Electricity bill variations by tariff type

Introduction

Annual domestic energy bills are published in DECC's Quarterly Energy Prices (QEP) Publication in December (provisional) and March (final).[1] They are published by fuel and payment type, and by distribution region, based on DECC's standard annual consumption assumptions.[2] In December 2012, DECC's Energy Trends publication featured an article examining the domestic market by tariff type, including the proportion of total customers that are on fixed, or social tariffs for example, and the corresponding bills for an average customer on each type.[3]

However, it is also useful to investigate the range of bills paid by customers in the domestic energy market, as well as the averages, to show the overlap of bills between different payment and tariff types, which may not be clear when comparing averages. This article examines the range of UK domestic energy bills for standard electricity customers only, as it has the greatest range of tariffs. Annual bills are calculated using the customer tariff prices collected in DECC's Domestic Fuel Inquiry survey for Quarter 4 of 2012. As with the bills published in QEP, consumption assumptions of 3,300kWh per annum have been used.

Due to the price rises implemented by suppliers towards the end of 2012[4], the data used for this article will produce higher bills on average than the 2012 bills published in QEP which were £500, £460 and £501 for Standard Credit, Direct Debit, and Pre-Payment respectively. The full impact of these price changes will be visible in the 2013 annual bills.

Distribution of Standard Electricity bills in the UK

Chart 1: Annual Standard Electricity bills based on December 2012 prices[5]

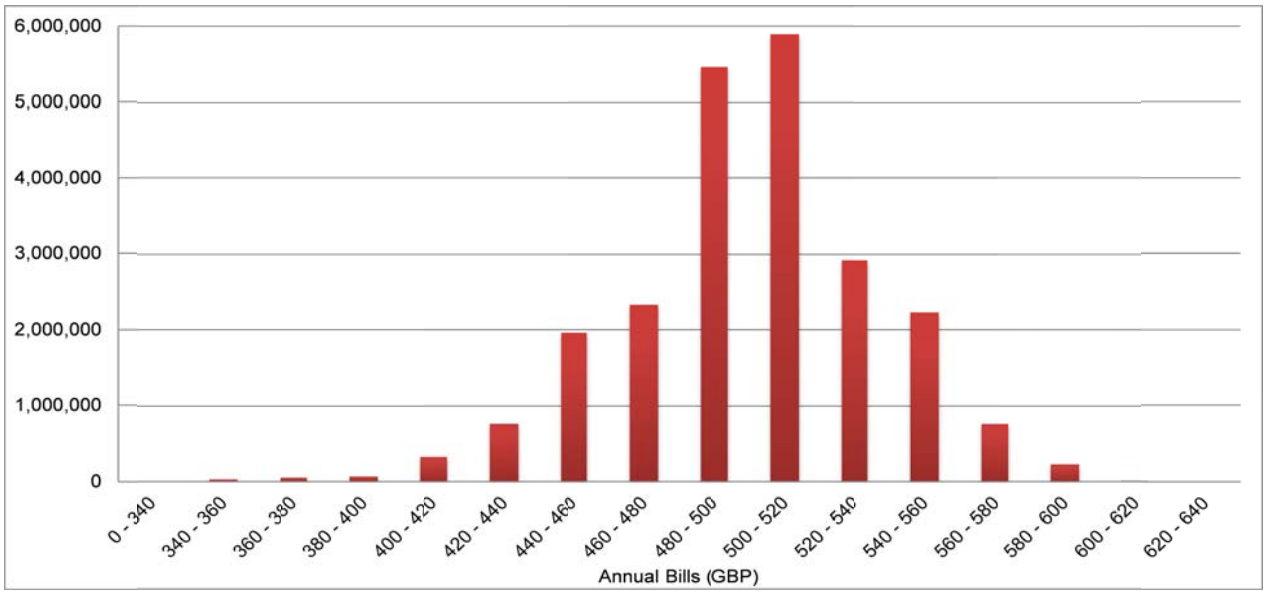


Chart 1 shows the number of customers with bills in each £20 category between £340 and £640, and suggests a relatively normal distribution around the modal categories. In December 2012, almost half of the 23 million UK standard electricity customers had average annual bills between £480 and £520. The number of customers paying more than £520 was 6 million, whilst 5.5 million paid less than £480.

[1] Published online at www.gov.uk/government/statistical-data-sets/annual-domestic-energy-price-statistics
[2] DECC's annual consumption assumptions are: 18,000kWh for gas, 3,300kWh for Standard Electricity and 6,600kWh for Economy 7 electricity.
[3] www.gov.uk/government/uploads/system/uploads/attachment_data/file/65916/7347-tariff-variation-dom-mkt-et-article.pdf
[4] In Quarter 4 2012, 5 of the Big 6 energy suppliers implemented price increases to standard electricity tariffs
[5] Assuming annual consumption of 3,300kWh

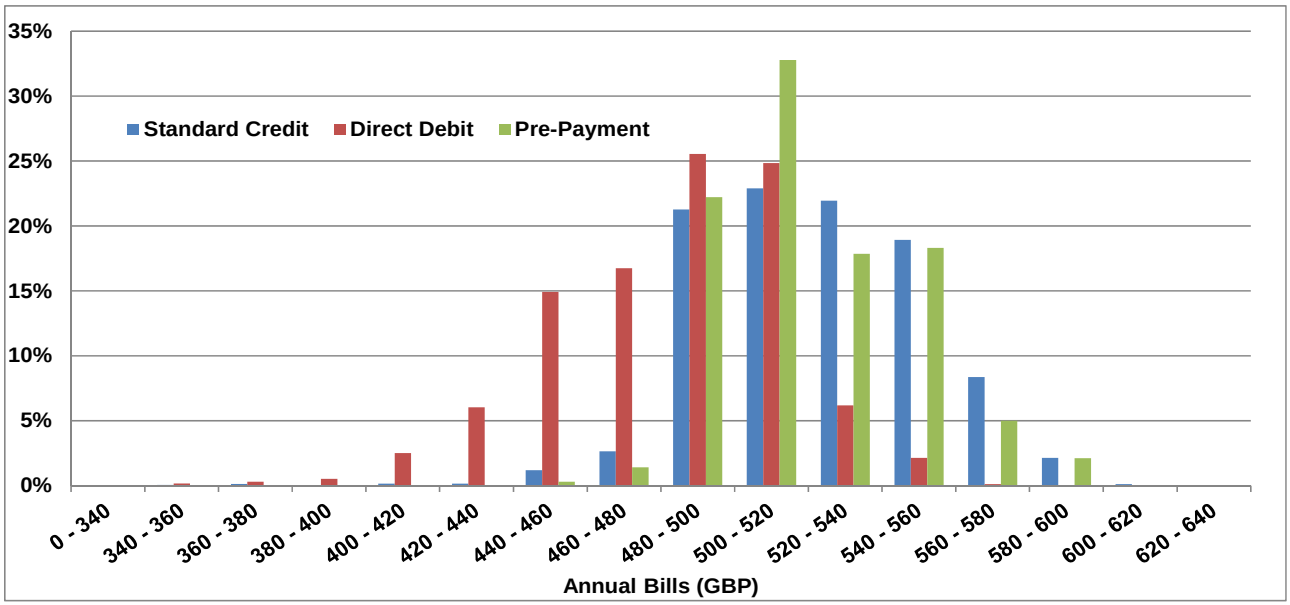
Special feature – Electricity bill variations by tariff type

Chart 1 portrays the distribution of bills for standard electricity tariffs across all tariff types, regions and payment methods. However, the distribution of bills varies significantly when bills are broken down by these three variables.

Distribution of Standard Electricity bills in the UK by payment method

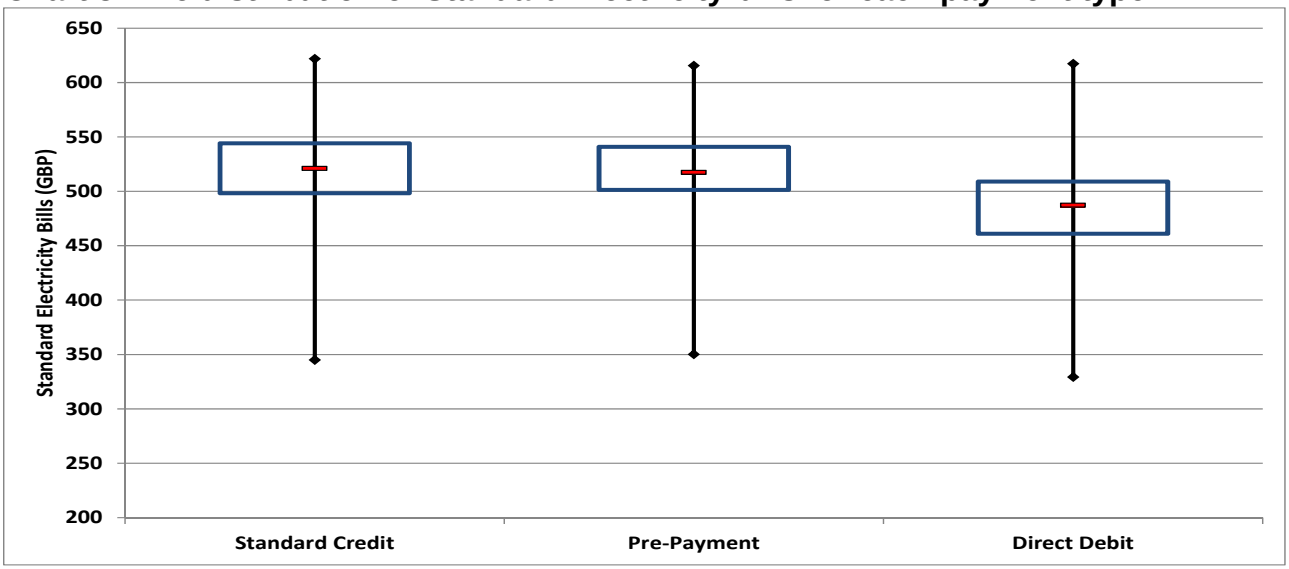
Chart 2 shows the proportion of customers that fall into each bill category on each payment type, across all regions. For Standard Credit and Pre-Payment, the modal category was £500-520, compared with £480-500 for Direct Debit. In general, the distribution of Direct Debit bills is, as expected, lower than that of Standard Credit and Pre-Payment. Two thirds of Direct Debit customers are paying standard electricity bills of less than £500, compared to only a quarter of Standard Credit and Pre-payment customers.

Chart 2: The proportion of Standard Electricity customers in each bill category



Since OFGEM's Energy Supply Probe was released in October 2007, and following campaigns from other bodies to remove Pre-Payment premiums, there has been a convergence of Standard Credit and Pre-Payment bills.[6] Chart 2 reflects this; generally showing a similar proportion of standard credit and pre-payment customers in each bill category.

Chart 3: The distribution of Standard Electricity bills for each payment type



[6] www.ofgem.gov.uk/Markets/RetMkts/ensuppro/Documents1/Update%20on%20Probe%20Monitoring_FINAL.pdf

Chart 3 is a box and whisker plot for the three payment types. The bottom and top of the box show the first and third quartiles, with the band inside the box showing the median value for the payment method. The extremes of the vertical lines shows the maximum and minimum bills by payment types based on our standard consumption estimates.

The chart shows that the distribution of Standard Credit and Pre-Payment tariffs are very similar. The median Standard Credit bill (£521) is very similar to that of Pre-Payment (£517) although the range and inter-quartile range are greater for Standard Credit, as there are far fewer Pre-Payment tariffs available.

The distribution of Direct Debit bills is somewhat different. As expected, the median Direct Debit bill is lower, by around £30. The upper quartile for Direct Debit is similar to the lower quartile for Standard Credit and Pre-Payment. The inter quartile range is largest for Direct Debit, and the overall range is larger too. Direct Debit is the most common payment method for Standard Electricity customers[7] and also has the largest range of tariffs and corresponding bills.

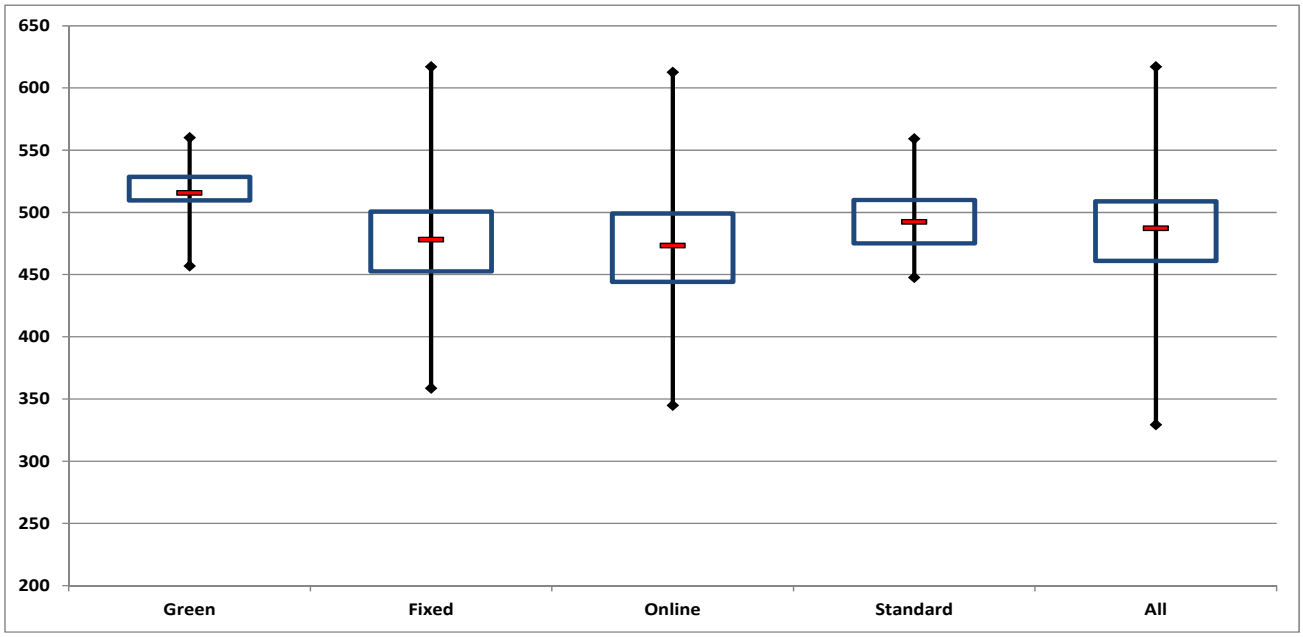
The distribution of Direct Debit Standard Electricity bills in the UK by tariff type

Around 86% of Standard electricity customers paying by Standard Credit are on the company's 'standard' tariff.[8] For Pre-Payment, this figure is even higher at 97%. For Direct Debit customers, 59% are on a 'standard' tariff, with 18% on fixed tariffs, and 18% on online tariffs. As such, analysis of the distribution of bills by tariff type is shown for Direct Debit tariffs only.

Chart 4 demonstrates the distribution of Direct Debit bills for customers on Green[9], Fixed[10], Online, and Standard tariffs, alongside the overall distribution for that payment method. It is worth noting that these four tariff categories are not mutually exclusive (with the exception of 'Standard'), and there may be some overlap of tariffs. Social tariffs are not shown in Chart 4, given the transition towards the Warm Home Discount scheme, which was introduced in April 2011. This involves suppliers working with Government to identify households that qualify, and distribute the appropriate discounts and subsidies[11].

[7] In December 2012, 54% of standard electricity customers were paying by Direct Debit, Quarterly Energy Prices (March 2013)
[8] Figures as of October 2012, published in Energy Trends, December 2012: www.gov.uk/government/uploads/system/uploads/attachment_data/file/65916/7347-tariff-variation-dom-mkt-et-article.pdf
[9] In this article, Green tariffs refer to those were certified by the Green Energy Scheme (GES) as of December 2012: www.greenenergyscheme.org/
[10] Includes all fixed and capped products that had not expired prior to the end of December 2012
[11] www.gov.uk/the-warm-home-discount-scheme/overview

Chart 4: The distribution of Direct Debit bills by tariff type



Standard Tariffs

Standard (core) tariffs are generally the most popular tariffs, but as there is only one per energy supplier, prices don't vary by much; chart 4 shows an inter quartile range of around £35. Generally, the prices of standard tariffs are similar between suppliers, as there are no special features or discounts that will distinguish them from other standard tariffs on the market. The median bill for a standard direct debit tariff is slightly higher than for all direct debit tariffs, as standard tariffs do not offer the discounts that online or fixed/capped tariffs do.

Green Tariffs

The median 'green' bill is higher than for standard tariffs, as customers pay a premium to ensure that their energy is either coming from renewable sources or supporting other environmental benefits. As with standard tariffs, most companies only offer one green tariff at a time, resulting in a very small range of bills. There is also a selection of tariffs offering environmental benefits such as low carbon generation guarantees, and contributions to environmental charities, which have been excluded as they were not Green Energy Scheme (GES) certified in December.

As a result, the interquartile range for customers on green tariffs is the smallest out of all of the tariff types: 50% of customers on green tariffs are paying bills between £510 and £528. The bottom quartile for green tariffs covers a much larger range than for standard tariffs, which is likely as a result of some available online discounts, unlike for standard tariffs.[12]

Fixed Tariffs

The full range of bills for customers on fixed tariffs (£258) is more than double that of standard tariffs (£112). Whilst the average fixed bill was cheaper than the average standard bill in 2012, the highest fixed bills are much more expensive than the highest standard bills. Fixed tariffs are heavily dependent on when the tariff was introduced relative to price expectations and fluctuations, and the duration of the fixed agreement.

Customers tend to pay a premium for fixing for longer periods of time, particularly when future price rises are expected. Cheaper tariffs generally guarantee prices for a shorter period of time than their more expensive competitors. Similarly, if customers signed up to a fixed tariff a long time ago –

[12] Standard tariffs defined in Energy Trends article December 2012: Tariff Variation in the Domestic Energy Market www.gov.uk/government/uploads/system/uploads/attachment_data/file/65916/7347-tariff-variation-dom-mkt-et-article.pdf

before the winter 2012/13 price rises – their annual bill will be comparatively much cheaper than recently fixed or variable rate tariffs.

Online Tariffs

As expected, most online tariffs are cheaper than standard tariffs, with 75 per cent of standard tariff customers paying bills that are higher than the median online tariff bill. However, bills for the most expensive online tariffs are higher than for the most expensive standard tariff in Q4 2012. Many online tariffs are only offered for a short period of time, as suppliers can replace them with a newer version with different prices. As a result, there will be some customers that had signed up to a cheap online tariff prior to the 2012 price rise, and some customers that are on a more expensive tariff introduced after.

Many online tariffs are not just online, but also have some other feature, such as being a social, green or fixed tariff. This can cause prices to vary a lot. For example, in December 2012, 27% of online tariffs were fixed, and therefore susceptible to the large range seen in the fixed tariff bills. Removing fixed online tariffs from the list, the range and inter quartile range for online tariffs are 18 and 15 per cent smaller respectively. This suggests a strong influence from fixed and other types of tariffs on the prices of online bills.

Conclusion

DECC's published average bills give a good indication of the relative prices of different tariffs and/ or payment methods. However, this article illustrates that there are still some large variations in the bills paid by consumers, even where they have the same payment method or tariff type.

User Feedback

Please send any comments or queries regarding this analysis to the contact details below.

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