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and Discretionary Assessments at the UK
Utility Regulatory Agencies**

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ARE ECONOMISTS KINGS?: ECONOMIC EVIDENCE AND DISCRETIONARY ASSESSMENTS AT THE UK UTILITY REGULATORY AGENCIES

Despoina Mantzari*

Abstract: UK regulatory authorities in the utilities sector are hybrid communities of lawyers and economists. Since the liberalisation of essential services, expert economists enjoy enormous discretionary powers in advancing the agencies' broad statutory objectives. Yet, despite the enormous societal impact of economic regulation, existing scholarship in the fields of public law and regulation has, with very few exceptions, disregarded these actors and the very essence of their work. This paper aims to address this gap in the literature by blending theoretical with empirical insights deriving from 14 semi-structured elite interviews with regulatory economists in the regulatory agencies for energy (Ofgem), telecoms (Ofcom) and water (Ofwat). The hypothesis explored is that the use of economic evidence by regulators has had the effect of expanding their discretionary space. The article puts forward a theoretical framework inspired by Craig Parsons' typology of political action so as to identify and examine the nature and scope of the constraints that inform and shape the influence of economics in the exercise of regulatory discretion.

Keywords: economic regulation; utilities regulation; competition law; economic evidence; administrative discretion; delegation.

I. Introduction

The delegation of vast discretionary powers to experts to shape and defend the legitimacy of regulatory decisions lies at the very core of the regulatory state. UK regulatory agencies in the utilities sector – i.e. Ofgem,¹ Ofcom,² and Ofwat³ – are no exception to this. Since the

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¹ Office for Gas and Electricity Markets. Ofgem was set up by the Utilities Act in 2000. It is charged with implementing the Gas Act 1986, the Electricity Act 1989, the Utilities Act 2000, the Competition Act 1998, the Enterprise Act 2002, the Energy Acts of 2004, 2008, 2010, 2011 and 2013 and the relevant EU legislation as well as the administration of a number of environmental projects on behalf of the government.

² Office for Communications. Ofcom was established by the Communications Act 2002 and operates under a number of Acts of Parliament and other statutes. It is responsible for regulating the TV and radio sectors, fixed line telecoms, mobiles, postal services and the airwaves over which wireless devices operate.

³ The Office of Water Services (OFWAT) was established under the Water Act 1989, continuing under the Water Act 2003 until 31 March 2006. By the 2003 Water Act it was replaced from 1 April 2006 by the Water

privatisation and subsequent liberalisation of essential services, such as energy supply, telecoms and water, expert economists appointed in independent regulatory agencies enjoy enormous discretionary powers in advancing the agencies' broad statutory objectives, mainly protecting consumers and promoting competition. In fact, with the exception, perhaps, of the neighbouring field of competition law, utilities regulation stands out amongst the various other fields of social and economic regulation in terms of the impact economics, as an external source of wisdom and authority, has had on the tools and methodologies regulators employ to inform the exercise of discretion. What makes the use of economic evidence in utilities regulation qualitatively distinct vis-à-vis other types of economic evidence employed in regulation, such as cost-benefit analysis, is that it is the main 'tool'⁴ for the translation of regulatory objectives (such as the promotion of competition) to operational policies and procedures (such as access pricing) that guide regulatory judgments. Hence, economic evidence, as used here, refers to the theories, methods, and tools used by the discipline of regulatory economics (mostly industrial organisation economics) with the aim to advance normative claims on matters of regulatory policy in the field of economic regulation. For example, economic evidence informed by the branch of neoclassical economics, known as industrial organisation economics, is crucial in determining the price that a supplier of gas should pay to access the network and serve consumers. This represents one of the core tasks of economic regulation with wide ranging implications for the affordability of energy supply. To take a different example, economic evidence informed by behavioral economics has been increasingly employed in overcoming consumers' systematic irrational behavior and thus reinforcing their engagement with the market.

Despite, however, the crucial role of economists within regulatory agencies in the UK and the societal impact of economic regulation, existing scholarship in the broader fields of public law and regulation has, with very few exceptions,⁵ disregarded these actors and the very essence of their work. Most notably, little attention has been paid to exploring how the increasing reliance of regulators on economic inputs in the neoliberal state influences or otherwise the way they perceive and exercise their discretionary powers. Has the use of economic evidence by regulators had the effect of increasing the discretion they enjoy? How

Services Regulatory Authority (WSRA). The authority is responsible for the regulation of the water and sewerage industries in England and Wales.

⁴ A de Streef, 'The Relationship between Competition law and Sector Specific Regulation: The Case of Electronic Communications' (2008) *Reflets et Perspectives*, XLVII (1), at pp.43-70.

⁵ See e.g. L Schrefler, *Economic Knowledge In Regulation: The Use of Expertise by Independent Agencies* (ECPR Monographs 2013).

do regulators assess the limits of their discretion and their interaction with other actors, such as the courts? Rather, the central preoccupations seem to revolve around the constitutional and institutional dimensions of regulatory action⁶ and the intensity of review of such action.⁷ Sure, there is plenty of indirect evidence from court judgments and regulatory decisions on the way economic facts and considerations feed into the decision-making process; to the process, for example, that led to the adoption of a given economic model rather than another when making discretionary trade-offs. But, still, we never really learn *directly* how those undertaking regulatory tasks actually perceive their scope of decisional freedom relative to their overall statutory mandate and the influence that economic evidence may or may not have on the reach and breadth of their discretion. The article aims to address this gap in the literature. In doing so, it blends theoretical with empirical insights deriving from 14 semi-structured elite interviews with regulatory economists working in Ofgem, Ofcom and Ofwat.

The hypothesis explored is that the use of economic evidence by regulators has had the effect of expanding their discretionary space when making complex trade-offs between the various goals of the regulatory enterprise. The article puts forward a theoretical framework inspired by Craig Parsons' typology of political action⁸ to uncover the possible constraints to the influence of economic evidence in regulatory decision-making. It thus seeks to explore the relative influence of 'structural',⁹ that is exogenous constraints (e.g. the political or economic climate), 'institutional',¹⁰ that is forces that affect regulators' actions with respect to their position 'within man-made organizations and rules',¹¹ and 'ideational',¹² constraints, such as the influence of epistemic communities in rich and diverse areas of regulatory action where economists are called upon to exercise discretionary assessments.

The argument unfolds in two parts. The first part is *conceptual* in nature and seeks to explore how economic evidence enters the realm of discretionary decision-making. In doing so, it offers a taxonomy of administrative discretion and unpacks its interrelationship with economic evidence. The second part is *operational* in nature and examines the use and influence of economic evidence in the context of specific regulatory episodes that emerged

⁶ See e.g. T Prosser, *The Regulatory Enterprise: Government, Regulation, and Legitimacy* (OUP 2010).

⁷ See e.g. J Arancibia, *Judicial Review of Commercial Regulation* (OUP 2011); P Daly, *A Theory of Deference in Administrative Law* (CUP 2012); D Mantzari, 'Economic Evidence in Regulatory Disputes: Revisiting the Court-Regulatory Agency Relationship in the US and the UK' (2016) 36 (3) *Oxford Journal of Legal Studies* 565.

⁸ C Parsons, *How to Map Arguments in Political Science* (OUP 2007).

⁹ *Ibid* at p. 12.

¹⁰ *Ibid* at p. 12; 49-65.

¹¹ *Ibid* at p. 12; 66-93.

¹² *Ibid* at p.12; 94-132.

during the interview design as having significant importance. The findings render a stark disparity between these two levels of analysis. While on a *conceptual* level virtually all regulators perceived economic evidence as the main ‘tool’ for translating their broad statutory mandate to operational policies and procedures, hence allowing them to expand their arena of discretion, this finding is extremely variable between the three regulatory agencies at the *operational* level of analysis. The article seeks to explain this variation by drawing on Craig Parsons’ rich framework of analysis.

The article seeks to contribute to our understanding of how economics, as one of the primary sources of wisdom and authority in this field of regulation, enters the realm of regulatory discretion and transforms the way regulators (and courts) understand and conceptualise the very idea of discretion. While existing scholarship attempts to locate the sphere of regulatory discretion within the confines of judicial review, this study adopts an inductive and context-sensitive approach that purports to better appreciate the inner-workings of regulatory discretion, as the latter is shaped by the power relations between the hybrid communities of lawyers and economists within regulatory agencies and other actors in the regulatory space.

The article is structured as follows. Section II briefly discusses the methodological approach taken; section III explores through the use of examples the interrelationship between economic evidence and the exercise of discretionary power and offers a taxonomy thereof; section IV explores the various constraints to the exercise of discretion and section V concludes.

II. A Note on Methodology

A mixed-methods approach was adopted that combined doctrinal, theoretical and empirical analysis. A qualitative analysis was performed of all regulatory decisions issued by Ofgem, Ofcom and Ofwat that have been informed by economic evidence deriving from industrial organisation economics and/or behavioural economics. When such decisions had been appealed the analysis included the relevant court judgments. The regulatory decisions covered the period between the enactment of the relevant regulator's governing statute and December 2018; i.e. since the Communications Act 2003 in the case of Ofcom, the Utilities Act 2000 in the case of Ofgem, and the Water Act 2003 in the case of the Water Services Regulatory Authority-Ofwat. The purpose of the review was to gain a broad view of the input and manifestation of economic evidence employed to support a range of discretionary assessments.

The interview design followed a different approach. The interviewees were asked, amongst others, to reflect on the influence economic evidence exerted over regulatory judgments and the reasons why it might not have been as effective, in the context of specific case studies related to their organisation. To allow for a reliable testing of the hypothesis, the case studies selection was subjected to two main constraints. First, closed episodes were selected so as to be able to examine the use and influence of economic evidence throughout the decision-making process under examination. Second, such episodes represent relatively recent cases so as to increase the chances of locating the relevant interviewees and ensure a relatively accurate recollection of facts. In the case of the energy regulator-Ofgem, the case studies were related to the use of neoclassical/Austrian economics in introducing competition in the retail energy market and the reregulation thereof as well as the use of behavioural economics in enhancing consumer participation in the market.¹³ In the case of the communications regulator-Ofcom, the case studies were related to the use of neoclassical economics in the termination rates disputes.¹⁴ In the case of the water regulator-Ofwat, the case studies were

¹³ See e.g. Ofgem, 'Ofgem launches probe into energy supply markets' (21 February 2008) available at: <https://www.ofgem.gov.uk/publications-and-updates/ofgem-launches-probe-energy-supply-markets> (accessed 10 June 2019); See CMA, 'Energy Market Investigation: Final Report' (24 June 2016) available at: <<https://assets.publishing.service.gov.uk/media/5773de34e5274a0da3000113/final-report-energy-market-investigation.pdf>> (accessed 10 June 2019).

¹⁴ See e.g. Ofcom, 'Determination to resolve a dispute between BT and each of Vodafone, T-Mobile, H3G, O2, Orange and Everything Everywhere about BT's termination charges for 0845 and 0870 calls' (10 August 2010) available at: https://www.ofcom.org.uk/_data/assets/pdf_file/0026/82961/final_determination.pdf > (accessed 10 June 2019).

related to the use of neoclassical economics in introducing competition to the non-residential retail market.¹⁵ Delving into these regulatory episodes allowed generating original insights on the respective positions and beliefs of economists in each episode, reinforced by their own account of the story. Because the institutional organisation of economic expertise varies greatly across the three regulatory agencies involved, the range of interviewees was balanced to involve economists in various positions within the agencies. Interviews were conducted between June 2017 and December 2017 ‘on the record’, face-to-face, and were audio recorded and transcribed. Interviewees received the interview protocol before the interviews, and expressed both their written and oral consent to the interview being recorded and used to inform this research. Due consideration was given to interviewees’ requests to keep certain pieces of information off the interview record. When specifically requested, interviews were conducted under promise of anonymity. The transcripts were manually coded. The coding aimed at identifying the regulators’ perceptions of constraints and their response to such constraints in terms of their decision-making process. Interviewees were given ample scope to self-direct their contributions within the context of a framework of prepared questions and issues for discussion deriving from the case studies. The qualitative analysis performed allowed to better contextualise the insights generated from the interviews and the breadth of the analysis allowed offsetting any possible tendency for interviewees to exert bias in their recollections.

Craig Parsons typology of political action directly informs the theoretical framework adopted in this article and serves as an analytical tool for identifying the various constraints to the influence of economic evidence in discretionary assessments. This article does not claim that Parsons’ framework is the only, or even the best, way of making sense of the interrelationship between economic evidence and discretion. However, its inclusion of various macro- and micro-level factors at play in decision-making renders it well suited to the task at hand. Parsons identifies structural, institutional, ideational and psychological constraints.¹⁶ For methodological reasons explained below this article focuses only on the first three sources of constraints.

‘Structural’ claims, explain people’s actions ‘as a function of their position vis-à-vis exogenously given “material” structures like geography, a distribution of wealth, or a

¹⁵ See e.g. Ofwat, ‘Residential Retail Market’ available at: < <https://www.ofwat.gov.uk/regulated-companies/future-markets/extending-retail-competition-to-households/>> (accessed 10 June 2019).

¹⁶ Parsons (n 8) 12.

distribution of physical power'.¹⁷ Applied in the context at hand, they refer to exogenous constraints, such as the political or economic climate in which regulators operate as well as broader societal pressures and the way these constrain or otherwise the way they employ economics when exercising discretion.

Institutional claims also explain people's actions with respect to their position but 'within man-made organizations and rules (and within the "path-dependent" process implied by man-made constraints)'.¹⁸ For our purposes here, the more pluralistic understanding of institutions is adopted, whereby the latter are not merely organisations that set the 'rules of the game'.¹⁹ Rather, they provide operating procedures, behavioral norms and identities to those who function within them. Hence, this allows us to explore how legal factors, such as the threat of judicial review or the standard of review, and quasi-legal factors, such as organisational factors, values, and the attitudes of officials affect the way economic evidence is used in discretionary assessments.

'Ideational' claims also explain regulatory action based on cognitive and/or affective elements, but see those as 'created by certain historical groups of people'.²⁰ For example, epistemic communities or elite beliefs may affect the type of economic evidence used, as we shall see in Section IV below.

'Psychological' claims explain people's actions by relying on 'cognitive, affective, or instinctual elements that organize their thinking, but see these elements as general across human kind, as hard-wired features of "how humans think"'.²¹ Examining such constraints would require a different methodological approach than the one adopted here and are thus left outside the scope of this article. Such an approach would be based on lab experiments so to reveal the existence or otherwise of biases, such as confirmation bias, and how these affect the use of economic evidence when exercising discretion.²²

¹⁷ Ibid, p. 12.

¹⁸ Ibid, p. 12.

¹⁹ DC North, 'Institutions' (1991) 5 (1) *The Journal of Economic Perspectives* 97.

²⁰ Parsons (n 8) 12.

²¹ Parsons (n 8) 12.

²² See e.g. J.C. Cooper and W.E. Kovacic, 'Behavioral Economics: Implications for Regulatory Behavior' (2012) 41 *Journal of Regulatory Economics* 41-58.

III. Conceptualising the Interrelationship between Economic Evidence and Discretion

A natural starting point would be to explore how economic evidence enters the realm of discretionary decision-making. This will allow us to better appreciate the input of economic evidence in diverse areas in which regulators are called to exercise discretion, explored in greater detail in section B below, as well as the various constraints to the use of economic evidence, discussed in section IV.

In examining the interrelationship between economic evidence and discretion, we follow a largely inductive approach that is informed by the interviewees' own understanding of the *purpose* ('why') for which discretion was awarded in the first place and the *manner* in which it will be exercised ('how'), i.e. how the regulatory agency will achieve its substantive goals and what tradeoffs should it make when multiple substantive goals interact. It will be shown that economics have added a layer to discretionary power composed of their own methodology and tools, that it is not solely confined to economic assessments, but it also directly influences discretionary trade-offs and value judgments.

In broad outline, all interviewees understood the essence of their discretionary power to be captured in the translation of high-level policy objectives that are enshrined in their governing statutes to operational policies and procedures that guide their day to day activities. What is more, recourse to economic evidence and analysis was perceived as an integral component of this translation process. Crucially, this is the case not only with respect to the operationalisation of the traditional core objectives of economic regulation, such as the promotion of competition and innovation, but also applies to the broader set of non-economic objectives, such as social and environmental statutory objectives that regulators have increasingly been called upon to fulfill.²³

Specifically, the interviewees understood economic evidence and analysis to inform three relatively distinct dimensions of regulatory discretion: a) the interpretation of their statutory mandate (what may be referred to as 'interpretive discretion'); b) the way they formulate policy when 'Parliament has expressly or impliedly left a specific policy domain

²³ See T Prosser, *The Regulatory Enterprise: Government, Regulation and Legitimacy* (OUP 2010) ch. 1.

undetermined'²⁴ (what may be referred to as 'operational discretion')²⁵ and c) the procedures and enforcement tools they choose and employ to this end (what may be referred to as 'enforcement discretion'). This widespread input of economic evidence and analysis has, in turn, allowed economists to relentlessly increase their discretionary space.

This has been possible by *first*, expanding their own understanding of the range of decision-making freedom open to them and *second* in that this expanded freedom is externally recognised from other actors in the regulatory space, notably the courts.

Before elaborating further on this point, it is first necessary to appreciate how discretion manifests itself in the statutory objectives of utilities regulator to which the next subsection turns to. Section B will then offer a taxonomy of the use of economic evidence in regulatory decision-making process by exploring the various ways in which economic evidence and analysis informs interpretive, operational and enforcement discretion.

A. How Discretion Manifests Itself: Scope and Implications

The source of discretion is to be found in the regulators' governing statute. A careful reading through the statutory frameworks of Ofgem, Ofcom and Ofwat will immediately reveal that discretion manifests itself through standards, rather than narrowly construed rules; if one adheres to such distinction. Although the term 'rules' may be used to refer to all 'general norm(s) mandating or guiding conduct or action in a given type of situation',²⁶ it is the narrower sense of 'rules', which in turn distinguishes the latter from the more flexible norms of standards and principles, that is used here.

As we shall see, the very fact that discretion manifests itself in the form of open-ended standards has 'important effects on the allocation of decision-making authority'.²⁷ In sharp contrast to rules, that 'vest authority in the rule formulators rather than in those who apply the rule in particular cases at a later time',²⁸ 'standards delegate decision-making authority to the decision-maker at the point of application'.²⁹ Hence, standards contribute to the ex post formulation of the content of the law, as they allow the decision-maker to gather, process and finally incorporate into his reasoning information obtained after the promulgation of the

²⁴ Eric C Ip, 'Taking a "Hard Look" at "Irrationality": Substantive Review of Administrative Discretion in the US and UK Supreme Courts' (2014) 34(3) Oxford Journal of Legal Studies 481, 485.

²⁵ Ibid.

²⁶ W Twining and D Miers, *How to Do Things With Rules* (4th edn, Butterworths 1999) 123.

²⁷ A Vermeule, 'Interpretive Choice' (2000) 75 NYU Law Review 74, 95.

²⁸ Ibid 93.

²⁹ Ibid 92.

standard.³⁰ For Vermeule, rules ‘require more information and decisional competence ex ante, at the time the rule formulators decide what the content of the rule should be’, whereas ‘[s]tandards require more information and decisional competence ex post, at the time of application’.³¹

Furthermore, unlike narrowly construed rules which may be overinclusive or underinclusive in their application, standards guide the exercise of discretion by encompassing an open-ended framework comprising, in our case, of various substantive regulatory objectives (economic and non-economic), which the regulator should interpret, take into account and trade-off when exercising her discretionary power. These objectives reflect both efficiency and equity considerations. For example, Ofcom’s principal statutory objective is ‘to further the interests of consumers in relevant markets, where appropriate by promoting competition’,³² but also ‘to further the interests of citizens in relation to communications matters’.³³ The efficiency maximisation objective is mostly apparent in the market mechanisms governing spectrum auctioning and management, whereas equity considerations are reflected in the non-economic objectives that the regulator ‘must secure’ or ‘have regard to’ in performing its duties that relate to the interests of ‘citizens’.³⁴ Those include ‘the availability throughout the United Kingdom of a wide range of electronic communications services’,³⁵ plurality considerations,³⁶ and ‘the needs of persons with disabilities, of the elderly and of those on low incomes’.³⁷

In the same vein, Ofgem’s principal statutory objective is not limited to the protection of ‘existing’ consumers, but, echoing sustainability considerations, further encompasses the protection of ‘future consumers’.³⁸ Additionally, Ofgem ‘must have regard’ to the financeability of license holders and to the achievement of sustainable development.³⁹ Similarly, Ofwat duties consist inter alia of promoting the interest of consumers whenever

³⁰ To this effect see L Kaplow, ‘Rules versus Standards: An Economic Analysis’ (1992) 42 *Duke Law Journal* 557.

³¹ Vermeule (n 27) 92.

³² Communications Act 2003, ss 3 (1) (b).

³³ Communications Act 2003, ss 3 (1) (a).

³⁴ See S Livingstone, P Lunt and L Miller, ‘Citizens, Consumers and the Citizen-Consumer: Articulating the Citizen Interest in Media and Communications Regulation’ (2007) 1 *Discourse and Commun* 85; S Livingstone and P Lunt, ‘Representing Citizens and Consumers in Media and Communications Regulation; (2007) 611 *Ann Am Academ Polit Soc Sci* 51.

³⁵ Communications Act 2003, ss 3 (2) (b).

³⁶ *Ibid*, ss 58 (2B).

³⁷ *Ibid*, ss 3(4) (i).

³⁸ Utilities Act, ss 9(1) (gas) and ss 13(1) (electricity).

³⁹ Gas Act 1986, s 4AA(2); Electricity Act 1989, s 3A2.

appropriate by promoting effective competition in the provision of water and sewerage services⁴⁰ and the financeability of license holders. Both Ofwat and Ofgem alongside their general duty to protect the interests of all consumers, they have particular responsibilities towards certain groups in society, such as the disabled or chronically sick, pensioners, individuals with low incomes and those living in rural areas.⁴¹ Promoting the interests of these groups involves a departure from the purely economic rationale for public intervention in markets summarised in the concept of ‘market failure’, in order to achieve a socially, rather than economically desirable outcome.

Finally, all regulators have a duty to promote effective competition ‘where relevant /appropriate’. Naturally, this leaves considerable discretion to the regulator as to the interpretation and application of the standard to the case at issue. As noted by Stephen Littlechild in the House of Lords Committee on the Regulatory State:

[H]owever you phrase them (the duties), it seems to me that these things will have to be balanced and judgments will be exercised. It is true that if the promotion of competition is put there explicitly as a duty in itself, it is, I would say, a stronger guide than something that says, ‘and by competition where appropriate’, because in the latter case you are introducing more judgment as to whether it is appropriate, whether it is effective and so on.⁴²

There is, however, one recent exception to the legal primacy of competition. The Energy Act 2010 requires Ofgem to consider in the regulation of both electricity and gas ‘whether there is any other manner (whether or not it would promote competition...) in which the Secretary of State or the Authority [Ofgem and GEMA] ... could carry out those functions which would better protect those interests [the interests of current and future consumers.]’⁴³ The role of competition in the electricity and gas industries has, indeed, come under considerable criticism and skepticism, rendering, as we shall see below, the energy regulator more vulnerable to structural constraints.

The following section will focus on how economic evidence informs the ‘ex post formulation of the content of the law’ granted by standards. It will thus attempt to open the ‘black box’ of discretionary decision-making and appreciate through the use of illustrative

⁴⁰ Section 93(3) adding a new s 2 (2B) to the Water Industry Act 1991 as amended.

⁴¹ Water Industry Act as amended by Section 39 (2C) of the Water Act 2014.

⁴² House of Lords, Select Committee on the Constitution, 6th Report 2003-4, ‘The Regulatory State: Ensuring its Accountability’, HL Paper 68-I, 2003-04 available at www.publications.parliament.uk/pa/ld200304/ldselect/ldconst/68/3021201.htm (accessed 10 June 2019).

⁴³ Energy Act 2010, Clauses 16 (for natural gas) and 17 (for electricity).

examples the diverse ways in which economic evidence influences the breadth of regulatory discretion vis-à-vis the statutory wording or otherwise.

B. The Use of Economic Evidence in Discretionary Assessments: A Taxonomy

In terms of our overarching statutory objectives of protecting the interests of existing and future consumers we have fairly wide discretion (emphasis added) in terms of how we achieve them. I do think in practice that has gone down fairly well established and well-worn routes really. We set principles that we expect companies to follow, we set price controls, clearly, we will take enforcement action if need be, there's a set of well-understood set of tools we have to influence the market, the sector as a whole. There can be questions of balance between them, take the balance between enforcement action and compliance work (...). I think there are questions about how you get the right balance there. Equally, there are questions...we have a certain toolkit, but does that need to change if we see big changes in the sector? (Ofgem, Chief Economist)

The above quote is quite illustrative of the regulators' understanding of the breadth of their discretion and the significant and wide-reaching role economics play in the process of operationalising their statutory objectives. It also serves to highlight the three relatively distinct dimensions of discretion that interviewees understood economic evidence to directly inform: interpretive, operational and enforcement discretion.

Of course, while these are presented here as conceptually distinct, pragmatically speaking they are very much interdependent in the larger institutional analysis of agency decision-making. For example, economic evidence and analysis employed to inform interpretive discretion as to what a 'fair and reasonable' price entails is impossible to cabin from procedural and enforcement discretion, as the regulatory agency's procedural framework and rules will determine, at least in part, whether and how the agency will achieve such a goal, what tradeoffs it will be required to make and which affected interests it will consult. Similarly, the process of interpreting the statutory mandate unavoidably involves consideration of how the statutory objectives will be implemented. Despite these shortcomings, the distinction adopted reflects the interviewees' perception of the different faces of their discretionary powers and also serves well our analytical purposes. The remainder of this section will explore, through the use of examples, the ways in which economic evidence informs these three dimensions of discretion.

i. Economic Evidence and Interpretive Discretion

Interpretive discretion can be said to broadly refer to the leeway in determining the meaning of the agency's statute in pursuance of its policy ends. A prime example of the influence of economic evidence on interpretive discretion is the so-called market review process in electronic communications. In meeting its principal objective to promote the interests of consumers, Ofcom has a specific statutory duty to periodically review the operation of the relevant markets in the telecoms sector so as to determine whether each of those markets is 'effectively competitive' and to impose regulatory remedies (price controls or quality standards) to undertakings found to enjoy a Significant Market Power (SMP), in accordance with the EU framework governing electronic communications.⁴⁴ The determination of SMP expressly relies on economic assessments that Ofcom must perform on a case-by-case basis. Those include both a *quantitative assessment* of market structure often through the application of the hypothetical monopolist test⁴⁵ and a *qualitative assessment* of the market characteristics.⁴⁶

I think if you are on the telecoms side, particularly anything to do with the market review process, where there's a very clear market definition, analysis of competition remedies, I think the economics is very heavily embedded into that and the way in which the competition group is set up. That's what they do. If we need a market, fine we go to the economists; SMP analysis we go to the economists; a network charge control, we need to get the economists to do that and even within the economists function now, we have recognized that sort of more specialized modelling role and sort of carved out specific financial economics team, which combines accounting function and people with modelling expertise (Ofcom 3).

While the determination of SMP is a strictly regulated exercise, the second stage in the process that involves the selection of the appropriate regulatory remedy to be imposed – typically price controls at the wholesale level – leaves considerable leeway to the regulator with regard to which pricing principle and pricing methodology will be adopted.⁴⁷ Article 13

⁴⁴ Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services [2002] L108/33.

⁴⁵ Otherwise known as the SSNIP test to determine whether a small but significant (between 5 to 10 per cent) and non-transitory price increase of a specified product in a specific area that is supposed to be offered by one supplier, the hypothetical monopolist, would be profitable.

⁴⁶ For example the regulator should, in particular, provide evidence of the following three conditions: a) the existence of 'high and non-transitory barriers to entry' of a 'structural, legal, or regulatory nature' in the relevant market; b) a dynamic assessment of whether there is the prospect of effective competition therein and c) the insufficiency of competition rules to be able to address market failures identified in the market review process.

⁴⁷ J Hauge and D Sappington, 'Pricing in Network Industries' in R Baldwin, M Cave and M Lodge (eds) *Oxford Handbook of Regulation* (OUP 2010) 462-99.

of the Access Directive,⁴⁸ as implemented by the Communications Act 2003, provides that the cost recovery mechanism or pricing methodology must be designed to confer the greatest possible benefits on end-users and to achieve the other specified purposes, namely that of promoting efficiency and sustainable competition.⁴⁹ Of course, these are broad objectives that cannot always be served at once. Choices have to be made and thus discretion has to be exercised in choosing the appropriate pricing methodology. Hence, pricing methodologies embody value judgments as to which of the various objectives is to be promoted. This was echoed by an interviewee when asked to comment on the disputed ‘welfare standard’ that was adopted in the context of the termination rates appeals dispute:⁵⁰

Many economists would view that as being neutral, but I don’t think it is neutral; that is making a particular set of value judgments (...) some economists may disagree with me, but I don’t think it is judgment free. That involves judgement and you have to be clear what those are because they are not always appropriate. (Ofcom 4).

As will be shown, economists enjoy a wide margin of discretion in picking and choosing the most appropriate pricing methodology in light of their statutory objectives, but that also economic evidence and analysis is itself *the tool* for mediating between these objectives.

A useful example that illustrates this point comes from the 2011 market review of the wholesale mobile voice call termination.⁵¹ That is the service provided by the intended recipient’s mobile communications provider to the originating communications provider, which is necessary for mobile and fixed communications providers to connect their customers with recipients on different mobile networks. For this service, operators impose a wholesale charge known as ‘mobile termination rates’ (MTR). These have been subject to regulatory control on the basis that absent control the significant market power exercised by operators would be detrimental to competition and to consumers. Ofcom was of the view that this price control should be based on either the so-called Long Run Incremental Cost (LRIC) or LRIC+.

⁴⁸ Directive 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities [2002] OJ L108/51 (Access Directive). For a discussion see A de Stree, ‘Remedies in the Electronic Communications Sector’ in D Geradin (ed) *Remedies in Network Industries: EC Competition Law vs. Sector-Specific Regulation* (Intersentia 2004) 67.

⁴⁹ Communications Act 2003, s 88.(1)(b).

⁵⁰ See n 14 above.

⁵¹ OFCOM, ‘Wholesale Mobile Voice Call Termination’ (March 2011) available at: <http://stakeholders.ofcom.org.uk/binaries/consultations/mtr/statement/MCT_statement.pdf> (accessed 10 June 2019). See further, OFCOM, ‘Disputes between each of Sky, TalkTalk, Virgin Media, Cable & Wireless and Verizon and BT regarding BT’s charges for Ethernet Services – Determinations and Explanatory Statement (20 December 2012) available at: <https://www.ofcom.org.uk/data/assets/pdf_file/0027/55539/ethernet_fd.pdf> (accessed 10 June 2019).

The fundamental difference between the LRIC and the LRIC+ is that the former is intended to cover the terminating operator's direct costs of terminating a call, whereas LRIC+ is intended to make a contribution to the terminating operators' fixed and common costs, such as the costs that are involved with running a network. Economic theory suggests that ideally access prices should reflect the marginal costs of an efficient network operator and thus LRIC was regarded by the regulator as a better approximation of marginal costs that would result in lowering mobile termination rates. It also had the merit of following a Recommendation of the European Commission.⁵² But, efficiency considerations alone could not form the basis of Ofcom's judgment. Ofcom was, therefore, required to consider and ultimately balance the benefits and the detriments of each of these two pricing methodologies against the broad policy objectives, which further involved making a number of hypothetical assessments on the effects of the pricing methodologies on economic efficiency (allocative and dynamic) and on competition, bearing also in mind their distributional implications. For example, the interests of dynamic efficiency or the protection of vulnerable consumers – the latter being a specific social group that Ofcom has a statutory duty to protect⁵³ – favored the adoption of LRIC+, while the interests of competition pointed towards pure LRIC. OFCOM eventually reasoned that a pure LRIC approach would confer the greatest possible benefits on consumers.

Crucially, in interpreting the statutory mandate and determining the appropriate price control standard and its proper application to the facts – a question of law – Ofcom enjoyed a large degree of interpretive freedom that is not only observed internally, but was also externally recognised by the courts. The Court of Appeal afforded a large measure of discretion to Ofcom's determinations highlighting the complexity of the economic judgment the regulator was called upon to perform that involved 'questions of policy in a highly technical field':⁵⁴

The regulator, Ofcom and the Competition Commission are required to make educated predictions for the future as to the effect of any price control measure to be imposed. Although decisions relating to the control of charges are of great importance to communication providers and to the general public, the exercise of seeking an

⁵² See further Commission Recommendation of 7 May 2009 on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU [2009] OJ L124/67, Recital 13.

⁵³ Article 8(4) of Access Directive; Article 8 of the Framework Directive.

⁵⁴ In *Everything Everywhere Limited v OFCOM (Mobile Call Termination)* [2013] EWCA Civ 154 per Moses LJ at [35].

appropriate solution is necessarily imprecise; when looking to the future there is unlikely to be any one right answer.⁵⁵

The Court of Justice of the European Union (CJEU) has also highlighted the interpretive freedom national regulatory authorities (NRAs) should enjoy when operationalising pricing principles enshrined in EU legislation, such as the one prescribing ‘cost-oriented’ wholesale access prices.⁵⁶ Indeed, in the *Arcor*⁵⁷ and *Mobistar*⁵⁸ preliminary rulings, the CJEU confirmed the NRAs’ broad discretion in interpreting and applying the principle of cost-orientation.⁵⁹ It further conceded that in the absence of Community legislation, it is the task of the NRAs to define detailed rules for calculating the actual costs, which have to be taken into account. Perhaps, most crucially, the CJEU affirmed that the boundaries of their discretion are not limited to the methodology employed, but further extend to the choice of analytical cost models for establishing the costs incurred by the notified operator,⁶⁰ as well as for other aspects of those costs and tariffs. Those rulings epitomise what Denis Galligan referred to as the ‘central sense’ of discretion.⁶¹ The regulators discretion reaches its central sense as there exist both ‘significant freedom’⁶² for the regulator in exercising his power and ‘the courts recognise this freedom’.⁶³

ii. Economic Evidence and Operational Discretion

In contrast to interpretive discretion, *operational* discretion ‘is exercised independently of statutory provisions if Parliament has expressly or impliedly left a policy sub-domain undetermined’.⁶⁴ As Eric C Ip notes, ‘while interpretive discretion might be constrained, at least in theory, by better legislative drafting technique and judicial legality review (of the procedural correctness with which legislation is construed), however, the same cannot be said

⁵⁵ Ibid. See further, *Everything Everywhere Limited v Office of Communications* [2016] EWCA 2134 (Admin) (Cranston J); *British Telecommunications Plc (Appellant) v Office of Communications (Respondent) & (1) Sky UK Ltd (2) TalkTalk Telecom Group Plc (Interveners)* [2016] CAT 3.

⁵⁶ See e.g. Regulation (EC) No 2887/2000 of the European Parliament and of the Council of 18 December 2000 on unbundled access to the local loop [2000] OJ L 336.

⁵⁷ See C-55/06, *Arcor AG & Co. KG v Bundesrepublik Deutschland* [2008] ECR I-2931, at para. 94.

⁵⁸ C-438/04, *Mobistar SA v Institut belge des services postaux et des télécommunications (IBPT)* [2006] ECR I-6675.

⁵⁹ See n (57) at para. 150.

⁶⁰ See (n 57) at para. 132 and at para. 134.

⁶¹ D Galligan, *Discretionary Powers: A Legal Study of Official Discretion* (Clarendon Press 1990) 23.

⁶² Ibid.

⁶³ Ibid.

⁶⁴ See Ip (n 24) 485.

of operational discretion'.⁶⁵ Operational discretion is far more open-ended as it captures the range of choices regulators have to make as to *when* to intervene in the markets (what can be understood as a first-order judgment) and *how* to intervene in the markets (what can be understood as a second-order judgment). It includes the process of choosing the policies, strategies, standards and procedures that may suit a particular situation.

Regarding the first-order judgment, all regulators conceded that it is economic logic deriving from the concept of market failure that informs their operational discretion on *when* to intervene:

Baseline position is that there is a market failure we are intervening on, there can be other reasons for intervening but the baseline is the market failure (Ofgem, Chief economist).

This hegemony, however, of neoclassical economics has been recently somewhat tempered when regulators arrive at the second-order judgment as to *how* to intervene and what remedies to impose: an exercise increasingly informed by behavioural economics.

The interrelationship between behavioural economics and operational discretion is better understood in the context of the ongoing *metamorphosis* of the regulatory state from a model of economic regulation largely concerned with the promotion of competition, to a broader framework of market organisation, where objectives such as security of supply, sustainability and affordability have all risen in salience.⁶⁶ As Frank Vibert observes 'regulators have moved from creating conditions 'sufficient' for consumers to be able to make choices (a "satisficing" role) to a trustee role, or, to acting in the "best interest" of the consumer (a role that tries to "optimize" conditions for consumers)'.⁶⁷ Because competition alone does not necessarily ensure that consumers will access and act upon the information needed to make sensible choices for themselves, regulators have become increasingly activist in the demand side of the market. Rather than assuming consumer rationality, they turn to the insights of behavioral economics so as to explore when and under what conditions consumers systematically depart from rationality. For instance, status quo bias explains why consumers fail to investigate alternative contracts that may be beneficial to them. This was in turn

⁶⁵ Ibid.

⁶⁶ For an excellent analysis see F Vibert, *The New Regulatory Space: Reframing Democratic Governance* (Edward Elgar 2014).

⁶⁷ Ibid at pp. 55-60.

incorporated in Ofgem's and Ofcom's ban on automatic renewal of contracts;⁶⁸ an exercise of operational discretion. Perhaps the most representative example relates to Ofgem's Retail Market Review.⁶⁹ Ofgem introduced measures aiming at the simplification of tariffs ('simpler choices' component).⁷⁰ Tariff simplification was premised on the findings of behavioural economics regarding consumers' cognitive limits and aimed at facilitating consumer switching.⁷¹ It is important not to underestimate the breadth and scope of operational discretion. Unlike the price control remedies imposed by Ofcom in the market review process, which are prescribed in great detail in the Communications Act 2003, Ofgem's remedies in the retail energy market represent the translation of the deliberately broad statutory mandate enshrined in the Utilities Act regarding the protection of consumers into operational policies and procedures. This gives rise to an expanded arena of administrative discretion, which has been given form and purpose by recourse to economic evidence and analysis. This expanded arena of operational discretion is mostly constrained by structural and ideational factors, as Section IV will illustrate.

iii. Economic Evidence and Enforcement Discretion

All regulators employ a spectrum of enforcement ranging from increased monitoring to a full-blown investigation. A central part of enforcement powers resides in the licence, which is granted to companies and which allows them to operate in each industry. Each licence contains the terms and conditions under which a company is entitled to operate. Regulators are responsible for policing the licences and they can unilaterally amend the provisions of the licence. They can also take action when industry behavior fails to meet obligations for consumers, especially those in vulnerable circumstances, and take action when companies do not observe the Standards of Conduct.

⁶⁸ See Ofcom, 'Removing Barriers to Switching: Ofcom Bans Rollover Contracts' (2011) available at <https://www.ofcom.org.uk/about-ofcom/latest/media/media-releases/2011/removing-barriers-to-switching-ofcom-bans-rollover-contracts> (accessed 10 June 2019).

⁶⁹ Ofgem, 'Retail Market Review' (2010) available at: <https://www.ofgem.gov.uk/electricity/retail-market/market-review-and-reform/retail-market-review> (accessed 10 June 2019).

⁷⁰ These measures included a ban on complex tariffs, a maximum limit on the tariffs offered and a simplification of cash discounts. Ofgem, 'Simpler, Clearer, Fairer' available at: <https://www.ofgem.gov.uk/simpler-clearer-fairer> (accessed 10 June 2019).

⁷¹ In particular, framing bias can be exacerbated in an environment where consumers are presented with a lot of information. This information can be purposefully presented in a confusing manner creating the problem of *confusopoly*. On framing biases see A. Tversky & D. Kahneman, 'The Framing of Decisions and the Psychology of Choice' (1981) *SCIENCE* 211. *Confusopoly* was first coined in S. Adams, *The Dilbert Future* (New York: Harper Collins, 1997).

Enforcement action includes imposing financial penalties and making consumer redress orders for breaches of relevant conditions and requirements under the governing statute or consumer protection legislation. At the same time regulators also enjoy competition law powers in the sectors for which they are responsible under the concurrency regime.⁷² Unlike interpretive and operational discretion, the exercise of enforcement discretion is predominantly influenced by legal and bureaucratic considerations. Whether to take enforcement action or not is not a straightforward matter for regulators, but a culmination of deliberations among lawyers and non-lawyers regarding the desirability of triggering formal legal procedures. This is not to argue that economic evidence does not have a role to play. On the contrary, a legal considerations and economic evidence are in a constant dialectic process:

We work very closely with lawyers; they are kind of involved throughout, and a lot of the time. I mean the way we tend to operate it's not siloed; you don't say 'you go away and do the economics, we go away and do the policy, you go away and do the legal analysis'. Yes, there are elements of that but it's an integrated whole, they interplay with each other. What are we trying to achieve in policy terms? How does that fit with the economic analysis? How is that consistent with our objectives and the legal analysis? How does it apply to what we should be doing and also limits on what we might want to do? Or the test, and actually one of the key areas in the interaction between economics and law that is very important is understanding what legal condition are we doing. Is it market review with SMP conditions? What does that imply for the legal test that would need to be satisfied for us to impose? (Ofcom 4)

In deciding whether to open an investigation, regulators have to assess the seriousness of the case according to the potential harm to consumers and to competition:

I think it comes down to whether you can demonstrate an effect and by that I mean can you convey to somebody that the action that one party or several parties have taken has adversely impacted generally consumers we are worried about, or some of the intermediate markets? But we need to demonstrate this as a first step. (Ofwat 3)

Because regulatory resources are scarce, economic evidence allows regulatory agencies to prioritise investigations where the alleged harm to the consumer or to competition is considered to be most serious. Economists are crucial in quantifying this harm:

We have been involved in enforcement cases. That's two roles: one is in terms of calculating gain; say a company failed to provide good service for consumers, how much detriment resulted, my team has a role of quality assurance in the assessment of

⁷² Enterprise and Regulatory Reform Act 2013, ss. 51-53.

the level of detriment resulted. The second is in competition enforcement cases where my team have contributed to enforcement cases and the analysis therein (Ofgem, Chief Economist).

But this quantification of harm is then subject to scrutiny by the ‘legal frame’.⁷³ It is the latter that will determine whether the evidence of harm marshaled in support of opening a case can meet the evidentiary requirements set by the law, i.e. the legal standard of proof. In cases relating to competition law infringements, the impact of the law is not merely procedural, but substantive: ‘what is an abuse of dominance, or refusal to supply? Economists may disagree about legal conditions’ (Ofwat 2), but economics need to be marshaled to support these legal conditions, i.e. the appropriate and relevant legal test for proving a competition law infringement as this is set by the case law.⁷⁴ It is the influence of legal considerations in the regulators’ exercise of enforcement discretion that render the latter vulnerable to institutional constraints, as the following section will demonstrate.

IV. From the Conceptual to the Operational: What Constraints to the Influence of Economic Evidence in Discretionary Assessments?

I don’t feel that we have broad latitude, when you are inside a body you feel quite hemmed in by all kinds of factors (Ofgem 1).

The first part provided an overview of the input of economics in the regulatory decision-making process by exploring the various ways in which economic evidence and analysis informs interpretive, operational and enforcement discretion. It was shown that recourse to economic evidence is pervasive across all three regulatory agencies and that economic evidence has allowed regulators to expand their discretionary space. In the case of interpretive discretion this has the blessings of the courts, while in the case of operational discretion the ongoing transformation of the regulatory state has enabled economists to acquire central stage in both promoting competition and acting as trustees of consumer interests.

⁷³ See K Hawkins, *Law as Last-Resort: Prosecution Decision-making in a Regulatory Agency* (OUP 2002) pp. 54-57.

⁷⁴ *BT v OFCOM* [2016] CAT 3.

Regulatory decisions, however, are made in complex environments that reflect the interplay of various values, such as economic values, human rights values and norms, as well as constraints. The analysis, therefore, of the influence of economic evidence in discretionary assessments could not be complete without an understanding of how these values and constraints affect or otherwise the way economists perceive the limits of their discretion. In line with Parsons' typology, the remainder of this article explores the relative influence of structural, institutional and ideational constraints to the use and influence of economic evidence in discretionary assessments in the context of specific regulatory episodes that emerged as being of significant importance. The findings are extremely variable between the three regulatory agencies examined. In fact, the following pattern emerges from the interviews: The greater the influence of institutional constraints, such as the threat of the decision being appealed in courts, the weaker the weight of economic evidence in the final decision reached, as the case of Ofcom reveals. Economic authority and wisdom while relevant is not always dispositive. In contrast, when competitive markets are nascent, such as that of water, and the degree of exposure to courts and litigation has remained low, such as in the case of Ofwat, the more unconstrained economists perceive themselves in the exercise of discretion. This, however, regulatory reality can at any time be shattered when regulators become vulnerable to structural constraints, such as the societal and/or economic pressures and ideational constraints, such as criticism from the academic community, as the case of Ofgem paradigmatically reveals.

A. Structural Constraints

According to Parsons, structural constraints are 'exogenous' in nature, occupying what Keith Hawkins refers to as 'the surround', that is 'the broad setting in which regulatory (or other) decision-making activity takes place'.⁷⁵ This may involve the political or economic climate in which regulators operate and/or broader societal pressures. The 'surround', however, is not static or unchanging. As Hawkins underlines, 'political and economic forces may shift, and in these circumstances the social surround of the organisation changes'.⁷⁶ While all regulatory agencies are exposed to structural constraints, these have been more pronounced, as we shall see, in the case of Ofgem.

Before we elaborate further on this point, it is important to appreciate the influence of such constraints on the use of economic evidence. As will be shown throughout this section, these

⁷⁵ Hawkins (n 73) 48-49.

⁷⁶ Ibid at 49.

constraints do not necessarily limit the recourse to economic evidence and analysis in the workings of regulators, but rather limit the influence of economic values. In particular, structural constraints downplay the pursuit of economic efficiency, in favour of non-economic and non-competition law considerations, such as that of affordability. This is especially the case when regulators exercise operational discretion. Hence, in sharp contrast to the firmly embedded in neoclassical economics ‘separability thesis’, that requires questions of economic efficiency to be separated from issues of distribution,⁷⁷ economists working in regulatory agencies are required to grapple with both so as to claim legitimacy for their normative prescriptions. As an Ofcom economist explained:

Sectoral regulation has always been more deeply involved in those kind of distributional questions, and justice questions and fairness questions than historically competition authorities, and as an economist it’s a fascinating area, because economics has little to contribute. A lot of the formal neoclassical economics is kind of trying to avoid getting into questions of fairness. What does an economist think about fairness? Most economists have nothing to say about fairness! And it is really important to understand one of these areas where understanding your limits of your specialism has to contribute, but also what it does not have to contribute. Economics and economists can really contribute to identify a framework that encompasses different perspectives and identify key trade-offs and the key issues and economics is just generally very good at that. (Ofcom 2)

In a similar vein, a senior manager at Ofgem emphasised the need to take more firmly into account considerations other than economic efficiency, given the nature of the regulated service:

I am of the view that for an essential public service, like energy, which has major environmental impacts and consequences, then it is inevitable you will make complex trade-offs. I think it would be damaging to us to say we are responsible for economic efficiency and everything else is a political issue because it would mean that our roles would be very much more limited than they are at the moment. I prefer the approach where we have a degree of discretion, which enables us to take a broader role and get involved in things that do have environmental and social impacts. Actually there’s a very few things that we do that are purely technocratic. Most things we do have distributional impacts, social, environmental, security of supply impacts (Ofgem 2).

⁷⁷ Following the Kaldor-Hicks criterion of efficiency, economic policy recommendations should be determined by efficiency, distribution remaining a problem for the political realm (the separability thesis). See JR Hicks, ‘The Foundations of Welfare Economics’ (1939) 49(196) *Economic Journal*, 696; N Kaldor, ‘Welfare Propositions in Economics and Interpersonal Comparisons of Utility’ (1939) 49(145) *Economic Journal* 549.

Indeed, the regulators' greater awareness of the distributional effects of regulation is an important constraint to the influence of economic efficiency as a value in the regulatory process. For example, although all regulators have long adopted a consumer vulnerability strategy,⁷⁸ post-financial crisis concerns coupled with the advent of behavioural economics have rendered regulators more attentive to the multifaceted and transient nature of consumer vulnerability in the markets they regulate.⁷⁹ Vulnerability has come to be understood as not solely confined to instances of 'economic disability', but also encompassing 'physical' and 'intellectual disability'.⁸⁰ While physical disability is quite self-explanatory, 'intellectual disability' is far more complex. It can be said to refer to difficulties 'cop[ing] with the requirements of the modern consumer society',⁸¹ such as difficulties in gathering and processing information and gaining access to advice and support. Such barriers to consumer empowerment may make it, in turn, difficult for consumers to find contracts best suited to their situation. 'Intellectual disability' has been a focal point of regulators in the more mature liberalised retail markets of energy and telecoms. This is owing to mounting evidence, which suggests that consumers rarely conform to the model of self-interested utility maximisation inherent in the neoclassical economics paradigm that informed the original regulatory framework of privatised UK industries,⁸² because of a number of biases which impeded rational choice.⁸³ Ofcom's review of the market for standalone telephone services is a case in point.⁸⁴

⁷⁸ See e.g. Ofgem's consumer vulnerability strategy first adopted in 2013 and recently updated, available at: <<https://www.ofgem.gov.uk/about-us/how-we-work/working-consumers/protecting-and-empowering-consumers-vulnerable-situations/consumer-vulnerability-strategy>> See further Ofwat, 'Vulnerability Focus Report' available at: <https://www.ofwat.gov.uk/publication/vulnerability-focus-report/> and Ofcom, 'Consumer Vulnerability' available at: <https://www.ofcom.org.uk/about-ofcom/what-is-ofcom/consumer-vulnerability> (accessed 10 June 2019).

⁷⁹ See example the work of the UK Regulators Network joint work on consumer vulnerability available at <<http://www.ukrn.org.uk/wp-content/uploads/2017/10/Making-better-use-of-data-identifying-customers-in-vulnerable-situations.pdf>> (accessed 31 October 2018).

⁸⁰ See Reich, 'Vulnerable Consumers in EU Law' in D Leczykiewicz and S Weatherill (eds), *The Images of the Consumer in EU Law: Legislation, Free Movement and Competition Law* (Hart 2016) 141. See further, D Mantzari, 'The Quest for Reasonable Retail Energy Prices in Europe: Positive and Normative Dimensions' (2017) 36(1) *Yearbook of European Law* 599-627.

⁸¹ See H Micklitz, 'Universal Services: Nucleus for a Social European Private Law' in M Cremona (ed.) *Market Integration and Public Services in the European Union* (Oxford University Press 2011) 21.

⁸² See C Mc Fadden, 'Free Markets and Fettered Consumers' 96(1) *Am. Econ. Rev.* (2006) 3; C Waddams Price and M Zhu, 'Empirical Evidence of Consumer Response in Regulated Markets' 12(1) *Journal of Competition Law & Economics* (2016) 113-149; S Lavrijssen, 'The Different Faces of Energy Consumers: Toward a Behavioral Economics Approach' (2014) 10(2) *Journal of Competition Law and Economics* 257.

⁸³ See, for example, A Tversky and D Kahneman, 'Judgment Under Uncertainty: Heuristics and Biases' (1974) 185 *Science* 1124; R Thaler and C Sunstein, *Nudge: Improving Decisions about Health, Wealth and Happiness* (Yale University Press 2008).

⁸⁴ Ofcom, Review of the Market for Standalone Landline Telephone Services (28 February 2017) available at: <https://www.ofcom.org.uk/__data/assets/pdf_file/0015/107322/standalone-landline-statement.pdf> (accessed 10 June 2019).

Such market includes consumers who buy landline services in a standalone contract and not part of the a bundle with other services such as broadband or pay-TV. Ofcom was of the view that such consumers were getting poor value for money in recent years, compared to those who bought bundled services and were experiencing rising prices for line rental despite falling wholesale costs. The regulator ultimately imposed a price cap on BT.⁸⁵

To the above one should also add the gradual decline of the ‘Littlechild model’ of economic regulation that has brought regulators closer to the concerns of government, including those of redistribution. Conveniently overlapping with the New Public Management’s (NPM) oversimplified distinction between ‘policy’ and ‘administration’ (or ‘steering’ and ‘rowing’), the ‘Littlechild model’ reserved a tightly remit to regulators to promote competition free from central government interference.⁸⁶ But the reality showed that there is a much greater degree of cooperation between the realm of independent regulation and the realm of central government than that envisaged under NPM.⁸⁷ Hence, the role of economic regulators has broadened in recent years to include environmental objectives and social objectives rendering them more exposed to the prevailing political and economic imperatives. While Ofwat interviewees also mentioned the political environment and public acceptability, especially in relation to opening the domestic water market to competition, the analysis deriving from the interviews suggests that these structural constraints have been particularly pronounced in the workings of the energy regulator, Ofgem:

There are important and difficult constraints in terms of changing how we regulate, the way economics is involved in how we make decisions. We have high levels of formal discretion but in practice we are quite constrained (emphasis added). Some of the external constraints include the political environment and the public acceptability (Ofgem 1).

Two plausible explanations to Ofgem’s vulnerability to their surround are offered here. First, a correlation seems to emerge between the degree of political influence observed in the workings of Ofgem and the institutional organisation of professional economic expertise within the organisation. Recent evidence suggests that ‘there was a decline in the number and

⁸⁵ Ofcom, Charges Cut for Up to a Million BT landline-only customers (27 October 2017) available at: <<https://www.ofcom.org.uk/about-ofcom/latest/media/media-releases/2017/charges-cut-million-bt-customers>> (accessed 10 June 2019).

⁸⁶ C Hood and M Jackson, *Administrative Argument* (Dartmouth Puc Co 1991); SC Littlechild, *Regulation of British Telecommunications' Profitability* (London: Department of Industry, 1983).

⁸⁷ D Coen and M Thatcher, ‘The New Governance of Markets and Non-Majoritarian Institutions’ (2005) 18 (3) *Governance* 329.

influence of economists within the organisation⁸⁸ that led inter alia to ‘economically uninformed and implausible’⁸⁹ retail energy market policies ‘against all expert economic advice’.⁹⁰ This was again picked up in the in-depth energy market investigation undertaken by the UK Competition and Markets Authority (CMA),⁹¹ which was, amongst others, a catalyst for institutional changes in the organisation of economic expertise within the regulatory authority including the appointment, for the first time, of a Chief economist:

I did join recently but the role was set relatively recently. The role followed the CMA investigation into the energy market, where it was felt that Ofgem had not used economic evidence as robust as it might do, economics did not have sufficient prominence in the organization and a formal office of the chief economist should be set up accordingly. There were people who had chief economist role before but they tended to be senior people with economic background rather than people who did economics as a big part of their job (Ofgem, Chief Economist)

The second reason has to do with the nature of the service Ofgem regulates. Retail energy supply has always had particular salience, especially to low-income households, as poorer consumers may end up paying more as a proportion of the household income than wealthy ones, who consume greater energy quantities.⁹² Furthermore, the provision of energy supply in a given society is crucial to realising its territorial cohesion and stability. Energy undertakings carry out activities, which are essential for the functioning of the society and on which many other activities depend. These activities are also important for social cohesion, as being cut off from electricity can amount to social exclusion. Hence, affordability and non – strictly speaking – economic considerations pertaining to economic efficiency are far more prominent in energy. Along with the prevailing political and economic climate they act as important constraints to the monolithic pursuit of economic efficiency:

You are trying to achieve economic efficiency within constraints and those constraints are set by society, by politicians, by and large security of supply, environmental constraints and limits on the degree of differential outcomes you might have, treatment of vulnerable customers, USOs, all these things. If everything was left to the market

⁸⁸ S Littlechild, ‘Promoting or restricting competition?: Regulation of the UK retail residential energy market since 2008’ (2014) EPRG Working Paper 1415, University of Cambridge, Energy Policy Research Group, at p. 34.

⁸⁹ Ibid at 35.

⁹⁰ Ibid at 36.

⁹¹ See CMA, ‘Energy Market Investigation: Final Report’ (24 June 2016) available at: <<https://assets.publishing.service.gov.uk/media/5773de34e5274a0da3000113/final-report-energy-market-investigation.pdf>> (accessed 10 June 2018).

⁹² C Waddams Price, ‘Back to the Future? Regulating Residential Energy Markets’ (2018) 25 (1) International Journal of the Economics of Business 147, 148.

you would find that 15% of the households would not have electricity at all because they are uneconomic to supply. (...) Once something has gained this public utility status, issues of universal access justice become quite important, fairness becomes important, I think we need to recognize that we operate within that context. A while ago I think there was a belief that energy could be made to be just like any public service, but it was a period of low energy prices, before climate change became such a high profile issue, and a period of significant surplus generation capacity, and now we've got tighter margins, climate change is really really important, and oil and energy prices are so much higher. (Ofgem 2)

Affordability can be achieved via a competitive market that renders *efficient* prices or via instruments laying outside the market mechanism, such as subsidies, social tariffs and retail price regulation.⁹³ The common denominator of such instruments is that they all involve, in principle, a departure from cost-reflective prices set by the market mechanism. This, however, should not distract from the role that economic evidence still plays in informing such departure from 'efficient' pricing. For example, both the principles applying to the designation of universal service providers as well as the costing and the funding mechanisms for ensuring universal are informed by economic evidence and analysis. The Universal Service Obligation (USO) intends to guarantee the supply of the essential service at reasonable prices to those who cannot afford it at the market price.⁹⁴ Redistributive pricing is achieved by imposing on one or more firms an obligation to supply energy to all consumers on a non-discriminatory basis, i.e. regardless of any variations in the cost of supplying different groups. Distribution is directed to high-cost service customers who, if market forces alone operated, they would simply not be served as it would be uneconomic to do so, let alone offered an affordable price. Hence, USOs intends to socialise the costs of energy supply that in the era of state-owned monopolies were addressed through cross-subsidisation. To take an example from telecoms, Article 8 and Recital 14 of the Universal Service Directive in electronic communications,⁹⁵ stress the importance that universal service should be provided in a 'cost-effective' manner, meaning that USOs could in some cases be allocated to operators demonstrating the most cost-effective means of delivering access and services. Economic evidence and analysis further informs the designation criteria,⁹⁶ especially those

⁹³ For an analysis see Mantzari (n 80).

⁹⁴ See Micklitz (n 81).

⁹⁵ Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive) [2002] OJ L 108.

⁹⁶ *Ibid*, article 3.

related to the economic and financial standing of the undertaking,⁹⁷ end-user tariffs and the net cost/amount of financial compensation required fulfilling the USO. The computation of the cost of providing universal service involves detailed examination of the costs and revenues associated with the customers the USO operator has to serve. Typically, the method for estimation of the costs is focused on the costs of provision to the loss-making customers on an avoidable basis. This requires detailed economic modeling so as to determine the maximum number of customers that can be served economically. Furthermore, recourse to economics is necessary for establishing the calculation method of these costs⁹⁸ and the choice of the financing mechanism.⁹⁹

Finally, notwithstanding the crucial role of economic evidence and analysis in operationalising both the economic and non-economic objectives of regulators, evidence suggests that structural constraints relating to the political climate expose the limits of economists and economic evidence in areas of substantial redistribution:

There are areas of very substantial redistribution that are matters best left to government rather than the regulator because the government has the political support, the public accountability and mandate to make these decisions (Ofgem 1).

This is perhaps nowhere more apparent than in the heated political and regulatory debate surrounding the return to price cap regulation for all household energy consumers on poor value tariffs; a debate that culminated in the enactment of the UK Domestic Gas and Electricity (Tariff Cap) Act.¹⁰⁰ In particular, the Act puts in place a requirement on Ofgem to set an absolute price cap on standard variable (SVTs) and default tariffs;¹⁰¹ i.e. a rate above which no energy supplier can charge. It is estimated that this price cap will protect around 11 million households in England, Wales and Scotland, who are currently on poor value tariffs. Unlike the existing price cap that protects consumers on prepayment meters, the cap on SVTs necessitated legislative action because of its wide remit and distributional implications. The

⁹⁷ Those include availability requirements, quality requirements, experience in the provision of the services concerned and the size of the provider's business.

⁹⁸ See (n 95), article 12, 1. Two methods exist. The first method calculates the difference between the net cost for the USP of operating with the USO and operating without the USO taking into account any market benefit which accrues to the USP and method two which makes use of the costs identified by a designation mechanism.

⁹⁹ Ibid, Article 13,1; Case C-146/00, *Commission v France* [2001] ECR I-9767.

¹⁰⁰ Domestic Gas and Electricity (Tariff Cap) Act 2018 (c. 21) available at <<http://www.legislation.gov.uk/ukpga/2018/21/contents/enacted/data.htm>> (accessed 10 June 2019).

¹⁰¹ SVTs are the suppliers' default tariffs charged when consumers do not choose a specific price plan. They are normally higher than fixed tariffs, which offer guaranteed prices for the duration of the supply contract. For an analysis see M Ioannidou and D Mantzari, 'The UK Domestic Gas Electricity (Tariff Cap) Act: Re-regulating the Retail Energy Market' (2019) 82 (3) *Modern Law Review* 488-507.

price cap will be designed and delivered by Ofgem and apply until the end of 2020, when the regulator will recommend to the government whether it should be extended on an annual basis up to 2023.¹⁰² In such a major intervention in the market, economists perceive their role as presenting evidence that allows political decision-makers to take decisions on distributional issues versus actually making the decisions themselves:

‘I think it would be uncomfortable if technocrats were making substantial redistributional decisions but I do think it can be useful for us to lay out evidence based on that and provide the information to make that decision’ (Ofgem, Chief Economist).

This section explored the structural, that is exogenous, constraints to the influence of economic evidence in discretionary assessments. Such constraints do not render the use of economic evidence redundant, as the example of the Universal Service obligation illustrated, but rather downplay the pursuit of economic efficiency in favour of non-economic considerations such as those of affordability. This has been further supported by the regulators’ greater awareness of the distributional impacts of regulation and the decline of the ‘Littlechild model’ of economic regulation. The section further hypothesised on why Ofgem, amongst the other two regulatory agencies examined here, has been more vulnerable to such constraints and highlighted the outer limits of the use of economic evidence in discretionary assessments that are triggered in matters of substantial redistribution.

B. Institutional Constraints

According to Parsons, institutional constraints differ from structural ones in the sense that they do not exist independently of the institution, but are rather forces that affect regulators’ actions with respect to their position ‘within man-made organisations and rules’.¹⁰³ Institutional explanations serve as a broader organising framework from which several constraints flow, legal and quasi-legal.

Legal constraints stem first and foremost from the provisions of legislation establishing the agency’s powers and from which her interpretive, operational and enforcement discretion is derived. While, as we have seen above, economics have been crucial in operationalising discretion, the ‘legal frame’ is prominent throughout much of the economists’ work. Economic evidence is not only integrated into legal norms and legal analysis, but is also

¹⁰² Ibid.

¹⁰³ Parsons (n 8) 12.

regulated by the ‘legal frame’. For example, administrative law, which requires regulatory authorities to exercise their powers lawfully, in accordance with the requirements of procedural fairness and on rational grounds, as well as its component that deals with judicial review of discretionary powers all regulate and constrain the exercise of economists’ discretion.¹⁰⁴ As one interviewee conceded:

The economic analysis is not the totality of it. We have to show evidence, to be rational, to be proportional, we cannot do more than can be justified by the evidence, which I think is all part of the framework that properly constrains us (Ofgem 2).

The above quote hints to considerations of both ‘thin’ and ‘thick’ legality that preoccupy economists when exercising discretion. In other words, regulators are not merely concerned with whether their discretionary assessments conform to the requirement of the relevant law (‘thin’ legality), but also whether their overall approach to the use of economic evidence in their exercise of interpretive, operational and enforcement discretion respects and reflects broader constitutional and human rights values inherent in the rule of law (‘thick’ legality).

Quasi-legal constraints can be said to derive from the behaviour of other actors within the regulatory agency, most prominently the Board, as well as ‘deeper values and principles reflecting the principles and “ethos” or “shared culture” of the community that may not be expressly reflected in legal rules’.¹⁰⁵ They also relate to ideational constraints, that is the influence of ideas and epistemic communities on the workings of economists and their normative prescriptions. Each will be examined in turn.

i. Legal Constraints

The ‘legal frame’ carries with it its distinct ‘logic’ of what a reasonable regulatory decision entails that it imposes on economists’ discretionary assessments; something that economists find at times ‘frustrating’: ‘You think action X is economically the right thing to do, but we cannot do it essentially’ (Ofgem, Chief Economist). Hence, legal rationality may be in direct conflict with economic rationality. It is typically, legal precedent and the provisions of the legislative framework that constraint an, otherwise, ‘economically right’ approach.

Take for example the imposition of regulatory obligations on telecommunications operators found to enjoy SMP. Economists may strongly favour a price control condition,

¹⁰⁴ *Council of Civil Service Unions v Minister for the Civil Service* [1985] AC 374.

¹⁰⁵ K Yeung, *Securing Compliance: A Principled Approach* (Hart 2004) 10.

whereby the regulator uses information about the historic costs of a service provider with SMP to impose maximum prices which it may charge for its services in the future, than the less intrusive cost orientation condition, which simply requires a reasonable relationship to be maintained between the costs of a service provider with SMP and the prices it charges for its services.¹⁰⁶ But the legislative requirement of regulatory remedies being a proportionate response to the finding of SMP may instruct otherwise.¹⁰⁷ The same applies to the pricing methodology. For example, in Ofcom's Determination regarding Ethernet services,¹⁰⁸ the regulator considered that a different methodology for cost-orientation should be employed than the one used by the incumbent, British Telecom, that of Distributed Stand Alone Cost ('DSAC').¹⁰⁹ In exercising her interpretive discretion, Ofcom relied on previous regulatory decisions and case law in the so-called PPC case¹¹⁰ and emphasised the identical wording of the cost orientation condition that applied in the latter case that rendered it consistent with her approach.¹¹¹

Considerations relating to 'thick' legality become prominent in the workings of economists precisely because of the contested nature of economics as a source of wisdom. Recourse to economic evidence and analysis rarely lends itself to a single 'right' answer. Economics, as one interview conceded, 'does not say oh well, the right answer is this, there cannot be another right answer. In almost any real world circumstance there's a range of possible decisions, or views.' (Ofcom 4). Therefore, considerations relating to procedural fairness and the meaningful participation of affected interests become important in driving the overall discretionary judgment and determining the weight of economic analysis in the final decision reached. There might be 'other considerations than the economic analysis, but we have to be clear that you have to have those other justifications or rationales if we are

¹⁰⁶ See Condition HH3.1 put in place by Ofcom. On 24 June 2004, Ofcom issued its final form Leased Lines Market Review ('the 2004 LLMR'). This was a substantial document, which included analyses of various markets and the extent of market power within them. Ofcom identified BT as having SMP in the AISBO market. It imposed Condition HH3, entitled 'Basis of Charges', as an SMP condition on BT as the Dominant Provider in that market.

¹⁰⁷ See Access Directive (n 48), Recital 6.

¹⁰⁸ Ofcom (2012), 'Disputes between each of Sky, TalkTalk, Virgin Media, Cable & Wireless and Verizon and BT regarding BT's charges for Ethernet services' available at: <https://www.ofcom.org.uk/_data/assets/pdf_file/0027/55539/ethernet_fd.pdf> (accessed 10 July 2019). See further *BT & Ors v OFCOM & Ors* [2017] EWCA Civ 330.

¹⁰⁹ See Access Directive (n 48), Recital 15.

¹¹⁰ PPC case [2011] CAT 5.

¹¹¹ See *BT & Ors v OFCOM & Ors* [2017] EWCA Civ 330, at para. 120.

doing it on that basis’ (Ofgem 1). Adequate procedures satisfying the requirements of democratic legitimacy, therefore, structure and constrain economic analysis.¹¹²

Human rights values, as these find their expression in the European Convention of Human Rights (‘the ECHR’), also constrain the use of economic evidence, particularly when the latter engage Article 1, Protocol 1 of the ECHR, which enshrines the right to property. For example, in setting the level of the energy price cap, an exercise of operational discretion that unavoidably interferes with the companies’ licences, Ofgem must strike a fair balance between the public interest, namely the protection of certain household consumers from unjustifiably high energy prices, and the rights of individual firms.¹¹³ Furthermore, Article 6 of the ECHR on the right to a fair trial and the related underlying values of procedural fairness influence the use of economic evidence in the exercise of enforcement discretion. According to Galligan, the primary purpose of procedural fairness is instrumental: to secure accurate outcomes.¹¹⁴ While this is certainly an important consideration, given that regulators are very much alive to the threat of appeal, they also strive to ensure that their decisions are substantively fair; that is that they reflect some ‘substantive notion of fairness in rationally pursuing regulatory goals’:¹¹⁵

The economic model is a support to our decision-making, it does not drive it entirely itself. There needs to be a good rational logic as to why we are doing things. That’s really important as good regulatory practice but also in making sure our decisions are robust legally because the last place you want to be is arguing the toss over bits of modelling code in court, which is... once you got to that stage you probably lost (Ofgem 2).

Indeed, one of the most significant legal constraints to the use of economic evidence in discretionary assessments is that of legal challenge in courts: ‘Legal review comes in to essentially everything we do and there is a fairly substantial internal legal review’ (Ofgem, Chief Economist). Utility regulators are in fact subject to quite a complex institutional architecture governing appeals. Not only do appeal routes against regulatory decisions vary depending on the nature of the issue involved, but they also differ significantly for each of the

¹¹² See e.g. Ofcom’s approach to enforcement available at: <<https://www.ofcom.org.uk/consultations-and-statements/category-2/ofcoms-approach-to-enforcement>>

¹¹³ See further *R (on the application of Infinis Plc) v Ofgem* [2011] EWHC 1873 (Admin) (Infinis), which introduced an important protection for companies in the form of a novel action for damages for unlawful state actions in violation of Convention rights. For an analysis see Mantzari (n 7) above.

¹¹⁴ Galligan (n 61) 6.

¹¹⁵ See Yeung (n 105) 42-43.

regulated sectors.¹¹⁶ Furthermore, a number of appeal bodies with dissimilar expertise in regulatory matters (e.g. the specialist CMA, the specialist Competition Appeal Tribunal-CAT and generalist High Court) and entrusted with varying standards of review (e.g. judicial review, statutory review and statutory appeal) have been involved over time in scrutinising regulatory decisions.¹¹⁷ Most notably, among all utility regulatory agencies, Ofcom is the regulator most frequently challenged in courts. On the one hand, this is due to the shorter regulatory period set for price controls in the sector (three years versus five years for the other two regulators); on the other hand, the multiplicity of market players active in the sector renders almost every regulatory decision susceptible to creating winners and losers. This in turn presents a strong incentive for companies to challenge Ofcom's decisions. Moreover, the majority of its decisions have been challenged on the merits before the specialist CAT. This should not be underestimated. Contrary to the ordinary courts, the CAT's bench combines legal and non-legal expertise in areas such as economics, business and accountancy, allowing thus the latter to exercise its self-proclaimed 'profound and rigorous scrutiny'¹¹⁸ over all aspects of Ofcom's decisions. As explained by one of the interviewees involved in the termination rates dispute case, when producing the body of economic analysis supporting the decisions, the threat of appeal was an important factor guiding the type of economic evidence produced:

We thought, well, this is an area where economic analysis should have something to bring to the table, and we commissioned some econometric analysis to try and get under the skin of the problem (...) what would happen to prices, what would happen to demand, because that seemed to be the obvious way to address this question, and what we found was... econometric analysis is very interesting, but ultimately was not definitive. It came up with a range of estimate for the elasticity of demand (...) the trouble was the range, the confidence interval around the parameters estimates were so big that... if this estimate was actually at one end of the range rather than the other, it kind of flips the result, so we were left with a situation where the econometrics did not give us anything we could rest a decision on, and in parallel to the econometric work we were having discussions with the industry and the industry [feared losing revenue] and because our econometric analysis didn't give us a kind of conclusive, opposite argument that we could say no, we don't think that's right and we have the actual

¹¹⁶ For instance, when sectoral regulators exercise concurrent powers with the CMA under the Competition Act 1998, there is a right of appeal on the merits to the CAT whose powers extend to substituting the decision for that of the regulator. In contrast, challenges against penalties and companies' licence conditions are heard by the generalist High Court on grounds similar to those of judicial review. Finally significant regulatory decisions for the investors and ultimately the consumers, such as price control decisions are appealed on the merits to the specialist CMA.

¹¹⁷ For an analysis see Mantzari (n 7).

¹¹⁸ See *Hutchison 3G v OFCOM* [2008] CAT 11, at para. 164; *Vodafone Ltd v OFCOM*, [2008] CAT 22, at para. 46; and *TalkTalk Telecom Group Plc v OFCOM* [2012] CAT 1 (TalkTalk case), at para. 71.

analytical evidence-based to back that up; we didn't feel we could push our argument further. (...) That was frustrating, but it was interesting to see the evolution of the...starting off from a presumption, let's do something, let's be bold and innovative and then over time going actually...mmm...let's roll back from that. (Ofcom 1)

Appeal on the merits can be seen as a means to clarify the wide statutory remit enjoyed by Ofcom and instil greater rigour in the regulatory decision-making process. But, Ofcom interviewees suggested that statutory appeals are being strategically deployed by market-players with deep pockets. Both affect the regulator's use of economic evidence. As one interviewee explained:

I don't think regulators like to be seen to try something that does not work and then they have to withdraw it. I am not entirely sure where that comes from, you'd have thought if we put in place a remedy that is not working then we should take it off but there is a reputational aspect to that. (Ofcom 3).

Such concerns as well as considerations relating to the length of an appeal and the high costs of continuing litigation in these fast-moving markets, recently led to a relegation of Ofcom's decision to a judicial review standard.¹¹⁹ In the future, the CMA and the CAT will both be required to review telecommunications appeals 'having regard to judicial review principles', rather than, as in the previous regime, 'on the merits'.

It would be superficial to attempt to summarise the intensity of review of regulatory decisions, which has been explored in detail in previous work.¹²⁰ But what is crucial for our purposes here is that the intensity of review does not only affect what regulatory agencies may do, but *who* within regulatory agencies might do it. As Adrian Vermeule illustrates, weak oversight of agency's rationality empowers non-lawyers within agencies, whereas strong rationality empowers lawyers.¹²¹ This seems to be confirmed when comparing Ofcom – a repeat player before the specialist CAT – to Ofwat, which has so far limited, albeit of significance, exposure to courts, with only one decision been appealed to the specialist CAT.¹²² This is owing to the fact that unlike its counterparts, Ofwat regulates a more consolidated, vertically integrated market. Unlike the telecoms and electricity and gas markets, the water

¹¹⁹ Section 87, Digital Economy Act 2017 (Commencement No 1) Regulations 2017 (2017 S.I. 675).

¹²⁰ See Mantzari (n 7) above.

¹²¹ A Vermeule, *Law's Abnegation* (Harvard University Press 2016) ch 6.

¹²² Ofwat's exposure to the UK CAT relates to the long and complicated Albion saga. Emphasis is placed primarily upon the following judgments: [2008] CAT 31 (hereinafter, 'Albion unfair pricing judgment'); [2006] CAT 23 (hereinafter 'Albion Main Judgment') [2006] CAT 36 ('Albion Further Judgment'); 2008 EWCA Civ 536 (hereinafter 'Albion Court of Appeal judgment'); [2009] CAT 12 (hereinafter 'Albion remedies').

industry has remained vertically integrated since it was privatised in the late 1980s. This has meant that, in most instances, within each company supply area, the same company has provided the entire service from source to tap (and the reverse on the wastewater side). Therefore, there are fewer players in the retail water sector compared to telecoms and energy and thus Ofwat emerges as the regulator least appealed in courts. Against this background, an interesting pattern emerges: The greater the threat of institutional constraints, such as that of an appeal against the regulator's decision, as in the case of Ofcom, and the more specialised the court in economics, as in the case of the CAT, the *weaker* the influence of economists in the final regulatory discretion. Economic authority and wisdom while relevant is not dispositive. Strong oversight of Ofcom's decision-making by the specialised CAT has empowered lawyers at the expense of economists. Moreover, it has also embedded a high degree of 'legal consciousness'¹²³ within the group of competition economics:

I think (the threat of appeal) does run through quite a lot of the work we do, because I know the lawyers are very alive to that threat of litigation (...) We are cautious about recognising the threat of litigation, that we do need to have a robust case for us to proceed, particularly if we are proceeding in the face of industry opposition (Ofcom 3).

All interviewees stressed the power lawyers enjoy at Ofcom during internal agency deliberations to veto policy decisions that are otherwise desirable and indeed legally supportable on the ground that they are legally incorrect. Perhaps, the most interesting account of the law's hegemony in the workings of Ofcom is offered from a senior economist at Ofwat who had also spent significant time at Ofcom:

Based on early impression here (at Ofwat), I think probably economics or decisions based purely on economics are more important, are given more relevance here at Ofwat than Ofcom (...). It seems to me that Ofwat is willing to take more risks, the message from the Chairman recently has been we may want to try new things, make mistakes, if you make mistakes we accept that it is a potential outcome. Ofcom is much more conservative, it tends to rely more on precedent, simply because I think it is a big organisation and it has been more subject to appeal than others. Ofcom is a bit more conservative (Ofwat 1).

Other than Ofwat's limited exposure to courts, another plausible explanation might relate to the rather nascent state of competition in the retail water market compared to that of telecoms. The interviewee, however, conceded that if Ofwat 'get challenged, it may change

¹²³ P Ewick and S Silbey, *The Common Place of Law: Stories From Everyday Life* (University of Chicago Press 1998).

its mind about that [i.e. relying strongly on economic analysis] (Ofwat 1). In fact, Ofwat has recently come to appreciate the threat of appeal and the impact of ongoing controls on the way economic analysis is deployed. A case in point is the Bristol Water case,¹²⁴ an appeal to the CMA against Ofwat's price control determination. Bristol Water was concerned about the difference between its business plan and Ofwat's final determination in relation to the appropriate level of wholesale costs required to deliver the agreed outcomes. Reducing bills to the degree proposed by Ofwat would have meant that the company would not have enough funds to invest and run its business. Bristol Water argued that the resilience duty required long-term planning to address supply challenges and in any event it needed to invest in a reservoir that would be invaluable in the case of a drought. At the heart of the dispute lied Ofwat's econometric modeling. Bristol water claimed that Ofwat had relied too much on the latter and did not consider whether the reduction suggested was achievable in practice. The CMA scrutinised in great detail the econometric evidence and modeling supporting Ofwat's decision and ultimately substituted these with its own model. It argued that Bristol Water should have been able to demonstrate that additional supplies would be needed and when they would be needed if resilience concerns were pressing. Although not frequently appealed in courts, Ofwat appears to be becoming aware of the threat of litigation. In the words of one interviewee:

There are lots of checks and balances in terms of when we make decisions; we can be held to account. Either companies can refer our decisions in the context of cases, to the CAT for judicial review or in cases of price determination to the CMA, so we are very alert to the fact that we are not making these decisions alone, without prospect of a review. What would a reasonable person interpret our duties, or whatever particular party, there's plenty of cases that tell you how what's reasonable would be interpreted. We have pushed the boundaries on some of those things, certainly when we have looked at certain cost measures or how to apply cost of capital in particular cases, we have said we think that the case law is not necessarily the right starting place, given what happens in our sector is different (Ofwat 3)

ii. Quasi -legal constraints

Quasi-legal constraints allow us to observe the influence of actors who are both internal to the regulatory agency, such as the Board, and external such as the relevant Ministry and the norms such actors produce.

¹²⁴ CMA (2015), 'Bristol Water plc price determination'.

All regulatory agencies are governed by corporate boards, which provide strategic direction to the organisations, each of which is supported by an office.¹²⁵ The Board usually comprises a Chair, and executive and non-executive members. Non-executive members bring experience and expertise from a range of backgrounds including industry, social policy, environmental work and finance. The organisational structure differs radically from that conceived under the original privatisation legislation, which vested individuals (e.g. the DG for Telecommunications) rather than Boards with the task of overseeing, directing and controlling the newly privatised industries.¹²⁶ The role of the Board as an important source of quasi-legal constraints to the use of economic analysis is prominent in the work of all regulatory agencies. This is owing to the fact that the Board is separated from the departments conducting economic analysis leaving thus greater room for a broader set of considerations, besides the merely economic ones, to influence the final regulatory judgment. As one interviewee explained:

There's a lot of good economics work at Ofcom, but I think the decision-makers (i.e. the Board) are a bit removed from the economics. Often what happens is that a direction is set at the very high level and then the work of the economists is more to justify the policy direction, the decision; it's not that economics shapes the decision so much (emphasis added), it may do indirectly if the original suggestion does not prove correct, but it's not the main driver, essentially (Ofwat 1).

A somewhat similar view was offered on Ofgem:

I think the role of the Authority, the Gas and Electricity Markets Authority, which is the ultimate decision-maker here, that body's role is to exercise judgement. There will be evidence that we present, with suitable caveats about the quality of it, but as far as we can we will give evidence on the costs and benefits of different options. Then there is an important role for GEMA in using its judgement based on the experience of its members that goes beyond the evidence that is presented. (Ofgem, Chief Economist)

The government through its role in making appointments to regulators' boards emerges as an important external actor. Most crucially, the relevant Ministry can exercise influence over the exercise of regulatory discretion through issuing guidance which signals the government's priorities and view of how legislation should be interpreted. For instance, Ofgem operates under the Social and Environmental Guidance, which reflects among others the Government's social and environmental energy goals with respect to fuel

¹²⁵ See e.g. Ofcom: www.ofcom.org.uk/about/how-ofcom-is-run/.

¹²⁶ For a comprehensive account see T Prosser, *Law and the Regulators* (Clarendon Press 1997); Telecommunications Act 1984, s 1.

poverty and energy consumption. The CMA investigation in the energy market brought into greater focus the influence of the Ministry on the regulatory decisions adopted and the deployment of economic expertise. The report stated that Ofgem's interventions in the retail energy market were based less on thorough economic analysis and more on concerns that the principals will intervene and take powers away from the regulator:

Two of Ofgem's most important decisions in recent years (neither of which we consider to have benefited customers)¹²⁷ were taken against a backdrop of DECC taking powers – or stating its readiness to take powers – to implement changes in primary legislation in the event that Ofgem did not act. We do not know how material this context was in influencing Ofgem, but the coincidence of DECC's and Ofgem's actions risked creating the perception of a lack of independence on the part of Ofgem.¹²⁸

Similarly, the Water Act 2014 created new powers under which the Secretary of State (i.e. the Department for Environment, Food and Rural Affairs-Defra) may publish a statement setting out strategic priorities and objectives for Ofwat to reflect in the way it regulates water services in England.¹²⁹ Together with the strategic policy statement, Ofwat is required to have regard to Defra's Social and Environmental Guidance, which seeks to provide the regulator with a steer on key environmental and social policies to which the Government expects it to contribute in carrying out its role when discharging its statutory functions.¹³⁰ Crucially, compared to other regulators, Ofwat operates under more direct guidance from the Government. As one interviewee observed: 'there is this sort of influence of the Ministry which you have to get buying into it; they have to issue a commencement order, guidelines; that is different from the other regulators' (Ofwat 1). Commencement orders are a form of Statutory Instrument designed to bring into force the whole or part of an Act of Parliament, which for some reason it is not desired to put into effect immediately upon Royal Assent. The gradual opening of the market to competition, deriving from the Water Act 2014, in fact depends on such commencement orders. For example, in Ofwat's recently published 2019 price review of the sector, the regulator

¹²⁷ These were the introduction of the simpler choices component of the RMR reforms in 2013 and of Standard Licence Condition 25A in 2009, prohibiting regional price discrimination.

¹²⁸ CMA (2016), "Energy Market Investigation. Final report". para 304.

¹²⁹ Defra (2017), 'The Government's Strategic Priorities and Objectives for Ofwat - Presented to Parliament pursuant to section 2A of the Water Industry Act 1991', available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/661803/sps-ofwat-2017.pdf

¹³⁰ Defra (2013), 'Defra's Social and Environmental Guidance to Ofwat' available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/243444/9780108512261.pdf.

envisages a bilateral market in water resources in which retailers will contract directly with upstream providers of water resources, with an access charge paid to the network business (competition in the market). However, such market depends on government activation of the relevant provisions of the Water Act.¹³¹

‘OFWAT is slightly different from other regulators in the sense that in some areas it needs approval by the Ministry in order to do things. It got approval to open up competition at the retail level for non-households, it has not got yet approval to do that for households. There have been attempts, some cost benefit analysis done, the government is not too convinced, it has postponed the decision. It’s basically driven by government. I think if it was for us we would extend it because that would work better in the bilateral market, retailers would have a bigger share of customers with stronger incentive to go and look for resources.’ (Ofwat 1)

This section highlighted the role of institutional constraints to the use of economic evidence. It first discussed the relative influence of legal constraints, such as considerations of ‘thin’ and ‘thick’ legality and the way these affect the translation of economic inputs to legal outputs. It then moved on to consider non-legal constraints relating to the organisational constraints. Perhaps, the most striking finding relates to the impact that the threat and intensity of review has on the use of economic evidence by regulators. The analysis revealed the following paradox: Economic evidence and analysis carries more weight in the decision-making process of the least appealed regulator, Ofwat, than in that of Ofcom, despite the latter being a repeat player before the specialist CAT. Despite the mature state of competition in the retail telecommunications market and the dedicated competition economics teams that exist at Ofcom, lawyers and the distinct logic of the ‘legal frame’ prevails over purely economic considerations so as to minimise the threat of appeal.

III. Ideational Constraints¹³²

‘Epistemic communities’ play a crucial role in scrutinising the use of economics and the regulators’ assessments, particularly when the latter exercise operational discretion. ‘Epistemic communities’ are ‘network[s] of professionals with recognised expertise and competence in a particular domain and an authoritative claim to policy-relevant knowledge

¹³¹ Ofwat (2017), Delivering Water 2020. Consulting on our Methodology for the 2019 Price Review.

¹³² This section is being redrafted.

within the domain or issue'.¹³³ They are typically providers of external expertise, as opposed to the expertise that resides with the regulatory agency, and may include academics and expert consultants. Their advice and support can, at times be requested by the regulator, when for example they provide additional evidence or cooperate in modelling exercises during the decision-making process:

We've obviously got economic expertise within the organisation but then there is quite an important role for economics outside, particularly in academia but also in other organizations, of providing a challenge function. My role is partly that, challenging things the rest of OFGEM is doing. Inevitably you can only get so far internal challenge, and you need that external challenge. It's always going to be quite uncomfortable, and some of the people who provide that external challenge are quite robust... but broadly it's a good thing. Compared to other jurisdictions I've seen there is a greater level of external challenge, which probably gets us to better decisions more quickly than it's the case in more consensual or internally focused regimes (Ofgem, Chief Economist).

An example comes from Ofgem, whose interventions in the retail energy market adopted following the Energy Supply Probe¹³⁴ in 2009 attracted wide criticism from the academic community of economists at the time of their introduction¹³⁵ and led to their subsequent withdrawal.

IV. Conclusion

Ever since the rise of the regulatory state and the subsequent liberalisation of essential services, competition and regulatory law scholarship have tended to assume that utility regulation is a largely technocratic enterprise. This is not completely unjustified given the pervasive role of economic evidence and analysis in the workings of regulatory authorities. As the preceding analysis illustrated, economic evidence informs a wide array of discretionary assessments, whether concerned with economic objectives and the promotion of

¹³³ P Haas, 'Introduction: Epistemic Communities and International Policy Coordination' (1992) 46(1) International Organisation 1, 3.

¹³⁴ Ofgem, 'Ofgem launches probe into energy supply markets' (21 February 2008) available at: <https://www.ofgem.gov.uk/publications-and-updates/ofgem-launches-probe-energy-supply-markets> (accessed 30 July 2018).

¹³⁵ S Littlechild, 'The Competition Assessment Framework for the Retail Energy Sector: Some Concerns about the Proposed Interpretation' (2014) European Competition Journal 181, 191. Hviid and Waddams Price (n 24); S Littlechild, 'Ofgem's Retail Choice: A Response to Ofgem's Consultation on SLC 25A' (28 May 2012), available at <https://www.ofgem.gov.uk/ofgempublications/39485/25astephen-littlechild-response.pdf>; C Waddams Price and M Zhu, 'Prices and Consumer Switching in the British Retail Electricity Market', Working Paper 13-12 (Centre for Competition Policy, 2013).

efficiency or the realisation of non-economic and non-competition law goals, such as that of affordability. Utility regulation has, therefore, long been perceived as the ‘Economists’ Kingdom’, where the ‘universalistic’ language of economics is employed; a style of talk that can be understood by those who have mastered economic theories, methods and tools. The complexity surrounding the use of economics in the exercise of discretion coupled with the arcane body of economically-informed discretionary assessments, has contributed to the latter being perceived as too ‘technical’ assessments, thus often concealing the important value judgments that they embody. Regrettably, English administrative law and regulation scholarship has rarely engaged with the essence of the work of regulatory agencies and has by and large ignored the important role of economists therein.

It was, therefore, the author’s intention to cast light on these neglected actors and to better understand how the use of economic evidence is transforming the way regulators understand and conceptualise the very idea of discretion. After all, traditional administrative law preoccupations on for example, the appropriate scope of review of regulatory decisions cannot be meaningfully addressed without a deeper, context-specific understanding of how regulators actually perceive and exercise their discretionary powers. In doing so, the author drew on both the competition law and regulation scholarship (which informs the substantive rules governing economic regulation) and the administrative law scholarship (which informs the procedural rules governing this area) in the hope of blending rather than bifurcating these two rich fertile sources of scholarship.

The novelty of the approach adopted in the article is that it departs from the court-centric understanding of the interrelationship between economic evidence and discretion, that has dominated the literature thus far, to focus instead on the perspective of those internal to the regulatory agencies. The court-centric approach is rife with categorical, artificial, most of the times, distinctions between economic assessments (often couched as questions of fact) and value judgments (deemed as matters of regulatory policy), which the courts draw in an attempt to tame discretion and its exercise.¹³⁶ When delving, however, on the perspective of those exercising discretion within the regulatory agencies it became apparent that the relationship between economic evidence and discretion is much broader than the judicial paradigm allowed us to envisage.

¹³⁶ See e.g. *Hutchison 3G v OFCOM* [2008] CAT 11, at para. 164; *Vodafone Ltd v OFCOM*, [2008] CAT 22, at para. 46; and *TalkTalk Telecom Group Plc v OFCOM* [2012] CAT 1 (TalkTalk case), at para. 71.

Economists, this article demonstrated, do take advantage of the use of economics in order to increase their discretionary space and make complex trade-offs between the diverse goals of the regulatory enterprise. This is especially the case when they exercise interpretive and operational discretion. But, contrary to the prevailing assumptions they are not always Kings, as the discrepancy between the conceptual and operational level of the analysis reveals. They are constrained by structural factors, such as the political and economic climate and broader societal concerns, institutional factors, such as the threat of appeal and the desire to produce substantively fair decisions, and by ideational factors, such as scrutiny by the academic community. The article sought to identify, examine and critique the nature and scope of such constraints that inform and shape the influence of economics in the exercise of discretion.

There are many benefits to understanding whether to what extent such constraints shape the decisions of economic regulators. First, we can better explain the on-going evolution of the British regulatory state, from a project largely fuelled by a strong market ideology and the concomitant New Public Management (economic) values of efficiency and effectiveness to one concerned with the promotion of non-economic objectives and the pursuit of ‘thick’ legality. Second, understanding the constraints faced by economists helps us assess and possibly reform the regulatory and/or adjudicatory process. If economists operate largely unconstrained when exercising interpretive discretion, as this article posits, then perhaps a more adversarial and less inquisitorial decision-making process might be necessitated. Such as reform would subject economic facts and arguments to a more detailed scrutiny and also allow for a greater representation of affected interests. And if legal constraints, such as the threat of appeal, dilute the significance of economic evidence in the regulatory decision-making process, then this may invite for a reconsideration of the scope and intensity of review; provided that one adheres to the objective of economically-informed regulatory decision-making. Finally, the issues discussed in this article open up avenues for further research on the relationship between the distinct rationalities exhibited by the disciplinary communities of lawyers and economists. Does and should legal understandings of reasonableness always prevail over the economists’ understandings of rationality, as demonstrated in this article? It is, indeed, the aspiration of the author that the analysis undertaken therein will trigger a dialogue between the disciplinary communities of lawyers and economists, but also between competition law and administrative law scholars, who have tended to talk past each other despite facing common interpretive challenges.