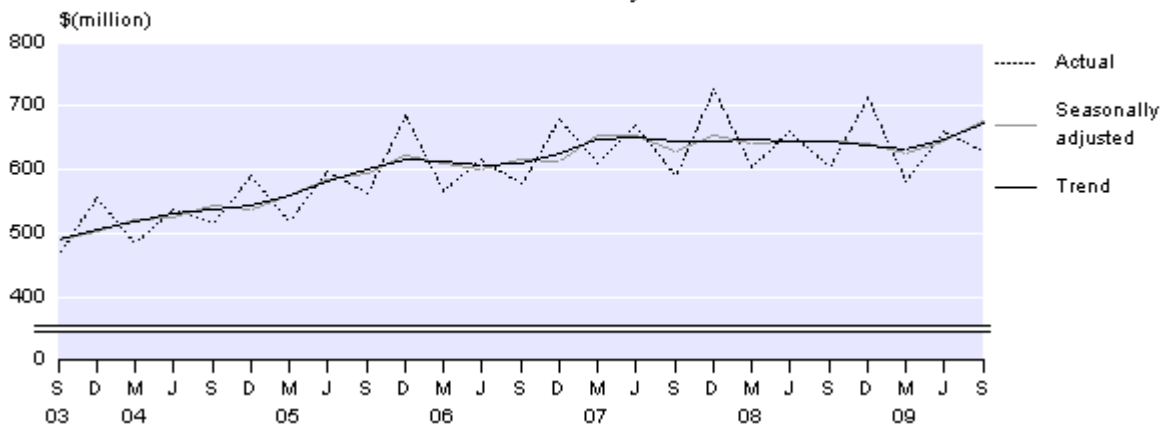
Clothing and softgoods retailing

The value of clothing and softgoods retailing sales was up 4.5 percent (\$29 million) in the September 2009 quarter. The sales volume was also up – 3.8 percent, the second-largest increase in volumes this quarter.

These increases coincided with below-average temperatures in July, and the warmest August on record.

Sales trends in values and volumes are both increasing. The values trend has been rising since the March 2009 quarter and is up 6.8 percent since then; the volumes trend has also risen over the same period, up 5.1 percent. Both values and volumes trends are at their highest level since the beginning of the series in September 1995, exceeding their previous peaks in the June 2007 quarter.

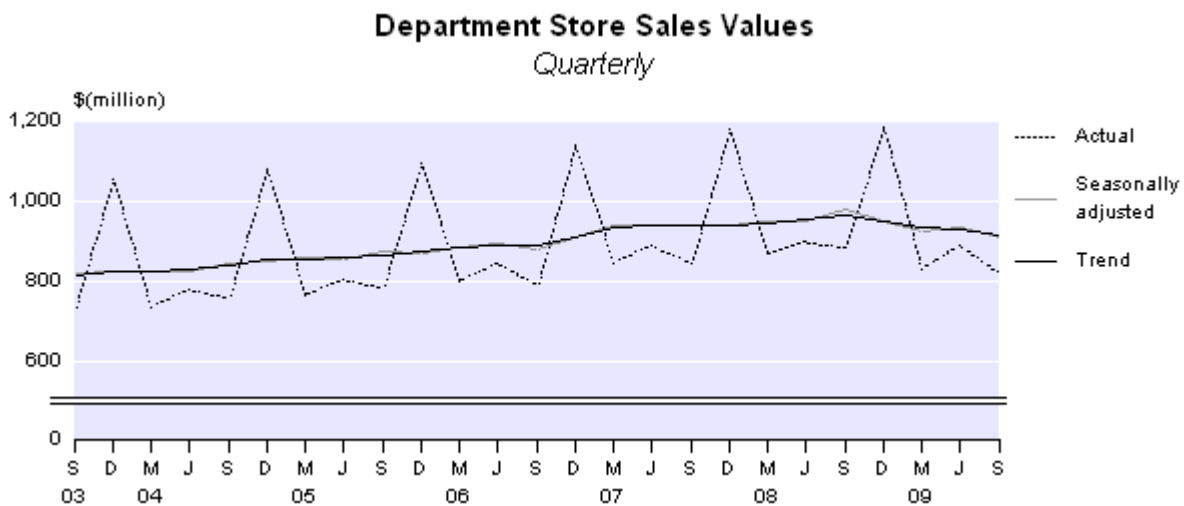
Clothing and Softgoods Retailing Sales Values Quarterly



Department stores

Department stores had the largest decrease in sales values in the core industries, down 3.2 percent (\$30 million) in the September 2009 quarter, and the second-largest decrease in all industries. The drop in sales values was mostly due to a decrease in volumes, which were down 3.1 percent, the second-largest decrease in volumes in all industries.

The trend in the value of department store sales has been going down since reaching a turning point in the September 2008 quarter; down an average of 1.3 percent per quarter. The trend is now 5.1 percent lower than in September 2008. Over the same period, the volumes trend has also been decreasing – down 6.7 percent. The trend in the volume of sales is at its lowest level since the December 2006 quarter.



Motor vehicle retailing

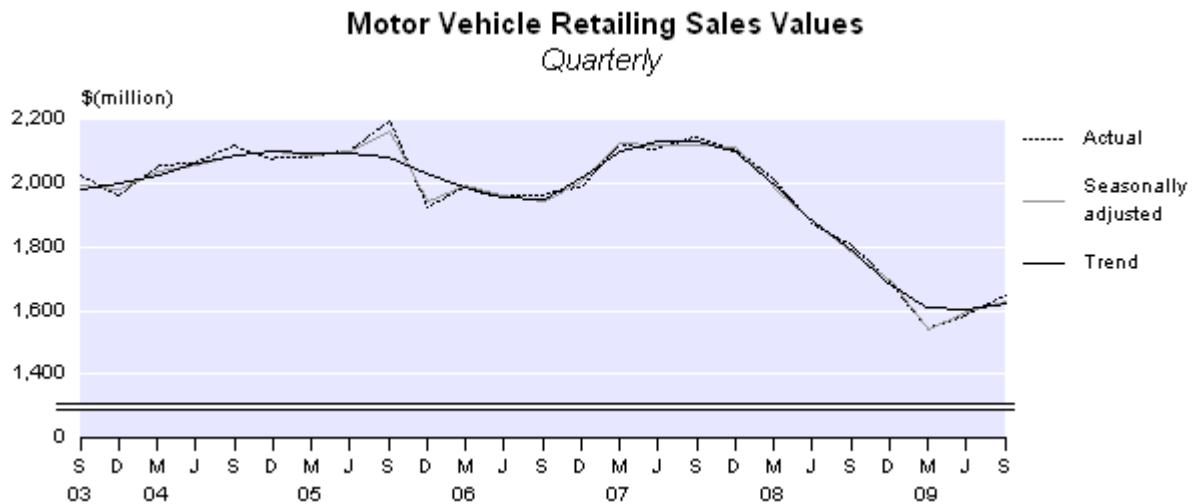
The value of motor vehicle retailing sales rose 1.9 percent (\$31 million) in the September 2009 quarter. This is the second consecutive increase, following six quarters of decreases. The increase in value was despite this industry having the largest decrease in volumes – down 2.0 percent.

The trend in the sales value fell 24.8 percent in the eight quarters from September 2007 to June 2009, but appears to have reached a turning point in June 2009, and is showing 1.4 percent growth in the September 2009 quarter. Initial trend estimates should be used with caution.

The trend in the sales volume has been falling since the June 2007 quarter – down 29.3 percent since then. This is the most sustained period of decline since the series began in September 1995. The volumes trend also fell between the June 1996 and March 1998 quarters, but the rate of decline was slower and the total fall was just 11.9 percent.

New Zealand Transport Agency figures, which are not seasonally adjusted, show 32,436 new registrations of cars and station wagons (including cars previously registered

overseas) in the September 2009 quarter. This is a 19.3 percent increase when compared with the June 2009 quarter.



Stocks

All references to stocks are in actual dollars.

The actual value of stocks held at the end of the September 2009 quarter was 4.6 percent (\$253 million) lower than at the end of the September 2008 quarter. This is the third consecutive quarter to show a decrease in the value of stocks held, compared with the same period last year.

Compared with a year earlier, 14 of the retail industries showed decreases in stock values. The biggest decreases were:

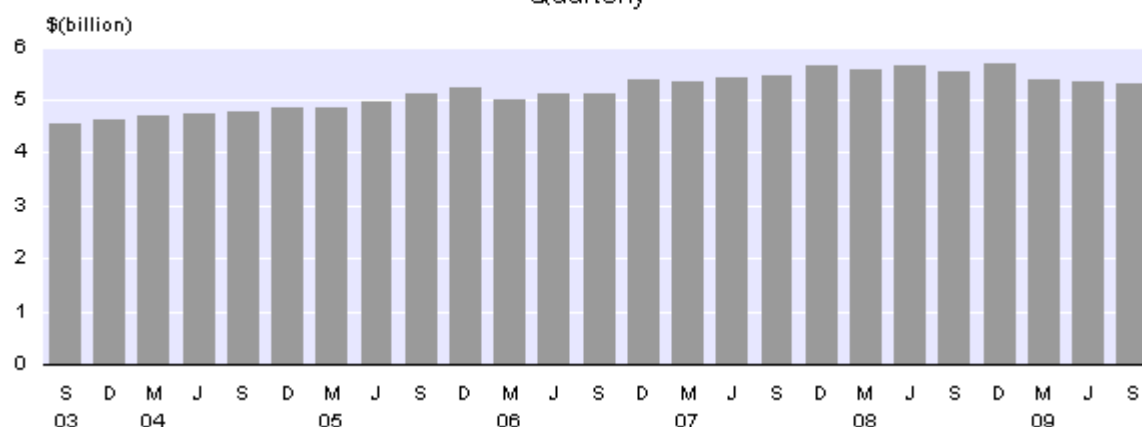
- Motor vehicle retailing, down 19.7 percent (\$208 million)
- Department stores, down 13.4 percent (\$97 million)
- Other retailing, down 6.9 percent (\$37 million)
- Furniture and floor coverings, down 14.6 percent (\$30 million).

The other 10 industries had decreases of less than \$15 million.

Of the 10 industries that held increased stock values, the biggest increases were:

- Clothing and softgoods retailing, up 13.7 percent (\$56 million)
- Appliance retailing, up 15.3 percent (\$53 million)
- Supermarket and grocery stores, up 9.0 percent (\$46 million).

Retail Stock Levels *Quarterly*



Regional estimates

In the September 2009 quarter, the value of seasonally adjusted retail sales in both the North Island and the South Island increased, although results for individual regions were mixed. Changes in regional sales were as follows:

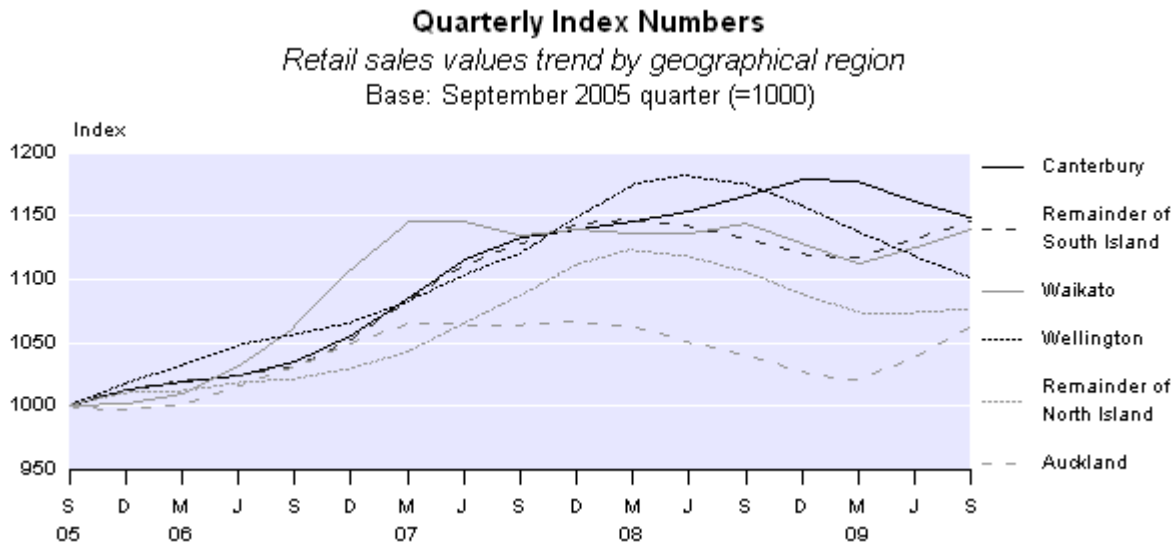
- Auckland, up 2.2 percent (\$114 million)
- Waikato, no change, sales fell less than 0.1 percent
- Wellington, down 2.5 percent (\$44 million)
- Remainder of the North Island, no change, sales rose less than 0.1 percent
- Canterbury, down 0.5 percent (\$12 million)
- Remainder of the South Island, up 0.8 percent (\$17 million).

Note that seasonal adjustment is run separately for each region and each industry, allowing the identification of individual variations in seasonal patterns. The total retail sales figure is calculated by adding industry data and therefore may not be the same as the sum of regional data.

Illustrated in the graph below, regional sales trends are as follows:

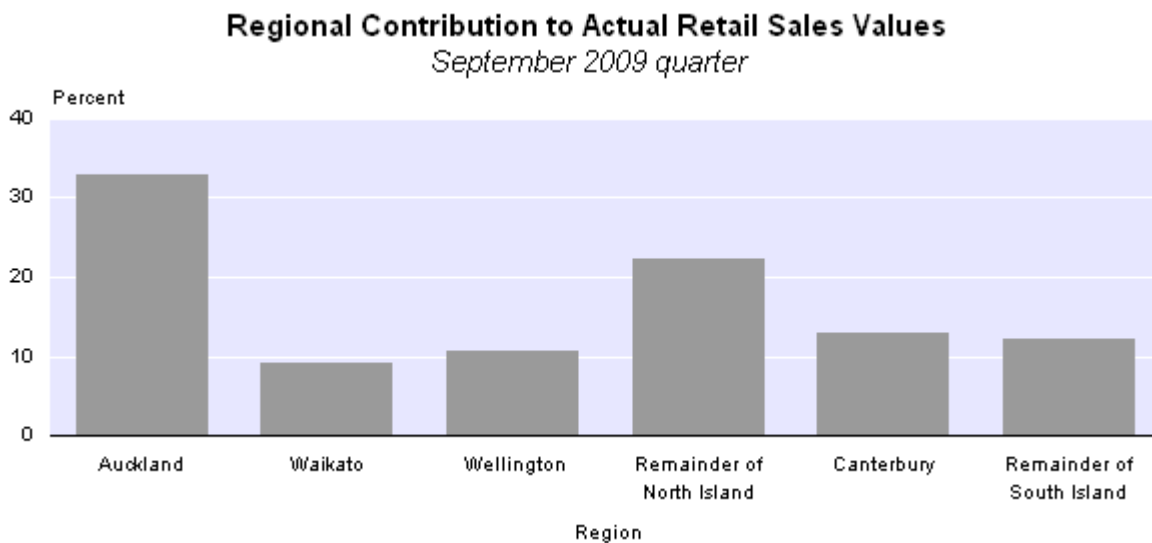
- Auckland – latest data confirms that the trend reached a turning point in March 2009 and has begun rising (up 3.9 percent since March). The trend fell 4.2 percent in the five quarters March 2008 to March 2009.
- Waikato – as with Auckland, latest data confirms the trend reached a turning point in March 2009 and has begun rising (up 2.5 percent since March). The trend fell 2.7 percent between December 2008 and March 2009.
- Wellington – the trend has been falling since June 2008 (down 6.9 percent since then).
- Remainder of the North Island – the trend fell 4.4 percent in the five quarters from June 2008 to June 2009, but latest figures suggest the trend may have reached a turning point in June 2009 and that the decline has stopped. Initial trend estimates should be used with caution as they may be revised as more data points become available.
- Canterbury – the trend has been falling since December 2008 (down 2.5 percent since then).

- Remainder of the South Island – latest data confirms the trend reached a turning point in March 2009 and has begun rising (up 2.5 percent since March 2009). The trend fell 2.5 percent between June 2008 and March 2009.



Contributions to total actual retail sales in the September 2009 quarter were:

- Auckland, 32.9 percent
- Waikato, 9.1 percent
- Wellington, 10.6 percent
- Remainder of the North Island, 22.3 percent
- Canterbury, 12.8 percent
- Remainder of the South Island, 12.2 percent.



September 2009 month

In the September 2009 month, compared with August 2009, seasonally adjusted sales in core retail were flat, down by less than 0.1 percent. Total retail sales rose 0.2 percent (\$10 million), due to a 0.9 percent (\$12 million) increase in the vehicle-related industries.

Thirteen of the 20 core retail industries had sales movements, up or down, of less than \$3 million. Bigger increases were in supermarket and grocery stores, up 1.1 percent (\$15 million), clothing and softgoods retailing, up 3.8 percent (\$9 million), and appliance retailing, up 3.6 percent (\$8 million).

Decreases bigger than \$3 million were in hardware retailing, down 7.7 percent (\$10 million), fresh produce, down 6.9 percent (\$6 million), cafes and restaurants, down 1.5 percent (\$5 million), and other retailing, down 2.0 percent (\$5 million).

In the vehicle-related industries, motor vehicle retailing sales rose 2.0 percent (\$11 million) and automotive fuel retailing sales rose 1.6 percent (\$8 million). Automotive repair and services not elsewhere classified (nec) sales fell 2.7 percent (\$5 million) and there was also a small fall in automotive electrical services, smash repairing, and tyre retailing.

The monthly trend in total retail sales has been rising since February 2009 and is up 1.7 percent since then. This follows a period of decline between February 2008 and February 2009, when the trend fell 3.3 percent.

The core retail sales trend has been rising since September 1995 at an average of 0.4 percent per month. Since April 2007 the rate of increase has been slow, averaging 0.2 percent per month.

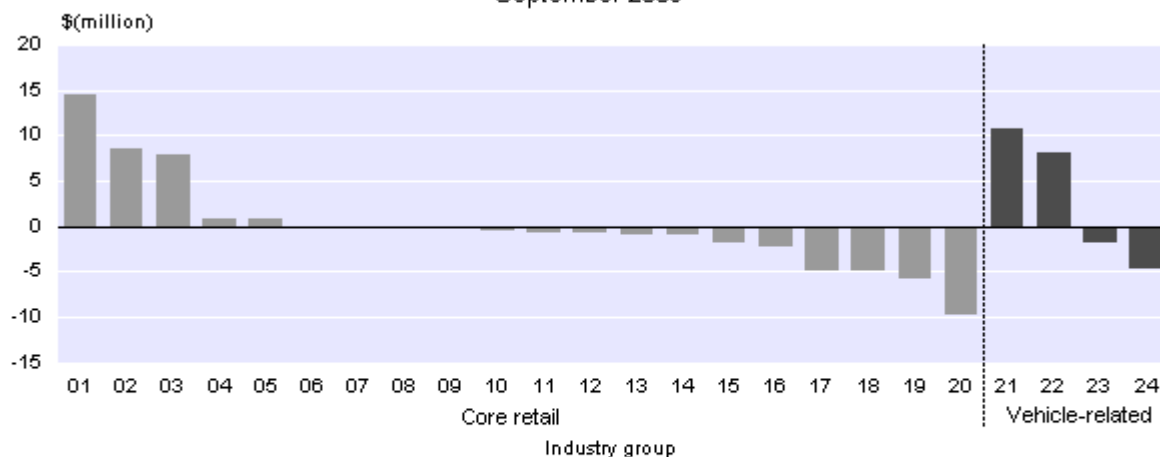
The total actual sales value for September 2009 was \$5.3 billion, 0.5 percent lower than in September 2008.

Seasonally adjusted total retail sales increased in Auckland, Waikato, and Wellington regions in the September 2009 month, and decreased in the remainder of the North Island, Canterbury, and the remainder of the South Island.

Regional sales trends are as follows:

- Auckland – the sales trend is strong, rising 5.0 percent since February 2009.
- Waikato – since February 2009 the trend has risen 1.3 percent.
- Wellington – the sales trend has declined 8.0 percent since March 2008.
- Remainder of the North Island – the trend is flat, rising just 0.3 percent since April 2009.
- Canterbury – since January 2009, the sales trend has declined 4.0 percent.
- Remainder of the South Island – since January 2009 the trend has risen 3.1 percent.

Retail Industry Contributions to the Change in Seasonally Adjusted Sales Values
Change from previous month
 September 2009



- | | | |
|--|--|---|
| 01 Supermarket and grocery stores | 09 Footwear retailing | 17 Other retailing |
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| 04 Personal and household goods hiring | 12 Household equipment repair services | 20 Hardware retailing |
| 05 Bars and clubs | 13 Recreational goods retailing | 21 Motor vehicle retailing |
| 06 Chemist retailing | 14 Furniture and floor coverings | 22 Automotive fuel retailing |
| 07 Department stores | 15 Accommodation | 23 Auto electrical, smash repair, tyres |
| 08 Takeaway food retailing | 16 Other personal services | 24 Automotive repair and services nec |

Revisions

There were no revisions in the September 2009 quarter.

Comparison statistics

For the September 2009 quarter compared with the June 2009 quarter:

- The consumers price index rose 1.3 percent.
- New Zealand Transport Agency figures, which are not seasonally adjusted, showed new registrations of cars and station wagons (including cars previously registered overseas) were up 19.3 percent.

Long-term comparisons:

- Credit card billings in New Zealand, including spending using New Zealand and overseas issued cards, fell 4.2 percent in the month of September 2009 and fell 2.0 percent in the September 2009 quarter (each compared with the same period of the previous year).

Other:

- The Reserve Bank of New Zealand's Official Cash Rate remained at 2.50 percent throughout the September quarter.

Measurement errors

All statistical estimates are subject to measurement errors. These include both sample errors and non-sample errors. In addition, the survey applies imputation methodologies to cope with small firms and non-response. These measurement errors should be considered when analysing the results from the survey. For more information on measurement errors, please refer to the technical notes of this release.

Sample errors

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

- 2 percent for sales at the total national retail trade level
- 10 percent for sales at the published national retail industry level.

This means, for example, that there is a 95 percent chance that the true value of total retail trade sales lies within 2 percent of the published estimate.

Retail Trade Survey: September 2009 Month Sample Errors by Industry <i>At the 95 percent confidence interval limit</i>		
Retail industry	Level (relative percent)	Movement (absolute percent)
Supermarket and grocery stores	5.4	2.9
Fresh meat, fish, poultry, fruit and vegetables	9.0	7.4
Liquor retailing	9.0	1.0
Other food retailing	10.3	6.8
Takeaway food retailing	6.2	2.3
Department stores	0.0	0.0
Furniture and floor coverings	8.4	4.6
Hardware	5.5	2.9
Appliance retailing	13.4	4.7
Recreational goods	8.8	8.4
Clothing and softgoods	5.9	3.6
Footwear	11.9	0.9
Chemist	5.5	1.8
Household equipment repair services	11.0	4.8

Retail Trade Survey: September 2009 Month Sample Errors by Industry
At the 95 percent confidence interval limit

Retail industry	Level (relative percent)	Movement (absolute percent)
Other retailing	8.0	5.5
Motor vehicle retailing	8.8	4.8
Automotive fuel retailing	3.4	1.2
Automotive electrical services, smash repairing, tyre retailing	5.6	4.2
Automotive repair and services, nec	7.4	3.4
Accommodation	5.2	3.4
Bars and clubs	8.7	4.1
Cafes and restaurants	5.6	2.2
Personal and household goods hiring	16.9	12.2
Other personal services	6.3	2.1
Total retail trade	1.9	1.6

Note: nec = not elsewhere classified

Industries with zero sample error are full-coverage industries. In these industries, all large firms are surveyed and all small to medium-sized firms are modelled using administrative data sourced from Inland Revenue.

Retail Trade Survey: September 2009 Month Sample Errors by Region
At the 95 percent confidence interval limit

Region	Level (relative percent)	Movement (absolute percent)
Auckland	4.7	2.6
Waikato	10.0	1.9
Wellington	5.5	1.1
Remainder of the North Island	6.4	1.1
Canterbury	7.1	0.6
Remainder of the South Island	8.5	0.8

Imputation

Small firms

Small to medium-sized firms are generally not surveyed. Their variables are instead modelled from administrative data (GST) sourced from Inland Revenue. Ratios calculated from the postal sample units are applied to the administrative data to provide an estimate of their variables.

Non-response imputation

Although every attempt is made to achieve a 100 percent response rate, in practice this does not occur. Values for non-responding businesses are estimated by a number of methods, including:

- regression imputation
- historic imputation
- mean imputation.

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

Sales Imputed in the September 2009 Month		
Retail industry	Tax modelled	Non-response
	Percentage of sales	
Supermarket and grocery stores	5.3	4.4
Fresh meat, fish, poultry, fruit and vegetables	7.6	12.9
Liquor retailing	10.0	13.1
Other food retailing	9.8	11.0
Takeaway food retailing	8.7	13.1
Department stores	0.0	0.0
Furniture and floor coverings	12.0	9.6
Hardware	6.4	6.0
Appliance retailing	7.2	2.7
Recreational goods	9.0	11.5
Clothing and softgoods	9.5	14.9
Footwear	8.9	9.2
Chemist	3.8	6.3
Household equipment repair services	9.1	12.4
Other retailing	13.0	15.8
Motor vehicle retailing	10.0	11.9
Automotive fuel retailing	2.2	8.2
Automotive electrical services, smash repairing, tyre retailing	9.9	12.2
Automotive repair and services, nec	10.8	13.0

Sales Imputed in the September 2009 Month		
Retail industry	Tax modelled	Non-response
	Percentage of sales	
Accommodation	8.6	14.0
Bar and clubs	11.7	8.6
Cafes and restaurants	10.0	14.5
Personal and household goods hiring	10.4	12.7
Other personal services	14.1	19.4
Total retail trade	7.4	9.2
Note: nec = not elsewhere classified		

Postal response rate

The response rate describes the proportion of geographic units that provided survey responses. Note that the calculation of this response rate relates only to data for the postal sample. The Retail Trade Survey has a target response rate of 85 percent. The response rate achieved for the September 2009 month was 90 percent.

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Next release ...

Retail Trade Survey: October 2009 will be released on 14 December 2009.

Technical notes

Background to the survey

The Retail Trade Survey (RTS) is designed to provide short-term economic indicators of the retail trade sector. In addition, the data is used for the compilation of the retail trade sector component of quarterly national accounts (on the production side) and in the compilation of household consumption expenditure (on the expenditure side). The survey was last redesigned for the September 2003 quarter. For more details about the redesign refer to [Retail Trade Survey – Redesign: September 2003](#) and the [Retail Trade Survey – Survey design information paper](#).

Population

The target population for this survey is all geographic units (GEOs) operating in New Zealand that are classified on Statistics New Zealand's Business Frame to the Australian and New Zealand Standard Industrial Classifications (ANZSIC) below:

- Retail Trade (ANZSIC division G)
- Accommodation, Cafes and Restaurants (ANZSIC division H)
- Personal Services (ANZSIC subdivision 95 of division Q).

Only enterprises with a turnover of \$30,000 or more are eligible for selection.

Industry descriptions

A geographic unit is included in an industry based on its predominant activity in terms of sales. For example, a footwear store will sell shoes and boots, but it may also sell bags and other accessories. The store will be classified to the footwear industry if most of its sales income comes from the sale of shoes and boots. The 24 industries are defined as follows:

Retail Trade Survey Industry Descriptions	
Industry	ANZSIC96 code
G0111 Supermarket and grocery stores	G511010 Supermarkets
	G511020 Groceries and dairies
G0121 Fresh meat, fish, poultry, fruit and vegetable retailing	G512100 Fresh meat, fish and poultry retailing
	G512200 Fruit and vegetable retailing
G0122 Liquor retailing	G512300 Liquor retailing
G0123 Other food retailing	G512400 Bread and cake retailing
	G512600 Milk vending
	G512900 Specialised food retailing nec

Industry	ANZSIC96 code
G0124 Takeaway food retailing	G512510 Fish and chips, hamburger and ethnic food, takeaway stores
	G512520 Chicken takeaway stores
	G512530 Ice-cream parlours and mobile ice-cream vendors
	G512540 Pizza takeaway stores
	G512590 Other takeaway food stores (including sandwiches and savouries) nec
G0131 Department stores	G521000 Department stores
G0141 Furniture and floor coverings retailing	G523100 Furniture retailing
	G523200 Floor covering retailing
G0142 Hardware retailing	G523300 Domestic hardware and houseware retailing
G0143 Appliance retailing	G523400 Domestic appliance retailing
	G523500 Recorded music retailing
G0144 Recreational goods retailing	G524100 Sport and camping equipment retailing
	G524200 Toy and game retailing
	G524300 Newspaper, book and stationery retailing
	G524400 Photographic equipment retailing
	G524500 Marine equipment retailing
G0151 Clothing and softgoods retailing	G522100 Clothing retailing
	G522300 Fabrics and other soft good retailing
G0152 Footwear retailing	G522200 Footwear retailing
G0153 Chemist retailing	G525100 Pharmaceutical, cosmetic and toiletry retailing
G0154 Household equipment repair services	G526100 Household equipment repair services (electrical)
	G526900 Household equipment repair services nec
G0159 Other retailing	G525200 Antique and used good retailing
	G525300 Garden supplies retailing
	G525400 Flower retailing
	G525500 Watch and jewellery retailing
	G525900 Retailing nec

Industry	ANZSIC96 code
G0161 Motor vehicle retailing	G531100 Car retailing
	G531200 Motor cycle dealing
	G531300 Trailer and caravan dealing
G0162 Automotive fuel retailing	G532100 Automotive fuel retailing
G0163 Automotive electrical services, smash repairing and tyre retailing	G532200 Automotive electrical services
	G532300 Smash repairing
	G532400 Tyre retailing
G0164 Automotive repair and services nec	G532900 Automotive repair and services nec
H0111 Accommodation	H571010 Hotels (accommodation)
	H571020 Motels and motor inns
	H571030 Hosted accommodation
	H571040 Backpacker and youth hostels
	H571050 Caravan parks and camping grounds
	H571090 Accommodation nec
H0121 Bars and clubs	H572000 Pubs, taverns and bars
	H574000 Clubs (hospitality)
H0122 Cafes and restaurants	H573000 Cafes and restaurants
Q0111 Personal and household goods hiring	Q951100 Video hire outlets
	Q951900 Personal and household goods hiring nec
Q0112 Other personal services	Q952100 Laundries and dry-cleaners
	Q952200 Photographic film processing
	Q952300 Photographic studios
	Q952400 Funeral directors, crematoria and cemeteries
	Q952500 Gardening services
	Q952600 Hairdressing and beauty salons
	Q952900 Personal services nec
Note: nec = not elsewhere classified	

Sample design

The survey population is stratified according to:

- industries defined by the ANZSIC-based ANZIND classification at the inter-industry level
- size (in terms of rolling-mean employment)
- turnover (annualised GST sales).

Each ANZIND inter-industry contains between two and four substrata. Because of the contribution that large units make to the economic activity within each industry, they are all included in the sample. A portion of the remaining medium to large units is also included in the sample. In addition, small to medium-sized businesses have their data modelled from administrative data (GST) sourced from Inland Revenue. The Inland Revenue data have been forecast two to three months ahead. All retailing GEOs belonging to a selected 'enterprise' are included.

There are approximately 70,000 retail outlets in New Zealand. Around 3,500 enterprises (between 9,000 and 10,000 GEOs) have been selected in the RTS postal sample. The postal sample is supplemented by GST data representing smaller retailers, approximately 36,200 enterprises (36,600 GEOs).

Sample maintenance

Sample maintenance is the process that maintains 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.

New enterprises are identified when they register for GST. Once a month, 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 retailing GEOs are removed from the survey. These are referred to as deaths.

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

Sample reselection

The sample for the RTS is reselected each month to ensure the sample reflects changes occurring in the retailing population.

Measurement errors

Errors in the survey are divided into two classes:

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 the recording and coding of data. The size of these errors is difficult to quantify. Statistics may be revised 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.

Definitions

ANZSIC96

Australian and New Zealand Standard Industrial Classification system – New Zealand version 1996.

ANZIND

An ANZSIC-based classification used to group industries for publication.

Business Frame

A register of all economically significant businesses operating in New Zealand. The population of the RTS is drawn from the Business Frame.

Deflators

Indexes that measure the rate of price change of goods and services sold by each RTS industry. Deflators are not calculated for the subtotal or all industries total. For information on how deflators are calculated follow the [link](#) from the technical notes of this release on the Statistics NZ website.

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 a self-employed individual.

Geographic unit

A geographic unit is a subdivision of an enterprise. It is a separate operating unit engaged in New Zealand in one, or predominantly one, kind of economic activity from a single physical location or base.

Per head of population

The population measure used is the estimated residential population. It excludes short-term visitors to New Zealand.

Sales volumes expressed in September 1995 quarter prices

A constant price estimate, from which the portion of the current price sales' movement caused by price changes has been removed.

Use of retail trade data in quarterly national accounts

A key use of the RTS is in the calculation of retail trade value added for the compilation of quarterly Gross Domestic Product (GDP).

The quarterly GDP retail trade indicator uses retail sales volumes expressed in September 1995 quarter prices, by industry series from the RTS. These series are chain-linked to give constant price sales at the ANZSIC96 working industry level. The chain-linking weights are calculated using annualised quarterly current prices sales by RTS industry.

Seasonally adjusted series

The X-12-ARIMA package has been used to produce the seasonally adjusted estimates and trend estimates for sales in all subdivisions. 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 months more comparable.

All seasonally adjusted figures are subject to revision each month. This enables the seasonal component to be better estimated and removed from the series.

Estimated trend

For any series, the survey estimates can be broken down into three components: trend, seasonal and irregular. While seasonally adjusted series have had the seasonal component removed, trend series have had 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 are seasonally adjusted estimates.

The trend series are calculated using the X-12-ARIMA seasonal adjustment package. They are based on a five-term or a seven-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 they become available and can therefore change as more observations are added to the series. Revisions can be particularly large if an observation is treated as an outlier in one month, but is found to be part of the underlying trend as further observations are added to the series. Typically, only the estimates for the most recent month will be subject to substantial revisions.

Regional estimates

In the October 2003 month, the RTS sample of geographic units changed. Data prior to the October 2003 month is an analytical back series, which has been derived to preserve industry movements at the national level. However, previously published regional movements may not have been preserved. Care should be taken when interpreting movements of regional series around the period of the redesign.

More information

For more information, follow the [link](#) from the technical notes of this release on the Statistics NZ website.

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Tables

The following tables are printed with this Hot Off the Press and can also be downloaded from the Statistics New Zealand website in Excel format. If you do not have access to Excel, you may use the [Excel file viewer](#) to view, print and export the contents of the file.

1. Actual retail sales by month, by industry
2. Seasonally adjusted retail sales by month, by industry
3. Retail sales trend by month, by industry
4. Summary by quarter
5. Actual retail sales by quarter by industry
6. Actual retail sales volumes expressed in September 1995 quarter prices, by quarter by industry
7. Seasonally adjusted retail sales by quarter by industry
8. Seasonally adjusted sales volumes expressed in September 1995 quarter prices, by quarter by industry
9. Retail sales trend by quarter by industry
10. Retail sales trend expressed in September 1995 quarter prices, by quarter by industry
11. Actual retail sales by geographical region
12. Actual retail sales by geographical region, excluding motor vehicle retailing
13. Seasonally adjusted retail sales by geographical region
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15. Retail stocks at end of quarter, by industry
16. Retail trade sales deflators by industry, percentage change from previous quarter
17. Retail trade sales deflators by industry, percentage change from same quarter previous year