
Costs and benefits of introducing competition to residential customers in England – emerging findings technical appendix 1

About this document

This document is a technical appendix to our document “The costs and benefits of introducing competition to residential customers in England”. It includes a summary table which details the assumptions that underpin the four scenarios which we have used in our analysis.

Scenario assumptions table

In our main emerging findings document we set out the four scenarios that have been used in our analysis. These are:

- Scenario 1. Low cost, widespread innovation, strong competitive activity among retailers
- Scenario 2. Low cost, less innovation and competitive activity among retailers
- Scenario 3. High costs, less innovation and competitive activity among retailers
- Scenario 4. High costs, little innovation and weaker competitive activity among retailers

In the table below we set out our detailed summary of each of our four assumptions.

Table 1: Detailed summary of scenario assumptions

Area	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Market opening	<p>Takes 2 years, market opening in model year 5</p> <p>Based on fastest possible time taken to open the market.</p> <p>This is benchmarked against NHH market opening (3 years). 2 years would be faster and may be possible, building on work done for non-HH.</p> <p>But anything faster than 2 years deemed implausible given that residential market opening not likely to be significantly less complex.</p> <p>As all scenarios, not implemented immediately, accounting for time for a decision to be made.</p>	<p>Takes 3 years, market opening in model year 5.</p> <p>Based on more realistic time taken to open the market (the same as for non-HH market opening)</p> <p>As all scenarios, not implemented immediately, accounting for time for a decision to be made.</p> <p>Market opening date is the same in all scenarios for consistency across NPV calcs.</p>	As previous scenario	<p>Takes 4 years to open, market opening in model year 5</p> <p>Based on a longer time taken to open the market, recognising that market design issues for residential market opening may take longer (e.g. customer protection etc.)</p> <p>As all scenarios, not implemented immediately, accounting for time for a decision to be made.</p>
'Active' share of the market	<p>50% active, taking 10 years to develop</p> <p>Aims to represent the quick and extensive development of competition</p> <p>Learning from the experience in energy, e.g., CMA market investigation, this resembles a scenario where lessons from the energy sector are effectively taken in to account to help customers become more engaged and active in the market</p> <p>Also reflects a world where innovation in technology helps customers to switch, which lowers search costs and helps drive a higher active share of the market. New business models such as flipper increase the active share of the market and increase</p>	<p>30% active, taking 15 years to develop</p> <p>Aims to represent competition developing at a rate similar to other sectors e.g. energy, telecoms</p> <p>Active share benchmarked against the energy market</p> <p>Full benefits occurring after 15 years, which is intended to reflect roughly the amount of time that the energy market took to get to its current state (with a similar share of active customers)</p>	As previous scenario	<p>15% active, taking 20 years to develop</p> <p>Aims to represent competition developing at a lower rate. Less competitive rivalry, innovation etc.</p> <p>Reflects a worst case scenario, where water is slower to develop than energy. Although we believe this is unlikely, this is included as a sensitivity.</p> <p>Active share</p>

Area	Scenario 1	Scenario 2	Scenario 3	Scenario 4
	<p>switching rates without requiring greater consumer engagement</p> <p>Active share set to a plausible but high value but higher than the scenario 2 'central estimate'</p> <p>Full benefits occurring after 10 years, representing a quick development of competition, resulting from the factors described above.</p>			<p>Full benefits occurring after 20 representing a longer timescale for market development.</p>
<p>Efficiencies applied throughout the value chain</p>	<p>Efficiencies based on precedent from Cave's analysis of the benefits of competition</p> <p>Assumptions linked to Cave research on the effect of competition on efficiency. Research Cave referenced is not sector-specific.</p> <p>Assumptions lowered to take into account double-counting of efficiencies from non-household competition</p>	<p>As previous scenario</p> <p>Applied with the same method, leading to lower overall efficiency savings because of a lower active share and slower market development</p>	<p>As previous scenario</p>	<p>Efficiencies approximately three quarters of those in other scenarios based on Cave</p> <p>Efficiencies scaled down to reflect less effective competition (which is reflected in 'active' share and switching etc.), perhaps because of little new entry / threat, little innovation, low customer engagement.</p> <p>Efficiencies lowered by 25% as a sensitivity to illustrate potential impacts of poor competition.</p> <p>Evidence welcome on this point.</p>
<p>Switching</p>	<p>30% of the market switching, speedy engagement through apps etc. The same number engaging but not switching.</p> <p>Switching assumption set at a plausible value intended to represent highly engaged</p>	<p>10% of the market switching each year, engaging for 15 minutes. The same number engaging but not switching.</p>	<p>As previous scenario</p>	<p>5% of the market switching, engaging for 30 minutes. The same number engaging but not switching.</p>

Area	Scenario 1	Scenario 2	Scenario 3	Scenario 4
	<p>customers (and linked to the ‘active share of the market’).</p> <p>Reflects higher switching rates than seen in the energy market due to features in the market that would make switching less onerous for customers. E.g., a tool similar to flipper and easy-to-use mobile phone apps, greater role of third-party intermediaries. And seems a reasonable maximum for market to reach in 30 years. Linked to the ‘active share of the market’ such that a plausible share of active customers switches</p> <p>Customer engagement is very quick (less than 10 minutes), representing switches that are either automated or can happen very quickly e.g. with new technology</p> <p>Value of customers’ time (per hour) linked to an FCA study on search costs for insurance.</p>	<p>Switching assumption roughly benchmarked against other markets such as energy</p> <p>Value of customers’ time (per hour) linked to an FCA study on search costs for insurance</p> <p>No specific evidence behind the number engaging but not switching each year (but again ok – but you must have a rationale). Evidence welcome on this point.</p> <p>Similar to what we have seen in energy. This is a conservative assumption due to the fact that tariffs would be less complex water and the likely impact of technology on customer engagement in the next thirty years</p>		<p>Assumptions set to represent a high cost of switching and consequent low levels of engagement, consistent with less competitive activity</p> <p>Compared against customer time spent switching insurance products (which are significantly more complex than in energy)</p> <p>Aware of CMA evidence suggesting energy customers can spend significantly more time engaging.</p> <p>Evidence welcome on this point.</p>
Companies’ acquisition costs	<p>Costs companies circa £8 to acquire a customer</p> <p>Based on retailers spending no more than profits earned from one customer – linked to assumptions on the active share of the market and switching rates. Estimate also based on a rough estimate of £5 profit per customer per year.</p> <p>i.e. acquisition costs estimated in this analysis based on what would be reasonable for a company to spend (would not spend more than it could make in profit)</p> <p>Evidence welcome on this point</p>	As previous scenario	As previous scenario	<p>Costs companies £15 to acquire a customer</p> <p>Method as previous scenario.</p> <p>Higher value reflects lower switching, which means retailers expect to keep customers longer (and are willing to spend more to acquire them)</p>

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Bad debt	<p>Significant additional bad debt savings of 2% per year</p> <p>Estimate not based on water-specific evidence on reduction of bad debt (none found despite research)</p> <p>But plausibility compared against bad debt rates in energy and rates of council tax non payment</p> <p>Evidence welcome on this point</p>	<p>Significant additional bad debt savings of 1% per year</p> <p>Represents less effective competition, so lower incentives for retailers to lower bad debt costs</p> <p>Evidence welcome on this point</p>	As previous scenario	<p>No further bad debt savings over and above general efficiencies</p> <p>Reflects lower competitive pressure, providing less incentive for cost saving. Linked to assumptions above explaining lower competitive pressure.</p> <p>Therefore companies do not specifically target bad debt costs</p>
Metering	<p>Additional savings to metering costs of 1% per year over and above general efficiencies.</p> <p>Estimate of high but plausible additional savings to metering costs. Not tied specifically to smart metering – as metering costs could arise through use of smart technology in conjunction with current meters.</p> <p>No water-specific information on possible metering cost reductions. No comparisons with other sectors.</p> <p>Evidence welcome on this point e.g. metering costs in other sectors (although would need to be treated with caution)</p> <p>Entry of multi-utility retailers could lead to synergies in metering costs</p>	<p>No additional savings to metering costs over and above general efficiencies</p> <p>Some multi-utility entry, but perhaps not enough to lead to specific synergies in metering, so no additional saving to metering costs.</p>	As previous scenario	As previous scenario
Water efficiencies	Metered customer in the 'active' part of the market save 20% of their water consumption	Metered customer in the 'active' part of the market save 10% of their water consumption	As previous scenario	No water efficiency benefits realised

Area	Scenario 1	Scenario 2	Scenario 3	Scenario 4
	<p>Linked to historic rates of water efficiency across England and Wales (i.e. customers taking up retailers' services to help them save water make savings consistent with the trend over the last 15 years across England and Wales).</p> <p>Applies only to metered customers in the active share (who are marketed new water efficiency services as a means of bill reduction)</p> <p>Linked to qualitative rationale that water efficiency may be one of the best ways to offer consumers bill savings (this and the above is the way I think you need to frame things – otherwise it does look like you have made things up and not applied an a rationale / or analysis which you of course have).</p>	<p>Simply a more conservative estimate than the 'high' scenario outlined above, reflecting less competitive activity to promote water efficiency (Ok. What do I need to believe for this to come about)</p> <p>Need to believe that only a small portion of customers take up water-efficiency offerings and that in total these only lead to savings of 10% over current consumption in thirty years' time, i.e. water efficiency savings are very modest.</p>		<p>No water efficiency benefits assumed</p>
Resilience	<p>Higher resilience benefit linked to greater reduction in consumption.</p> <p>Not quantified at initial findings.</p> <p>No assumption made because of a lack of evidence on resilience impact and its value.</p> <p>There will be benefits, but further work may be needed (likely beyond in Ofwat's ongoing work on resilience, which has flagged that there is no consensus on how to measure resilience, nor its worth)</p> <p>We have not quantified this benefit, but it should be noted that if there is a reduction in consumption, there would be an added benefit to resilience.</p> <p>Further evidence welcome on this point</p>	<p>Additional benefits of resilience from lower consumption.</p> <p>Not quantified at initial findings.</p> <p>As previous scenario</p>	As previous scenario	<p>No benefit to resilience.</p> <p>No benefit, because benefit is linked to reduction in demand, but no efficiency improvement in this scenario</p>

Area	Scenario 1	Scenario 2	Scenario 3	Scenario 4
<p>Companies' implementation costs (over and above separation)</p>	<p>£200m up-front, £20m ongoing Slightly greater than for non-household market opening Based on combing assumptions in the government's non-household impact assessment with a (simple) estimate of non-household implementation costs. This estimated references the best available information (at the time of estimation) Water UK submitted further costs, but too late for consideration in this analysis. Qualitative arguments for comparison between residential market opening costs and non-household market opening costs considered in the document. Companies could build upon costs already incurred for non-household, resulting in a cost only slightly higher than for non-household, but many more residential customers. Assumption on residential implementation costs assumed to be higher than for non-household market, particularly for set-up costs This further evidence will be considered for Ofwat's final findings Nonetheless, further evidence still welcome on this point</p>	<p>As previous scenario</p>	<p>£400m up-front, £40m ongoing Significantly greater than for non-household market opening Based on combing assumptions in the government's non-household impact assessment with a (simple) estimate of non-household implementation costs – based on sparse information Opportunities for building upon costs incurred for non-household are less prominent, resulting in significantly higher costs incurred for the household market Assumption on residential implementation costs assumed to be much higher than for non-household market, particularly for set-up costs. A simple assumption made to double the central estimate. No specific basis for this assumption but seeks to capture plausibility of significantly higher costs. Further evidence welcome on this</p>	<p>As previous scenario</p>

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Market operator costs, regulatory costs	<p>Non-household implementation costs -25%</p> <p>Non-household implementation costs are the most relevant and recent benchmark (most recent figures used as a comparator).</p> <p>Includes qualitative arguments about comparison with potential residential market opening, but due to early stage of work, no specific cost estimates available. This would be likely if learning from non-household market opening can be applied to residential market opening and if current systems can be scaled up at lower cost than on first implementation</p>	<p>Non-household implementation costs</p> <p>As previous scenario, further evidence still welcome on this point</p>	<p>Non-household implementation costs +25%</p> <p>Estimate scaled to reflect potential for significantly higher cost than non-HH</p> <p>As previous scenario, further evidence still welcome on this point</p>	<p>As previous scenario</p> <p>As previous scenario, further evidence still welcome on this point</p>