

Information paper

Frequently Asked Questions

1. Why have you recently changed your methods?

ONS outputs undergo regular reviews to ensure they continue to be produced according to up-to-date internationally recognised best practice and standards. Regular review and updating of outputs and methods used to calculate the final retail sales estimates is needed to ensure they are produced to the highest possible quality and also meet changing user needs and demands. The last major methodological change for the retail sales estimates was in 2003. Retail sales estimation methods and systems have recently been thoroughly assessed by ONS which included comprehensive user consultation.

The estimates on the updated methods, which include chain-linking and other changes, were released on 21 May 2009.

2. What are the changes you've made?

The main changes were

- Use of chain-linking for the calculation of volume estimates
- Use of commodity indices from the Consumer Prices Index rather than from the Retail Prices Index for the calculation of RSI industry deflators
- Re-referencing the time series to 2005 equal to 100
- Streamline the presentation of the published estimates in a new Statistical Bulletin

An information paper describes the changes to the ONS retail sales estimates was published on 15 May 2009:

3. Will the method changes lead to historical revisions?

Yes. The use of chain-linking, and other methodological changes, will mean that historical estimates were revised. An information article was released on 15 May

2009 which compared the current published estimates to the new estimates. Revisions are different depending on the series.

4. Are you admitting your estimates before were wrong?

No. Regular updating of methods is important to ensure that the estimates are calculated with the most appropriate up-to-date methods. Chain-linking is a standard internationally recognised method and endorsed and recommended by Eurostat. The introduction of chain-linking is responding directly to user feedback, particularly from the Bank of England. We pre-announced from November 2007, and more recently in the March 2009 release, that these changes would take place and have provided a methods article explaining the changes.

5. Why has it taken you this long to make the changes?

The changes we have made are the result of user feedback and are in line with international best practice. The changes are comprehensive and quality assured, this takes time.

6. How has the story changed?

For an overview and comparison of data for the last three years for the All retailing series see "Changes to the Retail Sales Methodology" which was released on Friday 15th May.

- Referencing (2005=100) does not change the movement in the time series
- Using Chain-linking lowers the volume estimates
- Using CPI commodity weights (rather than RPI commodity weights) increases the volume estimates
- The value estimates were relatively unchanged

Overall, the RSI series for value, seasonally adjusted show similar growth rates and are relatively unaffected by the method changes. Overall, the RSI series for volume, seasonally adjusted show lower annual growth rates, particularly at the current end. This is generally of the magnitude 0.5 to 1.0 percentage points in recent months for the All retailing estimate, although the impact of the changes are series dependant.

7. Have you increased the volatility of the series?

No. The month-on-month volatility of the series has not changed with the use of the new methods.

8. Can you provide me with more information about what chain-linking is?

Yes. Chain-linking is a standard internationally recognised technique and essentially ensures that the most up to date weights are used in the calculation of the volume estimates. It reduces an effect known as substitution bias where consumers switch their spending to cheaper goods. If the weighting of the prices has not been updated then this change in consumer behaviour is not captured.

There is a previous information article which describes chain-linking as used by ONS. It is available here:

http://www.statistics.gov.uk/articles/economic_trends/chainlinking.pdf

9. Can you give more details on why you have changed to use the CPI rather than the RPI?

We are continually improving our methods and the price indices from the CPI have been proven to be the better source.

The CPI better reflects total retail expenditure in the UK. CPI weights are derived from National Accounts household expenditure, which includes the expenditure of all private households in the UK, foreign visitors to the UK and people living in other accommodation such as nursing homes, retirement homes and university halls. RPI weights are largely based on the Expenditure and Food Survey, which only includes private households in the UK, and exclude the contributions to total expenditure from the top four per cent of households by income and from pensioner households that derive at least three quarters of their income from state benefits.

As well as these scope differences the calculation of the initial price indices within the RPI and CPI use different mathematical formulae to combine prices collected within each item in the retail basket. The CPI uses a formula that takes some account of substitution between similar products within each item, while the RPI uses a formula which does not allow for substitution between products within each item. For RSI, it is important that substitution effects are accounted for by the price indices.

For detailed information on the methodological differences between the CPI and RPI see the Consumer Price Indices Technical Manual (ONS, 2007).

10. Will the new retail sales estimates be used within the most recent National Accounts release?

The GDP(O) uses retail sales estimates as one input into their estimates. The retail sector is approximately 6% of the GDP(O) estimate. The GDP(O) estimate for the most recent data uses retail sales data for Quarter 1 2009 on a chain-linked basis. Historical data will be included in the GDP(O) estimates at the publication of Blue Book 2009 later this year.

11. Why have you introduced a Statistical Bulletin?

The presentation of the published information has been streamlined. The four main indications are still given on the table on the front of the Statistical Bulletin, and also historical data within the bulletin.

The year on year growth in the seasonally adjusted estimates provides users with a simple estimate of change which can be readily understood. Users can also choose the most appropriate indicator for their purpose.

12. When is data available from?

Data is now available from January 1988 for both value and volume series for consistency. One aspect of this is that chain-linking requires knowledge of previous year prices, and this data is not readily available for earlier periods.

13. Are these estimates better than your previous ones?

There was nothing wrong with our methods used to derive the previously published value or volume estimates. The methods used were the best methods available at that time and the estimates reflected the methodology used. The Retail Sales Inquiry still uses data from around 5000 businesses, and is a comprehensive and broad based survey. The value estimates are pretty much identical under both methods. The use of chain-linking to derive the volume estimates give different volume estimates as they reduce an effect known as substitution bias where consumers switch their spending to cheaper goods.

14. Where can I find out more information?

The ONS released an information article on 15 May 2009 which described the changes and compared the current published All retailing estimate to the new estimate. Please access this on the ONS website.

Contact details:

Retail Sales Branch at ONS:

Telephone for general queries: +44 (0)1633 455602

Email: retail.sales.enquires@ons.gov.uk

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