

Ofwat: Review of retail household markets in the water and wastewater sector - Call for evidence

Consultation response from the

Centre for Competition Policy

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Date: 16 February 2016

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This consultation response has been drafted by the named academic members of the Centre, who retain responsibility for its content.

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Response to Ofwat Call for Evidence re: Retail Household Markets¹

Introduction

The authors of this response (Deller and Hviid) welcome the opportunity to comment on Ofwat's review of retail household water and wastewater markets and to provide Ofwat with relevant evidence from the Centre for Competition Policy (CCP). This consultation response is split into four sections: (i) general comments on elements of the industrial context which Ofwat's scenarios might consider, (ii) general comments on the likelihood of introducing competition being beneficial, (iii) brief responses to questions contained in the call for evidence document, and (iv) a bibliography detailing research we believe to be relevant to the call for evidence.

At the outset the authors wish to state that our ability to provide detailed and informed comments on the issue of retail household markets is limited by the breadth of the call for evidence, the lack of detailed scenarios for introducing competition and the timeframe. Given the speed with which Ofwat is expected to assess the options, these features of the call appear inevitable.

General Comments – Setting the Industry Context for Household Retail Competition

When determining the scenarios it will investigate as part of its review, Ofwat must address whether the current industry structure is fixed or something that might be fundamentally altered to maximise the effectiveness of household retail competition. Indeed, a casual review of the economics literature on water provision does not reveal a great interest in considering the implications of household retail competition. Instead, the emphasis of the literature suggests that the greatest efficiency gains from introducing 'markets' relate to (i) the trading of limited water resources at the wholesale level², and (ii) introducing a price signal through water metering to reduce consumption.

Core elements of the water industry that are likely to have a strong influence on the desirability and optimal structure of retail water markets for households include:

- (i) Compulsory roll-out of water meters to all household consumers
- (ii) Whether water provision and wastewater disposal are a single or separate product(s)/market(s)
- (iii) Additional/stronger vertical separation of the water supply chain
- (iv) Creation of a single 'national grid' for the water network
- (v) Franchising vertically integrated and geographically separate water supply areas³

These parameters vary significantly in their radicalness and plausibility of implementation; nevertheless, it seems important for Ofwat to state clearly why certain options are 'on the table' and other options are 'off the table'. If these 'higher level' options are not considered and evaluated, there is the potential that the piecemeal introduction of competition into different aspects of the water sector may not lead to a 'first best' industrial/market structure. Similarly, understanding different industrial structures and their merits/weaknesses may help to identify risks and opportunities associated with introducing household retail competition within the confines of the current industry structure.

¹ The authors' understanding of the water sector has been aided by an ongoing series of formal and informal discussions with Anglian Water.

² See Foellmi and Meister (2012) for references to the academic literature on water trading.

³ Foellmi and Meister (2012) note that in France and Italy franchising has been chosen for water provision with competition occurring *for* the market rather than *in* the market. They also note that the German Monopoly Commission recommended the application of franchise bidding to improve the efficiency of water supply.

Of the elements laid out above, (i) and (ii) seem the most pressing for Ofwat to address. The authors expect that in (ii) the preferred outcome is for water and wastewater to be treated as a single product. The authors suggest this for two reasons: firstly, we would expect significant economies and co-ordination benefits from combined provision and, secondly, two separate markets would significantly increase the complexity and costs of engagement for consumers.

Undoubtedly, the decision about (i) is the most important in determining the scenarios considered in Ofwat's review and the likely outcomes of competition. A basic element of consumer choice in markets for products with a non-trivial marginal cost of supply, whether regulated or unregulated, is that there is a cost associated with increased consumption for consumers. To introduce retail competition in water for all households in the absence of compulsory metering would imply a version of competition in the UK water sector that would be 'exceptional'. The operation of the current 'optional' metering system in the UK is already described as "unusual" by Waddams and Clayton (2010)⁴ and has specific efficiency and distributional implications⁵. Given the distributional implications, the authors believe that the introduction of compulsory metering is an inherently political decision. However, the role of metering in generating a market where consumers experience conventional price signals leads us to conclude that Ofwat should include metering in the scenarios that they consider. This could be done in one of two ways: (a) considering the impact of household retail competition in combination with the roll out of compulsory metering, or (b) restricting the roll out of household retail competition to households with meters.

The authors note that the absence of metering does not necessarily preclude retail competition, with the Cave review making this very point⁶, however, it would make the retail competition being proposed 'non-standard'. To consider retail competition in the absence of metering has two clear consequences for the Ofwat review: (i) Ofwat will have to be particularly detailed in specifying what competition without metering looks like, and (ii) much of the existing theoretical and empirical results regarding the benefits of competition may not be directly applicable to this scenario. Both of these points suggest that the expected outcomes of a scenario(s) involving retail competition in the absence of metering will be subject to greater uncertainty than an equivalent scenario(s) where metering exists.

If retail household competition is to be introduced for *all* consumers, regardless of their metering type, it seems necessary to investigate two linked, but distinct, competitive markets: the market for unmetered consumers and the market for metered consumers. The challenge for Ofwat is that despite these being separate markets, firm and consumer behaviour in one market is likely to impact on the operation of the other market. Issues which may arise in a world of retail competition and partial metering could include:

- Firms who make losses due to incorrectly estimating demand in the unmetered market attempting to recover losses in the metered market.
- A majority of firms choosing to focus on only the metered market or only the unmetered market.

⁴ See the fourth paragraph on pg11 of Waddams and Clayton (2010).

⁵ Cowan (2009) uses a theoretical model to highlight that for the self-selection of water metering to be efficient it must be only households with a high price elasticity of demand that adopt water meters. Due to the requirement that consumers 'self-select' it may not be possible to construct incentives that achieve this 'first-best' outcome in all circumstances.

⁶ See paragraph 5.15 on pg 79 where it states: "The analysis highlights that retail competition can be introduced whilst maintaining tariffs differentiated by rateable value and geographic averaging."

- Altered incentives for meter adoption, if the increased adoption of water meters is deemed a long-term policy objective.
- Charges of unfairness if the introduction of competition lowers prices by a greater extent in the unmetered market⁷, causing those with meters to feel trapped on higher prices (assuming they cannot switch to unmetered access).

Putting the linkage between metered and unmetered markets to one side, the authors can envisage two ways that competition for unmetered consumers might work. In the first scenario, there could be auctions to provide retail services to different blocks of consumers. These 'blocks' of consumers could be based on their geographical location or possibly their common characteristics. By grouping a large number of consumers together one might hope that variations in consumption by individual households would be averaged out thereby limiting the risk borne by firms. In this scenario the design of the auction process selecting the 'winning' firm would need to be considered carefully as it would be a core determinant of the outcome of this form of competition. Another major consideration is the granularity at which water usage is recorded in unmetered areas as this is likely to constrain the size of the blocks that are auctioned. If this is a scenario that Ofwat wishes to evaluate, it should consult the literature on franchise auctions, the small number of academic papers that look at collective switching schemes⁸, and the experiences of other regulators regarding each of these mechanisms.

The second, riskier, scenario that the authors can envisage is where there is competition for individual unmetered customers with the price charged being based on 'observable' characteristics that correlate with individual households' water consumption. The authors view this scenario as riskier as the pricing strategy of firms will have to be based on estimations of demand and, if a company's estimates were wrong, the firm might incur losses very rapidly and have a high risk of failure. The other challenge with this scenario is where companies would obtain informative data to estimate the demand of unmetered households? To estimate demand accurately firms would need usage data from comparable households who had a meter installed to monitor their usage but were charged a flat fee for their water.⁹ Data from households who already have a meter installed is likely to be a poor predictor of water demand for unmetered households, unless demand for water is exceptionally inelastic, since metered households pay a price for increased consumption. Also, as non-new-build households have to opt-in to metering we might expect the characteristics and behaviour of metered households to be systematically different to those of households that chose to remain unmetered. Related points are made by Waddams and Clayton (2010)¹⁰ who note that, as of 2010, very little work had been undertaken to estimate price elasticities in the UK water sector.

⁷ If competition in the unmetered market involves a centralised auction mechanism to decide the firm supplying particular blocks of consumers, it seems plausible that there would be greater pricing pressure in the unmetered market than in the metered market, if the latter relied on the actions of individual consumers.

⁸ Deller et al (2014) considers the behaviour of consumers in 'The Big Switch' a collective switch organised by Which? in the UK energy market. Crucially, this was an 'opt-in' collective switch where consumers had to make an active decision to take part; an 'opt-in' structure inevitably limits the proportion of consumers who take part and the proportion who actually switch. The limited effectiveness of 'opt-in' collective switches in the UK energy market is highlighted in DECC (2013). We imagine that the auction of consumer blocks in the water market would be similar to the alternative format of 'opt-out' collective switches where consumers are automatically enrolled in the scheme unless they choose to opt out. Littlechild (2008) looks at the operation such a scheme in the Ohio energy market and highlights the challenges in Ohio's particular regulatory setting.

⁹ Ideally the monitoring of their water usage would be hidden from these households as simply the knowledge that someone was recording their water usage might lead to a drop in consumption.

¹⁰ See pg12.

General Comments – the Likelihood of Competition Being Beneficial

While CCP generally believes that competition is a good thing that delivers substantial and demonstrable benefits to society in terms of cost reduction, lower prices, improved customer service and, potentially, increased innovation, it is not automatic that all these benefits will be delivered in all scenarios. The authors are currently rather sceptical about the introduction of retail household competition in the water sector delivering substantial benefits to household consumers. Indeed, the authors feel that there is a significant risk that competition in the household water market will come to be seen as another ‘problem market’, alongside the energy and current account markets. Not only does a market judged as ‘failing’ have negative political consequences, the politicisation of the market may lead to badly designed and ‘kneejerk’ policy interventions. Additionally, a ‘failure’ of the market in the water sector may have the negative spill-over of reducing citizens’ general confidence in, and enthusiasm for, business, markets and competition.

The authors’ scepticism regarding the ability of water retail competition to deliver significant benefits to household consumers is based on the consideration of two points:

- (i) If retail competition results in significant pricing pressure, what is the scope for this pressure to induce significant efficiency gains in the water supply chain?
- (ii) What is the probability that retail competition generates significant pricing pressure?

We consider each of these points in turn. Regarding point (ii), CCP has substantial expertise and can provide considerable evidence on consumer behaviour from other UK utility markets, in particular, the retail energy market.

The Potential for Efficiency Gains

Even if the water sector overall is considered inefficient (the authors do not take a view on this), it is not automatic that introducing retail competition will drive significant efficiency gains. The potential for efficiency gains lies at two levels: (i) in the delivery of retail services themselves, or (ii) further upstream. On the basis that water bills average around £400¹¹ and one assumes a retail operating margin of 10%¹², and in the unlikely event that this operating margin was competed away in its entirety, the upper bound for the direct saving to an average household from retail competition is £40 per annum. As will be discussed in the following sub-section, the authors question whether the majority of consumers, if they act independently, will capture this efficiency gain even if it could be realised.

The second possible mechanism for efficiency gains is that water retailing firms who face pricing pressure in the household retail market will have an incentive to place pricing pressure on upstream elements of the water supply chain. Here a critical question is to understand the proportion of the upstream water cost base that will plausibly be open to commercial pricing pressure. Intuitively, the current structure of the water industry in the UK seems to offer far less potential for plausible efficiency gains than, say, the energy market. If the largest portion of costs in the water sector is attributable to its transportation, then retail competition is unlikely to drive significant efficiency gains since the water network itself is a natural monopoly and is likely to remain heavily regulated. Taking

¹¹ The article ‘See how far water bills will fall in your area’ by Kate Palmer in ‘The Telegraph’ on 11 February 2015 reports the average water bill to be £385. The article is available at: <http://www.telegraph.co.uk/finance/personalfinance/household-bills/11400370/See-how-far-water-bills-will-fall-in-your-area.html>

¹² This is purely an example operating margin, rather than being based on solid information, however, it seems to be one of a plausible magnitude. The arguments contained in this response would not change substantially if the actual operating margin was 5% or 15%.

a step upwards from the water transport network is what one might term 'clean water production', i.e. the extraction, storage and treatment of water. Again it seems likely that many of the costs of clean water production are fixed exogenously by decisions taken by environmental and health regulators regarding water quality.

From an intuitive perspective the extraction, storage and treatment of water all seem simpler and less capital intensive tasks than large-scale power generation.¹³ If these tasks are simpler to organise and less capital intensive (at the level of individual production units) than in power generation, it suggests fewer efficiency gains can result from the introduction of competitive pressure. Also, for pricing pressure in the retail household water market to drive efficiency in clean water production there needs to be a choice of clean water suppliers for the retail water suppliers. At present, this choice, at least with respect to water treatment and storage facilities, appears to be lacking as treatment and storage facilities are vertically integrated with the transportation network. While entry might be possible, one might question the probability of this occurring (due to the regional structure of water supply networks), and the desirability of this fragmentation, if externalities exist and property rights are unclear. Also, the current regional separation of water supply networks and existence of regional water supply companies seem to be ideal conditions to enable tacit collusion in the clean water production sector.¹⁴

One point made by Waddams and Clayton (2010) is that, if there is retail competition for large water users, but the household water market remains regulated, there is an incentive for water suppliers to shift costs towards the regulated household sector thereby raising household water prices. While this may be true, it is not automatic that the introduction of retail competition into the household water sector would resolve this problem. Firms with full freedom to set prices tend to price discriminate between consumers with substantially different price elasticities of demand. As we discuss in the sub-section below, it is likely that many (most) household consumers will be 'sticky' and, hence, one would still expect to see household consumers being charged relatively higher prices than commercial users.

The Likelihood of Retail Competition Generating Pricing Pressure

While the comments on the likelihood of upstream efficiency gains are based on the authors' intuitive understanding of the water sector, our scepticism towards households, taken as a whole, exerting substantial pricing pressure on water supply firms is based on a substantial body of empirical evidence from CCP's research programme. Based on this research, and the extensive market research performed by utility regulators and the CMA, it seems probable that a retail household water market would separate into: a small highly competitive market for 'rate tarts' and a much larger 'stagnant' market for the majority of households who do not engage with the market.¹⁵ As we will outline below, there are particular reasons why we think competition in the household water market may face greater challenges than even in the current account or domestic energy markets. Given the high likelihood of non-engagement by many consumers, one possibility for effective competition that delivers benefits to all consumers is if a centralised auction process occurred where water retailers bid to supply blocks of consumers in a process similar to an opt-out collective switching scheme. Such a scheme would take a similar form to our first suggestion for how competition for unmetered

¹³ The operation of desalination plants may be an exception due to the substantial energy inputs required.

¹⁴ Note that a key driver of early competition in the liberalised retail energy market was the presence of a national competitor, British Gas, who had an incentive to challenge all regional incumbents within their home regions through competitively priced 'dual fuel' deals.

¹⁵ This is the essence of the CMA's concerns regarding the effectiveness of consumer response and competition in the UK energy market.

consumers might work (described above), although, now auctions would take place for both metered and unmetered consumers.¹⁶

CCP has conducted considerable research using surveys and commercial data to understand consumer behaviour in regulated markets. The core results from this research can be summarised as the following:

1. The size of monetary savings is consistently a core driver of consumer switching, although, the presence of substantial monetary savings does not guarantee consumers will switch
2. The level of switching varies systematically across different types of consumers
3. Consumers may make 'mistakes' regarding the tariff they choose so they pay more than they have to, although, through learning, these mistakes tend to diminish through time.

Monetary Savings and Switching Behaviour The importance of monetary savings as a central drive of consumer switching is demonstrated in the following CCP research outputs: Waddams Price and Zhu (2016), Deller et al (2014), Flores and Waddams Price (2013) and Giulietti, Waddams Price and Waterson (2005). Point 1 is the main reason why the authors question the effectiveness of retail water competition for households; the maximum monetary savings to an average water consumer appear substantially smaller than in either the banking or energy markets, markets which are often commonly labelled as having 'worryingly low switching rates'. As discussed above, a plausible upper bound on the potential savings available to an average water consumer from retail competition is £40 which is substantially below both the £100 often cited by banks as being required to generate consumer switching and the amounts we record being 'left on the table' in the energy market.

That large monetary savings by themselves are insufficient to guarantee switching is clearly illustrated by Deller et al (2014) who studied a collective switching event in the UK energy market entitled 'The Big Switch' (TBS). Aggregated across all participants in TBS, the maximum switching rate reached only around 43% even when consumers were offered annual savings of more than £300 (see Figure 1 below).¹⁷ A similar result is obtained when annual savings are expressed in percentage rather than absolute terms: a saving of 20-25% of a participant's bill was associated with a maximum switching rate of around 41%.¹⁸ These results are particularly striking given consumers receiving an offer in TBS had already expended some effort to provide their full energy details, and were expecting to receive to an offer which required little further action to accept. As TBS was linked to Which?, the UK consumer association, we also expect that those who took part are likely to be more informed and engaged than an 'average' consumer. That the raw switching rates are 'low' even when 'active' consumers are shown large savings suggests that even if water retail competition evolved into a

¹⁶ Given the differing characteristics and behaviour of metered and unmetered households, it would seem likely that holding separate auctions for metered and unmetered households would be necessary/desirable.

¹⁷ It is possible some additional switching went unrecorded where TBS prompted consumers to consider switching but the consumer completed their switch outside TBS systems. However, other evidence we have gathered indicates that this unrecorded switching would raise the maximum switching rates observed by no more than around 15 percentage points and probably by a considerably smaller margin.

¹⁸ A core purpose of Deller et al (2014) is to identify and quantify other factors, beyond monetary savings, which deter or encourage switching. Deller et al find that a wide range of non-price factors influence the decision to switch even in the market for a homogenous good such as energy. These factors include: confidence in quoted savings, concerns about issues with the switching process, the presence of exit fees and other contractual barriers, preferences regarding firms' ethical and environmental behaviour, the motivations for taking part in TBS, time pressures at the point of making the switching decision and the demographic/socio-economic characteristics of households.

combined market for 'home services' (see discussion below) the plausible combined savings in this new market may not guarantee substantial switching.

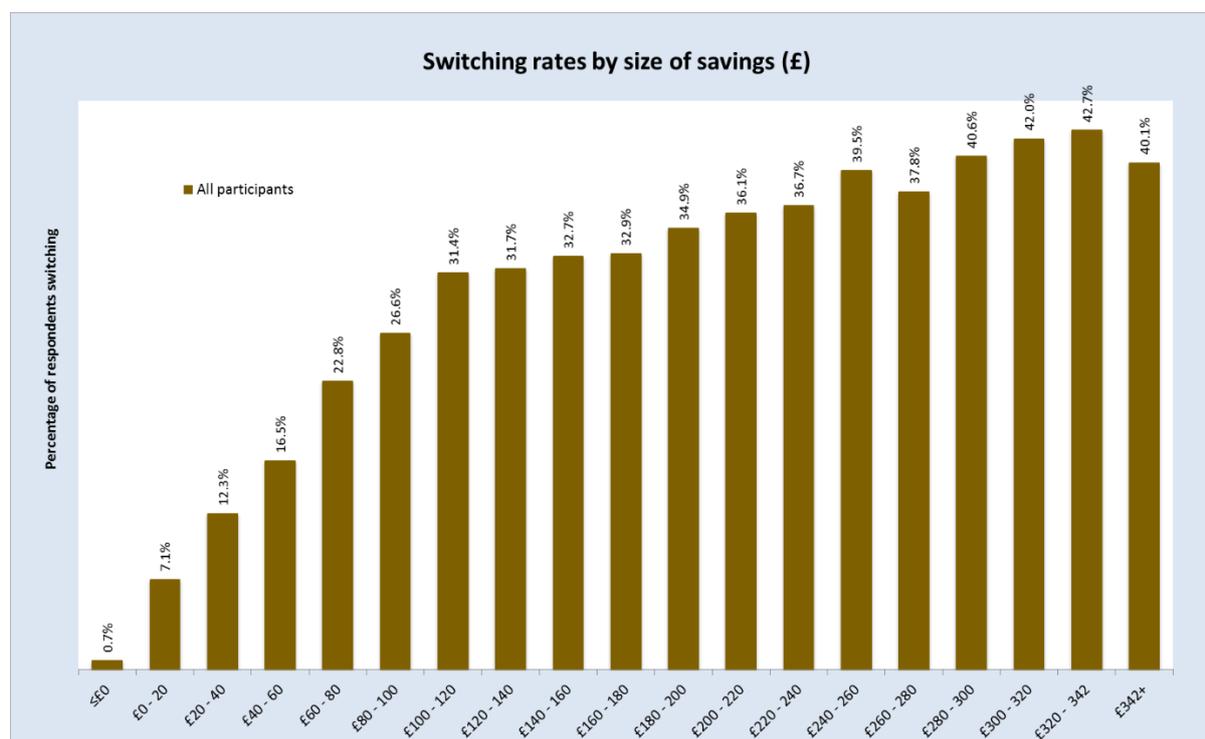


Figure 1: Switching rates for all participants in 'The Big Switch' broken down by the saving they were offered

For a rational consumer to consider switching, and therefore be a driver of competition, the expected gains¹⁹ from switching must exceed the expected costs. The expected costs take three main forms: (i) the opportunity cost of time spent searching for cheaper tariffs and actually completing a switch, (ii) contractual terms, such as exit fees, that impose costs and (iii) uncertainty regarding the quality of the new supplier. That engaging with a market imposes costs on consumers is key point that needs to be considered when evaluating different options for structuring the retail water market; two benefits of regulated prices or an 'opt out' collective switching system are that consumers do not incur the opportunity cost of engagement and the chosen mechanism does not rely on consumer engagement to be effective. Deller, Hviid and Waddams (2015) emphasise that consumer engagement with a market is at best an intermediate objective; the correct metric for assessing policy actions in regulated markets should be maximising (consumer) welfare.

Other Barriers to Switching Deller, Hviid and Waddams (2015) also notes that one might expect consumer engagement in regulated service sectors, such as water, to be lower than in other consumer facing product markets, such as supermarket food items, due to the reliance of the choice decision on written, frequently numerical, information. This is in contrast to decisions regarding most products in high street shops where a wide array of visual and other sensory inputs are available to aid decision making. Additionally, delayed consumption, consumption uncertainty and pricing uncertainty mean that consumer purchasing decisions for utility services are closer to the purchase of financial services than purchasing items in a supermarket. Furthermore, many citizens consider water to have a 'special'

¹⁹ Uncertainty about the likelihood of quoted savings being realised means that a consumer is substantially less likely to respond to a quoted saving of £40 than to a decision that is guaranteed to provide immediately £40 in cash.

status since it is essential to life. This means that many citizens may simply not consider the commoditisation of water and its treatment as a consumer product to be legitimate. While the authors cannot provide evidence on the proportion of citizens who take this view, it is likely that among those who hold this view engagement with the market will be lower as it induces various negative emotions.

Also, certain types of households may face additional barriers or disincentives to market engagement. For example, the CMA's Energy Market Investigation has identified that those living in rented accommodation may face extra barriers to participation in the energy market. These barriers may include: (i) a limited time period in a particular property (thereby limiting the expected gains from switching); (ii) difficulties identifying where the meter is located in a property; (iii) responsibility for utility bills resting with the landlord (an agency problem); and (iv) multiple tenants sharing joint responsibility for dealing with utility bills (a public good problem).

A Market for 'Home Services' While CCP's evidence suggests that an expected saving of £40 is unlikely to be sufficient to generate substantial engagement or switching by water consumers, there is one scenario where opening the household water sector to competition may have greater importance. This is if, rather than there being separate markets for water, energy and telecoms etc., a combined market for 'home services' emerges in the future. Here potential savings from household water competition may be important if, when combined with savings from other markets, the expected gain to a consumer is sufficient to induce a switch between home service providers. However, the importance of the water sector in such a scenario should not be overplayed since if water forms a small proportion of the total service cost, and a small proportion of total savings, the increase in switching *at the margin* which can be attributed to a competitive retail water sector is likely to be small. For example, if average savings available in the combined home services sector were £200, with £40 coming from the water sector, only those individuals unwilling to switch for £160 but willing to switch for £200, would change their behaviour due to water retailing being open to competition. Also, as indicated by Figure 1, even if expected savings of £200 or more were available it is not automatic that consumers would switch suppliers. Indeed, Figure 1 suggests that once monetary savings are above £100 increasing monetary savings further has only a limited impact on the raw switching rate.²⁰

Differences Across Consumers That different consumers respond in different ways to particular monetary savings is emphasised in Waddams Price and Zhu (2016) and Flores and Waddams Price (2013). After controlling for a full range of factors, Waddams Price and Zhu find a U-shaped relationship between age and propensity to switch, with the middle aged being least active. They also show that those on lower incomes are more likely to switch than those on higher incomes after controlling for other factors²¹, although, those on low incomes are not significantly more likely to search. Also, those on lower incomes were found to be less responsive to monetary gains, but more sensitive to the time spent on the process than higher income households. Similarly, those from lower educational backgrounds were found to be more responsive to expected monetary gains, and the time taken to switch was a greater deterrent to searching, than for higher educational groups. These results

²⁰ If the savings reported in Deller et al (2014) are expressed in terms of the percentage of a consumer's existing energy bill, the switching rate continues to increase at a fairly constant rate until consumers are shown savings of 20-25%.

²¹ This point should not be ignored. For example, even if being on a lower income itself is associated with a greater response to a particular expected saving, if the expected savings that this particular group receives are smaller than for those on higher incomes it may still be the case that the raw switching rate for those on low incomes is below that for those on higher incomes. That particular groups receive lower expected savings on average is one potential reason for why groups often perceived as 'vulnerable' are often observed as having raw switching rates which are lower than the average in market research reports published by UK sector regulators.

suggest that the introduction of competition for household water consumers will affect consumers in different, and potentially complex, ways. That different consumers respond to differing extents to the offers that they receive suggest that any potential benefits of water retail competition will be distributed unevenly across households.

Consumer Choice and ‘Mistakes’ The discussion above of why we might expect limited engagement and switching by consumers in a household retail water market is based on a fully rational model of consumer behaviour. In the past decade increasing attention has been given to behavioural economics and how consumers may not behave in ways that conform to a fully rational model of behaviour.²² A relevant example of these issues is the potential for consumers to make ‘mistakes’ when making purchasing decisions. If consumers make mistakes, it means that, even if good deals exist in a market, consumers may not be able to identify and secure them. Evidence of consumers consistently making mistakes would reduce the attractiveness of introducing household water competition. However, the evidence on this issue produced by CCP researchers is mixed. Wilson and Waddams Price (2010) report that among those UK energy consumers who switched exclusively for price reasons less than half of the total gains available were actually captured by switching consumers. Even more significantly, at least 17% of consumers actually reduced their monetary surplus after switching supplier. Wilson and Waddams Price perform calculations ruling out the possibilities of these findings resulting from consumers changing their beliefs about expected consumption or having a preference for particular types of tariffs.

In contrast, Ketcham et al (2012), who consider a radical change to US healthcare insurance, emphasise that, while consumers may initially make mistakes leading to overpayments, through learning these errors are reduced through time. Ketcham et al note that while many individuals appeared to overpay in the first year following the healthcare insurance change, in the second year many consumers switched supplier or reduced the amount by which they overpaid. ‘Overpaying’ in a new environment may result from rational individuals having incorrect expectations regarding future consumption rather than the consumers behaving in a non-rational manner. Similarly, Miravete and Palacios-Huerta (2014) find that when optional metering was introduced into the Kentucky telephone market in 1986 consumers again rapidly corrected initial mistakes regarding a simple tariff choice problem. As well as highlighting the econometric challenges of attempting to investigate ‘mistakes’ in a robust fashion, Miravete and Palacios-Huerta find that households learn at different rates: those households who faced a more challenging choice problem were more likely to make mistakes and took longer to correct them.

Additional Responses to Specific Questions

What are the advantages and disadvantages of extending competition to retail services in the water and sewerage sector to household customers? How could this best be achieved?

In the general comments above the authors outlined evidence and intuitions for why they believe that any benefits of retail water competition for household consumers are likely to be distributed unevenly since many consumers are likely to have a low level of engagement with the market. If a large proportion of consumers do not actively engage with the market, not only do these individual consumers potentially miss-out on gains, the ‘problem’ of limited competitive pressure to drive change and efficiencies in the wider water sector is created. Nevertheless, CCP has a long record of

²² For an overview of how behavioural economics influences competition and relates to consumer policy see the CCP book, ‘Behavioural Economics in Competition and Consumer Policy’ available to download at: <http://competitionpolicy.ac.uk/documents/8158338/8193541/CCP+economics+book+Final+digital+version+-+colour.pdf/30214557-cace-4b0b-8aac-a801bbde87bc>

demonstrating the general and significant benefits that can be attributed to competition within markets. A good summary of this material is provided by Davies et al (2004). Davies et al provide a series of UK case studies to highlight the benefits that can be attributed to competition. The case studies that Davies et al consider are: retail opticians' services, international telephone calls, the Net Book Agreement, passenger flights in Europe, new cars and replica football kits.

What scenarios for retail competition could be considered in Ofwat's analysis? What are the advantages and disadvantages of each for water and wastewater services for customers, the environment, wider society and investors?

The authors' general comments identify a number of elements of the water industry's structure which Ofwat may wish to vary when considering the scenarios it will investigate in-depth. The most important structural variable to consider in the competition scenarios is whether or not water metering for individual households will be compulsory or not.

Additionally, given the risk of a liberalised household water market coming to be seen as a 'problem market' akin to the retail banking and retail energy markets, it seems important for Ofwat to learn the emerging lessons of the CMA's investigations into these markets when constructing the 'preferred' scenario for introducing retail water competition. Additionally, it is essential that Ofwat remains fully abreast of the Department for Business, Innovation and Skills' efforts to establish common Switching Principles across regulated markets. When considering these Switching Principles, the authors advise Ofwat to also consider the consultation response of Deller, Hviid and Waddams (2015) which suggests that opportunities to increase consumer engagement and switching in these markets may be limited. At the core of Deller, Hviid and Waddams is the idea that rather than viewing low consumer engagement as a 'problem' it is probably a fully rational choice for the majority of consumers and, hence, the design of any utility market or regulatory mechanism needs to be robust to low consumer engagement.

With respect to potential competition scenarios used to support the analysis, what additional risks or opportunities should be captured in Ofwat's analysis? How should these be assessed? What would be necessary for each of the scenarios to be implemented successfully? Over what time period could implementation take place?

As noted in the authors' general comments, there are additional risks and the potential for unexpected results if retail competition is introduced for consumers without individual water meters. Since retail competition in this setting would be highly unusual, existing empirical evidence regarding the benefits of competition may have to be treated with caution and the uncertainty around any conclusions drawn by Ofwat would need to be highlighted.

Regarding the timing of implementation, the authors suggest that there could be significant benefits from taking a cautious and slow approach. The authors note that retail competition is in the process of being introduced for small commercial users in the water sector and the CMA's market investigations into the retail banking and retail energy markets are reaching their conclusion. An evidence-based approach to policy making would suggest it is sensible to wait a couple of years to identify the impact of the existing extension of retail competition in the water sector and to understand the outcomes of any interventions suggested by the CMA in the retail banking and energy markets.

Furthermore, there is an interesting question about whether introducing water retail competition for households at present is optimal in light of projected future water prices. This observation relates both to: (i) the likely politics of a newly liberalised market, and (ii) the establishment of consumer

norms regarding whether or not it is worth engaging with the retail water market. From purely a political perspective, and the promotion of markets as a 'good thing', it would seem attractive to a cynical policymaker to introduce competition when price projections predict a period of falling prices. If prices are falling and this coincides with market opening, political arguments can be made that suggest that market opening has *caused* the price drops, regardless of whether such a conclusion is warranted or not.

The more substantive benefit of introducing competition when prices are falling is that this should mean that when consumers first engage with the market they will be routinely encountering improved offers involving savings (compared to the previous year's bill) and so will feel motivated to take part in the market. If competition was introduced in a period of rising prices, while there may be relative savings between suppliers, the quotes based on consumers' previous consumption are likely to show expenditure increases compared to their previous year's bill. Consumer engagement may be lower in this latter environment as consumers may feel less satisfied with the offers they are receiving. Similarly, there is the risk that political arguments, rightly or wrongly, will suggest that the removal of regulation has *caused* the price increases.

The authors' understanding is that over the long term the costs of obtaining clean water are likely to rise, possibly considerably. In a world of high water costs it seems plausible that there will be greater cost differences between suppliers and possibly greater efficiency gains available meaning that switching suppliers could involve larger expected savings in a high cost world. If one believed that consumers were behavioural rather than fully rational, so that they were conditioned by their initial experiences of a new market, one might be concerned about introducing retail competition in a low cost environment prior to a shift to a high cost environment. The concern would be that behavioural consumers would be conditioned in the low cost environment into believing that the savings available in the water market are small and permanently disengage from the water market if the gains from switching were much higher in a high cost environment.

What are the interactions between household water retail and other markets in the water sector and beyond?

As noted above, allowing household water retail competition may have wider benefits if it stimulates additional switching and competition in any market for 'home services' which might emerge. However, as laid out in the general comments, the authors question the extent to which household water retail competition can drive efficiency gains in other parts of the water sector.

Where CCP research does demonstrate interactions is for individual consumers who engage with multiple markets. The research of Waddams Price and Zhu (2016) and Flores and Waddams Price (2013) find a positive association between switching in different sectors, i.e. if a consumer switches supplier in one market it is associated with the consumer being more likely to switch in other markets as well.²³ This suggests that the consumers who will capture gains by switching in a competitive water market are likely to be those who are already 'active', and have had positive experiences of engaging with other service markets. Also, it suggests that a possible risk of retail market opening in the water sector is that, if consumers have a bad experience of switching in the water sector, this could spill-over into reduced consumer engagement in other service markets.

²³ Although Flores and Waddams Price show that this effect is not present in all groups of consumers.

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