

## Price and Behavioural Signals to Encourage Household Water Conservation



### ALSO IN THIS ISSUE

**Do e-auctions Increase the Risk of Bid Rigging? P5**

**Data as an Entry Barrier: Does Data Portability Foster Competition in Internet Markets? P8**

**The EU Damages Directive and Stakeholders' Involvement P12**

**UKERC Funded Project | Fuel Affordability: Measuring expenditure and perceptions P14**

**Best of the Blog | Does the Prime Minister's Unexpected Discussion of Competition Policy Signal a Softening of Brexit? P17**

# Price and Behavioural Signals to Encourage Household Water Conservation

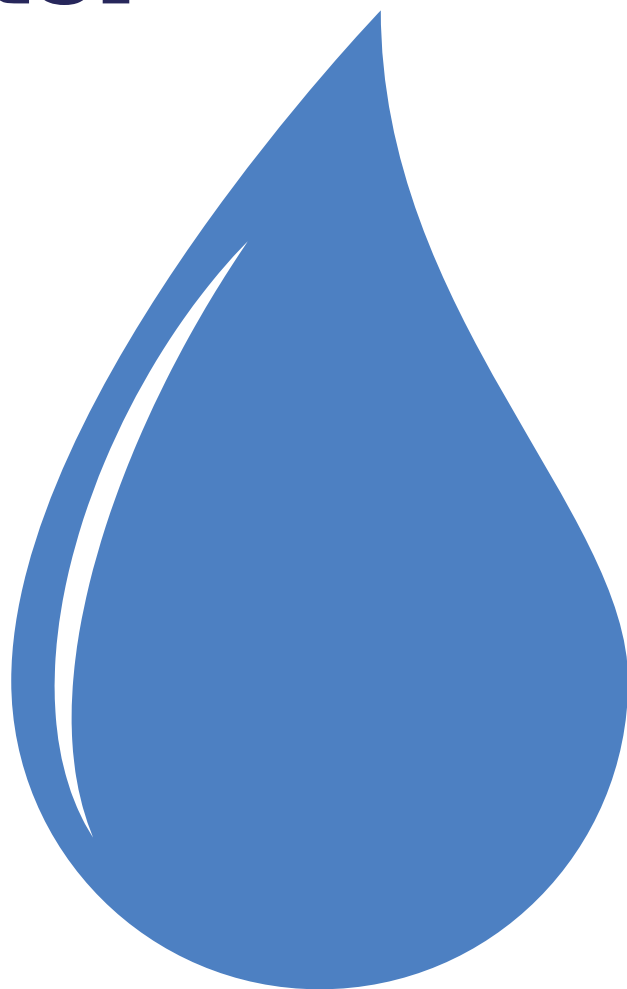
Liang Lu, Research Associate  
David Deller, Senior Research Associate  
Morten Hviid, Professor in Law

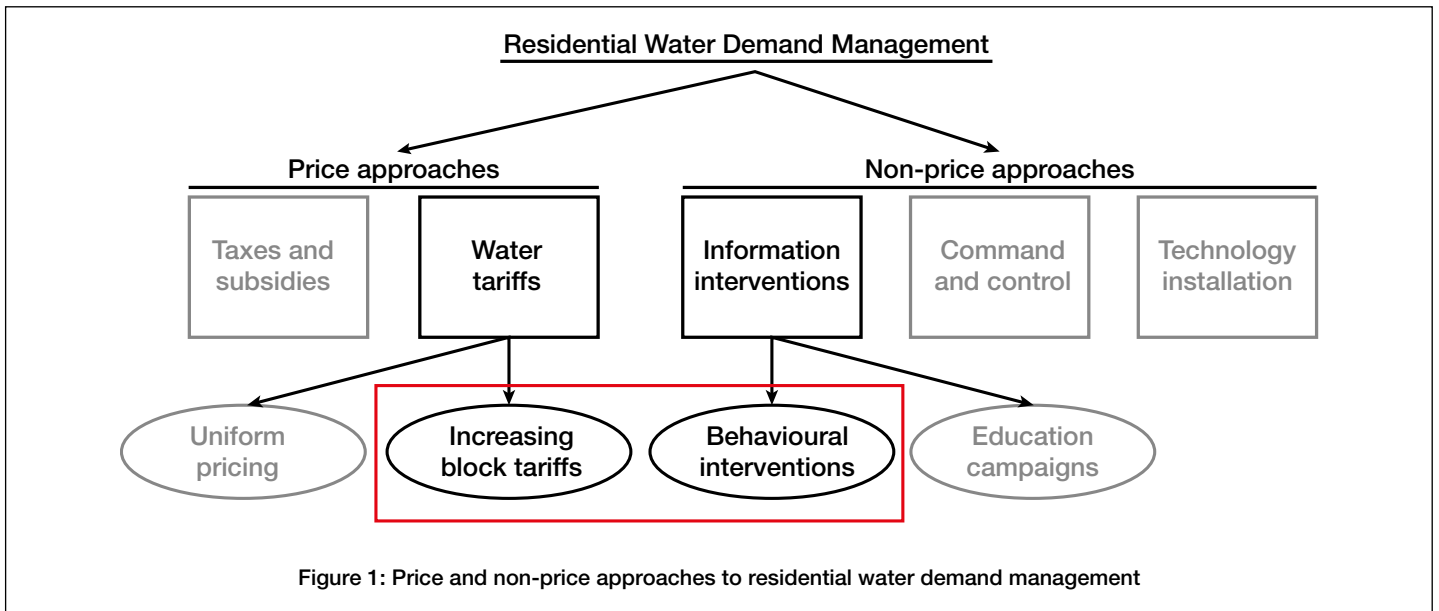
**Water scarcity is a global concern. Even in non-drought environments the political, economic and environmental costs of developing new water resources may favour conservation. Recent CCP research for Anglian Water reviews the effectiveness of two demand-side interventions to reduce residential water consumption: Increasing Block Tariffs (IBTs) and behavioural interventions.**

In theory IBTs can side-step affordability concerns and are an attractive option, however the authors highlight the operational challenges of implementing effective IBTs. Robust evidence on behavioural interventions is limited, although socially comparative feedback appears to encourage water conservation. Nevertheless, since existing evidence is typically obtained in drought situations, one may question its validity for designing interventions in non-drought situations such as the UK. The authors suggest that an essential first step before implementing an IBT is understanding a locality's water consumers and their water demand. Many UK households have an unmetered water supply and this presents challenges both for gaining the necessary understanding and producing an evidence base around behavioural interventions.

Population growth and climate change create uncertainty about the ability to balance supply and the demand for water in general. The UK, and the south-east/east of England in particular, face an increasing drought risk over the next 50 years. There are now even greater challenges in developing new water resources due to the economic and environmental costs involved and political opposition.<sup>1</sup> An alternative to resource options is to use demand-side options, involving both price and non-price tools (see Figure 1) to reduce household water use. Recent CCP research<sup>2</sup> explored whether Increasing Block Tariffs (IBTs) and behavioural interventions trialled in other industrialised countries already facing a high drought risk could be useful in the UK.

The law of demand suggests that increasing water prices should reduce the quantity of water consumed. However,





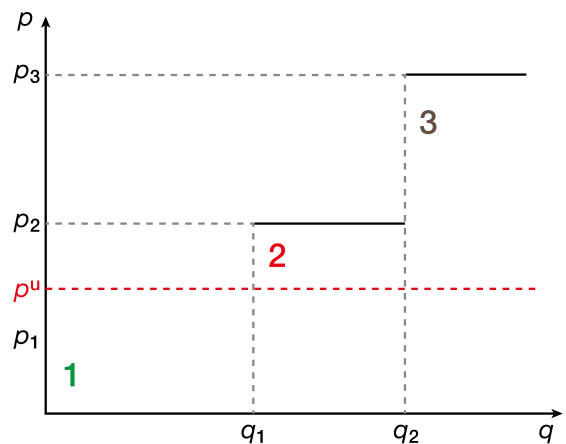
water demand is price inelastic,<sup>3</sup> i.e. consumers do not tend to be very responsive and cut their consumptions when facing price increases. To achieve a significant reduction in demand the water price would have to increase substantially, which may lead to poorer households consuming water below an advisable level and/or facing financial hardship. A price mechanism where the per-unit price varies with consumption, such as an IBT, seeks a balance between the affordability and conservation objectives. Under IBTs, different unit prices are charged for two or more pre-specified blocks (quantities) of water. Intuitively the idea is to construct a first block corresponding to the essential amount of water consumption during a billing period, and then consider subsequent blocks of consumption as increasingly a luxury product and price accordingly. Figure 2 illustrates a three-block IBT with conservation objectives. Compared to the uniform price tariff,  $p^u$ , the IBT involves a lower price for consumption up to quantity  $q_1$ , a higher price for additional consumption up to  $q_2$ , and a much higher price for consumption above  $q_2$ .

Among industrialised countries, IBTs are widely used in the US, some parts of Europe, such as Spain and Portugal, and parts of Australia including Melbourne, Perth and Sydney. Unsurprisingly, these areas are associated with a high drought risk. A review of those existing applications of IBTs offers two general insights: first, the structure of IBTs can vary considerably across geographical areas and time periods, and second, the effects of IBTs are mixed – some have reduced residential water consumption effectively, while others did not reduce demand, or sometimes even increased total consumption. This suggests that for an IBT to reduce water consumption successfully, it needs to satisfy two conditions: 1) the design of the tariff structure (including prices, block sizes, billing period, and the number of blocks) needs to reflect high quality data regarding local demand, and 2) consumers need to perceive and respond to the IBT's price signal correctly. Both conditions are challenging to meet in the UK.

Many UK households remain unmetered and their water bills are not based on their consumption. The limited

evidence on the price elasticity of water demand in the UK suggests the scope of using water tariffs to reduce water consumption in the UK is currently smaller than some other areas of the world.<sup>4</sup> The low variation in water expenditure across income groups may indicate that UK households' water demand generally involves a low level of discretionary use. In addition, the ability of firms to experiment with new pricing structures depends on the flexibility of the regulatory regime. IBTs require experimentation to develop an effective block pricing schedule. However, it is an open question whether the UK's political and regulatory setting would permit such experimentation and the charge of high unit prices for high consumption blocks. Despite greater emphasis on sustainable water use in recent years, the development of conservation-oriented tariffs in the UK has been slow. One of the main obstacles of introducing IBTs in the UK is the concern that water may become unaffordable for some large households under those tariffs.

Furthermore, households in the UK appear to pay little attention to their water consumption and water price, which may be due to the small size of water bills relative to total



**Figure 2: A three-block IBT**

Information type	Example
Technical advice	Information leaflets containing water-saving tips
Norm-based information	Letters emphasising social identity and prosocial preferences, such as the importance of water conservation and how individual households' effort matters for a community
Monitoring device tailored to specific appliances	Devices or labels with technical and conservation information for showers, washing machines etc., enabling usage to be monitored at the point of consumption
General feedback	Feedback on total household water use
Socially comparative feedback	Feedback comparing water use to the average of (similar) neighbours
Emoticon feedback	Happy faces indicating social approval when water consumption is below average, and sad faces indicating social disapproval when consumption is above average

**Table 1: Information types**

household expenditure. Most of the empirical evidence we reviewed is from a drought situation. It seems plausible that the perceived importance of water conservation will differ substantially between households who have experienced droughts and those who have not. Compared to drier locations, water stress in the UK is not an immediate threat to households' living standards, hence, households, are likely to be less aware of the need for water conservation and are less willing to change their water use habits.

The difficulties of introducing IBTs in the UK increases the attractiveness of using behavioural signals to encourage water saving. In water conservation, behavioural interventions often present different types of information to households and are increasingly evaluated through natural or constructed experiments. In an experiment, households are usually grouped into different "treatments" which receive different types of information about water use and water saving. By comparing treatment groups to a "control" group where no intervention is applied, studies assess whether the type of information used can reduce water consumption. In our review, we seek to address the effectiveness of alternative information types considered in the literature (see Table 1), and whether households' socioeconomic characteristics influence the response to interventions.

We still know very little about the effect of behavioural remedies on water consumption because only a handful of experiments have been conducted in this area, almost all involving small samples<sup>5</sup> and some being affected by sample selection issues. The existing evidence suggests that technical advice on its own and without a good motivation for conservation rarely generates a significant reduction

in water use. Social comparative feedback appears to be the intervention most likely to generate significant effects, however, a one-size-fits-all approach may not be effective: social comparison is most promising for high water users. When comparing interventions' short-run and long-run effects, there appears to be a complementarity between price and behavioural interventions. High water users are less price-sensitive but are more likely to respond to social comparisons. The effect of information-based interventions diminishes over time whereas IBTs can become more effective over time, so combining the two interventions may lead to both immediate effect and sustained effects.

Given the currently low consumer engagement in the UK, attitude-led behavioural interventions highlighting the importance of water conservation may help to 'set the scene', prior to the introduction of IBTs, while enabling UK water companies to learn how to maximise the effectiveness of delivering water conservation messages to households. The main insight from our review is that we require more experimental studies to obtain robust results from the UK (where the perception of drought risk is low). Future experimental studies also need to address the persistence of the effect of information interventions on conservation, how socioeconomic characteristics may influence households' responses to interventions, and how behavioural interventions interact with price incentives, such as IBTs.

References:

1. For example, there has been significant opposition to Thames Water proposals for a reservoir near Abingdon in Oxfordshire. See Group Against Reservoir Development website, [www.abingdonreservoir.org.uk](http://www.abingdonreservoir.org.uk)
2. Lu, L., Deller D., and Hviid M. 2018. Price and behavioural signals to encourage household water conservation in temperate climates, Centre for Competition Policy Working Paper 18-1. Available at <http://competitionpolicy.ac.uk/publications/working-papers>
3. See, e.g. Dalhuisen, J.M., Florax, R.J., De Groot, H.L. and Nijkamp, P., 2003. Price and income elasticities of residential water demand: A meta-analysis. *Land economics*, 79(2), pp.292-308.
4. Gardner, K., 2010. Residential water demand modelling and behavioural economics. Ph.D. Thesis, University of East Anglia.
5. With the exception of the experiment in Ferraro, P.J., Miranda, J.J. and Price, M.K., 2011. The persistence of treatment effects with norm-based policy instruments: Evidence from a randomized environmental policy experiment. *American Economic Review Papers and Proceedings*, 101(3), pp.318-322.

# Do e-auctions Increase the Risk of Bid Rigging?



**Penelope Alexia Giosa,**  
PhD Candidate in Competition Law  
& Public Procurement

More than EUR 1.9 trillion is spent each year on public contracts in Europe. In a time of economic crisis, there is need to maximise the efficiency of public spending, in order to secure budget savings. One of the ways to achieve this is to deter bid rigging (collusive tendering), a practice whereby two or more bidders agree on aspects of their submissions like, for example, on quality or price. Bid rigging undermines competition among bidders and may lead to reduced quality or higher prices for goods that are procured by the public sector.

In my recent research on electronically conducted auctions (e-auctions), one of the most common procurement tools that public bodies use in order to acquire goods or services, I argue that some elements of the current procurement practice increase the risk of collusion and that the new EU Directive on public procurement has not managed to adequately deal with those issues.

<sup>1</sup>The economic significance of public procurement in Europe is considerable, with public authorities in the EU

spending approximately 14% of GDP on public procurement every year, i.e. more than EUR 1.9 trillion.<sup>2</sup> In an attempt to maximize the efficiency of public spending in an era of austerity and continuing cuts to public purchasing, there is a trend towards the use of electronic communications by public bodies when buying supplies and services or when tendering public works (e-procurement). E-procurement offers a number of benefits such as simplified and shortened processes, reductions in red-tape and administrative

**The regulatory framework and practice of e-auctions raise competition concerns as they may facilitate anti-competitive practices, such as tacit collusion and bid rigging.**



burdens as well as significant savings for all parties.<sup>3</sup> Electronic auctions (e-auctions) are a representative electronic purchasing technique, the use of which has nearly doubled in number during 2009 and 2010.<sup>4</sup> Public procurement is regulated by two EU Directives<sup>5</sup> which apply to most of the auctions organised by public bodies. Yet, as my research demonstrates, the regulatory framework and practice of e-auctions raise competition concerns as they may facilitate anti-competitive practices, such as tacit collusion and bid rigging. Collusive activities reduce the level of competition and undermine the main objectives of public procurement, such as value for money in the acquisition of the required goods, works or services and efficiency in the procurement process.

E-auctions are a procurement tool that use web-based software to allow potential suppliers to compete online, in real time, to provide prices for the goods/services under auction. E-auctions can be based on price alone or other criteria such as quality, delivery or service levels. E-auctions can take two forms; they can be either reverse or forward. In the former, the contract is awarded to the lowest bidder and in the latter the bidder with the highest price wins the contract, for example when a company bids to purchase paper and magazines for recycling. The main characteristic of the e-auction system under the new Directive is that throughout each phase of an electronic auction information must be communicated to all tenderers in order to enable them to allocate their relative position compared to the other participants. This information may include details concerning prices or values submitted by other bidders as well as the number of participants in each phase of the auction. The

identities of the tenderers shall not be disclosed. Another significant element of the new Directive is that e-auctions may take place in a number of successive phases. Moreover, the new Directive enables contracting authorities to close an electronic auction at a previously indicated date and time or when the previously indicated number of phases in the auction has been completed. This is a general concern that regards all auctions and not only e-auctions.

In my PhD chapter I argue that the new Directive raises a number of competition concerns, especially regarding e-auctions. Firstly, the sharing of information facilitates collusive schemes between the participants, even with their identities being kept anonymous. The main reason for this is that the circulation of price and other related information that is mandatory under the Directive enables the bidders to observe the prices at which rivals quit as well as the set of valid offers submitted at each round of the e-auction. In this way, it is possible for the members of a bidding ring to determine whether their co-conspirators kept their promise to submit, for example, 'cover bids', i.e. bids at an artificially high price or composed of special terms that are likely to be rejected. Thus, firms engaged in bid rigging are able to monitor any deviations from their collusive agreement. Because bidders' identities are not disclosed, the bidding ring will not be able to use targeted punishments against the defecting bidder during the same auction. However, the bidding ring will still be effective in suppressing rivalry among members because of the knowledge that one or several bidders deviated. The general threat of ending the collusive agreement and reverse to competitive behaviour for the rest of the e-auction constitutes the greatest punishment



for the deviating firm. All firms would receive their lower non-collusive profits. Because of the information disclosure required in accordance with the Directive, deviating from a pre-arranged collusive agreement becomes observable, though anonymised, which makes a bidding ring more stable and e-auctions more susceptible to collusion.

Secondly, the multi-round format that an e-auction can take may enhance the sustainability of a bidding ring, especially in the context of a market whose characteristics raise collusion concerns. According to the economic theory of auction, collusion is likely to flourish when auctions repeat at regular intervals so that the same bunch of bidders may meet time and time again.<sup>6</sup> The repeated interaction among tenderers, even on an electronic marketplace and without their identities being disclosed to each other, gives them a number of opportunities to observe the process of price formation and monitor any deviation from their pre-arranged collusive agreement. After all, information flows well in industries, especially when there are only a few suppliers and it may be relatively easy to identify 'anonymous' bidders. Additionally, the limited time-intervals between the rounds of a multi-round e-auction strengthen the enforcement structure of a bidding ring, as any deviating member of the ring may face threat of immediate retaliation at the next stage of the e-auction.<sup>7</sup>

Thirdly, the new Directive enables contracting authorities in e-auctions to award a contract based on price only. Especially the 'lowest price' criterion in a reverse e-auction raises collusion concerns. Though the lowest price criterion is not exclusive to e-auctions, the anticompetitive effects of this awarding criterion may be stronger in case of e-auctions, where the price is the predominant criterion to select the winning bid rather than the criterion of 'economically advantageous'.<sup>8</sup> In an environment where the public purchaser does not have any specific preferences regarding the quality of the products/services procured and

competition is driven only by price considerations, bidders may find it easier to agree on a collusive scheme, especially with cost symmetry and in a multi-round e-auction.<sup>9</sup> This increases the risk of collusion because under such circumstances, the bidders can more easily suppress all ring competition in their cartel and allocate the collusive gains among them.<sup>10</sup>

The susceptibility of e-auctions to anti-competitive practices could be reduced by altering and reinterpreting the existing framework. To start with, procuring authorities should only disclose the minimum amount of information about the bidding history of other bidders. This would reduce the probability that deviations from the collusive agreement are observed, thus destabilising the bidding ring. For example, authorities could avoid disclosing the prices at which rivals quitted the auction or the number of valid offers submitted per round. It should be sufficient for a bidder competing in an e-auction to know whether its own bid is the leading one and what the price of the leading bid is. This information still enables the auctioneer to gauge the price that it ought to submit at the next round of the auction.<sup>11</sup> The contracting authority could also delay the publication of information to hinder collusion among auctioneers. By doing this, deviation of bidders from the collusive agreement will be delayed and so will be the punishment of the defector. It may also render punishment practically impossible if the e-auction has already closed.<sup>12</sup> In markets with concerns about collusion, authorities should also consider a single round of e-bids rather than e-auctions with multiple phases. The one-round format "cannot be easily manipulated to coordinate bidder strategies and thus constitute an anti-cartel device".<sup>13</sup>

The new Public Procurement Directive has not fully addressed the issue of collusive outcomes in e-auctions but contracting authorities may reduce the risk of bid rigging by reducing certainty for potential bid riggers and reducing the amount of information provided to bidders.

---

#### References:

1. This article is based on the PhD chapter 'Contracting Phase: Provisions that enhance or deter collusive tendering under the new 2014/24/EU Directive'.
2. European Commission, 2017, 'European Semester Thematic Factsheet-Public Procurement', available at [https://ec.europa.eu/info/sites/info/files/european-semester-thematic-factsheet-public-procurement\\_en.pdf](https://ec.europa.eu/info/sites/info/files/european-semester-thematic-factsheet-public-procurement_en.pdf)
3. European Commission, 2018, 'E-procurement', available at [http://ec.europa.eu/growth/single-market/public-procurement/e-procurement\\_en](http://ec.europa.eu/growth/single-market/public-procurement/e-procurement_en)
4. PwC, London Economics and Ecorys for the European Commission, 2011, 'Public Procurement in Europe-Cost and Effectiveness', available at <https://ukmin.lrv.lt/uploads/ukmin/documents/files/Studija%20d%C4%97%20kainos%20ir%20efektyvumo%20vie%C5%A1uosiuose%20pirkimuose.pdf>
5. The Public Sector Directive 2014/24/EU on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts (hereinafter 'the new Directive') and the Utilities Directive 2014/25/EU, coordinating the procurement procedures of entities operating in the water, energy, transport and postal services sectors.
6. Marshall R.C. and Marx L.M (eds), 2012, *The Economics of Collusion- Cartels and Bidding Rings*, The MIT Press, 206; Soudry O, 2004, 'Promoting Economy: Electronic Reverse Auctions under the EC Directives on Public Procurement', *Journal on Public Procurement*, 4(3), 362; Aoyagi M, 2003, 'Bid Rotation and Collusion in Repeated Auctions', *Journal of Economic Theory*, 112(1), 79-105; Gupta S, 2001, 'The Effect of Bid Rigging on Prices: A Study of the Highway Construction Industry', *Review of Industrial Organization*, 19(4), 455.
7. Klemperer P, (ed), 2004, *Auctions: Theory and Practice*, Princeton University Press; Albano G.L, Buccirosi P, Spagnolo G and Zanza M, 2006, 'Preventing Collusion in Procurement' in Dimitri N, Piga G and Spagnolo G(eds), *Handbook of Procurement*, Cambridge University Press, 358.
8. PwC, London Economics and Ecorys for the European Commission (n 4) 59.
9. Albano GL and Nicholas C (eds), 2016, *The Law and Economics of Framework Agreements-Designing Flexible Solutions for Public Procurement*, Cambridge University Press, 197-198.
10. Marshall and Marx (eds) (n 6) 191-192; Preston McAfee R and McMillan J, 1992, 'Bidding Rings' *The American Economic Review*, 82(3) 579-599; Albano and Nicholas (eds) (n 9) 197.
11. Albano and Nicholas (eds) (n 9) 352-3.
12. Albano, Buccirosi, Spagnolo and Zanza (n 7) 352-3.
13. Albano and Nicholas (eds) (n 9) 199; OECD 'Guidelines for Fighting Bid Rigging in Public Procurement', [www.oecd.org/competition/cartels/42851044.pdf](http://www.oecd.org/competition/cartels/42851044.pdf), 7.

# Data as an Entry Barrier: Does Data Portability Foster Competition in Internet Markets?

Wynne Lam, Lecturer in Industrial Organisation and Competition Policy

The right to data portability under the General Data Protection Rule (GDPR) is generally thought to encourage consumers to switch between different service providers and facilitate entry of new firms. The data portability rules only apply to data 'created by' the consumer (data subject), e.g. purchasing patterns. However, data 'derived by' a firm (data controller) with the help of data analytics, e.g. recommendations derived from purchasing patterns, does not fall under the portability rule. We show that without data analytics, data portability can indeed facilitate switching, but with data analytics, data portability may hinder switching. This is because consumers, knowing that they can switch easily in the future, are more willing to provide data to the incumbent, which strengthens the incumbency advantage and creates entry barriers. The second effect has been neglected so far and we demonstrate that the overall impact of data portability on switching and entry is ambiguous, depending on the availability and value of big data analytics.





A clear aim of data portability is to facilitate consumer switching and entry. There are, however, boundaries to the right to data portability according to Article 20 of the GDPR, which says: *'The data subject shall have the right to receive the personal data concerning him or her, which he or she has provided to a controller, in a structured, commonly used and machine-readable format and have the right to transmit those data to another controller without hindrance from the controller to which the data have been provided.'*<sup>1</sup>

This means that the right to data portability applies only to data 'provided by' the data subject but not inferred or derived data 'created by' the data controller. For example, whereas data on consumers' shopping and browsing behaviour fall within the scope, inferred data for personalisation and recommendation (hence, data analytics) fall outside. Such data analytics are commonly used by big Internet companies such as the GAFAM (Google, Amazon, Facebook, Apple, and Microsoft). This also means that although data portability may reduce incumbency advantage, it does not eliminate such advantage.

Let us first consider a market without data portability. It is well known that in such a market, consumers will be locked-in to the incumbent once they are on board, even when a more efficient firm enters the market at a later stage. Moreover, the lock-in effect is stronger when consumers consume more data.<sup>2</sup> This is because data consumption creates switching costs: they can be 'individual' switching costs (e.g. transaction and learning costs when changing service providers) or 'collective' switching costs (or network effects, e.g. the more friends join Facebook, the more value existing users derive). On the other hand, anticipating future lock-in, a consumer may want to refrain from consuming too much data, so that he/she can easily switch to a better firm.

Lam and Liu (2018) identify two ways that data portability changes this scenario.<sup>3</sup> First, for a given level of data consumption, data portability weakens the lock-in effect and the incumbency advantage, as it allows data to be transferred more easily to the entrant. We call this the switch-facilitating effect. This effect is one of the most compelling reasons for promoting data portability. Second, a weaker lock-in effect encourages data consumption. That is, consumers, knowing that they can switch easily in the future, are more willing to raise their data consumption and provide data to the incumbent. We call this the demand-expansion effect, which raises the value of staying with the incumbent and potentially creates entry barriers.

The overall impact of data portability on entry is a priori ambiguous because of the existence of these two opposite effects. We show that when there are no, or only weak big data analytics, the switch-facilitating effect dominates.

Hence, data portability facilitates switching and entry. However, when big data analytics are strong enough, it strengthens the demand-expansion effect to such an extent that the demand-expansion effect dominates the switch-facilitating effect, making switching and entry difficult.

Furthermore, we show that entry deterrence is more likely to happen in a more innovative market. This is because in such a market, anticipating better firms will enter in the future, consumers are more likely to wait for

**In a market without data portability, consumers are locked-in once they are on board, even when a more efficient firm enters the market at a later stage. The effect is stronger when users consume more data.**

the better firm and defer their data consumption. With less data consumption early on, the switch-facilitating effect of data portability becomes weaker. On the other hand, the demand-expansion effect becomes stronger because consumers are more likely to switch in the future and port data to the more innovative entrant. Combining both effects, the entry condition becomes more difficult. Thus, although data portability can benefit consumers by alleviating lock-in, it can also have an adverse effect on entry and long-term efficiencies. This casts doubt on the role of data portability in helping new firms and fostering competition. In summary, even though the short-term benefit of data portability is well grounded, the potential long-term effect requires more detailed analysis.

More generally, our work relates to the large economic literature on either switching costs or network effects.<sup>4</sup> However, there are few works that analyse both issues together. Yet, in both Lam and Liu (2018) and Lam (2017), we show that much of the literature that looks at these two issues separately provides an incomplete picture in the presence of both of them.<sup>5</sup> Therefore, we believe that much more work is needed in this area to enable a deeper understanding of competition in Internet markets, where both switching costs and network effects are common.

---

#### References:

1. Article 20, REGULATION (EU) 2016/679 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of April 27, 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation).
2. Data consumption is defined as the process of providing data and using a data related service.
3. Lam, W. M. W. and Liu, X. (2018) 'How does Data Portability Affect Entry?', Working Paper.
4. Farrell, J. and Klemperer, P. (2007) 'Coordination and Lock-in: Competition with Switching Costs and Network Effects', in Armstrong, M. and Porter, R. (eds.) *Handbook of Industrial Organisation*. Amsterdam: North-Holland.
5. Lam, W. M. W. (2017) 'Switching Costs in Two-sided Markets', *Journal of Industrial Economics*, 65(1), pp. 136-182.

## Day 1

Thursday 7 June

---

10:00 – 11:00 **Registration**

---

11:00 – 11:15 **Introduction & Welcome** | Kai-Uwe Kühn & Morten Hviid

---

**Session 1: Keynote speaker:**

11:15 – 12:00 **Gert Jan Koopman** European Commission  
*Competition Enforcement, Competitiveness and Industrial Policy*

12:00 – 12:30 Q&A Session

12:30 – 12:50 Impulse talk on Infrastructure Investments

---

12:50 – 13:50 **Lunch**

---

**Session 2: Shaping the Data Economy:  
Using Legal Rules for Industrial Policy?**

13:50 – 14:25 *Non-personal Data Mobility in the EU: Is a new right necessary to protect industrial data?*  
**Sabine Jacques** UEA Law School & Centre for Competition Policy

14:25 – 15:00 *The UK's post-Brexit Data Economy: Personal data transfers*  
**Karen Mc Cullagh** UEA Law School

15:00 – 15:20 *Innovation and Regulatory Design*  
**Howard Shelanski** Georgetown University, Washington DC

15:20 – 15:45 Discussion

---

15:45 – 16:15 **Break**

---

**Session 3: Directed Technological Change and the Energy Sector**

16:15 – 16:55 *Clean Technologies, Growth and Competition*  
**Ralf Martin** Business School, Imperial College London

16:55 – 17:30 *Directed Technological Change and Energy Policy: The German Experience*  
**Justus Haucap** DICE, Heinrich-Heine-Universität Düsseldorf

17:30 – 17:55 *Protection Effects of Environmental Policy*  
**Eugenio Miravete** University of Texas at Austin; School of Economics & Centre for Competition Policy, University of East Anglia

17:55 – 18:15 Discussion

---

19:00 **Conference Dinner**  
*Delia's Restaurant, Norwich City Football Ground*

---

## Day 2

Friday 8 June

---

### Session 4

#### New Industrial Strategy and Industry 4.0

09:00 – 09:45

*Market Design is Ex Ante Competition Policy for Industrial Strategy*

**Tony Curzon-Price** Department of Business, Energy and Industrial Strategy

09:45 – 09:55

Discussion

09:55 – 10:25

*“America has the internet, we have the things” – The German way of regulating digital platforms*

**Hans Friederiszick** E.CA Economics

10:25 – 10:50

Discussion

---

10:50 – 11:20

### Break

---

### Session 5

#### Supporting Industries – How Have We Done?

11:20 – 11:45

*State Aid to the Car Industry – the EU approach*

**Carlo Scarpa** Department of Economics & Management, University of Brescia

11:45 – 12:10

*Welfare Effects of R&D Support Policies*

**Tuomas Takalo** Bank of Finland

12:10 – 12:30

Discussion

---

12:30 – 13:30

### Lunch

---

### Session 6

#### Panel – The Future of State Aid

13:30 – 15:00

**Simon Coward** Hethel Innovation

**Bruce Lyons** School of Economics & Centre for Competition Policy, UEA

**Sheldon Mills** Competition and Markets Authority

**Jenny Sugiarto** KPMG

---

15:00 – 15:15

**Final Remarks** | Kai-Uwe Kühn

---

15:15 – 16:00

**Farewell Drinks Reception**

# The EU Damages Directive and Stakeholders' Involvement

Sebastian Peyer, Senior Lecturer in Law

**Public consultations are an important tool in the law-making process, improving efficiency, transparency and effectiveness of regulation, and aiming at countering lobbying and business interests. In preparation of its Damages Directive the European Commission held two public consultations: the Green Paper (2005) and White Paper (2008) consultations on options to reform private damages actions for the breach of EU competition law. Our analysis of the consultation responses suggests that business interests dominate and that consumer interests are underrepresented. We argue that this might, among other factors, explain why the Commission did not adopt more radical proposals to encourage compensation claims in favour of harmed consumers or small firms.**

For many years, few firms and virtually no consumers sought damages for breaches of EU competition law in the courts of the EU Member States.<sup>1</sup> The European Commission lobbied changes to the existing legal framework to encourage victims of anticompetitive conduct to sue for compensation. The Commission's efforts culminated in the EU Damages Directive that came into force at the end of 2014.<sup>2</sup> The Directive aims at harmonising the rules for bringing tort actions based on infringements of EU competition law, and one of its main objectives is to encourage consumers and firms to bring compensation claims against firms that engaged in anticompetitive conduct. The Directive is regarded as an important milestone in the development of private antitrust enforcement in Europe but it has also been contentious for introducing, for example, the disclosure of documents in many civil law jurisdictions. While the Directive has initiated reforms in the EU Member States, it has also fallen short of providing strong incentives for small firms or consumers to sue for damages.<sup>3</sup> For example, the Directive did not include mandatory rules for opt-out group actions and some of its proposals are likely to make litigation more expensive and, thus, less attractive for consumers.

To understand why the Directive fell somewhat short of its own compensation goal, it is important to look in the genesis of the Directive. While political pressure from some Member States may have had an influence on the final version of the Directive, we focus on the potential role that public consultation may have played in shaping the Damages

Directive. In preparation of the Directive, the European Commission held two public consultations – the Green Paper consultation 2005 and the White Paper consultation 2008. Both consultations attracted a significant amount of attention from academics and practitioners alike. We looked at all 318 publicly available responses that were submitted to the Green Paper or the White Paper. Of those 318 submissions, 251 were drafted in either English or German and we subjected them to a more detailed content analysis.

In our dataset of consultation responses we were able to identify the affiliation of the respondents and their positions on critical elements of the Directive such as access to information and passing-on.<sup>4</sup> Our data show that respondents from larger economies in the EU or more mature competition law regimes dominate the consultation process. Stakeholders from the UK submitted 52 responses, followed by Germany (46), Belgium (37), France (29), Italy (24) and the Netherlands (16). Compared to the size of its economy, Belgium seems to be overrepresented but this is largely explained by the fact that many interest groups and law firms have an office or their headquarters in Brussels. There were also seven responses from stakeholders based in the United States. This does not surprise. The United States have been at the vanguard of private antitrust enforcement and often served as the reference point in the discussion about the reform of private damages actions.

Lobby groups and law firms took centre stage in the consultation process, submitting the majority of the

“Only seven of those interest group responses were written by organisations lobbying on behalf of consumers, all the remaining submissions represented industries and non-consumer interests.”

Affiliation of respondents to EU Commission's Green and White Paper consultations on private actions

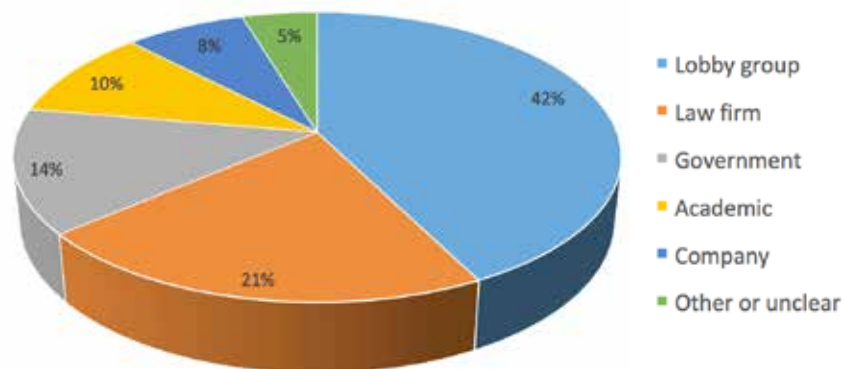


Figure 1

responses as shown in Figure 1. Only seven of those interest group responses were written by organisations lobbying on behalf of consumers whereas all the remaining submissions represented industries and non-consumer interests. That would explain why many submissions appeared to be motivated by the creation of a more level playing field or concerns about the exposure to litigation. Lobby groups were also the strongest voice against changes that were more likely to incentivise compensation claims such as better access to information in possession of the defendant via disclosure (a novelty in many continental jurisdictions). While the motivation for lobby groups to participate in consultations is clear, the considerable number of law firms that participated is surprising. We accept that many law firms may have a general interest in competition law but we wonder whether contributions were submitted on behalf of clients or groups of clients. A small number of academics or academic institutions submitted responses as well. Submissions from Governments included responses from various national ministries but also competition authorities and consumer protection agencies.

Most of the responses are cautiously positive and generally supportive of the Commission's proposals. The final Damages Directive seems to be the result of

the majority's opinion as expressed in the consultation responses. However, it is difficult to assess what other input has shaped the Directive. The European Parliament as well as pressure from national governments have played a role later in the drafting process too.

The preliminary results of our analysis indicate that industry organisations dominated both consultations and that more responses were submitted from larger economies or countries with more mature competition law systems. This may be one factor explaining why the Damages Directive contained few radical changes in favour of harmed consumers or small firms. On a more abstract level, the paper contributes to the discussion about public consultations. Open consultations are widely employed as a policy and regulatory tool to improve transparency, efficiency and effectiveness of regulation, aiming at widening stakeholder participation, information gathering and the initiation of dialogue with potentially affected parties.<sup>5</sup> The Green Paper and the White Paper consultations have certainly improved transparency and triggered a debate about private actions for damages, but the dominance of non-consumer interest groups seems to question the use of public consultations as a tool to widen stakeholder participation.

References:

1. The situation was and is different for injunction claims. See, for example, Peyer S, 2012 'Private Antitrust Litigation in Germany from 2005 to 2007: Empirical Evidence' *Journal of Competition Law and Economics* 8(2) 331-359.
2. Directive 2014/104/EU.
3. Peyer S, 2016 'Compensation and the Damages Directive' *European Competition Journal* 12(1) 87-112.
4. The Damages Directive introduces disclosure, i.e. allows claimants and defendants to access relevant documents in the possession of the respective other party. Passing-on means that harm caused by anticompetitive conduct is passed down the distribution chain (to varying degrees). The Damages Directive permits infringers to invoke the passing-on defence, i.e. arguing that the claimant has not suffered harm (or less harm) because he passed on overcharges to his customers.
5. OECD Background document on public consultations.



# UKERC-funded Project: Energy Affordability and Old Age: Expenditure versus self-reported perceptions

David Deller, Senior Research Associate  
Catherine Waddams Price, Professor of Regulation



The government has promised to improve energy affordability<sup>1</sup> as part of its pledges to help those who are ‘Just About Managing’. The legislation to cap energy prices for ‘disengaged’ customers, which is expected to receive Royal Assent this summer, is an important part of fulfilling this pledge. However the cost of energy has had political salience for far longer and has often been framed as whether older people can afford sufficient energy.

In 2001 the then government committed to eliminate fuel poverty and, since 1997, Winter Fuel Payments (WFP) have been made to all those over pensionable age. While WFP’s title is linked to energy, it is actually an income transfer, one costing the government around £2bn per annum. The increasing generosity of WFP not only represented a significant increase in support linked to energy it also represented a fundamental shift in the balance of support, away from low incomes (which determines receipt of Cold Weather Payments<sup>2</sup>) towards old age. The central policy question, as opposed to the political question, is whether this substantial help is being targeted at those who need it most? The answer depends partly on how need is measured.

In the UK policy discussions around energy affordability are often framed

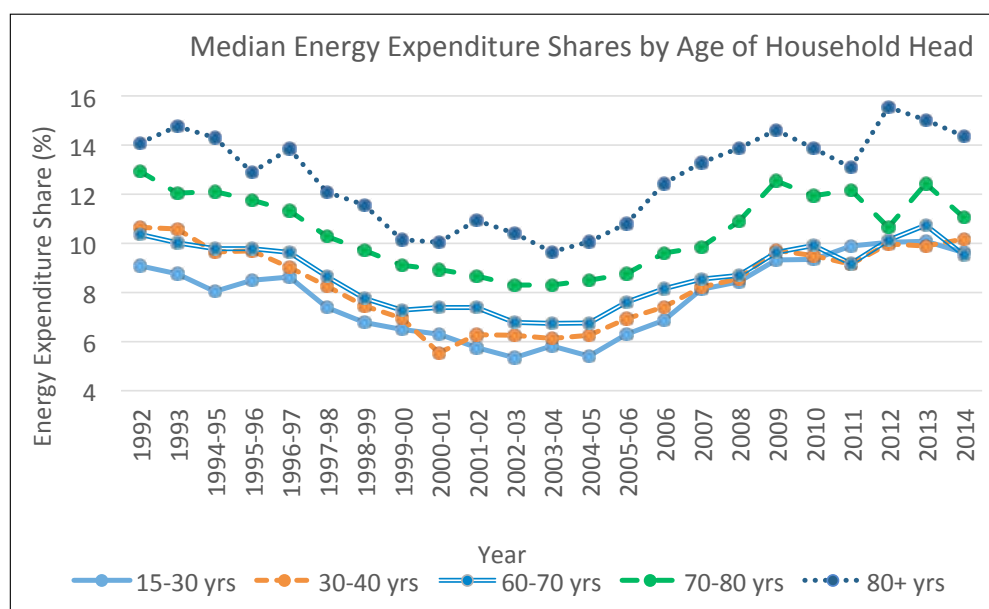
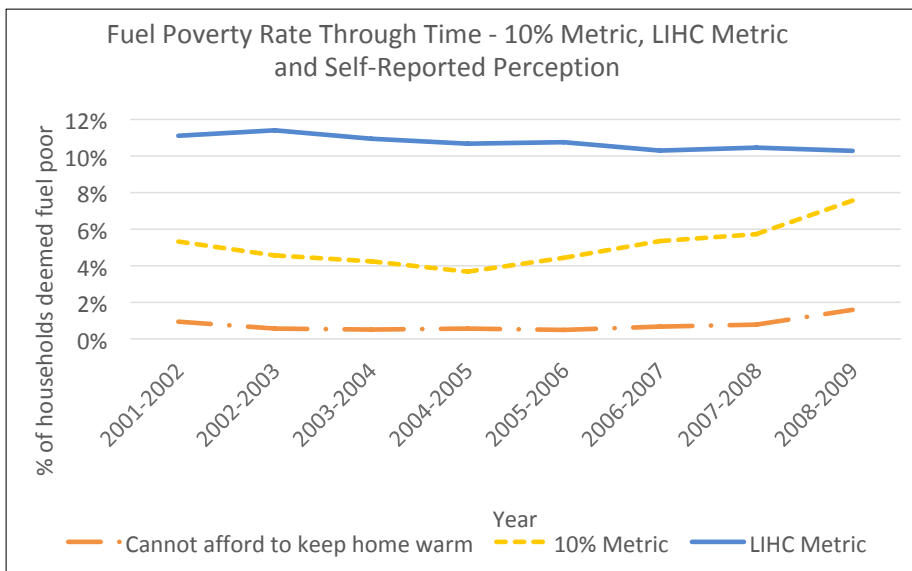


Figure 1 - Median ENEXShr by Age of Household Head, 1992-2014<sup>5</sup>



**Figure 2: Rates of alternative fuel poverty metrics, 2001-02 to 2008-09<sup>6</sup>**

**Fuel poor households contain a higher proportion of pensioner households than non-fuel poor households.**

in terms of ‘fuel poverty’, a term associated with particular statistical definitions of ‘unaffordable energy’ based on the value of energy expenditures relative to income. CCP research<sup>3</sup> has used large scale household survey data to look at both the broad question of energy affordability across all UK households, and the narrower question of how different fuel poverty measures vary in the households they identify as being unable to afford heat. First, in Figure 1, we consider how the proportion of expenditure devoted to energy (ENEXShr)<sup>4</sup> varies across households of different ages.

Figure 1 shows that ENEXShr is higher in households with a head aged over 70 than in younger age groups, and is especially high for the over-80s. However, the ‘young retired’, i.e. those aged between 60 and 70, many of whom receive WFP, have similar ENEXShr to younger households. The time trend of lower ENEXShr in the early-2000s reflects lower energy prices during this period.

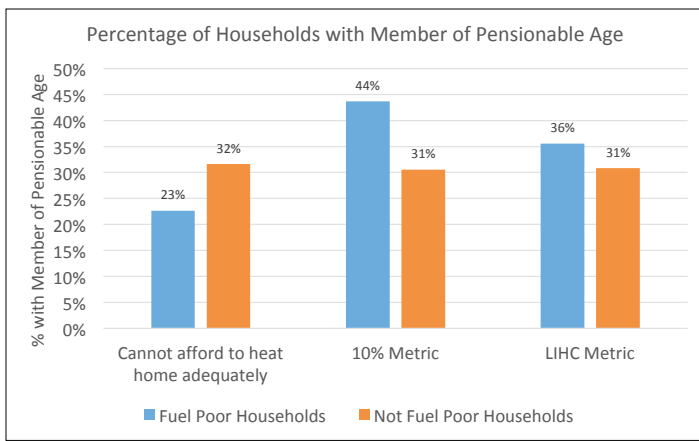
In 2001 the UK government statistically defined fuel poverty as households where energy expenditures exceeded 10% of income. The dotted yellow line in Figure 2 shows that those who devote more than 10% of their income to energy fell during the early-2000s, but increased after 2004-5, mirroring the time trend in ENEXShr shown in Figure 1. The solid blue line shows the percentage of households classified as fuel poor according to the Low Income-High Cost (LIHC) definition which supplanted the 10% metric as the official metric in England in 2012. The LIHC metric is a ‘relative’ metric since it defines a household as fuel poor if their energy expenditure exceeds the median and their income, after the deduction of energy expenditure, is below 60% of median income. The relative nature of the LIHC metric explains its stability through time.

While both the 10% and LIHC metrics are based on energy expenditures, an alternative approach is to record whether householders perceive themselves as being able to afford sufficient energy. This type of self-reported perception is reported by the orange line which is the proportion of households stating they could not afford to

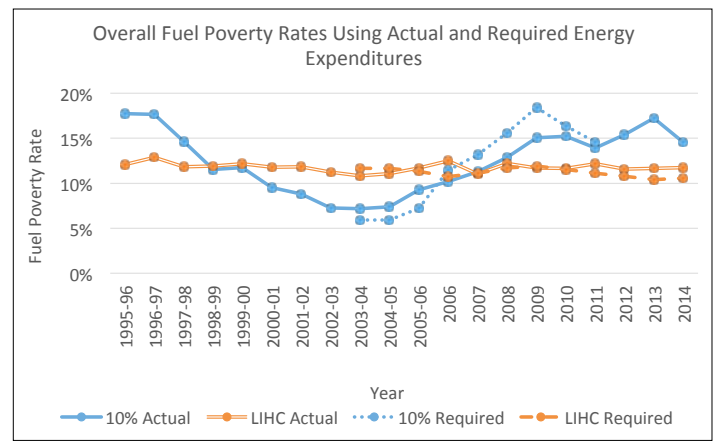
keep their home adequately warm. The percentage self-reporting inadequate warmth is far lower than for either of the ‘expenditure based’ metrics. This result is significant: the majority of the households identified as fuel poor by the 10% and LIHC metrics do not consider themselves as lacking adequate warmth.

Across the three fuel poverty indicators, Figure 3 shows a striking difference in the proportion of fuel poor households that are pensioner households. For both the expenditure metrics, fuel poor households contain a higher proportion of pensioner households than non-fuel poor households. In contrast, households reporting an inability to afford adequate warmth contain a lower proportion of pensioner households than those not reporting difficulties. This may be because pensioner households have a different view of what constitutes ‘adequate’ heating and/or prefer cooler houses; or because they are less inclined to express difficulties. Figures 2 and 3 therefore pose significant questions for policymakers regarding the targeting of support according to expenditure based fuel poverty definitions. While WFP, being an income transfer, should always improve the welfare of recipient households, if a household prefers cooler temperatures, its receipt is unlikely to increase the household’s indoor temperature. If a policymaker remained concerned by a household’s chosen temperature, in this specific instance an education programme expressing the benefits of higher temperatures might be more appropriate.

As with most academic studies of fuel poverty, due to data availability, Figures 2 and 3 are based on actual energy expenditures. The UK government’s official fuel poverty statistics are based on the expenditure ‘required’ to heat a home’s primary living area to 21°C. The intuition behind ‘required’ expenditure is that it avoids missing households from the statistics who severely limit their energy consumption (expenditure) because of low income. However, ‘required’ expenditures are arguably better described as ‘modelled’ expenditures, since they are derived from assumptions and modelling. Indeed, Figure 3



**Figure 3: The age profile of households judged fuel poor by alternative metrics, pooled data 2001-02 to 2008-09<sup>7</sup>**



**Figure 4 – Fuel Poverty Rates Using Actual and Required ENEX, 1995-96 to 2014<sup>8</sup>**

shows the intuition that fuel poverty rates based on actual expenditures should always be lower than those based on required expenditures, because of rationing, is false. Figure 3 shows the relationship between fuel poverty rates based on actual and required energy expenditures varies through time, i.e. the solid line (actual expenditure) is sometimes above the corresponding dotted line (required expenditure). The difference between the two fuel poverty rates for the 10% metric is probably related to required energy expenditures being based on constant consumption while, actual expenditures reflect an increase in energy consumption when energy prices fall and a fall when energy prices rise.

Overall, Figure 1 demonstrates the higher ENEXShr of older pensioner householders may justify policy support, although, there is less evidence of need among younger pensioners. However, Figure 1 alone does not indicate that age-based, as opposed to income-based, interventions are more appropriate. In turn, Figure 3 highlights that steering policy according to expenditure based metrics is likely to direct resources to older households, who are less likely to self-identify as being unable to afford adequate warmth. This suggests a policymaker directing financial resources

at older households must be confident the gap between metrics shown in Figure 3 is due to older households being particularly unwilling to report difficulties rather than reflecting their preferences. Together, Figures 2 and 4 demonstrate that the metric used to identify the ‘fuel poor’ significantly alters the apparent prevalence of fuel poverty and its movements through time. The welfare which households experience at any given point in time is, of course, independent of the metric chosen.

The contrasting pictures from the different metrics may be possible to reconcile by combining the direct recording of in-home temperatures, with the same householders’ heating preferences and energy expenditures. While the large scale recording of in-home temperatures has previously been considered exorbitantly expensive, the roll out of smart thermostats potentially offers new data to study more precisely the issue of cold homes and to assess and improve the government’s fuel poverty policies. However, as the 2017 election campaign demonstrated, any reforms to WFP may ultimately be determined more by politics than evidence.

References:

1. For example, the 2017 Queen’s Speech stated the government’s programme would, “include bringing forward measures to help tackle unfair practices in the energy market to help reduce energy bills”.
2. Cold Weather Payments began in 1986 and provide payments in particularly cold weather to those in receipt of certain income related benefits. While weather dependent, expenditure on Cold Weather Payments is noticeably lower than on WFP.
3. This research forms part of the UKERC funded project ‘Equity and Justice in Energy Markets’. More detailed preliminary findings are available in Deller and Waddams Price (2017), ‘Report into UK Energy Expenditure Shares – A Long Term View’, available at: <http://competitionpolicy.ac.uk/documents/8158338/18232983/UK+Energy+Expenditure+Shares+A+Long+Term+View.pdf/a252cb67-719c-4d51-b006-b30909162730>
4. In Figure 1, ENEXShr involves a denominator of total household expenditure that has been equalised and had housing costs deducted. The ‘raw’ ENEXShr generally would be lower than those shown in Figure 1 if these treatments had not been applied.
5. Data from the Living Costs and Food Survey (LCF) and its precursors.
6. Weighted data from the British Household Panel Survey (BHPS)
7. Data from the BHPS.
8. Data involving actual energy expenditures from the LCF and its precursors. Data on required energy expenditures comes from the official statistics of the Department for Energy and Climate Change which only cover parts of the time period. That the fuel poverty rates in Figure 2 tend to be lower than equivalent rates in Figure 4 most likely relates to Figure 2 being based on panel data where attrition is a likely issue.

# Best of the Blog

## Spring 2018



### Does the Prime Minister's Unexpected Discussion of Competition Policy Signal a Softening of Brexit?

Andreas Stephan, Professor of Law

On Friday 2 March 2018, in a much-anticipated speech meant to give clarity to the UK Government's Brexit objectives,<sup>1</sup> the Prime Minister suggested that: (a) UK State Aid and Competition rules could remain aligned with those of the EU, and (b) UK courts could continue to have regard to judgments of the European Court of Justice (ECJ). Nevertheless, her speech also made it abundantly clear that the ECJ could not continue to have jurisdiction over the UK. While, on the face of it, this speech appears to reiterate Theresa May's commitment to a 'hard Brexit', these significant concessions may signal a weakening of that resolve, as the Government acknowledges for the first time that – if the UK is to maintain a close trading relationship with the EU – the legal realities of Brexit will be complicated.

Even before the PM delivered her speech, the Government confirmed it was targeting a border with the EU that was as 'frictionless' as possible. Yet it also maintained very hard lines on taking back control of immigration and denying the ECJ any continued jurisdiction over UK courts and laws. This appeared to make a trade agreement – i.e. something akin to the EU-Canada Comprehensive Economic and Trade Agreement (CETA) – the only viable option for the UK.

What has brought the realities of a hard Brexit into sharp focus are concerns over the border between the UK and the EU in Ireland. A return to customs checks (a 'hard border') could jeopardise the peace process in Northern Ireland. Yet the most sensible solution (giving NI a special semi-autonomous status of being part of the UK but also in regulatory alignment with the EU) risks bringing down the Conservative Government. They rely on the voting support of

the Democratic Unionist Party, who want NI to have exactly the same Brexit settlement as Great Britain, so as to ensure the outcome does not increase the likelihood of an eventual Irish reunification.

So most commentators were expecting a softening in the Prime Minister's stance last week, but few were expecting that softening to take the form of a discussion of competition policy. She began by making an important statement about the future influence of ECJ case law on UK law:

The second hard fact is that even after we have left the jurisdiction of the ECJ, EU law and the decisions of the ECJ will continue to affect us... When we leave the EU, the Withdrawal Bill will bring EU law into UK Law. That means cases will be determined in our courts. But, where appropriate, our courts will continue to look at the ECJ's judgments, as they do for the appropriate jurisprudence of other countries' courts. And if, as part of our future relationship, Parliament passes an identical law to the EU law, it may make sense for our courts to look at the appropriate ECJ judgments so that we both interpret those laws consistently.

She then went further, using competition policy to illustrate her point: If we want good access to each other's markets, it has to be on fair terms. As with any trade agreement, we must accept the need for binding commitments – for example, we may choose to commit some areas of our regulations like state aid and competition to remaining in step with the EU's. The UK drove much of the policy in this area and we have much to gain from maintaining proper disciplines on the use of subsidies and on anti-competitive practices.

These statements are significant because they represent the Government's first significant departure from its characterisation of Brexit as a simple 'in/out' choice. What the Prime Minister is suggesting above, goes well beyond what might be expected from WTO rules (which do not include competition provisions per se) or from a Canada-style trade agreement.



For example, CETA contains a recognition of the importance of Competition policy to trading relations and the responsibility of each party to apply its domestic competition law. There is no requirement of equivalence in rules – indeed, EU and Canadian competition laws are very different in a number of respects. In terms of State Aid, the agreement requires parties to report certain subsidies to each other every two years and a non-binding mechanism through which each party must try and minimise the adverse effects of the subsidy on the complaining party's interests. There is no requirement of pre-authorisation rules similar to those under EU State Aid Law.

### **Continued Supremacy of EU Law by the Backdoor?**

In the [first academic paper to be published on Competition Policy after Brexit](#), we identified that there was a strong advantage in UK competition law remaining closely aligned to EU law, so as to minimise the regulatory burden on businesses operating in both jurisdictions.<sup>2</sup> We also noted that it was not unusual for UK courts to consider the jurisprudence of closely related jurisdictions (such as Australia and New Zealand) when dealing with novel questions of law, even though they were under no obligation to do so. This was echoed in the work of the Brexit Competition Law Working Group,<sup>3</sup> as well as in Richard Whish's contribution to the House of Lords European Union Committee report on 'Brexit: Competition and State Aid'.<sup>4</sup> Whish suggested that, at the very least, UK authorities should be required to 'have regard to' EU law and precedent.

The Prime Minister's statement, in fact, goes even further. The idea that competition and state aid rules should 'remain in step' may suggest a de facto obligation on UK authorities to follow EU jurisprudence. Indeed, the suggestion that Parliament might have to 'adopt identical law to the EU' also implies that – after Brexit – EU law will have a far greater influence on the UK than had been anticipated. Yet all this will occur without the UK having a say in the creation of new EU rules or the decisions of the ECJ, except via the limited levers that will be available through the trading agreement itself. As the junior partner in the relationship, the UK will largely become a rule-taker, reminiscent of the role that other small jurisdictions are forced into when dealing with much larger trading partners.

Without the UK's continued participation in European institutions, the UK's designated competition authority, the CMA, may find itself having to replicate the European Commission's work, while being simultaneously bound to produce the same outcomes – something that would clearly constitute a waste of administrative time and taxpayer's money. The Prime Minister herself acknowledged that the UK 'drove much of the policy' in EU Competition Law. Yet, it is precisely for this reason that EU competition policy will not necessarily continue along the same path we expect it to. With the UK's influence gone, it may become less free-market oriented and begin to depart from its effects-based approach. Similarly, the EU rules surrounding State Aid (which, as we point out in our paper, the UK is a clear net beneficiary of) may become more relaxed.

### **Conclusion: The beginning of a soft Brexit?**

In conclusion, the Prime Minister's discussion of competition policy is very sensible from a business perspective. A commitment to UK and EU competition and state aid rules remaining closely aligned will provide certainty and reduce the regulatory burden on firms wishing to invest in the UK. But, from a legal perspective, the speech raises more questions than it answers. What will the precise obligation be on UK authorities to stay closely aligned to EU rules? Under what circumstances will Parliament need to enact laws 'identical' to those of the EU? Will Competition Policy have a special status, or will this sort of arrangement extended to other areas? Will the UK accept being a 'rule-taker', or does the Government expect to have some leverage over European lawmaking through the wording of the final agreement?

Now the door to continued alignment with EU rules has been opened slightly, many of the questions we thought were resolved (about the autonomy of UK law after Brexit) are now open once more. Indeed, the Prime Minister's speech came only a week after the opposition Labour Party said it would pursue a Customs Union arrangement if it was elected to Government. The prospect of a softer Brexit now looks more conceivable than it did a few months ago; and it may all have started with a few seemingly innocuous words about competition policy.

*Published on the CCP Competition Policy Blog, 4 March 2018*

#### References:

1. Prime Minister's Office, 'PM Speech on our future economic partnership with the European Union' (2 March 2018), available at: <http://www.gov.uk/government/speeches/pm-speech-on-our-future-economic-partnership-with-the-european-union> [accessed 3 March 2018].
2. B Lyons, D Reader and A Stephan, 'UK Competition Policy post-Brexit: taking back control while resisting the siren calls' (2017) *Journal of Antitrust Enforcement* 5(1), pp. 347-374. An early draft is available as: 'UK Competition Policy Post-Brexit: In the Public Interest?' (2016) CCP Working Paper 16-12.
3. See Issues Paper (October 2016) <http://www.bclwg.org/wp-content/uploads/2016/10/BCLWG-Issues-Paper-FINAL.pdf> and Conclusions and Recommendations (July 2017) <http://www.bclwg.org/wp-content/uploads/2017/07/BCLWG-Conclusions-and-Recommendations-Final.pdf>
4. Published 2 February 2018, available: <https://publications.parliament.uk/pa/ld201719/ldselect/lducom/67/67.pdf>

The CCP [Competition Policy Blog](#) comments selectively on a variety of issues related to competition policy. It could be on something in the news, on policies from either the Government or agencies, or it could be on a new piece of academic research that particularly catches our eye. All our posts are founded in our understanding of the latest academic research and have been written to be accessible to practitioners, academics, students and journalists.



# CCP 15th Annual Conference

University of East Anglia, Norwich, June 2019

## Machine Learning and AI as Business Tools: Threat or blessing for competition?

The power of modern computing including Machine Learning and AI represents a transformation in technology with potentially profound impact on the market place. Such disruptive innovation has the potential to fundamentally increase competition in all sectors of the economy. But there are also considerable concerns that exactly the same forces might allow greater exploitation of consumers by facilitating and even automating anticompetitive behaviour and preying on consumers by taking advantage of limited attention, information processing, and boundedly rational behaviour. In this context there is a pressing need for a better understanding of how competition is likely to evolve and how to avoid long term domination by a small number of powerful players.

This conference will touch on themes like algorithmic pricing and competition, targeted advertising and consumer protection, as well as the use of algorithms and AI to enhance the position of the consumer in the market. In addition it will explore algorithms and AI as tools for the enforcement and for academic research and their potential role in improving how we monitor and evaluate markets. The conference is organised at the interface of social and computer sciences to bring insights from both disciplines to understanding the potential threats and blessings that AI might imply for competition.

Keep up to date with news on the 2019 Annual Conference  
Join our mailing list at [ccp@uea.ac.uk](mailto:ccp@uea.ac.uk)

ccp  
CENTRE FOR  
COMPETITION POLICY

## The Economics of Competition Policy for Economists

4-5 October 2018, etc.venues Farringdon, The Hatton

### Do you have a good background in microeconomics but want to learn more about practical competition policy?

Now in its fifth year, this highly successful two-day course is aimed at those who are relatively new to competition policy. Delivered by experienced practitioners from both the private and public sector, you will be given an in-depth introduction to the economic analysis involved in competition law and how it fits into the legal framework.

The focus will be on the core elements of standard antitrust, including the assessment of anti-competitive agreements, mergers and abuse of dominance. Each of the eight sessions will involve a mix of presentation and interactive work to provide you with practical analytical tools for use back in the workplace.

### Speakers will include representatives from:

The Centre for Competition Policy, Charles River Associates, Competition and Markets Authority, Oxera, RBB Economics, Frontier Economics and Compass Lexecon.

### Session Topics:\*

- Exclusionary Abuse: Introduction, Predation & Refusal to Supply
- Mergers: Unilateral Effects
- Market Definition & Market Power
- Legal Framework & Key Economic Concepts
- Horizontal Agreements & Coordinated Effects
- Exclusionary Abuse: Rebates & Margin Squeeze
- Vertical Restraints & Non-Horizontal Mergers
- Exploitative Abuse

\*Subject to change

“Great introduction to the key concepts of competition economics. Interesting to have difference experts insights”  
“It provided me with a good foundation on competition economics on which you can build on”

**Course is limited to 40 attendees maximum. Places are transferable.**  
**Private Sector £1,000 + VAT | Public Sector/Academia £850 + VAT.**

*20% early bird discount if booked before 1 August 2018*

**For more information visit [competitionpolicy.ac.uk/knowledge-exchange](http://competitionpolicy.ac.uk/knowledge-exchange)**

# Director's Letter: News from CCP

Morten Hviid

It is a pleasure to be able to report that, due to the hard work of its members, CCP continues to flourish and to be able to fund its activities. In this positive climate, my decision to step aside as Director, after 7 years in the role, has been much easier to make. While I will continue to be an active member of the Centre, I am looking forward to returning to the rank and file. The process of identifying a new director has begun.



This is the point in the year when we start looking forward to the annual conference. Taking place on June 7-8, we will again be hosted by the Enterprise Centre at UEA. This year the focus is on "Competition Policy and Industrial Policy: Is there a need for a new a balance". This topic is particularly timely as the UK wrestles with what the future will look like post-Brexit and we see increasing tendencies globally for more industrial protection.

The Centre's research continues to expand and we have begun to interact with Computer Scientists at the University of Liverpool, reflecting an increased interest of CCP members in the impact on markets, and new possibilities in research methodology, of artificial intelligence and the availability of processing power to deal with large data sets. To fully appreciate the effect that the ability to profile consumers and firms may have on competition requires an extension of our interdisciplinary family to include computer science. The importance of this area is reflected in both the Government's industrial strategy and in the annual plans of various competition and regulatory agencies.

As usual, the period since the last Research Bulletin has seen a turnover in Centre members and staff. We have welcomed as faculty members Pierre Bocquillon from the School of Politics, and Ratula Chakraborty and Wynne Lam from the Norwich Business School; and as research

students Maksim Dogonkin from UEA Law School, Vicens Esteve Guasch, Israel Gottschalk and Vasudha Wattal from the School of Economics, and Jennifer Young from the School of Psychology; while Anne Johnsen has joined the admin team. We have also had to say goodbye to faculty member Sven Gallasch and research student members Carsten Crede, Antje Kreuzmann-Gallasch, Francesca Vantaggiato and Mengjie Wang.

## Recent Working Papers

**Price and Behavioural Signals to Encourage Household Water Conservation in Temperate Climates**

Liang Lu, David Deller & Morten Hviid  
CCP Working Paper 18-1

**Do Retailers Manipulate Prices to Favour Private Label over Brands**

Ratula Chakraborty  
CCP Working Paper 18-2

**Has the financial regulatory environment improved in the UK? Capture-Recapture approach to estimate detection and deterrence**

John Ashton, Tim Burnett, Ivan Diaz Rainey & Peter L. Ormosi  
CCP Working Paper 18-3

**The effect of market consolidation on innovation in the HDD industry**

Anna Rita Bennato, Stephen Davies, Franco Mariuzzo & Peter Ormosi  
CCP Working Paper 18-4

You can find our Working Papers Series at: <http://competitionpolicy.ac.uk/publications/working-papers>

**Centre for Competition Policy**  
University of East Anglia, Norwich Research Park,  
Norwich, Norfolk. NR4 7TJ UK

**Tel: +44 (0) 1603 593715 Email: [ccp@uea.ac.uk](mailto:ccp@uea.ac.uk)**

**Twitter: @ccp\_uea Web: [competitionpolicy.ac.uk](http://competitionpolicy.ac.uk)**

**Blog: [competitionpolicy.wordpress.com](http://competitionpolicy.wordpress.com)**

**Academic Editor: Sebastian Peyer**  
**Assistant Editor: Nicolette Neile**



The following organisations are subscribed to the CCP Membership Scheme and their support is gratefully acknowledged:



Membership of this scheme or use of members' logos does not imply agreement by those organisations with any of the views or ideas published by CCP or any of its staff and students.