

Supermarket share of retail sales

Background

DECC has published a series showing the volume of fuel sold through supermarkets since 1999. As part of a methodological review we have worked with industry to revise how we collect and report on the volume of fuel sold through retailers, both supermarkets and other traders, and commercially (including, for example, fuel sold to HGVs through truck stops and fuel sold to bus and coach operators).

This paper describes the changes in the data collection and methodology used and our plans for further developing this series.

Current data collection methodology

Table 3.5 of Energy Trends provides quarterly information on the volume of fuel sold in the UK, broken down by the volume sold through supermarket chains, by roadside forecourts and by 'commercial' outlets (the latter being the volumes sold through truck stops and other sales outside of the UK's retail forecourt network). To do this we need to determine or estimate the total volumes sold through all parts of the fuel supply chain, some of which are more readily available, transparent, and accurate than other parts.

The total volume of road fuel sold in the UK is robust and well established. Whilst DECC monitor sales of road fuels from oil refiners, we also match our delivered volumes with the road fuels consumption reported in HMRC's Hydrocarbon Oils Duty bulletin¹.

Data on the volume of sales sold through supermarket chains is collected through a DECC survey which requires the major supermarket chains to report the volume of fuel sold, historically this has been split by hydrocarbon fuels and biofuel.

Data on both the remaining retail sales and the commercial sales are both estimated rather than surveyed. Commercial sales are estimated through returns provided by the UK's refiners. With many refiners increasingly selling fuel to third parties who then sell onto final consumers this survey is becoming less comprehensive as the final destination of the fuel is often not known to the refiner. The final piece of the data in the supply chain – the volume sold through other retailers - is the total volume of sales, minus the sales through commercial outlets and supermarkets. As such, retail sales are critically dependent on the data accuracy in other parts of the fuel supply chain and in particular the accuracy of the commercial volumes.

Revised data collection methodology

Following consultation with industry, we have introduced a number of changes;

Firstly, whilst previous surveys have attempted to separately estimate the volume of hydrocarbons and biofuel sold through supermarkets, the new survey requires the total volume of fuel sold, regardless of proportion of biofuel within that. This simplifies the return and will increase consistency and accuracy. The volume of biofuels consumed will still be shown in Chapter 6 of the Digest of UK Energy Statistics and Energy Trends.

Secondly, we have changed which supermarket chains are included in the survey. Previously, the 'hypermarket' share included the 'big four'² retailers alongside a number of relatively small local co-operatives and the fuel sold through the retail sites operated by the Co-Operative Group. Many of these small chains did not have a full national coverage and many of them were located at the road-side rather than alongside a supermarket, as are (predominantly) the retail forecourts operated by the Co-Operative Group. In order to provide greater clarity and consistency in understanding the proportion of fuel sold through supermarkets, the new survey includes only i.)

¹ www.hmrc.gov.uk/statistics/hydro-oils.htm

² Asda, Morrisons, Sainsbury's and Tesco.

Special feature – Supermarket share of retail sales

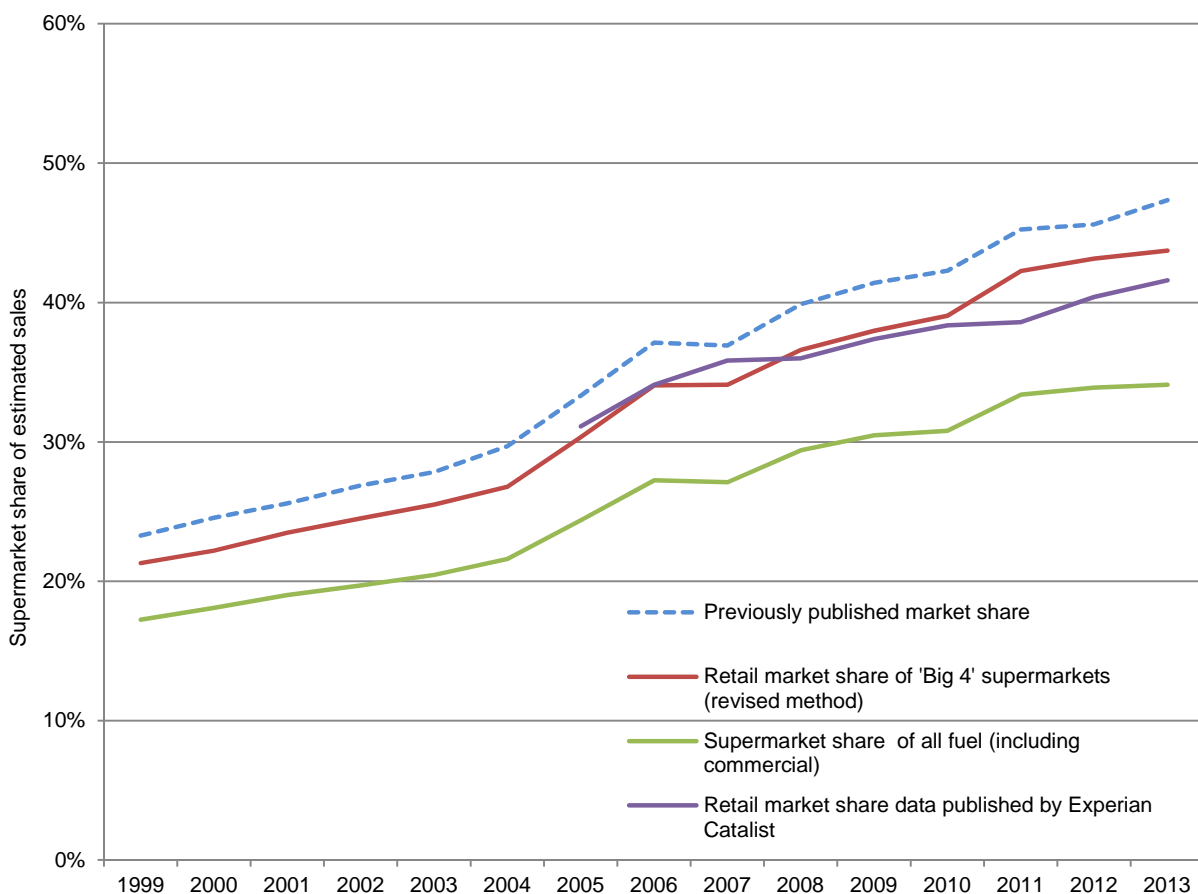
grocers with a substantial national presence that ii.) buy and sell fuel through iii.) their own-brand label. This means that the supermarket share data now comprises sales of the 'big four' only. The individual market shares of companies remain commercially sensitive.

Thirdly, as noted above, data on the volume of product sold outside of the retail network is declining in accuracy. Whilst DECC aims to develop better data collection for commercial sales, as an interim measure we have estimated the volumes sold through commercial sites by reference to the types of vehicles on the UK's roads (see Annex 1 for the volumes delivered). In this estimation, we assume that there is no petrol sold through commercial outlets, but that the vast bulk of buses and Heavy Goods Vehicles (c 80 per cent) buy their fuel at non-retail sites. We also assume that fuel used for off-road machinery (e.g. tractors) and inland navigation by water is also sourced outside of the retail network.

Impact of revisions

The overall impact of the three revisions is to reduce the share of retail fuel sold by supermarkets by around 3 percentage points from the current series as shown in the graph below. The overall direction of the trend has not changed with supermarket sales comprising a larger proportion of the road fuel markets on a year-by-year basis.

Chart 1: cumulative impact of changes in the data collection



The chart also shows two other comparisons. Firstly, the chart shows the market share data provided by Experian Catalist who conduct surveys of retail sites across the UK and estimate fuel volumes sold through the retail network, including the share of fuel sold by supermarkets. Whilst the market shares differ slightly from those published by DECC – as we would expect given the different methodologies - they are broadly in line over time.

Special feature – Supermarket share of retail fuels

The chart also shows the total share of all road fuels consumed in the UK. Whilst this does not represent a share of the retail market, it has the advantage of being based on two figures – the total volume of road fuel sales and the volumes sold by supermarkets – that are not estimated but calculated from a census.

Further developments

The new methodology increases consistency by more clearly specifying which supermarkets are included in the sample and we have also removed a potential source of inaccuracy and inconsistency with respect to biofuel content. Additionally, our estimation of the commercial sales (and hence the overall retail sales) is now based on a transparent methodology which allows users of these data to alter our assumptions should they see fit.

In the medium term, we hope to further improve the series by considering options for additional surveys or better techniques for estimating commercial sales and/or the total volume of retail sales.

As ever, DECC welcome comments on the methodology and suggestions for its improvement.

Acknowledgements

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Special feature – Supermarket share of retail sales

Annex 1: Estimated volume of fuel sold through commercial outlets.

Million tonnes

| MODELLED CONSUMPTION OF DIESEL FUEL BY VEHICLE TYPE (including bio-diesel) | | | | | | | |
|--|-------------------|----------------------|----------------------|--------------|--------------------|-------------------|------------|
| | Buses and coaches | Heavy goods vehicles | Light goods vehicles | Cars & taxis | Off Road Machinery | Inland Navigation | Total DERV |
| 1999 | 1.242 | 7.433 | 3.007 | 3.657 | 0.271 | 0.052 | 15.662 |
| 2000 | 1.266 | 7.191 | 3.231 | 3.876 | 0.273 | 0.056 | 15.892 |
| 2001 | 1.233 | 6.918 | 3.363 | 4.034 | 0.265 | 0.057 | 15.870 |
| 2002 | 1.266 | 6.998 | 3.494 | 4.380 | 0.261 | 0.060 | 16.459 |
| 2003 | 1.389 | 7.076 | 3.777 | 4.807 | 0.263 | 0.065 | 17.377 |
| 2004 | 1.397 | 7.238 | 4.078 | 5.375 | 0.281 | 0.070 | 18.438 |
| 2005 | 1.453 | 7.527 | 4.244 | 5.827 | 0.279 | 0.074 | 19.405 |
| 2006 | 1.481 | 7.686 | 4.435 | 6.329 | 0.291 | 0.079 | 20.301 |
| 2007 | 1.557 | 7.977 | 4.661 | 6.746 | 0.302 | 0.084 | 21.327 |
| 2008 | 1.513 | 7.339 | 4.672 | 7.326 | 0.299 | 0.090 | 21.240 |
| 2009 | 1.509 | 7.133 | 4.581 | 7.402 | 0.266 | 0.096 | 20.986 |
| 2010 | 1.502 | 7.702 | 4.621 | 7.401 | 0.297 | 0.098 | 21.620 |
| 2011 | 1.389 | 7.599 | 4.692 | 7.687 | 0.302 | 0.099 | 21.768 |
| 2012 (est) | 1.408 | 7.705 | 4.756 | 7.794 | 0.306 | 0.100 | 22.069 |
| 2013 (est) | 1.440 | 7.880 | 4.865 | 7.971 | 0.313 | 0.102 | 22.570 |

| ESTIMATED SALES THROUGH COMMERCIAL SITES | | | | | | | |
|---|--------------------------------------|---|---------------------------------------|-------------------------------|------------------------------------|-----------------------------------|-----------------------|
| | Buses and coaches (0.8* consumption) | Heavy goods vehicles (0.8* consumption) | Light goods vehicles (0* consumption) | Cars & taxis (0* consumption) | Off road machinery(1* consumption) | Inland Navigation(1* consumption) | Total Commercial DERV |
| 1999 | 0.993 | 5.946 | 0.000 | 0.000 | 0.271 | 0.052 | 7.263 |
| 2000 | 1.013 | 5.752 | 0.000 | 0.000 | 0.273 | 0.056 | 7.093 |
| 2001 | 0.987 | 5.535 | 0.000 | 0.000 | 0.265 | 0.057 | 6.843 |
| 2002 | 1.013 | 5.598 | 0.000 | 0.000 | 0.261 | 0.060 | 6.932 |
| 2003 | 1.111 | 5.661 | 0.000 | 0.000 | 0.263 | 0.065 | 7.100 |
| 2004 | 1.117 | 5.790 | 0.000 | 0.000 | 0.281 | 0.070 | 7.258 |
| 2005 | 1.163 | 6.022 | 0.000 | 0.000 | 0.279 | 0.074 | 7.538 |
| 2006 | 1.185 | 6.149 | 0.000 | 0.000 | 0.291 | 0.079 | 7.705 |
| 2007 | 1.246 | 6.382 | 0.000 | 0.000 | 0.302 | 0.084 | 8.013 |
| 2008 | 1.211 | 5.871 | 0.000 | 0.000 | 0.299 | 0.090 | 7.471 |
| 2009 | 1.207 | 5.707 | 0.000 | 0.000 | 0.266 | 0.096 | 7.275 |
| 2010 | 1.202 | 6.161 | 0.000 | 0.000 | 0.297 | 0.098 | 7.758 |
| 2011 | 1.111 | 6.080 | 0.000 | 0.000 | 0.302 | 0.099 | 7.591 |
| 2012 (est) | 1.126 | 6.164 | 0.000 | 0.000 | 0.306 | 0.100 | 7.696 |
| 2013 (est) | 1.152 | 6.304 | 0.000 | 0.000 | 0.313 | 0.102 | 7.871 |