



# Potential forms of price control for retail household – an evidence review

A report for Severn Trent Water

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# 1. Summary and introduction

This report has been prepared for Severn Trent Water and is provided in response to Ofwat's 'call for evidence' regarding its ongoing review of water retail markets for households. The main purpose of this is to help inform the debate regarding the appropriate form of any retail control, should one be deemed necessary.

This report has two main parts:

- (i) Firstly, we set out the evidence regarding the forms of retail control used elsewhere. Here we focus on identifying the considerations that have shaped the approaches implemented by various regulators. In doing so, we draw particular attention to how regulators have sought to balance short and long term objectives in determining the form of control.
- (ii) Secondly, we set out the key issues and considerations that we suggest need to be addressed in determining the form of control. Here we highlight the important independencies between any regulatory approach and the likely extent and form of competition.

## 1.1. Introduction

### 1.1.1. Background and context

In November 2015, **the UK Government stated its intention to extend water retail competition to household customers.** To inform this decision, Government directed Ofwat to provide an assessment of the potential costs and benefits associated with opening up retail markets for households:

*“Building on opening up the non-household retail market to competition, the government wants to extend choice to households. Ofwat will provide an assessment by summer 2016 of the costs and benefits of extending retail competition to household water customers.”<sup>1</sup>*

In January 2016 Ofwat published its draft terms of reference for undertaking the above review. In this document, Ofwat set out the principles that it would adhere to, which where:

- » The decision on whether, in what form and on what timeline, the household retail market in England will be opened to competition, is a matter for the UK Government.
- » Ofwat’s assessment of the costs and benefits of extending retail competition to households will be evidence based.
- » Ofwat will follow an open and transparent process, seeking evidence and ideas from those in the sector and beyond.

Following from this, the overall scope of Ofwat’s review, as defined in its **draft terms of reference**, is to evaluate the potential opportunities for introducing competition to retail household; and its associated costs and benefits. In terms of “how” Ofwat will make this assessment, the draft terms of reference distinguishes between:

- *competitive market scenarios* – which relate to the size and shape of the market, and the speed at which it is opened;
- the *key issues* that Ofwat will have to understand and reach a decision on; and
- the *type of evidence* Ofwat will develop and review in order to make those decisions.

One of the key issues identified by Ofwat is to understand the “*potential models for implementing any reform*” and their associated costs and benefits.

<sup>1</sup> *‘A better deal: boosting competition to bring down bills for families and firms.’ UK Government (November 2015). Para 2.4.*

Relatedly, Ofwat also indicated that any ‘implementation model’ is likely to require a consideration of whether – and if so in what form – price control regulation is likely to be appropriate.

*“Where we identify potential barriers to effective competition or risks to consumers from household retail competition, we will consider **what forms of price control** and other protection mechanisms could be used to allow effective choice to realise net benefits for customers.”<sup>2</sup>*

Following the draft terms of reference (and also in January 2016) Ofwat published a ‘call for evidence’ in relation to its review of retail household markets.<sup>3</sup> The main purpose of this is to seek early views and supporting evidence from stakeholders, to help progress the debate as to the relative merits of extending retail competition to households – and the means by which this could be done.

The call for evidence set out a range of specific questions and issues where Ofwat is particularly keen to seek views. One of the issues raised by Ofwat is what the appropriate **market design** might be for retail household – and how evidence on market design might impact any analysis of the relative merits of retail competition for households.

### 1.1.2. Scope and aims of this report

This report has been prepared for Severn Trent Water, and is provided in response to Ofwat’s ‘call for evidence’ in relation to its review of retail household markets.

**The overall objective of this paper is to inform the debate regarding how Ofwat should determine the appropriate ‘form of control’** (which can be thought about as being one element of a broader ‘market design’) in relation to household retail.

To meet the above aim, this report has two main parts:

- » **Section 2** provides a review of the ‘forms of control’ that have been implemented by regulators in relation to a range of retail markets. The purpose of this is to provide evidence as to: (i) the full extent of options for setting retail controls that could be available and considered; and (ii) the issues and rationale associated with the various forms of control identified.

<sup>2</sup> *‘Review of retail household markets in the water and wastewater sector: Draft terms of reference.’ Ofwat (January 2016) page 6.*

<sup>3</sup> *‘Review of retail household markets in the water and wastewater sector: Call for evidence.’ Ofwat (January 2016).*

- » **Section 3** sets out our views as to the key issues that will ultimately need to be addressed in order to determine the form of any control for retail household (*should one be appropriate*).

Not within scope of this report are: (i) any assessment as to 'what' the appropriate form of control *should be* - rather, at this early stage the objective is instead to help shape thinking and ensure that the right issues are identified and addressed; and (ii) any assessment of what Ofwat has described as the 'competitive market scenarios.'

## 1.2. Summary of key messages

The main messages contained in our report are as follows:

- » **Our review of retail controls implemented by other regulators has highlighted the following key points:**

- that, even where retail competition is introduced, regulators typically retain *some* form of price control (although it may be transitory or limited in scope);
- there are exceptions to the above, however, and sometimes controls are removed as markets are liberalised;
- regulators have explicitly acknowledged the need to strike a balance between 'customer protection' and the need to create incentives to drive competition that delivers longer-term benefits;
- related to the above, regulators have also acknowledged margin squeeze concerns that can arise from retail prices that are 'too low';
- there is precedent for allowing for marketing costs (customer acquisition and retention) in retail controls to facilitate competition;
- regulators have understood that the connection between the form of control and competition is not limited to the supply side - but importantly, regulation can impact customer engagement (either positively or negatively) and so this requires careful thought.

- » The broad approach to determining the form of any control rests mainly on an assessment of the likely scope for competition to develop, and its speed. This, in turn, requires a careful evaluation of supply and demand side evidence - which is the same evidence required to determine whether extending retail competition to household customers is likely to be beneficial in the first place.

- » Following from the above - in general we would expect that, where the scope for competition is greatest and where it is expected to develop most

rapidly, "lighter touch" forms of control would seem to be most appropriate (and vice versa).

- » A further important factor in the form of control relates to the balance of risk. Here the key principle is that any approach should allocate risk to the party best placed to manage / control that risk. For example, in the context of a competitive retail market, it will most likely be appropriate for firms to bear market share related volume risk.

- » However, because an assessment of "how" competitive the household retail market could be will invariably be a point of focus for Ofwat (as it undertakes its review of the likely costs and benefits of extending retail competition) there is additional benefit in identifying some *more specific* issues relevant to determining the form of any retail control.

- » **We have therefore identified seven specific issues that we think Ofwat will need to consider in determining the form of any retail household control** - which are that:

- **the likely extent of competition is not independent of how Ofwat sets any regulated prices** - and relatedly, it may be advantageous to err on the side of "higher" prices (given that prices that are "too low" might prevent competition from developing in the first place);
- because **in competitive retail markets, firms will need to incur marketing costs** to drive customer acquisition and retention - there is a need to consider how such costs can be recovered;
- consideration will need to be given as to **whether any form of control should be national in scope, or should vary geographically** (and if so, to what degree);
- concerns around **bill incidence impacts cannot be considered in isolation**, because limiting incidence effects might also limit pricing flexibility;
- there may be **benefits to setting the duration of any control so that it coincides with market opening**;
- it may also be advantageous to have a **common regulatory approach across household and non-household retail markets** (but one should not presume that the existing approach in non-household is 'correct');
- more broadly, we think that the demand side of the household retail market is most critical to the development of competition - and so **any form of control that impedes - or does not encourage - customer engagement would be undesirable**.



## 2. Review of forms of retail control

In this section we provide a description of the forms of retail control that have been applied by regulators across a range of sectors. The purpose of this is to identify and highlight the various different options that exist in relation to the setting of retail related price controls.

Our review includes:

- (i) The IPART's approach to setting electricity retail prices.
- (ii) The IPART's approach to setting gas retail prices.
- (iii) Offer's approach to transitional retail controls for electricity in England and Wales.
- (iv) Electricity retail price controls in California.
- (v) Ofel's retail controls of fixed line calls for BT.
- (vi) The WICS' approach to retail controls for the Scottish Water industry.

In this section we provide descriptions of how retail price controls have been applied across a range of other sectors and countries. The purpose of this is to highlight: (i) the various different forms of control that have been implemented in practice; and (ii) the issues and considerations that the relevant regulatory authorities took into account when designing them. Given that we are most interested in drawing lessons relevant to any potential form of retail household control in the water sector, the examples we have reviewed all relate to circumstances where competition was allowed for.

In some instances, for example in relation to British Telecom, retail price controls no longer apply. In those cases, we nonetheless consider it useful to set out the form of the controls that *did* apply, their history and rationale (including the rationale for removing them, where this occurred).

In turn we review:

- the 2013-16 retail price control for electricity in Australia, NSW;
- the 2013-16 retail price control for gas in Australia, NSW;
- the 1998 retail price control for electricity in England and Wales;
- the 1998 retail electricity price control in California;
- the 2002 review of BT's fixed line charges; and
- The WICS' approach to retail controls in the Scottish Water industry.

### 2.1. The IPART's approach to setting the 2013 retail price control for electricity in NSW, Australia

The Independent Pricing and Regulatory Tribunal (IPART) is the independent regulator that determines the maximum prices that can be charged for certain retail energy, water and transport services in New South Wales (NSW), Australia.<sup>4</sup>

The IPART was, until recently, responsible for regulating retail electricity prices for around 40% of residential and small business customers. On 1 July 2014 the NSW Government removed all retail price regulation, meaning the IPART no longer sets

electricity prices for regulated customers; and alternatively, now fulfils a market monitoring role.

Deregulation in 2014 reflected evidence found in the IPART's annual review for price changes (February 2014), which was conducted to update prices effective from 1 July 2014; and also following findings by the Australia Energy Market Commission (AEMC), which were consistent with the NSW electricity market being competitive. In particular:

- Standard Retailers (incumbents) had continued to lose market share within area;
- small retail customers continued to move off regulated tariffs, with around 60% of customers on market-based tariffs;
- switching rates were higher than ever before;
- customers were experiencing positive outcomes;
- there was no evidence of significant impediments to the further development of competition;
- low barriers to entry – with the biggest barrier being set up costs (prudential requirements, licensing and IT systems); and
- retail margins were considered to be consistent with effectively competitive market outcomes.

While the IPART's 2014 assessment of the effectiveness of competition found no *significant* impediments to markets continuing to develop, they did find several non-price impediments to competition, such as:

- the number of regulated and obsolete tariffs; and
- there were still a significant number of customers not engaging in the market.

Following from the above evidence, the AEMC and the IPART were of the view that price caps should be removed. This subsequently led to the removal of all retail regulation by the NSW Government in 2014.

Today the NSW retail electricity market consists of 14 active electricity retailers,<sup>5</sup> including two state Standard Retailers (incumbents): Energy Australia and Origin Energy, with the remainder being new entrants into the market.

Prior to deregulation, the IPART last set a retail price control for electricity in June 2013, which covered the period 1 July 2013 to 30 June 2016.<sup>6</sup> In the following we therefore discuss the *form* of this control – and its

<sup>4</sup> [http://www.ipart.nsw.gov.au/Home/Industries/Electricity/Reviews/Retail\\_Pricing](http://www.ipart.nsw.gov.au/Home/Industries/Electricity/Reviews/Retail_Pricing)

<sup>5</sup> 2014 Retail Competition Review – Final Report, Australian Energy Market Commission, 2014.

<sup>6</sup> 'NSW Electricity Regulated Retail Tariffs and Charges - 1 July 2013 to 30 June 2016. Electricity – determination.' IPART (June 2013).

associated issues and considerations. We note that retail competition already existed at the time the IPART set the 2013 control.

### Description of the form of control

Of relevance to the form of the 2013 control, the *Electricity Supply Act 1995* (in conjunction with the *IPART terms of reference*) requires that the IPART's determinations:

- allow for the recovery of efficient costs;
- support the continued development of competition in the retail market; and
- support the long-term interest of consumers.

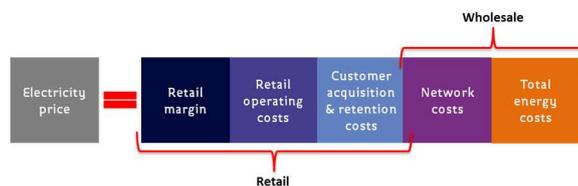
Consistent with the above, the regulatory design of the 1 July 2013 to 30 June 2016 determination package had a specific focus on promoting competition - and supporting the long-term interests of customers.

Under the 2013-2016 control, the IPART required the Standard Retailers (incumbents) to offer regulated electricity tariffs in their allocated districts to small customers (residential and small businesses) who had not entered into a negotiated electricity supply contract, or who had returned from a negotiated contract. In addition to the regulated tariffs, the incumbents were able to, and did, offer non-regulated 'market' tariffs alongside these.

In setting the 2013-2016 control, the IPART used a weighted average price cap (WAPC) approach to setting regulated prices, allowing Standard Retailers to adjust the level and structure of individually regulated prices as they chose, providing they stayed within the boundaries of the average price determined at each reset.<sup>7</sup> This, in effect, restricted the end price charged to customers "on average."

The principle of the above approach was that Standard Retailers should be allowed to fully recover: (i) efficient retail costs; and (ii) the actual costs they incur in paying *network fees and levies* by passing through wholesale costs to customers. The underlying components that made up the end retail price under the IPART's approach is described in the following (and are illustrated in the next figure).

**Figure 1. Components of Retail Electricity Prices in NSW**



### Retail margin

Setting a retail margin allowed retailers to earn an appropriate return, taking into account market and industry specific risk. This was set on a percentage EBITDA basis (earnings before interest, taxes, depreciation and amortisation). The methodology used in estimating the margin involved three approaches:

- expected returns – estimating the expected cash flows for each Standard Retailer;
- benchmarking – comparing margin ranges against a list of comparator firms; and
- bottom-up approach – where the IPART calculated a return on investment, based on a WACC, and then divided the profit by revenue to calculate the implied EBITDA margin.

### Retail operating costs (ROC)

The IPART allowed for the recovery of costs associated with the running of the retail business. These included items such as: administration, call centres, billing, and IT systems (and others). In determining the allowance for retail operating costs, the IPART estimated the efficient level of ROC a Standard Retailer is likely to incur, as follows:

- » Standard Retailers provided the IPART with information on their current and forecasted ROC per customer – both in total and by individual cost category (at a detailed level). The IPART used this information to reach a view as to what a 'reasonable range' for ROCs should be – and made a number of adjustments in order to exclude costs that the IPART considered were recovered elsewhere.
- » The IPART then benchmarked the range implied by the above data by comparing it to retail operating costs observed in other sectors.
- » Based on this evidence, the IPART then made a judgement as to what level of ROCs would be most consistent with its terms of reference.

<sup>7</sup> *Review of Regulated Retail Prices and charges for electricity – From 1 July 2013 to 30 June 2016 – Final Report.*

- » Finally, the IPART made adjustments to take account of future potential productivity improvements.

#### Network costs

These are the charges that retailers must pay to transport electricity from the generator to the customer, using the transmission and distribution networks (i.e. they are wholesale related costs). These were calculated as actual network prices imposed by the network businesses, as approved by the Australian Energy Regulator (AER).

#### Energy costs

The costs associated with purchasing electricity through the National Electricity Market (NEM) and included NEM fees, ancillary charges, and costs associated with technical electricity losses (i.e. also wholesale costs). The energy purchase cost allowance was based on each Standard Retailer's forecast regulated load over the period.

#### Customer acquisition and retention costs

Are costs associated with customer acquisition, transfer and retention activities. This is discussed in more detail subsequently.

#### Other elements of the IPART's electricity retail control

In addition to the above, the form of the IPART's control had four further elements that were intended to enhance the effectiveness of competition in the electricity retail market:

- » **To not impose any additional price constraints** on any of the Standard Retailers. In particular, the IPART noted that the imposition of *additional price constraints* (i.e. over and above the weighted average price cap) could have interfered with retailers' ability to set regulated prices at cost-reflective level throughout the regulatory period.
- » **To not allow Standard Retailers to introduce any new regulated retail prices** (without prior approval). In order to *reduce customer reliance on regulated prices* and to facilitate the development of competition. The IPART was of the view that innovation should occur among the products available in the competitive market, rather than in the regulated market. Here the principle was that tariffs offered to regulated customers should not be overcomplicated, so as to not impede demand-side factors of competition, as discussed further in the next section.

- » **Allow Standard Retailers to rationalise their regulated retail tariffs, and remove obsolete regulated tariffs** – however, incumbents were required to offer *at least 1 regulated tariff*. This is to address concerns surrounding the number of regulated prices being offered and to accelerate the rationalisation of these.
- » **Invite Origin Energy to publish a plan to rationalise its remaining obsolete prices out of area.** As above, however only applicable to Origin energy.

In addition to the above, in order to encourage customer participation in the market, the IPART also operates an independent, free, price comparator website *myenergyoffers*, in order to facilitate customer switching.

In the following we discuss the key issues and considerations taken into account by the IPART during the 2013 price reset. In particular, we describe the use of an additional incentive relating to the treatment of customer acquisition and retention costs.

#### *Summary of key issues and considerations that influenced the form of control*

In broad terms, the IPART maintained several elements of previous approaches to setting prices for the 2013-16 retail electricity control. However, following its review of the effectiveness of retail competition at the time, the IPART stated that the 2013-16 control would need to balance two potentially conflicting objectives:

- » Firstly, to encourage efficiency among retailers and protect customers from prices that are higher than their efficient level (in the short-term).
- » Secondly, to support the interests of consumers in the long-term, by setting prices that create incentives for retailers to compete and customers to participate in the market.

To balance the above objectives, the IPART used a systematic approach by firstly, setting allowances for energy costs, retail operating costs, and a retail margin in line with the estimates of the short-term efficient level of those costs. Followed secondly, by setting an explicit allowance for efficient customer acquisition and retention costs (CARC).

Following from the above, the inclusion of CARC was an additional incentive included in the framework in order to promote further competition in the market. Because CARC was added to the retail cost allowances (as above), **regulated prices were unlikely to be the**

**lowest in the market.**<sup>8</sup> In effect, the IPART’s rationale was that this should help reduce customers’ reliance on regulated tariffs (which, by definition, only applied to those customers who had not taken up any unregulated tariff offering – from either an incumbent or entrant). In short, the IPART believed that the CARC incentive would serve three objectives:

- encouraging entry;
- promoting efficient cost recovery; and
- encouraging customers to seek out better market deals.

To determine the appropriate ‘size’ for the CARC incentive, the IPART made use of two approaches.

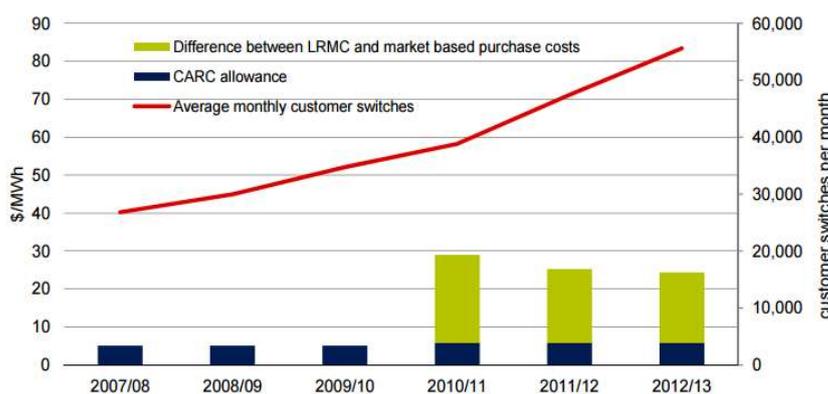
- » Firstly, a **top-down (outcomes based)** approach was used in order to assess: (i) the extent that historical regulated prices had promoted competition; and (ii) the implied levels of CARC required to see this continue. This was determined by looking at historical regulated retail prices and the corresponding outcomes in both the NSW and other jurisdictions (as illustrated in the following figure).
- » Secondly, a **bottom-up analysis** was conducted, which considered the costs incurred to acquire and retain customers in a competitive market. These costs were calculated using: evidence from information submitted by Standard Retailers; other regulatory decisions; the IPART 2010 determination; and market information.

The figure illustrates the analysis that formed part of the IPART’s ‘top down’ approach. Specifically, it shows the relationship between regulated prices, the CARC, and customer switching levels.

With regard to the IPART’s ‘bottom-up’ analysis, it is important to highlight that the regulator also included an allowance for ‘per customer’ costs relating to: (i) transferring new customers from another retailer; and (ii) for transferring existing customers from a regulated to a market contact.<sup>10</sup>

In the following section we review the more ‘light-handed’ approach to retail regulation that the IPART adopted in relation to gas retail in NSW.

**Figure 2. Incentives included in regulated prices and observed customer switching in NSW<sup>9</sup>**



Source: IPART calculations of AEMO switching data.

<sup>8</sup> The inclusion of the additional incentive does not provide a subsidy from regulated customers to market customers.

<sup>9</sup> Customer switching for 212/13 is based on AEMO data from July 2012 to May 2013. 2007/08-2012/13 (2012/13 \$, \$/MWh)

<sup>10</sup> Based on AEMO small retail customer transfer statistics in NSW over 2009 – as it was considered to be transparent and objective and on AEMO data on transfer activity in NSW.

## 2.2. The IPART's approach to setting the 2013 retail price controls for gas in NSW, Australia

In addition to regulating the electricity market in NSW, the IPART also regulates retail gas prices, based on provisions set out in the Gas Supply Act 1996.

As per electricity, the IPART last set a retail price control for gas for the period of 1 July 2013 to 30 June 2016.<sup>11</sup> However, we note that they are currently in the process of reviewing regulated gas retail tariffs and charges from 1 July 2016. In the last price control period, the IPART regulated prices for around 28%<sup>12</sup> of residential and small business customers in NSW, who consume under 1TJ of gas.

These regulated prices apply to three Standard Retailers (the incumbents); and are only charged to customers that have not signed a market contract with either incumbents or new entrant retailers. In addition to the three Standard Retailers, there are currently four non-regulated gas retailers serving the NSW area.

### Description of the form of control

Set every three years, regulated gas retail prices are determined using a relatively light-handed approach that involves making a multi-year pricing agreement with each Standard Retailer. This type of regulation is often referred to as a *Voluntary Pricing Agreement (VPA)*.

Under this approach, Standard Retailers submit a proposal to the IPART, setting out their own regulated prices to comply with the VPA. The IPART subsequently reviews these proposals before reaching a pricing agreement with each of the Standard Retailers. In addition to this, the IPART also monitors their compliance throughout the control period. In other words, whereas in electricity retail, the IPART was still effectively *setting* regulated tariffs for the 2013-16 control period, in gas its role was more one of *reviewing* and *approving* prices proposed by incumbents. However, conceptually the approach to the form of control for gas was broadly the same for electricity – in that the VPAs also included using a *weighted average price cap* approach to determine an appropriate level of prices.

Under the VPA approach for the 2013-16 control, Standard Retailers would put forward their proposed

prices “per customer” to the IPART. They would also provide the IPART with information regarding the core components that underpinned the overall weighted average price – and implied ‘changes’ from prevailing levels – including:

- » **Retail operating costs.** The costs a retailer would incur to serve its customer base, and included: customer service (the operation of call centres, billing and collecting revenue); finance; IT systems; and regulation (paying licence fees).
- » **Retail margin.** Where Standard Retailers proposed a retail margin that needed to fall within the IPART's ‘*reasonable range*’, which was between 6.3%-7.3% of EBITDA for this period.
- » **Wholesale gas costs.** Included gas commodity and transmission costs associated with being able to serve peak demand, and market related costs.
- » **Network / distribution costs.** This reflected the distribution costs of using the gas network, given they are ‘uncontrollable’ by the retailer, these were automatically passed through to consumers.
- » **Carbon costs.** These are costs associated with complying with the Federal Government's Carbon Pricing Mechanism (CPM), and were also passed through to customers. Since 1 July 2012, companies operating on parts of the gas supply chain are required to pay for their carbon emissions.

Figure 3. Components of Retail Gas Prices in NSW



As noted previously, the above approach is conceptually similar to the IPART's form of control for electricity retail. However, in practice its application differed (consistent with the VPA framework that existed for gas). In particular, for gas, incumbents submitted proposed changes to the retail (R) component of end bills, and then the IPART would seek to determine if these were reasonable. In commenting on its approach to this for Gas, the IPART stated:

*“To help us with this [the assessment of incumbent's proposals] we analysed the retail costs that a benchmark retailer would incur in supplying gas to*

<sup>11</sup> ‘Review of regulated retail prices and charges for gas From 1 July 2013 to 30 June 2016 Gas – Final Report.’ The IPART (June 2013).

<sup>12</sup> We note that this has fallen to 20% as per their November 2015 issues paper.

customers. However, in contrast to our approach for the 2013 regulated electricity price review, we did not assess and make decisions on each of the individual forecast cost components of the retailers' proposals. Instead, we used a more holistic approach."<sup>13</sup>

In practical terms, the above meant that for gas, the IPART effectively undertook a broad assessment of incumbent proposals for each element of the retail price against its view of a 'reasonable range.' In making this evaluation, the IPART sought to determine whether the proposals appropriately balanced longer and shorter term objectives for the price control. For example, in relation to *retail cost assessment*, the IPART did not evaluate, or make decisions, regarding forecast costs for *individual retail cost components* at a granular level (which it did for electricity). Instead, the regulator undertook high level analysis that included – amongst other methods – comparing *overall* retail costs across the firms and other comparators.

In addition to the above, another distinguishing design factor between electricity and gas was the treatment of customer acquisition and retention costs. For the 1 July 2013 to 30 June 2016 retail gas control period, the IPART did not make an explicit allowance for the costs associated with customer acquisition and retention for gas. This was because competition tends to be focused on dual fuel customers; and as such, acquisition and retention costs tend to be shared between gas and electricity. Thereby the IPART considered that its allowance for these costs within the electricity retail control was sufficient.

Another important factor when thinking about regulatory design, is the sharing of risk. When determining the **reasonable range** for the retail margin in gas, the IPART used an expected returns approach, which is based on the principle that business should be compensated for systematic risk.

#### **Summary of key issues and considerations that influenced the form of control**

At the time of the 2013-16 retail gas control, and following an analysis of market conditions, the IPART considered it **likely that competition in the market was effective enough to provide sufficient protection to customers**, as well as offering more choice and better price and service outcomes.

This was also consistent with the AEMC 2013 review of competition in the Retail and Natural Gas

Markets<sup>14</sup>, which ultimately suggested that **the removal of gas retail price regulation for all consumers would improve competition** (although the AEMC noted that for certain customers the IPART could consider maintaining voluntary pricing arrangements).

However, at the time the NSW Government still had some concerns regarding the extent of competition in certain market segments – and so instructed the IPART to retain some form of retail gas price regulation. With that in mind, the IPART favoured a 'light-handed' approach to its 2013 retail gas price review. Following the 2013-16 control period, the IPART will again assess the competitiveness of the retail gas market. The review of regulated gas retail tariffs and charges from 1 July 2016 is currently being undertaken by IPART.

### 2.3. The 1998 electricity retail price control in England and Wales

The Electricity Act (1989) removed the statutory restriction on entry that, until that point, had prevented (i) anyone other than the Central Electricity Generating Board from generating electricity; (ii) and the Area Boards from selling it (i.e. retailing). Focusing on the development of retail (supply) competition, it was clear that new entrants would need access to distribution networks in order to sell electricity directly to customers. Consequently, the Area Boards (which became known as Public Electricity Suppliers - PESs) were required to keep separate accounts for the distribution and supply parts of their businesses. Relatedly, their distribution businesses were not allowed to discriminate against rival supply businesses.

To further support non-discrimination, over time the Office of Electricity Regulation (Offer) and its successor (Ofgem) required companies to separately identify key costs for each business. The regulators also required incumbents to make a range of services (including metering, and meter reading) available to entrant supply (retail) businesses. Subsequently, in 2000 the Utility Act required there to be separate sets of businesses in relation to distribution and supply, with separate companies and licenses.

At the time of privatisation, there were two main sets of price control on the PESs: (i) one relating to their distribution networks; and (ii) the other relating to electricity retail or supply. There were no controls on

<sup>13</sup> 'Review of regulated retail prices and charges for gas From 1 July 2013 to 30 June 2016 Gas – Final Report.' The IPART (June 2013). Page 33.

<sup>14</sup> <http://www.aemc.gov.au/getattachment/634b1137-4b95-433e-9926-0066eee018f7/Final-Report.aspx>

generation. The price controls relating to the retail part of the supply chain were always regarded as being transitory in nature. In particular, Government planned to open the retail market to competition in three stages:

- large commercial customers could choose suppliers from 1990;
- medium sized commercial customers could choose suppliers from 1994; and
- smaller commercial and residential customers could choose suppliers from 1998.

The intention was that, until each market segment was fully opened to competition, controls would remain in place in order to provide protection to customers. However, this left open the question of whether, following market opening for each segment, some form of price control / protection might *still* be required. Competition for large industrial customers developed quickly when retail rivalry for these began in 1990 – and so price controls were removed by Offer. Similarly, all retail controls were removed for medium sized customers in 1994. This left the issue as to whether, and if so in what form, retail price controls might be required for smaller businesses and residential customers when the retail market for these was finally opened in 1998. In the following we therefore focus on this matter.

#### **Description of the form of control**

It was considered that, for small commercial and residential customers, the likely extent of retail competition was more uncertain. Therefore, Offer determined that it would be appropriate to retain some form of retail price control. The key features of the form of control set by Offer in 1998 were as follows:

- » The control was to be temporary – and was to apply for just two years initially (until March 2000).
- » The control was also limited in scope – it was to apply only to incumbent retailers, and only in their own supply areas.
- » The restraints identified, for each PES, a list of tariffs that designated (i.e. small commercial and residential) customers were able to take.
- » The restraints applied to final prices (excluding VAT) and so covered all elements of cost: generation, distribution, transmission, supply business costs and margin (and also the fossil fuel levy). The restraints allowed for variations in the fossil fuel levy to be passed through into prices.
- » With regards to the treatment of wholesale related costs (specifically generation

purchase costs) previously these had been treated as a “pass through,” subject to there being an economic purchasing obligation. However, recognising the need to create incentives for retailers in a competitive market to obtain the best possible price, for the 1998 control assumed generation purchase costs were based on an average across the incumbents’ prices on existing long-term contracts, plus the remaining proportion of output (where it was assumed this would be purchased via short term contracts currently available in the market).

- » The restraints were applied on a tariff basket basis. They specified that, for each PES, a weighted average of these tariff prices should increase no faster than RPI-X.
- » The allowed ‘retail’ costs included within the tariff basket allowance reflected a simple average of those incurred by incumbent suppliers.
- » Allowances were also made for increases in certain costs directly arising as a result of competition – and for the fact that certain fixed costs might be spread over few customers, as the result of losing market share to competing suppliers.
- » An allowed retail EBIT margin was set as a percentage of turnover. It was explicitly recognised that more efficient or successful companies could earn higher return.

#### **Summary of key issues and considerations that influenced the form of control**

Offer’s 1998 determination contains a number of details that provide insights into the issues it took into consideration in setting the form of control. Of particular relevance, Offer stated the following:

*“The level of the price restraints needs to balance the short term and long term interests of customers ... The restraints should ensure that all customers are not only protected but also receive tangible benefits from the opening of the competitive market. ... But the restraints should not seek to do the job of competition, or discourage its development. ... The aim is to consider what can reasonably be expected of the Public Electricity Suppliers (PESs) in the way of immediate price protection for all customers, while leaving scope for competitors to purchase and operate more efficiently than the incumbent PESs. It is then for the*

*competitive process to bring these further benefits to customers.*<sup>15</sup>

Following from the above, it is clear that an important consideration for Offer was the need to balance its objective of protecting customers against ensuring that there was scope for competition to develop.

Professor Stephen Littlechild has also commented on the 1998 Offer control – where he has highlighted the same above issues (i.e. the need to balance customer protection in the short run against the need to ensure competition develops). Here, of particular interest Littlechild noted that, whilst the hope was that entrants might be more efficient, allowing them to undercut the regulated prices *“on the other hand, entrants had to incur costs of acquiring customers, and these were typically greater than incumbents’ costs of retaining customers.”*<sup>16</sup>

Related to the above, another key consideration for Offer was that its view was that competition was likely to develop more quickly for some customers than others. This, of course, was reflected in its decision to fully deregulate the retail market for large and medium sized commercial customers at market opening; but to retain price regulation for small commercial and domestic customers. In addition, even within the ‘small commercial / domestic’ segment, it is clear that Offer was of the view that competition might develop at different rates.

The above view remained at the time Offer undertook a subsequent review of the market in 1999 in order to inform its approach for 2000 and beyond: *“There is no clear evidence to date that all domestic customers are benefiting from competition to the degree that no new price controls are required.... It is not certain that [developing competition] will sufficiently protect these customers in the event that price restraints are completely removed.”*<sup>17</sup>

## 2.4. The 1998 electricity retail price control in California

Energy regulatory structures and functions in the USA are somewhat different to those typically found in the UK and Western Europe. In California, electricity activities are regulated by three separate bodies:

- The Federal Energy Regulatory Commission (FERC), which regulates the transmission and wholesale electricity;
- the California Public Utilities Commission (CPUC), which regulates electricity retail activities; and
- the California Energy Commission (CEC) - which is responsible for forecasting future energy needs and promoting energy efficiency.

September 1996 saw the introduction of The Electricity Utility Restructuring Act (Assembly Bill 1890) to make all services associated with electricity activities competitive in California.

Up to this point, electricity consumers in California purchased their electricity from one of the state’s three largest investor-owned utilities (IOUs), who provided customers with bundled services at specified prices. Here, bundled services included all aspects of providing electricity services: generation; transmission; distribution; and retail activities. Prior to liberalisation, prices charged to customers were set by the CPUC and were based on **operating costs plus a regulated rate of return on prudently incurred “used and useful” invested capital.**<sup>18</sup> Put simply, prices were regulated based on a ‘rate of return’ approach, and were set on an end-to-end basis.

In the mid-1990s, however, Californian electricity prices were some 40% percent higher than the national average.<sup>19</sup> This, amongst other factors, led the CPUC to embark upon market liberalisation – and specifically, to initiate a four year transition to a competitive electricity market.

In the following we set out how regulation was applied during this transition period. Of particular interest is the extent to which the specific regulatory reforms (particularly those relating to retail) coupled

<sup>15</sup> *‘Offer, The Competitive Electricity Market from 1998: Price Restraints, Fifth Consultation’, August 1997, pages 4-5.*

<sup>16</sup> *‘Regulators, competition and transitional price controls: a critique of price restraints in electricity supply and mobile telephones.’ Stephen Littlechild, see page 20.*

<sup>17</sup> *‘Review of domestic and small business electricity supply regulation.’ Offer (1999).*

<sup>18</sup> [http://www.hoover.org/sites/default/files/uploads/documents/0817929126\\_7.pdf](http://www.hoover.org/sites/default/files/uploads/documents/0817929126_7.pdf)

<sup>19</sup> [www.eia.gov/electricity/policies/legislation/california/index.html](http://www.eia.gov/electricity/policies/legislation/california/index.html)

with other economic factors, may have contributed to the subsequent energy crisis in California.

### **Description of the form of control**

The transition to a competitive electricity market in California involved two parts: (i) restructuring of the IOU's - that is, separating the various parts of the supply chain by function (generation, wholesale and retail); and (ii) liberalisation, which (amongst other things) saw the electricity retail activities unbundled from the rest of the supply chain so that rival operators could undertake these activities.

Effective March 1998, all customers (residential, commercial, agricultural and industrial) in California were able to buy electricity from either their current utility provider or another alternative provider. The CPUC, as specified in the Assembly Bill 1890, set a **retail price cap** which in effect was a price freeze so that no customer would have levels any higher than their June 1996 level. In addition, residential and small business customers got a 10% reduction relative to the 1996 level.

The above 'price freeze' did not appear to be based on any particular economic framework or analysis per se. Rather, it was more the case that flat or falling prices were considered to be 'desirable' from a policy perspective.

Further to the above, under the form of control (a flat cap on retail prices) where there was no specific mechanism that allowed for any pass through in changes to wholesale related costs. However, at the time of implementation, wholesale prices were considered to be reasonable and stable; and the price freeze (cap) was, in any case, only to stand for four years, or until the IOUs recovered the costs of their past investments (which was to be facilitated through a competition transition charge - which explicitly allowed for the recovery of stranded asset costs), whichever was earlier.

In addition to the above, operators were required to separate their rates into the specific functions of their business: generation; transmission; distribution; and retail services, in order to provide greater information transparency on bills for customers.

As previously mentioned, deregulation also occurred throughout the rest of the supply chain. While we note this is not directly related to retail regulation, it

is important to consider design features of the entire market when thinking about possible implications for retail competition. Particular features of the deregulation include:

- » **Direct access.** Distribution lines continued to be operated by the existing electricity utilities. However, they had to operate in such a way that customers had to be provided direct access to any seller of electricity operating in the area.
- » **Divestment of assets.** The largest two IOUs were required to divest at least 50% of their fossil fuel generating assets, to address concerns surrounding market power.
- » **Independent system operator (ISO).** Creation of the ISO with the responsibility for assuring reliability of the high voltage transmission system.
- » **Spot market.** The creation of the 'Power Exchange', which operated like a commodities market, where power generators competed to sell their electricity to buyers. Prices changed on an hourly basis. Where participation in the spot market was compulsory for IOUs - i.e. they could not enter into long-term contracts - whereas new generators had the option to sell directly to consumers.

### **Summary of key issues as a result of the control**

California's competitive electricity market was initially working well. However, in 2000 the California energy crisis occurred, resulting in mass power outages and financeability concerns for the three major IOUs.

The crisis in California was heavily reported on in the media - and has also been examined in detail in various academic literature. As a result, there are a range of differing views regarding its underlying causes, and the relative importance of those causal factors.

Notwithstanding the above, critics were generally in agreement that there were six main factors across the supply and demand side, that collectively gave rise to the crisis.<sup>20</sup> These included:

- » **High wholesale prices.** Significant increases in wholesale electricity on the Power Exchange (due to increases in natural gas - primary fuel used to generate electricity in California, and an increase in cost of emissions permits). This was a particular problem given that there was no automatic way of

<sup>20</sup>

[www.eia.gov/electricity/policies/legislation/california/subsequentevents.html](http://www.eia.gov/electricity/policies/legislation/california/subsequentevents.html)

passing these through to retail prices under the form of control that was put in place.

- » **Increased demand.** Putting unprecedented loads on the network, and inefficient investment in new generating capacity to keep up with these increases in demand, led to widespread blackouts.
- » **Mismatch of supply and demand signals.** Due to lack of price pass through at the retail level, end customers did not respond to increasing wholesale costs by adjusting their demand for electricity.
- » **Low switching rates.** Only roughly 2% of residential customers ever switched, which was possibly due to the capped retail rate offered by the IOUs incentivising customers to stay.
- » **Finaceability troubles.** Utility companies were required to purchase large amounts of electricity (to keep up with demand) off the spot market, without being able to recoup the cost (due to the capped retail price) - this led to the insolvency of the two largest IOUs.
- » **Refusal to supply.** Independent generators were refusing to supply the IOUs, due to concerns that they would not get paid.

In order to overcome the above crisis, the state began to buy back power, and eventually became the primary power purchaser, locking the state into long-term contracts, and it is these contracts that account for most of the electricity being distributed to retail customers today. Business customers, on the other hand, appear to have opted for direct access contracts with independent generators.

When we described both the IPART and Offer retail controls in electricity markets previously, we highlighted how – in both cases – balancing the need to protect customers versus ensuring that there were appropriate signals for competition was an issue considered by both regulators. Relatedly, it is clear that, in principle, regulated retail prices that are ‘too low’ could give rise to margin squeeze concerns. One way of characterising the form of control in California, therefore, is a particularly extreme version of this. That is to say, with no link between regulated retail prices and wholesale costs, rapid movements in those wholesale costs could soon erode any retail headroom.

## 2.5. Retail price controls of British Telecom

Ofcom, the independent communications regulator, regulates TV, radio and video on demand sectors, fixed line telecoms, mobiles, postal services and the airwaves over which wireless devices operate in the UK. Its predecessor was Oftel.

British Telecom (BT), previously a government department before privatisation in 1984, was the monopoly provider of telecom services in GB. Since privatisation, the prices that BT charged to residential customers for line rental and phone calls (local and national) had been controlled by Oftel, limiting the amount BT could charge its customers in any year. However, following a consultation in March 2006, Ofcom announced the ending of the retail price controls (RPC) when they expired on 31 July 2006.

The last RPC that Oftel set for BT was for the period 2002 to 2006. Given that this was the last retail price control set before deregulation occurred, we have focused on this for the purpose of our review.

Prior to setting the 2002-2006 price control, Oftel’s review of the fixed telephony market had found that the level of competition in the provision of fixed calls, had steadily increased:<sup>21</sup>

- consumers had a wide range of choice from other suppliers;
- BT’s market share for calls was gradually being eroded; and
- BT’s call profits were falling.

However, despite the above improvements, the market was not yet considered to be effectively competitive, specifically due to BT’s large market share of both lines and calls markets.

### *Description of the form of control*

The 2002 to 2006 price control covered the supply of a basket of retail telephony services including: local and national calls, operator assisted calls and exchange line rental, to the lowest 80 percent of BT’s residential customer base (measured in terms of spend).<sup>22</sup>

In addition to the retail price control, a key component of Oftel’s regulatory package was a requirement on BT to provide a new wholesale line rental product (as this was seen as main barrier to the development of retail competition). This was to enable alternative retailers the ability to provide a

<sup>21</sup> *Protecting consumers by promoting competition: Oftel’s conclusions, 20 June 2002.*

<sup>22</sup> *Protecting consumers by promoting competition: Oftel’s conclusions, 20 June 2002.*

single bill, covering both line rental and telephone calls, to their customers.

Historically Oftel had set price limits for fixed lines using an RPI-X framework (where at its previous determination this had been set at RPI-4.5%). However, for the 2002 control, Oftel revised this to what it termed an “RPI – RPI” approach, effectively meaning that nominal bills could not rise overall for customers covered by the price control (this was subsequently relaxed to RPI + 0% in 2006). The framework was applied in the form of a price control, using a tariff basket approach.

A standard building block approach was used by Oftel to set the control – so that BT’s forecast rate of return for the period was equal to its cost of capital (using return on capital employed, ROCE, to measure the return that BT could earn on its assets).

In order to ensure BT’s compliance, Oftel brought in a new approach to monitoring in the 2002-2006 control, by requiring BT to set charges so that its revenues in any relevant year (including discounts) from all residential customers in the bottom 80 percent were equal to, or less than, the net revenues received from those customers in the previous year.

In addition to the above, Oftel introduced further protection through a price ceiling on BT’s line charge, so that those charges did not exceed their associated costs for all residential customers. This was to help protect those customers who do not make many calls, given that the line rental made up a significant part of their bill. Features of this included:

- the application of a bill constraint of RPI-0 percent on the amount by which the bills of customers in deciles 3, 4 and 5 could increase;
- extending the light user scheme, which was providing rebates to the line rental for qualifying BT customers in deciles 1 and 2, to include qualifying customers in deciles 3; and
- these measures would stay in place even following the removal / modification of the RPI-RPI control.

Relatedly, ancillary services, such as call waiting, were not subject to price controls; Oftel expected BT to provide these at reasonable prices.

### **Summary of key issues and considerations that influenced the form of control**

A key objective for Oftel during its determination of the 2002-2006 price control period was the development of effective competition. Relatedly, its policy decisions reflected its assessment that the prevailing market conditions were unlikely to continue throughout the period, as competition developed. For example, considerations that formed part of Oftel’s thinking around this included:

- » **Margin squeeze concerns.** With the introduction of the wholesale line rental product, Oftel was expecting a significant increase in competitive pressures on BT. In light of this, they were concerned that the RPI-RPI price control could give rise to **margin squeeze**, due to the low margins BT earned on the lowest spending 80 percent of residential customers. With that in mind, Oftel set out circumstances under which it would modify the control to a RPI-0% (which they subsequently did).
- » Considered **imposing broader price controls covering all residential and business customers**, in order to target price controls on areas where BT continued to make excessive profits. However, due to concerns surrounding the **use of regulation instead of competition**, Oftel ruled this out.
- » Incorporation of discounts into the price control basket. Due to the increasing importance of discounts in pricing strategies (reflecting the fact that large numbers of customers purchased packages of services) discounts were included within the scope of the 2002-2006 price control. This meant that BT had to show that its net revenues (amount paid by customers) had fallen by the required amount.<sup>23</sup>

## **2.6. Water retail price regulation in Scotland**

2008 saw the water retail market for non-household customers opened up to competition in Scotland. The Water Industry Commission for Scotland (WICS), an independent body, is responsible for the regulation of water and sewerage services in Scotland.

Prior to market opening, Scottish Water was the monopoly supplier of water and sewage services in Scotland. However, the reforms saw the separation of Scottish Water’s wholesale and retail activities, at which time Business Stream, the retail business, was

<sup>23</sup> Ofcom annual report, 2003.

formed. There are now 18 alternative retail suppliers competing with Business Stream for retail non-household customers in Scotland.

The following elaborates on the above, and sets out the form of control and key issues considered.

**Description of the form of control**

At time of market opening, the WICS decided not to impose formal price controls; but rather, to rely on ‘safeguard’ or default tariffs. These tariffs consisted of defined *minimum service levels* and a *maximum price* that could be charged for those services. Here the underlying rationale was to ensure that, as competition developed, customers would be protected in two main ways:

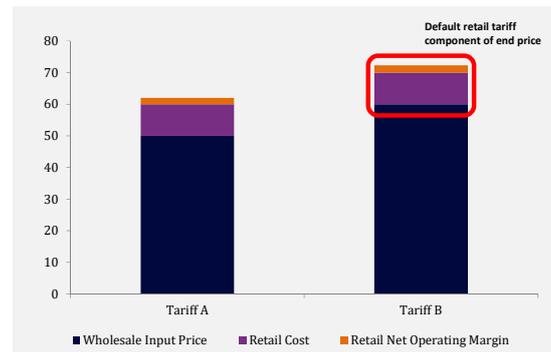
- they would be guaranteed to receive the level of service similar to what Scottish Water would have offered; and
- that the price they would pay for this would be *no greater* than that which would have been charged had regulation remained in place.

The WICS requires license holders in Scotland to offer all non-household customers, regardless of their location or industry they operate in, a default package of charges, services and standards. The underlying principle of the way in which the service standards apply is that: *only retail related functions that Business Stream can manage directly (such as billing and meter reading) should be relevant to setting retail default tariffs.*

It is important to note that retailers are not restricted by the default service offer. That is to say, so long as the default tariff is always made available, retailers are free to offer alternative tariffs at their associated prices, to non-household customers. On their part, customers are equally free to choose not to take the default offer. For example, they may select higher service levels at higher prices.

The default tariff is set with regards to the end price charged to non-household customers. The composition of the end price consists of: (i) the wholesale charge levied on the retailer (set using the existing price control approach); (ii) allowed retail costs; and (iii) allowed retail profit, defined on an EBIT margin basis (originally set at 3.2%) – as illustrated by the following figure.

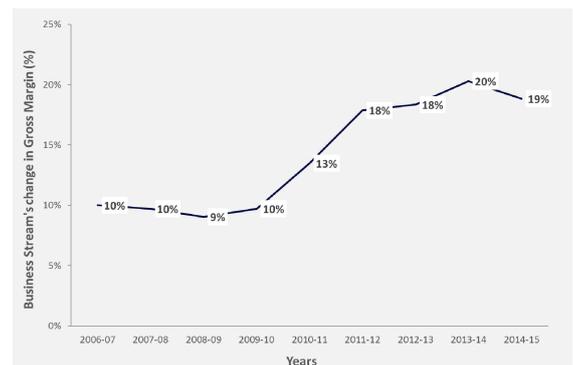
**Figure 4. Constructing the Default Tariff**



The WICS sets the above end price on a forward looking basis, using projections of Business Stream’s retail non-household costs. In these projections, the WICS embedded both expected changes to baseline costs and considerations of additional retail costs. Relatedly, the baseline retail costs originally allowed by the WICS within the defaults appeared to include an allowance for inflation.

It is also important to highlight the fact that the WICS has allowed Business Stream’s gross margin to grow over time, using the price caps between wholesale and retail. Over the 5 years from 2010, the WICS cut wholesale prices on average by RPI-23%, while cutting default retail tariffs on average by RPI-5%.<sup>24</sup> This resulted in the gross margin for Business Stream widening from 10% in 2010 to 19% in 2015, as illustrated in the figure below.

**Figure 5. Business Stream’s Gross Margin**



Source: Business Stream’s statutory accounts

<sup>24</sup> These are averaged on an estimated 50/40/10 split between water, wastewater and trade effluent.

### **Summary of key issues and considerations that influenced the form of control**

Ensuring customers were no worse off under a competitive market framework, the WICS imposed the following features as a safeguard:

- » **Business Stream's prices were rolled forward as a set of default tariffs.** This ensured that customers were no worse off than under a competitive market than they were under a regulated one.
- » For customers to pay more than the default tariff / service, they **must actively choose to move off the default.** That is, Business Stream cannot choose to move customers off the default tariffs, customers must want to move onto a non-regulated tariff, for example, to get better service quality.
- » Retailers must **pay wholesale charges in advanced** to Scottish Water, in order to prevent **retailer failure.**
- » To prevent cross-subsidisation (between Scottish Water and Business Stream) **Scottish Water is required to publish wholesale tariffs.** This ensures transparency of wholesale and retail costs.

### 2.7. Summary

Following our review of the forms of retail control seen in other sectors / countries, the key implications and issues of relevance to retail household in the water sector are as follow:

- » In the majority of cases we have reviewed, there has been *some* form of control where competition has been introduced (or where competition has existed). In some cases this has been a precursor to full deregulation, such as the electricity retail market in NSW Australia, and in other cases a form of control remains. It is clear, however, **that regulators are typically of the view that, even when competition is introduced, a control of some form is appropriate**, even if only for a limited period of time (and / or where it is limited in scope).
- » **There are exceptions to the above – such as in relation to electricity retail markets in England and Wales, for large and medium sized commercial customers.** Here, retail price controls were removed as the markets were opened.
- » We also observe **considerable variations in the form of control**, where this most notably varies with the extent and speed of the development of competition. For example, the approach to gas

retail regulation in Australia for the 2013-16 review was very 'light touch,' based on voluntary pricing agreements with incumbents – reflecting the relatively rapid development of competition.

- » Across a number of the cases we have reviewed, it is clear that **regulators have recognised that the regulated prices they set can influence competition** – and in particular, that in determining the appropriate approach, there is a need to balance short run factors (most often relating to customer protection) against long run considerations (facilitating or promoting competition). Here both the IPART and Offer were explicit in setting out the need to balance these aims.
- » The precedent also includes cases where regulators have explicitly **recognised the potential for margin squeeze concerns arising from retail prices that are "too low."** A particularly extreme illustration of this is provided by the approach to the electricity retail market in California. Here, because retail prices were frozen, without any account of wholesale cost movements, retail effectively became loss making.
- » Related to the above, a further factor recognised by regulators elsewhere is that their approaches to **the form of control can influence customer engagement in retail markets.** Specific approaches regulators have applied in practice of relevance to this include: (i) ensuring that regulated prices are not likely to be the "cheapest" available prices in the market; (ii) limiting the number of regulated prices (but not limiting the number of unregulated prices) in the market; and (iii) non price features, such as the use of price comparison websites. Here the general motivation of regulators is to reduce reliance on regulated prices, and so drive engagement amongst customers.
- » There has been **explicit recognition that, in a competitive market context, customer acquisition and retention (i.e. marketing) costs will be incurred** and so approaches to the form of control need to take this into account.



### 3. Determining the forms of control

In this section we set out an overview of the key issues that need to be considered when determining the appropriate form of any control for the household retail market.

In summary, we find:

- (i) The appropriate form of control primarily depends on the likely extent of competition that could develop – which in turn requires a detailed assessment of the supply and demand side features of the market.
- (ii) The above is the same evidence Ofwat will need to examine as part of its review to determine the costs and benefits of extending retail competition to households in the first place.
- (iii) Here, therefore, we focus on, “if” a decision is taken that competition should be extended, what *more specific* issues will need to be addressed.
- (iv) In total we identify seven key issues that require careful consideration. The overarching message is the detailed design of any control could itself impact the development of competition – and therefore should not be considered in isolation.

### 3.1. The context for considering the form of control for retail household

When considering what the appropriate form for any retail control for household customers might take, it is important to be clear about the context within which such a control might be designed.

For the purposes of this report, we have assumed that the context is one where it is determined that competition *should* be extended to include retail household customers. In this case, one might naturally expect that the evidence was found to be consistent with there being sufficient scope for competition such that the benefits it delivers outweigh the costs. Accordingly, this might seem to call into question why – in such circumstances – a price control of *any* form would be required.

In practice, however, experience indicates that competition can take time to develop in newly opened markets. Specifically, there are factors on both the supply and demand side that can delay the development of effective competition.

- » **On the supply-side**, it might take time for existing suppliers to make the operational changes and investments required to actively compete. In addition, new suppliers may choose to ‘wait’ and observe how the market develops in order to gauge what demand there is for different retail services before committing to entry. Uncertainty as to the final regulatory framework in a market could also lead to delays on the supply side (for example, in relation to water and sewerage, the retail commercial strategy of suppliers is likely to be somewhat dependent on the wholesale access terms and price, and on retail margins).
- » **On the demand-side**, it might take time for customers to engage with the market. For example, because they have not been able to choose a water retailer before and so are not used to weighing up the pros and cons of different options.

In addition, the above factors might also apply to varying extents to different segments of customers – meaning that competition develops more quickly and / or more extensively for some groups than for others. Equally, rather than just being a matter of ‘time,’ if the relevant supply and demand side impediments are sufficient, it might mean that effective competition does *not ever* develop for certain customer segments.

The key point to focus on – however – is that, even if the evidence suggests that the retail household markets is sufficiently contestable such that extending competition is likely to be a good thing, incumbents

may still benefit from pockets of market power – either:

- in a transitory sense – because competition takes time to evolve; and / or
- for specific groups of customers, for whom the economics of providing retail services are inherently less well suited to competition.

In turn, this **might** mean that some form of regulatory price control for retail household (or other safeguard) would remain appropriate, at least for a period of time, in order to protect customers. However, this would critically depend upon:

- **the extent of ‘customer harm’** that one thought would arise absent any such control; and
- **the likely ‘costs’** associated with implementing a price control - or other safeguard (where this not only includes the direct monetary costs of implementing any such protection, but also relevant regulatory failure risks).

In relation to potential customer harm, it is important not to only consider this in terms of ‘excessive pricing.’ For example, forms of market power might also give rise to margin squeeze concerns (i.e. retail prices that are ‘too low’) or concerns regarding service levels and quality.

In summary, for our purposes we are seeking to identify the key issues that may need to be addressed in order to determine the appropriate form of price control for retail household *where it is assumed that competition will be allowed for.*

### 3.2. Defining ‘form of control’

Before setting out our views on the key issues that Ofwat may need to take into account determine whether, and if so in what form, any price control for the retail household market might take, it is first necessary to define what we mean by ‘*form of control.*’

The literature and regulatory precedent provides considerable discussion of this; but for our purposes, we assume that the ‘form of control’ consists of the following dimensions.

- » **What is being controlled?** That is to say, is it ‘price level’, ‘revenues’ or a ‘hybrid’ of the two that is being set by the control?
- » **How is the price / revenue being controlled?** If prices are controlled, is that at an ‘individual price point’ level, or in relation to a ‘basket’? If revenues, is it in relation to ‘total’ or ‘average’ revenues?
- » **What is the mechanism by which the control is set?** Here we mean the conceptual approach and calculations used to set the prices. That is to say,

whether it is a building block approach, based on allowed efficient costs, inflation and a return on capital – and so on.

- » **What risk sharing mechanisms are applied?**  
Separate from the broader incentives associated with whether prices / revenues etc are controlled, whether and what specific tools are used to share risks between customers and investors. This could include, for example, volume adjusters such as revenue correction mechanisms.
- » **Are there any specific features designed to foster the development of competition?** Within any broad approach it is possible for regulators to design and implement specific features that are explicitly designed to help foster / manage the transition to competition. Such features might include: (i) allowances for customer acquisition costs within the price limits; and / or (ii) recovery of stranded asset risks; and / or (iii) a forward looking margin squeeze test to discourage anti-competitive pricing by incumbents – and so on.

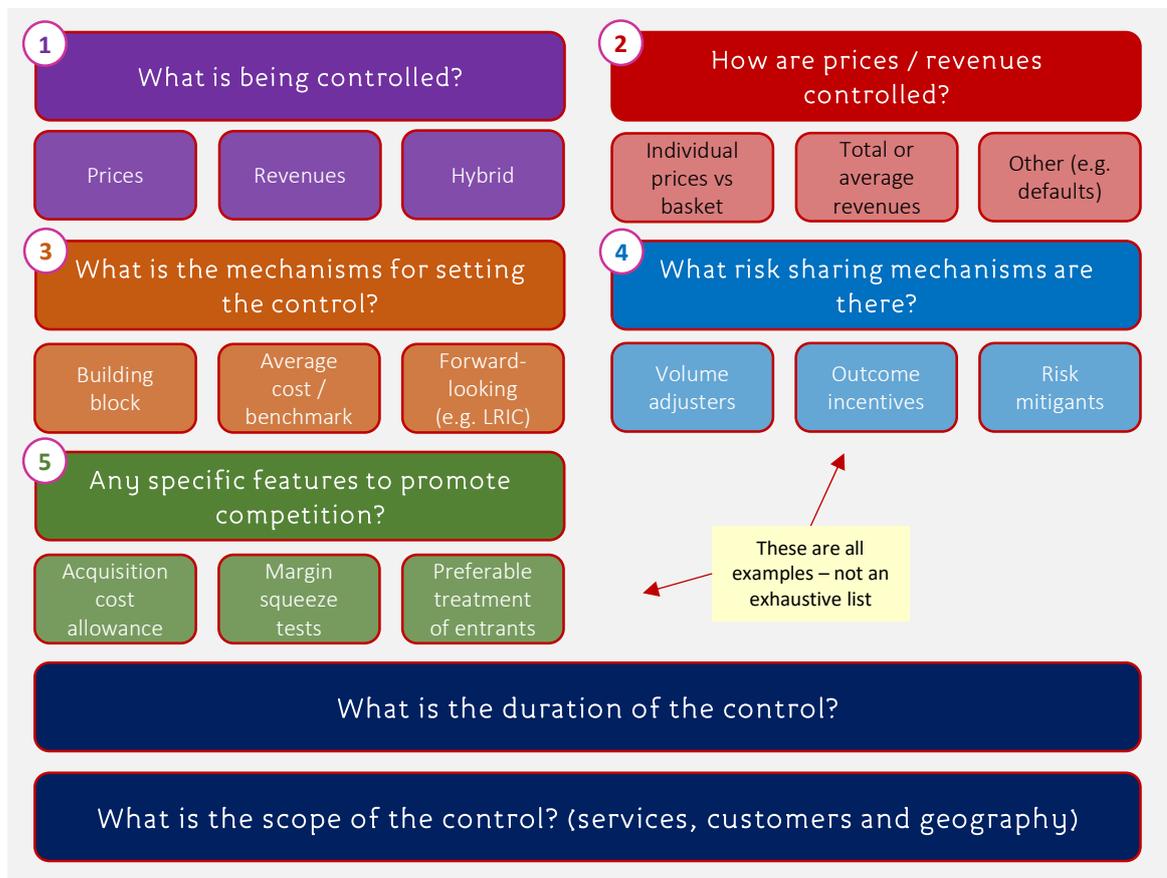
Cutting across the preceding issues, in determining the form of any retail control, a regulator will also need to determine:

- » **The scope of the control** – in relation to:
  - which **services** it applies to (i.e. in this case, the totality of retail household services, or a sub-set); and
  - which **customers** it applies to (i.e. all household customers, or just a subset – could its application differ across different customer groups?)
  - which **geographies** it applies to (i.e. is it national control, or separate for each regional company?)
- » **The duration of the control** – that is to say, how many years should prices / revenues etc be set at the time of the control?

Closely related to the form of control, one would also expect Ofwat to have to consider what **service provisions or standards** might need to stipulated, in light of potential market opening.

The figure below illustrates our definition of ‘form of control.’

Figure 6: the dimensions of ‘form of control’



With regard to the form of control, the key point to emphasise is that there is a wide spectrum of available options. These include, on one end, having no control at all (or perhaps a light touch control based on default tariffs and / or with a limited scope, applying only to certain customers); through to a much more pervasive price control regulation.

At a more fundamental level, the ‘appropriate’ form of control in the dimensions we have identified will primarily depend on the extent (and speed) to which competition is expected to develop - and the likely benefits it could bring. This, in turn, rests on a detailed assessment of supply and demand side factors (although we think that in relation to retail water markets, the demand side should be the primary focus).

In other words, the key issues that need to be addressed in order to determine the costs and benefits of extending retail competition to household customers in the first place are the same issues relevant to determining the form of any retail household control. These, of course, require careful consideration – informed by a detailed and transparent evaluation of the relevant evidence, which is the purpose of Ofwat’s review.

In the following, therefore, rather than simply discussing the supply and demand side of water retail markets in broad terms – **we have instead identified a number of more specific issues** that we think will also need to be addressed in determining any form of control.

In doing so, we do not draw any firm conclusions as to what the form of any retail household control should be (as this requires further work). Rather, **the objective is to highlight the factors we think should taken into consideration during the evaluation of that evidence.**

### 3.3. The key issues that need to be considered

In the following we set out our views in relation to seven specific issues that we think will need to be addressed in determining the appropriate form of any future retail household price control. As noted previously, the context in which these have been framed is one where we assume a decision is taken that retail competition will be extended to include household customers. The issues we have identified are:

- there is relationship between regulated prices and competition;

- whether and how to reflect the likely need to invest in brand in order to acquire and retain customers;
- whether any approach should be ‘national’ in scope or should be applied regionally (i.e. by company);
- the need to balance pricing flexibility against customer bill incidence;
- the duration of any control will need to reflect both the likely timing of market opening and the speed at which competition could develop;
- interactions with the non-household retail market; and
- the fact that market development is more likely to be driven by the extent of customer engagement – not supply side considerations.

#### Issue 1: there is a relationship between regulated prices and competition

In regulated markets where this is, or there is the prospect of, competition, it is important to understand the relationship between regulated price levels and competition. In particular:

- » If regulated prices are set too close to the short-run efficient costs of supply, there is unlikely to be a sufficiently strong incentive for firms to enter or expand in the market – or indeed, sufficient benefit to customers for them to engage in the market.
- » On the other hand, if prices are set sufficiently above short-run costs (and ideally are consistent with long-run efficient supply costs) this should generate incentives for retailers to enter and complete in the market – and equally, incentives for customer to engage and either move off regulated tariffs or switch supplier. In turn, this should result in:
  - higher service levels;
  - lower prices in the long run; and
  - increased investment and innovation.

Of course, in practice no regulatory price control will *precisely* deliver the intended incentives. Imperfect information means that one could never set prices exactly equal to the “true” efficient long-run cost of supply. However, the critical point is that – in a market where a regulator determines that there *could* be effective competition, the consequence of setting prices “too low” is that competition never develops in the first place, but the costs of regulation remain. Whereas, the consequences of setting prices “too high” might be a temporary overcharge to customers, but the stronger incentives for entry should result in that being completed away (and, importantly, if that were not the case, *it would seem to call into question*

*more fundamentally the assessment that the market should be opened to competition in the first place).*

Put simply, therefore, the consumer welfare loss of setting prices “too low” is likely to outweigh the welfare loss of setting prices “too high” at the time of market opening. This issue is recognised in the academic literature, and was also explicitly recognised by the IPART in Australia when setting the electricity retail control for 2013-2016 in New South Wales.<sup>25</sup>

“ *The consumer welfare loss of setting prices “too low” is likely to outweigh the welfare loss of setting prices “too high” at the time of market opening.* ”

In thinking through the practical implications of the above, one would also need to consider: (i) whether there are any ‘in principle’ reasons to suppose that prices set under the prevailing regulatory approach might be below the long-run efficient cost of supply in a competitive market; and (ii) what evidence and analysis could be developed in order to inform this.

Relating the above back to our ‘form of control’ framework, this issue is most relevant to determining **the ‘mechanism’ for setting any control**. That is, irrespective of whether any control relates to ‘prices’ or ‘revenues’ and so on, Ofwat will need to determine the detail of how any control is calculated – and within this, cost assessment will be a core component. The issue we are raising here goes to what the appropriate ‘philosophy’ should be in assessing cost in the context of opening the retail household market to competition.

## Issue 2: whether and how to reflect the likely need to invest in brand in order to acquire and retain customers

The retail part of the water and wastewater supply chain is typically characterised as being ‘asset light.’ This is clearly the case when considered in terms of tangible assets, and also (in the case of household) the prevailing monopoly model of supply.

However, for a competitive market to function, retailers will clearly need to incur costs in order to drive customer acquisition and retention. From an economics perspective, these costs are arguably a form of brand investment. What is important, however, is that:

- these costs by definition *have not existed historically*, because marketing of this kind is not required when there is only a monopoly supplier;
- as a consequence of the above, there is no explicit allowance for such costs within the prevailing regulatory approach; and
- in a competitive market, retailers will need to be able to recover these costs in order for entry and participation in the market to be viable.

The above has a number of important implications for Ofwat, as it considers the appropriate form of control. Specifically:

- » **Ofwat will need to determine whether an explicit allowance for such costs is required.** For example, whilst for the reasons set out previously, recovery of these costs is essential for market participants, Ofwat could take the view that the prevailing levels of allowed costs for incumbents are sufficient to enable this. This argument would seem to rest on incumbents being *sufficiently inefficient* such that existing ‘allowed costs’ are enough for an efficient retailer to invest in marketing (one might consider this broadly analogous to the argument Ofwat made not to automatically allow for retail inflation at PR14). On the other hand, if existing allowed costs were not sufficient to allow an efficient operator to recover investment in marketing, then some form of allowance would seem to be appropriate.
- » **Determining the above is a matter of evidence.** That is to say, it would not be appropriate to simply ‘assert’ that incumbents are so inefficient that the recovery of marketing costs can be assumed away. Rather, we would suggest that: (i) evidence and analysis is developed to examine the likely size of marketing costs; and (ii) these are

<sup>25</sup> *‘Review of regulated retail prices and charges for electricity: From 1 July 2013 to 30 June 2016.’ IPART (2013).*

then compared against Ofwat's assessment of efficiency.

- » **The mechanism for allowing recovery of marketing costs will need consideration.** If it is appropriate to allow for marketing costs, then the next issue would be to determine 'how' this should be done in practice. The options would in part depend on other aspects of the form of control – but are likely to include: (i) treating these as allowed opex; (ii) capitalising so that they become part of any retail asset base on which a return is earned; and / or (iii) including them in a net retail margin (i.e. if the retail household control was based on an allowed net margin, ensuring that this explicitly allowed for marketing costs to be recovered).

In practice, there are a number of examples where – in the context of developing competition – regulators have explicitly included marketing (typically customer acquisition and retention related) costs within their form of price control (as discussed in earlier sections of this report).

Customer acquisition and retention costs are also considered in the context of margin squeeze issues – both in a competition law and regulatory context. For example, in relation to the market for broadband local access, Ofcom set charge controls in relation to local loop unbundling, but allowed for pricing flexibility in relation to virtual unbundled local access (VULA) products. However, following the EC's 2013 costing and non-discrimination recommendation<sup>26</sup> regarding the promotion of competition in broadband investment, Ofcom set out an 'economic replicability test' (ERT) for VULA services. The goal of the ERT was to address the risk that competition for superfast broadband could be dampened, were BT to make use of its pricing freedom in an anti-competitive manner.

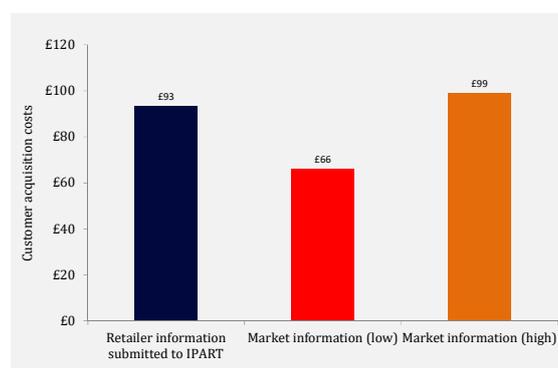
A key element of the ERT was Ofcom's proposal to require BT to set a 'minimum VULA margin' between its wholesale and retail price. Of relevance to this discussion, *the minimum margin explicitly included upfront customer acquisition costs.*<sup>27</sup>

Related to the above, another consideration for Ofwat would be that, even if any form of control did not

allow for relevant marketing costs, whether from a competition law perspective, this would lead to potential entrants raising margin squeeze complaints (due to the 'equally efficient' operator test).

Whilst companies do not typically publish customer acquisition costs, what evidence is available shows that they can be material in retail markets. For example – and as shown in the following chart – in the Australian electricity retail market, the IPART found direct acquisition costs to be between £66 and £99 per customer.<sup>28</sup>

**Figure 7: IPART estimates of customer acquisition costs**



Source: IPART: \$ Aus to £ sterling exchange rate of 2.055. Expressed in nominal terms, inflated from 2012/13 (as reported by the IPART) by average CPI

In addition, recent evidence by the Energy and Climate Change select committee (Feb 2015) found that comparison websites using their own comparison engines were paid commissions of £54-60 for dual fuel switches; and that those comparison sites that were white labelling another comparison engine were paid between £44-46 for each dual fuel switch.<sup>29</sup>

Other evidence suggests that customer acquisition costs can also be materially higher than those estimated by the IPART. For example, recent estimates of acquisition costs in the US car insurance

<sup>26</sup> Commission Recommendation of 11 September 2013 on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment (2013/466/EU); O.J L251, p.13.

<sup>27</sup> See EC letter 'Commission Decision concerning Case UK/2015/1692: Wholesale local access at a fixed location in the United Kingdom – Remedies.' C(2015) 992 final 13/02/2014.

<sup>28</sup> IPART figures show NPV of direct acquisition costs over 4 years using a discount rate of 9.7%. The IPART also allowed for indirect acquisition costs associated with price discounts given by retailers. Direct and indirect costs were ultimately converted into a \$ per MWH.

<sup>29</sup> See: <http://www.publications.parliament.uk/pa/cm201415/cmselect/cmenergy/899/89905.htm>

market are between \$487 and \$792 per customer (between £336 and £546 in sterling).<sup>30</sup>

In the water sector, **Ofwat could examine data on the number of customers acquired by entrants in the non-household retail market in Scotland** and the associated marketing costs incurred in order to acquire them.

Relating this back to our framework, potential allowances for marketing costs (customer acquisition / retention) is perhaps best characterised as a **mechanism to promote competition** within any form of control design.

### Issue 3: whether any approach should be 'national' in scope – or should vary geographically

Related to our first identified issue, any form of control would need to consider the balance between 'customer protection' and 'promoting competition.' Following from this, Ofwat will also need to consider the extent to which these aims are best served by either:

- a form of control that is set at a *national* level; or
- a form of control that is set at a *regional* level (i.e. by company).

Here, of course, it is important to recognise that, if controls were set separately across the companies, the *extent* of variation in allowed retail revenues would also be within Ofwat's control.

The appropriate approach mainly rests on whether the underlying (efficient) cost conditions of supplying water retail services to households are relatively common across geographies (which might tend to be more consistent with national models of market entry and supply); or rather, whether efficient supply costs vary by region. It is the supply side that matters most, because, from the demand side, it is not clear that geography would play any role in consumer purchasing decisions for retail services.

Following from the above – if one thought that cost conditions were most consistent with national supply, then one might be concerned that approaches that allow for material differences in regulated prices (retail revenues) by geography:

- were implicitly providing '*less protection*' to some customers than others; and / or
- were providing '*weaker entry incentives*' in some areas than others.

<sup>30</sup> Research by William Blair & Co. as reported in the Chicago Tribune '*Direct insurers paying less to attract customers.*' May 15 2015.

The second of the above issues would be a particularly important consideration where: (i) entry is most likely to be viable only a national basis; and (ii) the variation in entry incentives by geography created by any form of control is sufficient to undermine this (i.e. that a 'margin squeeze' would be created). In such circumstances, the prospects of market development could be undermined.

The practical implication of the above is that (if one believed that cost conditions were relatively common by region) approaches that result in material differences in '*total retail value*' per customer by geographic area may be of concern. In this context, it worth noting that the overall average revenue per customer in non-household implied by Ofwat's default tariff approach varies substantially from company to company – as shown in the following figure.

**Figure 8: Average non-household retail revenues per sewerage customer by WASC**



Source: Economic Insight analysis of Ofwat PR14 Final Determinations and company regulatory accounts

The above analysis (WASCs only) shows that average non-household retail revenue per customer for the 'highest company' (United Utilities) is £158, compared to £72 for the lowest (Wessex) – a difference of some 120%.<sup>31</sup>

Clearly, some of the above variation may reflect genuine differences in underlying (efficient) costs. Most obviously, those relating to bad debt which, as we discuss subsequently, may vary with the socio-economic makeup of customers, which in turn may be correlated with geography (i.e. company supply area). This, however, is a matter of degree – and we would note that:

- from a 'first principles' perspective, there are some good reasons to suppose that the market for household retail services in water would be

<sup>31</sup> The denominator is NHH customers billed for sewerage plus NHH voids for sewerage.

- 'national' in scope (i.e. other than bad debt related costs, most other cost variables would not seem to have an strong geographic dimension); and
- many other retail service industries (such as energy retail, insurance, retail banking and so on) typically have a number of *large national providers* – and equally, there are only limited examples of localised suppliers.

Given the above, the extent of the variation in (overall) average revenues in non-household would seem to call into question how consistent the regulatory approach is with a national market definition.<sup>32</sup> When thinking about the appropriate approach for any form of control for retail household – this would seem to point to a need to undertake a careful assessment of: (i) the extent to which (efficient) retail costs genuinely vary by geography; and (ii) given any variation, whether a 'national' or 'localised' approach is more likely to create the appropriate incentives for competition, whilst balancing customer protection.

An important point to highlight here is that, a finding that there is *some* regional variation in efficient costs (such as those relating to bad debt, for example) would not necessarily indicate that a regional form of control was most appropriate. For example, if in totality the evidence still pointed towards incumbent firms (and entrants) serving the market on a national basis, then one would expect the form of control to reflect this. In this case – Ofwat could set a single (national) regulated price based on:

- » The 'highest cost' provider (or upper quartile cost – or similar). This would make most sense if, due to uncertainties in estimating the 'true' efficient cost of supply, one wished to ensure that the form of control allowed for sufficient headroom so that entrants could profitably serve customers in all regions.
- » The 'lowest cost' provider (or lower quartile cost or similar). This would make most sense if there was greater certainty around the 'efficient' cost of supply, so that Ofwat could be more precisely balance the 'customer protection' objective against promoting competition.

Whilst this issue is, by definition, primarily one of the **scope of any price control** – it also has implications for the decisions Ofwat may have to take around: (i)

**how prices /revenues are being controlled;** and (ii) the detailed **mechanisms for controlling them.**

This is because the choices Ofwat will make regarding the latter two issues will fundamentally determine the extent to which, in practice, the form of control results in differing levels of customer protection by geographic area.

#### Issue 4: the need balance pricing flexibility against customer bill incidence

Closely related to the previous discussion is the wider issue associated with balancing pricing flexibility and bill incidence effects under any form of control. Here it is important to understand that, whilst the market is likely to be national in scope, this does not imply that one would not expect to see variations in pricing as the market develops. Rather, it just means that the extent of any variation *that is due solely to differences in supply costs by geography* are likely to be limited. However, prices could still vary more materially in other dimensions due to:

- » **Differences in customer preferences and willingness to pay** – which could: (i) vary by different customer segments; and (ii) which could result in some geographic variations in price if there were systematic differences in the mix of customer by geography.
- » **Differences in the cost (including risk profile) of supplying different customer groups.** It could be that certain retail related costs – most obviously those relating to bad debt, but also potentially acquisition and retention costs, vary across different customer groups.

In a competitive retail market for household customers, one would naturally expect pricing to develop in a way that revealed, and reflected, differences in demand and supply side factors. How material any price variation might be across customers will depend on the extent of the differences in these. However, all else equal, one would expect that allowing prices to reflect fundamentals would be most supportive of market development.

Balanced against the above, regulators are typically concerned about bill incidence effects arising from any regulatory reform. This might mean that, in considering the form of control, Ofwat will consider the likely extent of bill impacts (particularly for certain customer groups) and might attach weight to

<sup>32</sup> Note, it is important not to conflate this analysis with the question as to how companies should recover NHH revenues across individual tariff bands / groups of

customers – where one would naturally expect to observe a higher degree of variation.

forms of control that inherently limit incidence effects.

The key implications when considering the form of control for retail household are therefore:

- » That **Ofwat should not consider bill incidence impacts in isolation** – this is because any form of control that contains mechanisms designed to limit bill incidence are also likely to limit pricing flexibility.
- » Relatedly, by limiting pricing flexibility (where most likely this would relate to the scale of potential *price increases* for certain customers) **there is a risk that the scope for competition to develop will be reduced.** This is because, without being able to charge 'higher' prices to certain groups of customers, there will be insufficient value available to discount to other customers – potentially a key dimension needed to help motivate customer engagement and switching in the market. Clearly the above would depend on the 'extent' to which any form of control limited pricing flexibility.
- » **The appropriate lens through which to consider any incidence effect is the wider context of 'total bills.'** Specifically, we would suggest that it is important not to become unduly concerned with whether certain forms of control might result in large percentage increases or decreases in the *retail component of bills*. What matters to customers is the totality of their bill. In this context, it is clear that the scope for significant bill incidence effects, in £s terms, of any approach is likely to be limited.



*Bill incidence impacts under different forms of control should not be considered in isolation. If limiting incidence limits pricing freedom, it could reduce the scope for competition.*

The issues of bill incidence and pricing flexibility are most relevant to the question of **how prices / revenues are controlled** within any approach. That is to say, whether multiple individual prices are effectively being set, or whether a broader approach

(such as average revenues, of a broad set of default tariffs) is applied.

### **Issue 5: the duration of any control will need to reflect both the likely timing of market opening and the speed at which competition could develop**

As Ofwat made clear in its draft terms of reference for the review of retail household markets, decisions around any timetable for extending competition rest with the UK Government. As such, even if the retail household market is opened, it will not be for Ofwat to decide *when* this occurs.

However, given the likely lead times associated with designing any market – and putting in place the various infrastructure and tools required to support that market – it would seem likely that (even if Government did determine to open the market) the timing of this will not coincide with the start of PR19. Consequently, Ofwat might have to set a price control for detail household knowing that competition will begin at some point *during* the PR19 period. This would seem to imply that there could be merit in setting a **duration of control** to coincide with the expected market opening date, so that Ofwat retains flexibility to adapt its approach to take account of new evidence that emerges before opening.

Further to the above, the 'speed' at which Ofwat anticipates that competition could develop would also be a likely determining factor in setting the duration of control. In particular, should competition be expected to develop quickly, there would seem to be merit in Ofwat being able to adapt (or even remove) whatever forms of control / safeguards were originally put in place (perhaps pointing to shorter control durations). On the other hand, if competition is expected to develop more slowly, perhaps more weight should be placed on providing greater certainty associated a more stable regulatory approach over a longer period of time.

### **Issue 6: Interactions with the non-household retail market**

Another issue it seems likely will need to be considered is the extent to which the retail market for household customers interacts with the existing market for non-household customers. Here, the most pertinent matter would seem to be the extent to which it is likely that the same set of firms / entrants would choose to compete in both markets (which in turn will depend on how similar the underlying supply and demand side characteristics are).

To the extent that one expects the supply base to be relatively similar, there would seem to be advantages

to having a common approach to the form of control across the retail household and non-household markets. This is because differing approaches might undermine the viability of business strategies and forms of competition that could be welfare enhancing for customers by:

- making it harder for retailers to recover joint and common costs efficiently;
- artificially reducing pricing flexibility in a way that is inconsistent with supply and demand fundamentals; and / or
- creating greater regulatory complexity which could act as a deterrent to entry.

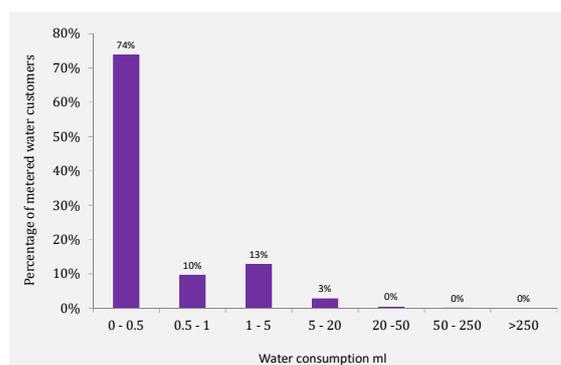
On the other hand, if one believed that the supply base for retail household markets could be quite different from that for non-household, different approaches to the form of control might be considered.

In practice, however, the vast majority of non-household customers are low volume and therefore are likely to have characteristics that are similar to household customers (from a retail service perspective). Therefore, this might indicate there being some rationale to applying a common approach.

The above point is illustrated by data published in Ofwat's recent consultation on the review of non-household retail controls, showing how metered non-household water customer numbers were distributed across company tariff bands.

As tariff boundaries differ considerably across the companies (some having many more tariff bands than others) it is not possible to show the overall distribution of customers for the industry as a whole on a consistent basis. Therefore, the following figure shows the distribution of metered non-household water customers for Thames Water (as its tariff bands are relatively granular). Here we can see that the majority of non-household water customers are low consumers of water.

**Figure 9: distribution of Thames Water's NHH metered water customers by consumption**



Source: Ofwat consultation on the review of non-household retail price controls

Finally, to the extent that one believes there are advantages in having a common regulatory approach across the household and non-household retail markets, this does not necessarily mean that the existing non-household approach is the *right* one.

### **Issue 7: Market development is more likely to be driven by the extent of customer engagement – not supply side considerations**

In our view, first principles are highly consistent with demand side factors, rather than supply side, being most important to determining the likely extent and speed at which competition could develop in the retail household market.

In summary, this is because there are generally few barriers to entry in retail markets – and a range of existing firms / suppliers that could actively participate in the market (meaning that green-field entry is not essential – although desirable). On the other hand, there are reasons to suppose that, on the demand side, customer engagement may be a concern given that: (i) the absolute value associated with the retail component of water bills will account for a very small proportion of household expenditure; and (ii) the scope for service differentiation does not, on face value, appear to be large.

“ *In designing any control, considerable weight should be put on how the approach impacts incentives for customers to engage in the market.* ”

Given the above, we would suggest that in designing any form of control, considerable weight should be put on how the approach impacts incentives for customers to engage in the market. This has direct implications for issues such as:

- the total amount of ‘value’ that is at stake in the first place – as determined by ‘how’ any regulated prices are set and, importantly, their level (note, here we are not talking about whether retail itself is ‘thick’ or ‘thin’ as discussed in Ofwat’s call for evidence – but rather, given any definition of retail, how much revenue is associated with it – for example: ‘how costs are allocated;’ ‘how efficiency is assessed;’ and ‘how returns are allowed for’);
- the complexity of any approach from the perspective of customers – where here the ‘mechanism’ by which any regulated / safeguard prices is perhaps less important – rather, issues like: the number of *regulated* prices, the scope of

- any control and so on, would seem to matter more; and
- the extent to which any approach allows firms to have flexible price and service offerings that respond to customer needs.

Clearly, customer engagement will also be a function of the broader regulatory framework and market design. For example, the ease with which any customer switching process functions. However, here we are primarily considering the narrow issue of how the form of control itself might impact engagement.

### 3.4. Summary of key messages

In the preceding we set out a number of specific issues that we think have important implications for the form of control that Ofwat might set in relation to the retail household market. In summary, the key messages arising from this are as follows:

- » **That the likely extent of competition is not independent of how Ofwat sets any regulated prices** – and from a customer welfare perspective, erring on the side of prices that are “too high” is likely to be superior to approaches that risk prices being “too low.”
- » **That in a competitive retail market, firms will need to invest in their brand through marketing** (primarily related to customer acquisition and retention). By definition, these activities – and their costs – have not arisen while retail has been a monopoly activity. So, how should this be reflected in any approach?
- » **That there is a need to carefully consider whether any form of control should be ‘national’ or ‘regional’** – while there are some grounds to suppose that firms would typically supply on a national basis, this is a matter of degree and requires evidence to be developed.
- » That any desire to limit **customer bill incidence effects must not be considered in isolation of the importance of pricing flexibility**, without which the scope for competition may be reduced.
- » **That there may be benefits to setting the duration of any control so that it coincides with market opening**; and / or it reflects the likely pace at which competition might develop, so that Ofwat can adapt to new evidence / circumstances.
- » To the extent that the supplier base for retail household is likely to be similar to that for non-household, there are likely to be **benefits in a common form of control across both markets**.

To do otherwise would risk undermining welfare enhancing models of competition and could deter entry. However, this does not mean that one should start from a presumption that the approach for non-household is the right one.

- » From a broader perspective, we think the demand side, rather than the supply side, is likely to be the main determinant of whether and how competition develops. Consequently, **in designing any form of control, Ofwat should be particularly mindful of how any proposals are likely to impact the extent of customer engagement** in the market. Approaches that risk undermining engagement would seem to be particularly undesirable.

**In the table overleaf we summarise how the above issues map to relevant regulatory precedent and evidence.** In addition to a consideration of these *specific issues*, the determination of any form of control more broadly rests on an assessment of issues relating to:

- » **The likely extent and speed at which competition could develop** – as this determines how “light touch” or “interventionist” any form of control should be. For example, where competition is expected to be more extensive, this would tend to point towards:
  - in relation to **“how”** controls are set, considering ‘default’ tariffs, or regulating ‘baskets’ of prices / overall average revenues, rather than having multiple regulated price points; and
  - in relation to the **“mechanisms”** for setting any controls, considering lighter touch approaches.
- » **The balance of risk** – where the overarching principle is that risk should be allocated to the party best placed to control / manage the risk. Here, one obvious consideration is that, as one would expect retailers to compete for customers, it would seem appropriate for companies to bear market share volume risk. In turn, this would point towards forms of control consistent with that outcome – such as average revenue type approaches.

The purpose of this report is not, however, to consider the above broader matters – as both will require the collection and assessment of evidence in detail over the coming months. Instead, here we have sought to draw attention to some more specific, but equally important, matters that will also require careful consideration, should Government decide to extend retail competition to household customers.

Table 1: Key issues, rationale and relevant regulatory precedent and evidence

Key issue	Economics rationale	Regulatory precedent / other evidence
<p>There is a relationship between regulated prices and competition (and the consumer welfare loss from prices that are “too high” is likely to be less than for prices that are “too low”).</p>	<p>On the supply side, prices set by a regulator determine the amount of headroom available to entrants – and therefore, the incentives for competition. Where effective competition can develop, prices that are too high result in customers being temporarily overcharged, until entrants compete prices down. Prices that are too low mean that competition never develops, but regulatory and market implementation costs persist.</p>	<p>The IPART’s approach to regulating electricity and gas retail prices explicitly recognised the balance between customer protection and promoting competition and the persistent nature of the welfare loss associated with competition never occurring.</p> <p>Offer’s approach to electricity retail in England and Wales also acknowledged the need to balance these aims – and that regulation was not intended to mirror competition.</p> <p>In relation to BT, Oftel and Ofcom recognised the risk that retail prices that were too low could give rise to margin squeeze.</p> <p>In the Scottish water retail market, the WICS has allowed gross retail margins to increase – arguably to help foster competition.</p> <p>Electricity retail in California provides an extreme example of the adverse consequences of setting retail prices that are ‘too low.’</p>
<p>Consideration needs to be given to as to how customer acquisition and retention costs will be recovered.</p>	<p>For a competitive market to function, retailers will incur marketing costs in order to drive customer acquisition and retention. As these have not been allowed for historically in regulated prices for (monopoly) incumbents, economics suggests an allowance may be required to create appropriate entry signals.</p>	<p>The IPART has explicitly allowed for customer acquisition and retention costs in its electricity retail controls.</p> <p>Similarly, Stephen Littlechild’s commentary on Offer’s approach to electricity retail in England and Wales suggests that customer acquisition costs incurred by entrants are greater than the customer retention costs of incumbents (and that this matter was a consideration for Offer).</p>
<p>There is a need to consider whether any form of control should be ‘national’ or ‘regional’ in scope.</p>	<p>Because depending on the evidence regarding the efficient costs of supply, one could inadvertently: (i) provide ‘too little’ or ‘too much’ customer protection in certain geographies; and / or (ii) could provide ‘too weak’ or ‘too strong’ incentives for entry, undermining market development.</p>	<p>Most retail service industries seem to be characterised by a small number of large, national, providers.</p>

<p><b>There is the need to balance pricing flexibility against customer bill incidence.</b></p>	<p>In a competitive retail market for household customers, we would expect pricing to develop in a way that revealed and reflected differences in demand and supply side factors. Prices could vary by differences in: (i) customer preferences and willingness to pay; (ii) the cost (including risk profile) of supplying different customer groups – which might be correlated with geography, even if geography itself is not the driver of the cost variation (e.g. bad debt).</p>	<p>Our evidence suggests regulators generally opt for average / weighted controls on a basket of services, as opposed to setting individual prices at a detailed, or prescriptive, level. This gives retailers flexibility to price individual services accordingly.</p>
<p><b>Duration of any control needs to reflect the likely timing of market opening and the speed at which competition could develop.</b></p>	<p>Duration gives regulators flexibility to take into account new evidence that emerges before opening. The anticipated speed at which competition develops is also important, as the duration of control impacts a regulator's ability to remove or amend regulation as markets evolve, or to provide more certainty where market development is slower.</p>	<p>Across the examples we have reviewed, regulators have often tied control duration to expected market development, often erring on the side of shorter controls. This includes: (i) the IPART setting 3 year controls for electricity and gas retail; (ii) Offer's electricity retail control being for just 2 years; and (iii) Ofel building in flexibility to move to RPI-0% within BT's 2002 fixed line control.</p>
<p><b>Importance of interactions with the non-household retail market.</b></p>	<p>Differing approaches to the form of controls across retail household and non-household markets may undermine the viability of business strategies and forms of competition that could be welfare enhancing.</p>	<p>Evidence would suggest that the vast majority of non-household customers are low volume and therefore are likely to exhibit similar characteristics to household customers.</p>
<p><b>The demand side of the household retail market are the most critical to the development of competition.</b></p>	<p>There are generally few barriers to entry in retail markets; and therefore a range of existing firms/ suppliers could actively enter and participate. However, customer engagement is a concern, as customers have not been able to participate in the market to date.</p>	<p>Regulators have recognised that their approach to the form of control (in terms of price 'levels', the number of price points and other aspects of regulatory design) can influence customer engagement. Therefore, regulators have given consideration to: (i) ensuring regulated prices aren't the cheapest on the market; (ii) limiting the number of regulated prices (but not the number of unregulated prices); and (iii) making use of non-price features, such as the use of price comparison websites.</p>

## Further Information Please Contact

**Sam Williams or Emma Souness**

e: [sam.williams@economic-insight.com](mailto:sam.williams@economic-insight.com)  
e: [emma.souness@economic-insight.com](mailto:emma.souness@economic-insight.com)  
t: +44 (0) 207 100 37 46

**Economic Insight Limited**

88 Wood Street  
London  
EC2V 7RS  
[www.economic-insight.com](http://www.economic-insight.com)

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