

## Retail Sales Index (RSI) and external surveys

The 2008/09 economic downturn has led to a number of external surveys being given greater coverage and prominence by external commentators and the media. It has been highlighted on a number of occasions that such surveys have not always been consistent with the equivalent ONS data, resulting in the robustness and validity of ONS estimates being questioned.

However it is important to note that ONS data and external surveys may not necessarily be directly comparable for a number of reasons, including differences in methodology and sample size. For this reason, any comparison between ONS and external survey data should be undertaken with care.

### How are external surveys useful?

The RSI is a key economic indicator and is one of the most timely short-term measures of economic activity. It is used to estimate consumer spending on retail goods and the output of the retail industry, both of which are used in the compilation of the National Accounts. Two prominent private industry surveys that can be compared with the ONS RSI are the 'BRC-KPMG United Kingdom Retail Sales Monitor' (RSM) and the 'CBI Distributive Trades Survey' (DTS). External surveys can help supplement official ONS data for the following reasons:

- **Timeliness** – The ONS RSI is usually published around 14 working days after the end of the month. In contrast, the BRC-KPMG RSM is usually published around seven working days after the end of the reference month, while the CBI DTS is published a few working days before the end of the month. Consequently, these private surveys can be valuable tools for providing an early indication of activity in the retailing industry.
- **Expectations** – The CBI DTS reports company expectations for variables such as sales and orders. These can be used to make inferences about the future prospects of the retailing industry.
- **Additional variables** – External surveys measure a variety of variables that are not covered in ONS data. For example, the CBI DTS reports data on investment intentions for the year ahead.

## What are the differences between RSI and external surveys?

### 1. Sample size

Table 1: Sample size and average response rates for each survey

	Sample size	Total response
ONS RSI	95 per cent of total UK retail sales value (5,000 companies)	93 per cent of total UK retail sales value (64 per cent response rate each month)
BRC-KPMG RSM	60 per cent of total UK retail sales value <sup>1</sup>	100 per cent response rate on a weekly basis across twelve product categories
CBI DTS	Between 850-900 companies, with an additional 800-900 approached every quarter <sup>2</sup>	A monthly average of 121 companies over 2013, of which 66 were in the retail sector

Retail sales data are collected from a sample of approximately 5,000 retailers across Great Britain. The sample represents the whole retail industry and includes all large retailers and a representative sample of smaller businesses. Collectively all of these businesses cover approximately 95 per cent of the retail industry in terms of turnover. Table 1 shows that the external surveys have a smaller sample size and fewer total responses than the official ONS data, although response rates from some external surveys are better, and BRC do not revise monthly data.

### 2. Coverage & methodology

As well as differences in the sample size and response rates, private sector surveys also employ different methodological approaches, which may provide further explanation of any divergence between the three series. The main methodological differences between the RSI, RSM and DTS are listed in Table 2. It should be noted that this is not an exhaustive list, as it does not cover methodological differences such as revision policy, data collection periods or period adjustments. A more comprehensive list was produced by Palmer (2007)<sup>3</sup>.

<sup>1</sup> [http://www.brc.org.uk/bis/default.asp?main\\_id=3](http://www.brc.org.uk/bis/default.asp?main_id=3)

<sup>2</sup> <http://www.cbi.org.uk/media/2182644/inside-cbi-business-surveys.pdf>

<sup>3</sup> Palmer, N. (2007) *Comparing the ONS's retail sales index with the BRC's retail sales monitor*, ONS, Newport

Table 2: Main methodological differences between RSI, RSM and DTS

Criterion	ONS RSI	RSM	DTS
Sample review	Sample updated each month, in accordance with the profile of the British retail industry	Sample related to BRC membership profile	Sample based on UK industry trade associations, CBI regional office contacts and publicly available databases <sup>4</sup>
Enforcement	Statutory survey	Voluntary survey	Voluntary survey
Headline retail sales measures obtained	Values and volumes, seasonally adjusted and non-seasonally adjusted	Changes in total, like-for-like and online sales values compared with a year ago, no seasonal adjustment	Balance statistic <sup>5</sup> indicating the change in sales volume compared with a year ago, no seasonal adjustment
Weighting method	Survey data weighted by sales for each type of retailer	Survey data covering twelve product categories and six online categories weighted by household expenditure on each type of product	Survey data weighted dually, according to gross value added (GVA) of each firm's sector and employment size

### 3. The qualitative nature of the CBI DTS

The CBI DTS survey offers a qualitative indication of the general direction of retail sales volumes compared with a year ago, while ONS official data are quantitative estimates that provide an accurate guide of the magnitude of movement. For example, the CBI DTS asks: *“How do your sales and orders for this month and your expectations for next month compare with those in the same month a year ago? (a) Up (b) Same (c) Down (d) n/a”*.

Positive and negative replies are then expressed as percentages, and a weight is applied to each response (as outlined in the table above), to arrive at the total balance. Consequently, the final balance statistic may not always reflect the true magnitude of growth in retail sales, if, for example, a small proportion of the sample experience a marked change in volumes, but the remainder experience small changes in the opposing direction.

Research undertaken by the Bank of England also suggests that balance statistics may not pick up small changes in output, as firms may choose to report the change in the volumes of sales as ‘the same’ for very small changes in output.<sup>6</sup>

<sup>4</sup> <http://www.cbi.org.uk/media/2182644/inside-cbi-business-surveys.pdf>

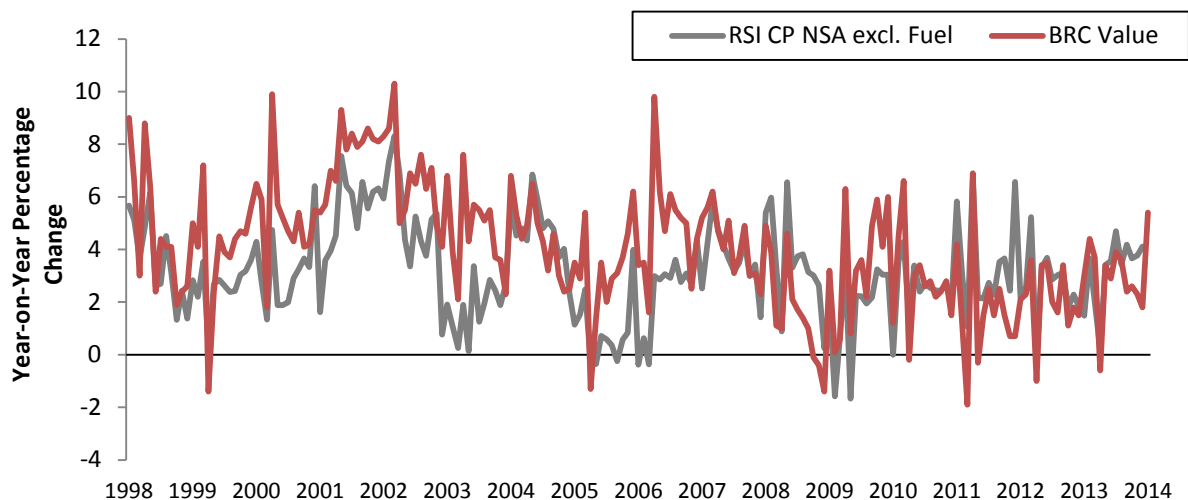
<sup>5</sup> A balance statistic is the difference between the weighted percentage of companies responding that sales were “up” on a year ago, and those reporting that sales were “down”.

<sup>6</sup> Bank of England (1997) *Quarterly Bulletin*, Vol. 3, Bank of England, London

## The comparability of ONS official data and external surveys

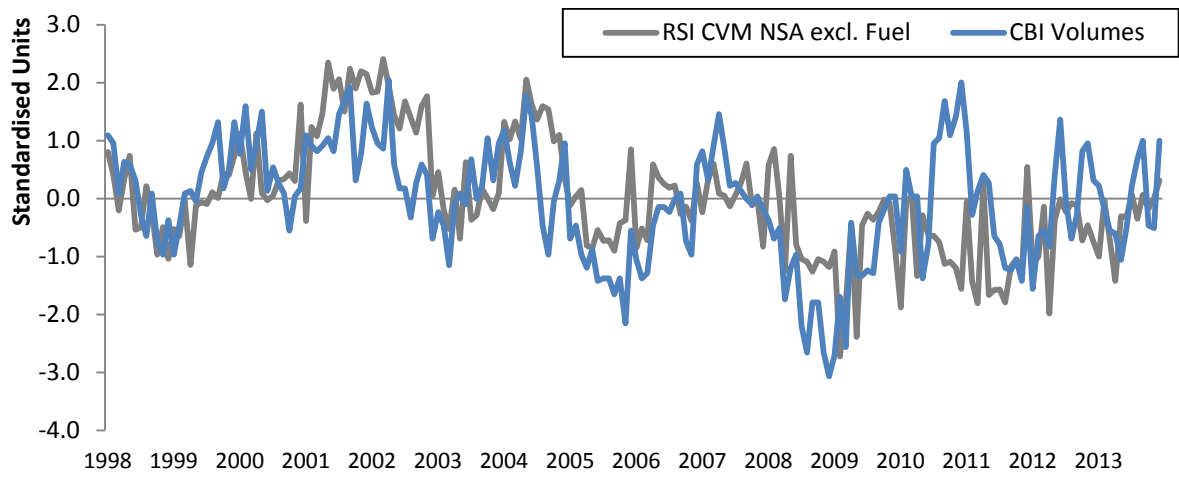
Despite the differences in coverage, external retailing surveys generally correlate reasonably well with ONS official data. Given the methodological differences listed above, the most appropriate measure to compare with the BRC-KPMG RSM total sales series is the RSI values series, non-seasonally adjusted. Figure 1 shows the year-on-year percentage change in the RSI current prices series (excluding fuel) and BRC's total sales growth series, and the relationship between the two is clearly visible.

Figure 1: Monthly retail sales growth for all retailers, compared with the BRC-KPMG RSM survey growth



The most appropriate measure to compare with the DTS volume of sales survey is the RSI volumes series, non-seasonally adjusted. However, as explained above, the DTS survey results are presented as a balance statistic; consequently both series should be standardised in order for an appropriate comparison to be made. Figure 2 shows standardised units for both the year-on-year percentage change in the RSI chained volume measure (excluding fuel), and the CBI volume of sales measure, with a trend between the two series again being clearly visible.

Figure 2: Monthly retail sales growth for all retailers, compared with CBI's DTS survey growth



## **Contacts**

### **This publication**

For information about the content of this publication, please contact

Kate Davies

Tel: 01633 455617

Email: [kate.davies@ons.gsi.gov.uk](mailto:kate.davies@ons.gsi.gov.uk)

### **Other customer enquiries**

ONS Customer Contact Centre

Tel: 0845 601 3034

International: +44 (0)845 601 3034

Minicom: 01633 815044

Email: [info@statistics.gsi.gov.uk](mailto:info@statistics.gsi.gov.uk)

Fax: 01633 652747

Post: Room 1.101, Government Buildings,

Cardiff Road, Newport, South Wales NP10 8XG

[www.ons.gov.uk](http://www.ons.gov.uk)

### **Media enquiries**

Tel: 0845 604 1858

Email: [press.office@ons.gsi.gov.uk](mailto:press.office@ons.gsi.gov.uk)