

Tilburg University

Algorithms and fairness

Graef, Inge

Published in:
Columbia Journal of European Law

Publication date:
2018

Document Version
Other version

[Link to publication in Tilburg University Research Portal](#)

Citation for published version (APA):
Graef, I. (2018). Algorithms and fairness: What role for competition law in targeting price discrimination towards end consumers. *Columbia Journal of European Law*, 24(3), 541-559.

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

The Columbia Journal of European Law

Vol. 24, No. 3

Fall 2018



ALGORITHMS AND FAIRNESS: WHAT ROLE FOR COMPETITION LAW IN
TARGETING PRICE DISCRIMINATION TOWARDS END CONSUMERS?

Inge Graef

EUROPEAN LEGAL STUDIES CENTER
COLUMBIA UNIVERSITY SCHOOL OF LAW

ALGORITHMS AND FAIRNESS: WHAT ROLE FOR COMPETITION LAW IN TARGETING PRICE DISCRIMINATION TOWARDS END CONSUMERS?

*Inge Graef**

Abstract

While algorithms bring about benefits for consumers in the form of more efficient price setting, they have also resulted in concerns about possible adverse effects, including discrimination. This Article takes a competition law perspective to analyze a type of discrimination that the use of algorithms may facilitate, namely personalized pricing. This is a form of price discrimination between consumers whereby a firm charges each consumer a different price depending on willingness to pay. As the advent of data analytics and algorithm-based services has made it easier for firms to engage in price discrimination, a clarification of the latter's legality under competition law is welcome. As such, this Article discusses the extent to which competition enforcement can be desirable for targeting price discrimination towards end consumers. In this regard, the interaction with other regimes such as data protection, consumer protection, and antidiscrimination law, is also considered.

INTRODUCTION	541
I. PRIMARY VERSUS SECONDARY LINE INJURY	542
II. THE PHENOMENON OF PERSONALIZED PRICING.....	543
III. WELFARE EFFECTS OF PRICE DISCRIMINATION.....	544
IV. SCOPE FOR COMPETITION INTERVENTION	545
V. LIMITS FROM OTHER LEGAL FIELDS	550
A. Limits from Data Protection Law.....	550
B. Limits from Consumer Protection Law	551
C. Limits from Antidiscrimination Law.....	552
VI. SOME THOUGHTS REGARDING APPROPRIATE REMEDIES AGAINST PERSONALIZED PRICING	554
VII. CONCLUSION.....	558

INTRODUCTION

The gradual shift from human actors to computers in many aspects of everyday life is becoming more and more relevant to competition law. Computers, rather than human actors, are increasingly setting prices. Businesses such as airline tickets, hotel booking, and online retail commonly apply algorithms to determine what price best matches the demand and the offers of competitors. Because of the advent of big data analytics, algorithms can monitor prices more efficiently than human beings and are able to respond to market changes more quickly and accurately. In this context,

* Assistant Professor at Tilburg Law School with affiliations to the Tilburg Institute for Law, Technology and Society (TILT) and the Tilburg Law and Economics Center (TILEC).

concerns have arisen about the ability of pricing algorithms to engage in collusion in the absence of any formal agreement or human interaction.² In addition, providers of online platforms rely on algorithms to personalize their services to users. For instance, search engine providers use algorithms to select and rank the most relevant results in response to particular search queries. As algorithms become more prevalent, issues will further develop regarding their transparency and the extent to which they may give rise to discrimination. The central question of this Article is whether competition enforcement is desirable or required to address price discrimination as facilitated by the use of algorithms.

Unlike other regimes, which generally deem discrimination undesirable,³ the competition regime typically considers this practice to have positive welfare effects from an economic perspective. Although discriminatory practices have been at stake in a number of competition cases, it is not entirely clear under what circumstances this conduct is abusive according to European Union (“EU”) competition law.⁴ Meanwhile, the advent of data analytics and algorithm-based services has made it easier for firms to engage in discrimination. As a result, it is necessary to clarify the legal status of discrimination under competition law. Against this background, this Article focuses on discrimination towards end consumers in the form of personalized pricing whereby a firm charges different prices for the same product despite identical costs.

This Article analyzes relevant decision-making practice and case law to identify the current principles applied to discrimination under the “abuse of dominance” regime of Article 102 of the Treaty on the Functioning of the European Union (“TFEU”). In addition, this Article engages in a more normative analysis by exploring the possible role of competition law in combating discrimination next to other regimes such as internal market, data protection, and unfair trading law. While this Article raises issues that go well beyond the remit of algorithm-based services, the increasing use of algorithms conduces discrimination, which makes a clarification of the scope of competition enforcement in relation to this conduct all the more pressing. However, the aim of this Article is not to establish what the exact triggers for intervention should be but rather to provide a possible roadmap for critical questions concerning the desirability of competition enforcement to target discrimination.

I. PRIMARY VERSUS SECONDARY LINE INJURY

Before exploring price discrimination targeted at end consumers, it is worth looking at the competitive harm that may result from discrimination as it is currently understood. Competition economics distinguishes two types of injury that are relevant in assessing the competitive effects of discrimination: primary and secondary line injury.

Primary line injury occurs where the supplier’s conduct produces effects against competitors in the market in which the supplier operates. By offering more favorable conditions to its own customers, for example in the form of selective price cuts or rebates, the supplier aims to prevent them from switching to rivals. In this

² See A. EZRACHI & M.E. STUCKE, *VIRTUAL COMPETITION. THE PROMISE AND PERILS OF THE ALGORITHM-DRIVEN ECONOMY* 56-81 (Harv. Univ. Press 2016).

³ Think for instance of human rights law and social law.

⁴ See R. O’DONOGHUE & J. PADILLA, *THE LAW AND ECONOMICS OF ARTICLE 102 TFEU* 245 (Hart Publishing 2013) (“Article 102(c) remains potentially very broad and gives rise to perhaps the greatest scope for potential confusion of any single clause under Article 102 TFEU.”).

scenario, the competitors of the supplier lose the business of the latter's customers, who take advantage of the discriminatory conditions on offer. As such, the supplier's objective is to foreclose rivals on the upstream market and thereby strengthen its own position in that market.⁵

Secondary line injury concerns discrimination exercised by a supplier against some of its customers compared to one or more of its other customers. This way, the supplier may distort competition on the downstream market, where it is not active, by favoring some customers over others. As such, the impact falls on the supplier's customers who compete with each other on the downstream market.⁶

It is vital to pay attention to this distinction, as the likely effects of either behavior will be different. While behavior giving rise to primary line injury has exclusionary effects by harming the direct competitors of the supplier, practices amounting to secondary line injury lead instead to exploitative effects because the supplier gives preferential treatment to some customers and not to others. Although these exclusionary and exploitative effects of discrimination are well-known and documented,⁷ the European Commission's decision-making practice and the EU Courts' case law in the area of Article 102 TFEU have not made a clear distinction in legal treatment between them.⁸ This can be problematic since the supplier's ability and incentives to discriminate will vary depending on which of the two scenarios is at stake, as will—even more importantly—the applicable legal and economic principles.⁹

However, the apparent lack of a coherent legal framework to evaluate discriminatory practices under Article 102 TFEU does not in itself impact the assessment of the form of discrimination at the center of this Article, which is not fully captured by precedents. Personalized pricing concerns price discrimination against final consumers, not against customers of the dominant firm who compete with one another on a downstream market, as targeted by Article 102(c) TFEU. The fact that this form of discrimination, which is likely to become more prevalent with the increasing use of algorithms, does not fit with generally accepted scenarios in existing competition cases explains the need to examine the desirability of a competition intervention for this type of discrimination.

II. THE PHENOMENON OF PERSONALIZED PRICING

One of the most common factors that gives rise to discrimination between customers is price. Price discrimination occurs when the same product is sold at different prices to different customers even though the production costs are identical. It also covers situations where products are sold at the same price despite cost differences. A firm's motivation to price discriminate is to extract as much as possible from a consumer's maximum willingness to pay. From an economic

⁵ P. Ibanez Colomo, *Exclusionary discrimination under Article 102 TFEU*, COMMON MKT. L. REV., 145 (2014).

⁶ A. JONES & B. SUFRIN, *EU COMPETITION LAW. TEXT, CASES AND MATERIALS* 381-82 (Oxford Univ. Press 2016).

⁷ See Ibanez Colomo, *supra* note 4, at 146 as well as the references he makes in footnote 16.

⁸ In fact, as will be explained in section 3.3, Article 102(c) TFEU only expressly lists secondary line injury as an abuse of dominance. Nevertheless, primary line injury has also been accepted as a basis for competition liability under this provision in a number of cases.

⁹ See DONOGHUE & PADILLA, *supra* note 3, at 247 (noting "Article 102 TFEU would be clearer and more rational if a more explicit distinction was made" between primary and secondary line injury).

perspective, a distinction is made between first-, second- and third-degree price discrimination.¹⁰

In first-degree or perfect price discrimination, the supplier charges each individual customer the maximum price it is willing to pay for the product. As it is mostly impossible for a supplier to know each customer's willingness to pay, it can only engage in second-degree price discrimination by offering products or services in different packages that consumers can select based on their preferences. For instance, an airline typically has several types of tickets available, ranging from more expensive high-end tickets, including extra features that business travelers consider important, to relatively inexpensive low-end tickets targeted at budget travelers.¹¹ Finally, in third-degree price discrimination, the supplier identifies groups of customers by easily observable features, such as pensioners or students.¹²

Although it is presently unclear to what extent first-degree price discrimination actually occurs,¹³ suppliers can now engage in personalized pricing strategies more easily as they are able to gather detailed information on individual consumers through loyalty cards or by monitoring individuals' online behavior. While first-degree price discrimination once required a supplier to negotiate with a customer on an individual basis in order to discern his or her maximum willingness to pay, the advent of data analytics has arguably reduced or even obviated the need for such individual negotiations. As such, data facilitates price discrimination and leads to the expectation that personalized pricing will become more prevalent in the near future.¹⁴ Even though perfect price discrimination still largely seems a theoretical issue, there is a lot of concern about this practice justifying a closer look at its nature and effects.

III. WELFARE EFFECTS OF PRICE DISCRIMINATION

In examining the desirability of competition enforcement, one should consider that price discrimination is mostly welfare-enhancing from an economic perspective if it increases output.¹⁵ By charging lower prices to customers that otherwise could not afford the product, a firm increases the number of transactions in the market, which is an economically rational strategy that has positive welfare effects. After all, customers who would have been priced out of the market now have access to the relevant product. Such a form of price discrimination is particularly efficient in industries with high fixed costs and low marginal costs. In such industries, it makes sense for a supplier to price products above marginal cost for customers who are willing to pay more. This allows the supplier to recover some fixed costs while charging lower marginal cost prices to other customers who can only afford the

¹⁰ See A.C. PIGOU, *THE ECONOMICS OF WELFARE* (Macmillan 1920).

¹¹ See O'DONOGHUE & PADILLA, *supra* note 3, at 783.

¹² JONES & SUFRIN, *supra* note 5, at 381.

¹³ See, e.g. Office of Fair Trading, *Personalised Pricing. Increasing Transparency to Improve Trust*, http://webarchive.nationalarchives.gov.uk/20140402142426/http://www.offt.gov.uk/shared_offt/markets-work/personalised-pricing/oft1489.pdf and the joint report of the French CNIL and DGCCRF, *IP Tracking : conclusions de l'enquête conjointe menée par la CNIL et la DGCCRF*, (Jan. 2014) <https://www.cnil.fr/fr/ip-tracking-conclusions-de-lenquete-conjointe-menee-par-la-cnil-et-la-dgccrf-0>.

¹⁴ EZRACHI & STUCKE, *supra* note 1, at 114 (arguing that behavioral discrimination will become more sustainable due to more retailers applying personalized pricing, reducing price transparency and increasing search costs which will make it harder for consumers to observe the competitive price and to evaluate their outside options).

¹⁵ See, e.g., R. Schmalensee, *Output and Welfare Implications of Third Degree Price Discrimination*, *AM. ECON. REV.* 242-47 (1981); H.R. Varian, *Price Discrimination and Social Welfare*, *AM. ECON. REV.* 870-75 (1985).

product at a lower price.¹⁶ However, a supplier that can price discriminate may also restrict output by raising prices to customers with a high willingness to pay. As a result, these customers will buy less than they would otherwise, thereby reducing the overall output of the supplier. As such, the overall effect of price discrimination on output and welfare is ambiguous.¹⁷

This implies that price discrimination does not call for a general prohibition. Instead, its effects should be assessed on a case-by-case basis. The challenge for competition law is to ensure that only discrimination that is harmful to consumer welfare is prohibited, without precluding discrimination that is welfare-enhancing. With the rise of personalized pricing, one must distinguish the effects of first-degree or perfect price discrimination from the effects of other types of price discrimination because first-degree price discrimination always leads to higher output. Since the supplier is able to identify every customer's willingness to pay, it has no incentive to limit supply to any customer as long as his or her willingness to pay covers marginal costs. The higher output will increase overall welfare but may not necessarily result in greater consumer welfare. By extracting each consumer's maximum willingness to pay, the supplier may appropriate the consumers' surplus (the difference between the actual price charged and the consumer's willingness to pay), leaving them worse off.¹⁸ Particularly if the supplier has a monopoly on the market, personalized pricing will lead to a transfer of gains from consumers to the supplier, who makes a greater profit.

As such, when considering whether to intervene against personalized pricing, competition authorities also have to make a policy choice between protecting total welfare or consumer welfare.¹⁹ At the same time, it is important to note that personalized pricing may benefit consumers in oligopolies through increased competition. In order to poach customers from rivals, each firm will prefer to cut the price it offers to those consumers that it knows would otherwise not purchase the product. As a result, all consumers face lower prices compared to a situation where no price discrimination is possible.²⁰

The overall effect of personalized pricing on consumer surplus is thus ambiguous and the impact will likely vary from market to market.²¹ However, as personalized pricing reaches near perfection and the potential for consumer harm increases, especially in concentrated markets, competition authorities may need to be more wary about price discrimination.²²

IV. SCOPE FOR COMPETITION INTERVENTION

A preliminary question when examining the desirability of competition enforcement for price discrimination between consumers is whether any enforcement

¹⁶ O'DONOGHUE & PADILLA, *supra* note 3, at 784-85.

¹⁷ M. MOTTA, *COMPETITION POLICY. THEORY AND PRACTICE* 496 (Cambridge Univ. Press 2004).

¹⁸ See O'DONOGHUE & PADILLA, *supra* note 3, at 785-86; Autorité de la concurrence and Bundeskartellamt, *Competition Law and Data*, 21-22 (2016).

¹⁹ M. Maggiolino, *Personalized prices in European competition law*, BOCCONI LEGAL STUD. RES. PAPER (Jun. 13, 2017), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2984840.

²⁰ OECD, *Price discrimination - Background note by the Secretariat*, DAF/COMP(2016)15, 13 October 2016, ¶ 38-43.

²¹ *When algorithms set prices: winners and losers*, OXERA DISCUSSION PAPER 26 (2017).

²² See S. Merler, *Big Data and First-Degree Price Discrimination*, BRUEGEL BLOG (Feb. 20 2017), <http://bruegel.org/2017/02/big-data-and-first-degree-price-discrimination/>; M. Bourreau, A. De Streeck and I. Graef, *Big Data and Competition Policy: Market Power, Personalised Pricing and Advertising*, CERRE PROJECT REP. (Feb. 16 2017), <http://cerre.eu/publications/big-data-and-competition-policy>.

actions would be possible on the basis of current competition law standards. At the outset, it is important to realize that many other abusive practices, especially exclusionary ones like margin squeezes, predatory pricing, tying, rebates, and refusals to deal, contain discriminatory elements by imposing disadvantages on rivals. The extent to which discrimination can be abusive on its own beyond these specific abuses remains rather unclear.²³ As the European Court of Justice (“CJEU”) made clear in *Post Danmark I*, “the fact that the practice of a dominant undertaking may . . . be described as ‘price discrimination’ . . . cannot of itself suggest that there exists an exclusionary abuse.”²⁴

Furthermore, price discrimination between consumers would constitute a form of exploitative, rather than exclusionary, abuse. Because of the exploitative effects, discrimination between consumers shows similarities with secondary line injury. Article 102(c) TFEU, the main legal basis of competition liability for discrimination, specifically targets this behavior. This provision states that an abuse may consist in “applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage.” The reference to “trading parties” and “competitive disadvantage” indicates that Article 102(c) TFEU aims to protect customers of the dominant firm who are in competition with each other and thus indeed deals with secondary line injury. Arguably, the most contentious element of the provision is the need for trading parties to be placed at “a competitive disadvantage” by the dissimilar conditions applied to them.

The case law presents some controversy as to the interpretation of this notion. *United Brands* dealt, among other things, with price discrimination in the supply of bananas to ripeners and distributors from various Member States. In this case, the CJEU applied Article 102(c) TFEU even though the customers from different Member States did not compete with each other and thus were not put in a competitive disadvantage.²⁵ Similarly, in *Corsica Ferries*, the Court relied on Article 102(c) TFEU while the domestic and international shipping lines, which were charged different tariffs for piloting services, were not competing with each other.²⁶ Interestingly, Advocate General Van Gerven stated in his Opinion that the CJEU does not seem to interpret Article 102(c) TFEU restrictively. As a result, “it is not necessary, in order to apply it, that the trading partners of the undertaking responsible for the abuse should suffer a competitive disadvantage against each other or against the undertaking in the dominant position.”²⁷ This statement of Advocate General Van Gerven and the approach of the CJEU in *United Brands* and *Corsica Ferries* contrasts with the later judgment in *British Airways*, in which the Court explicitly mentioned the need for a competitive disadvantage to be present under Article 102(c) TFEU.²⁸

The case dealt with bonus schemes operated by British Airways that the Court found resulted in discrimination between travel agents. British Airways gave

²³ See JONES & SUFRIN, *supra* note 5, at 559.

²⁴ *Post Danmark A/S v. Konkurrencerådet (Post Danmark I)*, Case C-209/10, ECLI:EU:C:2012:172, ¶ 30.

²⁵ *United Brands Company and United Brands Continentaal BV v. Commission*, Case 27/76, ECLI:EU:C:1978:22, ¶ 233-234. However, it seems that the reasoning of the Court of Justice was mainly motivated by market partitioning concerns.

²⁶ *Corsica Ferries Italia Srl v. Corporazione dei Piloti del Porto di Genova*, Case C-18/93, ECLI:EU:C:1994:195. In its judgment, the Court of Justice did not expand on the concept of competitive disadvantage at all.

²⁷ Opinion of Advocate General Van Gerven in Case C-18/93, *Corsica Ferries Italia Srl v. Corporazione dei Piloti del Porto di Genova*, ECLI:EU:C:1994:49, ¶ 34.

²⁸ *British Airways plc v. Commission*, Case C-95/04 P, ECLI:EU:C:2007:166.

different rewards to different agents for selling the same amount of tickets. In its judgment, the CJEU made it clear that in order for the conditions of Article 102(c) TFEU to be met:

there must be a finding not only that the behaviour of an undertaking in a dominant market position is discriminatory, but also that it tends to distort that competitive relationship, in other words to hinder the competitive position of some of the business partners of that undertaking in relation to the others.²⁹

The CJEU further clarified this in its preliminary ruling in *Kanal 5*. In this case, the Court expressly stated that in order to establish abuse of dominance, the national court must ascertain whether “Kanal 5 and TV 4, or either of those two companies, is a competitor of SVT on the same market.”³⁰

While *Kanal 5* reinstated the requirement for competitive disadvantage, the burden of proof seems relatively low. According to the CJEU’s *British Airways* judgment, it is sufficient that discriminatory behavior of a dominant firm “tends . . . to lead to a distortion of competition.”³¹ In particular, “it cannot be required in addition that proof be adduced of an actual quantifiable deterioration in the competitive position of the business partners taken individually.”³² In *Clearstream*, the General Court repeated the Court of Justice’s statements and thereby confirmed the approach adopted in *British Airways*.³³ However, the General Court also stated that for the purposes of the case at hand “the application to a trading partner of different prices for equivalent services continuously over a period of five years and by an undertaking having a de facto monopoly on the upstream market could not fail to cause that partner a competitive disadvantage.”³⁴ This may arguably give rise to a presumption that price discrimination is likely to result into a competitive disadvantage.

In his Opinion in *MEO*, Advocate General Wahl followed up on this and argued that even if one can derive such a presumption from this wording in *Clearstream*, the latter case is somewhat out of date.³⁵ And indeed in its *MEO* judgment, the Court of Justice confirmed a strict, more effects-based approach and endorsed the Advocate-General’s approach by stating that “the mere presence of an immediate disadvantage affecting operators who were charged more, compared with the tariffs applied to their competitors for an equivalent service, does not, however, mean that competition is distorted or is capable of being distorted.”³⁶ In particular, according to the Court, Article 102(c) TFEU covers a situation in which price discrimination towards downstream customers:

is capable of distorting competition between those trade partners. A finding of such a ‘competitive disadvantage’ does not require proof of actual

²⁹ *Id.*, at ¶ 144.

³⁰ *Kanal 5 Ltd and TV 4 AB v Föreningen Svenska Tonsättares Internationella Musikbyrå (STIM) upa*, Case C-52/07, ECLI:EU:C:2008:703, ¶ 46.

³¹ *British Airways plc v. Commission*, Case C-95/04 P, ECLI:EU:C:2007:166, ¶ 145.

³² *Id.*

³³ *Clearstream Banking AG and Clearstream International SA v. Commission*, Case T-301/04, ECLI:EU:T:2009:317, ¶ 191-194.

³⁴ *Id.*, at ¶ 194.

³⁵ Opinion of Advocate General Wahl in Case C-525/16, *MEO v. Serviços de Comunicações Multimédia SA*, ECLI:EU:C:2017:1020 ¶ 90.

³⁶ *MEO v. Serviços de Comunicações Multimédia SA*, Case C-525/16, ECLI:EU:C:2018:270, ¶ 26. See also Opinion of Advocate General Wahl in Case C-525/16, *MEO v. Serviços de Comunicações Multimédia SA*, ECLI:EU:C:2017:1020, ¶ 63.

quantifiable deterioration in the competitive situation, but must be based on an analysis of all the relevant circumstances of the case leading to the conclusion that that behaviour has an effect on the costs, profits or any other relevant interest of one or more of those partners, so that that conduct is such as to affect that situation.³⁷

A low standard of proof for establishing competitive advantage can be especially problematic where Article 102(c) TFEU is applied to situations of primary line injury. While the provision specifically targets secondary line injury, Article 102(c) TFEU has also been applied in a number of cases where a dominant firm offered dissimilar conditions to different customers with the aim of excluding its own competitors on the upstream market.³⁸ These cases have met criticism especially due to the relatively low standard of proof for establishing a competitive advantage as compared to the threshold that normally applies to exclusionary forms of abuse.³⁹

This quick look at the case law shows that Article 102(c) TFEU has been interpreted rather broadly to accommodate other forms of price discrimination that the Commission or EU Courts consider anticompetitive. This is an important observation for our purposes, as price discrimination between consumers does not fit the letter of Article 102(c) TFEU, either. Personalized pricing involves discrimination between *final consumers*, while the type of discrimination that Article 102(c) TFEU targets is unequal treatment between *intermediate customers*.

So far, the EU Courts have not considered whether discrimination between consumers can constitute abuse of dominance. The legal doctrine on Article 102 TFEU has mainly considered discrimination against downstream customers as a basis for potential anticompetitive behavior.⁴⁰ Interestingly, the Commission in 1999 charged the organizers of the World Cup in France with a symbolic fine for imposing unfair trading conditions on consumers through the application of discriminatory arrangements relating to the sale of football tickets.⁴¹ However, the case dealt with discrimination on the basis of nationality for which the harmful effects on competition in the internal market are more prominent than for personalized pricing.

Such an interpretation leaves unanswered the question of whether discrimination between final consumers beyond nationality falls within the ambit of competition law. One Commission decision explicitly dealt with this question. In *Deutsche Post: Interception of Cross-Border Mail*, the Commission stated that Article 102 TFEU “may be applied even in the absence of a direct effect on competition between undertakings on any given market” and “may be also be applied in situations where a dominant undertaking’s behaviour causes damage directly to consumers.”⁴² The Commission considered that the behavior of Deutsche Post negatively affected senders and addressees of the mailings at issue by charging them higher prices for postal services than other senders. While the Commission established that the conduct of Deutsche Post also affected the latter’s trading parties

³⁷ MEO v. Serviços de Comunicações Multimédia SA, Case C-525/16, ECLI:EU:C:2018:270, ¶37.

³⁸ See *Hoffmann-La Roche & Co. AG v. Commission*, Case 85/76, ECLI:EU:C:1979:36; *NV Nederlandsche Banden Industrie Michelin v. Commission*, Case 322/81, ECLI:EU:C:1983:313; *Irish Sugar plc v. Commission*, Case T-228/97, ECLI:EU:T:1999:246.

³⁹ JONES & SUFRIN, *supra* note 5, at 560.

⁴⁰ *Id.*, at 559-66.

⁴¹ Commission Decision of 20 July 1999 relating to a proceeding under Article 82 of the EC Treaty and Article 54 of the EEA Agreement (Case IV/36.888 - 1998 *Football World Cup*) [2000] OJ L 5/55.

⁴² Commission Decision of 25 July 2001 relating to a proceeding under Article 82 of the EC Treaty (COMP/C-1/36.915 — *Deutsche Post AG — Interception of cross-border mail*) [2001] OJ L 331/40, ¶ 133.

by putting them at a competitive disadvantage, it explicitly stated that “[e]ven in the absence of substantial negative effects on these trading parties, the behaviour of [Deutsche Post] has direct negative effects on consumers.”⁴³ From these findings, the Commission concluded that “[Deutsche Post’s] behaviour thus constitutes an abuse of Article [102] of the [TFEU] and in particular subparagraph (c) of its second paragraph.”⁴⁴ As such, the fact that the senders and their addressees were *consumers* of postal services did not preclude the Commission from classifying the conduct as an application of Article 102(c) TFEU.

Since the case never reached the EU Courts, the question whether discrimination targeted at end consumers can be abusive under Article 102(c) TFEU on its own and in the absence of any effect on downstream customers remains unanswered. The Commission had in fact identified such an effect. However, this identification was not decisive for the Commission’s conclusion that the discriminatory behavior of Deutsche Post amounted to abuse of dominance. As the Courts have interpreted the scope of Article 102(c) TFEU broadly (covering cases where no competitive disadvantage was present and even involving scenarios of primary line injury), there is no convincing reason to exclude its applicability to price discrimination between consumers. Even if such behavior does not precisely fall within the remit of Article 102(c) TFEU, it may still be targeted as a form of exploitative abuse under Article 102(a) TFEU or prove illegal under the general abuse of dominance clause. After all, Article 102 TFEU only provides an indicative list of possible abuses. As the Commission stated in *Deutsche Post*, “the Court of Justice has stated that the list of abuses mentioned in Article [102] itself is not exhaustive and thus only serves as examples of possible ways for a dominant firm to abuse its market power.”⁴⁵ At the same time, one cannot ignore the precise scope of Article 102(c) TFEU as set out in decision-making practice and case law because it provides the leading interpretation of the extent to which discriminatory conduct is anticompetitive.⁴⁶ It thus remains an open question whether the Commission and EU Courts will accept price discrimination between end consumers as a general basis for an abuse of dominance claim.⁴⁷

Irrespective of current competition law standards, the normative question arises whether the abuse of dominance prohibition should cover discrimination between end consumers.⁴⁸ A key issue in this regard is what competition law might add to the remedies that other regimes already provide to address personalized pricing. Furthermore, competition enforcement mainly focuses on protecting consumers indirectly by acting against anticompetitive exclusionary behavior, thereby keeping markets competitive.⁴⁹ Exploitative abuses have been rather rare in the enforcement

⁴³ *Id.* ¶ 134.

⁴⁴ *Id.*

⁴⁵ *Id.* ¶ 133.

⁴⁶ O’DONOGHUE & PADILLA, *supra* note 3, at 777.

⁴⁷ See OECD, Price discrimination - Background note by the Secretariat, DAF/COMP(2016)15, 13 October 2016, ¶ 72 (“In addition to a lack of case law, there has been no guidance from the Commission on how it investigates or prioritises non-exclusionary (exploitative or distortionary) abuses. It therefore remains unclear what the legal standard in Europe for exploitative price discrimination that directly harms final consumers is.”).

⁴⁸ See also, P. Akman, *To Abuse, or not to Abuse: Discrimination between Consumers*, EUR. L. REV., 492-512.

⁴⁹ Note that the Guidance Paper only considers exclusionary abuse. Communication from the Commission — Guidance on the Commission’s enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (Guidance Paper) [2009] OJ C 45/7, ¶ 7 (“Conduct which is directly exploitative of consumers, for example charging excessively high prices or certain behaviour that undermines the efforts to achieve an integrated internal market, is also liable to

work of the European Commission. Consumer protection or unfair trading law are generally considered more apt for tackling such practices.⁵⁰ The desirability of action against personalized pricing on the basis of competition law should therefore also take into account whether other legal fields such as data protection, consumer protection, and antidiscrimination law leave an actual enforcement gap. To that end, the analysis will now turn to the limits that these regimes impose on price discrimination.

V. LIMITS FROM OTHER LEGAL FIELDS

A. *Limits from Data Protection Law*

In order to engage in price discrimination, firms will typically collect individuals' personal data to personalize prices. In that sense, they qualify as so-called controllers within the meaning of data protection law and, as a consequence, must abide by the data protection rules.⁵¹ EU data protection law aims to protect the fundamental right to data protection by giving data subjects control over their personal data and by setting limits on the collection and use of personal data.⁵² The EU legal order recognizes the right to data protection in the Charter of Fundamental Rights.⁵³ In addition, this right is enshrined in Article 16 TFEU, which the Lisbon Treaty introduced as the new legal basis for the adoption of secondary data protection legislation. The General Data Protection Regulation ("GDPR"),⁵⁴ which was adopted in April 2016 and started to apply on 25 May 2018, is based on Article 16 TFEU.

The GDPR lays down a number of obligations for controllers and processors. A controller is the person or organization who determines the purposes and means of the processing of personal data.⁵⁵ The processor is the natural or legal person who processes personal data on behalf of the controller.⁵⁶ In particular, Article 5(1) GDPR contains the data quality requirements that controllers have to meet. These requirements include the lawful processing of personal data, which means that the controller must have a legitimate ground for processing personal data, such as the consent of the data subject, performance of a contract, a legal obligation or the legitimate interests of the controller.⁵⁷ In addition, the purpose limitation principle entails that controllers must collect personal data for specified, explicit, and legitimate purposes and not further process the data in a manner that is incompatible with those purposes.⁵⁸ This implies that a firm wishing to engage in personalized pricing needs to have a legitimate ground for processing personal data for that particular purpose. Requirements other than data quality may also apply, depending on the circumstances and purposes of the processing.

infringe Article 82. The Commission may decide to intervene in relation to such conduct, in particular where the protection of consumers and the proper functioning of the internal market cannot otherwise be adequately ensured.”)

⁵⁰ See O'DONOGHUE & PADILLA, *supra* note 3, at 846-49.

⁵¹ Commission Regulation 2016/679, On the protection of natural persons with regard to the processing of personal data and on the free movement of such data [2016] OJ L119/1, art. 4(7). [hereinafter General Data Protection Regulation].

⁵² General Data Protection Regulation 2016/679, *supra* note 51, art. 1.

⁵³ Charter of Fundamental Rights of the European Union [2012] OJ C 326/391.

⁵⁴ General Data Protection Regulation 2016/679, *supra* note 51.

⁵⁵ General Data Protection Regulation 2016/679, *supra* note 51, art. 4(7).

⁵⁶ General Data Protection Regulation 2016/679, *supra* note 51, art. 4(8).

⁵⁷ See the legitimate grounds listed in Article 6(1) of the General Data Protection Regulation 2016/679, *supra* note 51.

⁵⁸ General Data Protection Regulation 679/2016, *supra* note 51, art. 5(1)(b).

Article 21(2) GDPR is relevant to personalized pricing as it gives the data subject the right to object to the processing of personal data for direct marketing purposes.⁵⁹ This includes profiling,⁶⁰ to the extent that it is related to such direct marketing. For example, a data subject may object to targeted advertising practices because these constitute direct marketing. A controller must stop sending targeted ads if the data subject objects to the processing of his or her personal data for that purpose.⁶¹ In addition, data subjects have a right to not be subject to a decision based solely on automated processing, including profiling, which produces legal effects concerning him or her or similarly significantly affects him or her.⁶² However, one of the situations in which this right does not apply is when the decision is based on the data subject's explicit consent.⁶³ In practice, this means that in order to engage in personalized pricing, which is a form of profiling, a controller must have the explicit consent of the data subject involved. Once the controller has obtained the consent of the data subject and has met the data quality requirements, it is free to engage in personalized pricing under data protection law.⁶⁴

B. *Limits from Consumer Protection Law*

EU consumer protection law seeks to eliminate barriers to the internal market by assisting consumers as the weaker party in market transactions, through preventing or remedying market failures.⁶⁵ Consumer protection is also included in the Charter of Fundamental Rights.⁶⁶ This illustrates the development of consumer protection from a market-oriented policy to a human right.⁶⁷

As regards limits from consumer protection law on personalized pricing, the Unfair Contract Terms Directive excludes the adequacy of price from the assessment of the unfair nature of contract terms “in so far as these terms are in plain intelligible language.”⁶⁸ As a result, the Unfair Contract Terms Directive does not call into question the fairness of prices in and of themselves. The Unfair Commercial Practices Directive also leaves traders free to set prices as long as they inform consumers about the prices or how they are calculated.⁶⁹ As a result, personalized pricing as such does not breach EU consumer protection law.

⁵⁹ General Data Protection Regulation 679/2016, *supra* note 51, art. 21(2).

⁶⁰ Profiling in this context means: “any form of automated processing of personal data consisting of the use of personal data to evaluate certain personal aspects relating to a natural person, in particular to analyse or predict aspects concerning that natural person's performance at work, economic situation, health, personal preferences, interests, reliability, behaviour, location or movements.” General Data Protection Regulation 679/2016, *supra* note 51, art. 4(4).

⁶¹ General Data Protection Regulation 679/2016, *supra* note 51, art. 21(3).

⁶² General Data Protection Regulation 679/2016, *supra* note 51, art. 22.

⁶³ General Data Protection Regulation 679/2016, *supra* note 51, art. 22(2)(c).

⁶⁴ For a more detailed analysis, see R. Steppe, ‘Online price discrimination and personal data: A General Data Protection Regulation perspective’ (2017) *Computer Law & Security Review*, 768-785; F. Zuiderveen Borgesius & J. Poort, ‘Online Price Discrimination and EU Data Privacy Law’ (2017) *Journal of Consumer Policy*, 356-363.

⁶⁵ K.J. Cseres, *The Controversies of the Consumer Welfare Standard*, COMPETITION L. REV., 30.

⁶⁶ Charter of Fundamental Rights of the European Union [2012] OJ C 326/391, art. 38 (“Union policies shall ensure a high level of consumer protection.”).

⁶⁷ See I. Benöhr, *EU Consumer Law and Human Rights* (Oxford Studies in European Law 2013), 45-68.

⁶⁸ Unfair Contract Terms Directive 93/13/EEC, on the use of surprising or onerous terms used by businesses in deals with consumers [1993] OJ L 95/29, art. 4(2).

⁶⁹ In line with European Parliament and Council Directive 2005/29/EC, on unfair business-to-consumer commercial practices in the internal market (hereinafter Unfair Commercial Practices Directive) [2005] OJ L 149/22, art. 6(1)(d) and art. 7(4)(c).

Nevertheless, in its 2016 Guidance on the implementation and application of the Unfair Commercial Practices Directive, the European Commission did clarify that a breach of that Directive may occur when personalized pricing is combined with certain commercial practices.⁷⁰ An example is the use of information gathered through profiling in order to exert undue influence. According to the Commission, a trader who falsely claims that only a few tickets are left after finding out that a consumer is running out of time to buy a flight ticket may be considered to have engaged in a misleading commercial practice prohibited by Article 6(1).⁷¹ This provision regards a commercial practice as misleading if it contains false information or deceives or is likely to deceive the average consumer and causes, or is likely to cause a consumer to make a transactional decision that he or she would not otherwise have taken. This is true even if the information is factually correct. Under point no. 7 of Annex I of the Directive, one *per se* unfair commercial practice is a false statement “that a product will only be available for a very limited time, or that it will only be available on particular terms for a very limited time, in order to elicit an immediate decision and deprive consumers of sufficient opportunity or time to make an informed choice.”⁷² In addition, as made clear by the Commission, Articles 8 and 9 of the Unfair Commercial Practices Directive require marketing based on tracking and profiling not to involve aggressive commercial practices.⁷³ In this regard, point no. 26 of Annex I prohibits making persistent and unwanted commercial communications to consumers.⁷⁴

Personalized pricing as such is thus not problematic from a consumer protection law perspective. As long as suppliers do not engage in any misleading or aggressive commercial practices, they are free to customize prices provided they are transparent with consumers about doing so. However, any misleading commercial practices would violate the Unfair Commercial Practices Directive in and of themselves, even when not combined with personalized pricing. Thus, it is not the pricing that would violate the Unfair Commercial Practices Directive, but the commercial practices surrounding it.

C. *Limits from Antidiscrimination Law*

Apart from national antidiscrimination laws prohibiting differentiation based on factors such as gender, racial or ethnic origin, religion, and age, there is no general prohibition on price discrimination under civil law rules. When it comes to EU legislation, Article 20 of the Services Directive prohibits discrimination based on the service recipient’s nationality or residence in line with the Treaty rules on the free movement of services.⁷⁵ However, this does not preclude a firm from offering different prices or conditions when providing a service, if those differences are justified by objective reasons. These reasons vary from country to country and may include diverse rationales, such as “additional costs incurred because of the distance

⁷⁰ Commission Staff Working Document – Guidance on the Implementation/Application of Directive 2005/29/EC on unfair commercial practices, 25 May 2016, SWD(2016) 163 final, 149.

⁷¹ Commission Staff Working Document – Guidance on the Implementation/Application of Directive 2005/29/EC on unfair commercial practices, 25 May 2016, SWD(2016) 163 final, 146.

⁷² Point no. 7 of Annex I (‘Commercial practices which are in all circumstances considered unfair’) attached to the Unfair Commercial Practices Directive.

⁷³ Commission Staff Working Document – Guidance on the Implementation/Application of Directive 2005/29/EC on unfair commercial practices, 25 May 2016, SWD(2016) 163 final, 149.

⁷⁴ Point no. 26 of Annex I attached to the Unfair Commercial Practices Directive.

⁷⁵ European Parliament and Council Directive 2006/123/EC, on services in the internal market (hereinafter Services Directive) [2006] OJ L 376/36.

involved or the technical characteristics of the provision of the service, or different market conditions.”⁷⁶

On the basis of Article 20 of the Services Directive, the Commission started an investigation against Disneyland Paris in summer 2015. The Commission acted on the basis of allegations that the firm only made cheap deals available for residents of France or Belgium, in violation of the Services Directive. In April 2016, Disneyland Paris changed its policy and brought its online booking procedures and payment methods for tickets in line with the principle of non-discrimination.⁷⁷

The Regulation on geo-blocking, adopted on 28 February 2018, is also notable.⁷⁸ Geo-blocking occurs when traders operating in one Member State block or limit access to their websites or apps by customers from other Member States wishing to enter into cross-border commercial transactions.⁷⁹ Discrimination also occurs when traders apply different general conditions of access to their goods and services with respect to customers from other Member States, both online and offline.⁸⁰ In particular, the Regulation aims to prevent discrimination based on the nationality, place of residence or place of establishment of customers.⁸¹ This goes beyond Article 20 of the Services Directive, which was found to insufficiently address discrimination against customers.⁸² However, the Regulation does not harmonize prices; rather, it addresses discrimination in access to goods and services that cannot be objectively justified.⁸³

In cases where geo-blocking involves vertical restrictions of competition, there is also scope for competition enforcement under Article 101 TFEU, as evidenced by the proceedings of the Commission against Disney, NBCUniversal, Sony, Twentieth Century Fox, Warner Bros, Paramount and Sky UK in the area of cross-border provision of pay TV services.⁸⁴ In addition, the Commission announced competition investigations in the video game and hotel booking sectors in February 2017.⁸⁵ With regard to video games, the investigation focuses on whether agreements concluded between Valve, the owner of a game distribution platform, and five personal computer video game publishers required the use of activation keys by consumers for the purposes of geo-blocking. In particular, the use of activation keys that grant access to a purchased game only to consumers in a particular Member State may amount to a breach of Article 101 TFEU by reducing cross-border competition.

⁷⁶ Recital 95 of the Services Directive.

⁷⁷ *Disneyland Paris*, EU Commission https://ec.europa.eu/germany/news/disneyland-paris-kommission-begr%C3%BC%C3%9Ft-%C3%A4nderung-der-preispolitik_de. (last visited Sep. 26, 2018).

⁷⁸ European Parliament and Council Regulation 302/2018, on addressing unjustified geo-blocking and other forms of discrimination based on customers' nationality, place of residence or place of establishment within the internal market and amending Regulations (EC) No 2006/2004 and (EU) 2017/2394 and Directive 2009/22/EC, 2018 OJ L1 60/1. [hereinafter Regulation on geo-blocking]

⁷⁹ Regulation on geo-blocking rec. 1.

⁸⁰ *Id.*

⁸¹ Regulation on geo-blocking rec. 5.

⁸² *See id.*, rec. 4.

⁸³ *See id.*, rec. 27

⁸⁴ *See* Press Release, European Commission, Antitrust: Commission Sends Statement of Objections on Cross-border Provision of Pay-TV Services Available in UK and Ireland (Jul. 23, 2015) (on file with Commission Press Release Database); *see* Press Release, European Commission, Antitrust: Commission Accepts Commitments by Paramount on Cross-border Pay-TV Services (Jul. 26, 2016) (on file with Commission Press Release Database).

⁸⁵ *See* Press Release, European Commission, Antitrust: Commission Opens Three Investigations Into Suspected Anticompetitive Practices in e-commerce (Feb. 2, 2017) (on file with Commission Press Release Database).

Parallel trade may be restricted within the single market, preventing consumers from buying cheaper games available in other Member States. Similarly, the Commission has taken issue with agreements regarding hotel accommodations concluded between European tour operators and hotels. The Commission is concerned that these agreements may contain clauses that discriminate between customers on the basis of their nationality or country of residence. Due to these contractual clauses, customers would not be able to see a hotel's full availability or book hotel rooms at the best prices. This may breach Article 101 TFEU and lead to the partitioning of the single market by preventing consumers from booking hotel accommodation under better conditions offered by tour operators in other Member States.⁸⁶ In the context of Article 102 TFEU, however, it remains unclear to what extent a dominant undertaking can be held liable for differentiating or personalizing prices among consumers.

VI. SOME THOUGHTS REGARDING APPROPRIATE REMEDIES AGAINST PERSONALIZED PRICING

The role of data protection and consumer protection law in targeting price discrimination mainly relates to the need for transparency and the provision of adequate information to users. These regimes do not ban price discrimination as long as no misleading or aggressive practices occur under the Unfair Commercial Practices Directive and as long as data subjects have given their consent for controllers to engage in personalized pricing under EU data protection law. While data subjects can thus reduce the likelihood of price discrimination by denying consent to controllers for engaging in automated individual decision-making, controllers may rely on other legitimate grounds for processing personal data.

Article 22(2) GDPR places limitations on the right of the data subject not to be subject to a decision based solely on automated processing. Article 22(2) states that the right does not apply if the decision: (1) is necessary for entering into, or performance of, a contract between the data subject and a data controller; (2) is authorized by Union or Member State law to which the controller is subject and which also lays down suitable measures to safeguard the data subject's rights and freedoms and legitimate interests; and (3) is based on the data subject's explicit consent.⁸⁷ Notably, Article 15 of the Data Protection Directive, the predecessor of the GDPR, did not provide for consent as an exception ground for the controller to engage in automated decision-making.⁸⁸ In principle, automated decision-making was prohibited under the Data Protection Directive unless authorized by Union or Member State law to which the controller was subject.⁸⁹ As such, the GDPR provides controllers with more opportunities to apply personalized prices. As to the role of consent in legitimizing automated decision-making, one may doubt the capability of the data subject to identify the risks involved. Even if the controller fulfils all the information requirements under the GDPR, it is questionable whether the data subject realizes how an automated decision question may truly affect and impact him.

On this basis, it is submitted that there is scope for other regimes to restrict price discrimination even in the presence of information requirements imposed by data

⁸⁶ *See id.*

⁸⁷ *See* General Data Protection Regulation, *supra* 46, art. 22(2).

⁸⁸ *See* European Parliament and Council Directive 95/46/EC, On the Protection of Individuals With Regard to the Processing of Personal Data and on the Free Movement of Such Data [1995] OJ L 281/31, art. 14.

⁸⁹ *See id.* art. 15.

protection and consumer protection law. Findings from behavioral economics indicate that even when consumers are offered adequate information, they might not act rationally, because they may have limited willpower or be affected by biases and heuristics.⁹⁰ Requirements of transparency and information provision may thus have a limited effect. While national antidiscrimination legislation may ban discriminatory conduct, its scope is typically limited to instances where differentiation is based on factors such as gender, racial or ethnic origin, religion, and age. In turn, EU internal market law is only useful in situations where discrimination takes place on the basis of nationality, place of residence, or place of establishment.⁹¹ As such, competition enforcement arguably constitutes a welcome addition to the remedies available under other legal regimes. This is especially true considering that competition law may ban price discrimination on a case-by-case basis even if consumers are sufficiently informed that such practices take place.

An alternative approach would be to pose more general limits on the personalization of prices. A way to address this issue would be to mark personalized pricing as an unfair practice, similar to the practices currently included on the so-called black list annexed to the Unfair Commercial Practices Directive.⁹² The commercial practices included on this list are considered unfair in all circumstances. Nevertheless, as the welfare effects of price discrimination are ambiguous and studies about the effects of personalized prices more specifically have so far led to different conclusions,⁹³ it would not be optimal from an economic perspective to ban the practice of personalized pricing altogether. With its case-by-case approach enabling an analysis of the effects in individual circumstances, the abuse of dominance regime of competition law seems more suitable to address instances where personalized pricing harms consumers.

As to the required approach to target price discrimination, the first line of defense should be data protection and consumer protection law. Data and consumer protection authorities should ensure compliance with information requirements so that individuals become aware of personalized pricing. More awareness among the general public may lead firms to be more hesitant to engage in further price discrimination out of fear of reputational backlash. Since antidiscrimination law is only applicable to specific forms of discrimination, it becomes a policy question as to whether competition law should be used as an additional instrument to target price discrimination between consumers by dominant firms. The main challenge here would be to distinguish harmful forms of personalized pricing from those that are welfare-enhancing under Article 102 TFEU.⁹⁴ As price discrimination is more likely to negatively impact consumers in monopolistic markets,⁹⁵ it makes sense to limit enforcement actions to discriminatory behavior of dominant companies that are targeted by the abuse of dominance regime of Article 102 TFEU.

⁹⁰ See generally, DANIEL KAHNEMAN, *THINKING FAST AND SLOW* (Penguin 2011).

⁹¹ See European Parliament and Council Directive 2006/123/EC, On Services in the Internal Market [2006] OJ L 376/36, art. 20.

⁹² See European Parliament and Council Directive 2005/29/EC, Concerning Unfair Business-to-Consumer Commercial Practices in the Internal Market [2005] OJ L 149/22, Annex I (“Commercial practices which are in all circumstances considered unfair.”).

⁹³ For an overview of recent research, see Siliva Merler, *Big Data and First-degree Price Discrimination*, BRUEGEL (Sept. 15, 2018, 6:16 pm), 20 February 2017, <http://perma.cc/QYM6-PJKS>.

⁹⁴ For a proposed framework, see OECD, *Price discrimination - Background note by the Secretariat*, DAF/COMP(2016)15, 13 October 2016, ¶ 73-81.

⁹⁵ See § 3.2 above.

While competition interventions typically focus on addressing the exclusionary conduct of dominant firms,⁹⁶ there are signs that exploitative abuses are moving up the agenda of competition authorities. In November 2016, Competition Commissioner Vestager stated explicitly that there can be times where a competition intervention is necessary when “competition hasn’t been enough to provide a real choice” and “dominant businesses are exploiting their customers, by charging excessive prices or imposing unfair terms.”⁹⁷ It is worth noting that in May 2017, the Commission opened its first investigation into concerns about excessive pricing practices in the pharmaceutical industry against the company Aspen Pharma.⁹⁸ At the national level, the *Bundeskartellamt* (the German competition authority) opened proceedings against Facebook in March 2016 to examine whether consumers are sufficiently informed about the type and extent of personal data collected on its social network.⁹⁹ The *Bundeskartellamt* preliminarily concluded in December 2017 that Facebook’s terms of service violated data protection law and thereby also constituted abuse of dominance under competition law as an abusive imposition of unfair conditions on users.¹⁰⁰ The investigation seems to proceed on the view that principles from data protection law can provide benchmarks for assessing whether certain exploitative behavior of a dominant firm should be considered anticompetitive under Article 102 TFEU.¹⁰¹ It seems that the benchmark relied upon by the *Bundeskartellamt* is the validity of consent under data protection law. More specifically, the *Bundeskartellamt* seems to consider whether the consent given by Facebook users is sufficiently informed, as required by Article 4(11) GDPR. Depending on how the investigation evolves, the *Bundeskartellamt* may set a new precedent under which competition enforcement also has a role to play in preventing the exploitation of consumers by dominant firms through the imposition of unfair conditions regarding the processing of personal data.

It remains to be seen whether these developments will lead to an increase in the attention accorded by competition authorities to exploitative abuses more generally. Such a development would enhance the scope of competition enforcement to include types of price discrimination that exploit consumers but do not have an exclusionary effect, like personalized pricing. As competition law is inherently more apt to target exclusionary behavior, there should be limits on the extent to which exploitation can form the basis for a competition intervention. In the words of Competition Commissioner Vestager, “sometimes, a company is dominant simply because it’s better than its competitors. And when that’s the case, it’s only fair that it should get the reward of its efforts.”¹⁰² There is a need to prevent “competition authorities taking

⁹⁶ See Commission Guidance on the Commission's Enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings, at 7, COM (2003) 45 final (Feb. 24, 2009).

⁹⁷ See Margrethe Vestager, Commissioner for Competition, European Commission, Address at the Chillin’ Competition Conference: Protecting Consumers From Exploitation (Nov. 21, 2016) [hereinafter Address Protecting Consumers].

⁹⁸ See Press Release, European Commission, Antitrust: Commission Opens Formal Investigation into Aspen Pharma’s Pricing Practices for Cancer Medicines (May 15, 2017) (on file with Commission Press Release Database).

⁹⁹ See Press Release, *Bundeskartellamt*, *Bundeskartellamt* Initiates Proceeding Against Facebook on Suspicion of Having Abused its Market Power by Infringing Data Protection Rules (March 2, 2016) (on file with *Bundeskartellamt* Press Release Database).

¹⁰⁰ See Press Release, *Bundeskartellamt*, Preliminary Assessment in Facebook Proceeding: Facebook’s Collection and Use of Data From Third-party Sources is Abusive (Dec. 19, 2017) (on file with *Bundeskartellamt* Press Release Database).

¹⁰¹ See also Francisco Costa-Cabral and Orla Lynskey, *Family Ties: The Intersection Between Data Protection and Competition in EU Law*, 54 COMMON MKT. L. REV., 11, 33-37 (2017).

¹⁰² Margrethe Vestager, *supra* note 97, Address Protecting Consumers.

the place of the market” as a regulator, “deciding on the right price” in the context of possible competition interventions against excessive pricing. As such, “[t]he best defence against exploitation remains the ability to walk away” and consumers can often be protected “just by stopping powerful companies from driving their rivals out of the market.”¹⁰³ Nevertheless, when competition fails to enable consumers to vote with their feet, competition authorities should have the option to take direct action against exploitation in order to adequately protect consumer interests. As suggested by the Organisation for Economic Co-operation and Development (“OECD”), one relevant factor in examining the desirability of a competition intervention to address personalized pricing could be the extent to which the exploitation is sustainable.¹⁰⁴ For instance, the exploitation may be of a transitory character that the market could be expected to resolve itself if the price-discriminating firm is not protected by barriers to entry.¹⁰⁵ In this regard, competition authorities may request information from buyers and sellers on how long the scheme has already been in place in order to understand whether the exploitation is likely to persist.¹⁰⁶

Apart from such limiting principles, the possibility of a competition intervention for anticompetitive forms of personalized pricing that exploit consumers, and thereby harm consumer welfare, does not seem unreasonable. In fact, the rise of the notion of “fairness” in competition policy circles as an underlying principle of competition enforcement may point to a stronger willingness of competition authorities to address exploitative practices.¹⁰⁷ Such references to fairness cannot expand the reach of the competition rules. However, an explicit recognition of fairness as an inherent objective or outcome of competition enforcement does emphasize that competition law is about protecting the competitive process to the benefit of consumers, competitors, and the economy as a whole, thereby contributing to a fairer society.¹⁰⁸ As such, competition interventions should not be limited to instances of exclusionary abuse but should also target exploitative behavior that leads to “unfair” outcomes directly harming consumers.

Irrespective of whether it triggers competition concerns, price discrimination is largely regarded as “unfair.” Even if consumers will benefit from lower prices in some instances, they may feel uncomfortable about companies varying prices according to individuals’ willingness to pay. Consumers generally will not oppose price discrimination that advances social goals, such as facilitating access for lower-income consumers. Nor will consumers generally oppose price discrimination that

¹⁰³ *Id.*

¹⁰⁴ OECD, Price discrimination - Background note by the Secretariat, DAF/COMP(2016)15, 13 October 2016, ¶ 77.

¹⁰⁵ OECD, Price discrimination - Background note by the Secretariat, DAF/COMP(2016)15, 13 October 2016, ¶ 77.

¹⁰⁶ OECD, Price discrimination - Background note by the Secretariat, DAF/COMP(2016)15, 13 October 2016, ¶ 77.

¹⁰⁷ See e.g. Margrethe Vestager, Commissioner for Competition, European Commission, Address at the 10th Annual Global Antitrust Enforcement Symposium: Competition for a Fairer Society (Sept. 20, 2016) (“And competition enforcement also sends a message of fairness. That public authorities are here to defend the interests of individuals, not just to take care of big corporations.”). See also Renata Hesse, Acting Assistant Attorney General, U.S. DOJ Dep’t of Justice, Address at the 10th Annual Global Antitrust Enforcement Symposium: And Never the Twain Shall Meet? Connecting Popular and Professional Visions for Antitrust Enforcement (Sept. 20, 2016) (“It is good for the public – because antitrust enforcement promotes the interests of the public over the power of the few – and it is also good for antitrust – because it keeps enforcers focused on the ultimate goal of antitrust, economic fairness. [...] Accordingly, professionals and the public are moving more toward a consensus vision of antitrust focused on protecting competition and the fairness inherent in it.”).

¹⁰⁸ Alfonso Lamadrid de Pablo, *Competition Law as Fairness*, 8 JOURNAL OF EUROPEAN COMPETITION LAW & PRACTICE, 147, 148 (2016).

increases the overall quality of the product, for instance by increasing diversity through subsidizing tuition fees for certain students in prestigious study programs. However, price discrimination that has profit maximization as its sole goal and simply sorts consumers in order to extract as much surplus from them as possible is unlikely to prove socially acceptable.¹⁰⁹ When the existence of different cost levels cannot explain differentiated pricing, consumers will not likely accept such discriminatory practices.¹¹⁰ Apart from this consumer perception of personalized pricing as a breach of equality, the alleged “unfairness” of such practices also has a competition angle. By exercising their market power, dominant firms can take advantage of consumers who do not have any other viable outside option. Dominant firms can then extract consumers’ maximum willingness to pay or make consumers buy products that they may not need or want. Such conduct may not only be unfair from the perspective of individual consumers that are targeted by the exploitative practices, but can also harm the economy as a whole.¹¹¹ If a market player engages in personalized pricing, and in particular if it does so in a non-transparent way, this may impact the confidence of consumers in markets in general and lead consumers to become more hesitant to make purchases.¹¹²

While more evidence is necessary to understand the impact of personalized pricing facilitated by algorithms, competition enforcement should not be ruled out from the outset. It may prove a suitable instrument to address the harmful effects of such conduct. These possible harmful effects go beyond what data and consumer protection can currently address by ensuring that individuals remain in control of their personal identity and are aware of how prices are set.¹¹³ As such, in order to ensure an adequate level of protection against exploitation that harms consumer welfare, a need exists to further examine the scope for competition enforcement to address personalized pricing by dominant firms.

VII. CONCLUSION

Personalized pricing towards end consumers does not entirely fit the scenarios of discrimination generally accepted in decision-making practice and case law under Article 102 TFEU. The rise of algorithms that further facilitate discriminatory practices increases the need to clarify the potential of competition enforcement in addressing price discrimination. While Article 102 TFEU is sufficiently flexible to capture these—so far—rarer forms of discrimination, it is a policy question whether and to what extent competition enforcement should apply to personalized pricing.

When answering this question, one should not only consider the welfare effects of discriminatory behavior more thoroughly but also examine what competition law

¹⁰⁹ Ariel Ezrachi & Maurice.E. Stucke, 122-23 *VIRTUAL COMPETITION. THE PROMISE AND PERILS OF THE ALGORITHM-DRIVEN Economy* (2016).

¹¹⁰ See When Algorithms Set Prices: Winners and Losers, 27, Oxera, 2017.

¹¹¹ Ezrachi & Stucke, *supra* note 109, 105, 123-24.

¹¹² Marc Bourreau et al, *Big Data and Competition Policy: Market Power, Personalised Pricing and Advertising: CERRE Project Report*, CERRE (Sept. 17, 2018, 12:06 PM), <https://perma.cc/K7D4-WRPF>.

¹¹³ But see, Mariateresa Maggiolino, *Personalized Prices in European Competition Law*, Bocconi Legal Studies Research Paper (Sept. 17, 2018, 12:33 PM), <https://perma.cc/CPB8-V6UA> (“The main legal issues that seem to arise from personalized prices derived from big data concern the circulation and use of the information. Namely, the extent of information offered to buyers, digital or not, so that any purchases based on customized prices do not occur with their ignorance or lack of awareness as to the information upon which the price has been formulated. In addition, there is the issue of what rules are necessary to ensure individuals remain in control of their digital identity and the way in which it is used.”).

can add to the remedies that are available under other regimes. As it relies on a case-by-case analysis, competition enforcement may prove a suitable way to address the harmful effects of price discrimination towards end consumers that currently cannot be tackled on the basis of other regimes. As such, lessons should be drawn from the way in which competition law and other regimes interact in targeting personalized pricing.