Non-household retail competition

Illustrating the possible impact of exit from the non-household retail market

Prepared for
The Water Industry Commission for Scotland and Ofwat

6 March 2014

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Oxera

Contents

Executive summary 1
1 Introduction 2
1.1 Commercial exit: balancing economic and societal factors? 2
1.2 Scope of the analysis 2
2 Overview of the analysis 4
2.1 Measuring the potential effect of precluding exit 4
2.2 Is the scenario realistic? 4
2.3 Assumptions that underpin the scenario 5
2.4 Other considerations 5
3 Approach 7
3.1 Non-household revenue requirement 7
3.2 Potential impact of losing public sector and multi-site customers 8
3.3 Calculating the NPV of the potential impact 8
4 Results 9
4.1 Impact in one year 9
4.2 Present value of the impact 9
5 Implications 11
A1 Sensitivity analysis of the possible impact of exit 12
A1.1 Percentage of incumbent retailers that lose their public sector and multi-site customers 12
A1.2 Percentage of revenue from public sector and multi-site customers 12
A1.3 Public sector or multi-site customers have no bad debt costs 13

Figure 3.1 Estimating the non-household revenue requirement 7
Table 4.1 Impact on retail profit of incumbent loss of customers in one year, incumbent total (£m) 9
Table 4.2 Present value of the reduction in retail profit (£m) 9
Table A1.1 Present value of impact on retail profit (£m) 12
Table A1.2 Present value of impact on retail profit (£m) 12
Table A1.3 Present value of impact on retail profit (£m) 13

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Executive summary

The UK government is proposing to introduce a seamless cross-border retail market for non-household water and sewerage customers in England and Scotland by 2017.

In other markets that have been liberalised, the introduction of competition has created opportunities for some companies, and risks for others. There are winners and losers. Companies that lose respond in a variety of ways, including taking management action to reduce costs and the capital employed by the business. Ultimately, losers may choose to exit the market. However, the Water Bill currently passing through UK Parliament precludes the latter, and partially prevents the former, as existing licensees must retain the capability to provide retail services.

This report, which has been prepared jointly for WICS and Ofwat, estimates that incremental losses to the incumbent operators arising from losing the most attractive customers in the sector could amount to around £190m in net present value (NPV) terms over a ten-year period.

While this figure cannot be directly compared to that in the government’s regulatory impact assessment, as it has been prepared on a different basis, it is clear that precluding full exit could reduce the benefits that are envisaged from the non-household retail reforms and, ultimately, could impose additional costs on all water and sewerage customers.
1 Introduction

The UK government’s water White Paper sets out proposals to introduce retail competition for non-household customers in England. \(^1\) It also commits to putting in place arrangements for a seamless cross-border retail market for non-household customers in England and Scotland. Alongside the Water Bill, the UK government has set an indicative date of April 2017 for the opening of the English market. \(^2\)

Unlike in Scotland, the Water Bill envisages that incumbent water companies in England will have to retain an integrated licence that covers both their wholesale and retail functions. This could effectively preclude incumbent water companies from legally separating their retail functions from their existing wholesale functions. Consequently, even if there were commercial grounds for exiting the market, the incumbent water companies might have to continue to provide non-household retail activities and retain the capital employed that is necessary for this.

1.1 Commercial exit: balancing economic and societal factors?

The economic rationale for allowing commercial exit is that it could lead to a more dynamic retail market through allowing:

- an incumbent company that does not succeed in the retail market to exit the retail market and focus on its wholesale activities, potentially avoiding further incremental losses in the retail market;

- consolidation among the 17 existing incumbent retail companies, meaning that further efficiencies from a retailer being able to operate on a larger scale might be achieved quicker;

- new entrants to quickly acquire market share through a capital market acquisition, which could allow them to be a serious competitor to the incumbent retail companies.

It is the role of government to balance the economic case for allowing commercial exit against wider societal considerations such as customer protection.

This report aims to inform the evidence base on the potential impact of not allowing the incumbent water companies to exit the non-household retail market.

1.2 Scope of the analysis

This analysis seeks to understand the potential impact of precluding full exit from the non-household retail market through scenario modelling. The scenario focuses on the first issue identified above—namely, what would happen if an incumbent retailer loses its most profitable customers and is unable to exit the non-household retail market. If full exit is not possible, the incumbent retailer would potentially have to incur incremental losses for many years until it is able to reduce the scale and costs of its non-household retail operations. The potential impact on the incumbent retailers of precluding exit is calculated as the

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present value of those incremental losses that could potentially materialise over a period of five to 15 years.\(^3\)

Before describing the analysis, it is worth noting that:

- the purpose of this analysis is to inform the debate about whether to allow retailers to exit the water market, as set out in the current Water Bill being considered by Parliament;

- the report, and the analysis that underpins it, have been conducted on the basis of the impacts of the change on the incumbent English companies. The analysis does not cover companies operating wholly or mainly in Wales or, indeed, their customers. The Welsh government has taken a different policy position to the UK government with regard to the introduction of non-household retail competition;

- the analysis, and its results, are not directly comparable to the net present value (NPV) of retail reform as set out in the impact assessment that accompanied the Water Bill.\(^4\) The analysis in this report follows a different methodology, and no attempt should be made to use the two numbers in conjunction with each other.

This report is structured as follows:

- section 2 provides an overview of the scenario, and summarises the main assumptions;

- section 3 sets out the approach used for this analysis;

- section 4 presents the results;

- section 5 summarises the main implications.

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\(^3\) A period of five to 15 years is used because it is assumed that this is the period over which incumbent retailers would be able to remove the fixed costs related to retail, based on discussions with the industry.

2 Overview of the analysis

2.1 Measuring the potential effect of precluding exit

Oxera’s understanding is that the operational leverage of the retail business is such that revenue losses are unlikely to be matched by cost reductions, particularly in the short run, owing to the following:

- the costs associated with IT systems and other overheads are fixed—i.e. rent, rates and other types of fixed cost;
- transaction costs can be reduced but not necessarily immediately or ‘one for one’—for example, it takes time to reduce the number of key account staff;
- tariffs might not reflect the bad debt costs of individual customers or particular market segments—i.e. they may be averaged across all customers and not reflect the underlying bad debt risk of market segments or individual types of customer.

As such, companies may be expected to experience higher reductions in revenues than in costs when they lose market share—for the purpose of this analysis, the reduction in revenues net of the savings in costs is hereafter referred to as incremental losses. These incremental losses to the incumbent retail companies could be particularly acute if those customers carry little bad debt risk.

In any market where there are limited entry or exit barriers, the accumulation of incremental losses could be such that it would not make commercial sense to remain in that market. However, if the incumbent retailer is unable to exit the non-household retail market, these incremental losses could potentially remain for many years. Under such circumstances, precluding exit could mean that the incumbent has no choice but to incur those incremental losses for a sustained period. As such, precluding exit in this way could potentially impose an additional cost on the incumbent retail companies.

For this analysis, it is assumed that incremental losses from non-household retail business activities are not cross-subsidised by the revenues from the household retail business activities. As such, non-household retail business activities would be required to recover the full cost of providing these services; otherwise, the implication is that this would create an unlevel playing field for new entrants.

2.2 Is the scenario realistic?

Soon after the retail market opened in Scotland, the entire public sector in Scotland procured its water and sewerage retail services through one tender. Procurement Scotland prepared the tender and the contract represented around 20–30% of the non-household retail market in Scotland. The contract sought to secure different retail services from up to two retail suppliers.

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6 Procurement Scotland ‘structured the tender across two different lots...about equal size in terms of value, but with very different customer requirements in those lots’. See Leask, R. (2012), ‘Oral evidence taken before the Environment, Food and Rural Affairs Committee on Tuesday 30 October’, October, available at: http://www.publications.parliament.uk/pa/cm201213/cmselect/cmenvr/674/121030.htm.
At around the same time, the Advanced Procurement for Universities and Colleges (APUC) issued a single tender for the supply of water and sewerage retail services for all universities and colleges in Scotland. The contract represented around 5% of the non-household retail market in Scotland.\(^7\)

If the public sector in England seeks to follow the Scottish example by procuring its retail water and sewerage services from a smaller number of retail suppliers, some incumbent companies could stand to lose a sizeable proportion of market share in the period immediately after the non-household retail market opens. Furthermore, this effect could be greater if multi-site customers that operate across England also seek to consolidate their water and sewerage retail services.\(^8\) This is rather than continuing with the current situation, where they receive retail services from the 17 different companies operating in England.

### 2.3 Assumptions that underpin the scenario

For the scenario, the following assumptions are made based on the Scottish experience:

- all public sector and some multi-site customers in England seek to consolidate their water services and switch to a small number of suppliers through competitive tendering;
- these customers represent around 40% of the non-household revenues in England;\(^9\)
- the public sector and multi-site contracts are won by a quarter of the incumbent retail companies.

A sensitivity analysis of each of these assumptions is provided in appendix A1. Other considerations for the analysis are set out below.

### 2.4 Other considerations

#### Partial exit

Some incumbent retail companies might partially exit through outsourcing non-household retail activities to a third party or entering into a joint venture with another company. Indeed, some water companies have already entered into such arrangements. Bristol Water and Wessex Water, for example, established a joint venture for retail billing and collection.\(^10\)

Outsourcing, or a joint venture, is a possible means of securing partial exit. However, it will not be possible to remove all of the costs and risks associated with adopting such an option. For example, from a regulatory enforcement perspective, the incumbent will ultimately be held to account for service failings, and will also face the reputational risks that arise from the levels of service.

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\(^7\) Business Stream (2010), ‘Business Stream wins £45m universities, colleges and public bodies deal’, April.

\(^8\) Both Asda and Greene King have submitted written evidence to the Environment, Food and Rural Affairs Committee to suggest that they would seek to consolidate their water and wastewater services. See, for example, Environment, Food and Rural Affairs Committee (2012), ‘Written evidence submitted by ASDA stores limited’, October; and Environment, Food and Rural Affairs Committee (2012), ‘Written evidence submitted by Greene King plc’, October, available at: http://www.publications.parliament.uk/pa/cm201213/cmselect/cmenvr/674/674ww01.htm.

\(^9\) In the absence of information from England, this assumption is based on the experience in Scotland, where the public sector and the universities contract together account for around 30% of non-household retail revenues. For this analysis, it is assumed that the multi-site customers account for a further 10% of revenues. A sensitivity analysis of this assumption is provided in appendix A1.

failures. For this analysis, it is not possible to quantify all of the costs and benefits from outsourcing, or a joint venture, and, as such, these are not included.

Re-tendering the public sector and multi-site contracts

It is assumed that the companies that lose their public sector and some multi-site customers do not win them back when the contracts expire. If the incumbents managed to win the contracts back, this would shorten the period over which the incumbent incurred the losses. As such, the NPV of the incremental losses would be lower because the present value of the incremental losses is calculated over fewer years. The effect of this assumption is reflected in sensitivity analysis of the timeframe over which the present value of the incremental losses is calculated.

Pass-through of benefits to public sector and multi-site customers

Based on the experience in Scotland, companies are assumed to offer substantial discounts to win the public sector and multi-site contracts. As such, most of the allowed margin that would accrue to the winning companies (i.e. the net margin) is passed through to the public sector and multi-site customers; and the incremental losses to the incumbent retailers that lose their public sector and multi-site customers are not transferred to the incumbents that win the customers.

Proportion of costs that can be reduced immediately

As discussed, the incumbent retailers that lose their customers will be able to reduce the transaction costs only in the immediate term. For this analysis, transaction costs are assumed to account for 20% of retail costs.\(^{11}\)

Bad debt

Finally, incumbent retailers are assumed to average their bad debt costs in the default tariffs. Furthermore, public sector and some multi-site customers are assumed to have very low bad debt risk and therefore low bad debt costs. The implication of these assumptions is that the incumbent’s bad debt costs do not reduce if it loses its public sector and multi-site customers.\(^{12}\)

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\(^{11}\) This assumption comes from discussions with the industry on the cost structure of retail and the breakdown of costs reported in Business Stream’s quarter 4 annual report and accounts in 2007/08. It is assumed that variable transaction costs relate to general and administration costs and customer third-party costs.

\(^{12}\) Appendix A1 includes a sensitivity to show the effect, assuming that the public sector and multi-site customers have an equal share of bad debt costs.
3 Approach

The analysis involves three steps:

1. estimating the non-household retail revenue requirement for the industry;
2. estimating the incremental losses from three-quarters of the incumbent retail companies losing their public sector and multi-site customers;¹³
3. calculating the NPV of the potential incremental losses for the incumbent companies, which is one way of estimating the potential cost of precluding exit.

Each step is discussed below.

3.1 Non-household revenue requirement

Ofwat is yet to set the revenue requirement for non-household retail. As such, this revenue requirement is estimated based on the ‘building blocks’ of allowed revenues, as set out in Figure 3.1 below.

Figure 3.1 Estimating the non-household revenue requirement

For this analysis, a 2.5% net margin on sales was assumed for non-household retail. This assumption is based on Business Stream’s opening net margin,¹⁴ and is consistent with the net margin set out in Ofwat’s recent guidance on risk and reward.¹⁵

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¹³ The impact of a lower number of incumbent companies losing revenues is assessed in appendix A1.
¹⁵ Ofwat (2014), ‘Setting price controls for 2015-20 – risk and reward guidance’, January. However, the differences are that it is assumed that the entire net margin is based on a reallocation of the allowed return.
3.2 Potential impact of losing public sector and multi-site customers

For the three-quarters of the incumbents that lose their public sector and multi-site customers:

- non-household revenues are reduced by 40%;
- operating costs related to serving these customers are reduced by only 20% to reflect the reduction in transaction costs, while other costs, including the fixed and bad debt costs, remain with the incumbent.

For the purpose of this analysis, the incremental losses to incumbents are calculated as the reduction in revenue, net of the saving in the transaction costs and taxation.

3.3 Calculating the NPV of the potential impact

Without exit, the potential reduction in retail profit will continue for some time. However, it is assumed that management will respond to these incremental losses over time by rescaling the retail operations and removing the non-household retail costs that remain. Five scenarios are provided based on management removing these costs in equal increments over 5, 10, 15, 20 and 25 years.
4 Results

4.1 Impact in one year

Table 4.1 below shows the indicative reduction in retail profit for the incumbent retailers in one year if three-quarters (75%) of the incumbent retailers lose their public sector and multi-site customers.

Table 4.1 Impact on retail profit of incumbent loss of customers in one year, incumbent total (£m)

<table>
<thead>
<tr>
<th>Percentage loss of non-household retail revenues</th>
<th>50%</th>
<th>40%</th>
<th>30%</th>
<th>20%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicative reduction in retail profit</td>
<td>48</td>
<td>38</td>
<td>29</td>
<td>19</td>
</tr>
</tbody>
</table>

Note: Numbers are in 2012/13 prices. The analysis excludes Dŵr Cymru and Dee Valley, and is based on three-quarters (75%) of the incumbent retailers in England losing their public sector and multi-site customers. Appendix A1 provides a sensitivity of the assumption for the number of incumbent retailers that lose their public sector and multi-site customers.

Source: Oxera analysis.

Under the central scenario, that the public sector and multi-site customers account for 40% of the non-household retail revenue base, the reduction in retail profit could be £38m in an individual year. If the incumbent retailers are unable to exit from the non-household retail market, this effect on retail profit could persist for a prolonged period. The present value of the reduction in retail profit is examined in Table 4.2 below.

4.2 Present value of the impact

Table 4.2 below shows the present value of the indicative reduction in retail profit when the incumbent retailers are able to reduce the retail costs that remain (e.g. their fixed costs relating to IT, rent and rates) in equal increments over a number of years. The analysis examines the scenarios based on removing the remaining costs in 5, 10, 15, 20 and 25 years, given that the time taken to remove the remaining costs is unclear.

Table 4.2 Present value of the reduction in retail profit (£m)

<table>
<thead>
<tr>
<th>Present value of reduction in retail profit</th>
<th>5 years</th>
<th>10 years</th>
<th>15 years</th>
<th>20 years</th>
<th>25 years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>110</td>
<td>190</td>
<td>260</td>
<td>330</td>
<td>390</td>
</tr>
</tbody>
</table>

Note: Numbers are in 2012/13 prices and are rounded to the nearest £10m. The analysis excludes Dŵr Cymru and Dee Valley, and is based on three-quarters (75%) of the incumbent retailers in England losing their public sector and multi-site customers. Appendix A1 provides a sensitivity of the assumption for the number of incumbent retailers that lose their public sector and multi-site customers.

Source: Oxera analysis.

Based on the above analysis and our discussions with the industry on the cost structure of retail, a point estimate from the 5–15 years range might be appropriate. One reason for using the 5–15 years range is that retail assets have a relatively short average life. Thus, once these assets are fully depreciated and are due for replacement, management would be able to reduce the fixed costs related to them and remove the remaining retail costs.

16 For example, billing systems, information technology and vehicles are likely to have an asset life in the range of five to ten years, while property and call centres will have a much longer asset life.
For the purpose of this analysis, the ten-year estimate of £190m is used as the point estimate for the reduction in retail profit. This is because the ten-year figure is the central point, based on the 5–15 years range set out above.
5 Implications

Based on the indicative analysis, the impact on incumbent retail companies from precluding exit could be between £110m and £390m, depending on the timeframe over which the incumbent retailers that lose market share can reduce their remaining retail costs.

As previously discussed, given the short-term nature of retail assets, the actual number could be in the lower half of this range—i.e. five to 15 years. This is largely because the average asset life of retail assets falls within this range, and management is likely to be able to reduce the fixed costs related to these retail assets when they are due for renewal. The ten-year figure of £190m represents the central case for the purpose of this analysis, given that it is the mid-point in the 5–15 years range.

While this figure cannot be directly compared to that in the government’s regulatory impact assessment, as it has been prepared on a different basis, it is clear that precluding full exit could reduce the benefits that are envisaged from the non-household retail reforms and, ultimately, could impose additional costs on all water and sewerage customers.
A1  Sensitivity analysis of the possible impact of exit

A1.1  Percentage of incumbent retailers that lose their public sector and multi-site customers

Table A1.1 below shows the impact of changing the assumption for the percentage of the incumbent water companies that lose their public sector and multi-site customers.

Table A1.1 Present value of impact on retail profit (£m)

<table>
<thead>
<tr>
<th>Share of the incumbent retailers that lose their public sector and multi-site customers</th>
<th>1 year</th>
<th>5 years</th>
<th>10 years</th>
<th>15 years</th>
<th>20 years</th>
<th>25 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>50</td>
<td>150</td>
<td>260</td>
<td>350</td>
<td>440</td>
<td>520</td>
</tr>
<tr>
<td>75%</td>
<td>40</td>
<td>110</td>
<td>190</td>
<td>260</td>
<td>330</td>
<td>390</td>
</tr>
<tr>
<td>50%</td>
<td>30</td>
<td>70</td>
<td>130</td>
<td>180</td>
<td>220</td>
<td>260</td>
</tr>
<tr>
<td>25%</td>
<td>10</td>
<td>40</td>
<td>60</td>
<td>90</td>
<td>110</td>
<td>130</td>
</tr>
</tbody>
</table>

Note: Numbers are in 2012/13 prices and are rounded to the nearest £10m. The analysis excludes Dŵr Cymru and Dee Valley. For this sensitivity, it is assumed that public sector and multi-site customers comprise around 40% of non-household revenues.

Source: Oxera analysis.

The analysis assumes that three-quarters (75%) of the incumbent companies lose their public sector and multi-site customers. From Table A1.1, this assumption provides a range of £110m (5 years) to £390m (25 years).

It is worth noting that the central estimate from the analysis, £190m based on ten years, is included within all of the ranges above apart from the last sensitivity (i.e. a quarter of incumbents lose their public sector and multi-site customers).

A1.2  Percentage of revenue from public sector and multi-site customers

Table A1.2 below shows the impact of changing the assumption for the percentage of revenue from public sector and multi-site customers.

Table A1.2 Present value of impact on retail profit (£m)

<table>
<thead>
<tr>
<th>Percentage of revenue from public sector and multi-site customers</th>
<th>1 year</th>
<th>5 years</th>
<th>10 years</th>
<th>15 years</th>
<th>20 years</th>
<th>25 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>50%</td>
<td>50</td>
<td>140</td>
<td>240</td>
<td>330</td>
<td>410</td>
<td>480</td>
</tr>
<tr>
<td>40%</td>
<td>40</td>
<td>110</td>
<td>190</td>
<td>260</td>
<td>330</td>
<td>390</td>
</tr>
<tr>
<td>30%</td>
<td>30</td>
<td>80</td>
<td>140</td>
<td>200</td>
<td>250</td>
<td>290</td>
</tr>
<tr>
<td>20%</td>
<td>20</td>
<td>60</td>
<td>100</td>
<td>130</td>
<td>160</td>
<td>190</td>
</tr>
</tbody>
</table>

Note: Numbers are in 2012/13 prices and are rounded to the nearest £10m. The analysis excludes Dŵr Cymru and Dee Valley. For this sensitivity, it is assumed that three-quarters (75%) of the incumbent companies lose their public sector and multi-site customers.

Source: Oxera analysis.

The analysis assumes that 40% of non-household retail revenue is from public sector and multi-site customers. It is worth noting that the central estimate from the analysis, £190m based on ten years, is included within all ranges above.
A1.3  Public sector or multi-site customers have no bad debt costs

Table A1.3 below shows the impact of changing the assumption that public sector and multi-site customers have no bad debt costs. This assumption affects the analysis because it is assumed that the incumbent water company is unable to reduce its bad debt costs once it loses its public sector and multi-site customers. If the public sector and multi-site customers also account for 40% of bad debt costs, the incremental losses from losing those customers would be smaller than in the main analysis as the incumbent is able to reduce its bad debt costs.

Table A1.3 Present value of impact on retail profit (£m)

<table>
<thead>
<tr>
<th>Bad debt costs</th>
<th>1 year</th>
<th>5 years</th>
<th>10 years</th>
<th>15 years</th>
<th>20 years</th>
<th>25 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>No bad debt costs</td>
<td>40</td>
<td>110</td>
<td>190</td>
<td>260</td>
<td>330</td>
<td>390</td>
</tr>
<tr>
<td>Equal share of bad debt costs</td>
<td>30</td>
<td>80</td>
<td>140</td>
<td>200</td>
<td>250</td>
<td>290</td>
</tr>
</tbody>
</table>

Note: Numbers are in 2012/13 prices and are rounded to the nearest £10m. The analysis excludes Dŵr Cymru and Dee Valley. For this sensitivity, it is assumed that public sector and multi-site customers comprise around 40% of non-household revenues.

Source: Oxera analysis.

It is worth noting that the central estimate from the analysis, £190m based on ten years, is included within all ranges above.