Oxera

Economic appraisal of Ofgem's domestic tariff proposals

An appropriate intervention to increase consumer engagement?

Prepared for ScottishPower

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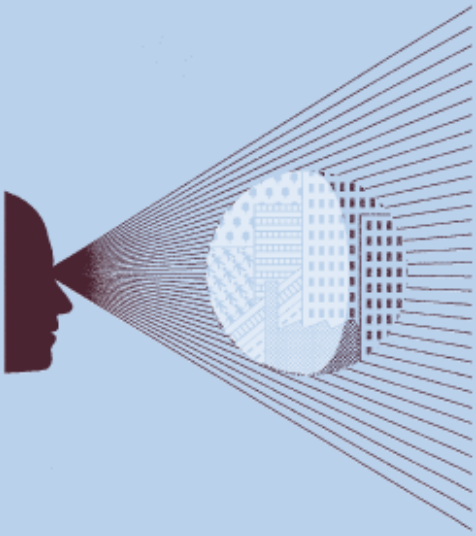

Executive summary

In its Retail Market Review, Ofgem is proposing significant regulatory intervention in the domestic energy supply market. The tariff simplification component of these proposals represents a considerable departure from the existing market arrangements, with the stated intention of promoting competition and protecting consumers.

ScottishPower has commissioned this analysis to provide an independent economic appraisal of Ofgem's case for these interventions, as well as to assess some of the risks associated with the proposals. The analysis compares Ofgem's approach and evidence base with the standards of good practice for market investigations and any subsequent interventions.

Ofgem's proposals

Ofgem considers that consumers' confusion about the tariffs on offer and consequent inability to understand and compare them is an impediment to the effective functioning of the energy supply market.[1] It is therefore proposing to increase customer engagement by imposing tariff restrictions on suppliers in addition to information remedies. The key restrictions within the reforms include:

– imposing different requirements on the structure of 'standard' and 'non-standard' tariffs, and the conditions attached to them;
– placing a restriction on the number of standard tariffs offered by suppliers;
– introducing a partially regulated price for standard tariffs, and the prospect of introducing a fully regulated 'backstop tariff'.

Ofgem believes that these proposals, aimed at improving tariff comparability, are the 'best means of tackling tariff complexity and promoting effective engagement'.[2]

Ofgem's analytical framework

Ofgem does not set out an explicit analytical framework within which to consider the features of supply and demand that may adversely affect competition, nor does it systematically consider the impacts of its proposals. As the proposals represent Ofgem's attempt to enhance competition in the retail energy market, good regulatory practice suggests that they should be developed within an analytical framework consistent with the principles and practices embodied in the Utilities Act 2000 and those upheld by other regulatory and competition authorities, such as the Office of Fair Trading (OFT) and the Competition Commission, as set out in the Enterprise Act 2002. These principles and practices suggest that the following components should be present in Ofgem's analysis:

– a complete assessment of the factors that drive consumers' decisions, including their price sensitivity and preferences for existing products, as well as behavioural biases;
– a clear link, and transparent evidence, to demonstrate how the proposed intervention targets the adverse features identified;
– a complete assessment of the potential demand and supply response to a range of potential interventions, and clear evidence why the chosen intervention is preferred;
– an estimate of the magnitude of the expected costs and benefits of the proposals.

[1] Ofgem (2011), 'The Retail Market Review: Domestic Proposals', December, para 2.1.
[2] Ibid, para 2.8.

The extent to which Ofgem's analysis meets these standards is considered below.

Appraisal of Ofgem's analysis and conclusions

Ofgem's analysis focuses on the factors that affect consumers' decision-making, and draws on three sources of evidence: qualitative survey evidence; a quantitative assessment of tariff comparability; and insights from the behavioural economics literature. This analysis is, however, incomplete and in places inaccurate. Ofgem's approach is based on the OFT's decision-making framework ('access, assess, act'), which describes the *ability* and *incentives* necessary for consumer engagement.[3] However, Ofgem focuses its analysis on only one relevant factor within the 'assess' stage: consumer capacity for engagement; it does not present an analysis of the *incentives* for consumers to access and act on information. As other evidence available to Ofgem shows, these incentives will be affected by factors including the price differentials between tariffs, framing effects, and the preferences of active customers for a number of existing tariff features.

A fundamental concern with Ofgem's analysis is that it does not establish a clear link between consumers' limited capacity to understand aspects of the current tariffs on offer, and the level of engagement. In addition, the evidence that Ofgem does present is misleading. For example, while Ofgem suggests that 61% of consumers found it difficult to choose suppliers in the energy market, this statistic has been taken from the survey responses to a question asked to only a sub-group of all respondents. Adjusting for this sub-group effect, this figure could be around 13%.

Even though Ofgem's focus is on the limitations of consumers' capacity to assess complex information, its qualitative analysis does not explicitly test whether this limited capacity is a causal factor driving consumer engagement, relative to other factors. Indeed, the causal factors of disengagement are not examined in detail. Establishing such a link is a central prerequisite to Ofgem's premise that restricting tariff structures will increase engagement.

Ofgem goes on to present analysis of the potential impact of its proposals on engagement. However, its quantitative analysis, and impact assessment of the proposed remedies, is inadequate for the following reasons.

– Owing to the construction of Ofgem's quantitative survey, it is not possible to compare the effects of the different components of the potential remedies that the regulator considers (eg, a common standing charge versus the inclusion of a monthly cost figure) in order to ascertain the likely impact of alternative interventions on the level of switching.

– Ofgem has incorrectly interpreted its quantitative evidence on customers' likelihood of switching under each proposed remedy: it asks only those consumers who select a particular remedy as their preferred option whether they would be more likely to switch. Correcting for these sub-sample issues significantly changes the interpretation of the results.

– The survey design itself is imperfect due to a lack of incentives for participants to engage in complicated calculations, and the possibility of fatigue bias.

– Ofgem's analysis has focused on one factor alone (ease of comparing tariffs) and appears to have given limited attention to a range of other factors relevant to consumer welfare, such as the removal of tariffs preferred by some customers and the pass-on of compliance costs to consumer prices.

[3] OFT (2010), 'What does behavioural economics mean for competition policy?', March, pp.15–16.

– Ofgem does not compare consumers' attitudes towards its proposal relative to the status quo, nor does it outline the order of magnitude of the costs and benefits of its proposals.

In summary, close inspection of Ofgem's analysis reveals that the actual evidence does not appear to be sufficiently robust to support a finding that consumers would prefer all of the measures included in the Retail Market Review proposals.

Potential adverse demand-side effects

Despite Ofgem's intention to increase consumer engagement and promote competition, its proposals risk creating their own adverse effects on competition.

On the demand side, the proposals risk creating the following adverse effects:

– the incentive for consumers to engage in the standard segment of the market could weaken in response to reduced price dispersion caused by the proposed restrictions on the structure of standard tariffs;

– the incentive for consumers to participate in the non-standard segment of the market may fall due to the perception of increased regulatory protection for standard tariffs and their greater prominence; and

– currently engaged consumers could suffer from the removal of tariff features and innovations that reflect cost savings related to their payment preferences or usage (eg, dual-fuel discounts, online and prompt-pay discounts, and variable tariffs). In addition, since tariffs that can create cost savings are prohibited, consumer welfare suffers because these inefficiently incurred costs are likely to be passed on to all consumers.

Ofgem has not assessed the likelihood or potential scale of these effects, or provided a description of the mitigating factors that could alleviate these risks.

Potential adverse supply-side effects

In addition to the demand-side risks, there is a risk that the tariff restriction proposals will create several adverse supply-side effects that could lead to a net increase in prices. Ofgem's own estimates of the margins of energy supply companies suggest that they are below the level of relevant retail benchmarks.[4] This implies that there is little scope for the proposals to reduce prices below their current levels. By contrast, if the risks to competition were realised, the scope for upward price movements would not be so limited.

Abstracting from the current starting point for prices, it is possible that the proposals will reduce individual firms' incentives to cut prices. Currently, when setting prices, energy suppliers can target tariffs at specific sections of the market. For example, tariffs can be differentiated by channel (eg, on-/offline) in a way that can be tailored to different groups of customers, and introductory offers and discounted tariffs (coupled with geographically targeted sales activity) can be used to 'raid' a rival's customer base. The literature suggests that restricting such product differentiation can lead to an overall increase in prices.

Under the proposals, when setting their standard tariffs, suppliers will have to offer the identical prices (ie, with no discount options) to all consumers. Depending on the composition of consumers, suppliers may be more inclined to stick with higher prices for all consumers, and hence the average price could rise.

[4] Ofgem (2011), 'The Retail Market Review: Findings and Initial Proposals', Appendix 9.

These risks are exacerbated when the incentives on the market as a whole created by the proposals are considered against the OFT's criteria for determining which interventions may reduce competitive intensity, and the conditions arising from the *Airtours* case. Assessing Ofgem's proposals against these criteria shows that the remedies create conditions that might help to foster tacit collusion. The remedies:

– will promote standardisation of products, and hence might increase transparency, enhancing firms' ability to monitor each other;
– could discourage entry, by prohibiting differentiation of products by new entrants;
– could enhance the threat of price-based retaliation against a firm that does not tacitly collude if consumers become more willing to switch supplier.

As a result of these three factors, the remedies risk impairing suppliers' incentives to engage in competition. A reduced incentive to engage in competition may mean that prices do not stay at the lowest (competitive) level, and hence consumers could be harmed. Essentially, if the costs of cutting prices to one segment include having to cut prices to all, this makes price-cutting less attractive. The knowledge that others face the same incentives further underlines the incentive to reduce price-cutting activity. According to Ofgem's own impact assessment guidance, an evaluation of these potential effects on competition should have been a component of Ofgem's Impact Assessment for this review.[5]

In addition, this risk of higher prices following an anticipated reduction in competition may be exacerbated because suppliers' direct costs are likely to increase as a result of compliance with the proposals and the removal of incentives for efficient consumer behaviour, and these costs may be passed through to consumers.

An alternative response to the evidence to date

As outlined above, Ofgem has not established that limited consumer capacity is the key driver of the current level of disengagement in the energy market, nor has it provided sufficient evidence that its proposed tariff restrictions would increase engagement.

This study suggests that remedies aimed at correcting for consumer biases should be introduced with caution. The concept of 'libertarian paternalism' in the behavioural economics literature suggests that consumers should be nudged to make more effective choices, rather than altering the choices themselves, and choices that are valued should not be removed. Furthermore, as the OFT has warned, interventions that restrict products and pricing practices can lead to less effective competition and higher prices overall. Ofgem's proposed tariff restrictions represent a highly intrusive intervention that appears to warrant a considerably more thorough analysis of the potential effects than has been conducted to date.

An alternative, less intrusive response, would be to focus on information measures. The requirement to improve information provision, as well as aid consumer decision-making by establishing a trusted price-comparison website, are interventions that Ofgem's survey evidence suggests may be most effective, and that would mirror the recent undertaking provisionally accepted by the OFT in its study of extended warranties.[6] This study finds that interventions would carry none of the risks associated with tariff restrictions and are likely to have an unambiguously positive impact on competition and prices.

[5] Ofgem (2009), 'Guidance on impact assessments', December, para 6.18.

[6] OFT (2012), 'Extended warranties on domestic electrical goods. An OFT market study and notice of the OFT's intention to accept Undertakings in Lieu of a Market Investigation Reference', February.

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1 Introduction

In its Retail Market Review, Ofgem is proposing significant regulatory intervention in the domestic energy supply market. The tariff simplification component of these proposals represents a considerable departure from the existing market arrangements, with the stated intention of promoting competition and protecting consumers.

In its assessment, Ofgem states that consumers' confusion about aspects of the tariffs on offer and consequent inability to understand and compare them is an impediment to the effective functioning of the energy supply market.[7] However, in contrast to recent market investigations, such as the preliminary decision of the Office of Fair Trading (OFT) for extended warranties,[8] Ofgem's proposed interventions go significantly further than outlining requirements to simplify and enhance information provision in order to increase consumer engagement.

In addition to imposing additional information requirements, Ofgem's proposals are intended to encourage consumer engagement by:

– imposing different requirements on the structure of, and conditions attached to, 'standard' and 'non-standard' tariffs;
– placing a restriction on the number of standard tariffs offered by suppliers;
– introducing a partially regulated price for standard tariffs, and the prospect of introducing a fully regulated 'backstop tariff'.

For more detail, see Box 1.1.

Box 1.1 Detail of Ofgem's proposals

Ofgem's proposals fall into three broad categories, set out below.

Tariff restrictions

– Only one standard tariff per payment type (and no discounts or bundling).
– Ofgem-determined standing charge for all standard tariffs.
– All non-standard tariffs have no automatic contract roll-overs.
– All non-standard tariffs have switching windows with no exit fee.
– Prices, terms, and conditions attached to non-standard tariffs will be guaranteed for the duration of the contract.

Information

– Price-comparison guide.
– Tariff Information Label.
– Common format for bills.
– Separation of bills and annual statements.

Standards of conduct

– Standards of conduct are to be applied to all interactions between suppliers and consumers.
– Standards of conduct will become legally binding as they will be incorporated into a supplier licence condition.

Source: Ofgem (2011), 'The Retail Market Review: Domestic Proposals', December.

[7] Ibid., para 2.1.

[8] OFT (2012), 'Extended warranties on domestic electrical goods. An OFT market study and notice of the OFT's intention to accept Undertakings in Lieu of a Market Investigation Reference', February.

ScottishPower has commissioned this analysis to provide an independent economic appraisal of Ofgem's case for these interventions, as well as to assess some of the risks associated with the proposals. The analysis compares Ofgem's approach and evidence base with the standards of good practice for market investigations and any subsequent interventions.

Market interventions that go beyond a requirement to provide additional, or simplified information, risk creating significant distortions to competition. For this reason, it is essential for regulators and competition authorities to clearly identify and measure the benefits of introducing additional regulations and to assess in full the risks of interventions. These conditions are reflected in the requirements placed on the Competition Commission (CC) by the Enterprise Act 2002.

Given Ofgem's intention to enhance competition by increasing consumer engagement, the standards embodied in the Utilities Act 2000 (as amended by the Sustainable Energy Act 2003) and Enterprise Act 2002 suggest that the following analysis should be present:

– a complete assessment of the factors that drive consumer decision-making, such as consumers' price sensitivity, their preferences for existing products, as well as behavioural biases;
– a clear link, and transparent evidence, to demonstrate how the proposed intervention targets the adverse features identified;
– a complete assessment of the potential demand and supply response to a range of potential interventions, and clear evidence why the chosen intervention is preferred;
– an estimate of the magnitude of the expected costs and benefits of the proposals.

Ofgem's analysis focuses on the determinants of consumer decision-making, and draws on three sources of evidence: qualitative survey evidence; a quantitative assessment of tariff comparability; and insights from the behavioural economics literature. However, this report identifies a number of significant shortcomings in Ofgem's analysis, including:

– a narrow focus on one driver of consumer decision-making—limited consumer capacity—and the omission of detailed analysis of the *incentives* required for consumer engagement, including price differentials and preferences for existing features;

– no clear link between a number of Ofgem's research findings and the proposed interventions—particularly in relation to restrictions on tariff structure;

– the omission of thorough testing of the potential impacts of the proposed reforms on consumer engagement—particularly on the impact of regulatory price-setting on consumer perceptions of standard tariffs;

– no analysis of the incremental benefits of different measures (eg, tariff restrictions) compared with less-interventionist measures—in particular, improved information;

– no analysis of the incremental benefits of the different measures compared with the status quo;

– the omission of any supply-side analysis assessing the potential impact of the proposals on supplier behaviour and on price levels;

– no attempt to estimate the order of magnitude of the costs and benefits of its proposals.

This report is structured as follows.

– Section 2 sets out the standards to which Ofgem's evidence base and analysis should adhere in order to assess the appropriateness of its proposed interventions.

– Section 3 provides an assessment of Ofgem's analysis and evidence base.

– Section 4 examines the likely supply- and demand-side responses to Ofgem's proposals, and sets out the adverse effects that these could have on competition and consumer welfare.

– Section 5 concludes.

2 An appropriate analytical framework

An appropriate analytical framework—key messages

Ofgem does not set out an explicit analytical framework within which to consider the features of supply and demand that may adversely affect competition, nor does it consider systematically the impacts of its proposals.

The Retail Market Review proposals reflect Ofgem's attempt to enhance competition in the retail energy market, and, as such, should be developed within an analytical framework consistent with the principles and practices upheld by other competition authorities, such as the OFT and CC.

Given Ofgem's intention to enhance competition by increasing consumer engagement, the standards embodied in the Utilities Act 2000 (as amended by the Sustainable Energy Act 2003) and the Enterprise Act 2002 suggest that the following analysis should be present:[9]

– a complete assessment of the factors that drive consumer decision-making, including price sensitivity and consumers' preferences for existing products, as well as behavioural biases;
– a clear link, and transparent evidence, to demonstrate how the proposed intervention targets the adverse features identified;
– a complete assessment of the potential demand- and supply-side response to a range of potential interventions, and clear evidence why the chosen intervention is preferred.
– an outline of the order of magnitude of the associated costs and benefits of the proposals.

The objective of Ofgem's proposals is to increase consumer engagement and enhance competition within the retail energy market in accordance with Ofgem's principal statutory objective as set out in the Electricity and Gas Acts, as modified.[10]

Ofgem's proposals represent a significant regulatory intervention, with potentially wide-reaching implications for consumer choice, the incentives to engage, entry conditions, and the overall level of prices. For these reasons, Ofgem's overall framework of analysis and evidence base should be robust and proportionate to the potential effects of its proposed intervention.[11]

In its consultation document, Ofgem does not set out an explicit analytical framework within which to consider the features of supply and demand that may adversely affect competition, from which it then derives the appropriate remedies and a systematic approach to its consideration of the impacts of its proposals. This lack of an explicit framework means that there is a risk that there may be some unintended consequences that Ofgem has not addressed, which, if included in the assessment, might alter the expected costs and/or benefits of the proposals.

This section sets out an appropriate analytical framework and the standards against which Ofgem's Retail Market Review domestic proposals should be assessed.

[9] Sustainable Energy Act 2003, section 6.

[10] Following the most recent modification, made by the Energy Act 2010, Ofgem's principle objective of protecting the interests of existing and future consumers must also consider their interests in the reduction of carbon emissions and in security of supply. Those interests are to be promoted wherever appropriate by promoting effective competition, but Ofgem must first consider whether the interests of consumers might be better protected by another option.

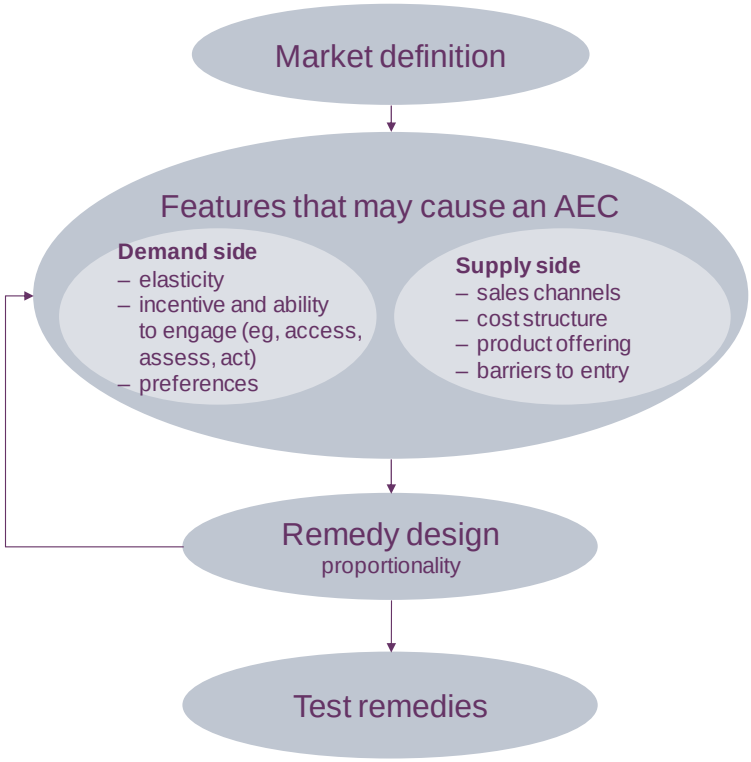
[11] When Ofgem imposes any regulatory interventions in pursuit of its statutory objectives, it must provide a justification for doing so. The Utilities Act 2000 (as amended by the Sustainable Energy Act 2003) imposes a duty on Ofgem to conduct a regulatory impact assessment before imposing regulatory intervention. According to Section 5A(3), before Ofgem can implement a proposal, it is required to carry out and publish an assessment of the likely impact of the proposal, or to publish a statement setting out its reasons why it considers such an assessment unnecessary.

2.1 An appropriate analytical framework—the CC standard

Ofgem's proposals seek to remedy its finding that consumers' confusion over the information provided about energy tariffs and the cost reductions they might obtain from switching tariffs causes many consumers to disengage, which in turn reduces the competitive constraint on suppliers.

When evaluating the impediments to competition within a Market Investigation Reference, the CC undertakes to identify, target, and remedy market features that adversely affect competition. Ofgem's analytical approach might therefore be expected to mirror the steps in the CC's analysis in order to meet the requirements under the Enterprise Act 2002, as summarised in Figure 2.1. The main steps are market definition; identifying features that cause an adverse effect on competition (AEC); remedy design; and remedy testing. The demand- and supply-side factors listed are illustrative, but are also typical of key features examined.

Figure 2.1 Key steps in market analysis and associated remedy design



Source: Oxera.

Figure 2.1 highlights the following key steps required in a robust market analysis.

– **Identification of the relevant market.**

– **Analysis of the key features that may cause an adverse effect on competition.** The Enterprise Act sets out the requirement for the CC to assess the 'features, of each relevant market [that] prevent, restrict or distort competition'.[12] These are important considerations in energy supply on both the supply and demand side. Examples include:

  – consumers' price sensitivity;

[12] Enterprise Act 2002, 134(1).

  - consumers' preferences among the existing products available (eg, demand for fully variable tariffs, dual-fuel, and online discounts);
  - potential behavioural biases. Ofgem's own review of the work of the OFT and CC highlights the importance of survey and experimental evidence in understanding consumer decision-making, and the importance of identifying consumers' reactions in practice;[13]
  - the nature of competition between suppliers, including the role of introductory offers in encouraging switching;
  - the channels through which cost savings (eg, from prompt payment) are passed back to consumers.

- **Targeted remedy design and testing to address the features of concern.** Where an adverse effect on competition has been found, it is necessary to consider whether there is a need for remedial action and the types of remedy that would be suitable, taking into account effectiveness, costs and proportionality.[14]

2.1.1 Proportionality—key analysis required in an impact assessment

Ofgem's Impact Assessment (IA) guidelines emphasise the need for robust analysis in order to demonstrate whether a proposed intervention is proportionate, and to limit the risks from unnecessary or inappropriate intervention that could increase industry costs, restrict competition, and ultimately harm consumers.[15]

The depth and breadth of analysis undertaken to assess the potential effects of a proposed remedy might be expected to depend on the envisaged scale of the benefits of the proposed remedy, and the ability to measure those benefits. The Competition Appeal Tribunal (CAT) has previously described the following 'double proportionality test' that should be applied to the level of analysis that should be undertaken by the CC within a market investigation:

> the more important a factor seems to be in the proportionality assessment, or uncertain its effect, or wide-reaching a proposed remedy is likely to prove, the more detailed or deeper the investigation of the factor may need to be.[16]

The lessons from Ofgem's own IA guidelines, and the Better Regulation principles,[17] suggest that the following features should be present in Ofgem's proposals.

- A presentation of the **range of remedies** considered, from the less to the more interventionist. Each remedy should be set out in sufficient detail for it to be understandable, and for a third party to be able to assess it at a high level.

- An outline of how the proposals mitigate the failure identified in a way that does not cause unintended consequences if there are errors in the underlying analysis.

- Analysis that shows that the proposed approach is **superior** to the alternatives, and is proportionate and targeted.

- The reasons for the final proposal and the **weight attached to each piece of analysis**.

- A full description and an estimate of the **magnitude of the costs and benefits** (initially an order of magnitude estimate but refined to reflect higher levels of accuracy as policy development progresses over time**)**.[18] This cost–benefit analysis should break down the

[13] See Ofgem (2011), 'What can behavioural economics say about GB energy consumers?', March, Appendix 1.

[14] Competition Commission (2003), 'Market investigation references: Competition Commission Guidelines', June.

[15] Ofgem (2009), 'Guidance on Impact Assessments', December, p. 1.

[16] Competition Appeals Tribunal (2009), *Tesco plc vs Competition Commission*, judgement, [2009] CAT 6.

[17] HM Government (2010), 'Reducing regulation made simple'.

[18] HM Government (2011), 'Impact assessment guidance', August.

costs and benefits in terms of their impact on parties, including companies, different categories of consumer, and potentially interested third parties, such as the government or local authorities.

The need to provide a complete and evidence-based assessment of the full effects of any regulatory intervention on consumers and suppliers has been highlighted by recent decisions of the CAT and CC (see Box 2.1).

Box 2.1 Lessons from the Payment Protection Insurance inquiry

A recent example where proposed market intervention has been rejected on appeal due to an insufficiently robust and complete impact assessment is the CC's inquiry and proposed remedies into the sale of payment protection insurance (PPI), a point-of-sale add-on product sold to consumers taking out a loan.

Part of the package of proposed remedies put forward by the CC was to prohibit credit providers from selling PPI as an add-on at the point of sale of the loan. The CAT remitted this remedy back for further consideration since the CC had provided insufficient evidence of how consumers would respond to the remedy, whether it would benefit them, and how this would weigh against the loss of convenience to consumers.[19] The CAT ruled that the CC's proposed market intervention was based on *assumed* behavioural biases, rather than direct evidence. The CC subsequently undertook consumer surveys and experiments to test its remedies with the relevant evidence as set out by the CAT. As a consequence, it decided not to implement its initial remedy for retail PPI (PPI covering catalogue and other retail purchases bought with credit, rather than direct loans), although it retained its original remedies for other PPI products.

Should Ofgem's proposals be opposed and appealed, the CC will be likely to use these principles in any examination of Ofgem's proposals.

Source: Competition Commission (2010), 'PPI—CC confirms point-of-sale prohibition', October.

2.2 Summary of expected analysis

The above analysis highlights that market intervention intended to promote competition requires significant analysis of the adverse market features and the potential impact of any interventions proposed. This analytical burden should be greatest when the proposed interventions have potentially wide-ranging impacts, and therefore risk the possibility that they could themselves create additional distortions that either undermine their objective or cause other problems in the market. Hence, the following pieces of analysis are imperative to good regulatory practice, and should be present within Ofgem's overall approach:

– a complete assessment of the factors that drive consumer decision-making, including price sensitivity, the preferences for existing products, and behavioural biases;
– a clear link, and transparent evidence, to support how the proposed intervention targets the adverse features identified;
– a complete assessment (with testing where possible) of the potential demand and supply response to a range of potential interventions, and clear evidence why the chosen intervention is preferred; and
– an outline of the order of magnitude of the associated costs and benefits of the proposal.

Section 3 now explores whether Ofgem has met this standard. The potential unintended consequences that it has not assessed are then set out in section 4 (consequences for consumer behaviour) and section 5 (consequences for supplier behaviour).

[19] See, for example, Competition Commission (2009), 'Statement following competition appeal tribunal's judgement', October.

3 Appraisal of Ofgem's analysis and conclusions

Appraisal of Ofgem's analysis and conclusions—key messages

Ofgem considers that the current level of consumer engagement in the retail energy market provides an ineffective constraint on suppliers.[20] It suggests that many consumers who try to switch energy tariffs find it difficult to make a well-informed choice,[21] and that its proposals, aimed at improving tariff comparability, are the 'best means of tackling tariff complexity and promoting effective engagement'.[22]

Ofgem's analysis focuses on the factors that determine consumers' decisions, and draws on three sources of evidence: qualitative survey evidence; a quantitative assessment of tariff comparability; and insights from the behavioural economics literature. This analysis is, however, incomplete and, in places, inaccurate.

Ofgem's analysis does not establish a clear link between disengagement and the apparent complexity of the range of tariffs on offer. Such a link is central to its premise that simpler tariffs will increase engagement.

Ofgem goes on to present analysis of the potential impact of its proposals on engagement. However, its quantitative analysis, and impact assessment of the proposed remedies, is inadequate for the following reasons.

– Owing to the construction of Ofgem's quantitative survey, it is not possible to compare the effects of the different components of the potential remedies Ofgem considers, for example, a common standing charge versus the inclusion of a monthly cost figure in order to compare the likely impact of alternative interventions on the level of switching.
– Ofgem has incorrectly interpreted its quantitative evidence on customers' likelihood of switching under each proposed remedy: it asks only those consumers who select a particular remedy as their preferred option whether they would be more likely to switch in response to information presented in that manner. Correcting for these sub-sample issues significantly changes the interpretation of the results.
– Ofgem does not compare consumers' attitudes towards its proposal relative to the status quo, nor does it outline the order of magnitude of the costs and benefits of its proposals.
– The survey design itself is imperfect due to a lack of incentives for participants to engage in complicated calculations, and the possibility of fatigue bias.
– Ofgem's analysis has focused purely on one factor and appears to have given limited attention to a range of other relevant factors, such as the impact of the removal of tariffs preferred by some customers and the pass-on of compliance costs.

In summary, close inspection of Ofgem's analysis reveals that the actual evidence is not sufficient to support a finding that consumer welfare overall is best served by introducing the tariff restrictions preferred by Ofgem.

This section reviews Ofgem's overall analytical framework, supporting evidence and conclusions against the principles and objectives set out in section 2. It shows that Ofgem has not embedded its proposed remedies in a robust analytical framework.

The following areas are examined in turn.

– Ofgem's analytical framework, the scope of its analysis and the logic behind its remedies;

[20] Ofgem (2011), 'The Retail Market Review: Domestic Proposals', December, p. 1.
[21] Ibid., para 2.1.
[22] Ibid., para 2.8.

– Ofgem's assessment of the relevant features of consumer behaviour;
– Ofgem's assessment of the relevance and proportionality of its proposals.

3.1 Ofgem's analytical framework

Ofgem has identified that retail energy consumers are disengaged—that is, there is a significant proportion of customers who report never having switched, although they consider that they may switch in the future. Ofgem concludes that disengagement is likely to be due to 'behavioural biases'—elements of psychology in decision-making that affect how consumers make decisions. In particular, Ofgem suggests that one particular bias, 'limited consumer capacity', means that the apparent complexity of the current range of tariffs offered by suppliers causes confusion among consumers, with the result that they disengage from the market.

Ofgem claims that this disengagement leads to low levels of switching between energy suppliers since consumers are unable to identify the optimal tariffs for their pattern of consumption. This lack of switching reduces the competitive pressures in the supply market since the threat of losing customers in response to high prices or poor service quality is reduced. In turn, this reduced competitive pressure harms consumers through weaker price and quality competition.

To substantiate its hypotheses on the drivers of, and impediments to, consumer decision-making, Ofgem draws on the following evidence:

– the OFT's consumer decision-making framework ('access, assess, act');[23]
– Ofgem's behavioural economics paper;[24]
– a customer engagement tracking survey;
– results from Ofgem's Consumer First panel; and
– vulnerable consumer research.

Ofgem's analysis starts with reference to the OFT's 'access, assess, act' framework—whereby consumer engagement is achieved when a consumer has both the *incentive* and *ability* to:

– **access** relevant market information;
– **assess** the offers available to choose what is best;
– **act** on their assessment of the information.

Ofgem does not discuss the economic incentives for consumers to undertake each of the stages within this framework; rather, it focuses on the different types of 'behavioural bias'; a summary of its behavioural economics research is provided in Box 3.1. While Ofgem does attempt to apply all the behavioural biases it identifies to all stages of the 'access, assess, act' framework, in both its analysis and conclusions Ofgem focuses heavily on the impact of consumers' limited capacity to process complex information on their ability to undertake the 'assess' stage; it pays little attention to other biases and to the 'access' and 'act' stages.

Box 3.1 Behavioural biases

In its behavioural economics paper, Ofgem identifies the following four behavioural biases that could contribute to low levels of switching in the energy market.

Limited consumer capacity: often referred to as 'bounded rationality', this bias is driven by consumers' limited ability to process complex information, or wide ranges of information. Consumers' limited capacity may cause them to make poor choices, or no choice at all. This departs from

[23] OFT (2010), 'What does behavioural economics mean for competition policy?', March, pp.15-16.
[24] Ofgem (2011), 'What can behavioural economics say about GB energy consumers?', March, para 3.10.

conventional economic theory, where consumers are assumed to have rational preferences, and processing information is costless.

Loss aversion: this bias is driven by consumers' underlying preferences. Conventional economic theory generally assumes that consumers have the same preferences about winning or losing a given amount. In fact, there are numerous experimental and empirical findings that indicate that that this is not the case. A more accurate model of actual behaviour would assume that consumers care about losses and gains relative to a reference point such as the status quo.

Status quo bias: this bias is driven by the finding that consumers place different values on goods that they have compared with goods that they do not have. This observed behaviour could be explained by different underlying behavioural biases—eg, loss aversion (ie, it is a feature of underlying preferences), or limited consumer capacity (ie, it is a feature of uncertainty about the impact of a change).

Time inconsistency: this bias describes the inconsistency in consumers' preferences over time. Economic theory typically models an individual with stable preferences, who maximises utility over time subject to their expectations about the future. However, experimental evidence shows that the pull of instant gratification can override this long-run maximising behaviour. For example, time inconsistency might explain procrastination, where an instant benefit of avoiding a task imposes a longer-term cost that an individual regrets.

These behavioural biases are, to a varying extent, present in all consumers' decision-making. What matters is whether these biases, combined with other market features, hinder the effective operation of the market.

Ofgem's evidence of the presence in retail energy markets of the biases set out in Box 3.1 relies on several surveys, and a review of behavioural economics literature. These surveys include Ofgem's Consumer First panel,[25] Ofgem's consumer engagement tracking survey,[26] a survey by the European Commission,[27] and a survey undertaken by the OFT as part of its investigation into the advertising of prices.[28] The evidence contained in some of these sources conflicts with that in others, and, in some cases, the evidence Ofgem has presented is not supported by the underlying research. Overall, Ofgem lacks evidence to support its conclusion that consumers' limited capacity causes many to disengage entirely from the energy supply market. In particular, the analysis fails to present evidence of a causal link between low levels of engagement and the current level of tariff complexity. This is discussed in section 3.2 below.

Furthermore, Ofgem has not undertaken analysis of other factors that may be key determinants of engagement in the retail energy market, including price sensitivity and product offering. This is explored in more detail in section 3.3.

Because Ofgem has primarily focussed its analysis on concerns about limited consumer capacity, its remedies have focused solely on this point. This has consequences for the relevance and proportionality of its remedies, as discussed in section 3.5 below.

3.2 Ofgem's inconsistent use of evidence

Ofgem has sought to assess the presence and magnitude of behavioural biases in retail energy using the sources listed above. In a number of instances, the conclusions that it draws from the evidence described above appear to be inconsistent with the underlying source, or with other pieces of analysis within its evidence base. Its assessment of each of

[25] Ofgem (2011), 'Ofgem Consumer first panel – Year 3', March.

[26] Ipsos MORI (2011), 'Customer Engagement with the Energy market – Tracking Survey', January, p. 8.

[27] European Commission, DG Sanco (2010),'The functioning of retail electricity markets for consumers in Europe', November.

[28] OFT (2010), 'Advertising of prices', December.

the behavioural biases, as presented in the behavioural economics paper issued at the start of the Retail Market Review,[29] is discussed below.

3.2.1 Limited consumer capacity

With regard to the impact of tariff complexity on consumer engagement, Ofgem concludes:

> Consumers' limited capacity to deal with the large number of tariffs and their complexity causes many to completely disengage.[30]

This conclusion does not appear to be supported by the evidence cited by Ofgem.

One of the main pieces of supporting evidence for Ofgem's assertion is that, according to the OFT survey, 61% of consumers found it difficult to choose suppliers in the energy sector.[31] In fact, the OFT reports that, *of those who qualified to respond*, 61% of consumers found it difficult to choose a supplier in the energy market.[32] In order to be qualified to respond, the consumer had first to say that they had encountered a complex or confusing price across the range of sectors being discussed. Only 56% of the sample said that this was the case, of which only 39% said that they had encountered a complex or confusing price in the energy sector.[33]

Weighting the result to account for this sub-sampling suggests that only around 13% of consumers said that they had encountered a complex price in the energy sector, and found it difficult to choose a supplier.[34] Furthermore, this statistic alone does not constitute evidence of a causal link between the current level of tariff complexity and disengagement. The survey in question goes on to ask further questions about what the consumers found difficult when choosing a supplier. Of particular relevance to Ofgem's core proposals, only 28% of this group of respondents that said they found it hard to choose an energy supplier said that the absence of 'like for like' comparisons made it difficult to choose. Therefore, the survey does not provide evidence in itself that more than 4% of customers would benefit from the improvements to comparability contained within Ofgem's core proposals. [35]

Ofgem cites another finding from the OFT survey referred to above: '46 per cent of consumers spent more than one hour comparing prices, but did not feel informed or confident that they had made the right choice.'[36] Again, this survey statistic is not supported by the underlying survey evidence. First, the result in question appears to have been taken from the section on complex pricing, and as such is subject to the same sub-sampling issue as the previous statistic—in fact, the statistic applies only to those who had encountered complex and confusing prices in the energy sector and had gone on to compare prices between suppliers (74% of this sub-group of respondents). Therefore, the cited 46%, actually represents only 7% of the whole sample.[37]

It is also unclear how Ofgem has concluded that this set of consumers 'did not feel informed or confident that they had made the right choice', as this information is not available in the published versions of the OFT survey.[38]

[29] Ofgem (2011), 'What can behavioural economics say about GB energy consumers?', March.

[30] Ibid., para 3.10.

[31] Ibid., para 3.7.

[32] OFT (2010), 'Advertising of prices', OFT1291.

[33] The qualifying question may also have been leading, as it includes gas/electricity supply as an example of an area where a consumer may have experienced a complex or confusing price.

[34] 13% = 61% * (39% * 56%)

[35] 4% = 28% * 13%

[36] Ofgem (2011), 'What can behavioural economics say about GB energy consumers?', March, para 3.8.

[37] 7% = 46% * 74% * (39% * 56%)

[38] The results in the available OFT data tables are broken down by only two question responses, whereas this result would require the responses to be cross-tabulated across three questions.

Ofgem also notes that, based on a survey by the European Commission on the functioning of Europe's retail electricity markets, only 49% of GB electricity consumers know how their energy bill is calculated.[39] This also does not provide evidence of a causal link between tariff comparability and disengagement. If a large proportion of consumers are already disengaged, it would not be surprising that they do not know how their bill is calculated. This finding could be an indicator, rather than a cause, of disengagement. Moreover, taking into account bounded rationality, some portion of consumers may not wish to know how their energy bill is calculated. Indeed, it might be expected that many consumers currently choose their supplier on the basis of an overall quotation, or summary information on price comparison websites and annual statements, rather than undertaking comparisons based on calculations using tariff rates— using total cost quotations in this way allows consumers to make easy comparisons across suppliers.

Ofgem cites the finding from its consumer engagement tracking survey that 'the energy sector has the highest proportion of consumers who do not know if they have switched to a better deal (38 per cent)'.[40] 'Highest proportion' implies that there has been some form of comparison across industries in the source. The statistic appears to be taken from the responses to questions 20a and 24a in the cited source. First, the citation appears to be incorrect, as the actual proportion of consumers who do not know whether they have switched to a better deal is 25% in electricity and 26% in gas. Second, there has been no comparison to the same statistic for other industries, from which to conclude the energy sector is highest. Furthermore, the fact that these consumers do not know whether they are on a better deal does not necessarily imply tariff complexity and limited consumer capacity. For example, if a consumer switched between a variable tariff and a capped tariff they may not know ex ante if they will end up on a better deal given the uncertainty over the level of future electricity prices. A follow-up question to understand what is driving consumers' responses would be important here if conclusions are to be drawn.

Finally, Ofgem ignores evidence that contradicts its view that limited consumer capacity is a significant cause of disengagement. Survey data obtained for Ofgem shows that relatively few consumers directly identify their inability to understand existing tariffs as a reason for disengaging with the market. Of those consumers who had previously switched, most found it easy: 77% of gas and electricity customers said that 'it was easy to decide which deal to switch to' and 76% 'are confident that they fully understand the key features of the deal they have switched to'[41]. Of those who did not switch, relatively few cited reasons that relate to limited capacity: 4% said they were unsure where to get information to help them make a good choice and 22% that said that switching is a hassle (which may or may not indicate lack of capacity). By contrast 77% gave as a reason that they were happy with their supplier.[42]

3.2.2 Status quo bias

Ofgem's assessment of the presence and magnitude of status quo bias in retail energy is not complete; it does not provide an assessment of whether status quo bias has a significant effect on the behaviour of consumers in retail energy markets, although Ofgem does believe that it is present.[43] Ofgem states that, although its survey evidence shows that awareness of switching availability is high (89%), and that most consumers who do switch found it easy to do so (85%), many consumers state that they have never switched gas or electricity supplier (60%). Furthermore, nearly two-thirds of consumers' energy accounts are with one of their ex-monopoly suppliers.

[39] Ofgem (2011), 'What can behavioural economics say about GB energy consumers?', March, para 3.7.

[40] Ofgem (2011), 'What can behavioural economics say about GB energy consumers?', March, para 3.8.

[41] Ipsos MORI (2011) Tracking survey, page 52. Although this sample is biased in that it comprises consumers who had already switched, the fact that three quarters found it easy to decide suggests that difficulty of tariff comparison may be more of a perceived than an actual problem.

[42] Ipsos MORI (2011) Tracking survey, page 53. Respondents could give multiple reasons, so proportions don't sum to 100%.

[43] Ibid., para 4.4.

However, the main reason consumers give for not switching supplier is that they are happy with their current provider (77%). To assess whether status quo bias is present and, if so, how it affects the level of switching, Ofgem would have to undertake further study into why consumers are happy with their current provider. If this is because consumers believe that they are on the best deal, when they are demonstrably not, this would indicate that behavioural biases are likely to be present, including status quo bias. If, however, it is because they are comfortable with the price and with the level of customer service, and see no point in changing provider for minor or negligible price benefits then status quo bias is unlikely to be a significant explanation of the level of disengagement.[44]

3.2.3 Loss aversion

Ofgem's assessment of the presence and magnitude of behavioural biases due to loss aversion in retail energy markets is also incomplete, partly because Ofgem does not appear to make proper use of the insights of behavioural economics into why consumers' actions exhibit loss aversion—namely, that loss aversion could be a product of underlying preferences, rather than consumers making errors of judgement. Ofgem states that loss aversion causes consumers to focus 'too much' on losses relative to gains. This would imply either a form of limited consumer capacity (making mistakes), or that Ofgem believes that consumers 'should' have particular risk attitudes.

Given that people's observed choices routinely indicate relative, reference-dependent preferences, being loss averse is not necessarily a cause for intervention. If consumers expect limited benefits, or perceive significant downside risks to switching supplier, their loss aversion will cause them to be reluctant to switch. Ofgem should undertake a proper analysis of the risks that consumers perceive around the benefits of switching, as well as what the costs are, and the associated risks. Ofgem's intervention should focus on ensuring that consumers' assessment of the benefits and risks is accurate, rather than seeking to change the relative weighting of losses and gains in consumers' decision-making.

3.2.4 Time inconsistency

Ofgem's assessment of the presence and magnitude of time inconsistency is also incomplete. It identifies two potential effects of time-inconsistent preferences related to the pull of instant gratification. The first is that consumers may not search at all (or not enough) due to the upfront search costs with benefits realised only later. The second is that consumers may be tempted by teaser rates into making poor decisions. It is worth noting that if a remedy were designed to have an impact on one of these potential biases, it could exacerbate the other. For example, banning teaser-rate products would shift more of the benefits to switching into the future, reducing engagement that was occurring because of the attractiveness of the instant gratification from the low initial rate.

Ofgem does not make a judgement on whether behavioural biases due to time-inconsistent preferences have a significant effect in the retail energy market.

3.3 Relevant features not considered by Ofgem

Ofgem's analysis does not take into account other relevant aspects of the decision-making process that can affect a consumer's desire to engage with the market. The following insights can be found within Ofgem's evidence base:

– potential cost savings provide the main incentive for customer switching;
– observed switching levels are less than declared willingness to switch; and
– consumers value existing product features and variety.

[44] Ofgem's Consumer First panel does ask some follow-up questions which indicate that customers are happy with customer service and the price they pay. See Ofgem (2011), 'Ofgem Consumer first panel – Year 3', March.

Ofgem does not appear to include this evidence when considering the access, assess, act framework. Their importance is discussed below.

3.3.1 Price differentials and the propensity to switch

When searching is costly (in terms of money, time or effort), consumers might only be expected to search for alternative deals and switch energy tariffs when the expected savings from search outweigh the costs. While behavioural biases can exacerbate the size of the benefits required by reducing consumers' assessment of the potential benefits of alternative products and increasing switching costs, genuine underlying savings must exist to generate the incentive for a well-informed rational consumer to switch.[45]

For switching to occur, these savings must exceed the perceived costs of the overall switching process, which may include the time spent preparing (locating annual consumption data), performing the search, effecting the switch (submitting meter serial numbers and readings, setting up a new direct debit, checking the final statement from the old supplier), plus the risks of additional hassle if the changeover does not go smoothly. Ofgem's proposals will potentially reduce one component of these costs, the time spent searching.

Both the presence of meaningful price differentials and consumer awareness of those differentials are therefore key drivers of consumer engagement. This is supported in recent survey insights from Ipsos MORI and YouGov that help in understanding the reasons for consumer engagement.[46]

– In the Ipsos MORI survey, of those who had switched supplier, 78% said it was in order to switch to a cheaper deal; [47] and
– In the YouGov survey, 51% of those asked were reluctant to switch under the current arrangements, as they did not expect sufficient savings to justify the effort.[48]

Recent survey data also provides a quantitative understanding of how propensity to switch varies as a function of expected saving. Table 3.1 presents the results of research into consumers stated propensity to search.

Table 3.1 Price differentials and the propensity to switch

	Saving required	Sample of population willing to switch (%)	
		incremental	cumulative
YouGov/ ScottishPower (2012)	Less than £50	13	13
	£51–£100	26	39
	£100 or more	46	85[1]
Morgan Stanley (2010)	Less than £50	18	18
	£51–£100	36	54
	£100 or more	36	90[1]

Note: [1] Cumulative figures do not sum to 100% where some respondents answer 'don't know' or where no price differential is enough.
Source: Morgan Stanley[49] and ScottishPower. [50]

[45] With behavioural biases, consumers may disregard future savings or use rules of thumb that mean that the full value of savings associated with particular tariffs are not considered.
[46] Ipsos MORI (2011), 'Customer Engagement with the Energy market – Tracking Survey', January; and ScottishPower YouGov survey.
[47] Ipsos MORI (2011), 'Customer Engagement with the Energy market – Tracking Survey', January, page 22-23. 78% is average of gas (79%) and electricity (77%)
[48] YouGov (2012), 'Ofgem Proposals Omnibus Research', report commissioned by ScottishPower, February
[49] Morgan Stanley (2007), 'Energy Supply Survey', January, pp 10.

The table highlights that, according to these surveys, less than 20% of consumers are willing to switch for savings of less than £50 per annum, and almost half of consumers require savings of over £100 per annum to be willing to switch.

Price gaps similar to these are needed to encourage switching in other consumer markets such as telecommunications. Research commissioned by Ofcom in 2004 suggested that on average consumers required a £63 per annum saving in mobile charges to justify engaging in 30 minutes of search and a £173 per annum in fixed line charges[51]. These results are also consistent with the observed price dispersion across a range of consumer products advertised on price comparison websites.[52]

In terms of the cost versus saving trade-off, Ofgem's tariff simplification measures may be expected to reduce the cost (effort and risk) side of the equation, and hence increase propensity to switch if the savings remain constant. This is a reasonable assumption in the case of information measures but may not be valid in the case of tariff restrictions. This is because the proposed regulated standing charge might cause prices to converge at lower consumption levels and hence reduce the available savings from switching between standard products;

This factor will reduce and potentially outweigh the benefits of reduced search costs. Given the availability of quantitative data on propensity to switch as a function of saving, this is an area worthy of investigation.

3.3.2 Observed switching levels

Analysis of switching rates in Ofgem's 2008 Supply Probe suggests that observed switching rates are much lower than consumers' stated willingness to switch in the survey findings above (see Table 3.2).

Table 3.2 Price differentials and observed churn

Driver	Change in observed churn
1% increase in a supplier's dual fuel price relative to the industry average	+2.5%
1% increase in a supplier's marketing expenditure	-1%

Source: Ofgem (2008), 'Energy Supply Probe – Initial Findings Report', October.

Ofgem's analysis implies that as little as 3% of a supplier's customers may switch in response to a price increase of £130[53], a much lower proportion that indicate a willingness to switch for a saving of £130.

In part this observation may reflect consumers' perception that price rises are often driven by underlying industry-wide cost shocks and not a relative price change between suppliers. If a customer expects other suppliers to adjust their tariffs relatively quickly, then the costs of switching would be borne for only a very short-lived price benefit. This would not be rational.

However, this observation may also reflect the fact that consumers' willingness to switch is a necessary but not sufficient condition for them actually to switch. Consumers need a trigger

[50] YouGov (2012), 'Ofgem Proposals Omnibus Research', report commissioned by ScottishPower, February

[51] Ofcom (2004), 'Strategic Review of Telecommunications, Phase 2 consultation document', Annex M, November. Desired savings were expressed as percentages of monthly savings and have been converted to £ per annum savings using typical monthly costs (in 2004) for mobile (£17) and fixed line (£19).

[52] Baye, M and Morgan, J (2004), 'Price dispersion in the Lab and on the internet', *RAND Journal of Economics*, **35**:3, Autumn, pp. 449–46.

[53] Ofgem's switching analysis uses a 'baseload churn' of 13%. Thus a 1% rise in dual fuel prices (approximately £13 per annum) results in an increase in churn by 0.3 percentage points (0.3%=(2.5% x 13%).

or a nudge to switch, and the behavioural biases discussed above, such as time inconsistency (procrastination), may override more rational behaviour.

This highlights that in conducting a more quantitative assessment of the benefits, Ofgem will need to consider the relationship between declared willingness to switch and actual switching rates.

3.3.3 Value attached to existing tariff features

Ofgem's quantitative analysis (see Table 3.3) highlights that consumers attach a value to choice of tariffs. Almost half the customers wanted Green tariffs to be available, 24% wanted internet access tariffs to be available and 18% wanted dual fuel tariffs to be available, regardless of whether they opt for those choices.

Table 3.3 Survey evidence on the value of additional features

Q: An option to make tariffs easier to compare is changing the range of additional features some tariffs have available. For each of the additional features listed, please tell us whether you think it should be available for you to choose?

	Internet access tariff (%)		Dual-fuel (%)		Green tariff (%)	
Base: all (2,202), all vulnerable (928)	**All**	**Vulnerable consumers**	**All**	**Vulnerable consumers**	**All**	**Vulnerable consumers**
I would probably choose this tariff	58	47	63	59	10	10
I would like this to be available whether or not I would actually choose it	24	26	18	18	47	44
Don't care if available or not	12	18	14	16	29	29
Prefer this was not offered	6	9	5	7	14	17

Source: Ipsos MORI (2011, 'Consumer reactions to varying tariff comparability', pp27.

Similarly, the results of a YouGov survey undertaken on behalf of ScottishPower suggest that there is considerable demand for discounted products to reflect low-cost ways of transacting with suppliers.

– 70% expected a discount for multiple purchases—ie, dual-fuel;
– 76% expected a discount for paperless billing;
– 65% expected a discount for prompt payment.

Ofgem's proposal to determine that consumers should not have these features of standard tariffs that they would otherwise choose for themselves is inconsistent with guidance prepared for the OFT on road testing consumer remedies.

> Another way to assist consumers is to carefully design arrangements against their very natural weaknesses..of course this does not mean that policy-makers should make decisions for consumers. Consumers are in the best position to know their private valuation of different goods and are therefore in the best position to make choices between different goods.[54]

The fact that consumers value choice of tariffs implies that there may be negative consumer reaction to some of Ofgem's proposals which could detract from the expected levels of engagement. As discussed below (section 4.4) removing discounts that incentivise efficient consumers to transact with suppliers in a low-cost way may also have an adverse impact on overall prices.

[54] London Economics (2009), 'Road testing of consumer remedies', July, para 3.22 and footnote 6.

3.4 Ofgem's evaluation of possible interventions

3.4.1 Survey methodology

In order to test the potential effectiveness of its proposed remedies, Ofgem draws on quantitative research carried out to test consumers' reactions to a subset of the five alternative options considered in the Impact Assessment.

– **RMR core**: suppliers can offer only one standard tariff per payment method. This must have a fixed standing charge set by Ofgem, and a unit rate set by the supplier. There would be no restriction on tariff structure in the non-standard market, other than the prohibition of unilateral variations in price or other terms and conditions.

– **Variable standing charge**: as in RMR core, with a standing charge set by the supplier instead of Ofgem.

– **Single tariff structure**: all tariffs would feature a fixed standing charge set by Ofgem, and a unit rate set by the supplier.

– **Price comparison only**: suppliers would be required to include a price comparison with their tariffs, using a format and methodology mandated by Ofgem.

– **Airline options**: as in RMR core, without the prohibition of discounts on standard tariffs; however, Ofgem would mandate the number and type of discounts that suppliers are able to offer. Underlying tariffs would have the same restrictions on structure as **RMR core**.

The focus of this survey was to assess the impact of some of the proposed remedies on two aspects of consumer switching:

– quality of switching, when consumers do switch, how many of them will switch to the lowest-price deal;
– level of switching, how many consumers switch supplier.

The survey also assessed the preferences of consumers towards the different types of tariff.

To assess tariff comparability under the different options, respondents were assigned a randomised consumption figure and then shown four tariff-comparison tables. The formats are presented in Box 3.2, for non-Economy 7 (E7) and E7 consumers.

Box 3.2 Options presented in tariff comparability research

For non-E7 respondents

Option A: four tariffs with the same standing charge, and a varying unit rate.

Option B: as in option A, but including an estimated monthly cost figure for a low-, medium- or high-usage consumer.

Option C: four tariffs with varying standing charges, and a varying unit rate.

Option D: As in option C, but including an estimated monthly cost figure for a low, medium, or high usage consumer.

For E7 respondents

Option F: four tariffs with the same standing charge, varying day and night time rates, and a weighted unit rate.[55]

Option G: as in option F, but including an estimated monthly cost figure for a low-, medium- or high-

[55] The weighted unit rate was made up of 55% of the day time rate, and 45% of the night time rate. This was consistent with the assumed usage ratio found in the price-comparison guide.

usage consumer.

Option H: four tariffs with the varying standing charges, and varying day and night time rates.

Option I: as in option H, but including an estimated monthly cost figure for a low-, medium- or high-usage consumer.

For each option, survey respondents were asked to select the cheapest tariff for their randomised consumption figure. They were also asked to rate the ease of use of the tariff information table, and how long it took them to make a decision. Having seen all four options, the respondent was asked to select a preferred intervention. Following this, the respondent was asked whether, if their preferred intervention were implemented, they would consider it an improvement to the status quo and whether, if their preferred intervention were implemented, they would be more likely to switch suppliers.

Later in the survey, quality of switching under an airline options approach was tested, by presenting a price-comparison table for low-, medium- and high-usage consumers, and a range of add-on products, with estimated prices. These were Options Z and Y, for non-E7 and E7 respectively. These tables did not include tariff formats, only price comparisons.

3.4.2 Survey results

The relevant results of the survey are presented in Table 3.4.

Table 3.4 Quantitative survey results

	Correctly identify best deal (%)	Ease of use (% rated as easy)	Preference (% choosing)	More likely to switch (%)	Adjusted more likely to switch (%)
Non-E7 respondents					
Option A	81	86	28	71	20
Option B	85	82	39	74	29
Option C	44	45	6	59	4
Option D	50	61	14	67	9
Option Z	50	63	–	–	
E7 respondents					
Option F	47	34	5	48	2
Option G	70	64	25	76	19
Option H	19	21	15	56	8
Option I	76	59	37	70	26
Option Y	43	50	–	–	

Note: 'Ease of use' based only on responses from consumers correctly identifying the cheapest tariff.
Source: Ipsos MORI (2011), 'Consumer reactions to varying tariff comparability', October.

For non-E7 respondents, the survey results indicate that consumers do appear to find it easier to choose the cheapest tariff under the proposed remedies with a fixed standing charge, as demonstrated by the proportion that correctly identify the best deal for Options A and B relative to the options with a variable standing charge, Options C and D.

Beyond this ordinal ranking, it is not clear that the survey results are informative. With regard to all the options, as respondents are not rewarded for correctly selecting the cheapest tariff, respondents may put less effort into trying to select the cheapest tariff relative to the effort they would put in if a genuine benefit were on offer. The variable standing charges in Options C and D vary by a large amount, with the smallest set at £1.22 and the largest set at £10.72. This is unlikely to be representative of the dispersion in standing charges that would be seen

under this intervention. However, it is difficult to determine the impact this difference could have had on preferences for options, ease of use or quality of switching. A further negative impact on the ability of consumers to choose the cheapest tariff may be that the randomised consumption figure negates any experience or intuition that the respondent would be able to use in the real world.

There are additional issues with the assessment of the quality of switching under the airline options approach. First, these options are presented later in the survey and fatigue bias may have negatively affected the observed ability. Second, respondents were not asked to choose the cheapest product, as they had been with the earlier options; rather, they were asked to choose the cheapest green energy Internet access deal. Third, these options were presented as a price comparison only 'to make the task of comparison easier'. It is not clear that this will have made the task easier—the underlying tariff structure is not obvious from either the questionnaire or the table presented to the respondent.

For E7 respondents, however, the proportion of users identifying the best deal is highest for Option I, which has a variable standing charge, and no weighted unit rate. It is also the option most preferred of those available. Given the significant preference for options with a price-comparison guide, Options G and I, and the higher quality of switching indicated by these options, Ofgem's quantitative evidence does not provide support that fixing the standing charge for E7 consumers is the best means for improving the quality or level of switching for these customers.

Owing to the construction of the survey, it is difficult to compare the different potential remedies and assess the likely impact on the level of switching that would arise. Only consumers who indicated that, of the four options presented, a particular one was their favourite were then asked whether that option would make them more likely to switch. The proportion stating that they would be more likely to switch under an option is then likely to be biased upwards compared with the response had all consumers been asked whether they would be more likely to switch under a given remedy. Respondents were not asked whether they would be more likely to switch under the 'airline options' remedies (Options Y and Z).

Thus, in interpreting the proportion of consumers that are more likely to switch under a given remedy, it is not appropriate to rely on the number as stated in the table. Ofgem ought to weight each of these results with the proportion of the total sample that preferred the given remedy. It should then give this figure as the lower bound for the proportion that would be likely to switch; however, the survey gives no indicator of how likely it is that a consumer that preferred another option would switch if a different remedy option were implemented. As set out above, this is a large downward adjustment to the cited numbers.[56]

3.4.3 Ofgem's assessment of the impact of its proposals on engagement

As outlined in section 2, when assessing the impact of proposed remedies, the assessment should be undertaken by comparing the set of possible remedies against the status quo. In its consumer research, Ofgem has not provided a benchmark of the quality of switching under the status quo. As such, this quantitative evidence does not allow Ofgem to calculate the impact of its remedies on the quality of switching observed relative to the status quo. While the survey questions relating to the level of switching are phrased so as to be relative to the status quo, the proportions reported as more likely to switch are not reflective of the total population.

[56] Note also that the value of Ofgem's 'likelihood of switching' measure is further limited because it is based on the proportion of consumers who say they are 'more likely to switch', not the increased likelihood of switching. The original question divided responses into 'much more likely' and 'somewhat more likely' but the split between these answers is not reported. So, for example, if 70% of respondents say they are more likely to switch, but the majority are only somewhat more likely, the increased likelihood of switching could be much less than 70% (depending on the meaning of 'somewhat').

Ofgem has relied on these biased proportions to support its preferred remedy: RMR core. For example, in the Impact Assessment, Ofgem states:

> 71 per cent of E7 respondents and 48 per cent of non-E7 respondents said they would be more likely to consider switching if the standing charge was fixed for standard tariffs. If a price comparison guide were also provided, 74 per cent of non-E7 respondents and 76 per cent of E7 respondents would be more likely to consider switching [sic: it appears Ofgem has transposed the statistics for E7 and non-E7 respondents][57]

Even absent the transposition error, Ofgem's conclusions do not stand. These proportions should be combined with the proportion that preferred that particular remedy, and should be presented as a lower bound only. For example, 5% of E7 respondents preferred Option F, and 48% of those respondents said that Option F would make them more likely to switch. This implies that the proportion of E7 consumers believing themselves to be more likely to switch if facing Option F relative to the status quo could be as low as 2.4%.These lower bounds can be found in Table 3.4.

Ofgem has also relied on the statistics on quality of switching (ie, ability to select the best deal) in support of the RMR core proposal. There are two issues with this: first, these statistics do not measure the impact of the remedy relative to the status quo, as no option reflects current tariffs; and, second, they are unlikely to be representative of the quality of switching in a real-world environment, where consumers have financial incentives to choose the cheapest tariff.

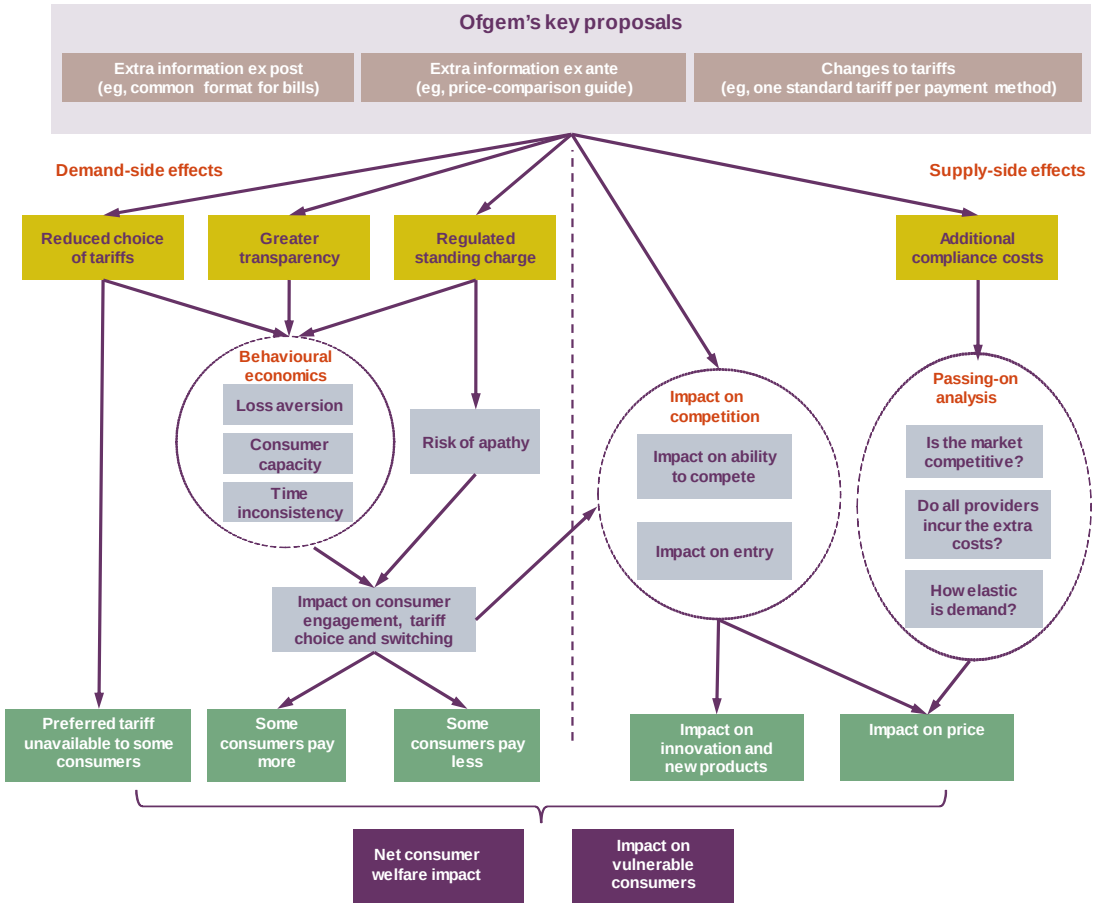
Lastly, Ofgem has not attempted to assess the impact on quality or level of switching for the least-interventionist remedy: price comparison only. Ofgem has also not assessed the impact on the level of switching of the airline options remedy, the second-least-interventionist remedy. There is therefore no evidence that RMR core represents a significant improvement in terms of the level or quality of switching relative to these less-interventionist alternatives.

3.5 The relevance and proportionality of Ofgem's proposals

The full effects of Ofgem's proposals are likely to be extensive and will go beyond influencing how consumers will engage with tariffs. The main effects from Ofgem's proposals that should be considered in any impact assessment are set out in Figure 3.1.

[57] Ofgem (2011), 'The Retail Market Review: Draft Impact Assessments for Domestic Proposals', December.

Figure 3.1 Stylised impact analysis chart



Source: Oxera.

Figure 3.1 shows that the proposals can broadly be placed into three categories: measures that increase information after use; measures that improve information before use; and structural changes to tariffs.

On the demand side, these measures have several effects. First, they reduce the range of available tariffs, which will remove some customers' preferred tariffs. Second, they improve price transparency, which, depending on how consumers engage, will affect tariff choices and switching. Third, a regulated standing charge will affect the prices paid by consumers, but may also generate consumer apathy if consumers feel 'safer' in sticking with a regulated option. The effect of these factors on consumer welfare would need to be estimated empirically based on the likely tariff differentials that will emerge, but the effect is currently ambiguous.

On the supply side of the market, the measures will be likely to reduce the ability of suppliers to differentiate themselves, and will also introduce compliance costs to the industry; these issues are returned to in section 5. The reduced differentiation will affect the ability of suppliers to compete. Any compliance costs are likely to be passed through (at least in part) to consumers in the form of higher prices. These factors should be considered alongside the direct demand-side effects in order to determine the net impact on consumer welfare.

The net consumer welfare impact is the key relevant outcome because it is Ofgem's primary statutory objective to protect the interests of consumers. In addition, the impact on specific sub-groups of consumers, particularly vulnerable consumers, is also relevant to Ofgem, as per its duty under Section 3A(3) of the Electricity Act 1989. It is these outcomes that should be the ultimate target of Ofgem's interventions. The individual components that contribute to these impacts, such as consumer engagement, are only a means to an end.

While Ofgem has discussed some of these effects, it has only really tested the direct impact on consumer capacity and not considered the broader effects of its proposals. In the next sub-section, a critique of Ofgem's Impact Assessment is set out. This shows that Ofgem's assessment is incomplete, does not correctly assess the trade-off of a given remedy against the status quo, and at times draws incorrect inferences from the survey evidence. Sections 4 and 5 explore the expected elements of impact assessment on which Ofgem has not focused.

3.5.1 How might improved tariff comparability influence engagement?

As discussed earlier in this section, Ofgem has failed to provide evidence of a causal link between the current lack of tariff comparability and consumer engagement. This leaves it unclear how improved tariff comparability and tariff comparison tables will increase engagement, and in particular the relevance of enabling consumers to make precise tariff comparisons manually when accurate bespoke comparisons are so widely available.

Suppliers are legally required to provide accurate bespoke price quotations and price comparisons against the existing tariff for face-to-face, telephone or online sales.[58] Online switching services are subject to a code of practice which also requires accurate bespoke comparisons. Hence, once consumers decide to switch, virtually all will do so via a channel which gives them a personalised quotation and comparison. In these circumstances the price comparison is straightforward and consumers do not themselves have to engage with the detail of tariff structure.

The availability of bespoke comparisons once consumers commit to their search suggests that a more relevant role for improved tariff comparability may be as a prompt or nudge. For example, if price comparison tables were to be published in newspapers or magazines, this could alert consumers to the potential magnitude of the saving opportunity, prompting them to commit to searching when they would not otherwise have done so. This mechanism cannot rely on having precise consumption data to hand, since that implies premeditation. Instead, it will be sufficient for the price comparison table to provide a general guide to the relative value for money of the current supplier.

If the main purpose served by the comparison table is to nudge the consumer into obtaining an accurate personalised quotation, there is no need for consumers to engage with the underlying tariff structure or to interpolate accurately between prices for low/medium/high consumption. This calls into question the relevance of Ofgem's quantitative survey design.

3.6 Summary

The above review highlights that, while Ofgem makes reference to the OFT's framework on the requisite ability and incentives for consumers to engage in the different stages of the decision-making process, its primary focus has been on the effects of limited consumer capacity to compare tariffs directly.

Ofgem's primary finding is that, within the stylised experiments it has conducted, consumers are able to identify the lowest-priced tariff more often when tariff structures are restricted so that they are differentiated only by a single unit rate. It also claims that its preferred options would be associated with higher levels of engagement as illustrated by statements regarding increased likelihood of switching.

This section has shown that Ofgem's assessment does not properly compare the status quo with its preferred remedies, and that Ofgem does not include the two less-interventionist remedies in an equivalent fashion in its assessment. It also does not correctly interpret the evidence from its quantitative survey, overstating the likelihood of switching significantly. This

[58] Supply Licence Condition 25. There is an exemption from the price comparison obligation when the supplier makes no claim that its product is cheaper.

means that Ofgem cannot conclude on the basis of this evidence that its proposed remedies would be likely to increase switching and provide a greater competitive constraint on suppliers.

Furthermore, in designing an appropriate remedy to enhance consumer engagement, and take account of the potential risks and benefits, it is equally important for Ofgem to recognise other relevant features of consumer decision-making, and the extent to which the current market outcomes are actually detrimental to consumers. In this respect, Ofgem makes little reference to the following features of demand and market outcomes that can be found within its evidence base:

– a number of consumers believe they can accurately compare existing tariffs;
– consumers value existing product features and variety;
– potential cost savings provide the main incentive for customer switching;
– observed switching levels are less than declared willingness to switch;
– price dispersion in the market is similar to that in other industries.

Given these additional observations, support for Ofgem's proposal to restrict tariff structures would require a demonstration that both the following conditions hold:

– that limited consumer capacity is the most important factor constraining switching behaviour;
– that any benefits from the proposed restrictions on tariffs will not be outweighed by adverse effects on consumer welfare; and
– that each of the individual components of the proposals (such as introducing a regulated standing charges for standard tariffs) is required, and is likely to increase consumer engagement.

As outlined in this section, Ofgem has not put forward evidence to demonstrate that these conditions hold:

– the relative importance of limited consumer capacity has not been established: the data on which Ofgem relies suggests that as little as 13% of the population surveyed said that they had difficulty choosing an energy supplier because of complex tariffs;
– there is no evidence that significant interventions restricting tariff structure represent a significant improvement over either the status quo, or the less-interventionist remedies: price comparison only, and airline options.

Table 3.5 summarises Ofgem's assessment relative to the standards outlined in section 2.

Table 3.5 Summary of Ofgem's analysis compared with good practice

Requirement	Comment
Complete assessment of components of consumer decision-making and adverse features: – price elasticity; – preferences for existing features; – impact of behavioural biases.	Ofgem presents a literature review of the possible behavioural biases present in energy. However, it does not present conclusive evidence that limited consumer capacity is the main determinant of disengagement: – there is no assessment of the relative importance of perceived savings and tariff complexity for disengaged customers; – there is no assessment of the relative weight attached to existing discounts by active switchers.
Clear link showing how the proposed remedies address the adverse features of supply or demand, and evidence why the chosen option is preferred	Ofgem presents quantitative research linking the options considered to the likelihood of switching. However, it does not structure its research in a way that allows easy comparison of the relative effects of different proposals: – consumers are asked to indicate whether they will switch in response to a combination of reforms, rather than testing individual proposals to assess the relative importance of each element; – the potential impact of the likelihood of switching on the proposed standing charge restrictions appears low; – there is no comparison between the options presented and the status quo.
Thorough testing of the potential supply and demand response to the proposals	Ofgem identifies, but does not assess, the potential adverse effects on engagement from introducing a regulated standing charge, or the removal of existing product features selected by consumers. Ofgem does not assess the potential supply response and the possible adverse impacts on prices.
Outline of the order of magnitude of the associated costs and benefits of the proposal	Ofgem does not provide a broad indication of the level of implementation costs or regulatory costs. It also does not provide quantification of the order of magnitude of any anticipated consumer benefit.

Source: Oxera.

4 Risks and unintended consequences—demand-side effects

Potential adverse demand-side effects—key messages

Despite Ofgem's intention to increase consumer engagement and promote competition, its proposals risk creating their own adverse effects on competition.

On the demand side, the proposals risk creating the following adverse effects:

– the incentive for consumers to engage in the standard segment of the market could weaken in response to reduced price dispersion caused by the proposed restrictions on the structure of standard tariffs;

– the incentive for consumers to participate in the non-standard segment of the market may fall due to the perception of increased regulatory protection and the prominence of standard tariffs;

– removal of tariff features and innovations that reflect cost savings related to their payment preferences or usage (eg, dual-fuel discounts, online and prompt-pay discounts, and variable tariffs).

– removing discounts that incentivise consumers to transact with suppliers in a low-cost way (online account management, dual fuel, prompt payment) may have an adverse impact on overall prices.

Ofgem has not assessed the likelihood or potential scale of these effects, or provided a description of the mitigating factors that could alleviate these risks.

An incomplete assessment of any proposed regulatory intervention increases the risk of imposing restrictions that create unintended consequences as a result of unexpected reactions by consumers and suppliers.

Ofgem's Impact Assessment identifies three potential adverse effects caused by its proposals, but does not assess their likelihood or potential magnitude:[59]

– the risk of reduced engagement from currently active consumers, who could become frustrated by the removal of dual-fuel tariffs and other products that they had previously chosen;
– the risk of distorting the market as consumers are drawn towards the standard segment of the market in the belief that products in this segment are endorsed by the regulator;
– the risk of slowing the uptake of innovative time-of-use tariffs that help realise the benefits of smart metering.

These are important considerations which, counter to Ofgem's intentions, could act to reduce the overall level of consumer engagement.

This section provides a more detailed consideration of the impact of the following unintended consequences that could arise from the introduction of the proposed tariff restrictions, which are not examined in detail by Ofgem, but could nonetheless lead to a material adverse effect on consumer engagement:

– the impact of reduced price differentials between competing standard tariffs;
– the impact of imposing different restrictions on standard and non-standard tariffs;
– the impact of the removal of tariffs and innovations that consumers have actively selected (eg, dual-fuel discounts, online and prompt-pay discounts, and variable tariffs).

[59] Ofgem (2011), 'The Retail Market Review: Draft Impact Assessments for Domestic Proposals', paras 1.240 to 1.244.

4.1 Overview of demand-side risks—the incentive to engage

As described in section 3, the OFT's consumer decision-making framework highlights that, in order to engage, consumers must have the incentive as well as the ability to access, assess and act on information about competing tariffs.

This is echoed in guidance prepared for the OFT on effective remedy design in consumer markets from the Economic and Social Research Council (ESRC) Centre for Competition Policy. The ESRC considers a range of interventions aimed at increasing consumer engagement, and concludes that, in order to be successful, proposed interventions must not only make comparisons easier, but consumers 'must be willing to search the market, so that they are in a position to compare between products'.[60]

As set out in section 3, Ofgem's survey evidence suggests that the main incentive for switching energy tariffs is financial (ie, driven by prospective savings from switching tariffs), although the literature on information and behavioural economics suggests that the weighting given to different tariffs and their associated savings can be influenced by consumers' perception of their relative risk.

4.2 The impact of reduced price differentials

Survey results from the Ipsos MORI tracking survey suggest that around 77% of those asked suggest that they are happy with their current energy supplier. Given that 77–79% of consumers who did switch did so with the intention of saving money, Ofgem appears to assume that the current level of disengagement with the market is reflective of consumers' limited capacity to identify and react to the existing savings possible from switching, rather than concluding that the current level of price differential provides insufficient incentive to incur the time costs of switching.

If this implicit assumption is incorrect then even if Ofgem's proposals were to improve consumers' ability to compare tariffs, there may be no effect on engagement if many consumers do not consider the potential savings available to be sufficiently large—indeed, 51% of consumers asked in a YouGov survey commissioned by ScottishPower said that they were reluctant to switch because the expected benefits were not sufficient to justify the effort (compared with 22% who said that was not the case, and 21% who did not know or had no view).

The current level of price dispersion of the highest and lowest standard electricity tariffs is around £80 per annum based on consumption of 3,300kWh per year, or +/–10% of the average tariff. Customers on the average tariff might therefore be able to realise a saving of around £40 per annum, and possibly somewhat more than this when switching gas and electricity together. Based on the stated price sensitivities highlighted in section 3, this is broadly in line with the level required for around a quarter of consumers to consider switching.

As explained in section 3.3, the tariff restriction proposals in themselves could narrow the existing price differentials and weaken the incentive to engage. Imposing a fixed standing charge will cause prices to converge at low consumption levels, and prohibiting discounted products will remove one of the main sources of cost saving that currently drives switching. More generally, a core aim of Ofgem's proposals is to reduce the dimensions of competition between firms' standard tariffs, and to focus competition on unit prices. As set out in detail in section 5, one of the likely consequences of reducing the dimensions of competition in this way is to reduce price differentials between competing tariffs—even though average prices may not necessarily be lower. With reduced scope for differentiation, suppliers face a lower

[60] OFT (2008), 'Assessing the effectiveness of potential remedies in consumer markets', April, para 4.61.

incentive to deviate from their rivals' pricing levels.[61] Any reduction in the size of available savings will act against any beneficial effects from improving information and tariff comparability. This would appear to represent a significant risk that Ofgem has not considered.

The remainder of this section examines other reasons why Ofgem's proposals to introduce different restrictions to the standard and non-standard segments of the market may reduce the incentives on consumers to compare alternative tariffs.

4.3 The impact of different restrictions on standard and non-standard tariffs

Consumer protection policies can affect consumers' incentives to become informed about the best deals available in the market, and therefore harm the consumers it is intended to protect: this is recognised in both the neoclassical and the behavioural economics literature.[62]

Ofgem's proposals to impose different sets of restrictions on tariffs in the standard- and non-standard segments of the market could reduce consumers' incentives to engage with the non-standard segment of the market for the following reasons:

– consumers may be relatively more attracted to standard tariffs in the knowledge that they are partially price-regulated by Ofgem, therefore believing that standard tariffs represent a relatively lower-risk option;

– the fact that non-standard tariffs default back to standard tariffs at the end of their fixed term could create an 'endorsement effect', and the belief that standard tariffs are recommended by the regulator;

– the annual process for setting standing charges for standard tariffs, and subsequent tariff adjustments and announcements from suppliers, is likely to increase the prominence of standard tariffs, which may confer a relative advantage on standard tariffs in consumers' search process.

In its assessment, Ofgem identifies only the first of these possibilities and then does not test the potential scale of this effect. Ofgem's statement that it would 'work with stakeholders' to manage their perceptions that standard tariffs do not provide additional regulatory protection does not appear to constitute an adequate assessment of the risks or how such effects could be mitigated.[63]

The potential impacts of the three features above on consumer engagement are discussed in turn below.

The impact of partial price regulation (moral hazard)

Ofgem states that setting a regulated standing charge in the standard segment of the market could cause consumers to favour standard tariffs over non-standard tariffs:

[61] Waterson (1989) describes how limited product differentiation can intensify price competition and lead to lower prices. Waterson, M. (1989), 'Models of Product Differentiation', *Bulletin of Economic Research*, **41**:1, pp. 1-27. However, Janssen and Moraga-Gonzalez (2004) and Baye et al. (2006) show that, with some consumers that are less price-sensitive, average prices can rise as suppliers consider the impact of price changes on the ability to win new customers, as well as its impact on the margins earned on existing customers. Janssen, M. and Moraga-González, J. (2004), 'Strategic Pricing, Consumer Search and the Number of Firms', *Review of Economic Studies*, **71**, pp. 1089–118; and Baye, M., Morgan, J. and Scholten, P. (2006), 'Information, Search, and Price Dispersion', in T. Hendershott (ed.), *Handbook of Economics and Information Systems*, Elsevier.

[62] See, for example, the literature on the economics of information, such as Armstrong, M., Vickers, J. and Zhou, J. (2009), 'Consumer protection and the incentive to become informed', *Journal of the European Economic Association,* **7**:2–3, pp. 399–410, and Thaler, R. and Sunstein, C. (2003) , 'Libertarian Paternalism', *The American Economic Review*, **93**:2, pp. 175–9.

[63] Ofgem (2011), 'The Retail Market Review: Draft Impact Assessments for Domestic Proposals', para 1.244.

> This would have the effect of distorting the market since some consumers may switch to standard tariffs because of the 'Ofgem factor' when they would have chosen a non-standard tariff in the absence of this.[64]

If consumers only search the standard segment of the market, the potential distortions to which Ofgem refers could include reduced demand for, and hence supply of, innovative tariffs, thereby lowering the uptake of new cost-reducing ways to consume energy and to engage with market, as well as reducing the scope for new suppliers to enter the market based on entry strategies that include innovative or differentiated products (eg, accompanying smart meter provision, or bundled with other retail products such as supermarket discounts).

Further distortions might be expected to weaken competition if consumers not only disengage with the non-standard segment of the market, but also do not actively search within the standard segment of the market, under the assumption that they are on a low-risk or 'protected' tariff.

A number of academic studies have analysed the effects of consumers being 'over-protected', and the impact of this on searching and equilibrium prices.[65] These studies highlight that increased regulatory intervention can reduce the proportion of consumers that seek to become informed, and thereby reduce the competitive constraint on suppliers. As there is increased regulation, price differences narrow across suppliers, resulting in lower gains to the (costly) activity of becoming informed, so fewer consumers choose to engage.

Ofgem's suggestion that it could introduce a fully regulated 'backstop tariff' would be likely to exacerbate this effect since consumers may disengage as a result of feeling protected by the backstop tariff, and such a scenario has been analysed explicitly in the academic literature.[66] Even a backstop tariff set above the level of some tariffs in the market, such that some benefits of search remain, can have detrimental impacts on competition through the following dynamics:

– for a proportion of disengaged consumers, the backstop level is pro-consumer and reduces prices for those consumers (the 'direct price effect');
– however, the cap reduces the proportion of informed consumers, and so increases the average price offered by suppliers (the 'moral hazard effect').

Ofgem does not assess the likelihood that its proposal to introduce a regulated standing charge for standard tariffs would significantly distort consumer decision-making. This would appear at odds with the risks identified in the literature on the incentives on consumers to become informed.

The impact of defaults (the endorsement effect)

The way in which particular options are presented to consumers can have a significant bearing on their choices. One feature of Ofgem's proposals that has the potential to alter consumers' perceptions is the requirement for standard tariffs to become the default option: automatic roll-over of non-standard tariffs would not be permitted, and consumers would automatically default to a standard tariff unless they expressly agree otherwise.

In its assessment of consumer behaviour, Ofgem acknowledges the need to understand behavioural biases. Its behavioural economics paper also makes note of the potential effects of 'default options':

[64] Ofgem (2011), op. cit., para 1.244.

[65] See, for example, Knittel, C. and Stango, V. (2003), 'Price ceilings as Focal Points for Tacit Collusion: Evidence from Credit Cards', *American Economic Review*, December, **93**:5, pp. 1703–29, and Armstrong, A., Vickers, J. and Zhou, J. (2009), 'Consumer protection and the incentive to become informed', *Journal of the European Economic Association*, **7**:2–3, pp. 399–410.

[66] See Knittel and Stango (2003), op. cit.

> 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 (the default option).[67]

Default options have been a prominent feature in the provision of employer pension schemes—a number of empirical studies have shown that individuals often accept the default options, even if these are not in their best interests. One of the reasons for this is that employees perceive default options as advice or a recommendation from their employer, even when they are not. As Laibson et al. (2009) conclude in their review of the literature:

> that defaults can so easily sway such a significant economic outcome has important implications for understanding the psychology of economic decision-making. But it also has important implications for the role of public policy towards saving. Defaults are not neutral – they can either facilitate or hinder better savings outcomes.[68]

In its proposals, Ofgem does not consider the potential negative impacts of making standard tariffs the default option, or the risks associated with creating an endorsement effect in favour of standard tariffs. It would appear prudent to test this further.

The impact of prominence

The presence of search costs implies that consumers face a trade-off between the expected benefits and costs of search, and will therefore make choices if a particular tariff is 'satisfactory' rather than the best deal on offer. Recent academic work suggests that this behaviour confers advantage on 'prominent' products that are most likely to be encountered first.[69]

If tariff comparison tables are restricted to standard products (which seems likely, given Ofgem's wish to avoid complexity), this will automatically give prominence to these products. The need for Ofgem to adjust the standing charge periodically and for suppliers to notify their customers of the change may also give prominence to standard products, especially if the change attracts media interest. Contrary to Ofgem's intentions, if standard products are perceived as satisfactory (which may be further reinforced by the perceptions created by the regulated standing charge and the status of the standard tariff as a default option described above), this prominence could cause search amongst non-standard tariffs to decline.

The means by which firms obtain prominence is therefore an important way in which they compete. Ofgem's proposals risk adversely affecting competition by removing the impact of suppliers' and new entrants' efforts to attract consumers to non-standard products.

4.4 The impact of a single tariff structure and restricting discounts

Product differentiation is one way in which tariff structures can be tailored to specific users in order to reflect the relevant costs to serve, and in turn increase overall levels of efficiency. However, the following features of Ofgem's proposals risk distorting this dynamic:

– the proposed single tariff structure for standard tariffs means that particular tariffs cannot be tailored to attract high/low-use consumers, which in turn may be likely to lead to higher prices faced by consumers with above or below average consumption;

– the proposal to prohibit cost-reflective discounts removes an important feature of competition, and removes the signal provided to consumers to engage with suppliers through lower-cost channels—which in turn could increase overall costs.

[67] Ofgem (2011), 'What can Behavioural Economics say about GB energy consumers?', March, para 2.13.

[68] Laibson, D., Choi, J., Beshears, J. and Madrian, B. (2009), 'The Importance of Default Options for Retirement Savings Outcomes: Evidence From the United States', chapter 5, in J. Brown, J. Liebman and D.A. Wise (eds), *Social Security Policy in a Changing Environment*, National Bureau of Economic Research Conference Report, University of Chicago Press.

[69] Armstrong, M., Vickers, J. and Zhou, J. (2009), 'Prominence and consumer search', *The Rand Journal of Economics*, **40**:2, pp. 209–33.

The impact of these effects is described in turn below.

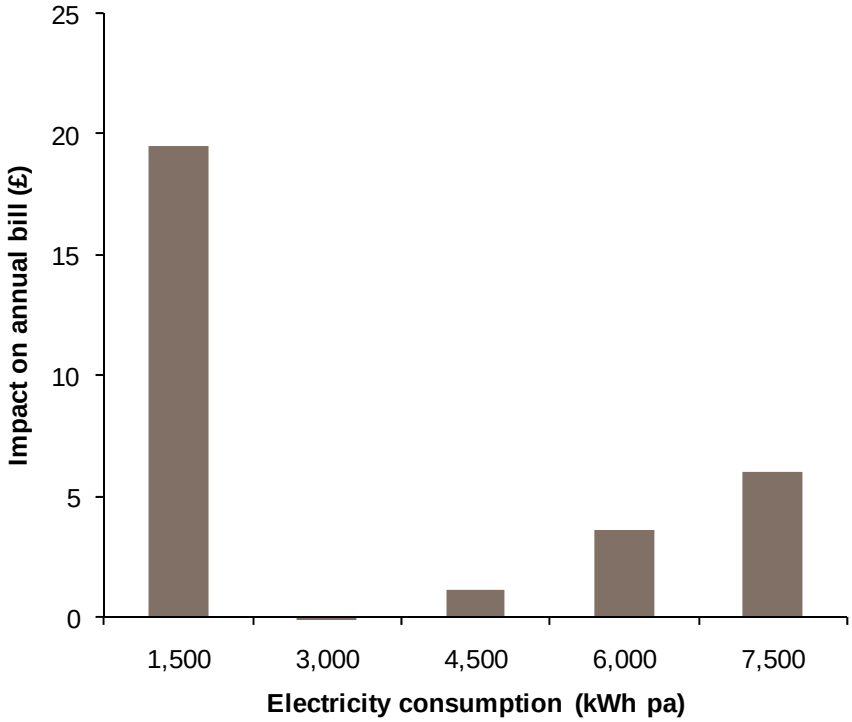
The impact of a single tariff structure on high- and low-use consumers

When comparing alternative two-part tariffs, the difference between the relative size of the fixed and variable charge means that one tariff may be the lowest price option for a high energy user (ie, a tariff with a high standing charge and a relatively low variable charge), while an alternative may be the lowest price option for a low energy user (ie, a tariff with a low standing charge but a higher variable rate).

Ofgem's proposal to restrict the structure of standard tariffs and set a common standing charge means that if suppliers have a broadly similar customer base in terms of consumption profile, and set their unit prices so as to compete for an 'average' consumer, the overall level of costs will rise for high- and low-consumption users that remain on a standard tariff relative to the status quo. Assuming that price levels reach a new equilibrium, 'medium' consumption users will be slightly better off, so that there is no change in overall consumer welfare. Nevertheless, the distributional effects of increasing the bills for low and high consumption users need to be considered, particularly with regard to vulnerable and fuel poor consumers.

Figure 4.1 illustrates this effect, and shows the difference between the lowest-cost standard electricity tariff currently in the market, and the implied cost under Ofgem's proposals assuming that suppliers set their variable rate in order that the energy bill of an 'average' consumer remains unchanged.

Figure 4.1 Potential change in the lowest-cost standard tariff



Note: Fixed standing charge based on level proposed in Ofgem (2012), 'The Standardised Element of Standard Tariffs under the Retail Market Review', February. Fixed standing charge unit rate adjusted to give same price as current tariff at mean consumption level.
Source: Company websites and Oxera analysis.

Figure 4.1 shows that, under the proposed tariff restrictions, low energy users are no longer able to opt for a standard tariff with a relatively low standing charge and high variable charge, and high energy users are unable to opt for a tariff with a relatively high standing charge and low variable charge.

The impact of prohibiting discounts

Ofgem's proposals outline that, in order to facilitate comparisons between tariffs, it considers that 'a number of rules and prohibitions will be necessary, including (but not limited to) a prohibition on suppliers offering discounts or linking standard domestic contract to contracts for other good and services'.[70]

Three prominent discounts are currently offered alongside existing standard tariffs that facilitate reductions in suppliers' cost bases, and the benefits of which are reflected in lower prices:

- **Dual fuel discounts.** Suppliers' costs are reduced by avoiding the duplication of multiple billing (and in some cases, meter reading) arrangements. Typical dual fuel discounts are around 1.5% of a standard gas and electricity bill.
- **Online discounts.** Suppliers' costs can be reduced from paperless billing as well as allowing consumers to submit their own meter readings. Typical online discounts are around 10% of an equivalent offline tariff.
- **Prompt pay discounts.** Suppliers' costs are reduced by avoiding the need for reminder bills, bad debt/debt factoring costs and funding additional working capital. Typical prompt pay discounts are around 2.5% of an equivalent standard credit tariff.

If these discounts were to be removed, a proportion of consumers who currently qualify for the discounts might be expected to change their behaviour, increasing overall industry costs. This would increase overall prices and reduce consumer welfare.

The removal of discounts that have been actively chosen, and allow cost savings to be realised by consumers, risks creating three adverse effects:

- active consumers could become frustrated and disengaged from the market as a result of the removal of the preferred terms in their existing tariffs;
- active consumers' bills could rise in the short run if they are transferred to standard tariffs without a number of their existing discounts (dual fuel, paperless billing, etc) and there is a delay before they engage with the non-standard segment of the market;
- active consumers' bills could rise in the long run if they become permanently disengaged or drawn towards the standard segment of the market.

Ofgem acknowledges that its proposals risk frustrating consumers by removing certain tariff features, and that its proposed tariff structure within the standard segment of the market would require the removal of dual-fuel discounts:

> The elimination of dual fuel discounts in the standard segment of the market carries a risk of frustrating a significant number of consumers… and this could create a backlash from people who could blame Ofgem for increasing their bills.[71]

4.5 Summary and policy implications

The above analysis highlights that the way in which Ofgem has proposed to restrict tariff variety and influence the level of certain tariff components risks creating significant adverse effects on consumer engagement and consumer bills. It is for these reasons that remedies aimed at correcting for consumer biases should be introduced with caution. This echoes the concept of 'libertarian paternalism' in the behavioural economics literature—ie, that consumers should be nudged to make more effective choices, rather than altering the choices themselves, and that choices that are valued should not be removed (see Box 4.1).

[70] Ofgem (2011), 'The Retail Market Review: Domestic Proposals', December, p. 11, footnote 15.

[71] Ofgem (2011), 'The Retail Market Review: Domestic Proposals', December, para 1.243.

Box 4.1 The need for caution—libertarian paternalism

Thaler and Sunstein

Thaler and Sunstein (2003a; 2003b; 2008) present and defend the concept of libertarian paternalism, an approach towards interventions in the presence of behavioural biases, which emphasises that when behavioural biases can cause harm to consumers, an appropriate remedy is to nudge consumers towards welfare-maximising outcomes.

To do so, nudge remedies should focus on altering the way choices are made, rather than altering the choices themselves. The simplest form of nudge remedy cited by the authors concerns the setting of defaults in organ donation: by changing the default to 'opted in' as opposed to 'opted out' the nudge promotes an increase in the level of organ donation, without restricting choice.

Thaler and Sunstein also discuss justifications for intervening to reduce the level of choice available to consumers. They conclude that such interventions are justified when consumers do not truly value the options that are removed, and preferences across consumers do not vary significantly.

Piccione and Spiegler

Piccione and Spiegler present a model of Bertrand competition under limited comparability, where firms make price and format decisions, and consumers' ability to make comparisons between formats is defined by a random graph. In the simplest of these models, there is one major price format with m peripheral nodes, and consumers are able to make comparisons between these minor formats and the major format with some probability.

Consumers select the cheapest price that they can observe. If they do not observe a price cheaper than the incumbent supplier they stick with their current provider.

Whilst the set-up of this paper is entirely theoretical, parallels exist with Ofgem's proposals. Currently there are several 'major' formats in the retailing of energy supply, with different standing charge and unit rates, two tier tariffs and dual fuel tariffs. There are also with a periphery of 'minor' formats, such as tracker products, capped price deals and such. Ofgem's proposals will collapse these major formats into one.

In this scenario, a regulatory intervention that harmonises these major currencies into a single one can cause firms' payoffs to increase- indicating a less competitive outcome. Piccione and Spiegler state:

> 'Thus, a regulatory intervention that enhances tariff comparability can make the market outcome less competitive, once the firms' equilibrium response is taken into account.'

Ofgem has cited this paper in its behavioural economics paper, however it does not appear to actually support Ofgem's case.

Source: Piccione and Spiegler (2010), 'Price competition under limited comparability', University College London, working paper. Thaler and Sunstein (2003a), 'Libertarian Paternalism', *The American Economic Review*, **93**:2, pp. 175–9. Thaler and Sunstein (2003b), 'Libertarian Paternalism is not an oxymoron', *The University of Chicago Law Review*, **70**:4, pp. 1159–202. Thaler and Sunstein (2008), 'Nudge: Improving Decisions About Health, Wealth, and Happiness', Yale University Press.

Given the potential adverse effects outlined in the section that could be caused by the introduction of restrictions on standard tariff structures and the introduction of a regulated standing charge for a sub-set of tariffs, Ofgem's proposals appear to carry significant risks to the effective functioning of the supply market that it has not thoroughly assessed.

5 Risks and unintended consequences—supply-side effects

Potential adverse supply-side effects—key messages

Despite Ofgem's intention for its proposals to promote competition, there is a risk that they will create several adverse supply-side effects.

These risks become apparent when assessing the proposals against the OFT's criteria for determining which interventions may reduce competitive intensity and the conditions associated with the increased likelihood of coordinated effects in a market. Assessing Ofgem's proposals against these criteria shows that the remedies could:

– promote standardisation of products and hence transparency, enhancing firms' ability to monitor each other;
– discourage entry by prohibiting differentiation of products by new entrants and by reducing profitability;
– enhance the threat of price-based retaliation against a firm that does not tacitly collude.

As a result of these three factors, the remedies risk impairing suppliers' incentives to engage in competitive behaviour. A reduced incentive to engage in competition may mean that prices do not stay at the lowest (competitive) level and hence consumers could be harmed. Essentially, if the costs of cutting prices to one segment include having to cut prices to all, price-cutting may become less attractive. The knowledge that others face the same costly incentives further underlines the incentive to reduce price-cutting activity. According to Ofgem's own impact assessment guidance, an evaluation of these potential effects on competition should have been a component of Ofgem's Impact Assessment for this review.

In addition, this risk of higher prices following an anticipated reduction in competition may be exacerbated because suppliers' direct costs are likely to increase as a result of compliance with the proposals, and these costs may be passed through to consumers.

It is important to consider not only what the demand impacts of Ofgem's proposals will be, but how they are likely to change the incentives facing energy supply companies, which determine the prices and products on offer, and in turn will affect consumers' behaviour.

Ofgem's proposals are intrusive in restricting the structure and terms of suppliers' tariffs, relative to remedies that focus on informing consumers and presenting information clearly, and as such the potential for unintended consequences could be substantial. Despite this, Ofgem's assessment of its proposals provides only a limited consideration of the potential supply responses to the proposed reforms.

5.1 The scope for price reductions

Ofgem sets out that its proposals will put downward pressure on the average level of prices, although it does not give a broad indication of the order of magnitude of this potential benefit. In its draft impact assessment, Ofgem states that its Retail Market Review aims to:

> increase consumer engagement overall and in doing so put downward pressure on prices for all consumers.[72]

It is clear that Ofgem believes that this downward pressure on prices will benefit all consumers, due to a ripple effect, where price reductions on one tariff lead to price reductions elsewhere. Any assessment of the scope for reductions should be made in light of the costs and overall profitability of the industry—competitive pressure might be expected to

[72] Ofgem (2011), op. cit., para 2.23.

limit returns to normal levels, and provide further incentives to reduce costs and hence prices in the long run, but it is unlikely to reduce returns below normal levels.

Ofgem's March 2011 analysis compared supply company returns against a number of relevant benchmarks. The findings of that analysis were that industry-average return on sales has been around 1.5–4% over the past five years,[73] and below all of the benchmarks considered (including high-street retail, supermarkets and telecommunications). The broad level of these returns have also been validated following Ofgem's independent verification of the accounting principles and transfer pricing policies used by suppliers to generate the segmental accounts that underlie this analysis. [74] This evidence of relatively low margins in energy retail suggests that the scope for further price reductions may be small. Therefore, the expected benefit of the proposals in terms of price reductions seems to be limited—indeed, there could be a risk of price increases.

5.2 Potential impact on unilateral price strategies

Abstracting from the current starting point for prices, it is possible that the Retail Market Review proposals will reduce individual firms' incentives to cut prices. Currently, when setting prices, energy suppliers can target tariffs at specific sections of the market. For example, tariffs can be differentiated by channel (eg, online/offline), and in a way that introductory offers and discounts can target particular customer groups differently. This means that reducing product differentiation need not lead to a decrease in price.

Ofgem has criticised the differential in price offered to online consumers against disengaged consumers. Its proposals ban discounts on variable products, and Ofgem has stated that it will take remedial action should a 'two-tier' market develop between standard and non-standard products. Its proposals are intended to make suppliers offer the lower prices seen in the online segment to all consumers. However, this may not be the outcome observed.

Under the proposals, when setting their standard tariffs, suppliers will have to offer the same prices to all consumers on standard tariffs. Depending on the composition of its customer base, a supplier may be more inclined to choose a relatively higher price point for its standard tariff, recognising a risk that it may lose some more price sensitive customers. Given that it can choose only one standard tariff level, this may be the profit-maximising option. In this situation, the average price could be higher after implementation of the proposals than before them.

To see this point more clearly, consider the stylised example in Figure 5.1.[75] This illustrates a post-Retail Market Review scenario where there are only two firms, each choosing whether to offer high or low prices but these prices must be offered to all their customers. The values shown are the expected profits to each firm under each pricing scenario.

[73] Ofgem (2011), 'The retail market review: Findings and initial proposals', March, Appendix 9.

[74] Ofgem (2012), 'Improving Reporting Transparency', January.

[75] The purpose of Figure 5.1 is to describe the principles underlying the risk that firms' best pricing strategies under the proposals may not be in the best interest of consumers. In the example here, this is represented as a two-firm market for ease of presentation only. Oxera has also considered modelling the situation with six firms and with the use of actual data on margins and the proportions of less price sensitive customers. This broadly yields the same results—indeed, Oxera finds that the proportion of low price sensitive customers has to fall below 43% before pricing 'high' is no longer the optimal strategy for each firm. Even below this threshold, it is still optimal for firms to incorporate high prices as part of a mixed strategy.

Figure 5.1 Potential pay-offs to pricing of standard tariffs under the Retail Market Review proposals: illustrative example

		Firm 1	
		Offer high price	Offer low price
Firm 2	Offer high price	100, 100	60, 80
	Offer low price	80, 60	50, 50

Note: Pay-offs in purple on the right accrue to Firm 1 and payoffs in red on the left accrue to Firm 2.
Source: Oxera.

The example represents a market where both firms are serving different groups of customers who may respond differently to price changes. Each firm has the choice to offer a high price or a low price. The profits to each firm depend on its pricing strategy and that of the other firm. If both firms offer a high price, each firm's share of customers remains the same, and profits increase. If one firm offers a low price and the other offers a high price, the low-price firm may gain one group of customers from the high-price firm and other firms in the market, but loses its high margin on its remaining customers. Whether the lost profit on the remaining customers is greater than the increased profit from attracting more customers depends on the relative proportions of each group.

This principle does not occur without the Retail Market Review intervention because, in the current scenario, firms can offer discounts on standard tariffs to certain groups of customers without offering the same tariffs to all their standard-tariff customers. This point is demonstrated in Figure 5.2, which shows illustrative payoffs when firms consider the prices to target one specific group of customers in the current market.

Figure 5.2 Potential pay-offs to pricing of standard tariffs for price-sensitive customers only without Retail Market Review proposals: illustrative example

		Firm 1	
		Offer high price	Offer low price
Firm 2	Offer high price	100, 100	0, 150
	Offer low price	150, 0	50, 50

Note: Pay-offs in purple on the right accrue to Firm 1 and payoffs in red on the left accrue to Firm 2.
Source: Oxera.

The example in Figure 5.2 demonstrates that, when tariffs can be differentiated, each firm has an incentive to deviate from offering a high price to price-sensitive customers. Hence, the only equilibrium in a one-shot game is for both firms to offer a low price to this group.

An alternative approach to considering the point illustrated by Figures 5.1 and 5.2 is to treat the market before the Retail Market Review proposals as one in which price discrimination can occur.

Price discrimination in competitive markets

Price discrimination is the practice of charging different prices to consumers for the same product. It occurs in many industries, from airlines to hotels. In competitive markets price discrimination is not necessarily welfare-reducing. The intuition for this is that allowing firms to price-discriminate can enable them to serve more consumers, recover fixed costs efficiently, and compete with each other (eg, they can use discriminatory prices to 'raid' a rival firm's customer base). These mechanisms have been recognised in the literature, as Armstrong (2006)[76] notes:

> The fact that firms might be worse off when they practice price discrimination is one of the key differences between monopoly and competition [...] a monopolist is always better off when it can price discriminate: the firm is free to choose a uniform price when discrimination is permitted but in general it is better off setting different prices. In the same way, an oligopolistic firm is always better off if it can price discriminate compared to when it cannot, for given prices offered by its rivals. However, as in many instances of strategic interaction, once account is taken of what rivals too will do, firms in equilibrium can be worse off when price discrimination is permitted. Firms then find themselves in a classic prisoner's dilemma.

Armstrong (2006) is indicating that, in a competitive market, if price discrimination is prohibited then a firm may actually be better off and be able to earn excessive profits (as indicated by the principles in Figure 5.1). The welfare effect of banning price discrimination is then ambiguous; in principle, the firm's options are to:

– **continue to raid rivals**, absorb the cost of cutting prices to its customer base, but earn new margins on increased market share;

or

– **cease raiding rivals**, gain no new market share, but maintain higher margins on its remaining customer base.

In a symmetric equilibrium, firms could employ either action, or a mixture of the two. Which strategy is used, and the resulting prices paid by consumers, will depend on:

– the increased market share that a firm expects to receive as a result of cutting its prices. (this will depend on the proportion of proactive consumers—Ofgem estimates that this may be as little as 10%);[77]

– the amount by which the firm has to cut its prices in order to attract these consumers, by overcoming the transaction costs of switching. (Survey evidence indicates that this is likely to be more than £50).

While this section has presented an overview of the principles, rather than detailed analysis of the expected impact, it seems that there is a risk that Ofgem's proposals might have the unintended consequence of weakening competition and resulting in a scenario with higher average prices. To avoid this outcome, it would be necessary for the proposals to substantially raise the proportion of active consumers, or decrease the costs of attracting them, or both.

[76] Armstrong, M (2006), 'Price discrimination', October, University College London working paper.

[77] Ofgem (2011), 'What can Behavioural Economics say about GB energy consumers?', March, Figure 3.1.

5.3 Relevant supply-side considerations in remedy design

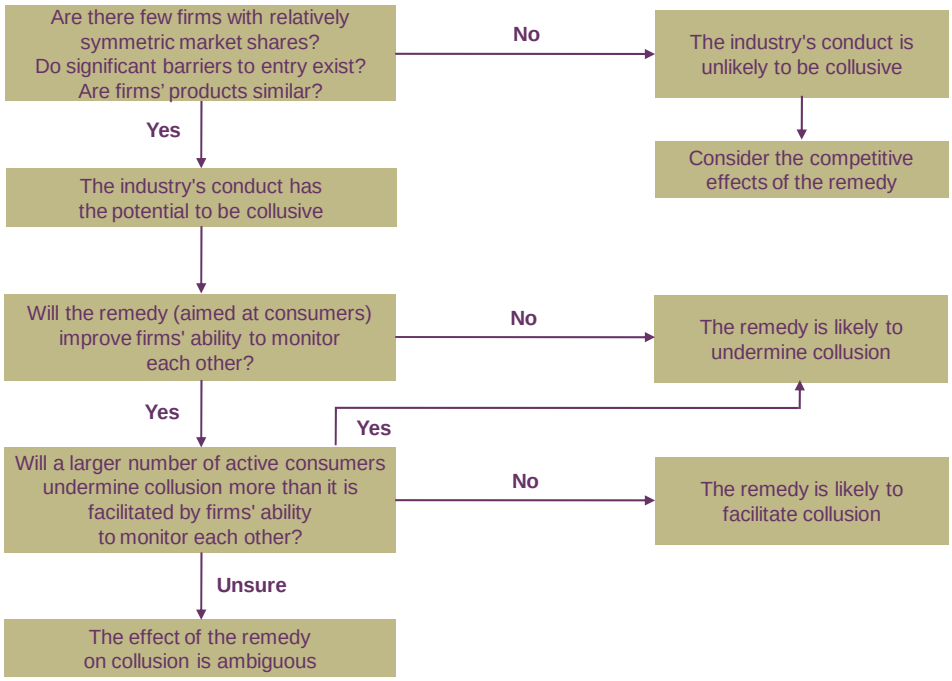
As stated in section 2.1, Ofgem's statutory objective is to promote consumer welfare wherever appropriate by promoting effective competition. Given this, it is important to determine whether Ofgem's proposals would be expected to increase or decrease competition within the market and, consequently, how this would be likely to affect prices to consumers.

In its guidance for evaluating remedies, the OFT has set out the conditions whereby a remedy may facilitate tacit collusion. Good practice would therefore involve paying careful consideration to the risks involved in an intervention that creates conditions similar to these.

The OFT describes how, when firms interact repeatedly, they can form a tacit understanding which acts to dampen competition. The current characteristics of the domestic energy market are such that there are opportunities for raiding rivals' primary geographic and product markets. In the current market, firms have some pricing flexibility since different tariff types can be targeted at different market segments. This constant threat of competition that may not be immediately observable helps to facilitate competitive dynamics.

The OFT's guidance on assessing the effectiveness of remedies describes a framework that can be used to evaluate a remedy's potential effect on competition, see Figure 5.3.[78]

Figure 5.3 Impact on incentives to compete



Source: OFT (2008), 'Assessing the effectiveness of potential remedies in consumer markets', April, Figure A.1.

Oxera now considers Ofgem's proposals in the context of this framework.

5.3.1 Are there few firms with relatively symmetric market shares?—Yes

The first part of the OFT's assessment covers the market structure. This condition is met in the energy market. Currently, there are six prominent suppliers in the market with relatively similar market shares, although with differences in customer composition reflecting their historical positioning. This structure would be likely to be retained following the imposition of Ofgem's proposals.

[78] OFT (2008), 'Assessing the effectiveness of potential remedies in consumer markets', April, Figure A.1.

5.3.2 Do significant barriers to entry exist?—entry has been limited

Although there has been entry by smaller firms, which now form part of the competitive fringe, since the market was liberalised there has been no entry of electricity supply firms on a scale sufficient to capture a large market share. Possible reasons for the relative lack of entry into the retail energy market include:

– the risk and administrative burden associated with dealing with government policy and regulatory intervention;
– low liquidity, which means that small suppliers struggle to find suitably tailored wholesale products to match their retail portfolio;
– credit risk—the need to understand the creditworthiness of counterparties;
– uncertainty around changes in network charges means that suppliers face a risk of volatile costs which cannot be transferred fully to consumers due to the need for relatively stable retail prices.

The Retail Market Review proposals are likely to limit entry further, since they remove the ability of a firm to enter with a differentiated product. In addition, their impact might lower the profitability of energy suppliers, limiting the prospects for entry. Such reductions in profitability may be greater for smaller suppliers, which have fewer customers across which to spread their fixed costs.

5.3.3 Are firms' products similar?—currently, no, but under the Retail Market Review, yes

Energy suppliers all sell the same physical product (electricity and gas). There are no physical or quality differences between the products.

However, tariff differentiation does exist. Energy supply companies have multiple product offerings at present. The energy supply companies have sought to differentiate themselves by two main methods: brand-based advertising, by which they have sought to build customer loyalty; and the offer of a range of tariffs, with elements differing across the standing charge, rate per unit, term of contract, and method of payment. Suppliers also previously offered differentiated tariffs depending on the region a customer was located in, but this has been restricted by Ofgem since 2009 (except where differences reflect underlying costs).

Under the Retail Market Review proposals, this tariff differentiation would be removed. The main impact of the proposals will be to standardise the product offerings of the energy supply companies. There will be limited scope to offer innovative tariffs, and no scope at all to have particular types of tariff, such as those with a discount against the variable rate. All products will have a standing charge, which will be the same for all providers in a given area. The terms of all providers' basic products will be the same, and even the non-standard tariffs will be more restricted than previously.

To extend this analysis of the impact of the Retail Market Review, the next step in OFT's framework is to consider whether the remedy improves firms' ability to monitor each other and how consumers might react.

5.3.4 Will the remedy (aimed at consumers) improve firms' ability to monitor each other?—yes

In its proposals, Ofgem has set out at some length that it wishes the market to become easier for consumers to understand, via the provision of standardised information across all providers. All price changes must be communicated to all customers, in a standard template and the structure of tariffs will be the same across tariffs. This change means that tariff transparency will increase considerably, since under the RMR proposals suppliers will simply have to monitor a standardised national tariff offered by each competitor. Any changes to this tariff will be more obvious then current tariff changes are. Furthermore, Ofgem proposes to restrict price changes over the duration of non-standard tariffs, meaning that the costs of monitoring are potentially lowered, as there is no need to engage in any monitoring during

periods when price changes are barred. This will have the effect of increasing the transparency of the market for competing providers.

5.3.5 Will a larger number of active consumers undermine collusion more than it is facilitated by monitoring?—unclear

The impact on the engagement of consumers is unclear. Although Ofgem hopes that the proposals will make consumers more active, there is a risk (as discussed in section 4) that consumers actually become less active. If this happens, the proportion of less price sensitive customers will increase, thereby increasing the pay-offs for high pricing. Conversely, even if consumers become more active, and so are willing to switch supplier more readily, this may not be enough to undermine tacit collusion, since any given price-based punishment strategy may become more effective, since it leads to greater numbers of customers switching between suppliers.

5.3.6 Conclusions

The OFT's summary table[79] has indicated that minimum standard requirements, restricted products and pricing, and standardising pricing comparisons are all remedies that can both reduce the strategies on which firms compete and improve their ability to monitor each other. These conditions match very closely the Retail Market Review proposals. Overall, the OFT considers that such remedies are likely to have an adverse impact on suppliers' incentives to engage in competition. A reduced incentive to engage in competition may mean that prices do not stay at the lowest (competitive) level, and hence consumers could be harmed. Essentially, if the costs of cutting prices to one segment include having to cut prices to all, this makes price-cutting less attractive. The knowledge that others face the same incentives further underlines the incentive to increase prices.

Overall, therefore, Ofgem's proposals may increase the prospects for tacit collusion in the energy supply market, *even if it achieves the regulator's aim of leading to greater consumer switching*. This is a classic example of 'topsy turvy' features that are common in the economic analysis of incentives for coordination—even if Ofgem were to be successful in encouraging consumers to become more engaged by making tariffs more similar, it risks inadvertently creating the conditions that incentivise tacit collusion in the market. Given this risk, a full assessment of the supply-side reaction seems appropriate; whereas Ofgem's approach, in which it intends to address supply-side issues when they arise, appears inadequate.

The risk of tacit collusion is of concern because of the risk of increased prices. There is precedent for prices rising by 15–20% in a market with a homogeneous product (concrete) where a transparency remedy was introduced in a market with undifferentiated tariffs (see Box 5.1).

[79] OFT (2008), 'Assessing the effectiveness of potential remedies in consumer markets', April, Table A.1.

Box 5.1 Tacit collusion in the Danish concrete market

The Danish ready-mixed concrete market experienced a short period of tacit collusion in the early 1990s. This is a market where there is little differentiation between suppliers' offerings. The Danish Competition Council had begun to publish price data for concrete in order to encourage purchasers to compare prices and shop around.

However, the data publication backfired and within a year of beginning to publish the data, prices had increased by 15–20%, despite a lack of increases in costs or demand. It seemed that the increase in transparency had allowed suppliers to monitor each other more effectively, and hence to detect deviations in prices from a tacit understanding. Hence, the greater transparency was facilitating tacit collusion.

Ultimately, the Danish Competition Council ceased publishing the pricing data.

Source: Albæk, S., Møllgaard, P. and Overgaard, P. (1997), 'Government-Assisted Oligopoly Coordination? A Concrete Case', *Journal of Industrial Economics*, **45**:4, pp. 429–43.

5.4 Costs

The final element of the supply side that will be changed by Ofgem's proposals is the cost of supply. At a high level, two cost categories could be changed by the proposals:

– marginal costs—the proposals would have a direct impact on per-customer costs of supply. Such costs would generally be expected to feed directly into prices to some extent;

– fixed costs of supply—costs that are not directly related to the number of customers served by a given supplier. These costs would generally not be expected to feed into consumer prices in the short term, as they do not affect the optimal price.[80]

Furthermore, Ofgem itself will incur costs that will then be funded from energy suppliers in the market. Indeed, in its consultation document, Ofgem acknowledges a number of these potential cost increases:

> The RMR core proposal would have a cost impact on suppliers. The one off cost associated with creating new tariffs and migrating a proportion of customers to the standard options may be large and is likely to vary between suppliers. Further, all suppliers would be required to publish tariff information in a specified format and so would incur ongoing costs due to the requirements for enhanced communications with customers and for providing switching windows with no exit fee...Ofgem would also incur costs under the RMR core proposal.[81]

Overall, therefore, there will be increases in fixed costs (creating new tariffs and migrating customers), and increases in marginal costs (enhanced communications and switching windows). Furthermore, the increased costs to Ofgem (which have to be funded by the energy industry) are themselves likely to act to increase marginal costs further.

The magnitude of these cost changes and the precise extent to which they are passed through to consumers will determine the consumer detriment that these costs might cause. However, given the range of cost increases identified by Ofgem in its document, it appears likely that both fixed and marginal costs will rise. On top of this, to the extent that the RMR proposals might reduce competition then prices may rise even further.

[80] Over the long term, there may be a price effect from fixed-cost increases. Higher fixed costs will lower the profits of the firms in the sector, which will in turn reduce the amount of entry that would be expected, as potential entrants will find the market less attractive. That said, unless the change in fixed costs is of a large amount, this impact may be close to zero in practical terms.
[81] Ofgem (2011), 'The Retail Market Review: Domestic Proposals', December, paras 2.63–2.64.

5.5 Precedent for structural interventions

In addition to affecting incentives to enter the market, regulation can create adverse effects in a range of other ways. This section considers the impact of Ofgem's proposals across a range of factors that will affect suppliers and, ultimately, consumers.

One example of a pricing intervention is provided by the CC's remedies in the small and medium-sized enterprise (SME) banking inquiry (see Box 4.3). The CC imposed some behavioural remedies, but also required the four largest clearing banks to offer a minimum rate of interest (linked to the Bank of England base rate) for current accounts.

These remedies are widely felt to have been ineffective, and to have had the impact of reducing competition in the SME banking market, the core reason being that, by engaging in price regulation, the CC distorted incentives for entry into the market. Whereas there had been high incentives to enter as entrants could be profitable while offering a considerable price advantage over the incumbents, the CC's price regulation had the effect of removing the ability of entrants to undercut incumbents. As the CC said in its response to questions from the OFT:

> The incentive on other banks to enter or expand has been reduced[82]

More detail on the SME banking remedies is given in Box 5.2.

Box 5.2 Lessons from the SME banking remedies

In 2002 the CC completed its investigation into the supply of banking services to SMEs. It found a number of issues about the supply of services by clearing banks to SMEs that resulted in adverse effects. Specifically, it found that a number of practices of the four largest clearing groups restrict and/or distort price competition, and result in these clearing groups charging excessive prices to SMEs in England and Wales.

As a consequence, the CC imposed a number of remedies, including interventions on price. It required that banks to offer SMEs a minimum interest rate on their current accounts, of at least the Bank of England base rate minus 2.5%.

In 2007, following the recommendation of the OFT, the CC released the banking sector from these remedies, the core reason being that, by engaging in price regulation, the CC distorted incentives for entry into the market. Whereas there had been high incentives to enter as entrants could be profitable while offering a considerable price advantage over the incumbents, the CC's price regulation had the effect of removing the ability of entrants to undercut incumbents.

Source: Competition Commission (2007), 'Notice of decision to release undertakings in relation to SME banking given pursuant to section 88 of the Fair Trading Act 1973'.

A second example with parallels to the Retail Market Review is the OFT's market review of extended warranties. The case was similar because it also addressed issues of limited consumer capacity. However, the OFT found that information remedies were sufficient to address its concerns, and did not consider any form of direct pricing intervention (see Box 5.3).

Box 5.3 Lessons from the extended warranties market review: 'Undertakings in Lieu'

Throughout 2011 the OFT engaged in a market review of extended warranties. The extended warranties market has been investigated by UK competition authorities on several previous occasions and although the OFT was aware of some positive trends in the market, it had a number of remaining

[82] OFT (2007), 'SME Banking: Review of the undertakings given by banks following the 2002 Competition Commission report', August.

concerns. One such concern of relevance to Ofgem's Retail Market Review is that there is 'relatively limited, and ineffective, shopping around by consumers, which reduces provider incentives to compete effectively'. The OFT attributed this to the difficulty and time involved in comparing extended warranties offered by different providers as they often have different terms, conditions and features.

Having identified this concern, the OFT had the option to refer the market to the CC for a more detailed market investigation. However, the OFT also considered undertakings in lieu of a reference. Focusing on behavioural and informational remedies, the OFT considered that these should be effective in changing consumer behaviour. It engaged with the main providers of extended warranties throughout the investigation to design these remedies.

Ultimately, the main providers agreed to:

– establish, maintain, publicise and participate in a price-comparison website;
– improve the prominence and accessibility of important information to consumers, through a key information box included in leaflets available in stores;
– engage in regular mystery-shopping exercises;
– improve the transparency of pricing of any pay-as-you-go offering by including annual-equivalent information.

The OFT found these undertakings to be sufficient to mitigate the need for a CC market investigation.

The main comparison for the Retail Market Review is that, in the extended warranties case, interventionist measures (such as prohibiting the selling of EWs at the point of sale) were not deemed necessary. Additionally, when determining the undertakings, the OFT engaged with suppliers before consulting on them.

Source: OFT (2012), 'Extended Warranties on Domestic Electrical Goods', February.

5.6 Summary

This section has indicated that, counter to Ofgem's intentions, the Retail Market Review proposals run a strong risk of creating incentives for suppliers to reduce price-cutting behaviour and for tariffs to become similar over time. The more similar tariffs are, the lower the incentive is to switch, since a prerequisite for switching is that there is a sufficiently large potential cost saving available.

In the market at present, firms have the ability—subject to certain limitations—to cut prices to strategic customer segments for the purpose of winning customers. This constant threat of competition that may not be immediately observable helps to give an incentive for firms to compete and to design innovative tariffs to attract customer segments.

Ofgem's proposed remedies would:

– promote standardisation of products and hence transparency, enhancing the ability of firms to monitor each other;
– discourage entry by prohibiting differentiation of products by a new entrant;
– enhance the threat of price-based retaliation against a firm that does not tacitly collude.

As a result of these three factors overall, the proposed remedies risk impairing suppliers' incentives to engage in competition. In turn, this may mean that prices do not stay at the lowest (competitive) level, and hence consumers could be harmed. Essentially, if the costs of cutting prices to one segment include having to cut prices to all, this makes price-cutting less attractive. The knowledge that others face the same incentives further underlines the incentive to increase prices. According to Ofgem's own impact assessment guidance, an evaluation of these potential effects on competition should have been a component of Ofgem's Impact Assessment for this review.

In addition, this risk of higher prices following an anticipated reduction in competition may be exacerbated because suppliers' direct costs are likely to increase as a result of compliance with the proposals, and these costs may be passed through to consumers.

6 Conclusions and recommendations

This report has set out an independent economic appraisal of Ofgem's case for proposing a significant regulatory intervention in the domestic energy supply market, and has provided an assessment of some of the risks associated with the intended reforms.

Ofgem's intention is to improve consumer engagement, and hence the competitive constraint on suppliers, which it believes is hindered by consumer confusion, and consumers' inability to understand and compare the tariffs on offer. It proposes to do this by imposing tariff restrictions on suppliers in addition to information remedies.

The key reforms include:

– imposing different requirements on the structure of, and conditions attached to, 'standard' and 'non-standard' tariffs;
– placing a restriction on the number of standard tariffs offered by suppliers;
– introducing a partially regulated price for standard tariffs, and the prospect of introducing a fully regulated backstop tariff.

Ofgem's analysis and conclusions

Ofgem considers that the current level of consumer engagement in the retail energy market provides an ineffective constraint on suppliers.[83] It suggests that many consumers who try to switch energy tariffs find it difficult to make a well informed choice,[84] and that its proposals, aimed at improving tariff comparability, are the 'best means of tackling tariff complexity and promoting effective engagement'.[85]

Ofgem's analysis focuses on the determinants of consumer decision-making, and draws on three sources of evidence: qualitative survey evidence; a quantitative assessment of tariff comparability; and insights from the behavioural economics literature. This analysis is, however, incomplete and in places inaccurate.

Ofgem does not establish a clear link between disengagement and tariff complexity. Such a link is central to its premise that simpler tariffs will increase engagement. Where Ofgem attempts to establish such links, they are based on flawed interpretation of statistics.

Ofgem goes on to present analysis of the potential impact of its proposals on engagement. However, its quantitative analysis, and impact assessment of the proposed remedies, is inadequate for the following reasons.

– Owing to the construction of Ofgem's quantitative survey, it is not possible to compare the effects of the different components of the potential remedies that Ofgem puts forward (eg, a common standing charge versus a tariff comparison table) in order to compare the likely impact of alternative interventions on the level of switching.

– Ofgem has incorrectly interpreted its quantitative evidence on customers' likelihood of switching under each proposed remedy: it asks only those consumers who select a particular remedy as their preferred option whether they would be more likely to switch.

[83] Ofgem (2011), 'The Retail Market Review: Domestic Proposals', December, p. 1.
[84] Ibid., para 2.1.
[85] Ibid., para 2.8.

Correcting for these sub-sample issues significantly changes the interpretation of the results.

– The survey design itself is imperfect due to a lack of incentives for participants to engage in complicated calculations and the possibility of fatigue bias, and its relevance is unclear given the wide availability of tariff comparison services.

– Ofgem's analysis has focused purely on one factor (ease of comparing tariffs) and appears to have given limited attention to a range of other factors relevant to consumer engagement such as the magnitude of available savings and consumers' preference for tariff choice.

– Ofgem provides no estimate (not even order of magnitude) of the expected costs and benefits of its proposals.

Potential unintended consequences

Guidance prepared for the OFT on assessing the effectiveness of potential remedies in consumer markets outlines that a requirement for firms to set the same pricing structure is a significantly more restrictive remedy than requiring firms to advertise a common headline price, and represents an intervention for which there is limited empirical evidence of the beneficial effects.[86]

This suggests that Ofgem should exercise caution in imposing such an untested intervention, and should fully assess the potential adverse supply- and demand-side responses to its proposals.

As recognised in the OFT's consumer decision-making framework, to increase engagement successfully, regulatory intervention must not only make comparisons easier, but consumers must be willing to search the market so that they are in a position to compare between products. Ofgem does not analyse this important aspect of consumer decision-making; rather, it has focused only on the ability of consumers to make comparisons.

As identified in the academic literature, and described in this report:

– price differentials provide an important incentive to search for alternatives and switch energy tariffs. Ofgem's proposal to restrict the dimensions of competition between standard tariffs to a single unit rate is likely to reduce the level of dispersion currently observed in the market, and hence the incentive to engage in that segment of the market;

– the relative attractiveness of standard and non-standard tariffs is also likely to depend on consumers' perceptions of their relative risk. Ofgem's proposed intervention to set a regulated standing charge for standard tariffs, and to make standard tariffs the default option, could provide significant incentives for consumers to remain on standard tariffs and disengage from the wider market;

– a consequence of restricting the structure of standard tariffs (with a regulated standing charge) and removing the ability to offer discounts for procuring energy through cost-reducing channels would be to reduce the cost reflectivity of tariffs, which would be likely to increase the overall costs to consumers.

In addition, Ofgem's proposals do not assess the potential responses by suppliers to its proposals.

[86] OFT (2008), 'Assessing the effectiveness of potential remedies in consumer markets', April, p. 63.

– Contrary to Ofgem's assertion that prices will decline as a result of its proposals and that even disengaged consumers will benefit from a 'ripple effect', the academic literature highlights that standardised pricing structures can lead to an increase in price when suppliers set prices by considering the impact on gaining or losing relatively more price-sensitive customers, and the impact on those less likely to switch.

– This uncertainty about the potential impact of the proposed reforms on price, in addition to Ofgem's own analysis that supply margins have been around 1.5–4% over recent years (which is below those of comparator benchmarks in supermarkets, high-street retail and telecommunications) suggests that there may be limited overall benefits to consumers.

The OFT specifically identifies the restriction of products and pricing as a possible market intervention that can lead to less effective competition by nature of the fact that, subsequent to the intervention, firms have fewer strategies that they can compete on, and firms' ability to monitor each other's strategies is improved.[87] This is likely to be of particular concern when there are a significant number of inactive consumers.

Ofgem's proposals do not therefore contain a number of important analyses required to represent good regulatory practice, and, as a result, risk worsening, rather than improving consumer engagement, thereby lowering the overall level of competition to the detriment of consumers.

A more cautious response to the evidence to date

Ofgem has not adequately justified the rationale for restricting the structure of tariffs or the number of standard tariffs on offer, and has not thoroughly assessed the risk of creating substantial distortions and adverse effects on competition from these additional restrictions.

In general, remedies aimed at correcting for consumer biases should be introduced with caution. This echoes the concept of libertarian paternalism in the behavioural economics literature—ie, that consumers should be nudged to make more effective choices, rather than altering the choices themselves, and that choices that are valued should not be removed.

The requirement to improve information provision, as well as aid consumer decision-making by establishing a trusted price-comparison website, is an intervention that Ofgem's survey evidence suggests may be most effective, and that would mirror the recent undertaking provisionally accepted by the OFT in its study of extended warranties.

Ofgem's proposals appear premature, given its research and analysis, and do not stand up to the scrutiny required for such a bold intervention.

[87] OFT (2008), 'Assessing the effectiveness of potential remedies in consumer markets', April, para A.28.

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