



Promoting choice and value
for all gas and electricity customers

What can behavioural economics say about GB energy consumers?

Discussion

Publication date: 21 March 2011

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Overview:

Ofgem has implicitly used insights from behavioural economics for many years to help consumers by improving the functioning of the GB energy retail markets. In this discussion paper, we make these insights explicit. We draw together evidence from a wide range of sources to examine the over-arching themes from behavioural economics that are relevant to the GB energy retail markets and the Retail Market Review.

Context

This paper examines themes from the literature on behavioural economics and how these can help us understand consumer behaviour in the GB energy retail markets. It also forms part of the supporting analysis for the Retail Market Review.

Associated documents

- The Retail Market Review – Findings and Initial Proposals, March 2011, 34/11
 - Do Energy Bills Respond Faster To Rising Costs Than Falling Costs?, March 2011
 - The Electricity and Gas Supply Market Report, March 2011, 36/11
 - The Retail Market Review – Findings and Initial Proposals – Supplementary Appendices, March 2011, (The Retail Market Review – Findings and Initial Proposals associated document)
 - Ofgem Consumer First Panel, Year 3 2010/11, Findings From The Second Set Of Workshops, Opinion Leader, March 2011, (The Retail Market Review – Findings and Initial Proposals associated document)
 - Customer Engagement with the Energy Market – Tracking Survey, Ipsos MORI, March 2011, (The Retail Market Review – Findings and Initial Proposals associated document)
 - Vulnerable Customer Research, FDS International, March 2011, (The Retail Market Review – Findings and Initial Proposals associated document)
 - Energy Supply Probe – Initial Findings Report, October 2008, 140/08
 - Update on Probe Monitoring: Tariff Differentials and Consumer Switching, July 2010, 79/10
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Executive Summary

Behavioural economics is a branch of economic theory that uses psychology to understand individuals' decision making processes. Ofgem has used insights from behavioural economics for many years. This paper makes explicit that thinking about consumer behaviour in the GB energy retail markets.

The first part of the paper uses a review of the academic literature on behavioural economics to identify four themes or consumer 'biases' that we think are relevant to consumers in the GB energy retail markets. The second part discusses how these themes apply specifically to GB energy retail markets. The table below summarises these themes and places them within the Office of Fair Trading's "access, assess, act" framework of consumer decision making¹.

Consumer biases and effects on the decision making process

Bias	What does it mean?	How does it affect the decision making process?		
		Access	Assess	Act
Limited consumer capacity	Consumers have difficulties assessing many different options and large amounts of information about them.	Consumers' awareness of the challenges they face means that they do not search at all.	Consumers adopt filters or shortcuts to navigate the information (eg 'rules of thumb', 'reference points').	Consumers switch to an option that is 'better' instead of the best one for them.
Status quo bias	Consumers prefer the current option.	Consumers do not search for alternative deals beyond their current package and/or provider.	Consumers over-emphasise knowledge of existing package and/or provider.	Consumers do not switch away from current package and/or provider.
Loss aversion	Consumers attach more weight to monetary losses than to monetary gains and avoid risk taking behaviour.	Consumers search less when energy prices fall than when they rise.	Consumers give too much weight to possible losses relative to potential gains.	Consumers postpone making a decision.
Time inconsistency	Their preference for immediate gains means that they place too much weight on costs incurred now compared to future savings.	Consumers do not search for new or alternative energy deals.	Consumers over-emphasise short-term discounts.	Consumers do not make a decision.

We conclude that these behavioural themes are useful to help understand consumer engagement in the GB energy retail markets. In particular, complex tariff information and poor comparability between suppliers' tariffs, accentuate these biases. These features result in consumers disengaging from the market or making poor switching decisions. Low engagement in turn has a significant impact on the extent to which the current market is delivering the benefits from competition.

¹ OFT 2010, "What does behavioural economics mean for competition policy?", p.15-16

1. Introduction

1.1. This paper is the first review by Ofgem of the insights from behavioural economics into how consumers make decisions about buying energy. Ofgem has implicitly drawn on behavioural economics in our previous analysis of the retail market, including in the 2008 Energy Supply Probe². However, this paper is a more systematic approach to the literature, which reflects our recognition that this discipline can help us identify problems in the GB energy retail markets.

1.2. Ofgem's principal objective is to protect the interests of consumers. Behavioural economics is one tool that enables us to do this, by helping us to understand consumer behaviour. Behavioural economics offers a framework for considering a range of factors that influence consumers' decision making. By drawing on these insights, Ofgem should be better able to help consumers engage effectively with the market and encourage competition. In other words, using behavioural economics can help us foster a virtuous circle of engaged consumers and vigorous competition³.

1.3. Retail consumers of energy in GB have been free to choose between a range of gas and electricity suppliers for over a decade. However, consumer engagement is still low. Standard economic theory predicts that retail consumers will use all available information to make the best choices for themselves. Behavioural economics, on the other hand, gives practical explanations for why this might not happen. It does so by drawing on psychology as well as laboratory experiments and field work⁴. A key insight is not only do behavioural biases exist that may limit consumer engagement, but they might be widespread and predictable too⁵. In economic language, consumers do not maximise their utility function in a rational way⁶. And these outcomes may persist over time even with repeated engagement with the GB energy retail markets⁷.

1.4. Our analysis is focused on material relevant to the GB energy retail markets and concentrates on consumer behaviour. Understanding consumer behaviour is important for understanding whether markets are functioning effectively. Well functioning markets require effective operation of both the demand side (consumers) and the supply side (firms). On the demand side, consumers need to be able to

² Ofgem 2008, "Energy Supply Probe – Initial Findings Report"

³ OFT 2010, "What does behavioural economics mean for competition policy?", p.9

⁴ DellaVigna, S. 2009, "Psychology and Economics: Evidence from the Field", *Journal of Economic Literature*, 47(2) p.315–72

⁵ Oxera 2010, "Competition, behavioural economics and remedy design"

⁶ Laibson, D and Zeckhauser, R. 1988, "Amos Tversky and the ascent of behavioural economics", *Journal of Risk and Uncertainty*, p.7-47

⁷ Knetsch J., Tang, F and Thaler, R. 2001 "Endowment effect and repeated trials: is the vickrey auction demand revealing?", *Experimental economics*, Volume 4, Number 3, p.257-269



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engage actively in the market and make choices that reflect their preferences. Where this is not the case, the benefits of competition can be significantly weakened.

1.5. The structure of the rest of this paper is as follows:

- chapter 2 summarises the relevant academic literature
- chapter 3 applies insights from behavioural economics to GB energy retail markets
- chapter 4 makes some preliminary conclusions and suggests areas for further work
- appendix 1 gives examples of how UK competition and regulatory bodies and the European Commission have used behavioural economics in practice.

2. Academic literature

Chapter Summary

This chapter reviews the academic literature on behavioural economics that relates specifically to consumers. It explores the themes of limited consumer capacity, status quo bias, loss aversion and time inconsistency that are important for the GB energy retail markets.

2.1. There is a large academic literature relating to behavioural economics⁸. In this chapter, we focus on material that we believe is particularly relevant for the GB energy retail markets.

History

2.2. The practice of applying observations from everyday life to characterise and explain the behaviour of individuals and organisations is at the heart of economics. It was particularly important when economics was more of a philosophical science than a mathematical one. Economists from David Hume to John Maynard Keynes have all used elements of this approach in their work⁹.

2.3. However, conventional economics makes a number of simplifying assumptions, such as that consumers can easily identify the best product for them. These assumptions let economists put together models that describe how markets work. At some point though, these simplifications limit what economics can tell us about what happens in reality. Behavioural economics adds a deeper understanding of consumer behaviour to conventional economics by removing some of these simplifications. There has been an explosion of interest in behavioural economics in recent years. It began in the academic literature and is now influencing policy in a range of areas¹⁰.

⁸ Ciriolo, E. 2011, "Behavioural economics in the European Commission: past, present and future", p.1

⁹ Earl, P.E. 2005, "Economics and Psychology in the twenty first century", Cambridge Journal of Economics, 29 p.909-926

¹⁰ Appendix 1 gives examples of how behavioural economics has been applied in practice by a number of UK competition authorities and regulators and by the European Commission.

Themes

2.4. The themes discussed below are ones identified in the academic literature that are useful for describing and thinking about the way that consumers behave in the GB energy retail markets. The themes are:

- limited consumer capacity
- status quo bias
- loss aversion
- time inconsistency.

2.5. There is some overlap between these themes. For example, loss aversion helps to explain status quo bias and limited capacity helps to explain loss aversion. Nonetheless, we valued looking at these themes separately because of their individual relevance to the different behaviours we have observed.

Access, assess, act

2.6. We have found it useful to consider the behavioural economic themes within the OFT's "access, assess, act" framework¹¹. This framework breaks down consumers' decision making processes into three stages:

- access – consumers find information about their tariff and other available tariffs
- assess – consumers evaluate the information and decide which deal is best for them
- act – consumers choose the best deal.

Limited consumer capacity

2.7. In standard economic theory, search costs exist but they are typically assumed to be low because consumers can easily assess information about different offers. For example, it is assumed that consumers can easily identify and use relevant information and discount irrelevant information. In other words, it is assumed that extra information will only have a small impact on search costs. Therefore, if firms provide more information about the choices available to consumers, they will make better decisions.

2.8. However, behavioural economics emphasises that consumers have a limited capacity to assess the goods and services offered to them. These limitations are due to the limited time and attention that consumers can use to assess the offers, as well as the knowledge and skills of individual consumers. Limited capacity will not affect all consumers in the same way, as some will be more able to assess the information

¹¹ OFT 2010, "What does behavioural economics mean for competition policy?", p.15-16

than others. Nevertheless, all consumers will have limits to their ability to use all of the available information.

2.9. Some consumers deal with their limited capacity for assessing information by only engaging in the markets when it is simple to do so. Some consumers might face difficulties when they need to compare many options. These difficulties are likely to be greater when consumers are faced with a complex range of tariffs that have different components. Consumers may also find it hard to choose between many very similar products. Piccione and Spiegler (2010) showed that a fraction of consumers will only switch from their current tariff if the new tariff is structured and presented in exactly the same way¹². Other consumers may be so discouraged by the complexity of a market that they do not begin searching.

2.10. Similarly, in experiments, Iyengar and Lepper (2000) found that limiting the amount of choice makes more people more likely to purchase products (jam or chocolate) or write optional class essays¹³. With the essays, people felt happier with their choices and wrote better essays when offered fewer essay topics to choose from. Students engaged better and were happier when the decision was made easier by limiting choice.

2.11. Other consumers will engage when choices are complex, but use their own ways of simplifying the choice. Some might adopt 'rules of thumb' for assessing information, such as only considering the products shown to them by a salesperson. Alternatively, their search and switching behaviour might be strongly influenced by what they know their friends and neighbours are doing.

2.12. Consumers might also be overly influenced by a 'reference point'. For example, they may stop searching when they find an offer that is slightly cheaper than their current one, instead of exploring fully whether there is a much cheaper option. Ariely et al (2003) ran an experiment to find out if the price that people were willing to pay for products was influenced by reference points¹⁴. They showed participants random numbers as reference points. They then asked them what they would be willing to pay to receive familiar goods, or avoid unfamiliar experiences, such as listening to unpleasant noises. They found that willingness to pay was heavily influenced by the reference points, which were used to simplify the decision making process.

Status quo bias

2.13. Status quo bias refers to the tendency of consumers not to change from what they are currently doing unless they face strong reasons for doing so. The reasons

¹² Piccione, M., and R. Spiegler (2010), 'Price Competition under Limited Comparability', working paper

¹³ Iyengar, S. and Lepper, M. 2000, "When choice is demotivating: can one desire too much of a good thing?", *Journal of Personality and Social Psychology* Vol. 79, No. 6 p.995-1006

¹⁴ Ariely, D., Loewenstein G. and Prelec, D. 2003, "'Coherent arbitrariness': stable demand curves without stable preferences", *The Quarterly Journal of Economics*, p.73-105

given for status quo bias in the literature include the endowment effect and loss aversion. The endowment effect refers to the extra value people attach to a good or service that they already own or receive. Loss aversion refers to people's fears about making a mistake when trying something new, which is discussed below. The impact of status quo bias is that it increases the importance of a consumer's current deal or the one that they receive without making an active choice (their default option).

2.14. The status quo bias has been shown to exist in a range of areas and has been used to inform policy¹⁵. Adabie and Gay (2006) found that the default 'presumed consent' for organ donation is a key determinant of the amount of organ donation across countries, even when other factors are controlled for¹⁶. Johnson and Goldstein (2003) estimate that changing the default option to people donating organs instead of not doing so could increase the amount of donors in the US by 1000s each year¹⁷.

2.15. Similarly, Madrian and Shea (2001) found that automatic enrolment in savings schemes led to significantly higher savings by employees¹⁸. Thaler and Benartzi (2004) found that it was possible to increase how much employees contributed to their pensions by committing them to increasing their level of contribution when they get a pay rise.

Loss aversion

2.16. According to economic theory, consumers value future losses and gains depending on how likely they are to occur, and the consumers' appetite for risk. For example, a risk neutral consumer would be willing to accept a gamble that won £10 for a head and lost £10 for a tail in a coin toss. In practice however, consumers focus far more on losses than gains and shy away from options with a 'downside'. Loss aversion can affect consumers' decisions to act, or to access information in the first place.

2.17. A study conducted by Khaneman et al. (1990) offers a good demonstration of loss aversion¹⁹. In their experiment, half the participants were given a mug. The other half were not. The participants were then asked whether they would like to trade the mugs. The study found that participants who were given the mugs valued them at twice the price that those without mugs were willing to pay and so little trading occurred. In other words, those who had mugs cared more about losing them than those who did not care about gaining them. These findings also occurred with repeated games. Similarly, some research indicates that consumers are less likely to

¹⁵ For example, see: Department of Work and Pensions / Pensions regulator in Appendix 1.

¹⁶ Abadie, A. and Gay, S. 2006, "The impact of presumed consent legislation on cadaveric organ donation: a cross country study", *Journal of Health Economics*, Vol. 25, No. 4, p.559-620

¹⁷ Johnson, E. and Goldstein, D. 2003, "Do defaults save lives?", *Science*, Vol. 302, p.1338-1339

¹⁸ Madrian, B. and Shea, D. 2001, "The power of suggestion: inertia in 401(k) participation and savings behaviour", *The Quarterly Journal of Economics* Vol. 116, No. 4, p.1149-1187

¹⁹ Kahneman, D., Knetsch, J. and Thaler, R. 1990, "Experimental tests of the endowment effect and the Coase theorem", *The Journal of Political Economy*, Vol. 98, p.1325-1348

search for better offers when prices are falling or they believe they are 'gaining' anyway²⁰.

Time inconsistency

2.18. In standard economic theory, consumers prefer to receive goods and services today than tomorrow. But this preference for receiving things now more than in the future is constant over time. In practice, however, the amount that consumers discount the future by varies depending on how far in the future points are. For example, in Ainslie and Haendel (1983) people were asked first whether they would prefer \$50 today or \$100 in 6 months²¹. They were then asked if they would prefer \$50 in a year or \$100 in a year and six months. The authors found that in response to the first question people preferred \$50 today. But in response to the second question, they preferred \$100 in a year and six months, despite the fact that the difference between payment dates was the same.

2.19. Similarly, consumers much prefer delaying payment for things far into the future, even if they end up paying a lot more to do so. Shui and Ausubel (2005) found that consumers chose credit cards with 'teaser rates' too much²². Given the amount of time people borrow money, too many people chose credit cards with initial teaser rates that had higher charges later. And they also failed to switch when their borrowing lasted longer than initially estimated or when new offers became available. Shui and Ausubel could only explain this behaviour through time inconsistency, or consumers being more attracted to immediate rewards over long-term gains.

²⁰ Lewis M. 2009, "Asymmetric price adjustment and consumer search: an examination of the retail gasoline market" Industrial Organization, 0407010, EconWPA

²¹ Ainslie, G. and Varda H. 1983, "The Motives of the Will" Etiologic aspects of alcohol and drug abuse, E. Gotteheil et al., eds., (Springfield, Il, Charles C. T. 1983)

²² Shui, H and Ausubel, L 2005, "Time inconsistency in the credit market", Working Paper, Department of Economics, University of Maryland

3. The GB energy retail markets

Chapter Summary

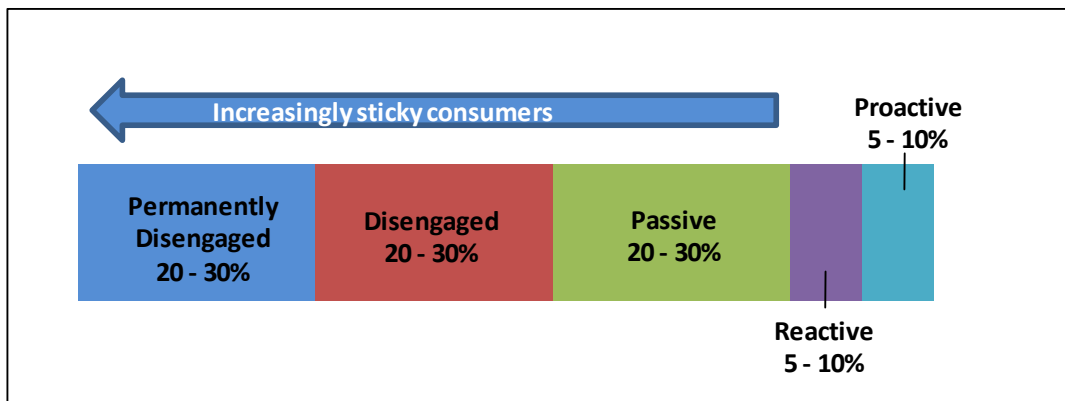
This chapter provides background on the GB energy retail markets. It then explores how the behavioural economic theory discussed in the previous chapter applies to these markets.

Background

3.1. The market for retail energy supply in GB has been open to competition since 1998, which means consumers have been free to choose how they buy their energy for over a decade²³.

3.2. While competition has delivered benefits to consumers, Ofgem's 2008 Energy Supply Probe and the Retail Market Review have identified a number of shortcomings of the markets. Two key concerns are weak consumer engagement, as illustrated in the figure below, and the complexity of prices.

Figure 3.1: Categorisation of consumers by switching behaviour



Source: *Ofgem consumer analysis*²⁴

3.3. Competition incentivises firms to provide consumers with what they want. However, ineffective or weak consumer engagement reduces the benefits of competition. Firms face less pressure to provide the goods consumers want - lower prices, better quality and new products.

3.4. In chapter 2, we examined a number of themes or 'consumer biases' identified in the behavioural economics literature that can limit the effectiveness of consumer

²³ Ofgem 2008, "Energy Supply Probe – Initial Findings Report"

²⁴ Ofgem 2011, "The Retail Market Review – Findings and initial proposals", Figure 2.4

engagement. These biases are general characteristics of consumer behaviour and may apply in a wide range of markets. However, the extent to which they affect consumer engagement will vary between markets depending on the features and product characteristics. Firms may also have an incentive to exacerbate these biases to their own advantage.

3.5. In the remainder of this chapter, we look at how the themes discussed in the previous chapter relate to consumer behaviour in the GB energy retail markets and how they function.

Consumer decision making in the GB energy retail markets

3.6. The table below sets out the themes or 'biases' identified in the previous chapter. It summarises how we think they affect the consumer decision making process in the GB energy retail markets, using the Office of Fair Trading (OFT)'s access, assess and act framework²⁵. Some biases have a greater impact at different stages of the decision making process. For example, we believe low consumer capacity has the greatest impact on consumers' ability to assess different offers. However, as the table shows, all of the themes we have identified may explain some consumer behaviour at all stages of the decision making process.

Table 3.1: Consumer biases and effects on the decision making process

Bias	What does it mean?	How does it affect the decision making process?		
		Access	Assess	Act
Limited consumer capacity	Consumers have difficulties assessing many different options and large amounts of information about them.	Consumers' awareness of the challenges they face means that they do not search at all.	Consumers adopt filters or shortcuts to navigate the information (eg 'rules of thumb', 'reference points').	Consumers switch to an option that is 'better' instead of the best one for them.
Status quo bias	Consumers prefer the current option.	Consumers do not search for alternative deals beyond their current package and/or provider.	Consumers over-emphasise knowledge of existing package and/or provider.	Consumers do not switch away from current package and/or provider.
Loss aversion	Consumers attach more weight to monetary losses than to monetary gains and avoid risk taking behaviour.	Consumers search less when energy prices fall than when they rise.	Consumers give too much weight to possible losses relative to potential gains.	Consumers postpone making a decision.
Time inconsistency	Their preference for immediate gains means that they place too much weight on costs incurred now compared to future savings.	Consumers do not search for new or alternative energy deals.	Consumers over-emphasise short-term discounts.	Consumers do not make a decision.

²⁵ OFT 2010, "What does behavioural economics mean for competition policy?", p.15-16

Limited consumer capacity

3.7. Survey and other evidence show that consumers struggle to assess deals in the GB energy retail markets. According to an OFT survey, 61 per cent of consumers found it difficult to choose suppliers in the energy sector, which was more than for any other sector surveyed²⁶. Many Consumer First Panellists said they were confused by the number of components in energy tariffs²⁷. Consumer Focus argued that tariff information was sometimes presented in a way that makes it very difficult for consumers to work out their current price and use price comparison sites²⁸. These findings were supported by a recent European Commission survey that found only 49 per cent of GB electricity consumers understand how the price of electricity is calculated²⁹.

3.8. The OFT survey also found that 46 per cent of energy consumers spent more than one hour comparing different suppliers but did not feel informed or confident that they had made the right choice³⁰. A recent Ipsos Mori survey shows that the energy sector has the highest proportion of consumers that do not know if they have switched to a better deal (38 per cent)³¹. As part of the Retail Market Review, a psychologist assessed the literacy and numeracy requirements of information from suppliers. The review showed the written information was relatively easy to understand. However, it was hard to understand prices.

3.9. The large number of tariff options also makes it difficult for consumers to assess the different deals. An Ofgem survey reported that 70% of consumers found the number of tariffs on offer confusing³². Figure 3.2 shows that the number of tariffs has increased significantly in the last four years.

²⁶ OFT 2010, "Advertising of prices", OFT1291, Available from:

http://www.ofg.gov.uk/shared_ofg/market-studies/AoP/OFT1291.pdf

²⁷ These included features such as the standing charge, the number of tiers of different price rates, acquisition discounts and cash back offers.

²⁸ This was especially in relation to discounts and termination fees. See: Consumer Focus 2010, "Request for investigation into energy tariffs", Letter to Ofgem

²⁹ European Commission, DG Sanco 2010, "The functioning of retail electricity markets for consumers in Europe"

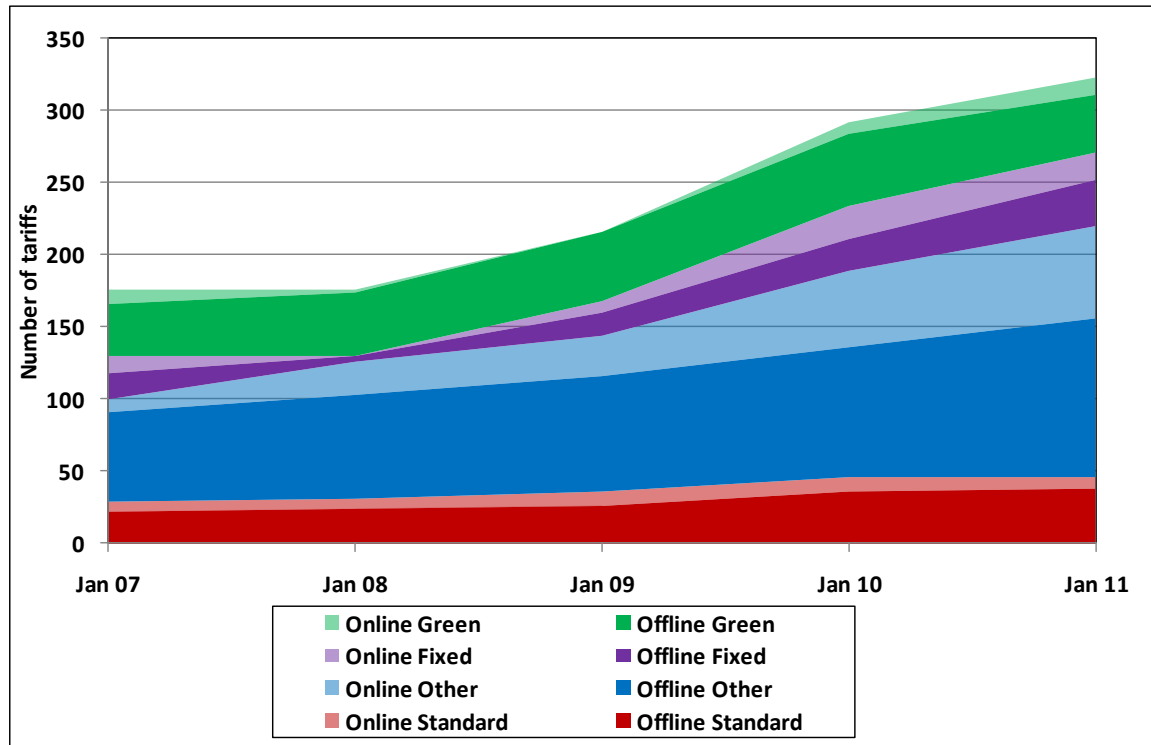
³⁰ OFT 2010, "Advertising of prices", OFT1291, Available from:

http://www.ofg.gov.uk/shared_ofg/market-studies/AoP/OFT1291.pdf

³¹ Ipsos MORI 2011, "Customer Engagement with the Energy market – Tracking Survey"

³² Ofgem 2008, "Energy Supply Probe – Initial Findings Report", Appendix 4

Figure 3.2: Number of tariffs available to domestic consumers on 1 January from 2007 to 2011



Source: *Ofgem analysis of data from TheEnergyShop.com*³³

3.10. Consumers’ limited capacity to deal with the large number of tariffs and their complexity causes many to completely disengage. When consumers do engage, many are likely to miss the best offers because they use short cuts or rules of thumb to navigate the information. For example, consumers may use their existing deal as a reference point and stop searching when they find a better deal, rather than continuing until they find the best deal. They may also restrict themselves to using the information provided by a sales agent, rather than searching the markets. Our latest Ipsos MORI survey showed that 30 per cent of switchers made their decision as a result of information from a door step salesperson. These factors – low engagement and short cuts – are likely to dampen price competition.

Status quo bias

3.11. There is evidence that many consumers stick with the status quo in the GB energy retail markets. Of consumers surveyed by Ipsos MORI, 89 per cent are aware that they can switch energy supplier, and 85 per cent of switchers find switching fairly or very easy. However, approximately 60 per cent of consumers say they have never switched supplier³⁴. Two thirds of consumers’ energy accounts are with one of their ex-monopoly suppliers (either British Gas or the ex-monopoly electricity

³³ Ofgem 2011, “The Retail Market Review – Findings and initial proposals”, Figure 2.1

³⁴ Ipsos MORI 2011, “Customer Engagement with the Energy market – Tracking Survey”

supplier for that region). Research for Ofgem in the Retail Market Review has shown that consumers can make substantial savings by switching³⁵.

3.12. The main reason consumers give for having never switched is that they are happy with their current supplier (77 per cent of non-switchers), and many consumers express loyalty to their current provider³⁶. However, it is very difficult to disentangle loyalty due to lower prices and better service from status quo bias in the survey evidence. Our latest Ipsos MORI survey showed that only 13 per cent of consumers have checked the prices of other suppliers and believe that they are already on a good deal³⁷. Consumer First Panellists explained their satisfied with their current supplier by a lack of problems with them and that their bills were 'within their budget'.

3.13. Most consumers in the GB energy retail markets are on 'evergreen' contracts. They therefore do not have regular contract renewals to act as 'trigger points' to force them to reconsider their current energy deal. Consumers on evergreen tariffs are hence more likely to exhibit status quo bias as their current tariff is in effect their default option. When consumers also face complex tariff information this makes them even more unlikely to switch from their current evergreen deals.

Loss aversion

3.14. In the GB energy retail markets, loss aversion means that consumers focus too much on potential losses (eg higher prices, worse service) than potential gains.

3.15. Consumers have doubts over the information they have access to, or lack confidence in their own assessment of energy deals. This can make consumers reluctant to act on their assessment. In the face of uncertainty, there may be a benefit to postponing a decision because consumers may get better information later. However, loss aversion means that consumers over value this benefit and delay making a decision too long. With regard to consumers' confidence in their own assessment, Ofgem's 2008 qualitative consumer research identified that consumers lacked confidence or knowledge to switch³⁸.

3.16. In addition to focusing on potential losses from higher prices or poor service, many energy consumers also appear to be concerned by the potential 'loss' (ie hassle) associated with something going wrong with the switching process. Ofgem's 2008 Ipsos MORI research identified that 58 per cent of non-switchers feared that something will go wrong if they switch, whereas another survey found that in reality only 12 per cent of switchers found switching difficult³⁹.

³⁵ Ofgem 2011, "The Retail Market Review – Findings and initial proposals", Figure 2.9

³⁶ Ipsos MORI 2011, "Customer Engagement with the Energy market – Tracking Survey"

³⁷ Ipsos MORI 2011, "Customer Engagement with the Energy market – Tracking Survey"

³⁸ 2008 qualitative consumer research prepared by FDS International, summarised in: Ofgem 2008, "Energy Supply Probe – Initial Findings Report", Appendix 3

³⁹ Ofgem 2008, "Energy Supply Probe – Initial Findings Report", Appendix 4. Switching figures

3.17. Loss aversion, especially when combined with complex information is likely to make consumers disengage from the market. The limited pursuit by consumers of potential gains might also lead to consumers to searching less when wholesale prices are falling because they are “winning anyway”. In our econometric work, we have found evidence of weaker competitive forces when wholesale costs (and prices) are falling compared to when they are rising⁴⁰.

Time inconsistency

3.18. In the GB energy retail markets, time inconsistency might mean that consumers put too much weight on the effort of searching today compared to the payoff of lower energy bills in the future. Time inconsistency may result in them spending less time searching for information on tariffs than would be optimal, weakening consumer engagement. For some consumers, it may stop them from comparing tariffs at all.

3.19. As discussed above, up front search costs are, or are perceived to be, high for many energy consumers. As mentioned earlier, the OFT found that 46 per cent of energy consumers spent more than one hour comparing different suppliers without feeling confident they had made the right choice⁴¹. Consumer First Panellists have also said they disengage when tariffs are complex⁴².

3.20. Time inconsistency might also affect consumers' decisions about whether to purchase fixed rate energy deals. It might put consumers off from choosing fixed rate and other deals that have 'payback' further in the future. On the other hand, they might be overly influenced by 'teaser rates' and cash back offers. These offers, whilst cheaper to begin with, might be more expensive over a longer time period. Overall, time inconsistency may result in retail energy consumers choosing tariffs which are less good for them.

from: Ipsos MORI 2011, “Customer Engagement with the Energy market – Tracking Survey”

⁴⁰ Ofgem 2011, “Do energy bills respond faster to rising costs than falling costs?”

⁴¹ OFT 2010, “Advertising of prices”, OFT1291, Available from:

http://www.ofg.gov.uk/shared_ofg/market-studies/AoP/OFT1291.pdf

⁴² Opinion Leader 2011, “Ofgem Consumer First Panel, Year 3 2010/11, Findings from the second set of workshops”

4. Conclusions


Chapter Summary

This chapter draws conclusions on what behavioural economics can tell us about GB energy consumers.

- 4.1. Well functioning markets require effective operation of both the demand side and the supply side. On the demand side, consumers need to be able to engage actively in the market and make choices that reflect their preferences.
- 4.2. The behavioural economics literature shows that different consumers exhibit different 'biases' that can limit their effective engagement in the markets. In this paper we have considered how behavioural biases may affect consumers in the GB energy retail markets.
- 4.3. A key 'bias' is limited capacity, ie finite time and ability to process information. Survey evidence shows that consumers struggle to assess deals in the GB energy retail markets. As a result, many consumers disengage from the market, which is shown by our consumer research⁴³. Many others adopt shortcuts or rules of thumb to navigate the information that means they may not switch to the best deal. Where suppliers can benefit from these biases, they have an incentive to exploit them.
- 4.4. Status quo bias (consumers favouring their existing choice) and loss aversion (consumers weighting potential losses more than gains) also characterise consumer behaviour in the GB energy retail markets. These biases mean that consumers are less likely to engage in the market. About two thirds of gas and electricity consumers' accounts are still with one of the suppliers they were with over a decade ago⁴⁴.
- 4.5. Finally, time inconsistency means that consumers refrain from searching the market because they have to invest time and effort now for a pay off that they get in the future. In other words, time inconsistency means that consumers are more likely to delay or avoid engaging in the markets, even though it would benefit them. In the GB energy retail markets there are no triggers for consumers to engage, as there are for example in car insurance (where contracts are renewed on an annual basis).
- 4.6. It is also important to note that, while all groups of consumers are susceptible to these behavioural biases, some groups are more likely to have them than others. Ofcom's consumer research has shown that some vulnerable groups, such as those

⁴³ Opinion Leader 2011, "Ofgem Consumer First Panel, Year 3 2010/11, Findings From The Second Set Of Workshops"

⁴⁴ Ipsos MORI 2011, "Customer Engagement With The Energy Market – Tracking Survey"



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on low income and, to a lesser degree, older people are more likely to display behavioural biases⁴⁵.

4.7. Consumers in the GB energy retail markets exhibit a number of behavioural biases – as they do in other markets. However, complex tariff information and poor comparability between suppliers' tariffs increase the impact of these biases. These features of the markets are likely to make consumers disengage more, or make poor switching decisions. These tendencies significantly reduce the extent to which the current market is delivering the full benefits from competition.

⁴⁵ Ofcom 2010, "Behavioural Economics and 'Vulnerable Consumers': A Summary of Evidence", Available from: <http://www.communicationsconsumerpanel.org.uk/smartweb/consumer-protection/behavioural-economics-and-vulnerable-consumers>

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Appendix 1 – Behavioural economics in practice

5.1. This Appendix provides examples of analysis carried out by economic regulators and competition authorities in the UK and the European Union (EU) that draw on behavioural economics.

Office of Fair Trading

5.2. The OFT has carried out research into a broad range of issues regarding behavioural economics. It has examined what behavioural economics means for competition policy and developed the access, assess and act framework referred to in the main text⁴⁶. The OFT has also commissioned studies that test the effect of remedies on consumer behaviour, which stressed the importance of examining consumer reactions in practice⁴⁷. It has also carried out a market study into contracts that has identified particular terms and conditions that create challenges for consumers, and can cause them harm⁴⁸. It highlighted misleading terms, terms that are complicated or confusing, as well as limited opportunities for learning about these terms in the marketplace. In addition, the OFT have investigated the implications of behavioural economics for firms⁴⁹.

5.3. The OFT has run investigations into the Personal Current Account (PCA) and gym markets that had behavioural focuses. The OFT's investigation into Personal Current Accounts found that banks made nearly 30 per cent of revenues from unauthorised bank charges. Consumers were unaware of the charges either at the time of contracting, or when they incurred the charges. A key behavioural insight was that even when consumers understood the charges, they consistently underestimated how much they would use services with charges. In other words, they were overly optimistic about how their future behaviour would not lead to fines⁵⁰. The remedies that the OFT considered were:

- increasing the amount of switching amongst consumers,

⁴⁶ OFT 2009, "What does behavioural economics mean for competition policy?", Available from: http://www.offt.gov.uk/shared_offt/economic_research/offt1224.pdf

⁴⁷ London Economics for the OFT 2008, "Road testing of consumer remedies", Available from: http://www.offt.gov.uk/shared_offt/economic_research/offt1099.pdf

⁴⁸ OFT 2011, "Consumer contracts", OFT1312, Available from: http://www.offt.gov.uk/shared_offt/market-studies/consumercontracts/offt1312.pdf

⁴⁹ OFT 2010, "The impact of price frames on consumer decision making", Available from: http://www.offt.gov.uk/shared_offt/economic_research/OFT1226.pdf

OFT 2010, "The applicability of behavioural economics to models of the firm", Available from: http://www.offt.gov.uk/shared_offt/economic_research/OFT1213.pdf

⁵⁰ OFT 2007-2010, "Personal current accounts in the UK", Available from: <http://www.offt.gov.uk/OFTwork/markets-work/completed/personal/>

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- improving the information given to consumers and
- reducing the revenue that banks receive from these charges.

5.4. The OFT considered that an intervention was worthwhile, if it gave the consumer new knowledge that changes what they buy, and this learning would not have happened quickly by itself in the market.

5.5. In the market for gym membership, the bias towards optimism was also the key behavioural insight. The OFT found that consumers were too confident that they would use a gym membership and so signed up to long term contracts. These contracts were subject to high exit penalties. The OFT's proposed remedies are to make the long term nature of contracts and exit charges more explicit and to reduce the exit costs to a more justifiable level. This case is ongoing⁵¹.

Competition Commission

5.6. The UK's Competition Commission (CC) investigated the market for payment protection insurance (PPI)⁵². Sellers were found to have point of sale monopolies that resulted in poor value for money for the consumer. The CC proposed a range of remedies, including banning the sale of PPI at the same time as a credit product and for seven days afterwards. The Competition Appeals Tribunal (CAT) rejected this remedy⁵³. The CAT concluded that the CC had not gathered enough evidence on how consumers would respond to the remedy in practice. In particular, the CC failed to take account of the loss of convenience caused⁵⁴. The CC has since gathered additional evidence about the benefits from banning immediate sales of PPI, including data from experiments⁵⁵. In its analysis, the CC argued that it was difficult to isolate specific effects in experimental work, which highlights the importance of experiment design. Instead, they focused on survey data and modelling work.

European Commission

⁵¹ OFT 2009, "OFT warns consumers: exercise your judgement when signing up to a gym", Available from: <http://www.of.gov.uk/news-and-updates/press/2009/05-09>

⁵² Competition Commission 2009, "Market investigation into payment protection insurance", Available from: http://www.competition-commission.org.uk/rep_pub/reports/2009/fulltext/542.pdf This case is also discussed in OFT 2010, "What does Behavioural Economics mean for Competition Policy?", Available from: <http://www.of.gov.uk/OFTwork/publications/publication-categories/reports/Economic-research/of1224>

⁵³ The proposed remedy did allow the sale of PPI within seven days if the buyer proactively returned to the seller at least 24 hours after the purchase of the credit product.

⁵⁴ Competition Appeals Tribunal 2009, "Barclays Bank PLC c Competition Commission", Case 1109/6/8/09 Available from: http://www.catribunal.org.uk/files/Judg_1109_Barclays_16.10.09.pdf

⁵⁵ Competition Commission 2010, "PPI Remittal, Final Report", Available from: http://www.competition-commission.org.uk/inquiries/ref2010/ppi_remittal/final_report.htm

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5.7. The European Commission has published a study that uses behavioural economics to examine how consumers make decisions about retail investment services⁵⁶. In addition to a literature review, they carried out online and face-to-face experiments. The study found that people struggled to choose the best investment for them, even when they faced very simple choices. It also highlighted that consumers can behave unexpectedly (in particular, with regard to the disclosure of the adviser's conflict of interest) and how small practical details can have a big impact on them. The European Commission highlighted the need for data from the 'real world' to design policy as well as information from experiments.

5.8. 6,000 people participated in the online experiments, and made five different choices between two alternative products. Less than 2 per cent chose the best investment product each time. The investment choices were worse when:

- the information was harder to understand
- the information was incomplete
- the products were more complicated
- the products involved risk.

5.9. The European Commission found that standardising and reducing the information improved the investment choices that were made.

5.10. The other experiments focused upon the impact of revealing commission to consumers in both an online and face-to-face setting. People responded to this information in a face-to-face setting. However, people only reacted to this information online if it was in bold red font. In addition, people sometimes reacted to this information by choosing outcomes that were worse for them through 'contrarian' behaviour.

5.11. This study emphasises the power of simplifying and standardising product information. It also shows that simple presentation tricks can have significant impacts, such as using red bold font. Further, it shows how consumers can react in unexpected ways, such as to information about incentives, which increases the importance of testing proposed remedies.

Department of Work and Pensions / Pensions regulator

5.12. The Pensions Act 2008 (the Act) was developed in response to the Pensions Commission's findings that retirement savings rates in the UK were low⁵⁷. The low

⁵⁶ European Commission 2010, "Consumer decision-making in retail investment services: a behavioural economics perspective" Available from:

http://ec.europa.eu/consumers/strategy/docs/final_report_en.pdf

⁵⁷ Cabinet Office, Institute for Government 2010, "Mindspace: influencing behaviour through public policy", Available from:

<http://www.instituteforgovernment.org.uk/content/133/mindspace-influencing-behaviour-through-public-policy>

rates were mainly due to employees not signing up to their employers' pension schemes. The Act attempts to overcome this by requiring employers to automatically enrol workers over the age of 22 into a workplace pension from 2012. The Pensions Commission's research showed that while people recognise that they "have to save", they do not want to be forced into compulsory saving. The Pensions Commission's solution does not introduce compulsory saving — employees can still choose to opt out — but changes the default position to "opting in" to a pension.

5.13. The Pensions Commission's research identified several key issues for it to overcome when creating the default opt-in option. The riskiness and types of investments for the default pension need to be set at an appropriate level. In addition, the motivations of employees and employers need to be taken into account when setting up the opt-in / opt-out process. This is because incentives employers' and employees' are not aligned. It will cost employers money (in increased employer contributions) for employees to sign up. They therefore have an incentive to encourage people to opt-out.

Financial Services Authority

5.14. The Financial Services Authority (FSA) commissioned and carried out two key studies in this area:

- an experiment to examine the impact of sellers' behaviour and extra information upon consumers' decisions to purchase insurance⁵⁸
- a study into the impact of providing extra and standardised information to consumers on their decisions to purchase mortgages⁵⁹.

5.15. The experiment examined the performance of individual salespeople by comparing how much they sold against one another. It found that some sellers consistently sold more insurance than others, even though they were selling the same products. The researchers concluded that differences in sellers' performance were because of differences in their persuasive skills; extrovert sellers were particularly successful.

5.16. The study also found that providing extra information about the product's value for money (claims ratio) and the sellers' incentives (commission) had no real impact upon purchasing decisions. Consumers recognised this information was important but were unable to use it in a consistent manner to change their behaviour. However, this extra information did make consumers feel less confident about the decisions that they made. This means that the overall impact of more

⁵⁸ Meza, D., Irelenbusch, B., Reyniers, D. 2007, "Information versus persuasion Experimental Evidence on Salesmanship, Mandatory Disclosure and the Purchase of Income and Loan Payment Protection Insurance", Available from:

http://www.fsa.gov.uk/pubs/other/DeMeza_Report.pdf

⁵⁹ Monteiro, N and Ziadi, R 2007, "Market impact of MCOB", Available from:

<http://www.fsa.gov.uk/pubs/occpapers/op27.pdf>

information on consumer wellbeing was ambiguous. While consumers valued having the information, or recognised its importance, it did not enable them to change their decisions and they became less happy about their actions.

5.17. The quantitative analysis examined whether the Key Facts Information (KFI) that was introduced through Mortgage Conduct of Business (MCOB) regulation improved consumers' decisions about purchasing mortgages. MCOB was introduced in 2004 to improve the ability of consumers 'to make informed choices in the mortgage market and so to buy lower cost and/or more suitable products for their needs'⁶⁰. The KFI was intended to standardise and simplify information about mortgages. To assess whether MCOB has been successful, the study drew on numerical techniques as well as data gathered by the Council of Mortgage Lenders about the 2 million mortgages purchased in the UK between 2003 and 2005. It found that after MCOB there were better mortgages available in the market. However, mortgage prices increased after MCOB. They concluded that this could have reflected costs of MCOB being passed through by lenders. They also found that after MCOB, consumers bought mortgages that offered poorer value for money to them.

5.18. These findings indicate that consumers value having greater access to information they think is important. However, they have limited capacity to process extra information when making their purchase decisions. The second study also highlighted that providing this information can be costly. Further, it is possible that extra information can harm consumers' feelings of wellbeing.

Ofcom

5.19. Ofcom conducted experimental research into the impact of providing information about the prices of phone calls on consumer behaviour⁶¹. They found that providing the exact price of a call in a pre-call announcement had the greatest impact. However, all means of communicating prices improved the choices made by consumers. Consumers also learnt over time from all of the remedies tested. They also found that total bill costs, rather than information on individual call prices in bills, had an impact on future consumer behaviour.

5.20. These are experimental results and so should be interpreted with caution. However, the results do give some interesting insights into consumer behaviour. Ofcom's research highlighted that consumers may respond better to providing information about total cost on bills than detailed information. Ofcom's research also finds that it is important to take account of any learning effect that might result following extra information being made available.

⁶⁰ Monteiro, N and Ziadi, R 2007, "Market impact of MCOB", p.5, Available from: <http://www.fsa.gov.uk/pubs/occpapers/op27.pdf>

⁶¹ Ofcom 2010, "Using experiments in consumer research", Available from: <http://stakeholders.ofcom.org.uk/market-data-research/telecoms-research/experiments/>