University of East Anglia

CENTRE FOR COMPETITION POLICY

Transactional fairness and pricing practices in consumer markets

Bruce Lyons
Centre for Competition Policy and School of Economics, University of East Anglia

Robert Sugden
Centre for Competition Policy and School of Economics, University of East Anglia

CCP Working Paper 21-03
This version: 28 January 2021

There is growing public concern about the 'unfairness' of many pricing practices that have become common in consumer, particularly digital, markets. Industrial and behavioural economists have developed theories that explain the conditions under which these practices are profitable for firms, and their implications for consumer welfare. We identify a mismatch between the welfare economic principles used in this theoretical work and the normative perspective in which these practices are viewed as unfair. We develop a concept of 'transactional fairness', grounded in the normative approach of Sugden's *Community of Advantage*, that is reflective of public concerns. Transactional fairness is complementary to established criteria of economic efficiency and distributional equity, but is based entirely on the relationship between individual buyer and seller. It establishes clear principles with realistic information requirements that are appropriate for compliance by firms. Regulation based on this approach can help to restore public faith in markets.

This replaces our paper previously circulated as CCP Working Paper 20-07: 'Transactional fairness and unfair price discrimination in consumer markets'

Contact Details:
Bruce Lyons b.lyons@uea.ac.uk
Robert Sugden r.sugden@uea.ac.uk

ISSN 1745-9648

Transactional fairness and pricing practices in consumer markets

Bruce Lyons* and Robert Sugden**

28 January 2021

* Centre for Competition Policy and School of Economics, University of East Anglia, Norwich, NR4 7TJ, UK

Email: b.lyons@uea.ac.uk

** Centre for Behavioural and Experimental Social Science, Centre for Competition Policy and School of Economics, University of East Anglia, Norwich, NR4 7TJ, UK

Email: r.sugden@uea.ac.uk

Abstract

There is growing public concern about the 'unfairness' of many pricing practices that have become common in consumer, particularly digital, markets. Industrial and behavioural economists have developed theories that explain the conditions under which these practices are profitable for firms, and their implications for consumer welfare. We identify a mismatch between the welfare economic principles used in this theoretical work and the normative perspective in which these practices are viewed as unfair. We develop a concept of 'transactional fairness', grounded in the normative approach of Sugden's *Community of Advantage*, that is reflective of public concerns. Transactional fairness is complementary to established criteria of economic efficiency and distributional equity, but is based entirely on the relationship between individual buyer and seller. It establishes clear principles with realistic information requirements that are appropriate for compliance by firms. Regulation based on this approach can help to restore public faith in markets.

Keywords: Price discrimination, unfair pricing, consumer law, competition policy

JEL Codes: D61, D63, K21, K23, L40, L51

Funding: This research was supported by the Economic and Social Research Council, grant number ES/P008976/1. Sugden's work was also partly funded by the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme, grant agreement No. 670103. We thank Tim Vickers and Rohan Grove for comments on earlier versions of the paper.

There is growing public concern, expressed in the media, in public debate and by consumer advocacy groups, about what is thought to be the 'unfairness' of many pricing practices that have become common in consumer markets. Undoubtedly, current economic and technological trends are facilitating new forms of price discrimination by firms. Among these trends are the increasing importance of personalised and digital services in the economy; the shift in selling strategies from sale to rental and from payment-per-item to subscription payment; the shift to direct debit payment and auto-renewal for ongoing service contracts; and developments in information technology that give firms access to data about the individual characteristics of their customers and allow firms to use this to set personalised prices. Many of the pricing practices that are emerging from these trends are widely perceived as unfair.

Legislators and regulators are conscious of this concern and are responding to it. In the US, it contributed to the political climate in which the 2010 Dodd-Frank Wall Street Reform and Consumer Protection Act was passed, setting up the Consumer Financial Protection Bureau to regulate retail financial markets.[1] The EU has recently standardised and codified consumer protection measures in the New Deal for EU Consumers (2020).[2] In the UK, regulatory agencies have responded with inquiries into unfair pricing practices and by introducing regulations designed to limit their use.[3]

---

[1] The FTC's interpretation of consumer unfairness has evolved only slowly and imprecisely by administrative decision and judicial review. In a 1980 policy statement, which draws on a Supreme Court decision and remains on their website, the FTC sets out three criteria for consumer unfairness: '(1) whether the practice injures consumers; (2) whether it violates established public policy; (3) whether it is unethical or unscrupulous'. In 1980, the FTC found the third criterion redundant because they defined unfairness only in terms of consumer injury or violation of public policy. Our paper can be seen as providing a separate understanding of this third criterion: unfairness as unethical behaviour.

[2] The European Commission's Enforcement and Modernisation Directive (EU) 2019/216, 17 January 2020, develops four earlier directives including the Unfair Commercial Practices Directive (2005/29/EC); the Consumer Rights Directive (2011/83/EU); the Unfair Contract Terms Directive (93/13/EEC); and the Price Indications Directive (98/6/EU).

[3] Market investigations have identified apparently 'unfair' pricing practices including local energy customers being offered higher tariffs than 'out of area' customers (Ofgem, 2009), automatic reversion to an unfavourable 'single variable tariff' at the end of fixed term energy contract (CMA 2016a), 'back-book' bank customers being left on unfavourable accounts that are no longer available to new customers (FCA, 2015; CMA 2016b), bundled contracts for 'mobile phone plus usage' that continue by default after the phone has been paid for and a SIM-only contract would be much cheaper (Ofcom 2019). More general investigations have highlighted how widespread these practices are becoming (CMA, 2018; FCA, 2018b), and have resulted in follow-on investigations and actions (FCA, 2019; Ofcom, 2020).

Industrial and behavioural economists have developed theories that explain the conditions under which various kinds of price discrimination are profitable for firms, their implications for consumer welfare, and the likely effects of different regulatory interventions.[4] Legal scholars such as Bar-Gill and Warren (2008) have found the common law inadequate for addressing such issues and advocate detailed regulation, particularly for financial markets. Others have noted that regulatory developments in consumer protection exacerbate a long-standing tension between consumer protection law and competition (or antitrust) law.[5] Wright (2012) argues that these two branches of law are now 'at war with one another': competition law is based on neoclassical price theory, which assumes that consumers' choices reveal consistent and welfare-relevant preferences, while the behavioural economics that is now being used in consumer protection rejects that assumption.[6]

In our paper, we propose an approach that can lessen this tension. Our premise is that there is a mismatch between, on the one hand, the principles on which both neoclassical and behavioural welfare analyses are based and, on the other, the normative perspective in which the pricing practices in question are viewed as unfair. As a result, when regulators or courts look to economics for guidance about fair pricing, they struggle to reconcile two fundamentally different normative approaches. Our paper is an attempt to resolve this problem by formulating a concept of 'transactional fairness' that can represent the intuitive sense of fairness that is invoked in public debate, and that can be used by regulators, courts and in economic analysis. We present transactional fairness as a normative standard that is distinct from, but complementary with, conventional welfare analysis. Crucially, the definition of transactional fairness neither presupposes nor denies the empirical validity of rational choice theory.

---

[4] This literature is discussed below.

[5] This tension was evident forty years ago in a special issue of *The Journal of Law and Economics*. Beales, Craswell and Salop (1981) highlighted how, in the US, the provision of consumer information had been the bedrock of Congressional statute law, regulation by the FTC, and Supreme Court decisions. However, they observed that 'the law has yet to develop a satisfactory set of principles determining *when* the government ought to respond to consumer information problems and *how* it ought to do so' (p.494). Schmalensee (1981) suggested that this weakness was because, in the field of consumer protection, economics had yet to develop empirically supported microeconomic models of the kind that the industrial organisation literature was developing to implement competition law.

[6] In this war, Wright (2012, pp. 2267–2268) sides with 'antitrust agencies and courts' in their 'irreversible commitment' to price theory. He does not consider what that commitment would imply if in fact consumer choices systematically contravened the assumptions of revealed preference theory – perhaps because of the (we believe, excessive) scepticism about behavioural economics expressed in Wright and Ginsburg (2012).

We begin with two familiar examples of price discrimination that illustrate the mismatch we have described. Here, and elsewhere in the paper, we follow a conventional practice in the economic literature by distinguishing between *savvy* and *naïve* consumers ('savvies' and 'naïves' for short). Savvies are rational in the sense of neoclassical theory: they act on stable, internally consistent and context-independent preferences – for short, preferences that are *integrated* – and on correct beliefs about relevant economic variables, including search opportunities and prevailing business practices. Naïves fall short of these standards in some way, for example by lacking essential information, holding false beliefs, or being susceptible to psychological influences that neoclassical theory assumes away. Many allegedly unfair pricing practices discriminate between savvies and naïves.

Our first example is the practice that leads to *bill shock*. A firm offers a service contract with a below-cost or even zero price for its core component, along with a schedule of charges, well in excess of cost, for add-ons that consumers can incur while using the service and will be billed for afterwards. Familiar examples include late payment fees, bank charges for unarranged overdrafts, and high unit prices for mobile phone usage above some threshold. Savvies avoid the add-ons and benefit from the low headline prices. Naïves incur the add-ons, either by signing up to contracts without recognising the significance of the small print or by inattention afterwards.

Our second example is the *loyalty penalty*. Firms offer service contracts that are subject to periodic renewal; at each renewal, the firm quotes a new price. Firms attract new customers by offering low initial prices. The longer a customer has stayed with a firm, the higher the price she pays. A common strategy is to increase a customer's price at each renewal by proportionately more than the increase in the firm's costs, tailoring each increase so that it is not obviously excessive ('price walking'). Savvies notice the price increases and switch frequently between suppliers. Naïves do not notice and are penalised for their 'loyalty' to their original supplier.

In these examples, price discrimination is based on differences in consumers' information about, understanding of, or attention to firms' pricing strategies. Because of this, the textbook result that price discrimination cannot occur in a competitive market does not apply. In a market with no fixed costs or barriers to entry, competition between firms can induce an equilibrium in which firms operate at minimum cost and earn only normal profit, but there is still price discrimination between naïves and savvies. In the bill shock case, firms compete to offer low headline prices for the core service, seeking to attract naïve customers

who will incur add-on charges. In the loyalty penalty case, firms compete to offer low-price introductory offers, seeking to attract naïve customers who will continue to renew their contracts as the price increases. In both cases, savvies are cross-subsidised by naïves (Gabaix and Laibson (2006); Armstrong and Vickers, 2012; Armstrong, 2015; Grubb, 2015).

Such pricing practices are seen by many consumers as unfair. For example, a large-scale telephone survey of UK motor and home insurance customers, commissioned by the Financial Conduct Authority (FCA), asked respondents to say whether the following was fair or unfair: 'Mr Smith has been with the same insurance firm for 5 years and pays £500 for his buildings insurance. Mr Jones, whose house is identical, asks Mr Smith's insurance provider for a quotation, and is quoted £300 for the same policy'. Only 9 per cent of respondents thought this 'fair' (FCA, 2019b).[7] Intuitively, it is easy to understand how this kind of discrimination can be seen as unfair, but (as we will explain in more detail later) it is more difficult to represent its unfairness within the theoretical framework of normative economics.

One might ask why this is a problem for economics. If economics has its own coherent methods of normative analysis, and if, according to an analysis conducted using those methods, there is nothing objectionable about some pricing strategy that the general public regards as unfair, isn't the problem simply that the general public has insufficient understanding of economics? We believe that such a response would be inadequate, for (at least) the following reasons.

First, we conjecture that many professional economists – including specialists in welfare economics and industrial organisation – will think that the practices we have described *are* unfair. If we are right about this, the problem must surely be more than a misunderstanding of economics.

Second, much work in economics is framed as leading to 'policy implications' – as giving advice to market regulators, courts and economic policy-makers. In a democratic society, regulators, judges and policy-makers are not benevolent autocrats, free to act on advice from whoever they choose to consult; ultimately they are constrained by, and so need to take account of, citizens' judgements about economic matters. An essential first step in

[7] This was not because respondents were unaware of pricing strategies in the insurance market: 89 per cent of respondents agreed with the statement 'Typically, first time customers receive a lower price'. Nor did respondents think it unfair that search was rewarded: 80 per cent thought it fair that 'Alex gets her insurance renewal letter. She shops around using a price comparison website and gets an offer from a different insurance provider and saves £75.'

doing this is to understand and characterise those judgements. We believe there should be a default presumption that widely held judgements about economic fairness and unfairness are intelligible within some reasonably coherent normative framework that many citizens implicitly endorse. Identifying such a framework, if it exists, should be seen as an issue on the agenda of economics.

Third, if market regulation is to be effective, it has to be based on general principles that are stated publicly and are commonly understood by actors in the economy: it should not be an unsystematic collection of case-by-case ex post decisions. In the context of price discrimination, firms need to know in advance the principles by which regulators determine which practices are permissible, and consumers need to know in advance what they can and cannot expect of firms. If regulation or court decisions will in fact be influenced by citizens' conceptions of fairness, those conceptions need to be codified.

Fourth, if a market economy is to be politically sustainable, consumers must have a general sense that the market treats them fairly. Since most consumers' main contact with the market is through firms, it is important that there is a publicly accepted standard of fair business behaviour to which firms can be seen to comply, or be held to account for violating. If a firm is able to continue to use pricing practices that are generally perceived as unfair, this is liable to undermine trust, not only in that particular firm, but also more generally in markets, regulators and the market system. Effects of this kind are particularly dangerous in markets such as financial services, where trust is fundamental to the nature of the product.

Our final reason goes deeper. The normative assumptions used in current economic analysis are not immutable. Philosophically and methodologically, they reflect the influences of utilitarianism and rational choice theory on modern welfare economics. They support a view of economic institutions as mechanisms through which unintended social outcomes are generated through the interactions of rationally self-interested individuals, and a view of public policy-making as a problem of mechanism design whose objective is the maximisation of social welfare. But other ways of understanding economic life have equally deep intellectual roots. Adam Smith's (1776/ 1976: 456) metaphor of the 'invisible hand' that leads self-interested merchants to promote the interests of society is often (and not unreasonably) cited as a precursor of the First Fundamental Theorem of welfare economics. But in another famous passage, Smith characterises the market in terms of individual freedom – as 'the obvious and simple system of natural liberty' in which every man 'is left perfectly free to pursue his own interest in his own way' (p. 687). Ideas of fairness that are currently

seen as non-economic might be more compatible with an approach to normative economics that emphasises freedom and opportunity.

Our objective is to characterise a concept of fairness, grounded in normative principles of consumer freedom and opportunity, that can represent intuitions that underlie public concerns about many forms of 'unfair' price discrimination. We must emphasise that we are not proposing this concept as a standard that can replace the conventional economic standards of efficiency and distributional equality: we are presenting it as complementary with those standards – as a significant and distinct normative dimension.

In Section 1, we identify features of standard economic approaches to normative questions – features common to both neoclassical and behavioural economics – that fail to take account of important aspects of fairness. In Section 2, we introduce an alternative approach, based on a principle of 'mutual benefit', that has been proposed by Sugden (2018) and which will underpin our analysis. In Sections 3–5, we formulate and defend a concept of transactional fairness based on clear principles and with realistic information requirements that are appropriate for compliance by firms. In Section 6, we discuss the implications of this concept for market regulation. We argue that our approach can help to restore public faith in markets without either deterring the emergence of new business models that provide opportunities for mutual benefit or requiring frequent ad hoc fire-fighting interventions by regulators.

1. Standard approaches in neoclassical and behavioural welfare economics

In both neoclassical and behavioural economics, the standard normative approach to economic appraisal uses the yardstick of *economic efficiency* or *social welfare*. In principle, this involves identifying all those affected by the outcome of a policy or business practice, and assessing the impact on each individual. Given the assumption that each individual has integrated preferences over relevant outcomes, these impacts can be measured in monetary units as compensating or equivalent variations. The net sum of these impacts is the effect of the policy or practice on economic efficiency. The same sum is often also treated as an approximate measure of the effect on social welfare. Alternatively, the effect on social welfare is measured as a weighted sum of the effects on individuals, with weights that may be different for different groups of people, classified (for example) by income or need. Such weights can be interpreted as publicly approved normative judgements, or as proxies for the marginal utility of income, interpreted in classical utilitarian terms. Market regulation is

often based on a simpler *consumer welfare* standard, which sums unweighted effects on consumers but gives zero weight to effects on corporate profits. This approach may be justified on the grounds that the primary role of regulatory agencies is to ensure that markets work well for consumers; it is the responsibility of firms to work out how to make profit within the rules set by regulators and legislators.[8]

The assumption that consumers have integrated preferences can lead to difficulties in assessing the welfare of naïve consumers. In mainstream economic theory, an individual's preferences are assumed (or, in some versions of the theory, defined) to be revealed in her decision-making behaviour, and the consistency properties that are attributed to those preferences are interpreted as principles of rationality. By definition, however, a naïve consumer is one whose decisions are *not* based on complete information, or are *not* fully rational. In the case of incomplete information, there is a long-standing practice in the industrial organisation literature of using models in which naïves have integrated preferences that would be revealed in decisions made with complete information; what counts as 'complete' information is specified by the nature of the model (for example, Diamond, 1971; Salop and Stiglitz, 1977; Varian, 1980). In normative versions of behavioural economics, it is common to extend this practice by assuming that a naïve individual has integrated *latent* (or 'true') preferences that would be revealed in her decisions if she had complete information and was not subject to 'biases' or 'errors' attributable to deficiencies of cognitive capacity, attention or self-control (for example, Sunstein and Thaler, 2003; Camerer et al., 2003; Kőszegi and Rabin, 2007; Bershears et al., 2008).[9] A related approach infers preferences solely from individual choice behaviour, but ignores data from choices made in situations in which psychological effects induce 'incorrect perceptions' of the choice set (Bernheim, 2016).

It would be in accord with these analyses of naïve consumer behaviour to define a firm's behaviour as unfair if it activates psychological biases in a way that induces its customers to act contrary to their true preferences. This idea is central to the EU's 2005

[8] This is reflected in the UK Competition and Markets Authority's primary duty 'to promote competition… for the benefit of consumers' (Enterprise and Regulatory Reform Act 2013). The UK sector regulators have similarly consumer-oriented duties.

[9] Camerer et al. (2003: 1218) draw an explicit analogy between behavioural economics and the economics of information. They argue that from the 1930s, economic theory was successfully extended by relaxing first the assumption of perfect competition and then the assumption of perfect information. Relaxing the assumption of perfect rationality is 'a logical next step'.

Unfair Commercial Practices Directive.[10] According to this Directive, one condition that can make a commercial practice unfair is that the practice 'materially distorts' the behaviour of an 'average consumer' in relation to the product of the relevant firm; 'material distortion' is defined as 'using a commercial practice to appreciably impair the consumer's ability to make an informed decision, thereby causing the consumer to take a transactional decision that he would not have taken otherwise' (European Union, 2005: Articles 2, 5.2).[11] This condition has some similarities with a condition that will feature in our proposed definition of transactional fairness. But notice the implicit assumption in the 'thereby …' clause that it is possible to predict the decisions that consumers would have taken in the absence of some allegedly unfair commercial practice, presumably by identifying settings in which consumers' decision-making abilities are *not* impaired. In other words, the Directive is invoking a model of latent preference and bias, and assuming that latent preferences can be identified by screening out the effects of bias.

However, the claim that naïve choices can be explained by the interaction of integrated latent preferences and psychological biases is questionable. Since this issue will turn out to be significant for our analysis of transactional fairness, we consider it briefly here. Infante et al. (2016) have argued that the concept of latent preference lacks psychological foundations and is explanatorily redundant.[12] We explain this critique in relation to a well known contribution to behavioural consumer theory – Bordalo et al.'s (2013) model of the effects of 'salience' on consumer choice.[13]

This model builds on the behavioural finding that, when valuing any good, individuals tend to give most attention to those attributes on which it stands out relative to the goods with which it is being compared. In Bordalo et al.'s leading example, a consumer chooses between a high-price, high-quality French wine and a low-price, low-quality Australian wine. At 'supermarket' prices of $20 and $10 respectively, the price difference is highly salient; at 'restaurant' prices of $50 and $40, price is less salient and quality is more salient. Bordalo et al. model the latent utility that a consumer derives from a good as a linear function of the

[10] This Directive, including the relevant wording, was translated into UK law by the Consumer Protection from Unfair Trading Regulations 2008.

[11] To be unfair, a practice must also be 'contrary to the requirements of professional diligence' (Article 5.2).

[12] Related critiques of this concept are developed by Berg and Gigerenzer (2010), Wright and Ginsburg (2012: 1060–1062), and Rizzo and Whitman (2020: 46–52).

[13] The following discussion of Bordalo et al.'s model is based on Sugden (2015).

quantities of the good's positive and negative attributes (quality and price in the example). A 'rational' consumer maximises latent utility. A 'salient thinker' (that is, naïve consumer) maximises a function in which the weight attached to each attribute in the latent function is 'distorted' in a way that reflects its relative salience. This model can explain the pattern in the choices of the wine buyer in the example, and a range of related anomalies in consumer choice. But, unless special assumptions are used to calibrate the model, it cannot tell us which (if either) of the supermarket or restaurant preferences is rational and which is distorted.[14] The underlying psychological theory proposes that individuals give more attention to attributes that are more salient; it does not say – and has no need to say – what is the *correct* distribution of attention between them. The salience-dependence of choice is an empirical concept, but correctness is not.

The approaches to normative economics described above – the approaches that are most commonly used in neoclassical *and* behavioural economics – share three significant features. First, they are *synoptic*: they make normative judgements from the viewpoint of a single social planner or ethical observer, looking at society as if from outside. Second, they are *consequentialist*: normative judgements are about the outcomes that individuals experience, interpreted without reference to the procedures by which those outcomes came about. Third, they (even the approaches used in behavioural economics) are ultimately *based on rational choice theory*: effects on the welfare of individuals are defined in relation to preferences that are (or would be) revealed in rational choice, and the social planner or ethical observer is understood as a rational maximiser of social or consumer welfare. These features impose constraints on the kinds of fairness and unfairness that can be taken into account.

Take the case of bill shock in a competitive market with no fixed costs. In equilibrium, firms produce at minimum average cost and earn only normal profit. The profits that firms earn from naïves are competed away in the loss-leading headline prices from which savvies benefit. Suppose for simplicity that the incremental cost to a firm of supplying the relevant add-on is zero, that naïves do not anticipate the possibility of incurring this add-on,

[14] Bordalo et al. specify their model so that a consumer's 'rational' preferences are revealed in tasks which elicit her willingness to pay for a single good, considered in isolation. They do not explain why willingness-to-pay tasks have this special status. Perhaps their thought is that, if such a task is presented in the simplest possible form, there can be no external sources of bias. But the accumulated evidence suggests that when valuation tasks are presented in apparently context-free form, responses are often stochastically unstable and influenced by irrelevant cues (for example, Ariely et al., 2003).

and that attentive customers can evade the add-on at no cost to themselves.[15] Under these conditions, both savvies and naïves have the ex ante perception that they are buying only the core service and paying only the headline price; ex post, it is as if the firm's loss from selling below cost is made up by an arbitrary levy on naïves. Apart from the possible inefficiency that results from overconsumption of the underpriced core service by both types of consumer – an effect that seems orthogonal to concerns about fairness – the effect of the price discrimination is a pure transfer from naïves to savvies. In a standard economic analysis, an evaluation of this effect would be a distributional judgement based on the relative income of savvies and naïves. If naïves are predominantly cash-rich, time-poor consumers who can afford to be inattentive to add-on prices, that transfer might be judged an *increase* in welfare.

Even if naïves are distinguished by their cognitive 'vulnerability', for example, due to age, infirmity or lack of financial understanding, it is not obvious that effects on them should be given greater distributional weight than effects on savvies. Suppose that Arthur is an 85-year-old widower with a good index-linked pension but declining mental powers, and that Bella is a 30-year old low-income single mother who takes care when using her bank account. As a result of his poor memory, Arthur incurs high add-on bank charges from which Bella ultimately benefits. Viewed in a consequentialist perspective, the effect is a small transfer of income from someone for whom the marginal utility of income is relatively low to someone for whom it is higher. But one might still think that, by taking advantage of his vulnerability, Arthur's bank has treated him unfairly.

To provide context for the loyalty penalty, consider some relevant results from one-period models of price search and price dispersion. Price competition can be effective only if consumers seek out low prices, and consumers would have no reason to compare firms' offers if they already knew that all offers were exactly the same. In realistic models of price competition, some price dispersion persists in equilibrium. The extent of this dispersion depends on consumers' trade-offs between the costs of searching for low prices and the benefits of finding them. On average, consumers who are more willing to search pay lower prices, but those who search more confer a positive externality of lower prices on those who search less (for example, Diamond, 1971; Salop and Stiglitz, 1977; Stiglitz, 1979; Varian, 1980). Consider two extensions. First, a regulation that imposes a price cap as a means of reducing price dispersion may, by reducing the incentive to search, increase prices at the

[15] In fact, many bank customers incur overdraft fees through inattention when they have adequate balances in other accounts: see, for example, Stango and Zinmann (2014).

lower end of the distribution and so, under some conditions, reduce expected welfare for *all* consumers (Armstrong, Vickers and Zhou, 2009). Second, if firms can identify and discriminate between savvy consumers who search and naïve consumers who do not, then each firm has the incentive to set a low price for savvies and a high price for naïves, which removes the positive search externality but may still reduce average price paid and raise average welfare (Armstrong, 2015).[16]

Next, consider the implications of these results for an analysis of the loyalty penalty. Consumers who are already in the market have a default provider. A firm's client base may include both savvy and naïve consumers. A 'loyalty penalty' pricing strategy for the firm would be to offer existing clients a high price (but not so high as to induce search by naïves) and offer a harder to find lower price which can only be discovered by savvy clients (including its own and those of rival firms). As compared with firms offering a single price, this may be a pro-competitive strategy and reduce average or even all prices (Corts, 1998; Stole, 2007, sec. 3.4). Nevertheless, inasmuch as the firm is 'hiding' offers for which its naïve clients are eligible, one might still agree with the survey respondents who thought that Mr Smith's insurance provider had treated him unfairly.

2. Mutual benefit as an ethical standard

Our analysis of transactional fairness builds on an approach to normative economics that is neither synoptic nor consequentialist, and is not based on rational choice theory – an approach developed by Sugden and co-authors (Sugden, 2004, 2018; McQuillin and Sugden, 2012; Bruni and Sugden, 2013; Infante et al, 2016).

As historical background: in the early 2000s, behavioural economists began to recognise the need to develop a form of normative analysis that was consistent with behavioural findings. The now-standard method of defining welfare in terms of latent preferences, described in Section 1, was proposed in two influential manifestos. Sunstein and Thaler (2003) linked this method with the proposal that public policy should be based on 'libertarian paternalism': naïve individuals should be 'nudged' towards behaviour that would satisfy their latent preferences, but without being subjected to paternalistic restrictions on

[16] Such price discrimination may be implemented, at least approximately, by setting a higher price in shops than on the internet (if that is how the savvy search), or by offering a range of complex tariffs out of which only the savvy can identify the single low price, or by using individualised data on search history to set personalised prices.

choice. Camerer et al. (2003) proposed 'asymmetric paternalism', based on a (not fully defined) behavioural form of cost-benefit analysis that would take account both of the benefits that paternalistic regulations confer on naïves and the costs they impose on savvies. Contemporaneously, Sugden (2004) proposed a radically different approach.

The key idea in this approach is to focus on individuals' *opportunities* – represented by their choice sets – rather than on how far their preferences are satisfied by the choices they make from those sets. Because each individual's choice set can be defined objectively, without reference to her preferences or psychology, a normative criterion that is defined in terms of properties of individuals' choice sets need not be disabled by the findings of behavioural economics. Sugden (2004) formulates an opportunity-based analogue of the Pareto-optimality condition of neoclassical welfare economics. Roughly speaking, this Opportunity Criterion requires that individuals' choice sets are such that every group of individuals has the collective opportunity to make any feasible transaction amongst themselves that they might conceivably find mutually acceptable. The only 'acceptability' assumption is that individuals attach positive value to the medium of exchange (that is, prefer to buy at low prices and to sell at high prices).

It can be shown that every competitive equilibrium of an exchange economy – including 'storage' economies in which exchange takes place over a sequence of time periods – satisfies the Opportunity Criterion (Sugden, 2004; McQuillin and Sugden, 2012). McQuillin and Sugden (2012: 630–631) say that a person is 'willing to pay for' a good if (at the moment of decision) she is willing to give up what would induce others to supply it. In this sense, their result shows that a competitive market 'gives each person, rational or irrational, what she wants and is willing to pay for, when she wants it and is willing to pay for it'.

Why might this be viewed as a *desirable* property of the market, even if what an individual wants at the moment of decision is not an implication of integrated preferences? Sugden does not claim that this property can be seen as desirable from the synoptic viewpoint of a social planner, seeking to maximise some measure of social welfare that integrates the welfares of different individuals. The claim is that it can be seen as desirable *by each individual separately*, thinking reflectively about what *she* wants from an economic system while recognising that the properties of that system must be justified to everyone. This normative viewpoint is the 'contractarian perspective' (Sugden, 2018: 29–52). From the individual's viewpoint, the opportunities provided by the market need not be desired as the

means of maximising some measure of her own welfare that integrates the consequences of different transactions: the desirability of each transaction lies in the fact that she desires it at the time and in the context that it takes place.

Viewed in the contractarian perspective, market transactions can be seen as voluntary interactions between individuals who are cooperating for mutual benefit. In this context, behaving ethically is playing one's fair part in a cooperative scheme. Sugden (2018: 256–281) expresses this ethic of cooperation in the following principle:

> *Principle of Mutual Benefit*. When participating with others in a voluntary interaction, and for as long as others' behaviour in that interaction is consistent with this very principle, behave in such a way that the other participants are able to satisfy normal expectations about the consequences of the interaction for them.

The Principle of Mutual Benefit applies to voluntary interactions in general, but market transactions are a paradigm case.

The concept of *normal expectations* applies to a given class of similar interactions that take place recurrently within some population. Normal expectations are beliefs that: (i) are at least approximately correct as a description of actual behaviour in the population, (ii) most members of the population can reasonably infer from their own experience and information, and (iii) are in fact held by most members of the population. In terms of a definition that is widely used in the theory of social norms, patterns of behaviour that are the objects of normal expectations are *descriptive norms* (Cialdini, Reno and Kallgreeen, 1990; Bicchieri, 2006).

The idea behind the Principle of Mutual Benefit is that if some class of interactions is voluntary (that is, each episode of interaction takes place only with the consent of all participants) and if there are normal expectations about how people behave within such interactions (the *practice* for that class of interactions), then your choosing to participate in an episode of interaction is a signal that, conditional on the others also choosing to participate: (i) you intend to conform to the practice; (ii) you expect the other participants to conform; (iii) you expect to benefit from the interaction; and (iv) you expect the others to benefit. By virtue of these properties of participation decisions, the existence of a practice is an opportunity for mutual benefit. By conforming to a practice in a specific episode, you play your part in a cooperative activity that involves you and the other participants. At the same time, you are also playing your part in a wider scheme of cooperation: by conforming to a

practice, you reinforce the common expectation that it will be followed, and so help to sustain opportunities for others to achieve mutual benefit by following it.

Notice that the Principle of Mutual Benefit never requires anyone to participate in a transaction from which she does not expect to gain. (It does not require anyone to participate in *any* transaction.) However, an individual who has chosen to participate in a transaction is required to conform to the practice for that transaction, even if it would be in her self-interest to deviate. Thus, the principle requires adherence to practices of trust that are the normal expectation in that context – for example, the expectation that a buyer will pay the agreed price after the delivery of a good, or expectations about how a price will be adjusted when unforeseen contingencies occur.

If the Principle of Mutual Benefit is understood as the ethical underpinning for a network of opportunities for voluntary interactions, it has a natural counterpart in a principle that forbids each individual from obstructing other individuals' opportunities to cooperate with one another. For example, suppose that Annie wants to sell her car and that Bill and Charlie are potential buyers. If Bill makes a deal with Annie after having obstructed Charlie's efforts to make a bid, Annie's participation in that deal is not genuinely voluntary. An ethic of market behaviour that is based on the idea of cooperation for mutual benefit should proscribe anti-competitive actions that are intended to foreclose other agents' opportunities to transact with one another. Thus, Bruni and Sugden (2013: 156–157) include 'acceptance of competition' in a list of 'market virtues' derived from the principle that the *raison d'être* of the market is mutual benefit. Although many anti-competitive practices by firms – for example, collusion, dominance-creating mergers, investment strategies to disadvantage or exclude rivals – do not necessarily involve issues of transactional fairness between firms and consumers, some such practices do, because they work by imposing conditions on retail transactions which restrict consumers' opportunities to investigate the offers of rival firms.

3. The scope of transactional fairness

Transactional fairness is a property of individual transactions and not, as efficiency and income distribution are, properties of an economic system as a whole. A *transaction* is an economic interaction between specific *participants* (who may be individuals or firms), each of whom enters that interaction voluntarily. Considering any given transaction, the question that a concept of transactional fairness has to answer is: '*In this transaction, is each*

participant treating each other participant fairly?' The formulation of this question immediately imposes restrictions on what can be relevant for assessments of transactional fairness. In this section, we formulate these restrictions as *scope conditions*. Although our main concern is with whether firms' pricing practices treat customers fairly, our discussion in this section will apply to transactional fairness in general. The concept of transactional fairness can apply to any participant in any transaction. (For example, one can ask whether a customer treats a firm fairly. Consider a consumer who buys an item of clothing on approval, wears it for one special occasion and then returns it as if unworn.)

We propose the following five scope conditions:

3.1. Irrelevance of externalities

Because transactional fairness is a property of the relationship between the participants to a transaction, external effects of that transaction on non-participants have no bearing on its fairness. Thus, in our example of bill shock, the benefit that Bella derives from Arthur's add-on bank charges is not relevant for an assessment of the fairness of the transaction between Arthur and his bank. Similarly, it might be a fact that, by increasing incentives to search, price walking tends to reduce the overall level of prices in the market for home insurance; but that fact would not be relevant to an assessment of the fairness of the transaction between Mr Smith and his insurance provider.

However, behaviour outside a particular transaction can be relevant for determining what kinds of behaviour count as fair in that transaction inasmuch as they affect normal expectations. For example, one might reasonably claim that the standards of fairness that apply to transactions between buyers and sellers at a car-boot sale or flea market are laxer than those that apply to transactions between a department store and its customers. Such a claim, as we interpret it, rests on the idea that standards of fairness are social norms, and that social norms can be context-dependent. Normal expectations about the behaviour of sellers in car-boot sales are descriptive of the behaviour of such sellers *in general*, but they affect what a buyer can expect in any *specific* car-boot transaction.

3.2. No requirement to incur losses

The ethical foundation of our concept of transactional fairness is a view of market transactions as cooperative. Thus, transactional fairness should not require individuals or

firms to enter transactions from which they do not expect to gain relative to their outside options.

In this respect, transactional fairness is different from most of the concepts of pro-sociality that are represented in social preference theory. In the simplest such models, an individual with social preferences is altruistic – that is, willing to make trade-offs between personal benefits and benefits to other people (for example, Becker, 1974). In more complex models, individuals are represented as having preferences for reductions in inequality between themselves and others (for example, Fehr and Schmidt, 1999; Bolton and Ockenfels, 2000), for increases in economic efficiency (for example, Charness and Rabin, 2002), for confirmations of other people's expectations of benefit (for example, Battigalli and Dufwenberg, 2007), or for the rewarding or punishing of other people for their kindness or unkindness, 'kindness' being interpreted as forgoing one's own benefits to benefit others (for example, Rabin, 1993). In all these models, pro-sociality is represented as a willingness to make some form of self-sacrifice. But self-sacrifice is inappropriate as a foundation for market ethics.

In the context of the market, agents treat one another fairly *within interactions that are directed at mutual benefit*; principles of transactional fairness impose constraints on the ways in which agents may properly seek to benefit themselves in such interactions. Thus, for example, bill-shock add-ons and loyalty penalties might be judged to breach those constraints, but the complaint against a firm that uses these pricing strategies is *not* that is failing to be altruistic towards its customers: fairness is expected, but altruism is not.

We recognise that there are exceptional situations in which a firm might be judged to have a moral obligation to engage in loss-making transactions. For example, one might think that an airline or train operating company ought to carry disabled passengers at its normal fares while providing them with the additional assistance they need, or that it ought to waive cost-recovering rebooking charges for customers who need to change their plans because of family emergencies. But we maintain that these are obligations of humanity or decency, not of transactional fairness.

3.3. Irrelevance of the distribution of cooperative surplus

If market transactions are viewed as cooperation for mutual benefit, it might seem natural to think that a concept of transactional fairness should take account of the distribution of gains from trade – for example, by requiring that the parties to a transaction receive approximately

equal shares of this *cooperative surplus*. However, such distributional requirements are not compatible with the workings of a market economy in which individuals can choose between alternative trading partners.

For example, consider the market for some service that is supplied by (almost) identical small firms in monopolistically competitive equilibrium. Suppose these firms have significant fixed costs but produce at zero marginal cost, all charging the same average-cost price p. Annie wants to buy one unit of the service and has a reservation price greater than p. She is almost indifferent between buying from Bill's firm and buying from Charlie's, but has a marginal preference for Bill's and so buys from him. In trading with Annie, Bill gains p (he incurs no opportunity cost in meeting Annie's demand), while Annie gains almost nothing relative to her outside option (buying from Charlie). Thus, Bill appropriates almost all the cooperative surplus. Does this imply that Bill has treated Annie unfairly? We maintain that it does not. The unequal distribution of the surplus reflects an asymmetry between the two agents' outside options, not an unfairness that is internal to their transaction.

3.4 Non-paternalism

A welfare-based approach to normative economics that is addressed to a regulator or policy-maker might reasonably recommend paternalism in some situations – as advocates of libertarian and asymmetric paternalism indeed do. However, we maintain that a concept of fairness that is grounded on a view of market transactions as cooperative should treat individuals as responsible for their own choices.

A frequent claim in behavioural economics is that consumers can sometimes be made worse off by expansions of their choice sets. One version of this claim is the hypothesis of *choice overload*. Choice overload is said to occur when large choice sets induce low-quality decision-making by cognitively overloaded individuals, or reduce buyers' satisfaction with their final choices, or undermine individuals' motivation so that they avoid choosing altogether (for example, Bown et al., 2003; Botti and Iyengar, 2006).[17] Choice overload is analogous to the external effects of transactions that we considered in Section 3.1. By adding a further product to a market in which many products are already on sale by other suppliers, a firm may increase the cognitive costs incurred by consumers in the market as a whole. But if

[17] How far these hypotheses are supported by the balance of evidence is an open question: see the meta-analysis reported by Scheibehenne et al. (2010).

the firm presents its own offer transparently, the costs that consumers incur in considering that offer are not unfairly imposed by the firm.[18]

A different version of the claim hypothesises *self-control failure* – that consumers are liable to choose superficially attractive products, contrary to their latent preferences or self-acknowledged long-term interests. In such cases, it is argued, consumers might be better off if certain options did not appear in their choice sets. This hypothesis is often represented in dual-self models in which a person's rational self (the 'Planner') can be subverted by an impulsive self (the 'Doer'). Thaler and Sunstein (2008: 41–49) endorse this model and give the example of a Cinnabon stand at Chicago O'Hare Airport, whose oven aromas subvert the health-oriented intentions of Planners heading for the nearby fruit and yoghurt stand. If (as Thaler and Sunstein imply) the Cinnabon stand has been deliberately designed to allow its aromas to reach passers-by, this is a 'choice architecture' that 'nudges' potential customers towards buying. Thaler (2018) distinguishes between 'conscientious' choice architects who 'nudge for good' and firms whose marketing nudges 'encourage buyers in order to maximize profits rather than to improve the buyers' welfare'. The Cinnabon stand is presumably intended as an example of the latter kind of nudge (or 'sludge' in Thaler's terminology), and a suitable target for the 'sludge clean-up campaign' he proposes.

Given evidence of self-control failure, a sufficiently paternalistic social planner might invoke welfare-based justifications for imposing restrictions on the offers that firms make to consumers. But would such restrictions be justified *on grounds of transactional fairness*? We think not. We take it that the Cinnabon stand is offering consumers an opportunity to buy a familiar product at a familiar price. The oven aromas are not deceptive; they remind potential customers of the actual qualities of the experience of consuming the product. We maintain that this should be understood as a fair offer. The customer's decision to buy a cinnamon bun may be impulsive, but it is *her* decision. It is fair that she takes responsibility for it.

3.5 Availability of information about co-participants

Transactional fairness is concerned with ethical standards that can be action-guiding for individual firms and consumers. Principles of transactional fairness must therefore be

[18] Different issues are involved if a firm puts multiple offers on the market, with the intention that some consumers will fail to notice the offers that are best for them. We discuss such cases in Section 4.2.

formulated in terms of information that is available to the firms and consumers who are expected to be guided by them.

Notice the contrast with efficiency- and welfare-based approaches to normative economics, which are intended to guide the actions of regulators or policy-makers. Because efficiency and social welfare are properties of a whole economy, and because an economy is a complex system, individual firms and consumers cannot be expected to base their decisions directly on such criteria. Instead, the expectation is that welfare economics provides guidance about how to design institutional mechanisms, or how to set parameters such as tax rates, so that efficiency or welfare emerges as an unintended outcome of decisions by firms and consumers who act on more immediate criteria. In contrast, transactional fairness must restrict itself to outcomes that are intended by – or at least, reasonably foreseeable by – decision makers.

Our feasibility requirement is that each participant in a transaction should be able to assess the fairness of his (or its) own behaviour in that transaction. This condition imposes limits on how far transactional fairness can require firms to meet their customers' preferences. Under the assumption that consumers have integrated preferences that are revealed in their decisions, a firm might be expected to know the main population-level properties of consumer preferences with respect to its own products. In some contexts, more might be expected. For example, professional codes may require that clients' preferences are solicited as part of a transaction (for example, financial advisers asking about risk preferences). But in many retail settings the firm cannot know the actual preferences of particular customers. Thus, while it would be unfair for a firm to use the small print of an offer to hide information about an add-on that almost all customers could be expected to incur (for example, a standard delivery charge), it is not possible to describe *every* add-on with a degree of salience that matches its particular importance to *every* customer. The information problem becomes more severe if there are naïve consumers whose behaviour does not reveal integrated preferences. If latent preference is not an empirical concept – a possibility that we considered in Section 1 – transactional fairness clearly cannot require firms to take account of customers' latent preferences.

What *can* a firm be expected to know about its customers? Some basic properties of preferences, such as that most consumers prefer to pay less rather than more for given products, or that buyers of electrical appliances prefer these to work when plugged in, are uncontroversial. Less obviously, the fact that a consumer has *chosen* to participate in a

particular transaction with a firm has significant information content. The firm knows that the consumer made that decision in the light of the information at her disposal. Some of the latter information was supplied by firm itself, and so is known to the firm. In addition, the firm might reasonably assume that its customers have some knowledge about normal practices in the market in which they are participating. For example, introductory offers may be common practice in a market with consumer switching costs or for experience goods and services. Similarly, a seller in a car-boot sale can reasonably assume that he is selling to someone who knows that trades in car-boot sales are made on *caveat emptor* terms.

4. Transactional fairness in firms' pricing practices

Our aim is to propose a definition of transactional fairness that can be used in assessing the fairness of firms' pricing practices.[19] This conception is grounded in the ethic of mutual benefit, as presented in Section 2, and is compatible with the scope conditions set out in Section 3. We begin with a summary definition:

> *Transactional Fairness.* Transactional fairness requires that a firm acts in such a way that consumers with normal expectations about pricing practices in the relevant market are able to understand the consequences of transacting with that firm (*No Deception*) and are not hindered from terminating a relationship with the firm or from transacting with alternative sellers (*No Hindrance*). It also requires that the firm is able to explain the rationale of its pricing practices, locating them as part of a business model based on mutual benefit between the firm and its customers, and is willing to provide the explanation publicly (*Public Explanation*).

We now explain the components of this definition in more detail.

4.1 Normal expectations

'Normal expectations' were defined in Section 2. Normal expectations about pricing practices can be interpreted as default settings for the terms of implicit contracts between firms and consumers. (Those settings can be over-ridden, but only with the explicit

[19] In relation to any given transaction, we treat 'the firm' as the trading entity that is recognised by consumers. For example, NatWest, Royal Bank of Scotland, Adam & Co. and Coutts are brands that are all part of NatWest Group. Consumers' normal expectations on pricing and service are likely to be associated with the individual brands rather than the group. For other issues, such as asset protection, the group would be relevant.

agreement of both parties.) There is an implicit contract between a firm and a customer if they are mutually aware of (i) the market context for the transaction they have initiated, (ii) the business (and consumer) practices that normally apply in this context and that are obviously relevant to the participation decision, and (iii) the fact that participation in the transaction has been freely chosen. According to the Principle of Mutual Benefit, the parties to an implicit contract should comply with its terms, even if advantage could be gained by deviating. Our definition of transactional fairness incorporates that requirement.

Implicit contracts, based on (often market-specific) expectations as to what are acceptable commercial practices, are common in business-to-business transactions. For example, there may be hard bargaining after which an agreement may be secured by a handshake. A detailed contract usually follows for high-value, one-off transactions, but relational contracting, with important unwritten conditions, often suffices in low-value or ongoing relationships.[20] These norms reduce transaction costs, facilitate flexible adaptation to changing circumstances, support rapid trading and allow parties to focus their detailed attention on other matters such as their core production. They can be enforced by reputation, withdrawal of future business and resort to contract law.[21] However, it is the scale and value of business transactions that make these mechanisms credible.

Implicit contracts between firms and consumers are similar in principle but often less enforceable. If each consumer accounts for only a small share of the firm's sales, the value of an ongoing relationship with any individual customer is correspondingly small. Nevertheless, contravening an implicit contract is unfair. If expectations can be expected to differ between consumers (for example, at times when new business models are emerging, or when the context of a transaction can be interpreted in different ways, implying different normal expectations), a firm should make public any business practices that it intends to follow and that are obviously relevant to the participation decision. If a firm relies on (and

---

[20] See Macneil (1978). For a summary of the evidence, see the introduction to Baker et al (2002).

[21] The legal standing of relational contracts is mixed at best, and tied to the concepts of good faith and fair dealing. Most civil law systems have an overriding principle that contracting parties should act in good faith, and the concept can also be found in commercial codes in many common law systems (for example, the. US Uniform Commercial Code). The UK is generally considered an exception, although good faith is mentioned in the Consumer Rights Act 2015 s.62(4) in relation to 'a significant imbalance in the parties' rights and obligations'. However, 'the notion of good faith… actually means different things both *within* a particular legal system and *between* the legal systems' (Whittaker and Zimmermann, 2000, p.690). The result is that little can be said about what good faith actually means 'and what can be said is not very helpful for deciding concrete cases' (ibid p.30).

does not try to correct) a customer's mistaken beliefs about its business practices, it is engaging in passive deception.

In interpreting 'normal expectations', some allowance must be made for vulnerable consumers. We will say that a consumer is *transactionally vulnerable* in relation to a given transaction if her capacity to make considered and well-informed decisions is impaired by factors outside her or the firm's control. 'Impairment' may be due to long-lasting cognitive limitations (for example, young children, individuals with dementia) or temporary distress (for example, a recently bereaved person planning a funeral). Vulnerability with respect to information could also be due to inability to access commonly-used sources of information (for example, lack of internet access). Insofar as the firm can recognise transactionally vulnerable customers, it should interpret its implicit contracts with them in accordance with what those customers can be expected to know and understand. Because the requirements that transactional fairness imposes on a firm are conditional on the firm's information, vulnerability is relevant for transactional fairness only to the extent that the firm can recognise it. There are very substantial privacy issues in identifying vulnerable individuals. Nevertheless, some natural correlates of vulnerability are easily identified (for example, age), and some sales situations may naturally present other evidence (for example, severe mental impairment may be revealed in person-to-person sales, bereavement is revealed in funeral planning).

Our concept of transactional vulnerability is more narrowly defined than many uses of the term 'vulnerable' in current UK discussions about market regulation. For example, a recent report by the FCA identifies 'protecting vulnerable consumers' as a 'key priority' and uses a definition that classifies 50 per cent of British adults as 'potentially vulnerable' (FCA, 2019a: par. 1.1). A vulnerable consumer is defined as one 'who, due to their personal circumstances, is especially susceptible to detriment, particularly when a firm is not acting with appropriate levels of care' (par. 2.1). This definition conflates impaired decision-making capacity and factors such as low income, low savings, indebtedness and job insecurity which raise the stakes of making good decisions. In characterising transactional fairness, it is important to distinguish between factors (such as cognitive impairment) that affect *what counts as fair* in a firm's treatment of a consumer and factors (such as low income) that affect how much a consumer would be harmed *if she were treated unfairly*. One might also be uneasy about the use of concepts such as 'vulnerability', 'care' and 'protection' to refer to firms' dealings with consumers whose modes of decision-making, even if not

consistent with neoclassical models of rational choice, reflect properties of normal human psychology. Our approach is to define transactional fairness so that it applies to a firm's relationships with *all* its customers, without any presuppositions about their rationality or irrationality.

4.2. No Deception

There is deception, and therefore transactional unfairness, if a consumer is enticed into a transaction by a firm's use of misleading information, or by its hiding obviously relevant information about the transaction. 'Hiding' includes presenting information with misleading salience that draws attention away from what is likely to be most relevant. This much is the widely accepted and familiar territory of robust consumer law.

'Obviously relevant information' includes information about the prices of add-ons that are effectively unavoidable (for example, delivery charges, booking fees, fees for debit card payments for online sales) or that most customers would expect to buy in combination with the main product (for example, product-specific ink cartridges for printers, product-specific brush heads for electric toothbrushes). Where add-ons are relevant only for relatively small numbers of customers (for example, additional charges for delivery to particularly remote locations) or would be needed only in unlikely contingencies (for example, fees for replacing lost travel documents), it is not unfair for their prices to be relegated to the small print of an offer, but for this kind of low-visibility price to be non-deceptive, it should be in line with normal pricing practices in the relevant market.

It is unfair for a firm to hide information about other relevant tariffs that it offers and for which the consumer is eligible: this information is 'obviously relevant' to the transaction between the specific firm and the specific consumer. This rules out forms of price discrimination that rely on consumers' lack of information about *the firm's own* prices.[22] For example, it would be unfair for a train operating company to sell 'any time' tickets to walk-up customers in off-peak periods without informing them about its cheaper off-peak tickets. If, instead of quoting take-it-or-leave it prices, the firm is stating an initial offer that it is willing to negotiate, or that it is willing to reconsider if a potential customer can show that a rival has quoted a lower price, it should make this clear as a property of that offer. Not doing

[22] Recall from note 18 that 'the firm' may be identified by its trading name rather than its ownership. Thus, our proposal does not prohibit forms of price discrimination in which what is effectively the same product is sold at different prices under different brand names, without the consumer being informed of this fact.

this can sometimes be a profitable form of price discrimination, based on differences in consumers' knowledge about the firm's pricing strategy; but it contravenes the No Deception condition.

When a firm acts as an intermediary between consumers and producers, there is scope for other forms of deception. Take the case of an online retail platform that sells its own products alongside those of other producers, or an online booking site that takes commission from suppliers. If such an intermediary gives greater prominence to (or makes implicit recommendations in favour of) its own products or those of suppliers who pay higher rates of commission, failure to disclose this practice can be a form of passive deception. For example, in the absence of self-preferencing or differential commission rates, the prominence with which a product is displayed may be expected to be positively correlated with the frequency with which it is bought. Potential buyers who are unaware of self-preferencing practices or unseen commission might reasonably use display prominence as an indicator of customer satisfaction with the relevant product. More generally: if a firm exploits consumers' knowledge of general features of a market to induce false beliefs about its own offers, it is engaging in passive deception.

Moving into the domain of competition law, a firm is under no legal obligation to tell a potential customer about *its competitors'* offers. One might ask whether it is fair (and not merely legal) for a firm to sell at prices that it knows are higher than those of a rival, and without announcing that fact.[23] For example, GAP (guaranteed asset protection) insurance is often sold as an optional add-on when a new car is bought; typically, an equivalent product could be bought as a stand-alone purchase at a significantly lower price (FCA, 2018a).[24] Clearly, the car saleroom has a point-of-sale monopoly advantage in the insurance market, which might reasonably be judged anti-competitive and which a regulator might try to

[23] A related issue was debated by ancient and medieval philosophers. A merchant is carrying wheat to a city where grain is in short supply and the price is high. He knows that other sellers of wheat will arrive soon, and so the price will fall. His potential customers do not know this. Does justice require the merchant to reveal this information? Aquinas (1265–74, Part II.II, Question 77, Article 3) argues that it does not.

[24] The evidence suggests that, for many consumers, willingness to pay for GAP insurance is context-dependent: a person who chooses not to buy it as an add-on in the saleroom is unlikely to buy a much cheaper stand-alone product after driving the car home (FCA, 2018a). Is this the result of psychological bias in the saleroom (over-attention to the enticing features of the new car, susceptibility to saleroom pressure) or psychological bias afterwards (lack of engagement with financial matters, procrastination)? Compare our discussion of 'bias' in Section 1.

remedy.[25] Nevertheless, we maintain that not revealing a rival's price is compatible with transactional fairness. From the customer's point of view, information about the rival firm's price is undoubtedly relevant for her choice between them; but this is not information about the transaction whose fairness is being assessed. Taking a wider view, each firm revealing its competitors' prices could not persist as a normal expectation in a competitive market. Such a practice would undermine both consumer responsibility to search and rivalry between firms – mechanisms that are fundamental to the working of the market. (Recall the discussion of price dispersion in Section 1.)

The position we defended in the preceding paragraph does not necessarily apply when consumers are transactionally vulnerable. Take the case of an unscrupulous firm that specialises in doorstep contact with elderly householders, offering to do repair work at prices far above market levels. If these customers are known to lack the mental resources necessary for effective price search, this practice should be viewed as transactionally unfair.[26]

As we noted in the introduction, there is an increasing tendency for products to be sold on indefinite or default contracts (for example, banking, domestic energy, mobile phones, wifi, home entertainment), for rental deals to replace sales of durable goods (for example, cars, computer software), and for subscription contracts to replace payment-per-item selling (for example, sales through Amazon Prime, streaming services).[27] Such business models involve an ongoing relationship between the firm and 'its' customer (or 'client'). This creates a continuing implicit contract which expands the scope of the No Deception condition.

The No Deception condition implies that there is transactional unfairness if a firm attempts to retain an existing consumer by giving misleading information, or by hiding obviously relevant information about the terms of the continuing transaction. Thus, it is unfair if the firm does not periodically provide an existing customer with relevant

---

[25] In fact, the relevant UK regulator did take action (FCA, 2018a).

[26] This issue has a philosophical pedigree too. In an early discussion of price discrimination, Kant (1785/ 2002: 13) claims that it is 'in conformity with duty that the merchant should not overcharge his inexperienced customers', and gives the example of a transaction with a child. (Kant notes that duty and self-interest would coincide for a merchant in a sufficiently competitive market, but even if the merchant has monopoly power, the duty of non-discrimination remains.)

[27] To some extent, this shift is a return to business models that were common before the supermarket era. It was once common for households to have ongoing relationships with specific suppliers of milk, groceries, fish and meat products, sometimes with home deliveries and purchase on credit.

information about changes in its prices, or about the absence of a price change for a product whose cost of supply is falling over time. Several UK regulators have recently adopted policies requiring firms to provide such information when contracts are renewed (for example, the requirement that insurance renewal documents report the customer's previous price alongside the renewal quote).

As in the case of pre-purchase fairness, it is unfair for a firm to hide information about alternative tariffs that it offers and for which the customer is eligible, or about its willingness to renegotiate initial renewal quotes. These principles rule out many forms of price discrimination between 'front book' (recently acquired) and 'back book' (long-standing) customers: fairness requires the firm to inform its back-book customers about their eligibility for front-book offers. It is not necessarily unfair for a firm to make low-price introductory offers that are available only to new customers. Such offers are compatible with intentions for mutual benefit if the low price is paid only for an introductory period, and if the intention is to allow new customers to sample the firm's product, or to compensate them for costs of searching and switching. However, it is contrary to the No Deception condition to mislead consumers about the ease with which they will be able to cancel at the end of the introductory period. (As we explain in Section 4.3, such a practice would also fall foul of the No Hindrance condition.)

There is a growing tendency for firms to use *personalised pricing* for products that are sold on continuing contracts. Rather than offering a publicly-displayed range of tariffs from which consumers can choose, subject to specified eligibility criteria, a firm determines the offers it makes to individual consumers on the basis of its information about their particular circumstances or previous purchases. Personalised pricing is particularly prevalent in insurance markets, where normal underwriting practice requires customers to provide information that identifies risk-relevant personal characteristics, and the price of a given level of cover varies according to those characteristics. It is a small step to extend this practice to 'margin optimisation', that is, varying prices according to the profitability of different classes of customer when profitability is *not* related to risk. For example, in making price offers to new customers, insurance firms routinely take account of differences in consumers' propensities to renew their contracts and to buy add-ons (FCA, 2019b).[28] If a firm uses

[28] Interestingly, margin optimisation may partially offset the tendency, discussed in Section 1, for price discrimination to benefit savvies relative to naïves. In competing to attract naïves who will

personalised pricing without making this clear to consumers, it is engaging in passive deception.[29]

4.3 No Hindrance

The No Hindrance condition requires that consumers with normal expectations are not hindered from terminating a relationship with a firm or from transacting with another firm. The first clause is in the spirit of consumer law; the second is in the spirit of competition law.

It is transactionally unfair if a firm uses pricing practices that deter consumers from searching for competitors' offers. For example, industrial economists and regulators have analysed firms' use of *time-limited* (or *exploding*) offers – offers that must be accepted or rejected within a time frame that is too short to allow a potential buyer to search for other offers. A related (alleged) practice in internet selling is to use cookies that record individual consumers' search behaviour and to quote higher prices to consumers who return to a firm's website after searching elsewhere. By creating disincentives to search, such practices tend to raise prices (for example, Office of Fair Trading, 2010; Armstrong and Zhou, 2016). Irrespective of that tendency, pricing practices that systematically penalise consumers for investigating other firms' offers are transactionally unfair. However, selling strategies that make posted prices and available offers liable to change at short notice (for example, because capacity constraints are reached, or a fixed stock of a good is sold out) are not inherently unfair. Correspondingly, it is not inherently unfair if a consumer misses out on an offer by searching for, and failing to find, something better. But it is unfair for a firm to make an offer that is *conditional on* the consumer not making further searches. Similarly, it would be unfair for a firm to base personalised prices on information about individual consumers' interactions with other firms.

In the context of ongoing relationships between firms and customers, there is transactional unfairness if a firm attempts to retain an existing customer by making it difficult for her to cancel a contract for which renewal is the default. Familiar hindrances to cancellation include procedures that require consumers who signed up online to cancel by

---

incur later loyalty penalties or buy high-priced add-ons, firms are trying to avoid offering low headline prices to unprofitable savvies.

[29] This is consistent with the recent EU Enforcement and Modernisation Directive (EU) [2019/216, 17 January 2020] which includes a requirement to inform consumers if the online price they see is individualised by an algorithm that uses information on past consumer behaviour (of the individual or identifiable group).

mail or phone (sometimes using phone lines with very slow answering services), and online interfaces in which cancellation options are not easily visible or involve unnecessary sequences of operations. A related practice, now prohibited by the relevant UK regulator, is for operators of mobile phone networks to sell devices that are 'locked' to the provider's network in ways that many customers find difficult to undo (Ofcom, 2020: par 1.6–1.8). A good rule of thumb is *exit/entry equivalence* – that 'consumers should find it as easy to exit a contract as it was to enter' (CMA, 2019: para. 130). Unfair hindrance applies to indefinite contracts with continuous or recurring opportunities to choose between renewal and cancellation; it does not release consumers from fixed-term contracts that were fairly entered into (for example, fixed-term mortgages with pre-specified interest rates).

Analogously with passive deception, there can be unfair passive hindrance. For example, if a contract is subject to periodic renewal by direct debit, it is unreasonable to expect consumers to remember renewal dates in the absence of reminders or renewal statements. Fairness requires a firm to give customers sufficient notification of upcoming renewal dates to allow them to search for alternative offers.

Notice that the No Hindrance condition does not require firms to make public offers. This leaves room for firms to use practices which, at the industry level, impose barriers to search. Personalised pricing provides an example. Even when there is common knowledge that firms are using this practice, personalised pricing makes the terms on which a firm trades with each customer private to those two parties. To the extent that this makes searching for the best offer more onerous for consumers than comparing publicly-announced prices or tariffs, personalised pricing has anti-competitive effects that regulators may wish to take into account.[30] But a concept of fairness *within an individual transaction* should not require that the participants publicise the terms on which they are trading.

4.4 Public Explanation

The Public Explanation condition requires that a firm is able to explain the rationale of its pricing practices and is willing to provide this explanation publicly. By the 'rationale' of a pricing practice, we mean *the firm's reasons* for choosing to use it. There are two ethical constraints here. First, the reasons must be genuine explanations of the firm's behaviour. Second, the rationale must be in terms of a business model based on mutual benefit between

[30] There may also be a countervailing effect: privacy of the terms on which firms trade with individual customers can be an obstacle to the formation and survival of cartels.

the firm and its customers. By 'mutual benefit', we mean that the firm pursues the interests of its owners within the constraints of No Deception and No Hindrance. Subject to those constraints and in relation to an assessment of transactional fairness, profit-maximisation is a legitimate rationale for a pricing practice. There is no requirement of paternalism on the part of the firm: a firm treats its customers as benefitting from their transactions with it if they enter and leave those transactions voluntarily, without being subject to deception or hindrance. The added value of the Public Explanation condition is that, *should they be challenged*, firms are required to explain the purpose of their actions, and this encourages ex ante compliance.

For example, consider the phenomenon of 'paying not to go to the gym'. Della Vigna and Malmendier (2004, 2006) investigate consumers' buying behaviour when gyms offer a choice between pay-as-you-go and membership tariffs. They find that, on average, people who choose monthly membership tariffs pay around 70 per cent more than the total pay-as-you-go prices of the visits they actually make. Della Vigna and Malmendier (2006: 716) conclude that the best explanation for this is that gym users tend to over-estimate how many gym visits they will make in the future.[31] In a competitive market, consumers whose forecasts are correct (savvies) are cross-subsidised by those whose forecasts are not (naïves). A similar analysis applies to low-price mobile phone tariffs with low usage thresholds and high 'overage' charges: in this case, savvies are cross-subsidised by naïve *under*-forecasters (Grubb, 2015).

In these examples, there are (at least) two possible explanations for the existence of the tariffs that are chosen by mis-forecasting naïves. One explanation is that the firm is using pricing strategies that are designed to discriminate between consumers with different *actual* usages, on the assumption that each consumer will choose the tariff that is cheapest for her. Under this assumption, the firm offers multiple tariffs with the aim of maximising profit, but with no intention to deceive. It is unavoidable that some consumers who mis-forecast their usage end up paying more than they needed to have done, but that is an unintended by-product of a pricing strategy in which each tariff is offered as a good buy for its intended purchasers. An alternative explanation is that the tariffs chosen by mis-forecasting naïves are put on the market with the primary intention that they will be chosen in exactly this way.

[31] The evidence supports this explanation rather than one that is often suggested by behavioural economists – that membership is a self-control device by which a consumer's 'planning' self incentivises her later 'doing' self to take exercise.

Thus, for example, the apparently low price of the low-usage phone tariff might be merely a bait to attract overage payments. In that case, the firm's pricing strategy would be based on passive deception.

By requiring a firm to be willing to state the rationale of its pricing strategies, the Public Explanation condition puts some pressure on the firm to avoid transactional unfairness and, if this is insufficient, facilitates regulation. For example, a phone service provider might be reluctant to make a public claim that its low-usage tariff was designed to meet the needs of low-usage customers if most of the revenue it generated came from overage charges, and if this fact might be exposed in public debate, in an enquiry by a regulator, or in litigation. If a firm cannot explain a pricing strategy in terms of mutual benefit, one might reasonably suspect intentions to deceive.[32]

5. Discrimination between consumers

In the preceding section, we categorised various forms of price discrimination as transactionally unfair. Many of those pricing practices (for example, hidden add-ons, price walking, overage charges designed to trap under-forecasting consumers, time-limited offers, barriers to the cancellation of contracts, not informing customers about the firm's own tariffs) discriminate against naïve consumers and in favour of savvies. In our analysis, however, the unfairness of such practices derives from properties of deception or hindrance that are located in the transaction between the firm and the naïve consumer, and not in the difference between the firm's treatment of the two classes of consumers. This is fundamental to our concept of transactional fairness: we have defined transactional fairness as a property of individual transactions. In the transactional sense of the term, price discrimination is not intrinsically unfair.

To repeat what we said in the introduction, we are not proposing transactional fairness as the *only* normative criterion for assessing pricing practices: we see it as complementary with the standard criteria of efficiency and distributional equality. In terms of standard criteria, price discrimination by profit-seeking firms can be pro-competitive (for example, when a firm uses it to enter a market in which a rival has a dominant position) or anti-

[32] This example can be extended beyond pricing practices to product design, and is consistent with a guideline formulated by the FCA (2019a, Annex 1, par. 17): 'Products and services marketed and sold in the retail market are designed to meet the needs of identified consumer groups and are targeted accordingly'.

competitive (for example, when a dominant firm uses it to exclude potential entrants). It can be distributionally progressive (for example, when the rich have less elastic demand than the poor) or regressive (for example, when richer consumers can access a greater number of potential suppliers, and so have more elastic demand). When used by a monopolist, price discrimination can increase economic efficiency by enabling a product to be sold to consumers whose willingness to pay is relatively low, and it can reduce consumer welfare by distorting consumption or extracting more surplus than is needed to recover fixed costs.

When price discrimination is used to recover fixed costs, there are significant parallels between normative criteria for price discrimination and principles of just taxation. In the traditional literature of public finance, two principles of just taxation are often discussed – the *ability-to-pay principle* and the *benefit principle* (for example, Musgrave, 1959). Applied to price discrimination, the ability-to-pay principle implies that richer consumers of a given product should pay more than poorer consumers, as is approximated when concessionary prices are offered to buyers who are in full-time education, retired or 'unwaged'. The benefit principle implies that consumers with higher willingness-to-pay for a given product should pay more than those who benefit less.

In many cases, profit-seeking price discrimination by firms is broadly in line with the benefit principle. For example, consider how the prices charged by (non-budget) airlines for round-trip tickets differ according to the interval between outward and return flights. The rationale is that business travellers have low price elasticity of demand and are particularly likely to choose short stays. The result is that consumers with higher willingness-to-pay bear a higher share of the airline's fixed costs. A similar analysis applies to introductory offers for experience goods, as discussed in Section 4.2: consumers who are not familiar with a firm's (assumedly good quality) product have lower willingness-to-pay for it than do the firm's current customers. Notice, however, that the 'benefit' that is relevant for profitable price discrimination is measured relative to consumers' outside options. Thus, other things being equal, price discrimination favours consumers who have better outside options – for example, when (independently of any cost differences) a firm charges lower prices to consumers who buy online than to those who buy from bricks-and-mortar outlets. In accordance with the scope condition set out in Section 3.3, we do not claim that any particular relationship between price and benefit is a requirement of transactional fairness.

We recognise that price discrimination can be unfair in ways that are not 'transactional' and that the standard economic criteria of efficiency and distribution do not

take into account. That people should be treated equally, irrespective of 'protected' characteristics such as age, disability, sex, ethnicity, religion and sexual orientation, is a very widely held ethical principle, upheld by law in most democracies.[33] However, this does not mean that pricing practices that discriminate on the basis of protected characteristics are necessarily *transactionally* unfair.[34] Problem cases arise when protected characteristics are correlated with factors that would otherwise be legitimate bases for price discrimination. For example, concessionary prices for the young and for the old are based on correlations between age and income; differential insurance premia for male and female drivers (common in Europe until a European Court of Justice ruling in 2012) were based on correlations between gender and accident risk. In not addressing these difficult issues, we should not be thought to be denying their importance. We believe that clarity is best served by treating transactional fairness as a distinct form of fairness.

6. The role of regulation in ensuring transactional fairness

If a firm's pricing practices are transactionally unfair, they have harmful effects on the customers who are treated unfairly, and can persist only as long as those consumers continue to patronise the firm. Thus, in principle, firms might find it profitable to compete in developing reputations for transactional fairness. There are many historical examples of consumer-facing firms that have built and maintained market share by this reputational route. However, this is an imperfect mechanism, particularly at times when the retail sector is experiencing rapid change, making it harder for consumers to recognise and keep track of firms' behaviour. Furthermore, as we noted in the introduction, there can be externalities in reputation: after experiencing instances of unfairness, consumers may draw inferences about the unfairness of firms in general, and not merely about the unfairness of specific firms.[35]

---

[33] For example, the UK's Equality Act 2010 consolidated earlier anti-discrimination law by setting out a list of 'protected characteristics': age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, and sexual orientation. The Act prohibits direct and indirect discrimination based on these protected characteristics.

[34] Arguably, however, such practices are contrary to the ethic of mutual benefit. If mutual benefit is the *raison d'être* of the market, a disposition to make mutually beneficial transactions with others on terms of equality, whoever those others may be, can be construed as a 'market virtue' (Bruni and Sugden, 2013: 154).

[35] Tirole (1996) develops a theory of reputational externalities to show that 'after episodes of bad behaviour, either the group is stuck in a bad-reputation steady state, or trust takes several periods to re-establish' (p.18). Furthermore, 'an increase in product market competition may make it difficult for firms to sustain their reputation' (p.3). A recent empirical test investigates the firm-specific scandal of VW's deliberately misleading behaviour in its conduct of diesel emissions tests, and the

There is therefore a role for regulation, and the development of judicial doctrine, in defining and maintaining standards of transactional fairness.

Some principles of non-deception and non-hindrance are already embodied in consumer and competition law, but generally with the emphasis on active deception and active hindrance. What we have called passive deception and passive hindrance rest in a grey area of business practices that are unfair without being clearly illegal, except insofar as they contravene specific regulations. Such regulations are often designed as ad hoc remedies for specific practices that have been deemed to be unfair by a possibly paternalistic intuition. There is also an entrepreneurial dynamic here, with an inbuilt time lag. Firms discover new strategies (perhaps made possible by advances in technology) for making profit within the constraints imposed by existing regulations. These strategies can drift into becoming common practices in a market, viewed by firms as ethically acceptable, even though they involve passive deception or hindrance of consumers who are not aware of how business practices have changed. It is only after sufficient evidence of the unfairness has accumulated that interventions or new regulations are introduced. This persistent misalignment of expectations, combined with the perception of regulation as ad hoc fire-fighting, can undermine public trust in the market system.

Our aim in this paper has been to contribute to the development of general principles that can guide regulators and courts in assessing the fairness or unfairness of firms' pricing practices. If (as we have proposed) those principles use only information that is directly available to firms, firms should be able to predict whether or not particular new practices would be permitted by the regulator and, in the case of litigation, by the courts. This facilitates both compliance and, where necessary, enforcement.

Our approach identifies three general roles for regulation in support of transactional fairness. First, and most obviously, regulators can prohibit (or litigate) specific pricing practices that contravene the No Deception or No Hindrance conditions. Some regulators (for example, in the UK) have been active in trying to address such issues, but consistency is difficult in the absence of guiding normative economic principles. In the absence of a clear normative framework, conflict becomes more likely between consumer and competition objectives. Regulators and courts may then draw on inappropriate precedent or analogies,

---

negative externality this had on other German car manufacturers in the US market. Bachmann et al. (2017) find that German firms unconnected to VW Group (for example, BMW and Daimler) suffered substantial loss of market value and sales, including for their petrol vehicles. They also suffered a deterioration of sentiment (a measure of approval/reputation) on Twitter.

resulting in a loss of competition and consumer detriment.[36] Transactional fairness provides a common framework for guiding and, just as importantly, limiting interventions.

A second role is to administer the Public Explanation condition. This requires firms to cooperate with regulators in the public process of ensuring that business practices are fair. Regulatory agencies can be a repository for complaints of unfairness made by consumers and advocacy groups. Regulators can ask firms to explain their practices, ask for verification of questionable claims, make public comment on their findings, and potentially enforce a change in business practice. If there are clear principles of No Deception and No Hindrance against which to test compliance, it is easier for firms to anticipate challenges when devising new practices, and so actual challenges are made less necessary.

Because the concepts of deception and hindrance are defined in relation to normal expectations, there is a third role for regulation in shaping those expectations. For example, we have argued that 'hidden' add-ons are unfair if consumers would normally expect them to be included in the headline price. But in a market in which different firms define their headline prices in different ways, there may be no precise 'normal expectation', with the implication that no individual firm's practice is deceptive. A regulation that imposes a specific definition (for example, requiring that headline prices are stated inclusive of taxes and standard delivery charges, or that interest rates are defined according to a standard formula) can *create* a normal expectation and a corresponding category of transactional unfairness. Importantly, it can do this without holding back the emergence of (non-deceptive, non-hindering) business models which offer new opportunities to consumers.

We have argued that the role of the regulator is to uphold a coherent ethical conception of a well-functioning market as a network of mutually beneficial cooperative interactions. The regulator does not have to second-guess consumers' 'true' preferences. Viewed from the perspective of firms, such a market is a space in which each firm is free to

---

[36] For example, the introduction of non-discrimination clauses in retail electricity in the UK in 2009 resulted in less competition and higher prices (Hviid and Waddams Price, 2012, Waddams Price and Zhu, 2016). The form of discrimination at issue was lower prices being offered to consumers residing outside of an electricity company's original home region. The purpose was to compete more effectively for market share across the UK and the practice contravened none of our conditions for transactional fairness. The regulator's error was later recognised by the CMA (2016a, pp. 70-71 of 'Summary'): 'We regard it as a significant cause for concern that Ofgem [the energy regulator] considers that [its consumer] duties impose a constraint in practice on its ability to pursue competition-based policies'. For an example of the problems faced by common law courts in understanding unfair pricing practices, see Armstrong and Vickers (2012) who unpick the UK bank charges case which was decided by the UK Supreme Court.

seek profit by proposing transactions to consumers, provided it does so without deception and without hindering transactions in which it is not involved. Viewed from the perspective of consumers, such a market offers an array of opportunities for transactions that each individual is free to enter voluntarily, knowing what to expect, and remaining free to leave.

References

Aquinas, Thomas (1265–1274). *Summa Theologica*. Available at: http://www.documentacatholicaomnia.eu/03d/1225-1274,_Thomas_Aquinas,_Summa_Theologiae_%5B1%5D,_EN.pdf , accessed 4 August 2020.

Ariely, Dan, George Loewenstein and Drazen Prelec (2003). Coherent arbitrariness: stable demand curves without stable preferences. *Quarterly Journal of Economics* 118: 73–105.

Armstrong, Mark (2015). Search and ripoff externalities. *Review of Industrial Organization* 47: 273–302.

Armstrong, Mark and John Vickers (2012). Consumer protection and contingent charges. *Journal of Economic Literature* 50(2): 477–493.

Armstrong, Mark, John Vickers and Jidong Zhou (2009). Consumer protection and the incentive to become informed. *Journal of the European Economic Association* 7(2–3): 399–410.

Armstrong, Mark and Jidong Zhou (2016). Search deterrence. *Review of Economic Studies* 83: 26–57.

Bachmann, Rüdiger, Gabriel Ehrlich and Dimitrije Ruzic (2017). Firms and collective reputation: The Volkswagen emissions scandal as a case study. *CEPR Discussion Paper* No. 12504.

Bar-Gill, Oren and Elizabeth Warren (2008). Making credit safer. *University of Pennsylvania Law Review* 157(1): 1–101.

Battigalli, Pierpaolo and Martin Dufwenberg (2007). Guilt in games. *American Economic Review: Papers and Proceedings* 97: 171–176.

Beales, Howard, Richard Craswell and Steven C. Salop (1981). The efficient regulation of consumer information. *The Journal of Law & Economics* 24(3): 491-539

Becker, Gary (1974). A theory of social interactions. *Journal of Political Economy* 82: 1063–1093.

Bernheim, Douglas (2016). The good, the bad, and the ugly: a unified approach to behavioural welfare economics. *Journal of Benefit-Cost Analysis*. Available on CJO 2016 doi:10.1017/bca.2016.5.

Bershears, John, James Choi, David Laibson and Brigitte Madrian (2008). How are preferences revealed? *Journal of Public Economics* 92: 1787–1794.

Bicchieri, Cristina (2006). *The Grammar of Society: The Nature and Dynamics of Social Norms.* Cambridge: Cambridge University Press.

Bolton, Gary and Axel Ockenfels (2000). ERC: A theory of equity, reciprocity and competition. *American Economic Review* 90: 166–193

Bordalo, Pedro, Nicola Gennaioli and Andrei Shleifer (2013). Salience and consumer choice. *Journal of Political Economy* 121: 803–843.

Botti, Simona and Sheena Iyengar (2006). The dark side of choice: when choice impairs social welfare. *Journal of Public Policy and Marketing*, 25: 24–38.

Bown, Nicola, Daniel Read and Barbara Summers (2003). The lure of choice. *Journal of Behavioral Decision Making* 16: 297–308.

Bruni, Luigino and Robert Sugden (2013). Reclaiming virtue ethics for economics. *Journal of Economic Perspectives* 27: 141–164.

Camerer, Colin, Samuel Issacharoff, George Loewenstein, Ted O'Donoghue and Matthew Rabin (2003). Regulation for conservatives: behavioral economics and the case for 'asymmetric paternalism'. *University of Pennsylvania Law Review* 151: 1211–1254.

Charness, Gary and Matthew Rabin (2002). Understanding social preferences with simple tests. *Quarterly Journal of Economics* 117: 817–869.

Cialdini, Robert, Raymond Reno and Carl Kallgren (1990). A focus theory of normative conduct: recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology* 58: 1015–1026.

Competition and Markets Authority [CMA] (2016a). *Energy market investigation: final report*. 24 June 2016.

Competition and Markets Authority [CMA] (2016b). *Retail banking market investigation: final report*. 9 August 2016.

Competition and Markets Authority [CMA] (2018). *Tackling the loyalty penalty: response to a super-complaint made by Citizens Advice on 28 September 2018*. 19 December 2018.

Competition and Markets Authority [CMA] (2019). *Consumer Vulnerability: Challenges and Potential Solutions*. February 2019.

Della Vigna, Stefano and Ulrike Malmendier (2004). Contract design and self-control. *Quarterly Journal of Economics* 119: 353–402.

Della Vigna, Stefano and Ulrike Malmendier (2006). Paying not to go to the gym. *American Economic Review* 96: 694–719.

Diamond, Peter (1971). A model of price adjustment. *Journal of Economic Theory* 3(2): 156–168.

Dupuit, Jules (1844/ 1952). On the measurement of the utility of public works. *International Economic Papers* 2 (1952): 83–110. Translated by R.H. Barback. First published in French in 1844. (Page references to reprint in *Cost–Benefit Analysis*, edited by Richard Layard. Penguin, 1973.)

European Union (2005). *Unfair Commercial Practices Directive*. Directive 2005/29/EC.

Fehr, Ernst and Klaus Schmidt (1999). A theory of fairness, competition and cooperation. *Quarterly Journal of Economics* 114: 817–868.

Fehr, Ernst and Simon Gächter (2000). Cooperation and punishment in public goods experiments. *American Economic Review* 90: 980–94.

Financial Conduct Authority [FCA] (2015) *Cash savings market study report: final findings*. Market Study 14/2.3, January 2015.

Financial Conduct Authority [FCA] (2018a). *An evaluation of our guaranteed asset protection insurance intervention*. Evaluation Paper 18/1.

Financial Conduct Authority [FCA] (2018b) *Fair pricing in financial services*. Discussion Paper 18/9.

Financial Conduct Authority [FCA] (2019a) *Guidance for firms on the fair treatment of vulnerable consumers: Guidance consultation* GC 19/3.

Financial Conduct Authority [FCA] (2019b) *General insurance pricing practices: Market Study interim report* MS18/1.2.nt of

Gabaix, Xavier and David Laibson (2006). Shrouded attributes, consumer myopia, and information suppression in competitive markets. *Quarterly Journal of Economics* 121(2): 505–540.

Grubb, Michael (2015). Consumer inattention and bill-shock regulation. *Review of Economic Studies* 82(1): 219–257.

Hviid, Morten and Catherine Waddams Price (2012). Non-discrimination clauses in the retail energy sector. *Economic Journal* 122 (August): F236-F252.

Infante, Gerardo, Guilhem Lecouteux and Robert Sugden (2016). Preference purification and the inner rational agent: a critique of the conventional wisdom of behavioural welfare economics. *Journal of Economic Methodology* 23: 1–25.

Kant, Immanuel (1785/ 2002). *Groundwork for the Metaphysics of Morals*. Translated by Allen Wood. New Haven, CT: Yale University Press.

Kőszegi, Botond and Matthew Rabin (2007). Mistakes in choice-based welfare analysis. *American Economic Review* 97: 477–481.

McQuillin, Ben and Robert Sugden (2012). How the market responds to dynamically inconsistent preferences. *Social Choice and Welfare* 38: 617–634.

Musgrave, Richard (1959). *The Theory of Public Finance.* New York: McGraw-Hill.

Office of Communications [Ofcom] (2020). *Fair treatment and easier switching for broadband and mobile customers: Implementation of the new European Electronic Communications Code*. London: Office of Communications.

Office of Fair Trading (2010). *Advertising of Prices*. Report OFT 1291. London: Office of Fair Trading.

Rabin, Matthew (1993). Incorporating fairness into game theory and economics. *American Economic Review* 83: 1281–1302.

Rizzo, Mario and Glen Whitman (2020). *Escaping Paternalism: Rationality, Behavioural Economics and Public Policy*. Cambridge: Cambridge University Press.

Salop, Steven and Joseph Stiglitz (1977). Bargains and ripoffs: a model of monopolistically competitive price dispersion. *Review of Economic Studies* 44(3): 493–510.

Scheibehenne, Benjamin, Rainer Griefeneder and Peter M. Todd (2010). Can there ever be too many options? A meta-analytic review of choice overload. *Journal of Consumer Research* 37: 409–425.

Schmalensee, Richard (1981). Comments on Beales, Craswell, and Salop. *The Journal of Law & Economics* 24(3): 541-544

Shapiro, Carl (1983). Consumer protection policy in the United States. *Journal of Institutional and Theoretical Economics* 139.3: 527-544

Stango, Victor and Jonathan Zinmann (2014). Limited and varying consumer attention: evidence from shocks to the salience of bank overdraft fees. *Review of Financial Studies* 27: 990–1030.

Stiglitz, Joseph (1979). Equilibrium in product markets with imperfect information. *American Economic Review* 69(2): 339–345.

Sugden, Robert (2004). The opportunity criterion: consumer sovereignty without the assumption of coherent preferences. *American Economic Review* 94: 1014–1033.

Sugden, Robert (2015). Looking for a psychology for the inner rational agent. *Social Theory and Practice* 41: 579–598.

Sugden, Robert (2018). *The Community of Advantage: A Behavioural Economist's Defence of the Market*. Oxford: Oxford University Press.

Sunstein, Cass and Richard Thaler (2003). Libertarian paternalism is not an oxymoron. *University of Chicago Law Review*, 70: 1159–1202.

Thaler, Richard (2018). Nudge, not sludge. *Science* 361 (6401): 431.

Thaler, Richard and Cass Sunstein (2008). *Nudge: Improving Decisions About Health, Wealth, and Happiness*. New Haven, CT: Yale University Press.

Varian, Hal (1980). A model of sales. *American Economic Review* 70(4): 651–659.

Waddams Price, Catherine and Minyan Zhu (2016). Non-discrimination clauses: their effect on British retail energy prices. *The Energy Journal* 37(2): 111-132.

Wright, Joshua D. (2012). The antitrust/consumer protection paradox: two policies at war with each other. *The Yale Law Journal*, 121: 2216-2268.

Wright, Joshua D. and Douglas H. Ginsburg (2012). Behavioral law and economics: its origins, fatal flaws, and implications for liberty. *Northwestern University Law Review*, 106(3): 1033-1090.