Petrol and diesel prices

Introduction

Estimates of retail prices for unleaded petrol (ultra-low sulphur petrol – ULSP) and diesel (ultra-low sulphur diesel – ULSD) are published in Section 4 of DECC's Quarterly Energy Prices publication. This article provides background to petrol and diesel prices and analysis of price movements over the past few years.

Background

The price of crude oil is the main driver of changes in petroleum product prices. Crude oil prices are influenced by a number of factors, both local and global. Other factors affecting petroleum product prices are the rates of hydrocarbon oil duty and VAT. The current retail price of ULSP is 137.58 pence per litre, of which the pre-tax price is 56.70 p/l (41%), duty is 57.95 p/l (42%), and VAT is 22.93 p/l (17%).

Prices post-2000

Oil prices

The price of crude oil has been on an upward trend since the early years of this century. The start of the Iraq War in 2003, hurricane damage to US refineries in 2005, conflict in Lebanon in 2006, increased demand from emerging economies, geopolitical tensions, and the weak dollar in 2008 all led to price increases. Crude oil prices peaked in real terms in 2008, reaching over \$140 per barrel in cash terms in July (10 per cent higher than the real terms peaks reached in the late 1970's), before dropping sharply into December 2008 as the world economy slowed. Prices then increased from January 2009 on, with prices in 2011 staying above \$100/barrel throughout the year.

In the first quarter of 2012, prices were in the range of \$120 -\$125/barrel, due to concerns over potential Iranian supply disruption, but in April the crisis in the Eurozone caused reduced estimates of future demand, and hence prices, to fall. By June, prices had fallen below \$100/barrel for the first time since January 2011. However, by July prices were increasing again, as Eurozone worries reduced, and concerns about potential supply disruption in the Middle East, maintenance outages in the North Sea planned for September, and the upcoming Gulf of Mexico hurricane season drove prices back up. By late August prices had reached over \$115/barrel, but fell back to around \$110 by December due to worries about a possible fiscal crisis in the US. Prices increased steadily into 2013, reaching 4-month highs of over \$118 in mid-February due to increased demand from China, before falling back to around \$110 in early March as political gridlock in Washington triggered automatic U.S. budget cuts.

Petroleum product prices

Chart 1 on the next page shows how changes in petrol and diesel prices compare to changes in crude oil prices. The prices for road fuels closely follow the pattern of the crude oil index, with the crude oil price spike in 2008 and the fall that followed in 2009 clearly shown in the crude price index and reflected in the prices of both fuels.

Tax and Duty

Chart 2 shows the relative percentages of the retail price for unleaded petrol represented by the operator's price, by VAT, and by duty. Tax and duty on road fuels is comprised of hydrocarbon oil duty and VAT, which together currently account for around 60% of the retail price of road fuel - amongst the highest rate in Europe. However, as duty is a fixed rate, the proportion of tax and duty varies as the wholesale price of the fuel changes. Tax and duty has accounted for almost 75% of the retail price of petrol as recently as January 2009, when retail prices were almost 60% lower than present (at 86.3 p/l), compared to 59% tax and duty in March 2013.

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Chart 1: Percentage changes in average prices of ULSP, & ULSD and crude oil

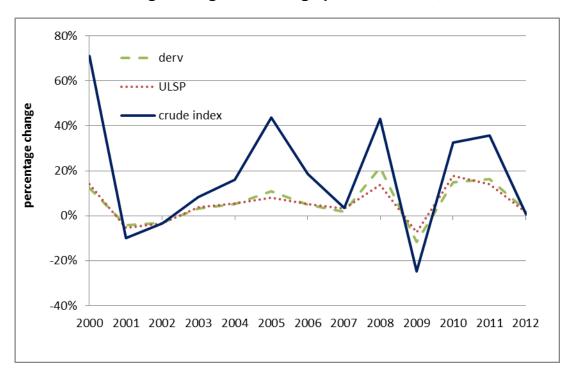
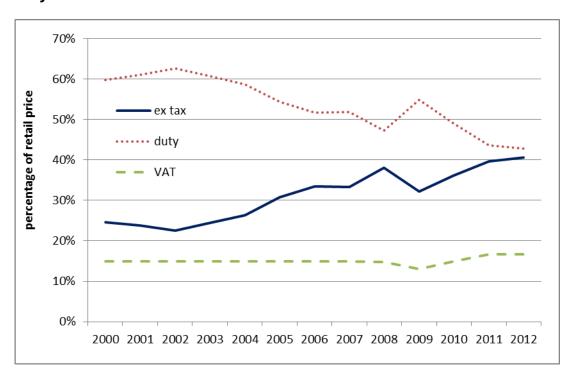


Chart 2: Percentage of ULSP retail price represented by operator's price, tax and duty



The Chancellor of the Exchequer is responsible for duty policy, which is currently that rates should rise each year at least in line with inflation. Addressing the concerns surrounding high oil prices, the fair fuel stabiliser was introduced in March 2012, under which fuel duty will not rise beyond the rate of retail price inflation when oil prices are above \$75 (£45) per barrel. Duty rates on road fuels have not changed since March 2011, with the proposed rise of 3 pence per litre due in September 2013 being cancelled in the 2013 Budget of 20 March.

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Data collection and methodology

DECC collects and publishes petrol and diesel price data weekly and monthly. Fourteen companies (ten oil companies and four supermarkets), covering over 90% of the road fuel market, provide monthly road fuel price data. A smaller sample provides prices weekly. Both surveys also collect price data on gas oil and standard grade burning oil (kerosene heating oil).

The weekly prices are collected every Monday and are the prices for that day. The monthly prices are collected mid-month and are prices as of the 15th of the month. To reduce the burden on business, those companies that supply weekly prices are not re-surveyed for the monthly survey, instead their weekly data for the date closest to the 15th is used.

For both weekly and monthly prices, the average price for each fuel is calculated by weighting the individual company prices by the annual volume of sales of each reporting company, stratified by 'supermarkets' and 'other'. The weekly data is also provided to the European Commission under Council Decision 1999/280/EC. The monthly data is provided to the Office for National Statistics (ONS) as part of the Producer Price Index (PPI) survey, and as such is statutory under the Statistics of Trade Act.

Data validation and standard errors

A daily price survey using an alternative methodology is produced by a commercial reporting company and the data made available to DECC and published on their website. Each week, the data are compared to ensure that both series are moving in similar directions. In addition, the weekly data closest to the 15th of the month is regularly compared against the mid-month prices collected for the monthly statistics.

Estimates of the standard error on the monthly prices are around 0.1% for both petrol and diesel, based on data for the first six months of 2012. The standard errors on weekly estimates are slightly higher, at around 0.25%, due to the smaller sample size (around 65% compared to over 90% for the monthly survey).

Publication

The weekly (Monday) prices for ULSP and ULSD are published on the DECC website each Tuesday at 9.30 am:

www.gov.uk/government/uploads/system/uploads/attachment_data/file/85829/weekly_fuel_prices.x <u>ls</u>. This is one of the most timely data releases available, with data collected on the Monday afternoon. Data are delayed for one day for Bank Holidays falling on a Monday.

Monthly prices for ULSP and ULSD, plus prices for super-unleaded petrol, gas oil and standard grade burning oil, are published on the last Thursday of each month in Table 4.1.1 on the DECC website:

www.gov.uk/government/uploads/system/uploads/attachment_data/file/69866/gep_411.xls

The monthly data is published one month in arrears, but an initial estimate of ULSP and ULSD prices for the current month is also published, based on the weekly data. The spreadsheet also details quarterly and annual prices, and prices excluding VAT and excluding VAT & duty. Commentary is provided on price changes (month on month and year on year).

Other uses of the data

The weekly prices, along with data on tax and duty rates, are reported to the EU for publication in the 'Oil Bulletin': http://ec.europa.eu/energy/oil/index_en.htm. This data on a monthly basis is combined with data for other EU member states and re-published by DECC in Table 5.1.1 and 5.2.1, which show how UK petrol and diesel prices compare with the rest of Europe:

www.gov.uk/government/uploads/system/uploads/attachment_data/file/69869/gep_511.xls

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The monthly prices are also used to produce Table 4.1.3, which has average prices for January of each year:

www.gov.uk/government/uploads/system/uploads/attachment_data/file/69868/qep_413.xls

The monthly prices are also used to produce price indices for the monthly PPI (Producer Price Index) that DECC prepares for ONS (Office of National Statistics).

User feedback

Please send any comments or queries about this article to:

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