

REFLECTIVE WILLINGNESS TO PAY: PREFERENCES FOR SUSTAINABLE CONSUMPTION IN A CONSUMER WELFARE ANALYSIS

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ABSTRACT

Our starting point is the following simple but potentially underappreciated observation: When assessing willingness to pay (WTP) for hedonic features of a product, the results of such measurement are influenced by the context in which the consumer makes her real or hypothetical choice or in which the questions to which she replies are set (such as in a contingent valuation analysis). This observation is of particular relevance when WTP regards sustainability, the ‘non-use value’ of which does not derive from a direct (physical) sensation and where perceived benefits depend heavily on available information and deliberations. The recognition of such context sensitivity paves the way for a broader conception of consumer welfare (CW), and our proposed standard of ‘reflective WTP’ may materially change the scope for private market initiatives with regards to sustainability, while keeping the analytical framework within the realm of the CW paradigm. In terms of practical implications, we argue, for instance, that actual purchasing decisions may prove insufficient to measure consumer appreciation of sustainability, as they may rather echo learnt but unreflected heuristics and may be subject to the specific shopping context, such as heavy price promotions. Also, while preferences may reflect the current social norm, the latter may change considerably over time as more consumers adapt their behaviour.

I. INTRODUCTION

It is a seeming paradox that consumption precipitates negative externalities on the environment even though there appears to be a broad societal consensus

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on the expedience of promoting sustainability.¹ It appears equally paradoxical that the legislator, despite the societal consensus, fails to address the issue in a way that would satisfy, if not to say pacify, a large portion of society. Against this backdrop, a discussion has emerged whether and to what extent agencies and institutions may directly account for sustainability in their decisions.² Several

¹ The notion of sustainability does not yet have a generally recognized definition within the antitrust debate. We construe it broadly, encompassing effects on the climate as well as on the environment in general. We also include variety of species and animal welfare into it, since all these issues can raise similar problems when integrating them into antitrust assessment. The notion of sustainability can also embrace further societal goals including, but not limited to, the fairness of wealth distribution. The draft paper of the Dutch competition and markets agency Autoriteit Consument & Markt (ACM) on sustainability agreements shows this, ACM Draft Guidelines: Sustainability agreements—Opportunities within competition law. Available at: <https://www.acm.nl/sites/default/files/documents/2020-07/sustainability-agreements%5B1%5D.pdf> (last accessed 05 October 2020). It focuses on ‘climate change and sustainability’, at ¶ 6, but it also addresses examples of agreements on ‘animal-friendly products’ ¶ 30, or such ‘guaranteeing a fair income’ ¶ 30. On the notion of sustainability see also Roman Inderst & Stefan Thomas, *Prospective Welfare Analysis: Extending Willingness-to-Pay Assessment to Embrace Sustainability*, 25/09/2020, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3699693 (last accessed 23 November 2020). In environmental economics, sustainable development is defined more formally in terms of (intertemporally) non-declining utility, non-declining wellbeing or a non-declining productive base (e.g. Robert Solow, *Intergenerational Equity and Exhaustible Resources*, 41 REV. ECON. STUD. 29–46 (1974)).

² See, out of the vast amount of literature, inter alia, Sarah Beeston, *Competition Law and Sustainability Initiatives*, in Festschrift für Dirk Schroeder 111 (Juliane Kokott, Petra Pohlmann & Romina Polley eds., Cologne: Otto Schmidt 2018); Claassen Rutger & Gerbrandy Anna, *Rethinking European Competition Law: From a Consumer Welfare to a Capability Approach*, 12 Utrecht L. Rev. 1 (2016); Kevin Coates & Dirk Middelschulte, *Getting Consumer Welfare Right: The Competition Law Implications of Market-Driven Sustainability Initiatives*, 15 EUR. COMP. J. 318 (2019); Anna Gerbrandy, *Solving a Sustainability-Deficit in European Competition Law*, 40 WORLD COMPETITION 539 (2017); Anna Gerbrandy, *Addressing the Legitimacy Problem for Competition Authorities Taking into Account Non-Economic Values*, 40 EUR. L. REV. 769 (2015); Simon Holmes, *Climate Change, Sustainability, and Competition Law*, 8 J. ANTITRUST ENFORC. 354, 377 (2020); Suzanne Kingston, *Integrating Environmental Protection and EU Competition Law: Why Competition Isn't Special*, 16 EUR. L. J. 780 (2010); SUZANNE KINGSTON, *GREENING EU COMPETITION LAW* (Cambridge: Cambridge University Press 2011); Suzanne Kingston, *Competition Law in an Environmental Crisis*, 10 J. EUR. COMP. L. PRAC. 517 (2019); Erik Kloosterhuis & Machiel Mulder, *Competition Law and Environmental Protection: The Dutch Agreement on Coal-Fired Power Plants*, 11 J. COMP. L. ECON. 855 (2015); José Carlos Laguna de Paz, *Protecting the Environment Without Distorting Competition*, 3 J. EUR. COMP. L. PRAC. 248 (2012); Thomas Lübbig, *Sustainable Development and Competition Policy*, 4 J. EUR. COMP. L. PRAC. 1 (2013); Giorgi Monti, *Four Options for a Greener Competition Law*, 11 J. EUR. COMP. L. PRAC. 124 (2020); Giorgi Monti & Jotte Mulder, *Escaping the Clutches of EU Competition Law: Pathways to Assess Private Sustainability Initiatives*, 42 E. L. REV. 635 (2017); JULIAN NOWAG, *ENVIRONMENTAL INTEGRATION IN COMPETITION AND FREE-MOVEMENT LAW* (Oxford: Oxford University Press 2016); Maarten Pieter Schinkel & Yossi Spiegel, *Can Collusion Promote Sustainable Consumption and Production?* 53 INT. J. IND. ORG. 371 (2017); Eva van der Zee, *Quantifying Benefits of Sustainability Agreements Under Article 101 TFEU*, 43 WORLD COMPETITION 189 (2020); Maurits Dolmans, *Sustainable Competition Policy*, 6 Competition Law & Policy Debate 4 (2020), available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3608023 (last accessed 05 October 2020). Several agencies have entered into the debate by policy statements, such as the ACM Draft Guidelines: Sustainability agreements—Opportunities within competition law, available

competition agencies have initiated discourses on the means and forms of considering sustainability in their enforcement policy.³ These initiatives are embedded in a broader debate on the expedience of integrating sustainability in the regulation of the market economy.⁴

We assume, in this paper, that there is a majority opinion in the political economy that the promotion of sustainability is a matter of societal interest. We moreover recognize that this conviction has percolated into the legal order in various ways. It has not, however, led to an overarching sustainability clause relating to the EU or U.S. antitrust law. When it comes to antitrust enforcement, the integration of sustainability, therefore, causes a predicament. Upon the assumption that the antitrust laws aim at protecting competition and that they hinge on the paradigm of consumer welfare (hereinafter: CW) to measure anticompetitiveness, sustainability can, as a conceptual matter, only be integrated into the analysis to the extent that consumers honour it with an increased willingness to pay (hereinafter: WTP). Where this is not

at: <https://www.acm.nl/sites/default/files/documents/2020-07/sustainability-agreements%5B1%5D.pdf> (last accessed 05 October 2020), the German Bundeskartellamt with its background paper on public interest and competition law, available at: https://www.bundeskartellamt.de/SharedDocs/Publikation/DE/Diskussions_Hintergrundpapier/AK_Kartellrecht_2020_Hintergrundpapier.pdf;jsessionid=576D124E4992D51AA08B4A3DE857125A.1_cid390?_blob=publicationFile&v=2 (last accessed 5 October 2020). The Hellenic Competition Commission has launched a dialogue on competition law and sustainability, available at <https://www.epant.gr/en/enimerosi/competition-law-sustainability.html> (last accessed 5 October 2020).

³ See Dutch ACM initiative on draft guidelines on ‘Sustainability Agreements’, *supra* note 3; on the Hellenic Competition Commission’s dialogue on competition law and sustainability see *supra* note 3; German Bundeskartellamt, press release of 5 October 2020, Sustainability initiatives and competition law practice—virtual meeting of the Working Group on Competition Law, and the respective background paper available at: https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2020/05_10_2020_AKK_2020.html;jsessionid=7AAA46298A7EC53B4D7E53E4066E0E28.1_cid362?nn=3591568 (last accessed 30 November 2020). The EU Commission has initiated a public consultation on the matter, see https://ec.europa.eu/competition/information/green_deal/index_en.html and https://ec.europa.eu/commission/commissioners/2019-2024/vestager/announcements/green-deal-and-competition-policy_en (last accessed 30 November 2020).

⁴ The ECB expounds ways to integrate sustainability in its policy, see Christine Lagarde, President of the ECB, *The Monetary Policy Strategy Review: Some Preliminary Considerations*, at the ‘ECB and Its Watchers XXI’ Conference, Frankfurt am Main, 30 September 2020: ‘Climate change affects all aspects of monetary policy: output and inflation, long-term interest rates and policy transmission. That is why we are carefully studying the implications of climate change for our primary objective as part of our strategy review’. Available at: <https://www.ecb.europa.eu/press/key/date/2020/html/ecb.sp200930~169abb1202.en.html> (last accessed 26 November 2020); Simon Dikau & Ulrich Volz, *Central Banking, Climate Change, and Green Finance*, in *HANDBOOK OF GREEN FINANCE* 81 (Jeffrey Sachs, Wing T. Woo, Naoyuki Yoshino & Farhad Taghizadeh-Hesary eds., Singapore: Springer 2019); Malin Andersson, Claudio Baccianti & Julian Morgan, *Climate Change and the Macro Economy*, Occasional Papers Series, No 243/June 2020, available at: <https://www.ecb.europa.eu/pub/pdf/scpops/ecb.op243~2ce3c7c4e1.en.pdf> (last accessed 26 November 2020). Another aspect is the EU’s sustainable finance initiative, see Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, OJ 2020 L 198, p. 13, which defines ecologically sustainable financial products.

the case, however, an antitrust intervention, conceptually, could not, without more, be based on sustainability concerns, inasmuch as sustainability could not be invoked as a defence legitimizing an anticompetitive measure.⁵

Against this backdrop, several approaches have been proposed to push green antitrust enforcement beyond the limits of what the CW approach is supposed to be capable of in achieving. One suggestion is to gauge the societal costs that can be prevented by an anticompetitive sustainability measure. Such costs are, then, conceived of as a type of indirect reduction in CW, so that the restrictive agreement can be coined as ‘efficient’ (hereinafter: ‘societal cost approach’). Another stream of thinking considers sustainability to amount to an enforcement goal in its own right, which sits at the side of the protection of competition and the promotion of CW.⁶ Accordingly, the effect of a measure on consumer surplus on the one hand, and its impact on sustainability on the other, shall be balanced against each other (hereinafter: ‘multi-goals approach’⁷). We find that the debate on the appropriate way of dealing with sustainability is in its infancy. It might very well be that one of these two proposals, or even both, evolves into recognized and effective enforcement paradigms and possibly even legislation. Even though we do neither endorse nor reject any of these approaches in this paper, we want to briefly allude to a few objections that can be raised against them. This merely serves the purpose to create awareness that the conceptual way of dealing with sustainability in antitrust is unsettled.

The societal cost approach comes with problems in terms of commensurability. While the avoidance of societal environmental costs would accrue to the entire society, the anticompetitive measure to improve on sustainability will be harmful only to those who purchase the more sustainable product at a potentially increased price. The multi-goals approach, on the other hand, gradually dilutes the antitrust law’s dedication to competition as its goal. That raises questions as to the legitimacy of enforcement measures to the extent that, presently, the law does not explicitly enshrine sustainability as a goal in

⁵ The underlying problem would be commensurability, for sustainability and consumer surplus cannot be compared unless some kind of common unit of measure is found, which is WTP. To paraphrase Justice Antonin Scalia in *Bendix Autolite v. Midwesco Enterprises*, 486 U.S. 888, 897 (1988) on the nature of ‘balancing’ in the absence of a common unit of measure: ‘This process is ordinarily called “balancing,” [...] but the scale analogy is not really appropriate, since the interests on both sides are incommensurate. It is more like judging whether a particular line is longer than a particular rock is heavy’.

⁶ See, for example, Simon Holmes, *Climate Change, Sustainability, and Competition Law*, 8 J. ANTITRUST ENFORC. 354, 377 (2020); Suzanne Kingston, *Integrating Environmental Protection and EU Competition Law: Why Competition Isn’t Special*, 16 EUR. L. J. 780 (2010); SUZANNE KINGSTON, *GREENING EU COMPETITION LAW* (Cambridge: Cambridge University Press 2011).

⁷ The respective societal benefits could then be calculated using methods primarily from environmental economics, see Theon van Dijk, *A New Approach to Assess Certain Sustainability Agreements under Competition Law*, in *COMPETITION LAW AND ENVIRONMENTAL STABILITY* (Paris: Concurrences Books, forthcoming).

Commission and national agencies have, lately, initiated a discussion process on these matters.¹⁴ This highlights the importance of agencies engaging in the general policy debate and, possibly, also influencing the legislator to make readjustments to the law.

In our paper, we pursue a path that is different from the aforementioned. We do neither endorse nor reject any of the aforementioned approaches. Rather, we venture to establish that the CW paradigm can be more accommodating of sustainability considerations by eliciting a more reflective response from consumers about their appreciation for sustainability.

We venture to test the capability of the CW paradigm to embrace consumers' appreciation for sustainability more effectively than what the traditional CW analysis is capable of. The main posit is that consumers' reflections on sustainability can be influenced by the context in which the consumers' WTP is being measured. To capture complex sustainability deliberations, we propose to reset this context for the purpose of WTP analysis. We refer to this as 'reflective WTP'. The economic idea behind this reflective WTP approach is not, by definition, confined to sustainability features of services or goods. In this paper, we conceptualize it with an exclusive focus on sustainability and the legal determinants for its integration into antitrust.

This proposal complements our earlier contribution on 'Prospective Welfare Analysis', for which we have extended the CW paradigm into the dimension of time.¹⁵ We strive to eventually synthesize both approaches here. The common posit behind both papers is that the measuring of WTP is merely a way of comparing two market outcomes by counterfactual analysis. The purpose of this effort is to decide whether an intervention is justified or not, that is whether market outcome A is preferable over market outcome B. We argue that, when gauging whether a market outcome is more preferable than another one, it is necessary to take into consideration that consumers' WTP is not static, but that it can change depending on the point of time or the context in which it emerges. We argue that a CW analysis that strives to find out about which of two market outcomes is preferable should undertake a comprehensive view and yet, in particular, not be necessarily confined to 'revealed preferences', as emanating from concrete purchasing decisions. While this observation has more general applicability, it is of particular relevance with regards to sustainability. As we discuss at length below, the 'non-use value' of sustainability does not derive from a direct (physical) sensation, and perceived benefits depend heavily on available information and deliberations.

to horizontal cooperation agreements OJ 2001 C 2 p. 3 ¶ 188–198, where it was held that an exemption under Article 81(3) EC is possible if the 'net contribution to the improvement of the environmental situation overall outweighs increased costs' (¶ 198).

¹⁴ See *supra* note 4.

¹⁵ Roman Inderst & Stefan Thomas, *Prospective Welfare Analysis: Extending Willingness-to-Pay Assessment to Embrace Sustainability*, 25/09/2020, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3699693 (last accessed 23 November 2020).

More specifically, consumer's expressed appreciation of a certain product feature may hinge on a complex set of information and deliberations. In such cases, consumer's measured WTP may vary appreciably depending on the context in which the respective choices are made (or the respective questions are posed) and depending on the level of information available to the consumer in that moment. Also, the fact that a consumer prefers a cheaper good over the more expensive substitute even though the latter is more sustainable does not necessarily reflect the consumer's general ignorance towards sustainability. It might merely demonstrate that the way these products are promoted and presented in the shop tilt WTP for different attributes. The consumer, when shopping in the supermarket, might be so time constrained that he relies on price as the most accessible criterion of distinction or just follows some ingrained heuristic, thereby eschewing a reflection on sustainability. This observation relates some of our thinking to the literature on behavioural economics, which has demonstrated that, depending on circumstances, actual purchasing decisions may also be subject to a wide range of behavioural biases,¹⁶ including a tendency to procrastinate (often referred to as hyperbolic discounting), or some status-quo bias in behaviour.¹⁷ We therefore also reflect, in this paper, on the relevance of these biases in particular from the perspective of sustainability.

Boldly stated, in some areas, society at large seems to crave market outcomes that deviate from what consumers 'vote for' at the counter, and there must be

¹⁶ There is a growing literature dealing with the question of whether and how behavioural economics can be integrated into antitrust law and the construal of its provisions in general. We are not touching upon this conceptual issue since, for the purpose of our specific topic, this is not relevant. We rely on behavioural economics merely for the purpose of pointing out that there is not one static WTP among consumers. On the general debate, see, inter alia Maurice E. Stucke, *Behavioral Economists at the Gate: Antitrust in the Twenty-First Century*, 38 LOY. U. CHI. L. J. 513 (2007); Maurice E. Stucke, *Behavioral Antitrust and Monopolization*, 8 J. COMP. L. ECON. 545 (2012); Amanda P. Reeves & Maurice E. Stucke, *Behavioral Antitrust*, 86 IND. L. J. 1527 (2011); Avishalom Tor, *The Fable of Entry: Bounded Rationality, Market Discipline, and Legal Policy*, 101 MICH. L. REV. 482 (2002); Christopher R. Leslie, *Rationality Analysis in Antitrust*, 158 UNIV. PA. L. REV. 261 (2010). Voicing skepticism towards some aspects of integrating such concepts for antitrust analysis see Joshua D. Wright & Judd E. Stone II, *Misbehavioral Economics: The Case Against Behavioral Antitrust*, 33 Cardozo L. REV. 1517 (2012); Gregory J. Werden, Luke M. Froeb & Mikhael Shor, *Behavioral Antitrust and Merger Control*, 167 J. INST. THEOR. ECON. 126 (2011); Roger Van den Bergh, *Behavioral Antitrust: Not Ready for the Main Stage*, 9 J. COMP. L. ECON. 203 (2013); Roger Van den Bergh, *Economic Approaches to Competition Law*, in *COMPARATIVE COMPETITION LAW AND ECONOMICS* 69–76 (Roger Van den Bergh ed., Cheltenham: Edward Elgar 2017). With an emphasis on the agency's perspective, see Benjamin J. R. Nuñez, *Developing Behavioural Economics as a Practical Tool for Market Authorities*, 5 J. ANTITRUST ENFORC. 375 (2017); William E. Kovacic & James C. Cooper, *Behavioral Economics and Its Meaning for Antitrust Agency Decision Making*, 8 J. LAW ECON. POLICY 779 (2012).

¹⁷ See, generally, on the role of understanding human behaviour for the analysis of the law Cass R. Sunstein, *Behavioral Analysis of Law*, 64 UNIV. CHIC. LAW REV. 1175 (1997); Cass R. Sunstein, Christine Jolls & Richard Thaler, *A Behavioral Approach to Law and Economics*, 50 STANFORD L. REV. 1471 (1998); Richard A. Epstein, *Behavioral Economics: Human Errors and Market Corrections*, 73 UNIV. CHIC. LAW REV. 111 (2006).

a reason for this delta. One such reason may consist in the lack of information or deliberation, given the constraints of an actual shopping context. And still another reason may lie in behavioural biases, which may be particularly relevant with regard to sustainability, where benefits are not felt directly and may even be uncertain or lie far in the future. Our approach tries to bridge this gap in that we propose to analyse WTP also in scenarios that overcome these shortcomings. And, as noted above, we also relate this to our previous contribution on ‘prospective WTP’ by relating measured WTP to the prevailing social norm, which may change considerably when other consumers adapt their choices.

It is important to emphasize, in the context of the present paper, that we do not espouse the idea of using antitrust law to enforce sustainability goals or other legal aims, for example, in the context of consumer protection, as an end in itself and detached from CW. We merely argue to rely on reflective WTP, where appropriate, within the established normative criteria stipulated by the antitrust laws in relation to cartels, unilateral conduct, and mergers. For instance, the fact that consumers have a reflective WTP for certain features and that the offerings of a dominant firm do not fully cater to such preferences, does not demonstrate, therefore, an anticompetitive exploitation of consumers in terms of Article 102 TFEU.¹⁸ What matters for a theory of harm in such a case is whether the market outcome deviates from the competitive counterfactual so that it would become dispositive whether, absent dominance, consumers would be served better. It would be unconvincing to argue, however, that since consumers ‘do not get what they want after thorough reflection of their WTP’ amounts to an abuse.¹⁹ On the other hand, reflective WTP could

¹⁸ The rationale behind the prohibition of exploitative abuses is, in our view, to prevent a dominant firm from extracting prices or contractual terms from its customers in a way that would not be possible were it not for the dominant position, see ROBERT O’DONOGHUE & JORGE PADILLA, *THE LAW AND ECONOMICS OF ARTICLE 102 TFEU* (Oxford: Hart Publishing 2013) at 265: ‘Abuses such as excessive pricing [...] have a clear causal connection with dominance’. Therefore, the Court refers to a comparison with competition products, see Court of 14 February, Case 27/76 [*United Brands Company and United Brands Continental BV v. Comm*] ECLI:EU:C:1978:22, ¶ 252. Inasmuch as the Court, additionally, refers to the ‘unfairness in itself’, this must be conceived of as a proxy indicating a deviation from what would be possible under competition. The Commission points out that this unfairness paradigm is of limited guidance Commission of 23 July 2004, A.36.570/D3, ¶ 196. In any event, what matters in exploitation cases is whether the outcome deviates from what would be possible absent the dominant position, for it would be unconvincing to hold a dominant firm liable for a conduct that does not deviate from what this company would do and could do under competition, see Miguel da la Mano, Renato Nazzini, & Hans Zenger, in JONATHAN FAULL/ALI NIKPAY, *THE EU LAW OF COMPETITION* (Oxford: Oxford University Press 3rd edn. 2014) ¶ 4.253: ‘exploitative abuses, in which competition is harmed by the dominant undertaking charging prices or applying trading conditions that are, to a significant degree, above or more onerous than the prices or the trading conditions that would be charged or applied in a competitive market’. See also loc. cit. ¶ 4.259. See also Michael Kling & Stefan Thomas, *Kartellrecht, Nomos*, Munich, 2nd edn. 2016, § 6 ¶ 90.

¹⁹ Reflective WTP, in that regard, is not different from consumers’ appreciation of low prices. The fact that consumers would want products to be cheaper does not mean that a dominant firm

become relevant in a merger context, for example, if the concentration led to cost efficiencies resulting in a downward pricing pressure at the expense of sustainability. If, in such a case, the downward pricing pressure, which might be found by way of UPP-analysis, did not offset the decrease in sustainability for which consumers display a reflective WTP, this could amount to a significant impediment to effective competition within the framework of a standard unilateral effects analysis in a horizontal merger setting, since consumer rent would be reduced as a result of the concentration. Thus, when we speak of a modified way of dealing with WTP analysis in this paper, we do not mean that the antitrust theories of harm should be modified to directly enforce sustainability paradigms or consumer protection laws. Rather, we mean that a more reflective measuring of WTP can enhance the knowledge base on which an agency or a court can base its decision when applying the standard theories of harm and substantive gauges of antitrust law. We moreover argue, from a normative perspective, that such a broadening of the knowledge base is permitted and that it can even be called for in legal terms.

In the following, we will outline in more detail why the measuring of WTP for sustainability warrants such a broadened analytical framework. The intention behind this approach is to render the CW paradigm more powerful in measuring consumer preferences with respect to sustainability and to make the results commensurable²⁰ within the traditional methods of effects analysis in antitrust. We relegate a detailed description of the further organization of this article to the subsequent section.

II. AN OVERVIEW OF THE REFLECTIVE WTP APPROACH

We are eager to stress, at the outset, that our proposal of ‘reflective WTP’ is not intended to merely serve as a defence in antitrust cases. In our concept, sustainability does not qualify as an extraneous justification. Rather, the implication of any reflective WTP to be found will directly affect CW analysis. Therefore, our approach may equally broaden the scope of potential antitrust interventions, as well as it can make the law more accommodating of sustainability considerations as a defence. In cases where the impact of a merger, for example, impedes on sustainability-related product features which, upon examination of reflective WTP, deprive consumers of appreciated benefits, our approach may support a theory of harm. The following additional

selling those products to them exploits those consumers in terms of the law if the product is not ‘cheap enough’ in the viewpoint of consumers.

²⁰ On incommensurability in the law see Cass R. Sunstein, *Incommensurability and Kinds of Valuation: Some Applications in Law*, in *INCOMMENSURABILITY, INCOMPARABILITY, AND PRACTICAL REASON* 234, 238 (Ruth Chang ed., Cambridge, MA: Harvard University Press 1998): ‘Incommensurability occurs when the relevant goods cannot be aligned along a single metric without doing violence to our considered judgements about how these goods are best characterized’. The single metric, in our approach, is consumer surplus.

example may highlight this for the context of unilateral conduct: Take a dominant firm that controls access to final consumers, for example, as an important end-consumer trader. Assume now that this dominant firm focuses on low prices and excludes higher priced products from its shelves. A small supplier of sustainable products is, therefore, denied access to this market since its product characteristics do not reconcile with the low-price approach of this dominant trader. When it comes to assessing whether the refusal to deal is justified, the dominant trader might argue that consumers demonstrate a preference for low prices at the counter. The small supplier, on the other hand, might invoke that the focusing on revealed preferences, namely low prices, deprives it from reaching consumers with its more sustainable offerings. To the extent that an analysis of consumer preferences shows a reflective WTP for sustainability, this could add to the argument that the refusal to deal is an unjustified discrimination of the small supplier vis-à-vis its more cost-efficient, albeit less sustainable, rivals. Ultimately, reflective WTP could, in this example, form an argument for an antitrust intervention.

It is equally conceivable, however, that some restrictive measures turn out to be efficient to the extent that they cater to a reflective WTP for sustainability that would not have been discovered had the agency confined itself to revealed preferences instead of undertaking a more comprehensive analysis. In conclusion, we advocate that, where reasonably applicable, the analytical paradigms within a CW analysis must be adjusted or, at least, complemented to avoid the aforementioned gaps, relating, for example, to lack of information, context-dependency, or externalities. The overarching extension is thereby to make the expression of preferences, and thereby the extraction of WTP, more reflective.

At this point, another clarification is warranted. We do not want to fall victim to the naïve idea that WTP was some state of mind in a consumer that existed independently of the circumstances and that could therefore be separated from these circumstances. That is not the case. We do not argue, therefore, that our approach enables to ‘filter out the pure preference’ of consumers, as opposed to ‘tainted samples of WTP’ that are diluted by biases. Our approach is void of any such ideas on the purity of people’s wills. We harbour no illusion about the fact that one and the same consumer can display different WTPs in relation to the same product feature, depending on the circumstances under which he is observed or asked, and that all these WTPs are equally ‘true’. Also, we do not aspire to judge on the ‘soundness’ or ‘reasonability’ of consumers’ WTP. In fact, we suppose that all expressions of WTP have equal dignity irrespective of whether a majority of people thinks of them as reasonable or not. Moreover, we do not argue that the WTP, as expressed by a consumer in one situation, is ‘more typical’ for this person than that expressed by the same person in another situation. We think that any such attempt to rank opinions according to the degree to which they reflect a

person's 'true personality' would be highly arbitrary. Our proposal, therefore, does not make such an attempt either.

Rather, we rely, as a starting point, on the assumption that sustainability is a societal goal of great importance, on which there is a far-reaching consensus, and which is reflected by the legal order in several ways. We conclude from here that it is expedient to relate WTP analysis to those contexts in which the consumers, when making up their minds about sustainability, have the likeliness of attributing adequate weight to it. In that vein, we construe our concept as an openly utilitarian approach, the purpose of which is to reconcile the societal goal of sustainability, to the extent possible, with the CW paradigm. An advantage of this approach, as opposed to the multi-goals approach, is in the fact that it retains the consumer as the sole arbiter on how much weight is attributed to sustainability. The WTP for sustainability will, after all, still be determined by the consumer in displaying a certain degree of appreciation. As we will outline below, however, we also recognize that the integration of a reflective WTP into effects analysis depends greatly on the quality of the data that can be achieved in a given case. We therefore advocate a comprehensive analysis that should venture to integrate reflective WTP for sustainability rather than making the strict posit that reflective WTP should substitute, under any circumstance, for preferences that are extracted from other, for example, less reflected choices.

Another merit of the reflective WTP approach can be found in that it relates to the identical consumer or consumer group when measuring harm and benefit. This avoids the commensurability problems that arise in the societal cost approach. In fact, the reflective WTP approach does not hinge on the avoidance of societal costs at all, therefore making it applicable even in cases where sustainability relates to ethical posits that are not cost-efficient, such as an increase in animal welfare, which does not avoid societal costs albeit possibly catering to CW to the extent that consumers display an increase in WTP to such ethical product features. That said, we will outline that our concept of reflective CW may also encompass, to some extent, externalities of individual consumption decisions on the well-being of other citizens, including those who are not current consumers. Unlike the integration of societal costs, though, externalities of this kind will only be relevant to the extent that they are echoed by a consumer appreciation. We will not ask whether societal costs resulting from externalities are so great that an appreciable number of consumers or non-consumers will suffer. Rather, we will ask what WTP is attributed by consumers to the goal of achieving that negative sustainability externalities are reduced or prevented to the benefit of the consumers and of other people (or animals).

Our contributions will proceed as follows. We will, first, show how it is possible to readjust the framework of CW analysis to accommodate sustainability considerations by consumers to a greater extent (Section III). We also provide some guidance on how to modify the context or the choices posed to

consumers. Subsequently, we will demonstrate that this readjustment towards a reflective WTP approach reconciles with the existing legal determinants (Section IV). The article will close with conclusions where we will also relate our main arguments of this paper to our companion paper on ‘Prospective Welfare Analysis’ (Section V).

III. THE ECONOMIC FOUNDATION OF REFLECTIVE WTP AND ITS MEASUREMENT

A. Exemplification

To sharpen the subsequent discussion, we consider the following examples. Suppose that producers of meat, together with national distributors or final retailers, committed through a restrictive agreement to only raising animals according to a minimum (animal welfare) standard. The restrictive agreement is supposed to cover a sufficiently large (or even the full) segment of the local market, and we assume that the agreement will lead to higher prices or that it will reduce the availability of lower-priced alternatives. Alternatively, the example could relate to environmental sustainability, where a more sustainable product may reduce harmful emissions or support greater biodiversity.

Suppose also that the products, which the agreements would want to promote, are already in the market, albeit presumably with a low market share. With this assumption, we ensure that it is possible to take actual consumer behaviour in the relevant market into account—next to, as we will elaborate, other information, as obtained from hypothetical choices posed to consumers. But we acknowledge that often an assessment of the outcome of a restrictive agreement based only on observed purchases is simply not feasible, for example, as the intended change in production or the respective introduction of new products have yet to occur. By focusing the discussion in this section on cases where data on observed purchasing behaviour are, however, both accessible and informative, we can sharpen our ideas. In particular, we thereby challenge the idea that irrespective of circumstances one can sufficiently (and exclusively) learn consumers’ WTP and thereby conduct a CW analysis solely by extracting revealed preferences from observed purchases.

In the considered cases, preferences of consumers over the considered alternatives relate to attributes that do not directly confer so-called use value. Such ‘use value’ would typically be obtained by consuming or physically interacting with the considered product, in difference to ‘non-use’ value.²¹

²¹ For this article, we do not wish to engage in a more thorough discussion about terminology, noting, however, that there are clearly also other terms that refer to the same or related concepts (such as the term ‘passive-use value’, which goes back to the well-known contribution by Krutilla (John V. Krutilla, *Conservation Reconsidered*, 57 AM ECON. REV. 777–86 (1967))). In environmental economics literature, next to the concepts of ‘use value’ and ‘non-use value’, one also frequently encounters the notion of ‘option value’, which refers to future use value (which may notably be compromised by current production and consumption of the same

There may also be externalities involved, though this is not a crucial feature for the concept of reflective WTP.

The first question that we pose in what follows is whether, when making their observed choices, consumers had all necessary information to understand the consequences of their decisions and whether such information, even if consumers were in principle aware of it, formed part of their actual deliberations. Of course, it would be entirely impractical to require that consumers, when making real or hypothetical decisions, should first consider all possibly relevant information in their deliberations. And this would also not ensure that they process this information, which may be complex and fraught with uncertainty, in a fully appropriate way. Still, as we will argue below, we need to consider that available information forms an important part of the decision process, that variations in such information could lead to the extraction of potentially different ‘revealed preferences’, and that such differences need to be considered carefully when deciding on an appropriate measure of CW for a specific case.

The consideration of such context sensitivity of choices has, however, wider implications, which brings us to a second question, in which we now take information as a given. Still, the considered real or hypothetical choices are always conducted in a particular choice context, consisting, for instance, of the menu of alternatives, but also, notably with real purchase choices, of the specific shopping situation. The latter may involve a consumer filling her shopping basket during a once-a-week shopping trip to the discounter, facing almost exclusively promotions on prices and being, in addition, time constrained. A different context may, again, lead to different choices and thereby potentially different ‘revealed preferences’. With a particular emphasis on learnings from behavioural economics, for our second question we will thus zoom in on the issue of context sensitivity of choices. We also relate the context to the prevailing social norm.

Before we elaborate on these questions, we note that the preceding discussion would also invite a more fundamental reflection on such terms as ‘preferences’ and ‘welfare’. For instance, if a measurement of WTP proves to be sensitive to the created context, how can we still speak of ‘the’ preferences of a consumer and, by way of aggregation, of ‘the’ CW? We already touched upon these issues in the preceding preliminary analysis, and we will return to it at the end of this section, as it naturally leads over to the question of how to provide a legal basis for a potential broadening of CW in antitrust.

B. Revealed preferences depend on information and deliberation

As already hinted at above, when considering attributes of a product that do not directly relate to use-value, such as those about environmental

or, in particular, other consumers). This refers, again, to the time dimension and is addressed separately below.

externalities, consumers may lack the information about the differences between various choice options for them to make a reflected decision on their WTP for a sustainability feature. Providing consumers with a more comprehensive set of information, when measuring their WTP for sustainability, can therefore help to integrate sustainability into antitrust enforcement. Specifically, two arguments sustain this posit.

First, we assume that any person usually has a self-interest in obtaining the highest quality of information on which to base his or her decisions.²² It is true that there are situations in which the acquisition of information is too costly in relation to the value of the decision to be made, which can lead to rational ignorance. Yet it is not the potentially available information, which is spurned in these instances, but the effort to obtain it. On the other hand, we find a plethora of examples deeply ingrained in the organization of markets demonstrating that the legislator prefers informed consumers over ignorant ones. Take the mandatory disclosure of health risks in smoking, or the obligation to inform customers on the financial risks of investment products, or on fuel consumption in car advertisements. Secondly, and independently of the afore, we rely on the finding that sustainability is a matter of great societal and legal interest, so that a general postulate of integrating it into antitrust analysis, to the extent possible, is justified (see *infra* IV.). In both respects, a consumer may put the more weight on the matter of sustainability in her decision, the more information she has on the environmental implications of her purchasing behaviour. While in this article we refrain from fully fleshing out a particular application, in light of the preceding examples a representative sample of consumers may be recruited for a survey. In this survey, consumers' WTP could be elicited either directly (through so-called contingent valuation analysis) or indirectly by a choice experiment (through so-called conjoint analysis).²³ With respect to the first example, subjects may be given information about the different products and the related NOx emissions to a different degree, including potentially a richer description of its implication on human health. In the second example, which relates to animal welfare, the circumstances of how animals are raised under the different scenarios may likewise be described in more or less detail. In addition, the time given for deliberations may vary.²⁴

²² There may exist exceptions to this rule, for example, relating to the personal knowledge on an unavoidable illness, in which a person may prefer ignorance over knowledge. But we think that this type of case does not have relevance with respect to the sustainability issue which is at hand in this article.

²³ With respect to sustainability, hypothetical choices will typically be inconsequential (other than in so-called incentivized experiments).

²⁴ Often, in conjoint analysis, subjects are exposed to a fairly large number of binary choices, where in each case attributes are varied. Time of deliberation may then remain rather restricted.

C. Revealed preferences may reflect context dependency

The notion that choices are context-dependent is one of the central themes of behavioural decision theory and behavioural economics. Such context goes beyond the availability of information. The literature in this area, but also in marketing (consumer choice), has documented such context-dependency both in experiments and in the field. There are, by now, various theories that model such dependency. The literature has also coined specific terms, such as ‘reference-point dependency’ or the dependency on so-called frames of decision making. To illustrate, we only refer to a particular example, which we introduce under the heading of ‘salience’ (while it should be noted that different terminology is used in the literature).

Suppose, for the purpose of a simple illustration, outside our previously introduced cases, that products in a given market differ only with respect to the following two attributes: price and quality, where the latter is directly appreciated by the buyer when consuming the product. We, thus, currently abstract from additional complexities arising from externalities or non-use values. According to standard choice theory, a given consumer should have stable preferences over the respective offers and thus, in particular, also stable preferences with respect to the weights that she attaches to price and the non-monetary attribute, viz. quality.²⁵ Departing from this, we may suppose, instead, that these weights depend on the circumstances, such that in one context the consumer may place a greater weight on price, while in a different context quality is considered the more relevant aspect. The attribute towards which weight is, thus, reallocated may be described as the more salient one in the respective context.

Clearly, which attribute becomes salient in this sense could simply depend on the particular appearance of the product, for example, how prominently the price is displayed on the shelf. Less trivially, based on insights from psychology, the literature in behavioural economics posits that the salience of an attribute depends on how different the manifestation of this attribute is relative to that of comparable offers in the market. For instance, one such model of salience posits that, when the average price in the market is, say, 5 Euro, and when the average quality (according to some metric) is 10, and when a specific product has a 20% lower price of 4 Euro, but a 10% lower quality of 9, then the relatively lower price, compared to the reference point of 5 Euro, would be more salient than quality (as its quality of 9 is only 10% lower than the market-wide reference point of 10).²⁶ Whether a given absolute discount, here of 1 Euro, thus makes low prices more salient compared to low quality

²⁵ In this simple exposition, we thus abstract from interactions that could arise from income effects (i.e. where quality becomes relatively more or less important depending on a consumer’s residual income or wealth, after subtracting the purchasing price).

²⁶ See Pedro Bordalo, Nicola Gennaioli & Andrei Shleifer, *Salience and Consumer Choice*, 121 J. POLIT. ECON. 803–843 (2013).

depends on the market-wide price level. According to this theory, price would more likely be salient when the overall price level is low, and quality should be salient, instead, when the price level is high. A low price level would prevail, for instance, when the respective product is heavily promoted by retailers, as it is used to pull in consumers. Typically, staple products, such as milk or meat, but also olive oil and flour (depending on the national cuisine), are used as such loss leaders, and according to the discussed theory of salience, for such products consumers' choices may thus be tilted towards lower-priced products.²⁷ Instead, when the market price for this particular product category was higher, for example, as it was no longer used as a loss leader, or if such loss leading was restricted, then, according to this theory, the relative importance of quality would increase.

Without putting too much emphasis on this particular example, it illustrates why 'revealed preferences' are not, other than what is suggested by standard welfare analysis, an entirely objective metric subject only to some random measurement error. Behavioural economics has also pointed to various other reasons why choices or expressed WTP depend on the specific context, including also past behaviour. Of course, this does not yet answer whether a particular theory of such context-dependency is applicable in a specific case, and, if so, whether its implications make a significant difference in the measurement of WTP. Still, the preceding example illustrated again why WTP extracted from observed purchasing behaviour may not adequately capture preferences for sustainability. This mirrors our observation with regards to information provision and deliberation. There, we suggested that hypothetical choice experiments may change such information and the time given for deliberations. Now, the context could be varied more widely. Most immediately, in contrast to the actual purchasing situation, price may no longer be given a prominent exposition.

At this point, we also note that consumer choices can, more generally, be fraught with so-called behavioural biases.²⁸ This is noteworthy as some of

²⁷ This theory of loss-leading products has been formalized in Inderst and Obradovits (Roman Inderst & Martin Obradovits, *Loss Leading with Salient Thinkers*, 51 260–278 RAND J. ECON. (2020)).

²⁸ We would distinguish these from simple errors in decision-making, which, as a matter of distinction, would appear to be more random, that is, not systematically favouring one alternative over another. Of course, if available data are rather limited, such errors may still confound the analysis substantially. A survey on biases from the perspective of applicability to regulation is contained in Nick Chater, Roman Inderst & Steffen Huck, *Consumer Decision-Making in Retail Investment Services: A Behavioural Economics Perspective*, European Commission, Final Report, 2010, available at: https://www.wiwi.uni-frankfurt.de/fileadmin/user_upload/dateien_abteilungen/abt_fin/Dokumente/PDFs/Allgemeine_Dokumente/Inderst_Downloads/PO_LICY_PAPERS_and_POLICY_RELATED_REPORTS/consumer_decision-making_in_retail_investment_services_-_final_report_en.pdf (last accessed 1 December 2020). Various books by some of the main contributors to this area take each a specific focus; RICHARD THALER & CASS SUNSTEIN, *NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH, AND HAPPINESS* (Connecticut: Yale University Press, 2008); DAN ARIELY, *PREDICTABLY IRRATIONAL: THE*

these biases may be of particular relevance for choices that relate to non-use values and thereby, notably, to sustainability.²⁹ In fact, such choice situations may typically be quite different from those for which it is instead generally acknowledged that actual purchase decisions provide a fully appropriate reflection of consumers' preferences, that is, when they relate to items that are frequently purchased, that are of relatively limited value, and where the consumer derives benefits (almost) exclusively from the respective use value. In stark difference, the impact of an individual action on the environment should typically be very small and uncertain, and it may only materialize in the future—all without an immediate physical sensation.³⁰ Behavioural biases have recently been, more generally, reflected in the area of 'behavioural welfare economics', even though, to our knowledge, there has not yet been a specific incorporation of sustainability issues (and with it, in particular, of non-use values and externalities). We relate our analysis to this area below. Furthermore, also the prevailing social norm could be seen as a specific context, in particular if its perception is shaped by a consumer's expectation or observation of the behaviour of other consumers. While for a given consumer and at a given time, this may be considered as fixed, it should nevertheless be taken into account at least for the following reasons. First, in view of a more dynamic, prospective analysis, as already referred to above, a change of social norm and thus WTP may be taken into account. Second, a considered undertaking, such as an agreement, may result in a swift and appreciable change of consumption, thereby also changing the social norm and once again individual WTP. This should then be reflected in the counterfactual analysis.³¹

HIDDEN FORCES THAT SHAPE OUR DECISIONS (New York, NY: Harper Perennial 2010); DANIEL KAHNEMAN, THINKING, FAST AND SLOW (New York, NY: Farrar, Straus and Giroux 2011).

²⁹ Widely cited biases include, for instance, a possible overweighing of immediate consumption benefits (sometimes referred to under its specific formalization of 'hyperbolic discounting') or errors in expectation formation, in particular in relation to low-probability events (as exposed, for instance, by Prospect Theory, going back to Kahnemann and Tversky, Daniel Kahneman & Amos Tversky, *Prospect Theory: An Analysis of Decision under Risk* 47 *Econometrica* 263–291 (1979)). With respect to eliciting preferences from a survey, another well-known potential bias refers to difference between WTP, for example, for an environmental good, and willingness to accept compensation for its loss (sometimes referred to as an 'endowment bias', cf. Richard Thaler, *Toward a Positive Theory of Consumer Choice* 1 *J. ECON. BEHAV. ORGAN.* 39–60 (1980)). We further acknowledge that when asking questions regarding sustainability attributes (or eliciting preferences through choices), there is a risk of potentially inflating measures preferences through a so-called social desirability bias, though this may be mitigated through an anonymous survey or experimental design.

³⁰ We note however that consumption of sustainable products may come with a particular 'warm glow' effect. This sensation may depend, again, on the choice context. And it may even depend on whether a consumer could actually decide against a less sustainable variant. If a sustainable restrictive agreement deprives a consumer of such a choice, the 'warm glow' effect may subside.

³¹ We do not pursue this particular aspect in greater detail here as it is dealt with separately in a companion piece, together with an empirical analysis and an application precisely to potential market failures and horizontal agreements: Roman Inderst & Stefan Thomas, *Sustainable Agreements and Social Norms*, mimeo.

D. Implication for a broader concept of WTP and CW

Before we turn, as a next step, to the legal foundations for our reflective WTP approach, we briefly pause to take stock of our journey so far. In the introduction, we motivated our endeavour with the recent debate on how to integrate concerns for sustainability into competition analysis. Although this should not preclude other options, in this article we posit that this is possible also within the CW paradigm. To show this, we started, in this section, with the ‘straw man’ of an analysis of revealed preferences based on observed purchasing behaviour, presupposing thereby that all product attributes of relevance are already expressed in actual offers in the market. We advanced various reasons for why this measure of WTP, and the CW constructed accordingly, may, however, not be sufficiently informative. Observed choices and thereby measures of WTP could be different with additional information. Revealed choices may also be insufficiently informative about consumers’ WTP for non-incremental changes in the market outcome, implying changes in the behaviour also of other or even all consumers.

In sum, the measurement of WTP, and the construction of CW based on it, cannot be considered in isolation, without consideration of the context to which the measuring relates. Varying the context may produce very different results. This can lead to the same person displaying different weights for the same feature, depending on the context in which WTP is measured, as outlined above. Such a notion, whereby measured preferences should not be regarded as a manifestation of some ‘true’ preferences, which a person possesses irrespective of other circumstances, is also shared with authors on behavioural welfare economics.³² To our knowledge, however, no particular reference has yet been made to preferences over sustainability (and with this, to choices that primarily relate to non-use values and that generate externalities on others). Still, we share with the literature the recognition that what is ultimately measured relies on the constructed act of choice, that is, in our words, its context. When we need to measure CW, so as to possibly account for a compensation of a price increase from a restrictive agreement, we need to take this into account.³³

³² This view is expressed prominently in Douglas Bernheim, *The Good, the Bad, and the Ugly: A Unified Approach to Behavioral Welfare Economics* 7 J. COST BENEFIT ANAL. 12–68 (2016). In particular, he also leans against the view that humans act according to ‘true preferences’ the existence of which does not depend on the act of choice and the underlying construction of judgement (to which he refers to as ‘decision frame’, for example, Bernheim (ibid, p. 36)). He also emphasizes that while sometimes preferences seem to be constructed virtually in the process of their elicitation, this does not suggest arbitrariness, but rather a careful recognition of the respective circumstances.

³³ Importantly, this is entirely different when we are only interested, for instance, in elasticities and other expressions of competitive constraints of firm behaviour, for example, for market delineation or to calculate pricing pressure resulting from a merger. Then, we are rightly concerned only with consumer behaviour at the act of purchasing, making thus use of such data to calculate, for instance, the respective elasticity.

IV. LEGAL FOUNDATIONS

To underpin the reflective WTP approach in legal terms, we assume that the CW paradigm is a recognized standard for construing and enforcing the antitrust laws, which is a view widely shared in competition enforcement and scholarship.³⁴ A case can be made for total welfare instead, which has, however, not gained major recognition in practice, most likely for the complexities that this would bring with it for effects assessment in day-to-day enforcement.³⁵ We will therefore remain dedicated to CW.

It is true that there is an ongoing debate about the aims and goals of competition and, concomitantly, competition law.³⁶ We do not strive to weigh

³⁴ Neelie Kroes, speech, *European Competition Policy—Delivering Better Markets and Better Choices*, European Consumer and Competition Day, London, 15 September 2005: ‘Consumer welfare is now well established as the standard the Commission applies when assessing mergers’, available at: https://ec.europa.eu/commission/presscorner/detail/en/SPEECH_05_512 (last accessed 05 October 2020); Joaquín Almunia, speech, *Competition and Consumers: the Future of EU Competition Policy*, European Competition Day, Madrid, 12 May 2010: ‘All of us here today know very well what our ultimate objective is: Competition policy is a tool at the service of consumers. Consumer welfare is at the heart of our policy and its achievement drives our priorities and guides our decisions’. Available at: https://ec.europa.eu/commission/presscorner/detail/en/SPEECH_10_233 (last accessed 05 October 2020); Sir Phillip Lowe, speech, *Consumer Welfare and Efficiency—New Guiding Principles of Competition Policy?* Available at: https://ec.europa.eu/competition/speeches/text/sp2007_02_en.pdf (last accessed 05 October 2020): ‘Ladies and Gentlemen, my overall message is short and simple. Yes, consumer welfare and efficiency are the new guiding principles of EU competition policy. Whilst the competitive process is important as an instrument, and whilst in many instances the distortion of this process leads to consumer harm, its protection is not an aim in itself. The ultimate aim is the protection of consumer welfare, as an outcome of the competitive process’. See also Svend Albæk, also Svend Albæk, *Consumer Welfare in EU Competition Policy*, in AIMS AND VALUES IN COMPETITION LAW (Caroline Heide-Jørgensen, Christian Bergqvist, Ulla Neergaard & Sune Troels Poulsen eds., DJØF Publishing Copenhagen 2013); José Luís da Cruz Vilaça, *The Intensity of Judicial Review in Complex Economic Matters* 6 J. ANTITRUST ENFORC. 173, 184 (2018): ‘I believe such statements are useful for clarifying what the Court considers to be the major goal of EU competition rules, [...] although perhaps not always 100 per cent consistent, the case-law places in general sufficient emphasis on consumer welfare as a goal’. For the US see HERBERT HOVENKAMP, *THE ANTITRUST ENTERPRISE: PRINCIPLE AND EXECUTION* (Cambridge, MA: Harvard University Press 2005) p. 2: ‘The only articulated goal of the antitrust laws is to benefit consumers [...]’.

³⁵ There is an ongoing scholarly debate on whether total welfare or consumer welfare is the appropriate standard for antitrust enforcement, see Louis Kaplow, *On the Choice of Welfare Standards in Competition Law*, in THE GOALS OF COMPETITION LAW 3–26 (Daniel Zimmer ed., Cheltenham: Edward Elgar 2012); Louis Kaplow & Carl Shapiro, *Antitrust*, in HANDBOOK OF LAW AND ECONOMICS Vol. 2, 1073, 1167 (A. Mitchell Polinsky & Steven Shavell eds., Amsterdam: North Holland 2007): ‘From an economic point of view, however, it would seem that in principle total welfare should be the standard’. Damien J Neven & Lars-Hendrik Röller, *Consumer Surplus vs. Welfare Standard in a Political Economy Model of Merger Control*, 23 INT. J. IND. ORGAN. 829–848 (2005); Barak Y. Orbach, *The Antitrust Consumer Welfare Paradox*, 7 J. COMP. L. ECON. 133–164 (2010); An Renckens, *Welfare Standards, Substantive Tests, and Efficiency Considerations in Merger Policy: Defining the Efficiency Defense*, 3 J. COMP. L. ECON. 149–179 (2007); Joseph F. Brodley, *The Economic Goals of Antitrust: Efficiency, Consumer Welfare, and Technological Progress*, 62 N.Y.U. LAW REV. 1020 (1987).

³⁶ The Neo-Brandeis-School advocates the effects doctrine to focus too much on CW thereby rendering antitrust policy too restricted in scope, see Lina M. Khan, *The New Brandeis*

in here, either. That is because CW is an integral element of any counterfactual analysis, even within those approaches that do not conceive of CW as the actual goal of competition. Some find that antitrust law protects competition as an end in itself, or, in a different way of putting it, the freedom to compete and make contracts among firms and consumers.³⁷ Others hold that the sole purpose of competition is an augmentation of welfare, which usually means CW as its aim.³⁸ Irrespective of which viewpoint is taken, however, any effects analysis in antitrust law is based on a counterfactual comparison.³⁹ To balance two different states, these must be made commensurable.⁴⁰ Relying on CW when comparing two different states of a market provides a common unit

Movement: America's Antimonopoly Debate, 9 J. EUR. COMP. L. PRAC. 31 (2018): 'The fixation on efficiency, in turn, has largely blinded enforcers to many of the harms caused by undue market power, including on workers, suppliers, innovators, and independent entrepreneurs'. Sandeep Vaheesan, *The Twilight of the Technocrats' Monopoly on Antitrust?* 127 YALE L. J. FORUM 980, 990 (2018): 'Second, the consumer welfare model represents an impoverished understanding of corporate power. It focuses principally on one aspect of business power—power over consumers—and ignores other critical manifestations'. See also TIM WU, *THE CURSE OF BIGNESS: ANTITRUST IN THE NEW GILDED AGE* (New York, NY: Columbia Global Reports 2018); Lina M. Khan, *Amazon's Antitrust Paradox*, 126 YALE L. J. 710 (2017). A similar strand of thinking beyond the consumer welfare paradigm is spreading in the EU. Legal scholars point out that the antitrust laws are not confined to safeguarding economic efficiency. They can also, so it is argued, embrace non-economic goals, which make antitrust law a—metaphorical—'sponge'. See Ariel Ezrachi, *Sponge*, 5 J. ANTITRUST ENFORC. 49 (2017). Defending the CW standard against these allegations Herbert Hovenkamp, *Is Antitrust's Consumer Welfare Principle Imperiled?*, 45 J. CORP. L. 101 (2019); A. Douglas Melamed & Nicolas Petit, *The Misguided Assault on the Consumer Welfare Standard in the Age of Platform Markets*, 54 REV. IND. ORGAN. 741 (2019); Stefan Thomas, *Normative Goals in Merger Control: Why Merger Control Should Not Attempt to Achieve 'Better' Outcomes than Competition*, *supra* note 9.

³⁷ That competition as a process is an end in itself is a view espoused by the *ordo-liberal* school of thought, which, until today, enjoys great endorsement in Germany. See Wernhard Möschel, *The Goals of Antitrust Revisited*, 147 J. INST. THEOR. ECON. 7, 9 (1991): 'The purpose of the GWB is to protect the free process of competition'. Wernhard Möschel, *Competition Policy from an Ordo Point of View*, in GERMAN NEO-LIBERALS AND THE SOCIAL MARKET ECONOMY 142, 146 (Alan Peacock & Hans Willgerodt eds., London: Palgrave Macmillan 1989): 'The actual goal of the competition policy of *Ordo-liberalism* lies in the protection of individual economic freedom of action as a value in itself, or vice versa, in the restraint of undue economic power'. Lawrence A. Sullivan & Wolfgang Fikentscher, *On the Growth of the Antitrust Idea*, 16 Berkeley J. INT. L. 197, 222 (1998): 'They pleaded for a concept of competition that was process-oriented, dynamic, and aimed at political and economic liberty'.

³⁸ Joaquín Almunia, *supra* note 35; Herbert Hovenkamp, *supra* note 35.

³⁹ For merger control, see Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings, OJ 2004 C 31, p. 5–18, ¶ 9: 'In assessing the competitive effects of a merger, the Commission compares the competitive conditions that would result from the notified merger with the conditions that would have prevailed without the merger'. For article 101(1) TFEU, see Court of 30 June 1966, Case 56/65 [*Société Technique Minière v. Maschinenbau Ulm*] ECLI:EU:C:1966:38, ECR 1966 p. 250: 'The competition in question must be understood within the actual context in which it would occur in the absence of the agreement in dispute'.

⁴⁰ Herbert J. Hovenkamp, *Antitrust Balancing*, 12 N.Y.U. J. L. Bus. 369, 373 (2016): 'Balancing requires that two offsetting effects can each be measured by some common cardinal unit, such as dollars or tons or centimeters, and then weighed against each other'.

of measure that creates commensurability.⁴¹ Therefore, the law as it stands is not hostile to the consideration of an increase in CW as a defence.⁴² If state A creates greater benefits to consumers than state B, the latter is usually preferable over the former. The EUMR⁴³ recognizes an efficiency defence⁴⁴ in the same way as Article 101(3) TFEU provides for the possibility of economic benefits to exempt a restriction of competition from the prohibition of Article 101(1) TFEU. Suffice to say that the U.S. antitrust order is equally accommodating of efficiencies. The purpose of the CW approach, therefore, is to provide a gauge to the enforcers (and legislator when drafting bills) to balance harm and benefit⁴⁵ when deciding about interventions in finding a legitimate reason for intervening or refusing to intervene.⁴⁶

We therefore rely on the CW paradigm in our analysis. That is not meant as to deny that other goals, such as the freedom to compete, can also be considered legitimate for the antitrust laws. Our approach, however, is conceptualized as a CW-based assessment. Therefore, we do not need to draw any conclusions on whether or in which circumstances CW is the only appropriate viewpoint. It is one, albeit possibly not the only, parameter that can be relied on.

⁴¹ See also GC of 7 June 2006, Joined Cases T-213/01 and T-214/01 [Österreichische Postsparkasse] ECLI:EU:T:2006:151, ¶ 115: '[T]he ultimate purpose of the rules that seek to ensure that competition is not distorted in the internal market is to increase the well-being of consumers'.

⁴² We do not address whether and to what extent the absence of a reduction in consumer rent can be an element of a theory of harm, as opposed to the creation of consumer benefits constituting a defence.

⁴³ In the same vein, a merger cannot be prohibited if the consumer harm is fully offset by merger-specific efficiencies, see European Union Commission Horizontal Merger Guidelines, OJ 2004 C 31 p. 5, ¶ 77; IOANNIS KOKKORIS & HOWARD A. SHELANSKI, *EU MERGER CONTROL*, ¶ 12.01 (Oxford: Oxford University Press 2014); MICHAEL ROSENTHAL & STEFAN THOMAS, *EUROPEAN MERGER CONTROL*, Chapter C ¶ 496 (Munich/Oxford: C.H. Beck/Hart 2010).

⁴⁴ See Commission Horizontal Merger Guidelines, OJ 2004 C 31 p. 5, ¶ 77; IOANNIS KOKKORIS & HOWARD A. SHELANSKI, *EU MERGER CONTROL*, ¶ 12.01 (Oxford: Oxford University Press 2014); MICHAEL ROSENTHAL & STEFAN THOMAS, *EUROPEAN MERGER CONTROL*, Chapter C ¶ 496 (Munich/Oxford: C.H. Beck/Hart 2010).

⁴⁵ On balancing under the EUMR see Stefan Thomas, *The Known Unknown: In Search for a Legal Structure of the Significance Criterion of the SIEC Test*, 13 J. COMP. L. ECON. 346 (2017).

⁴⁶ The courts have ruled that the EU antitrust order is accommodating of econometric models to gauge the effects within the realm of counterfactual analysis, see, for example, Court of 16 January 2019, Case C-265/17 P [*Comm'v. United Parcel Service*] ECLI:EU:C:2019:23, ¶ 33: 'To that end, the use of econometric models allows better understanding of the planned operation by identifying and, where relevant, quantifying some of its effects, and thus contributes to the quality of the Commission's decisions. It is therefore necessary that, where the Commission intends to base its decision on such models, the notifying parties are able to submit their observations in that regard. To that end, the use of econometric models allows better understanding of the planned operation by identifying and, where relevant, quantifying some of its effects, and thus contributes to the quality of the Commission's decisions. It is therefore necessary that, where the Commission intends to base its decision on such models, the notifying parties are able to submit their observations in that regard'.

Against this backdrop, it is expedient, for the further legal analysis, to recapitulate the most important conclusions drawn from the preceding discussion with respect to sustainability:

- (1) Consumer choices are context-dependent and subject to the information that consumers possess and activate at this occasion. Consumers may also make choices that, upon reflection, they would regret, for example, as they have given in to procrastination or a status-quo bias.
- (2) When choices bear on sustainability, such problems may be compounded by the very nature of the underlying mechanisms: complexity, low probability, uncertainty, non-use value.

In view of these findings, we argue that the CW paradigm, as underlying the antitrust laws, reconciles with an analytical approach that ventures to extract such sustainability preferences by way of a careful joint consideration (and possibly modification) of the context of their elicitation, as compressed in our notion of reflective WTP. Bearing in mind that CW is a gauge to compare two scenarios by way of counterfactual analysis to establish a legitimate legal response to a case, the measuring of WTP is never an end in itself. It is a proxy to find out whether a market outcome is more preferable to consumers than another market outcome. The question whether a method of WTP measuring that provides greater sensitivity to sustainability appreciation can be applied or not is therefore not precluded by the legal determinants underlying WTP analysis. Relying solely on preferences revealed in actual purchasing behaviour, or obtaining a more reflective measure of WTP are merely two different ways of finding out about the most preferable market outcome from the consumer's viewpoint.

Of course, the idea that an economic analysis of revealed preferences on the one hand, and of reflective WTP on the other, in a particular case lead to two distinct results of equal robustness is a hypothetical scenario. Since the methods for extracting WTP are different, and since the available data might most likely be of different scope and reliability, the outcomes of the analysis will most likely reflect this in a different degree of robustness. Measuring preferences revealed in actual purchasing behaviour can be more robust than the measuring of reflective WTP in a hypothetical choice scenario. In the light of this, it would be unconvincing to argue that the outcome of a reflective WTP analysis should, under any circumstance and even if not very robust, trump the former. As outlined above, it is rather the case that reflective WTP, where its application makes sense and produces robust results, should be integrated in a CW analysis of a particular case, with the agency paying due account to its results. Yet still the question remains with which legitimacy the reflective WTP approach can claim to become relevant within such a comprehensive review.

One potential answer to this question could be that the choice, whether to open up to a reflective WTP analysis or not, is at the agency's discretion. Even if the results of a reflective WTP analysis proved robust, the agency might want to discard it if it thinks that actual purchasing behaviour, where available, pictures CW better in the case at hand—or the agency may want to measure WTP in a less reflective choice context. That view might fit well with the jurisprudence according to which the authority enjoys a degree of discretion when analysing the economic impacts of a case, and that the choice of methods is only subject to a limited judicial review.⁴⁷ One might argue that setting the focus of WTP analysis on a specific context, to extract a reflective WTP, is a technical matter within this remit. There are compelling reasons for this view. As outlined above, the choice depends on the facts of the case. It would therefore cater to the efficiency and, possibly, effectiveness of antitrust enforcement to concede such discretion of choice to be enjoyed by the enforcer.

On the other hand, one might consider the agency or court obliged to apply a reflective WTP analysis and consider the results to the extent possible. That would still allow to account for the specifics of the case so that, where a reflective WTP analysis yields results of limited robustness, the agency may disregard this evidence. Yet in difference to a full discretion, the authority would be obliged to investigate, in the first place, whether a reflective WTP analysis revealed a greater appreciation of sustainability among consumers in a reliable way and how this depends on the respective context. Such a view could be based on the idea that different WTPs expressed by the same persons are equally 'true', as outlined above. Therefore, the choice between

⁴⁷ Court of 3 October 2006, Case C-413/06 P [*Bertelsmann and Sony Corporation of America v. Impala*] ECLI:EU:C:2008:392, ¶ 144: 'As regards the substance, it should first of all be noted that the Commission has a margin of assessment with regard to economic matters for the purposes of the application of the substantive rules of the Regulation, in particular Article 2. It follows that the review by the Community judicature of a Commission decision relating to concentrations is confined to ascertaining that the facts have been accurately stated and that there has been no manifest error of assessment'. Court of 15 February 2005, Case C-12/03 P [*Comm' v. Tetra Laval*], ECLI:EU:C:2005:87, ¶ 38; Court of 31 March 1998, Joined Cases C-68/94 and C-30/95 [*France and others v. Comm'* (Kali & Salz)] ECLI:EU:C:1998:148, ¶ 223, 224. Furthermore General Court of 6 July 2010, Case T-342/07 [*Ryanair v. Comm'*] ECLI:EU:T:2010:280, ¶ 136: 'Furthermore, the applicant's assertion that the 'non-technical evidence' cannot be taken into account unless it is supported by 'technical evidence' cannot be upheld. There is no need to establish such a hierarchy. It is the Commission's task to make an overall assessment of what is shown by the set of indicative factors used to evaluate the competitive situation. It is possible, in that regard, for certain items of evidence to be prioritized and other evidence to be discounted. That examination and the associated reasoning are subject to a review of legality which the Court carries out in relation to Commission decisions on concentrations. It is thus in that context that it is necessary to examine the applicant's arguments relating to the conclusions which should have been drawn by the Commission with regard to the various econometric analyses carried out during the administrative procedure and the impact which those conclusions should have had on the evaluation of the competitive situation (see paragraph 181 below)'. See also Marc van der Woude, *Judicial Control in Complex Economic Matters*, 10 J. EUR. COMP. L. PRAC. 415 (2019).

two or more different ‘truths’ is, in fact, a matter of what defines CW rather than how to measure it technically. From this perspective, the choice between different measures of WTP becomes a matter of honing the CW standard in a particular case, which falls squarely within the realm of substantive law. To hold the agency obliged to consider reflective WTP as a matter of substantive law, however, it is necessary to find a legal foundation for this posit. The search for a legal foundation will be guided by the hypothesis that reflective WTP can help to discover a stronger consumer appreciation of sustainability. A legal foundation for the posit to consider reflective WTP could, therefore, result from a commitment in the European legal order to pursue sustainability as an enforcement paradigm.

Since antitrust law does not provide a specific rule on the role of sustainability in its construal and enforcement, it becomes dispositive to embrace the wider legal context in which the former is embedded. At this point, we allude to the fact that there is a broad societal consensus on the importance of sustainability, which includes its relevance for the governing of the economy, and that this conviction has percolated into the law in various ways. A prominent manifestation is Article 3 TEU (ex Article 2 TEU), which sets out in its Paragraph 3 Sentence 2 that the EU shall ‘work for the sustainable development of Europe based on [...] a highly competitive social market economy, aiming at [...] a high level of protection and improvement of the quality of the environment’. Article 3(5) Sentence 3 TEU adds that the Union shall contribute to a ‘sustainable development of the Earth’. These are manifestations of the fact that the aims of a competitive market economy on the one hand, and sustainability and environmental protection on the other, have to be reconciled. Another emanation is Article 191 TFEU (ex Article 174 TEC), which stipulates, in its first paragraph, that ‘Union policy on the environment shall contribute to the pursuit of the following objectives: - preserving, protecting and improving the quality of the environment, - protecting human health, - prudent and rational utilisation of natural resources, - promoting measures at international level to deal with regional or worldwide environmental problems, and in particular combating climate change’. Even though legislative action based on Article 191 TFEU has not yet led to a general sustainability clause in antitrust, this commitment within the EU legal order provides backing for the postulate that sustainability is an enforcement paradigm that is embedded in the wider convictions shared by Union law.

Most importantly, however, the cross-section clause of Article 11 TFEU (ex Article 6 TEC⁴⁸) defines that ‘(e)nvironmental protection requirements must be integrated into the definition and implementation of the Union’s policies

⁴⁸ Its predecessor was introduced in the EC-Treaty by 1987 as Article 130r(2) Sentence 2, and by the Maastricht Treaty slightly amended and transferred to Sentence 3, which read: ‘Environmental protection requirements must be integrated into the definition and implementation of other Community policies’.

and activities, in particular with a view to promoting sustainable development'. The effects of Article 11 TFEU go beyond a mere policy statement. Rather, the provision mandates a thorough consideration of sustainability when applying EU law, without prejudice, however, on how this has to be done. Article 11 TFEU therefore carries a normative weight that bears on all kinds of EU legislation and its enforcement.⁴⁹ The Court of Justice has stated that the 'protection of the environment constitutes one of the essential objectives of the Community' and that Article 11 TFEU 'emphasises the fundamental nature of that objective and its extension across the range of those policies and activities'.⁵⁰ The underlying principle is that EU law must be construed so as to constitute a coherent system.⁵¹ Article 11 TFEU, therefore, can bear on the construal⁵² and the application of the entire EU legislation in that it retains enforcers to assess the impact of enforcement measures on sustainability.⁵³

⁴⁹ See, for example, Opinion of Advocate-General (AG) Kokott of 18 November 2003, Case C-304/01 [*Spain v. Comm*] ECLI:EU:C:2003:619, ¶ 68: 'Finally, the contested regulation is also proportionate in a more narrow sense. In adopting the measure the Commission had to reconcile several aims. The measure primarily provides for conservation of fish stocks in the interest of their further sustainable exploitation and for environmental protection, which under Article 6 EC must also be taken into account in the area of fisheries policy. This aim would have been best achieved by a total closure of fisheries'. (footnote omitted); Opinion of AG Jacobs of 30 April 2002 in Case C-126/01 [*Ministre de l'économie, des finances et de l'industrie v. GEMO*] ECLI:EU:C:2002:273, ¶ 65 mentioning Article 6 TEC as point of reference for his legal argumentation; Opinion of AG Alber of 4 July 2002 in Case C-444/00 [*The Queen on the application of Mayer Parry Recycling Limited v. Environment Agency et al.*] ECLI:EU:C:2002:420, ¶ 124: 'The objective of attaining a high level of environmental protection accords with the requirements of Article 174(2) EC. Article 6 EC requires environmental protection requirements to be integrated also when measures to harmonize laws are adopted. The Court has deduced from that objective, which the Waste Directive also serves, that the concept of waste is to be interpreted broadly'. (footnote omitted); Opinion of AG Ruiz-Jarabo Colomer of 26 May 2005 in Case C-176/03 [*Comm' v. Council*] ECLI:EU:C:2005:311, ¶¶ 56, 59. See also Suzanne Kingston, *Integrating Environmental Protection and EU Competition Law: Why Competition Isn't Special*, *supra* note 3 at 780, 787.

⁵⁰ Court of 15 November 2005, Case C-320/03 [*Comm' v. Austria*] ECLI:EU:C:2005:684, ¶ 72, 73.

⁵¹ To that end with respect to sustainability Suzanne Kingston, *Integrating Environmental Protection and EU Competition Law: Why Competition Isn't Special*, *supra* note 3 at 780, 783, see also PIERRE PESCATORE, *THE LAW OF INTEGRATION* (Leiden: A.W. Sijthoff, 1974), at 41.

⁵² On that specifically Martin Nettesheim in MARTIN NETTESHEIM (ed.), GRABITZ, HILF & NETTESHEIM, *DAS RECHT DER EUROPÄISCHEN UNION (THE LAW OF THE EUROPEAN UNION)* (Munich: C.H. Beck, 7th edn. 2020) Article 11 ¶ 31.

⁵³ Court of 17 September 2002, Case C-513/99 [*Concordia Bus Finland et al.*] ECLI:EU:C:2002:495, ¶ 57 (in relation to procurement law): 'In the light of that objective and also of the wording of the first subparagraph of Article 130r(2) of the EC Treaty, transferred by the Treaty of Amsterdam in slightly amended form to Article 6 EC, which lays down that environmental protection requirements must be integrated into the definition and implementation of Community policies and activities, it must be concluded that Article 36(1)(a) of Directive 92/50 does not exclude the possibility for the contracting authority of using criteria relating to the preservation of the environment when assessing the economically most advantageous tender'. See also Court of 13 March 2001, Case C-379/98

While it is questionable whether the EU institutions must, as a result of Article 11 TFEU, prioritize sustainability under all circumstances⁵⁴, it can be concluded that the provision obliges them to at least consider sustainability as a matter of importance when shaping policies and enforcing the law.⁵⁵ Further weight to this view is added by Article 37 of the EU Charter of fundamental Rights, which states that ‘(a) high level of environmental protection and improvement of the quality of the environment must be integrated into the policies of the Union and ensured in accordance with the principle of sustainable development’.

Some authors argue from there that the legislative endorsement of sustainability is of such weight that it can alter the antitrust paradigms in a way that subjects the law to sustainability goals besides the traditional CW paradigm.⁵⁶ We have already made clear, in the introduction, that our approach deviates from this view in a fundamental way. Unlike this viewpoint, we do not consider sustainability as a goal besides CW that can, fully or partially, override CW.

[*PreussenElektra v. Schleswag*] ECLI:EU:C:2001:160, ¶ 76; see also Court of 14 July 1988, Case C-284/95 [*Safety Hi-Tech v. S. & T.*], ECLI:EU:C:1998:352, ¶ 36, 37.

⁵⁴ To that effect Giorgio Monti, *Article 81 EC and Public Policy*, 39 C.M.L. Rev 1057, 1078 (2002): ‘Another possible argument [...] is that the duty imposed by Article 6 EC to integrate environmental protection in the Community policies and activities referred to in Article 3 EC means that environmental protection is normatively superior to the core values of EC competition law, and may thereby act as a “trump” to justify even anticompetitive environmental agreements if these are necessary to safeguard the environment’. Suzanne Kingston, *Integrating Environmental Protection and EU Competition Law: Why Competition Isn’t Special*, *supra* note 3 at 787: ‘policy makers must prioritize environmental protection in defining and implementing EU policies at all stages, including the stage of initial policy formulation’. See also Martin Wasmeier, *The Integration of Environmental Protection as a General Rule for Interpreting Community Law*, 38 C.M.L. Rev. 159, 160 (2001): ‘Essentially, the Community cannot adopt any measures that lead to deterioration of the quality of the environment’.

⁵⁵ Christian Calliess, in *EUV/AEUV* (Christian Calliess & Matthias Ruffert eds, Munich: C.H. Beck 5th edn. 2016) at Article 11 TFEU ¶ 9: ‘[...] rechtlich eindeutig gewährleistet, daß nicht nur die Rechtsetzungstätigkeit der EU im Einzelfall, sondern darüber hinaus jedes (auch individuell-) konkrete Handeln der Organe umweltverträglich ausgestaltet sein muß. Mithin ist eine auch auf alle Einzelmaßnahmen ausgerichtete “strategische Umweltverträglichkeitsprüfung” durchzuführen’. (footnotes omitted) translation: ‘[...] guaranteed un-ambiguously in legal terms that not only legislative actions by the EU in a particular context but also any (even individually) concrete measures of EU Institutions must be designed in an environmentally-friendly way. Therefore, a “strategical environmental assessment” must be undertaken with respect to any concrete measure’. In a similar vein NELE MIEKE LEENTJE DHOND, *INTEGRATION OF ENVIRONMENTAL PROTECTION INTO OTHER EC POLICIES: LEGAL THEORY AND PRACTICE* (Groningen: Europa Law Publishing 2003) at 181: ‘The view that the provisions in Articles 6 and 174 EC are merely of a political nature or importance is unattainable in light of the above-summarised and -discussed case law. All provisions seem to have certain legal effects, which I divided into direct and indirect consequences’.

⁵⁶ See, for example, Maurits Dolmans, *supra* note 3 at 13 arguing that the agency could, as a matter of last resort if taxation fails to remedy the issue, clear a merger that will inflict monopoly prices on consumers if the product harms the environment so that the decrease in output precipitated by the price increase will contribute to sustainability. See also Simon Holmes, *supra* note 3 at 377.

Instead, we strive to integrate consumers' appreciation for sustainability to a greater extent by way of a reflective WTP analysis. Figuratively spoken, we venture to integrate sustainability into CW assessment, instead of having sustainability as a distinct objective besides WTP analysis. This, however, does not render the legislative commitments, which have been made in the EU in regard to sustainability, irrelevant. On the contrary, these commitments, namely Article 11 TFEU, provide the legitimacy to integrate a reflective WTP analysis to the extent that this leads to greater weight on sustainability within the framework of CW analysis. While we have based the argumentation on references to the EU legal order, we put forward that the same conclusions will, most likely, have to be drawn for many national legal orders in which legislative endorsements on the role of sustainability of similar weight can be found.

To conclude on the legal side, our approach avoids a shift away from the consumer to the agency, as inherent in other approaches, when it comes to weighing and balancing sustainability. Rather, reflective WTP creates a context in which the consumer will ultimately reflect upon his or her appreciation for sustainability autonomously, albeit in a context that is created to allow such a fuller reflection. This allows to retain the consumer as the ultimate sovereign in matters of market outcome. It does not lead to the agency substituting its own conviction about the importance of sustainability for that of the consumer, yet it enables, at the same time, to receive from the consumer a more reflected response to matters of sustainability than what is achievable by direct reference to revealed preferences.⁵⁷ The crucial point in our approach is that the ultimate benchmark for sustainability evaluation will always be determined by the consumer in expressing his or her ultimate WTP for a sustainability feature, but that notably with respect to sustainability the expressed WTP may depend on the respective circumstances in which it is elicited. This should open up a discussion on which WTP is most adequately applied. Here, enforcers may also find guidance in the treaty provisions on sustainability and base their decision on the WTP expression that reflects sustainability to a greater degree. That is conceptually different from a multi-goals approach in which it would come upon the enforcers to attach a weight to the importance of sustainability in their decisions.

V. CONCLUSION

In conclusion, the results of a CW analysis can be influenced by the context in which WTP is measured. This turned out to have relevance, especially for

⁵⁷ At the same time, we are, as expressed throughout this article, fully aware that by changing the context in which consumer choices are made, the designer of the respective choice experiment has considerable sway over the outcome. Still, the joint construction of the context and consumer choices is then entirely transparent and can be juxtaposed with potentially different results. Such a coexistence of different measures of WTP is fully coherent within our concept of reflective WTP.

hedonic features related to sustainability. As a consequence of this observation, an extension of WTP analysis that provides the consumer, when measuring WTP, with additional information on the effects of his or her purchasing decisions and on the potential to mitigate externalities, may yield results different from when such preferences are estimated based on concrete purchases. The specific context may, however, also make one attribute more prominent than another and thus more influential for the actual or hypothetical choice decision. And such choices may take place in a context that either is prone to free riding or allows to internalize such externalities. As we have argued, all these forms of WTP measurements are equally ‘true’. Each needs to be assessed together with the respective context of its generation. To obtain a comprehensive picture of CW, an integration of a reflective WTP is therefore expedient in antitrust analysis. The legal determinants of WTP analysis in antitrust do not prevent an extension of the analytical scope to reflective WTP. On the contrary, in the realm of sustainability, the EU legal order, for example, even provides arguments to agencies and courts to at least consider the feasibility of a reflective WTP analysis with respect to sustainability features and to account for its results within a comprehensive CW assessment—in particular, if other measurements of CW risk falling short of an adequate consideration of sustainability.

These conclusions complement our paper on ‘Prospective Welfare Analysis’⁵⁸. There, we have extended the CW paradigm into the dimension of time to account for the WTP of future generations to the extent that a change in consumer appreciation can be forecast and that this would alter the overall CW assessment of a competitively relevant measure, such as a sustainability agreement. As we have also noted already, a particular context of a choice (and thus an expression of WTP) is the prevailing social norm, which may depend, *inter alia*, on the observed or expected behaviour of other consumers, that is, on their contribution to sustainability. As this norm may change over time, so could individual WTP change, and a prospective analysis would need to keep this in mind.⁵⁹

The common feature of our contributions lies in the idea that CW analysis is capable of integrating the dynamics in the way WTP shapes itself among existing consumers and future generations. It can embrace any product feature where a consumer’s choices and the thereby extracted WTP depend in a significant way on available information, deliberations or simply the overall context, also including the anticipated choices of others.⁶⁰ We have focused on

⁵⁸ Roman Inderst & Stefan Thomas, *Prospective Welfare Analysis*, *supra* note 16.

⁵⁹ We also recall that, notably, an agreement between firms may lead to a considerably swift and appreciable change in consumer behavior and thus the prevailing norm, which would need to be reflected in a counterfactual WTP analysis; cf. Roman Inderst & Stefan Thomas, *Sustainable Agreements and Social Norms*, *supra* note 32.

⁶⁰ For instance, with respect to privacy concerns, various experimental studies have documented that consumer choices and the thereby constructed preferences depend crucially on various

sustainability basically for two reasons: first, matters of sustainability provide suitable examples for honing the concept. Second, the idea of integrating sustainability into antitrust faces several conceptual challenges if one detaches this goal from the CW paradigm. While we do not conceive of our proposal as an argument to reject other opinions on integrating sustainability into antitrust, by referring to reflective and prospective WTP we point towards a path that might eventually reconcile established enforcement paradigms with the sustainability goal.

Despite the conceptual arguments that we have found for this approach, it is necessary to heed the issue of practicability and the effectiveness of antitrust enforcement. Therefore, we do not canvas the reflective WTP approach as a substitute for the analysis of revealed preferences. Rather, we consider it an enhancement of CW assessment that may complement the analysis. Moreover, we have stressed that the robustness of the results will depend on the facts of the case, so that it must be upon the agency or court to determine to what extent a reflective WTP analysis can take place and be integrated in the CW analysis. Yet still, economics provides with the methods needed to pursue this path, and it can, depending on the setting, yield results that broaden the knowledge base on which enforcement decisions can rest. It might, at the same time, help bridge a gap that can exist between societal convictions on the one hand and the market outcome on the other, such as can often be observed in the context of sustainability.

contextual factors, such as information (Volker Benndorf, Dorothea Kübler & Hans-Theo Normann, *Privacy Concerns, Voluntary Disclosure of Information, and Unraveling: An Experiment*, 75 EUR. ECON. REV. 43–59 (2015)), whether choices relate to willingness-to-pay or willingness-to-avoid (Alessandro Acquisti, Leslie K. John & George Loewenstein, *What is Privacy Worth?* 42 J. LEGAL STUD. 249–274 (2013)), whether WTP for privacy is measured as an ancillary attribute when purchasing another product (Tobias Regner & Gerhard Riener, *Privacy Is Precious: On the Attempt to Lift Anonymity on the Internet to Increase Revenue*, 26 J. ECON. MANAG. STRAT. 318–336 (2017)) or on the ordering of attributes (Christian Flender, *Order Effects in Observations of Stated and Revealed Privacy Preferences*, in CHRISTOS DOULIGERIS, NINETA POLEMI, ATHANASIOS KARANTJIAS & WINFRIED LAMERSDORF eds, COLLABORATIVE, TRUSTED AND PRIVACY-AWARE E/M-SERVICES, I3E 2013. IFIP Advances in Information and Communication Technology, Vol. 399 (Berlin/Heidelberg: Springer 2013).