

Sustainability *first*

Engaged, or just good friends?

An exploration of retail electricity and gas pricing
and 'sticky customers'

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Discussion Paper

Preface

Sustainability First

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Executive summary

Electricity and gas customers are increasingly offered a range of options by energy suppliers. As well as different tariff options, customers may choose green or low-carbon tariffs, an offer from a smaller supplier, a dynamic approach involving demand-side response, and / or a local option from a local authority or a community energy provider. While increasing numbers of customers take-up such options, in practice it remains a minority who engage and benefit : many customers currently remain unable or unwilling to engage. This paper explores this question in relation to energy pricing, both now and for the future. The approach suggested is relevant to customer innovation and choice, and to the public interest more widely – including in relation to future low-carbon smart energy. These themes are also explored in other Sustainability First papers.

The idea that the majority of electricity and gas customers can be persuaded to become less ‘sticky’ and more engaged in their energy purchasing underpins both the CMA’s remedies following its investigation of the energy market and also the benefits from the smart meter roll out. This paper considers (1) today’s domestic electric and gas retail markets and (2) a future smart electricity market against a possible future where many domestic customers may remain ‘sticky’. The paper looks at what might be done to ensure fair pricing for all customers in such circumstances. It compares proposed approaches to market regulation, now and in the ‘smart’ world, by how far they each manage to meet two key objectives, proposed in the paper, as a means of testing that arrangements are fair to all customers. These are: (1) arrangements that encourage companies to price competitively and to innovate to meet the changing needs of the market, and (2) avoidance of particularly unfair pricing for any domestic customer. The paper examines the impact of these approaches in terms of how they affect three groups of customers: those willing and able to engage, those able but unwilling to engage, and those unable to engage.

So far as today’s market is concerned, the paper reviews the CMA’s remedies and a number of alternative approaches suggested by commentators. It concludes that, whilst no approach is perfect in addressing the objectives we have set, the solution that goes furthest to meeting both of these proposed objectives is one where, when suppliers change the price of their standard variable tariff (SVT), they are also required to publish for use by commentators their estimated margin on this tariff (as proposed by Professor Dieter Helm), and also publish and make available to price comparison sites the date from which the SVT applies.

Part 2 of this paper explores several approaches to future retail tariff development in a ‘smart’ electricity world. These approaches align with our two objectives for addressing customer inertia and ‘stickiness’ in today’s non-smart world. This is key. Without active customer engagement, we will struggle to deliver an efficient low-carbon energy system.

1. Introduction

The remedies proposed by the Competition and Markets Authority in its final report of its energy market investigation¹ have provoked much debate. The CMA has carried out much worthwhile analysis and listened to a wide range of stakeholders. But why has it been so difficult to find solutions that adequately meet the needs of all domestic energy users, whether in vulnerable situations or able to pay?

This paper argues that the CMA (1) failed to understand fully key characteristics of typical electricity and gas customers, and (2) overestimated their appetite for engagement. The paper therefore looks at the issue of retail electricity and gas prices, but with a view to finding arrangements that are satisfactory for 'real-life' customers. It recognises that all customers are not identical and that a single approach will not meet the needs of all categories of customer. Rather than look for a perfect solution, the paper suggests dealing with particularly flagrant aspects of unfairness, while seeking to avoid being overly intrusive elsewhere in retail market arrangements.

Given that the CMA has completed its investigation and Ofgem is in the process of implementing the remedies and recommendations, this may seem a pointless exercise. However, the Government has recently indicated on several occasions² that it is considering whether further protection needs to be given to customers on standard variable tariffs (SVT)³ or any other evergreen tariff. Moreover, and just as important, we are about to enter a new era in electricity supply, drawing on the capabilities that will be enabled by smart meters and other smart devices, where much of the benefit forecast in the smart meter impact assessment is supposed to come from reduction in customers' bills resulting from greater engagement with their energy use, including choosing an appropriate smart tariff. If the CMA's remedies designed to engage customers are not effective to encourage them to switch tariff and / or supplier, we may need to find approaches which, so far as possible, meet the needs of customers while making as much use as possible of the opportunities that the new 'smart era' may provide.

¹ <https://www.gov.uk/cma-cases/energy-market-investigation>

² See, for instance, Evidence to the Business, Energy and Industrial Strategy Committee by Rt Hon Greg Clark, 14 December 2016, Q 124

³ An SVT is an energy supplier's default tariff. Unlike a fixed tariff, where the price remains fixed for a set period, an SVT has no set end date and the energy supplier can change the price as long as the customer is given advance notice.

Part 1 – Today’s gas and electricity market

2. Addressing ‘stickiness’ in the current electricity and gas market structure

This paper considers the same question that the CMA faced and which the smart meter roll out will prompt: what should be done to address the issue of unfair pricing for ‘sticky’ customers in the present and future electricity and gas markets⁴.

We begin with the observation that all customers are not alike. This is recognised in Ofgem’s annual survey into consumer engagement in the energy market⁵, in which domestic consumers are divided between four categories: ‘Switched on’, ‘Tuned in’, ‘On standby’ and ‘Unplugged’, according to their degree of engagement in the market, measured by their level of awareness and exhibited behaviour. However, the remarkable stability in the proportionate composition of each of these groups over the last two years, despite extensive effort to encourage more switching, including collective switching, suggests that other factors, such as **willingness to engage**, may be just as important as **ability to engage** in determining customer response. For simplicity, in this paper we propose to use just three categories, a categorisation originally identified by Consumer Focus:

- **Able and willing to engage.** These are customers who recognise the potential benefits of switching and are keen to get best value from it (though they don’t always manage to switch to a better deal).
- **Not able to engage.** These are customers who for a number of reasons may not be able to engage; for example, they do not have the knowledge, skills or tools to get best value from the market.
- **Able but not wanting to engage.** These are customers who are aware of the opportunities available, but choose, for whatever reason, not to engage.

Although the matching is not exact, these last two categories broadly include the 70% of customers who have remained on the Standard Variable Tariff (SVT).

Let us look at these groups in a little more detail:

Able and willing to engage

These comprise Ofgem’s ‘Switched On’ customers and perhaps some of the ‘Tuned In’ customers - say, about one quarter of domestic customers overall. This is an important group, as it is this group that by its active involvement is most likely to encourage innovation and new entry into the market place. This active involvement is **necessary** if competition is to work as a means of encouraging efficiency and cost-effective pricing. However, there are two important caveats which mean that the activities of this group are not **sufficient** to ensure that the benefits accrue to **all customers**.

⁴ A problem that persists despite the CMA’s conclusions. I am aware of a dual-fuel offer made to a customer by a Big Six supplier since the CMA’s conclusions of the alternative of a fixed price 12 month deal or, if preferred, the SVT at a 46% higher price.

⁵ Most recent survey at <https://www.ofgem.gov.uk/publications-and-updates/consumer-engagement-energy-market-retail-market-review-2016-survey-findings>

First, since suppliers appear to be able to rely on a considerable proportion of their customers remaining on a higher SVT, it is possible, as the CMA found, for the able and willing to engage group to reap more than its fair share of the benefit of innovation and competition **without the benefits of either competition or innovation being extended to all customers**. Second, it is likely that most of these customers predominantly engage in the market only if they stand to gain a certain level of financial benefit⁶. This means that if suppliers are to cover their costs and continue to make an acceptable margin, they will endeavour to recover the cost of providing this benefit from their other customers, who, in turn, will face higher retail prices as a result.

Not able to engage

These customers comprise about one quarter of domestic customers overall, roughly Ofgem's 'Unplugged' category. To quote from the 2016 survey:

"These customers show little understanding of the energy market. They have not changed or compared tariff in the last year and many have never switched supplier or changed tariff. Many do not recall receiving communications in the last 12 months. They are the least likely to trust their energy supplier to provide useful information, and they are the least satisfied with the service from their supplier. Unplugged consumers are the most likely to pay for their energy by prepayment meter and to be on a standard variable tariff."

This suggests that providing customers in this category with information alone to encourage them to engage is going to have limited effect, and a very different approach will be needed if these customers are not to lose out compared with those customers who do engage. This has been recognised by the CMA and Ofgem in remedies aimed at this group⁷. Indeed as Ofgem's Vulnerability Strategy Progress Report states⁸:

"Millions of consumers may face additional challenges when trying to access the cheapest tariffs in the market, and the services and information they need to effectively manage their energy use and stay safe... Barriers to engagement include but are not limited to: lack of awareness among consumers that they can take action; lack of awareness of how to take action; and a lack of tools, confidence, skills or ability to easily engage. Consumers in the most vulnerable situations are likely to face a combination of these barriers."

Able but not wanting to engage

These customers comprise at least one-half of domestic customers overall. They may well be aware, to a greater or lesser extent, of the opportunities to compare different energy contract offerings, but, in addition to being encouraged to be more active in the energy market, they are also being urged by the Government to become more actively engaged in a range of other services: for example, those their banks provide⁹ and in providing for their long term financial future through a

⁶ Some customers may be motivated by other drivers, such as quality of service, ethical / green products, smart meter offers etc.

⁷ Chapter 4 of https://www.ofgem.gov.uk/system/files/docs/2016/11/cma_remedies_implementation_plan.pdf

⁸ https://www.ofgem.gov.uk/sites/default/files/docs/2015/09/cvs_progress_report_for_website_final.pdf, page 27

⁹ <https://www.gov.uk/government/news/cma-paves-the-way-for-open-banking-revolution>

pension¹⁰. And in due course they may also be encouraged to engage to access the opportunities provided by retail water competition¹¹. Advocates of engagement in each area seem to think that the main factor which stops customers acting in an economically rational way is lack of information. But this confuses **'ability' to engage** with **'willingness' to engage**. Each customer faces a transaction cost, in time if not financially, from more active engagement, particularly when faced with pressure from so many directions to engage in active participation in different markets. In reality, time and enthusiasm are likely to be limited and, for most spending decisions, customers may look for a 'good enough' solution, particularly in cases where the decision is not critical to the individual's finances or well-being¹². As a result, engagement in the electricity and gas market may well not be the priority for the individual which economic theory would suggest. In addition, as behavioural insights highlight, willingness to engage is also linked to behavioural biases, which discourage action. These include, for example, a preference for the status quo, loss aversion or fear of something wrong. Addressing these biases is likely only to go so far in addressing what are in fact perfectly rational reasons not to engage.

As well as the question of a willingness to engage, there is the issue of customer attitude to the energy market and its providers. Trust in the industry is not high. Figure 1 summarises typical customer attitudes towards the industry currently and the changes which would be needed for the typical 'able, but unwilling' customer to become fully engaged. It includes some of the changes needed for 'smart' engagement as well as in today's market. Evidence from management studies of culture change in organisations and groups suggests that this change in attitude is difficult to achieve, takes a long time and needs strong leadership¹³. Moreover, culture change is more likely to succeed where there is a 'burning platform', ie all of those involved understand and agree on the need to see through change. This is difficult to achieve in the case of the energy market where, for political reasons, change will almost always have to be voluntary.

Now	Engaged smart customer
Product available on demand	Need for customer flexibility
Single price	Cost-related pricing
Reasonably affordable	Penal at certain times
Customer in control	Partnership
Not my problem	Shared solution
Lack of trust	Trust
Disengaged	Engaged/Enabled

Figure 1 – Attitude changes needed to create the smart customer
(Source: Sustainability First)

¹⁰ For example, <http://www.workplacepensions.gov.uk/employee/>

¹¹ <http://www.ofwat.gov.uk/regulated-companies/improving-regulation/extending-retail-competition-to-households/>

¹² Survey results by You Gov in December 2016 tend to support this. Data from the Utilities Tracker Wave 7 report finds that 44% of consumers say they are unlikely to switch utilities provider in the next 12 months. Of this group, one in five (19%) think that any savings they make from changing supplier 'aren't really worth the hassle' and approaching three in ten (28%) don't believe that switching provider would trim their energy bills.

<https://yougov.co.uk/news/2016/12/02/large-numbers-think-switching-energy-provider-isnt/>

¹³ See, for example, Sustainability First's New-Pin paper on Trust and Confidence,

http://www.sustainabilityfirst.org.uk/images/publications/new-pin/New-Pin_Trust_and_Confidence_Paper_FINAL_VERSION_FOR_WEBSITE_18.3.16.pdf

Encouraging such customers to become more 'engaged' and less 'sticky' is likely to be difficult and not something that can be accomplished by simply providing them with more information. Customers may also be suspicious as to the motive behind the provision of all this information about engagement and cynical about how partisan it might be. As long as the cost of their supply is 'good enough', they do not see the need to devote extra effort to improving their position. They would look to the market arrangements and its regulator to protect them from exploitation, such as prices that might be particularly unfair.

This inbuilt inertia among one half of all energy customers leads us to ask whether there are approaches capable of improving the customer experience in the energy market, both that of today and in the 'smart' world, that **do not** in practice require this group of customers to become more actively engaged with the market.

3. What are we trying to achieve?

Before we look at possible approaches to sticky customers, we need to establish more clearly what we are trying to achieve. This paper proposes two objectives and both are important. **First, we want to encourage companies to price competitively and innovate to meet the changing needs of the market.** The best way to achieve this is most likely to be by means of a competitive market place for retail electricity and gas. But this is not enough. Given the nature of the way customers pay for their electricity and gas and their differing degrees of willingness to engage in the market, **this objective on its own does not deliver good value to all, or indeed to most customers.** (Analysis of why this is so is dealt with at greater length in Appendix 1.)

So, we also propose a second objective : **namely, that the pricing structure that results is broadly 'fair' and does not seriously disadvantage any particular segment of customers.** We want this second objective because, as we have seen, 'sticky' customers cannot be relied on to seek out better prices if their 'stickiness' is being exploited, and, additionally, there may be some need for cross subsidy to protect those *not able* to access the benefits of the market and to ensure access to energy given the nature of energy as an essential services. It could be argued that, if they can't be bothered, then 'caveat emptor'. But as energy is such a basic need, it is not unreasonable to expect higher standards of customer service from those providing it than for many other goods (but see also below and Appendix 2 for the FCA's approach for financial services). **Moreover, given the extent of 'stickiness' amongst customers, these standards need to be applied to all customers - not just those in vulnerable situations or those unable to engage.**

Both of these objectives are important simultaneously. If we have the first and not the second (in effect, the status quo), then because of the 'stickiness' of many customers, rather than competitive pricing and innovation bringing pressure on the cost base of the supply companies, these benefits will accrue only to those customers who seek it out. This would be at the expense of the 'stickier' customers, and therefore provide no downward pressure on wider costs. If we have the second and not the first, we have apparent 'fairness' but, again, no incentive on companies to reduce costs.

The problem is to reconcile the two objectives in the particular circumstances of the energy market. A classical markets approach might deliver the first objective, whereas a regulatory approach such as a price cap would deliver the second. But can we achieve both together, or do we end up with a worse answer than with either one or the other?

Our two objectives in combination would appear to align with Ofgem's aims for more principles-based retail market regulation in its working paper on broad regulatory principles¹⁴:

- Promote innovation and competition among suppliers
- Provide effective protection for consumers in a rapidly changing market
- Put responsibility firmly on suppliers for achieving good consumer outcomes

and with the discussion in that paper on Standards of Conduct¹⁵ aimed at ensuring that customers are treated fairly. However, 'fairness' is currently only applied within the Standards of Conduct to behaviour, information and customer service. The approach of our paper is that, to meet the needs of 'sticky customers', this fairness principle will need extending to retail pricing. Competition clearly

¹⁴ https://www.ofgem.gov.uk/system/files/docs/2016/08/fr_r_working_paper_on_broad_principles_-_final.pdf

¹⁵Op. cit., section 2

works for some customers, but as currently constituted fails to provide a 'fair' outcome for many others.

Are we trying to set unreasonable objectives? Are we trying to move the balance too far in favour of customers? We would argue, as a matter of principle, that we are not. But it is also worth looking at the approach of another UK regulator operating in a similar market context, the Financial Conduct Authority dealing with personal financial services. Appendix 2 shows that the FCA also has concerns on fairness for sticky customers, similar to some of the questions discussed in this paper, but sees its role as extending beyond the simple provision of more information. The CMA, Ofgem or BEIS do not seem to have examined the approach to 'sticky' customers adopted by the FCA, a UK regulator with arguably some comparable duties. This seems to be a clear and anomalous gap.

In this connection, it is worth noting a recent paper by Amelia Fletcher¹⁶ for Which?. This reviews the role and effectiveness of demand-side remedies as regulatory interventions across a wide range of UK markets. In her conclusion, she raises questions which are very relevant to the discussion in this paper:

'How much should regulators seek to protect consumers if they fail to protect themselves despite being given appropriate tools to do so?

Do they focus on demand-side remedies, step back from intervening at all, or move to more interventionist outcome control remedies, bearing in mind that the latter bring their own concerns?'

Taking our two objectives as yardsticks against which to judge the likely success of a proposed remedy, we now look first at the current electricity market and the remedies proposed by the CMA and other commentators. We then look forward to the impact of sticky customers once we have a 'smarter' electricity retail market.

¹⁶ <http://www.staticwhich.co.uk/documents/pdf/the-role-of-demand-side-remedies-in-driving-effective-competition-456067.pdf>

4. Approaches to dealing with customer ‘stickiness’ in today’s electricity and gas markets

CMA

The CMA summarised the aim of their remedies on customer engagement as follows¹⁷:

Helping customers engage

38. Certain categories of customer face specific barriers to engagement, which our remedies address: we are imposing an order on suppliers to make all their single rate tariffs available to customers on restricted meters; and we are recommending that Ofgem takes forward measures to address the difficulties faced by indebted prepayment customers in seeking to switch supplier.

39. However, for the majority of domestic customers, the challenge is primarily that they do not consider switching, or perceive the difficulties to be greater than they are. The key to unlocking engagement from such customers may be relatively simple – the way in which information is framed or the medium of communication, for example – but is likely to differ between types of customer and over time.

The list of remedies includes:

- An interim price cap for prepayment customers
- Removal of ‘simpler tariff choices’ restraint on suppliers
- Removal of ‘whole of market’ requirement from price comparison websites
- Use of trials to test engagement
- Provide information on bills on the cheapest tariffs available in the market
- Creation of a database of customers who have been on the standard variable tariff for three years or more to allow rival suppliers and Ofgem to prompt these customers to engage
- Enhance the role of third party intermediaries in increasing customer engagement by removing restrictions on their access to data and regulations that undermine their incentives and enhance the ability to promote engagement.

A full list of remedies appears on the CMA website¹⁸.

In broad terms, the CMA addressed the needs of the three customer groups we have identified as follows:

¹⁷ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/531204/overview-modernising-the-energy-market.pdf

¹⁸ <https://www.gov.uk/cma-cases/energy-market-investigation>

Can't engage – a 2 year price cap for prepayment customers

Able and willing to engage – encourage innovation by the removal of some of the behavioural remedies that Ofgem previously had put in place (such as the limit to four tariffs and the undue discrimination provision) and which had been found wanting.

Able but not wanting to engage – provision of additional information to make customers better informed, and making contact details of 'sticky customers' (those that have not switched in the last 3 years) available to rival suppliers for them to target.

But it is not clear that the CMA has demonstrated that those who are able to engage, but choose not to, can be persuaded to do so by the remedies proposed: namely, by providing customers with even more information (including from rival suppliers), by allowing the companies to construct even more complex tariffs, and by reducing the confidence customers might have in the integrity of price comparison sites. Rather than increasing engagement by improving the trust these customers might have in energy suppliers, the outcome seems potentially to be the reverse – further reduce general customer trust in energy suppliers. Customers may well respond to these market 'nudges' by staying with the devil they know.

In terms of meeting the two market goals we set ourselves earlier in this paper, the CMA remedies meet the first objective by retaining the opportunity for suppliers to innovate and, if anything, removing some of the barriers to innovation. On the second objective, the CMA remedies assist customers who are keen to engage. They provide some protection for those unable to engage, but with the exception of steps to help those with different meter types (prepayment and restricted meters) they do not address many of the other barriers faced by those unable to engage e.g. lack of internet access, lack of knowledge or skill to engage with information. and they are likely to fail badly with the 50% of customers who are unwilling to engage, possibly making them even less willing to engage than at present.

We comment further on the implications of a price cap below.

In the following paragraphs, views by some key commentators on the CMA remedies are 'tested' against our two proposed market objectives.

Martin Cave

Martin Cave, a member of the CMA Inquiry Group, dissented in part from the conclusions of the Group¹⁹. He argued that, while he agreed with the analysis in the report and with the bulk of the remedies proposed, they did not go far enough. He considered that, in view of the 'severe harm' inflicted on most households, not just the fuel poor, the proposed remedies were untested and therefore it would be risky to rely on them. He therefore proposed a price cap for a period of two years for all households on a Standard Variable Tariff. In terms of our three customer groups he proposed :

Can't engage – a price cap

Able and willing to engage – as CMA

Able but not wanting to engage – a price cap

¹⁹ <https://assets.publishing.service.gov.uk/media/5773de34e5274a0da3000113/final-report-energy-market-investigation.pdf>, pp1415-7

The widely acknowledged challenge of price caps is that they substitute the regulator's own assessment of costs and risks for that of the supply companies. The costs faced by a supply company change markedly month by month²⁰ as do the risks²¹. But because of the relative infrequency of meter reads, an SVT needs to remain unchanged over at least a single quarterly billing period. A supplier will therefore make their own judgment on dealing with future uncertainties in their cost profiles and make their purchasing and tariff-setting decisions accordingly. A regulator cannot have the same detailed knowledge of an individual company's costs, and would, moreover, need to set the same cap for each company if it were to avoid discriminatory treatment. This in itself would remove any last vestiges of competition between companies in the SVT market. If the cap were set too low, this would reduce the incentive on customers to move from an SVT and would focus supply company attention on short-term cost reduction instead of innovation. If set too high, suppliers would simply be given the opportunity for an easy ride. These shortcomings of a price cap might be just about tolerable if, as the CMA propose, the cap applied only to the 4 million prepayment meter customers²² (around 16% of the domestic market) – although there is also the danger of the cheaper prepayment meter tariffs disappearing - but would cause serious issues if applied to all SVT customers (70% of domestic customers of the Big Six).

Furthermore, although Professor Cave proposes a time limit of two years for the price cap, it is difficult to see what is likely to occur in that period to resolve the issue. On the contrary, given that a price cap is likely to reduce the incentives available from switching, customers may well become more, rather than less, 'sticky'.

In terms of meeting our two market objectives, Professor Cave's proposals deliver on the second but may fail in encouraging innovation and competition. In this, they resemble an earlier Ofgem attempt to intervene with a non-discrimination requirement that in the end tended to level prices up rather than down.

Stephen Littlechild and others

Professor Stephen Littlechild and a number of regulatory colleagues were concerned that the CMA's remedies in the domestic market were unnecessary. Their views have been expressed most recently in a paper sent to the House of Lords Economic Affairs Committee in January 2017²³:

Unfortunately, in our view the CMA's analysis of the domestic market is mistaken. It has not only wrongly blamed the large retail suppliers and their customers. It has also given false hope to customers, regulators and politicians that measures to nudge more customers into action and/or to discipline suppliers could radically improve the situation and bring lower energy prices to the majority of domestic customers. This is simply not the case. The CMA's alleged detriments of £1.4bn or £2bn per year, that remedial action could translate into benefits for customers at the expense of suppliers, are illusory.

This is not to deny that energy prices have increased significantly over the last 15 years or so, to the hardship or discomfort of many customers. Assisting vulnerable and other

²⁰ See <http://www.cornwallenergy.com/Cornwall-Energy-index-of-domestic-energy-supply-costs>

²¹ See, for example, http://cornwallenergy.com/cms/data/files/Downloads/161014_Chart-of-the-Week.pdf

²² <https://www.gov.uk/government/news/next-step-towards-300m-saving-for-prepayment-energy-customers>

²³ <http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/economic-affairs-committee/the-economics-of-uk-energy-policy/written/46083.html>

customers to switch to cheaper tariffs could be useful. But such tariffs are already available.

For our three customer groups, this implies:

Can't engage – no remedy

Able and willing to engage – as CMA

Able but not wanting to engage – no remedy

Like the CMA's remedies themselves, this suggestion delivers on our first objective but not on the second, but with the improvement that it would be less likely to irritate those unwilling to engage.

Dieter Helm

Dieter Helm has been forthright in his criticism of the CMA's conclusions. His view is that the final report was "flawed in almost all its parts"²⁴, because the £1.4 billion in excess of the 'competitive price' that the CMA considered that SVT customers were paying was, in his view, a result of monopolistic behaviour, not, as the CMA concluded, a result of 'inefficiency' in the market. Making customers switch would, in the CMA's view, solve the problem.

Dieter Helm argued:

"Future electricity markets are not going to be driven overwhelmingly by wholesale prices: capacity contracts, Feed-in-Tariff (FiT) contracts and system charges will make up more and more of the final bill. In an increasingly zero marginal cost world, the guts of the market shifts to the allocation of the system fixed costs – none of which can be switched away from, except by defecting from the system.

The case for Standard Variable Tariff is very simple – and very compelling. Customers want the supply of a homogenous product on a fair and reasonable basis. They do not want to spend their evenings on the Internet searching through ever more complex tariff structures. Switching is at best a means, not an end. So what would constitute a stable and fair basis for buying a simple product like electricity? Loyal customers should reasonably expect a tariff that reflects the underlying costs, and a fair profit margin on top. That is what would happen in a competitive market. They understand that if costs go up, so should prices; and conversely if costs go down, so should prices. They expect this automatically to happen through their billing. And that is precisely what they do not get.

The non-price regulated approach to the Standard Variable Tariff goes like this. The suppliers would be required – amongst the multitude of tariffs they might want to offer – to set a tariff which comprises the wholesale cost, plus the fixed costs (FiTs, capacity payments, transmission and distribution costs) plus a margin. This is not a price regulation. It is simply one tariff amongst many possibilities, but it should at least be available. The only further suggestion I made was that these margins should be published, and hence customers should

²⁴ <http://www.dieterhelm.co.uk/energy/energy/flawed-in-almost-all-its-parts-the-final-cma-report/>

know how much profit each supplier is making out of reading their meters, billing them and collecting the debts.

For our three customer groups:

Can't engage – an SVT with the profit earned on it published

Able and willing to engage – as CMA

Able but not wanting to engage – provision of additional information to make customers and their champions better informed

Of the view-points outlined above, Professor Helm's proposal comes closest to meeting both of our proposed market objectives. Suppliers can offer innovative and competitive tariffs to those able and willing to engage. But, crucially, if they were required to publish the margin made on the SVT (and any other evergreen tariff they introduce) so that it was available for stakeholders, consumer bodies and other commentators to review, it would become obvious if the competitive tariffs were being cross-subsidised at the expense of the SVT customers, and this could be challenged. This is important because, even if the supply companies are only earning a reasonable margin from their supply business as a whole, we still have a problem if they do so by subsidising their cheaper offerings by earning a higher margin from their 'sticky' customers²⁵. This practice has not been prevented by the CMA's conclusions; if anything, things have got worse²⁶.

The picture is not quite as simple as Helm suggests, however. He makes the important point that in the future the fixed cost and capacity elements of the electricity bill are likely to be more important than the per unit cost - given the changes to the wholesale market brought about by the introduction of FITs and the capacity market. However, these changes also make the cost of dealing with uncertainties higher, since generators will need to be paid more to alter their generating pattern. As the reference in footnote 20 makes clear, we are already seeing greater volatility in the day-ahead and balancing markets, and this is likely to become more pronounced. This means that a supply company's energy purchasing strategy will remain important, and smaller suppliers, who have benefited in recent years from not buying forward as the wholesale price has fallen, may find themselves at greater risk in the future²⁷.

Thus there is still likely to be some variability in SVTs offered, depending on the wholesale purchasing strategies of the suppliers and differences in their own costs. But this does not mean that when a supplier posts a change to their SVT, they should not, as Helm proposes, indicate the implied margin on that SVT. While this information may not be of particular interest to customers themselves, it is likely to be closely examined by consumer groups such as Citizens Advice and Which?, aggregators and other intermediaries, and other commentators. Guidance would, of course, need to be provided by Ofgem on a definition of margin, since the margin earned on part of a business's activity can be ambiguous unless clearly defined - given that costs can be allocated between activities in a number of ways.

One other change would also be of use. As Sustainability First pointed out in its response to the CMA's provisional findings²⁸, the snapshot of prices provided on a price comparison site gives no

²⁵ This approach to pricing is known to economists as Ramsey pricing. But just because Ramsey pricing has an academic pedigree, this does not make it acceptable in the domestic electricity market.

²⁶ http://cornwallenergy.com/cms/data/files/Downloads/161007_Chart-of-the-Week.pdf

²⁷ As has already been seen with the collapse of GB Energy Supply in November 2016.

²⁸ https://assets.digital.cabinet-office.gov.uk/media/55e6be4fed915d06a100001e/Sustainability_First_resp_to_PFs.pdf

indication of when those prices might change. This is of particular importance for SVTs, as unlike a fixed period deal, the SVT price could change even during the time that the customer is switching, and the customer could then be paying a higher price with the new supplier than he or she expected. This is most likely to be the case after an increase in wholesale electricity costs as happened earlier in 2017. One supplier increases their price, followed shortly afterwards by most of the others. A customer checking a price comparison site after the first company's increase, but before any of the others, perhaps encouraged by commentators suggesting customers shop around, could well find themselves in this position. This experience would be likely to lead to a reduction in trust in price comparison sites.

Although the supplier must be free to change the price of their SVTs when needed – this is after all the nature of an SVT – publishing the date when the particular price **started** to be applied should, in principle at least, help the customer. **For a customer comparing SVTs, an indication that several companies' offerings had recently changed while one company's SVT was six months old, for example, would provide a good indication that that company's price would probably be changing shortly.** Although this might seem to require the customer to have detailed knowledge of pricing approaches, it would be a relatively simple message for organisations such as Which? or Citizens' Advice to put out – to beware of follow-on price increases.

The chart below compares the retail market remedies proposed by different commentators - as discussed in the paragraphs above – against Sustainability First's two proposed objectives for the energy retail markets.

	SF Objective 1 – encourage competition and innovation	SF Objective 2 – avoid disadvantage to particular customer segments
CMA	Yes	Only for customers with vulnerabilities
Cave	No	Yes
Littlechild	Yes	Only for customers with vulnerabilities
Helm	Yes	Yes, if in addition combined with information on duration of the SVT

Source : Sustainability First.

Therefore, building on the Helm proposal, **our conclusion is that whenever a supplier changes the price of their SVT, they should also make public (1) the implied margin and (2) the date from which the new price would apply. In the latter case, this should be published on their own website and made available for price comparison websites.**

Energy suppliers might legitimately ask why they should be singled out in this way, and that such constraints do not apply in other markets with sticky customers – insurance for example (although as we have seen above the Financial Conduct Authority takes a more interventionist attitude). The CMA's remedies appear to have some sympathy with this concern since the main responsibility for ensuring a fair market is placed by the CMA on the customer (other perhaps than those unable to engage), with the supplier being left free to make use of whatever market opportunities co-exist

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with the CMA position. **In our view, this leaves too much freedom with the supplier - and undue responsibility on the consumer. Is it unreasonable to expect the provider of what is effectively a social good to act responsibly towards its customers? Perhaps if electricity suppliers had done so in the past, trust might now be higher and there would have been no need for the CMA inquiry.**

The CMA investigation will not be the last word on the future of the retail energy market. Indeed, there are indications that the Government is keeping the issue of sticky customers under review²⁹. We consider that the proposal above comes closest to meeting the two objectives we have set in this paper. There may be other approaches or remedies that have not yet been considered. But we believe that any such remedies to address the problems of sticky customers should be tested against our proposed market objectives as to whether they are likely to (1) encourage competition and innovation and (2) avoid unfair disadvantage to particular customer segments.

²⁹ Evidence to the Business, Energy and Industrial Strategy Committee by Rt Hon Greg Clark, 14 December 2016, Q 124

Part 2 – The smart energy market

5. Lessons for smarter energy

The Government and Ofgem published in November 2016 a Call for Evidence on “A smart, flexible energy system”³⁰. This document quotes studies that indicate (p 7) substantial projected customer savings (£3-8 billion a year from one study) from a more flexible energy system. It claims customer enthusiasm for engagement:

Research commissioned by Smart Energy GB shows that nearly one in three (30%) of consumers would be in favour of switching to a smart tariff, while Government’s recent research into consumer attitudes found that 50% of respondents would take up a smart tariff if their supplier offered one to them now and that for a third of respondents, automation would encourage them to take up a smart tariff.³¹

It takes the same view as the CMA that information provision will overcome ‘stickiness’:

We believe our focus for engaging domestic and smaller non-domestic consumers should be on information provision, with a particular emphasis on how we might best empower and protect those vulnerable consumers who are most likely to have difficulty participating in a smarter energy system.³²

There must surely be room for challenge on a number of counts: for example, as to whether sufficient numbers of customers will engage to generate the savings suggested, whether the research findings are likely to be representative of typical customers’ views in practice, and whether sufficient customer action will take place - particularly if the focus is simply on information provision. This is reinforced by the fact that the range of savings cited are projected from all types of flexibility³³, not just the domestic sector, and even in the latter case much of the savings would come from flexibility some time off in the future, in the use of electric vehicle charging, heat pumps and smart appliances. Savings available to customers who do not have such large flexible single-point loads would be considerably smaller, as suggested by the results achieved in recent demand-side response trials. If such customers are not currently convinced by the savings of several hundred pounds on offer to them today from switching from their Standard Variable Tariff, there must be doubt whether they would be persuaded by the prospect of ‘smart’ savings, which would be, in these cases, somewhat smaller than the SVT savings³⁴. The updated Smart Meter Impact Assessment³⁵ also published in November 2016 now assumes a later date of introduction of time of use tariffs but assumes 30% of customers will be on these tariffs by 2030.

³⁰

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/567006/Smart_Flexibility_Energy_-_Call_for_Evidence.pdf

³¹ Op. cit. p51

³² Op. cit. p67

³³ https://www.theccc.org.uk/wp-content/uploads/2015/10/CCC_Externalities_report_Imperial_Final_21Oct20151.pdf

³⁴ See, for example, <http://www.networkrevolution.co.uk/wp-content/uploads/2015/04/Domestic-SME-Final.pdf>

³⁵

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/567167/OFFSEN_2016_smart_meters_cost-benefit-update_Part_I_FINAL_VERSION.PDF

The Call for Evidence did recognise the need for “supporting further pilots of tariff structures and domestic consumer responsiveness and opportunities to raise consumer awareness, engagement and understanding” (p 52) and for striking “the right balance between allowing innovators to emerge and flourish, while ensuring appropriate consumer protections are in place to prevent market abuse.” (p 68). Ofgem is planning to work with suppliers to carry out randomised controlled trials to learn which prompts work best to engage customers³⁶. This suggests the need for flexibility in approach in case engaging customers through the provision of information does not prove successful.

So, if there are serious or unanswered questions that customers may not become engaged enough for both them and the country to benefit from the opportunities of smart energy, what can be done about it? The next two sections focus on smart electricity and discuss (1) a number of radical approaches to electricity retail tariffs that smart meters would make possible and which could be worth trialling, and (2) a possible alternative model for moving forward into the smart energy arena that does not depend on the premise that non-engaged, sticky customers will necessarily change their tariff, their retailer, or their current behaviour patterns.

³⁶https://www.ofgem.gov.uk/system/files/docs/2016/12/draft_forward_work_programme_2017-18.pdf, section1.3

6. Could a change to market design reduce ‘stickiness’?

As we have seen, ‘stickiness’ in the electricity market results in part from the nature of the market: that you are locked into one supplier and type of contract until you decide to switch, and that you are billed for your consumption over a period of several months (if you are not on a prepayment meter) rather than paying when you use the electricity. Rather than try to change the customer, could a change to market design reduce stickiness?

Technically at least, the introduction of smart meters together with mandatory half-hourly settlement could make possible a fundamental change in the way that electricity is purchased by retail customers. Below we set out some thoughts on some possible options, some of which are quite radical, but which might merit further consideration. They would all meet the objective of encouraging competition and innovation, and as long as customers’ involvement was voluntary our second objective would also be met. Trials would be needed to see if the options were practicable and could be made to run alongside the current market design. Early consideration would need to be given in particular on the nature of customer protection that would be needed if any of these options were to be tried.

Option 1 – Remove the supplier monopoly

With information stored and down-loadable on each customer’s use of electricity in each half hour, (and even at 10 second resolution) there is no reason in principle why in the future a customer with a smart meter should not be able to buy the electricity used in each half hour from a different supplier. Clearly, this would require third party brokers, with sophisticated back office operation, and automation at the customer’s end to make it work, but it would not be beyond the scope of a competent market actor. There are practical issues that would need to be resolved, of course. It would complicate the purchasing strategy of suppliers. But given that each customer’s electricity demand and therefore the total demand for electricity in each half hour may remain much the same as it is now and may vary no more than now, and therefore balancing the national system could remain a broadly equivalent challenge to now, it would chiefly require a more active secondary market for suppliers to square their books. Chasing debts from such customers would be a further complication, but if this approach operated on a pay-as-you-go basis, this need not be a major issue. Customers who bought electricity in this way could never be ‘sticky’ and would therefore contribute to a more competitive market. If this were a step too far for the domestic customer, or if the back office costs were too high, such an option could be suited to the larger customer market.

Option 2 – Separate suppliers for peak and off-peak electricity

Short of this major transformation of the market, a simpler approach might be to permit customers to buy their peak-time electricity from one supplier and off-peak electricity from another supplier. This would require more active involvement by the customer in choosing their overall package and their supplier ‘mix’, but could help support a shift to more cost-related pricing of electricity. This simpler approach would only work so long as peak pricing of electricity coincided with peak use, but could in principle develop as the market became more dynamic.

Although technically feasible, neither of these approaches or others that exploit the extra information potentially available from smart meters would currently be feasible as, at present, each

meter, and consumption measured by that meter, is attributed to a *single* supplier. If we are to encourage innovation, thought may need to be given to removing such regulatory restrictions, at least to permit trials to take place. Ofgem and BEIS should consider the possibility of trialling such approaches, including as part of its work on non-traditional business models.

On the assumption that any such change to the market was purely voluntary on the part of the customer, these radical options might be attractive to the already engaged customer, but are unlikely in themselves to encourage the sticky customer to become more engaged. The next option, which could operate under the existing market structure, could make use of marketing and innovation skills from outside the existing industry structure.

Option 3 - Make it easier for third party companies to do the 'heavy lifting'

If sticky customers lack the ability or willingness to engage in activities that would save them money and yet that possibility exists, does this not suggest there is a business opportunity in doing the work for them? One possibility might be that third parties, given appropriate access to customer data, could select appropriate tariffs saving the customer money while generating income for themselves. Another would be that third parties could also explore the opportunities for the use of equipment and automation to move customers' load to cheaper times, perhaps through a leasing arrangement to avoid the customer facing a high initial capital cost. Customers with own generation could benefit from a wider range of demand management options. Third parties might find it easier to engage with customers than electricity suppliers because of their closer understanding of markets for consumer products and services. Issues would need to be resolved such as consenting access to individual customer data. In particular, it would be vital to provide adequate customer protection to avoid customer exploitation by unscrupulous organisations. Nevertheless, opening up the market in this way could be useful.

Option 4 - Introduce a capacity element into domestic electricity charging

Concern is already being expressed that, because domestic electricity prices are based largely on units consumed not on the maximum demand placed on the network, those customers who succeed, through the use of own generation or otherwise, to minimise the number of units they import are getting a 'free lunch' in relation to their access to the network.³⁷ At some point as the amount of self-generation increases, distribution charges will need to recognise the maximum demand domestic customers place on the network if they are to adequately / appropriately reflect the underlying costs. Four issues arise in determining the structure of such charges:

- Because there are many domestic customers on an individual feeder, it is the averaged (diversified) maximum demand (or ADMD) that is relevant for network investment, rather than individual households maximum demand. So an individual per kW charge may or may not be appropriate.
- A simple Distribution ToU tariff could needlessly penalise peak time use at times in the year where the system is neither likely to be under stress or congested.
- A choice would need to be made between charges based on short-run marginal cost (which would provide the appropriate financial signals to the DNO to consider alternatives to

³⁷ See, for example,

<https://www.citizensadvice.org.uk/Global/CitizensAdvice/Energy/Energy%20Consultation%20responses/Tackling%20Tariff%20Design.pdf>

network investment in hotspots, but which would vary with location) and long-run marginal cost (which would not be locationally dependent) and so would be fairer to customers, who have little choice about whether network infrastructure locally is in need of reinforcement.

- For local and community energy projects which aim to generate and use power locally, cost-related network charges may somehow need to reflect their *net* impact on the wider system: not necessarily *gross* impact as at present. This is relevant to the current review of embedded benefits. It is important to review the position as a whole.

Any of the four options outlined above, or indeed many other approaches, could have radical impacts on the relationship between customers and market players. This means that careful thought would need to be given to whether and how the market players, in particular aggregators and / or other third parties, should be regulated and how customers' interests, both of those actively engaging and those who still choose to be less actively engaged, should be protected. Any change would, of course, need to be voluntary and there would need to be full consideration of appropriate customer safeguards, even before any of these options were trialled. These issues are covered in detail in Sustainability First's GB Electricity Demand project papers 8 and 12 on the Smart Electricity Consumer, in particular with regard to consumer safeguards.³⁸

³⁸ <http://www.sustainabilityfirst.org.uk/index.php/gb-elec-demand-publications>

7. A smart Plan B?

This section deals predominantly with smart electricity customers rather than smart gas customers.

As set out in Section 5, the success of the Government's smart energy strategy relies on greater customer engagement in choosing smart tariffs, responding to more information about energy use and changing behaviour to reduce energy costs. But it could well be the case that the fifty percent of all customers who are currently able but unwilling to engage in switching tariff and / or supplier remain resistant to engaging with the smart market, particularly if the financial reward for doing so is less than they could gain now by changing tariff. This assumption needs testing in more detail, recognising that trials to date have used enthusiastic volunteers who are more likely to be engaged than the typical customer.

But if it turns out that the degree to which customers are able and willing to engage with smarter energy technologies and behaviours is no greater than their ability and willingness to engage in the current electricity market by switching tariff or supplier, might the transition to a smarter, more flexible electricity market also be doomed? Not necessarily. If it is the case that many such customers presently show limited appetite for change, then it would seem to make sense to focus initially on those customers where the benefit, both to them and to the overall electricity system, is greatest and where the cost of achieving change is less. This suggests the following:

Able and willing to engage

These customers may be more likely to be keen to accept their supplier's offer of a smart meter and to use the extra information they provide. They may also be keen to try out time of use (ToU) and other innovative tariffs. They are also likely to be early adopters of low carbon technologies such as solar panels, heat pumps and electric vehicles. Their use of these technologies will mean that the patterns of daily and annual electricity and gas use of such early adopters are likely to diverge from those of 'average' customers and potentially, in the long run, could be disruptive to the traditional electricity system. Initially at least, it therefore seems sensible to focus commercially-led development of demand-side management on this customer segment. But this group is financially aware. They will only change behaviour where this saves them money. And unless there are overall system benefits which reduce the total cost of supply and can therefore reward everyone, this could lead to other customers paying more for their power³⁹. (This is in addition to the cost of the feed-in tariff payments solar panel owners receive, and which are paid for in everyone's electricity bill – including those of less well-off customers.)

Unable to engage

Many of these customers are likely to be living in poorly insulated properties with little capital to invest in energy efficiency improvements and in many cases little opportunity to improve their energy management by changing habits.⁴⁰ The focus here needs to be, as now, to concentrate on

³⁹ http://www.sustainabilityfirst.org.uk/images/publications/other/Sustainability_First_-_Discussion_Paper_by_Jon_Bird_-_Smarter_fairer_Cost-reflectivity_and_socialisation_in_domestic_electricity_prices_-_FINAL.pdf

⁴⁰ Apart from those using direct electric heating without storage, https://www.ofgem.gov.uk/sites/default/files/docs/insights_paper_on_households_with_electric_and_other_non-gas_heating_1.pdf

energy efficiency improvements and to provide help and advice for those who lack the skills, tools, confidence, who are in debt or on bespoke meter types, from people whom the customer can trust. Improvements in energy efficiency will continue to be a particularly intractable issue for customers in the private rented sector.

Able but unwilling to engage

If our assumption about the likely thinking of these customers is correct, they are less likely to be interested in the outputs from their smart meters and / or in new tariff propositions. And, to judge from the results from recent smart grid trials, the amount of money they could save from making significant changes in their energy use behaviour may well be far less than the amount they could currently anyway save by switching from an SVT³⁴. Therefore to expect that many customers in this category will move rapidly to more cost-reflective tariffs with the advent of smart meters, may be somewhat hopeful. The focus here, at least to begin with, should therefore be on the benefits which a smart meter can bring to understanding and monitoring one's energy use. Subsequently, it may make sense to focus on the legislative and regulatory changes that are in train to improve the energy efficiency of electrical appliances, such as low energy lighting and white goods. This might include encouraging their purchase over less efficient alternatives, so that behaviour change to reduce energy use both in aggregate and at peak times occurs by default.

For 'able but unwilling to engage' customers, the reality may be that they simply never switch from their existing tariffs. However, as the electricity market continues to develop and we move towards mandatory half-hourly settlement, electricity suppliers may want to encourage customers more actively to move onto ToU or other smart tariffs in order to better match their underlying cost structure.

One possible approach for electricity suppliers to try could be to make use of behavioural insights, in particular the finding that many people stay with the default option. (This is part of the reason for 'stickiness'.) If the Standard Variable Tariff for customers with smart meters were Time of Use, then suppliers' costs would be better aligned with their revenues. But an abrupt transition from the current flat rate pricing to a peak/ off-peak structure would create winners and losers and as a result could be controversial³⁶. The transition could however be made over a period of some years.

Suppliers could very usefully start by reporting peak and off-peak usage separately to their customers. Then the bill could separately identify peak and off-peak usage with the cost of each identified, but with no price differential initially between peak and off-peak units. Then, over a period of, say, five years, different tariffs could be applied to peak and off-peak electricity, where the price differential between the peak and off-peak tariffs could be small initially and increased gradually and become more cost-reflective. This would ensure no winners and losers at the outset from the introduction of time-varying prices and create far smaller customer impacts in each successive year. As the default option, it would need to be highly transparent and visible if it was slowly to become generally accepted. As with our proposals for the 'non-smart' SVT, suppliers would still be required to publish their expected margin and the date of introduction of any price change. These will be needed at least as much as at present to ensure that all customers benefit from the market changes.

This might seem to be a far-reaching approach, but would be far less disruptive than any sudden change to universal mandated ToU retail tariffs. People accept peak and off-peak pricing in other markets, such as public transport, and also the fact that, just as some energy customers cannot

change their peak time electricity use, some people have to travel at peak time. One key challenge is in getting customers used to the idea and avoiding either significant losers or too many losers at the point of transition.

Care would need to be given to ensure that vulnerable customers were not unduly affected, perhaps by providing an appropriate social tariff.

How does this model compare with our two market objectives? The first one is met through working with the engaged customer group to encourage innovation. And since we are proposing at first no change with tariffs for the less willing to engage, the approach we have proposed for today's market would continue to apply, as it would subsequently if the gradual change to SVT structure to a two-part peak- / off-peak tariff structure were subsequently to be made.

8. Conclusion

This paper has attempted to find solutions to today's electricity and gas market concerns and those of the smart future electricity market that do not rely on switching tariff or supplier or other behaviour change amongst customers who are currently disengaged. All our suggested or similar proposals need testing in rigorous trials, which will need careful planning and execution to avoid spurious results⁴¹. Trials tend to rely on volunteers who are by definition more engaged. Customer surveys can be affected by eagerness by the participants to please and so do not necessarily represent unprompted attitudes and behaviour. However, finding solutions that work and are fair to all customers is most important both in today's market and in future.

Possible approaches that could give greater recognition to many customers' reluctance to engage include:

- Whenever a supplier changes the price of their SVT, they should make public (1) the implied margin (using an agreed definition) on that SVT and (2) the date from which the new price would apply - to allow scrutiny by the consumer bodies and others on behalf of customers. The latter should also be made available for use by customers on price comparison websites and on their own website.
- Extend Ofgem's Standards of Conduct for the retail energy market explicitly to include approaches to energy retail pricing.
- The Government and Ofgem should assess any further proposed changes to the operation of the energy market against both of the objectives proposed by this paper (rather than just the first): that the measure encourages competition and innovation, and that it does not seriously disadvantage any particular segment of customers.
- Consideration should be given to trialling some radical approaches to retail market structure, such as those suggested in section 6.
- Research should be carried out to test typical customers' willingness to engage in the smart market.
- If customers prove unwilling to engage, consideration should be given to focusing smart initiatives initially on the engaged and those with the ability and willingness to have the greatest impact.
- Customer protections, particularly for customers in vulnerable circumstances and those who are unable to engage with the market, must remain central to any changes to the energy market.

⁴¹ Section 1.3 of Ofgem's draft Forward work programme for 2017-18 (https://www.ofgem.gov.uk/system/files/docs/2016/12/draft_forward_work_programme_2017-18.pdf) mentions plans to work with suppliers to carry out randomised controlled trials to learn which prompts work best to engage consumers.

Appendix 1 - Competition and 'rational customers'

This Appendix discusses the short-comings of an over-arching policy approach which is wholly dependent on a concept of a 'rational customer'.

One of the textbook requirements for perfect competition is the 'rational customer', who has clear preferences, has access to complete information to make choices and is motivated to maximise his or her self-interest. This may be a useful starting point for developing an academic economic model (indeed, it is the basis of rational choice theory, a mainstay of neoclassical economics), but it describes the typical real domestic utility customer no better than 'assume a spherical cow' provides a basis for understanding the physics of the real world.

The growing field of behavioural economics has developed from the recognition that people seldom conform to the model of the 'rational customer'. But the CMA's remedies in their recent inquiry into the energy markets⁴² seem to be based on the idea that customers can be persuaded to be 'more rational' and thus that competition in the domestic electricity market can be made 'more perfect'. The CMA are not alone in this – the Government's rationale for the introduction of smart meters is that, by providing customers with more information, they will take more 'rational' decisions on their use of electricity, such as reducing their electricity use overall or additionally adapt their discretionary electricity use according to times at which the price is higher or lower.

Lack of information, and limited ability to process that information, is certainly one of the constraints faced by customers in becoming more rational users. However, there are other factors that are just as important. One particularly important factor is that making choices is not cost-free. While there may not necessarily be a financial cost to changing your provider of goods or services, there is always a resource cost in terms of time taken to consider and compare alternatives and to make the purchasing decision. The 'rational customer' would presumably take the time and effort to assess every spending decision they have to make. In reality, time and enthusiasm is likely to be limited and, for most spending decisions, customers would be looking for a 'good enough' solution, particularly in cases where the decision is not critical to the individual's finances or well-being. (There is a substantial literature dealing with this approach, which is known technically as 'satisficing'⁴³.)

How can we apply these insights to domestic energy supply? Unlike in a simple market place, where each purchasing decision is independent of the last, customers do not consciously make a purchasing decision every time they switch on the light or cook a meal. This is partly due to a lack of information – customers tend not to be aware of either the amount of electricity or gas consumed in using an appliance or the cost of that electricity or gas. The Government's case is that smart meters and the associated in home display (IHD) will help to address this. However, while the IHD will display the instantaneous electricity usage and total household electricity use over a period of time, what is more important for understanding the cost of using an appliance is the electricity used by it over the period of a cycle of use. For instance, a 100W incandescent light bulb used for 6 hours a day will use twice as much electricity in a year as a washing machine used once a week. So, smart

⁴² <https://www.gov.uk/cma-cases/energy-market-investigation>

⁴³ See, for example, <http://www.sciencedirect.com/science/article/pii/S1364032114007990>, which is an interesting academic paper applying the principles of behavioural economics, including satisficing, to the issue of household energy efficiency.

meter customers will not necessarily have better, or more useful, information about their electricity use.

The second reason why customers do not make a purchasing decision every time they switch on the light is that electricity and gas are purchased by means of a contract over a period of time. This need not be a fixed term, such as a fixed price for a year, but at the minimum is governed by the amount of time it takes to change provider⁴⁴. This further disengages the process of use from a purchasing decision and inevitably introduces an element of 'stickiness' into the purchase. It also provides a means of making the pricing more complex by associating different prices with different contract terms (such as pay-as-you-go or prepayment, SVT or fixed twelve month terms), time of day or location. In principle, different prices for different contract terms could be justified by the supplier in relation to the different risks faced or the purchasing strategies employed, but, to judge from the evidence provided to the CMA and the examples quoted in footnotes 4 and 26, price differentials have gone far beyond what could reasonably be justified on purchasing or risk grounds.

The different contractual terms for buying electricity and gas, together with geographical variability, differences in standing charge and throughput rates, and customers' different consumption patterns make comparison of different offers complex. Price comparison sites help, but they essentially provide a 'black box' approach and the customer has to trust their methodology. This further distances the experience of the average customer from that of the 'price discoverer'.

Paying by direct debit also obscures the picture. It is clear from many examples of complaints by customers that there is frequent misunderstanding of the relationship between monthly fixed direct debit payments and the underlying price of supply, in particular why direct debit payments may need to change because of past under- or over-recovery. This will not change with the introduction of smart meters. The most quoted benefit of smart meters to suppliers and customers alike is 'an end to estimated bills'. Monthly fixed direct debit payments are based on the previous full year's consumption, and this will necessarily continue to be the case with smart meters. Although suppliers will have more accurate knowledge of actual consumption, this could still differ from the previous year's total and so direct debit payments could still under- or over-recover. Customers who face the need for adjustments to their direct debit payments because of changes in consumption could well feel that they have been misled.

The way we buy electricity and gas therefore makes us all 'sticky' customers to some extent. And it is perhaps not surprising that in many, indeed a majority, of cases this stickiness can become long-term or even permanent. In such circumstances, unlike in a perfect market, we cannot rely on a comparatively small number of active players keeping the market wholesome for the rest of us.

⁴⁴ Currently 21 days, but the Government announced in the Summer Budget 2015 that it will work with Ofgem with the ambition of introducing reliable next day switching by the end of 2018. However, the intention does not appear to be to encourage customers to change supplier every day, rather to make the switching process easier.

Appendix 2 – The approach taken by the Financial Conduct Authority

The Financial Conduct Authority (FCA) is responsible for financial conduct regulation in the UK, as it relates to the provision of financial services to retail, wholesale and capital customers. Its objectives are comparable to those of Ofgem:

We have an overriding strategic objective set by Parliament to ensure that relevant markets function well. In addition we have three operational objectives with which to deliver our strategic objective; to protect consumers, protect the integrity of UK markets and enhance competition.⁴⁵

However the FCA does not seem to share the apparent view of the CMA, Ofgem and BEIS that simply giving customers more information helps them make sensible decisions:

Public policy makers have traditionally assumed that people will make the ‘right’ choice for their needs if they are given as much information as possible. More recently however, behavioural economics has shown that inherent bias can play a greater role in influencing consumers’ decisions than rational choice. Our own research has also shown that that too much information can confuse consumers.

We believe we can play a greater role in helping consumers access the right services for their needs by influencing how they make decisions. This can include changing the way firms present choices to consumers and ‘nudging’ them towards decisions that are more appropriate for them.⁴⁶

...

Just as there are no perfect markets in the real world, our approach is to look at the capabilities of actual consumers and their likely responses, rather than those of a theoretical consumer who is aware of all available options and able to assess them perfectly.⁴⁷

The FCA recognises the need for greater regulatory involvement where products are complex:

An important judgement in financial conduct regulation is where to draw the boundary between activities or risks that are best left to users and those where a regulator’s activities can deliver their own economies of scale that provide a public good. For financial products that involve a locking-in over an extended period of time, or are complex, the costs to users of understanding the nature of the product and monitoring its performance over time are high. For these products, it may be more efficient for the regulator to play a larger role to enforce market discipline, rather than for individual users to try to do so unaided.⁴⁸

The FCA understands the issue of ‘sticky’ customers and the fact that they can be treated unfairly:

Financial service markets can share two features which cause consumers to pay different prices for equivalent products or services, or pay the same price even though the cost to the firm of supplying them differs.

⁴⁵ <https://www.fca.org.uk/publication/corporate/our-future-mission.pdf>, page 4 (October 2016)

⁴⁶ Op. cit., page 6

⁴⁷ Op. cit., page 26

⁴⁸ Op. cit., page 14

The first common feature is that consumers are price-sensitive to different degrees. This might be because some consumers are better able to identify the full range of returns and charges implied by a contract. This is why economists often model markets with both 'sophisticated' and 'naïve' consumers. Or differences in price-sensitivity might arise because of differences in willingness to make the effort to search and switch between suppliers. Or certain consumers may face barriers to switching.

The second common feature is that, increasingly, firms have the data to model which groups of consumers, or which individual consumers, will be more price-sensitive. Hence firms are able to charge higher prices to those groups or individuals, or between products, expected to be less price-sensitive. The use of Big Data and user segmentation can allow firms to better tailor offers to active or sophisticated consumers, while the passive or unaware are left behind. Where price-sensitive consumers are paying prices that are less than the service costs to provide, they are being cross-subsidised from the prices charged to other consumers.

Once cross-subsidies become central to how a market works, firms can become highly focused on ways of extracting more and more profit from trapped or otherwise price-insensitive consumers. Market forces may not change that dynamic. Any current firm or potential entrant that tries to educate consumers to be more price-sensitive, or seeks to change its charging structure or practices, may find that it cannot attract consumers at all. More active or sophisticated consumers may not switch to a new entrant because they negotiate lower prices with their existing firm and are cross-subsidised by less active customers paying higher prices. If an entrant firm declines to make initial offers to attract customers then it will attract neither naïve nor sophisticated consumers. And if it educates any naïve consumers it does acquire, it will lose them as they will move to firms that do cross subsidise to give lower prices to sophisticated customers.

Such practices raise a challenge for us in terms of the limits of our role. Our statutory objectives can make a clear case for interventions in some markets, such as where we can justify them as increasing competition. Inevitably, this requires a judgement about the acceptable level of price discrimination and cross-subsidy between different groups of consumers and different products or services. Some level of cross-subsidy is inevitable, but beyond a certain point it can have harmful effects that threaten our objectives. In future we will seek to be more transparent when we make judgements of this sort.⁴⁹

Like the CMA, Ofgem and BEIS, the FCA has particular concerns about vulnerable customers and aims to ensure they are treated fairly. But it recognises that it is not just the vulnerable who need to be treated fairly. In a recent speech to the ABI Annual Conference on 22 November 2016, Andrew Bailey, Chief Executive of the FCA, expanded on this (my emphasis)⁵⁰:

Access to big data can yield a wide range of information. Suppose – as happens – that it allows us to identify people whose behaviour over time shows inertia in the sense that they do not shop around for a better premium. They are not prone to switching. There may be many reasons why a customer chooses to stay with a particular provider, but **big data could be used to identify customers more likely to be inert, and insurers could use that information to differentiate pricing between those who shop around and those who do not. The latter pay more and thereby can cross subsidise those who do shop around.**

⁴⁹ Op. cit., page 23

⁵⁰ <http://www.mondovisione.com/media-and-resources/news/the-challenges-for-insurance-and-regulators-in-a-big-data-world-speech-by-and/>

There is a choice for society – do we permit this sort of behaviour to go on, or not? This is the essence of financial conduct regulation – the job of the FCA. Parliament has given us an objective to ensure markets function well and, in order to achieve that, an operational objective in respect of consumer protection. We are therefore asked to exercise judgement on whether as a society we should or should not allow this type of behaviour. **To simplify, our view is that we should not. Why? If you take the argument apart, it is because we think that to do so would be to exploit a feature of individual behaviour which should not be exploited in this way.**

Sustainability *First*

Sustainability First was set up to develop new approaches to sustainability. Its primary focus is on policy and solutions within the UK, but draws on experiences and initiatives both within and outside the UK.

Sustainability First develops implementable ideas in a number of key policy areas – notably, Energy and water - where it can make a difference. It undertakes research; publishes policy and discussion papers; organises high level seminars and other events. Sustainability First is a registered charity.

Sustainability First's trustees are: Ted Cantle (Chair); Richard Adams; Phil Barton; Derek Lickorish; Derek Osborn; Trevor Pugh; David Sigsworth, Sarah Deasley and Sarah Harrison. Its projects are developed with support of the trustees by associates and consultants.

Sustainability First is a registered charity number 107899.

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