

The Consumer Voice in Europe

## EACH CONSUMER A SEPARATE MARKET?

BEUC position paper on personalised pricing



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## Why it matters for consumers

Offering consumers different prices is as old as commerce itself. However, in the age of data, the situation has changed: now, businesses have the tools to determine the maximum price we can accept to pay and charge us exactly that. Our personal data used for such predictions can be extremely broad in scope, including insights from our e-mail history, search history, shopping history, where we live and what we do in life; it can also be based on outdated or wrong information. When more businesses start employing such practices, the consumer will no longer be able to establish the objective value of products and services, as the price shown to each consumer will be different. With the associated risks of welfare loss and of discrimination, as well as the added harm to privacy and autonomy in decision making, algorithmic price personalisation based on information held about the individual consumer is cause for serious concern.

## Summary

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**Behavioural price personalisation** techniques analyse consumers' personal data to quote them different prices for the same products, typically set at the maximum (predicted) amount an individual can agree to pay. Despite a weak information requirement in the Consumer Rights Directive, such techniques are still highly problematic in terms of reducing **consumer welfare**, questionable **transparency**, as well as the risk of unfair **discrimination**; they are also **not accepted** by the majority of consumers.

Price personalisation is not compatible with EU laws that protect consumers and their personal data. This includes the General Data Protection Regulation (consent requirements, purpose limitation), the Consumer Rights Directive (pre-contractual information), as well as unfair contract terms and unfair commercial practices law. It also creates a risk of discriminatory practices, where it can be used as a tool for locking 'undesired' consumers out of a service, simply by rendering it too expensive for them to afford.

Against this background, BEUC calls for a **general prohibition** of pricing techniques using personal data to adjust the price based on behavioural predictions made about the individual, such as:

- Assessing the consumers' individual willingness to pay,
- Using profiling to predict the likelihood of switching to a different provider,
- Filtering the customer base by giving 'undesired' consumers over-inflated prices.

The prohibition should leave out individual and group discounts which are not based on profiling, as well as price differentiation techniques which are:

- Fully transparent, including about the data and assessments involved, and limited to such data and type of assessment that are strictly necessary and directly relevant to performing the given service, such as insurance risk assessments.

In all cases, the **burden of proving compliance** must be on the trader.

Moreover:

- **The provisions of Article 22 of the General Data Protection Regulation** should be clarified to avoid uncertainty as to their applicability to price personalisation.
- **Sweep investigations** by authorities of the Consumer Protection Coordination Network should be performed to see how traders have implemented the provisions of Directive (EU) 2019/2161<sup>1</sup> (and their national transposed pendant) in regard to price personalisation.

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<sup>1</sup> Directive (EU) 2019/2161 of the European Parliament and of the Council of 27 November 2019 amending Council Directive 93/13/EEC and Directives 98/6/EC, 2005/29/EC and 2011/83/EU of the European Parliament and of the Council as regards the better enforcement and modernisation of Union consumer protection rules ('Omnibus Directive').

## 1. Introduction

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### 1.1. What is price personalisation?

Despite the seemingly clear 'popular understanding' of price personalisation (or price discrimination) as the act of **charging different economic actors a different price**, the term can in fact refer to different market practices.

A typology dating back to early 20<sup>th</sup> century identifies three degrees of price discrimination:

- **First-degree ('perfect') price discrimination:** charging everyone a different price for the same product or service, at the maximum amount they could pay ('individual willingness to pay'). In this case, the consumer's ability to save money by spending less than they could ('consumer surplus') no longer exists.
- **Second-degree price discrimination:** using different prices to respond to differences in willingness to pay depending on different variants of the product (for example, offering discount prices for goods sold in bulk packaging).
- **Third-degree price discrimination:** setting a number of different prices and offering them to different groups of buyers (for example, charging students less for a train ticket).<sup>2</sup>

Long after this division was conceived, the 'perfect' price discrimination of the first degree, requiring knowledge of each buyer's individual willingness to pay, remained a purely theoretical construct. Nowadays, a century later, access to information has been turning the tables. Detailed insights derived from aggregated data collected about consumers allow traders to make inferences about their interests and needs, but also their economic status and their life situation; all this information can be used to predict an individual's behaviour, thus making first-degree price discrimination a reality – where the consumer is quoted a truly personalised price.

A note on terminology: Although an established classic, the three-tiered typology presented above is not perfect in describing modern data-based practices. Depending on how the required technology is implemented, a trader **pursuing first-degree personalisation** may, instead of having a truly personalised price (meaning even as many distinct prices as they have customers), end up with a **tiered approach** that will only select one of a few price variants, depending on the factors considered as relevant in the individual's data trail. In effect, this type of price personalisation would result in a **segmentation** of their customer base, which would bring the practice closer to third-degree personalisation instead (particularly where the price is based on only a single parameter, e.g. age<sup>3</sup> or battery level<sup>4</sup>). Nonetheless, third-degree personalisation is primarily the category of group discounts and similar innocuous practices which can be socially beneficial (e.g., discounts for low income/under-privileged groups).

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<sup>2</sup> Pigou AC (1920) The Economics of Welfare, McMillan & Co., p. 279. Available at <https://oll.libertyfund.org/title/pigou-the-economics-of-welfare>.

<sup>3</sup> See the Tinder examples in Section 2.

<sup>4</sup> <https://www.brusselstimes.com/449143/uber-fares-allegedly-linked-to-phone-battery-levels>

The focus of this paper is on personalised pricing understood as '**automated differentiation of the online price for identical products or services based on information a company has about a potential customer**'<sup>5</sup> and its aim is to discuss solutions in a technology-neutral manner. It will thus refrain from referring to personalisation of the 'first degree', speaking of 'behavioural' pricing, or simply of price personalisation instead.

## 1.2. Personalised pricing v. dynamic pricing

The distinction between personalised and dynamic pricing is an area of potential confusion. Typically applied in certain industries, such as energy, travel and accommodation, a dynamic price changes constantly as it seeks to reflect overall demand (like current demand for accommodation in the area) and a number of factors on the side of the trader (in travel, this could be the number of hotel rooms left available, the price of fuel, the anticipated travel time, risk of strikes, etc.) In such cases, establishing the base price (e.g., to determine whether price personalisation is occurring) can be quite demanding.

In other sectors, such as insurance or financial services, the line may be blurred even further: credit institutions and insurers often rely on individual risk assessments that involve various forms of consumer data. This is fine as long as the assessments transparently analyse data directly relevant to the service (for example, in car insurance, data such as one's age, vehicle type, accident history). However, as the amount of personal data available to risk assessors increases, such risk assessments may well become 'hyper-personalised' as they scrutinise broad arrays of consumer information to allow for very detailed risk assessments, at a massive privacy cost to consumers.<sup>6</sup> In such a case, on top of other risks caused by personalised pricing (as will be discussed in this paper), this would also entail the risk of a discriminatory effect of rendering certain consumers uninsurable.<sup>7</sup> It may also undermine the entire premise of insurance as a collectivised (and not individualised) risk scheme. This shows that price personalisation which builds on broad arrays of personal data can be **harmful irrespective of the sector of the economy**.

## 1.3. Consumer responses to price personalisation

Consumers do not accept behavioural price personalisation and in majority consider it unfair.<sup>8</sup> In a 2023 (forthcoming) study by BEUC that surveyed consumer opinions across eight EU Member States, nearly 40% of consumers stated they were uncomfortable with the practice, while 25% expressed their approval.

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<sup>5</sup> Rott P, Strycharz J, Allededt F (2022) Personalised Pricing, November 2022. Available at [https://www.europarl.europa.eu/thinktank/en/document/IPOL\\_STU\(2022\)734008](https://www.europarl.europa.eu/thinktank/en/document/IPOL_STU(2022)734008) ; Poort, J. and Zuiderveen Borgesius, F., 2019, Does everyone have a price? Understanding people's attitude towards online and offline price discrimination, Internet Policy Review 8. Available at: <https://policyreview.info/articles/analysis/does-everyone-have-price-understanding-peoples-attitude-towards-online-and-offline>.

<sup>6</sup> See the 2023 supervisory statement by the European Insurance and Occupational Pensions Authority (EIOPA) for a discussion on how insurance customers are charged different premiums based on personal characteristics such as their price elasticity, loyalty etc. Also discussed in section 2.1. <sup>6</sup> [https://www.eiopa.europa.eu/system/files/2023-03/EIOPA-BoS-23-076-Supervisory-Statement-on-differential-pricing-practices\\_0.pdf](https://www.eiopa.europa.eu/system/files/2023-03/EIOPA-BoS-23-076-Supervisory-Statement-on-differential-pricing-practices_0.pdf)

<sup>7</sup> BEUC (2020) the use of Big Data and artificial intelligence in insurance, p. 3. [https://www.beuc.eu/sites/default/files/publications/beuc-x-2020-039\\_beuc\\_position\\_paper\\_big\\_data\\_and\\_ai\\_in\\_insurances.pdf](https://www.beuc.eu/sites/default/files/publications/beuc-x-2020-039_beuc_position_paper_big_data_and_ai_in_insurances.pdf)

<sup>8</sup> Poort J and Zuiderveen Borgesius F (2019) Does everyone have a price? Understanding people's attitude towards online and offline price discrimination. Internet Policy Review 8. Available at <https://policyreview.info/articles/analysis/does-everyone-have-price-understanding-peoples-attitude-towards-online-and-offline>; OECD (2021) The effects of online disclosure about personalised pricing on consumers, p. 24. Available at [https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DSTI/CP\(2020\)6/FINAL&docLanguage=En](https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DSTI/CP(2020)6/FINAL&docLanguage=En).

Please indicate how you feel when your search and browsing history, e-mails, messages, insights about your economic status, etc., are used to show you personalised prices (i.e. based on your estimated willingness to buy).

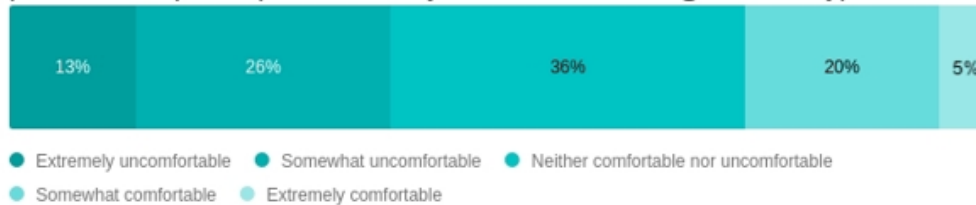


Figure 1. Consumer responses to price personalisation.

Source: BEUC (2023) Connected but unprotected: empirical survey on digital fairness in the eyes of European consumers (forthcoming)

At the same time, this figure showed a relatively high percentage of indecisiveness (36%) which may point towards a potential problem with understanding of the practice: when asked about processing and monetisation of their personal data, consumers' responses were much more decisively in the negative (60% against, 24% undecided, 16% in favour).

Apps/websites can analyse and monetise my personal information, messages, e-mails and search history.



Figure 2. Consumer responses to personal data analysis and monetisation.

Source: BEUC (2023) Connected but unprotected: empirical survey on digital fairness in the eyes of European consumers (forthcoming)

A 2019 Dutch study analysing consumer attitudes demonstrated that this negative sentiment applies to both simple price differentiation from buyer to buyer (see Fig. 3 below) and to individual discounts based on past online behaviour (Figure 3 below).

Around the same time, a research study by BEUC's UK member Citizens' Advice demonstrated that learning about the provider applying price personalisation practices affects the trust consumers place in the traders.<sup>9</sup> The study showed that **84% of respondents felt uncomfortable with personalised pricing in essential service markets**, while three in four people said that if they encountered personalised pricing they would not trust their provider.<sup>10</sup>

<sup>9</sup> In a UK study, 84% of respondents said they felt uncomfortable with personalised pricing in essential service markets and 3 in 4 said that if they encountered personalised pricing, they wouldn't trust their provider (Citizens Advice (2018) 'A Price of One's Own. An investigation into personalized pricing in essential markets' <https://www.citizensadvice.org.uk/a-price-of-ones-own-an-investigation-into-personalised-pricing-in-essential-markets/>).

<sup>10</sup> Citizen's Advice (2018).

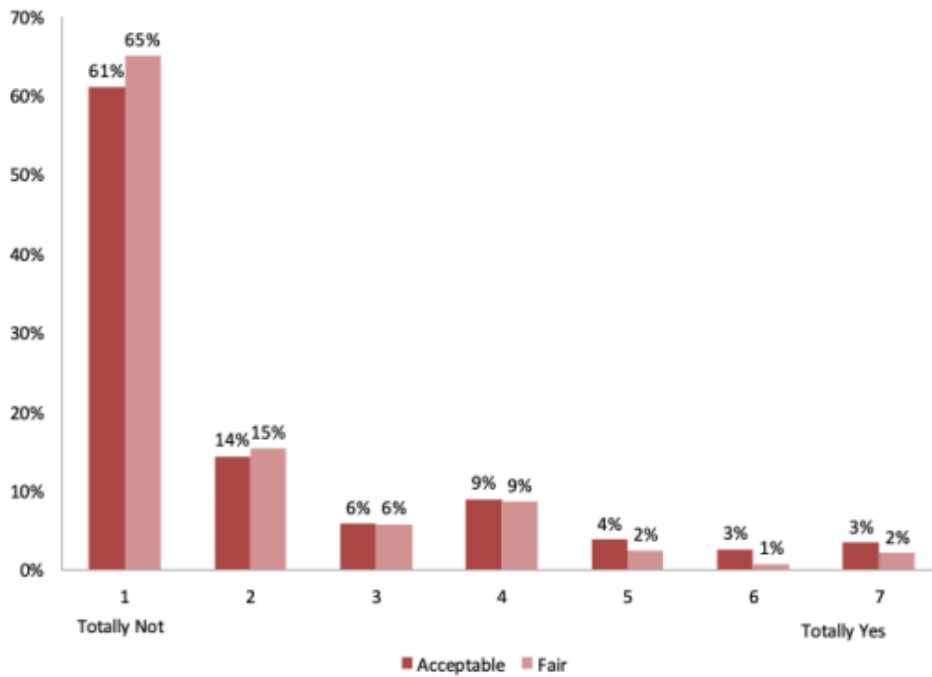


Figure 3. 'Do you find it acceptable/fair that an online store charges different prices to different people for the same product?'

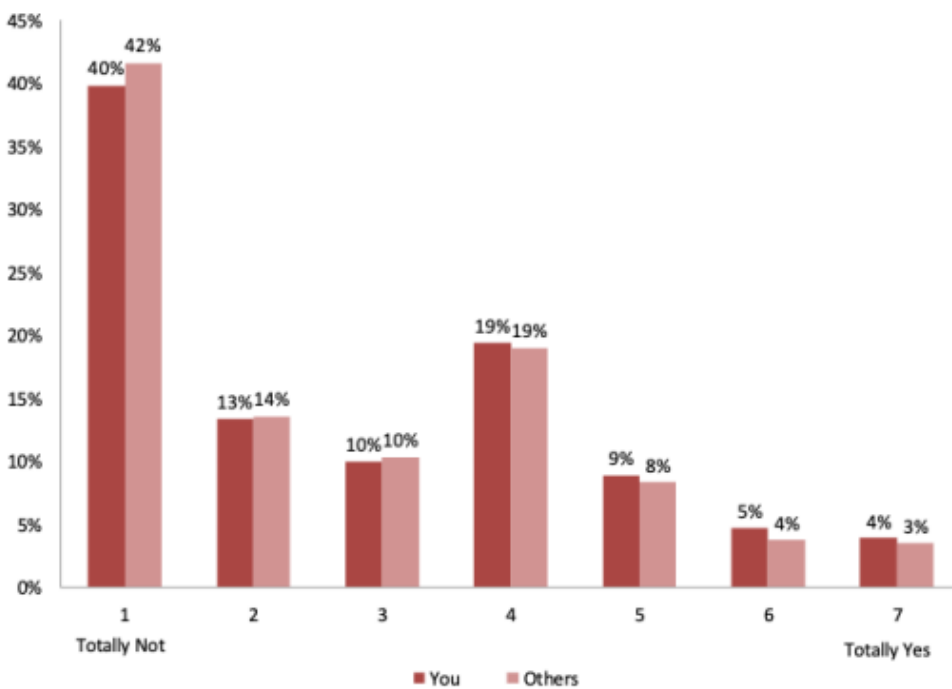


Figure 4. 'Would you find it acceptable if a web store gives a discount to you/others based on your/their online behaviour (such as the websites you/they have visited before)?'

Source (Fig.3-4): Poort and Borgesius (2019) Does everyone have a price? Understanding people's attitude towards online and offline price discrimination. Internet Policy Review 8 (1) <https://policyreview.info/pdf/policyreview-2019-1-1383.pdf>

The perceived unfairness is greater when the personalisation leads to the price being increased rather than discounted.<sup>11</sup> Other research has confirmed that consumers speak against price personalisation even if they stand to gain from it.<sup>12</sup>

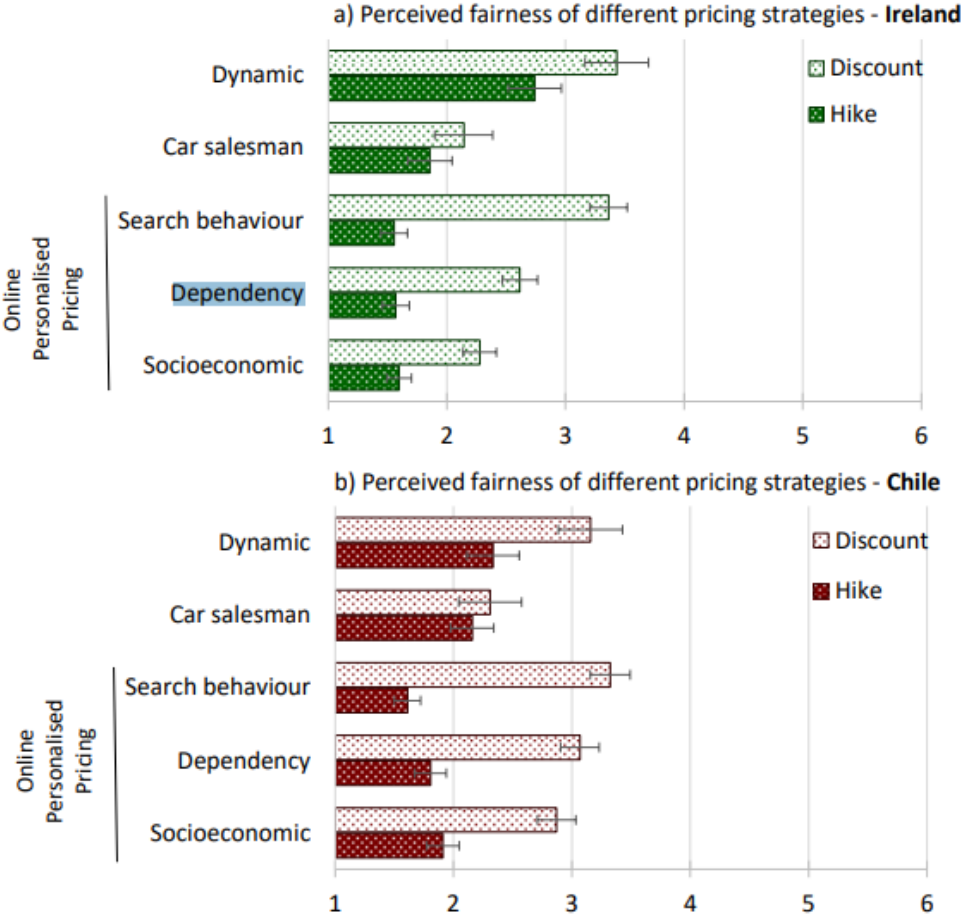


Figure 5. Fairness perceptions of different price differentiation strategies, rated by participants of a behavioural study from 1 ('Completely unfair') to 6 ('Completely fair').

Source: OECD (2021), The effects of online disclosure about personalised pricing on consumers. Results from a lab experiment in Ireland & Chile  
[https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DSTI/CP\(2020\)6/FINAL&docLanguage=En](https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DSTI/CP(2020)6/FINAL&docLanguage=En)

A 2021 OECD behavioural study indicated a generally low approval of such techniques and a particularly low acceptance for personalisation based on one's search history, dependency on the product or socioeconomic factors.<sup>13</sup>

At the same time, the OECD demonstrated that despite the negative sentiments, **disclosure** of personalised pricing had **little effect** on the actual shopping behaviour,<sup>14</sup>

<sup>11</sup> OECD (2021), The effects of online disclosure about personalised pricing on consumers. Results from a lab experiment in Ireland & Chile  
[https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DSTI/CP\(2020\)6/FINAL&docLanguage=En](https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DSTI/CP(2020)6/FINAL&docLanguage=En)  
 Results from a lab experiment in Ireland & Chile.  
[https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DSTI/CP\(2020\)6/FINAL&docLanguage=En](https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DSTI/CP(2020)6/FINAL&docLanguage=En)

<sup>12</sup> Rott P (2019) A Consumer Perspective on Algorithms. In: de Almeida L, Cantero Gamito M, Durovic M and Purnhagen KP (eds) The Transformation of Economic Law. Essays in Honour of Hans-W. Micklitz. Hart 2019.

<sup>13</sup> OECD (2021) p. 24.

<sup>14</sup> OECD (2021) p. 28.



although consumers did quite well at recognising that personalised pricing was being applied (reaching 83% correct positive identifications in Ireland).

This discrepancy can be interpreted along the lines of a general feeling of resignation and of being powerless against the data-collection ecosystem. In a 2021 consumer survey on a potential right not to be profiled, 64% consumers were in favour while only 21% were against.<sup>15</sup> At the same time, in a 2021 survey of 2,000 consumers in Germany and France on acceptance of social media companies collecting personal data, 83% of respondents showed negative attitudes.<sup>16</sup> In a Norwegian poll on acceptance of personalised advertising, two out of three respondents rejected collection of personal info online but more importantly, six out of ten said they had no real choice in the matter.<sup>17</sup>

This echoes earlier findings of our UK member Which? demonstrating that consumers do not feel they have realistic alternatives. For example, following the Cambridge Analytica scandal, 24% of respondents who used Facebook declared they considered leaving the site (but did not) while only 6% actually deactivated or deleted their accounts. The reasons given for this included the feeling that it was already too late as companies already had their data.<sup>18</sup>

#### 1.4. Economics-based approaches and consumer welfare

Traditional economic theory approaches suggest that personalised pricing can improve market efficiency and total welfare when charging every buyer, the maximum amount they might pay. Research suggests that this may improve consumer welfare under ideal circumstances, such as perfect market coverage, and assuming that the practices are uniformly applied across the market.<sup>19</sup> Under less-than-ideal circumstances, however, the opposite is true and consumer welfare is **reduced**.<sup>20</sup>

From a consumer perspective, the following observations must be made:

- A. Personalised pricing increases the trader's profits, but it **reduces consumer surplus**<sup>21</sup> (and perfect price discrimination allows the trader to extract all of the consumer's surplus<sup>22</sup>). This means that in a personalised pricing setting it is the trader who benefits, at the expense of consumers.
- B. Although personalised price reductions could theoretically lead to an inclusive effect (by allowing less-wealthy consumers make an otherwise inaccessible purchase),<sup>23</sup> on a price strategy level, traders have little incentive to personalise prices by reducing their base price as this could lead to a loss of revenue; hence

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<sup>15</sup> Sample: 10,064 EU citizens in the Netherlands, Germany, Italy, France, Austria, the Czech Republic, Spain, Sweden and Belgium.

<sup>16</sup> <https://www.globalwitness.org/en/blog/do-people-really-want-personalised-ads-online/>

<sup>17</sup> Norwegian Consumer Council (2021) consumer attitudes to surveillance-based advertising. <https://fil.forbrukerradet.no/wp-content/uploads/2021/06/consumer-attitudes-to-surveillance-based-advertising.pdf>

<sup>18</sup> Which (2018) Control, Alt or Delete? The future of consumer data (report), <https://www.which.co.uk/policy/digital/2659/control-alt-or-delete-the-future-of-consumer-data-main-report>

<sup>19</sup> Rhodes A, Zhou J (2022) Personalized Pricing and Competition, available at <https://cowles.yale.edu/sites/default/files/d2329.pdf>.

<sup>20</sup> Id.

<sup>21</sup> Dube JP, Misra S (2021) Personalised pricing and consumer welfare, p. 26; see also the comments in Section 1.1. above.

<sup>22</sup> Dube, Misra (2021) p. 9.

<sup>23</sup> BEUC (2018) Personalised Pricing in the Digital Era – Note by BEUC to Organisation for Economic Co-operation and Development Directorate for Financial and Enterprise Affairs Competition Committee, p. 3. Available at [https://one.oecd.org/document/DAF/COMP/WD\(2018\)129/en/pdf](https://one.oecd.org/document/DAF/COMP/WD(2018)129/en/pdf).

personalisation usually focuses on **charging a higher price** to those consumers who have a higher willingness to pay.<sup>24</sup>

- C. Consumers with a higher willingness to pay, who bear most of the cost of personalised pricing (as it is mainly their surplus being extracted) are not only those who can pay more due to a greater personal wealth. The category will also include, e.g., consumers who **need** the product or service due to their life circumstances and/or having few alternatives. Such scenarios, characterised by the OECD study as a '**dependency**' situation,<sup>25</sup> are the equivalent of **weaponising** a vulnerable consumer's **vulnerability** against them.
- D. Applying this consideration to the above discussion on a potential redistributive effect of personalised pricing in some circumstances (if the surplus extracted from those with a high willingness to pay would reduce the price for ones where it is low<sup>26</sup>), it may also lead to a **reverse** redistribution of wealth: 'punishing' consumers whose need for the product comes from difficult life circumstances, and favouring ones who are less determined to buy. As a result, **consumers who are poorer but more desperate will end up co-financing the price reduction for those who may be wealthier but less determined.**

## 2. Personalised pricing in practice

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### 2.1. Research studies

For a long time, personalised pricing was in practice mainly anecdotal, for reasons such as being too complex and resource-intensive, all the while risking consumer backlash and a reputational cost.<sup>27</sup> In a 2018 study by the European Commission of 160 websites in eight Member States, prominent evidence was found of personalised ranking of offers,<sup>28</sup> but no 'consistent and systematic personalised pricing' practices were observed and the noted price variations were small. Nonetheless, in the mystery shopping exercise, **hotel booking websites and airlines displayed the most evidence of personalising the price**, with the identified factors including whether the shopper connected via a price comparison website or the trader itself being large or small (with smaller ones tending to personalise prices to a higher degree).<sup>29</sup>

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<sup>24</sup> Rott et al (2022), p. 17.

<sup>25</sup> OECD (2021) Personalised Pricing in the Digital Era. Background Note by the Secretariat, 28 November 2018, [https://one.oecd.org/document/DAF/COMP\(2018\)13/en/pdf](https://one.oecd.org/document/DAF/COMP(2018)13/en/pdf), p. 24.

<sup>26</sup> BEUC (2018).

<sup>27</sup> OECD (2021) p. 14. See also Council of Economic Advisers (2015), Big Data and Differential Pricing, The White House [https://obamawhitehouse.archives.gov/sites/default/files/whitehouse\\_files/docs/Big\\_Data\\_Report\\_Nonembarqo\\_v2.pdf](https://obamawhitehouse.archives.gov/sites/default/files/whitehouse_files/docs/Big_Data_Report_Nonembarqo_v2.pdf).

<sup>28</sup> Over 61% of the surveyed e-commerce websites were personalising their product rankings, either based on how the shoppers accessed the website (via price comparison websites, a search engine, via a mobile device etc.) or based on behavioural data about the consumer. In total, personalised ranking was found in 92% airline ticket websites, 76% hotel room websites, 41% websites selling sports shoes, and 36% websites selling TVs. See [https://commission.europa.eu/publications/consumer-market-study-online-market-segmentation-through-personalised-pricingoffers-european-union\\_en](https://commission.europa.eu/publications/consumer-market-study-online-market-segmentation-through-personalised-pricingoffers-european-union_en)

<sup>29</sup> The latter was tentatively explained in the study by smaller entities being less frequently in the crosshairs of scrutiny for evidence of price personalisation. See European Commission (2018) Consumer market study on online market segmentation through personalised pricing/offers in the European Union [https://commission.europa.eu/publications/consumer-market-study-online-market-segmentation-through-personalised-pricingoffers-european-union\\_en](https://commission.europa.eu/publications/consumer-market-study-online-market-segmentation-through-personalised-pricingoffers-european-union_en)

A 2018 mystery shopping exercise by BEUC member *Altroconsumo* showed consistent individual-dependent price differences when making bookings on travel sites including Ryanair, Expedia and Booking.com.<sup>30</sup> Purchases of hotel accommodation and flights were made using different profile users and devices at the same time. The differences in prices quoted for the same product at the same time ranging from 5% to 23%.<sup>31</sup>

Also in 2018, a study by Citizen's Advice dedicated to essential services markets noted that, while little evidence of personalised pricing had been found in the postal and water sectors, **in the energy and telecoms markets, personalised pricing was found to be more likely**, due to the pricing of energy and telecoms being flexible, with a range of tariffs on offer in both markets and a good access to consumer data, including personal and usage data, allowing traders to draw behavioural insights. At the same time, personalised pricing was identified as being particularly potentially harmful to vulnerable consumers.<sup>32</sup>

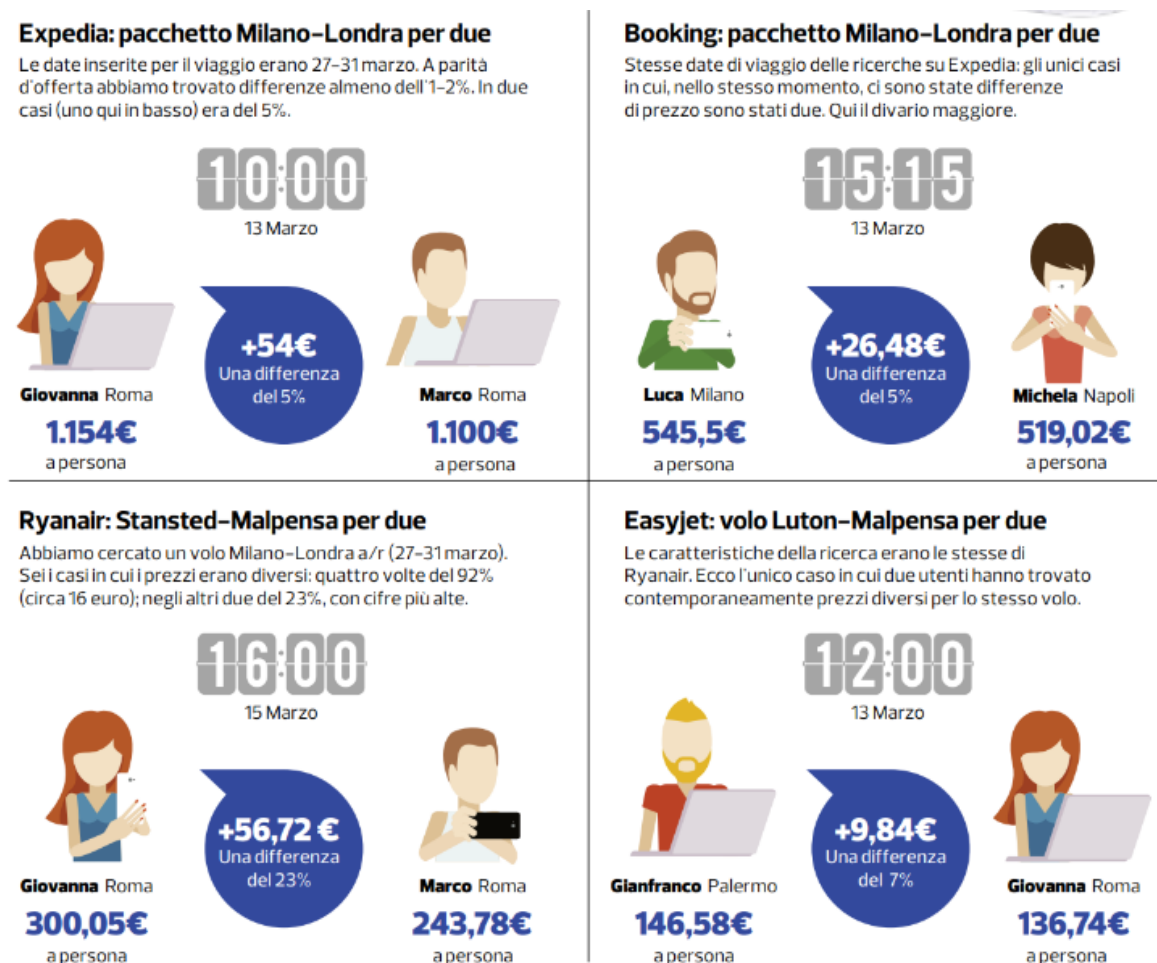


Figure 6. Price differences while shopping simultaneously using different user profiles.

Source: Altroconsumo, "C'era una volta un prezzo", 326 Altroconsumo, June 2018

A 2019 study by Verbraucherzentrale Brandenburg conducted a review of German online retailers to look for price differences based on location and end device. Differences in pricing were found depending on device and location; however, no discernible pattern could be identified. On Amazon.de and Amazon Marketplace, differences were found to be

<sup>30</sup> Altroconsumo, "C'era una volta un prezzo", 326 Altroconsumo, June 2018.

<sup>31</sup> Id.

<sup>32</sup> Citizen's Advice (2018).

typically very small, but with exceptions – e.g., in smartphones, depending on whether the user connected from an Android or an Apple device, the difference could be as high as €45.99 (14%).<sup>33</sup>

Lastly, in a 2019 market study by BEUC member *Arbeiterkammer* (AK) device-dependent price differentiation was found on Booking.com and Opodo.com/at.

Personalised pricing was not confirmed due to insufficient transparency but indicated as also possible. The demonstrated differences included a Verona hotel being shown as €28.90 (10.3%) more expensive to users of PC or laptop devices than to users of smartphones or iPads; fluege.de charging laptop users €14.72 (8.2%) more than users of other devices, as well as differences in the speed of the price increasing over time depending on whether a PC or Mac device was being used.<sup>34</sup>

Over time, evidence has been emerging to show that **price personalisation practices had been in use to a degree**, suggesting that the availability of the required technology and the economic benefits are now enough to overcome the proclaimed obstacles of cost and complexity.

In a case study by Consumers International and Mozilla published in early 2022, up to **31 different prices** within the same country were found to be quoted by the price personalisation algorithm of Tinder Plus. Although the company would not disclose the methodology of price personalisation, it was observed that age of the user was one of the factors, with some users paying even five times more than others.<sup>35</sup> The study involved five countries (Brazil, India, the Netherlands, New Zealand, Republic of Korea, United States) representing five continents. Evidence of price personalisation (applied without disclosure by the company) was found in all of the surveyed markets.

An even greater price differentiation was found in a 2022 study of Tinder's pricing in Sweden by BEUC member *Sveriges Konsumenter* (SK), based on data collected by students of Södertörn University. The study identified **36** distinct price points for Tinder's premium subscription, ranging from SEK 30 to SEK 369 per month, which amounted to a **1200%** difference between the two extremes.<sup>36</sup> Differently from the international study by Consumers International, age could not be pinpointed as the only factor affecting the price and more detailed results would require a larger data sample. On this basis of the observed price differentiation, SK submitted complaints against Tinder to the Swedish Discrimination Ombudsman, the Privacy Protection Authority and the Swedish Consumer Agency.<sup>37</sup>

Similarly large price differences were found in Norway by BEUC member *Forbrukerrådet*, with users reporting prices from NOK 55 to NOK 229 for a month of Tinder Plus, and from NOK 135 to NOK 455 for Tinder Platinum. In this case, the differences did not appear to be closely related to the age of the users and it was not clear what determined the price.<sup>38</sup>

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<sup>33</sup> <https://www.verbraucherzentrale.de/sites/default/files/2019-09/marktwaechter-untersuchung-individualisierte-preisdifferenzierung.pdf>

<sup>34</sup> Delapina M (2019) AK-Test: Preisdifferenzierung im Online-Handel.

[https://www.arbeiterkammer.at/beratung/konsument/HandyundInternet/Internet/Online-Handel\\_2019.pdf](https://www.arbeiterkammer.at/beratung/konsument/HandyundInternet/Internet/Online-Handel_2019.pdf)

<sup>35</sup> Consumers International and Mozilla (2022) A consumer investigation into personalised pricing. [https://assets.mofoprod.net/network/documents/Personalized\\_Pricing.pdf](https://assets.mofoprod.net/network/documents/Personalized_Pricing.pdf)

<sup>36</sup> Sveriges Konsumenter (2022) Jakten på kärlek - och dolda priser, <https://www.sverigeskonsumenter.se/media/xwpluga1/rapport-tinder-0222.pdf>.

<sup>37</sup> Tinder is reported to authorities for discrimination - large price gap between users, Tellerreport.com, <https://www.tellerreport.com/news/2022-02-08-tinder-is-reported-to-authorities-for-discrimination---large-price-gap-between-users.B1m6GOMlyc.html>

<sup>38</sup> Forbrukerrådet (2022) Store prisforskjeller for Tinderbrukere, <https://www.forbrukerradet.no/siste-nytt/store-prisforskjeller-for-tinderbrukere/>

Also in the UK, BEUC member organisation Which? found price differences based on consumers' age used by Tinder, with little transparency on how the practice is applied.<sup>39</sup>

The rise of differential pricing practices was also flagged by a supervisory statement by the European Insurance and Occupational Pensions Authority (EIOPA) in February 2023.<sup>40</sup> The statement covers practices where, on top of risk-based price calculation, insurance customers are charged a different premium "based on **personal characteristics** such as their **price elasticity**, propensity to **shop around** at the renewal stage or based on an estimation of the value that can be generated by up-selling and cross-selling other products to the customer". The statement takes note that the growing use of such practices has already led to supervisory and regulatory activities in a number of EU Member States,<sup>41</sup> the UK<sup>42</sup> and the United States<sup>43</sup>.

## 2.2. Enforcement actions in the EU and beyond

In summer 2022, the platform 'Wish' was found to have been using undisclosed price personalisation techniques along with other disallowed practices (e.g., fake discounts) by the Dutch Authority for Consumers & Markets (ACM), in cooperation with other European consumer authorities and the European Commission. However, although informing consumers about the practice would have been enough to fulfil the disclosure requirement under the updated Consumer Rights Directive (discussed further in the following section), Wish chose to discontinue personalised pricing altogether.<sup>44</sup>

On the other side of the Atlantic, a few months before the publication of the Consumers International/Mozilla report on Tinder, the company saw a class settlement in an age-based discrimination case rejected by the 9<sup>th</sup> Circuit Court of Appeals. The grounds for rejection included inadequate relief for consumers offered in virtual currency (Tinder's Super Likes) and free subscription periods, against the background of inadequate assessment of collusion. More importantly however, Tinder had agreed to discontinue the age-based price differentiation, but only for new users (which ruled out the class members).<sup>45</sup>

The *Allison v. Tinder* case showed that Tinder had not discontinued its practices despite it not being the first time it was taken to court. Unfair discrimination already became the core of the issue decided on appeal by the Second District Court in California as early as January 2018, *Candelore v. Tinder* saw the failure of Tinder's narrative based on 'increased access to services for the general public' and 'profit maximisation by the vendor, a legitimate goal in our capitalistic economy', both to be allegedly achieved by age-based price personalisation techniques. The District Court noted that under the law of the state, all persons are free and equal – and the kinds of discrimination listed as prohibited under

<sup>39</sup> Cavaglieri C (2022) Tinder's unfair pricing algorithm exposed, Which? <https://www.which.co.uk/news/article/tinders-unfair-pricing-algorithm-exposed-adCwG8b7VRYo>

<sup>40</sup> [https://www.eiopa.europa.eu/system/files/2023-03/EIOPA-BoS-23-076-Supervisory-Statement-on-differential-pricing-practices\\_0.pdf](https://www.eiopa.europa.eu/system/files/2023-03/EIOPA-BoS-23-076-Supervisory-Statement-on-differential-pricing-practices_0.pdf). For BEUC's work on the subject, see BEUC (2020) The use of Big Data and artificial intelligence in insurance, [https://www.beuc.eu/sites/default/files/publications/beuc-x-2020-039\\_beuc\\_position\\_paper\\_big\\_data\\_and\\_ai\\_in\\_insurances.pdf](https://www.beuc.eu/sites/default/files/publications/beuc-x-2020-039_beuc_position_paper_big_data_and_ai_in_insurances.pdf).

<sup>41</sup> The examples cited in EIOPA's supervisory statement include Germany ([https://www.bafin.de/SharedDocs/Veroeffentlichungen/EN/Fachartikel/2021/fa\\_bj\\_2101\\_KfZVErs\\_Altersdiskriminierung\\_en.html](https://www.bafin.de/SharedDocs/Veroeffentlichungen/EN/Fachartikel/2021/fa_bj_2101_KfZVErs_Altersdiskriminierung_en.html)), Ireland (<https://www.centralbank.ie/docs/default-source/publications/consultation-papers/cp143/differential-pricing-review---final-report-and-public-consultation.pdf?sfvrsn=5>), Italy ([https://www.ivass.it/pubblicazioni-e-statistiche/pubblicazioni/att-sem-conv/2022/16-12-workshop-rcauto/Cosconati\\_intervento\\_workshop\\_IVASS\\_16\\_12\\_2022.pdf](https://www.ivass.it/pubblicazioni-e-statistiche/pubblicazioni/att-sem-conv/2022/16-12-workshop-rcauto/Cosconati_intervento_workshop_IVASS_16_12_2022.pdf)), the Netherlands (<https://www.afm.nl/en/nieuws/2021/juni/aandachtspunten-gepersonaliseerde-beprijzing>) and Sweden ([https://www.fi.se/contentassets/cb09f3ae4d964572be187b9726371ea4/report\\_loyal\\_policyholder.pdf](https://www.fi.se/contentassets/cb09f3ae4d964572be187b9726371ea4/report_loyal_policyholder.pdf)).

<sup>42</sup> <https://www.fca.org.uk/publication/policy/ps21-5.pdf>

<sup>43</sup> [https://content.naic.org/sites/default/files/inline-files/committees\\_c\\_catf\\_related\\_price\\_optimization\\_white\\_paper.pdf](https://content.naic.org/sites/default/files/inline-files/committees_c_catf_related_price_optimization_white_paper.pdf)

<sup>44</sup> <https://www.consuwijzer.nl/nieuws/wish-staat-geen-schijnkortingen-en-gepersonaliseerde-prijzen-meer-toe>

<sup>45</sup> 19-55807 - Rich Allison, et al v. Tinder, Inc., et al. <https://www.qovinfo.gov/content/pkg/USCOURTS-ca9-19-55807/pdf/USCOURTS-ca9-19-55807-0.pdf>. For comments see <https://news.bloomberglaw.com/us-law-week/tinders-24-million-deal-to-end-age-discrimination-suit-undone>.



California law (such as sex, race, and national origin)<sup>46</sup> were 'illustrative, rather than restrictive'.

This protection applies also 'where unequal treatment is the result of a business practice'.<sup>47</sup> Tinder was then found to be using a personal characteristic to discriminate against older customers based on a 'generalised prediction' about income.

### 3. Legal considerations

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#### 3.1. General observations<sup>48</sup>

EU law does not prohibit personalised pricing. The current wording of Article 6 (1) (ea) of the Consumer Rights Directive (CRD),<sup>49</sup> as amended by the Omnibus Directive<sup>50</sup> applicable as of 22 May 2022, only lays down an information requirement when the price was personalised on the basis of automated decision-making. This requirement does not apply to dynamic or real-time price changes 'in response to market demands' (Recital 45 to the Omnibus Directive). Although the revised Guidance document<sup>51</sup> notes that personalised pricing may fall under the specific rules on automated decision-making (ADM) in Article 22 of the General Data Protection Regulation (GDPR),<sup>52</sup> the practice itself is thus allowed.

Nonetheless, as will be explained in this Section, there are **sufficient grounds to consider that price personalisation cannot be reconciled with a number of laws relevant to consumers**. As it hinders the consumer's ability to learn the market price, price personalisation affects their ability to make informed choices, increasing the imbalance of knowledge and power in the consumer-trader relationship and potentially reducing consumer welfare. In doing so, price personalisation lays bare certain **contradictions and blind spots** in applicable consumer law, between the 'informed decision-making' assumption under the CRD, the prevention of material distortion of transactional decisions under the UCPD, the requirement of transparency in unfair terms law which can arguably never be achieved in case of sophisticated data-driven services. These will be discussed below.

#### 3.2. Pre-contractual information requirements

The revised Guidance document to the Consumer Rights Directive<sup>53</sup> notes the importance of consumers being '*clearly and prominently informed* [about the price being personalised] *so that they can take into account the potential risks in their purchasing decision.*' Price personalisation must be disclosed before each transaction; it is thus not sufficient to insert

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<sup>46</sup> The 1959 Unruh Civil Rights Act, codified as California Civil Code section 51.

<sup>47</sup> <https://caselaw.findlaw.com/ca-court-of-appeal/1887382.html>

<sup>48</sup> This analysis looks at the issues that become apparent when applying laws relevant to consumers to behavioural price personalisation. Despite the risk of discriminatory results, non-discrimination law is not included due to the limited scope of its five Directives: Directive 2000/43/EC on racial equality, Directive 2002/78 framework on employment and occupation, Directive 2004/113/EC on gender equality in provision of goods and services, Directive 2004/38/EC on EU citizens and family members and Directive 2006/54/EC on equal opportunities. For a discussion on algorithmic discrimination and professional diligence, see Micklitz, Helberger et al., (2021) EU Consumer Protection 2.0: Structural asymmetries in consumer markets, [https://www.beuc.eu/publications/beuc-x-2021-018\\_eu\\_consumer\\_protection.0\\_0.pdf](https://www.beuc.eu/publications/beuc-x-2021-018_eu_consumer_protection.0_0.pdf), p. 95 et seq.

<sup>49</sup> Directive 2011/83/EU of the European Parliament and of the Council of 25 October 2011 on consumer rights. Consolidated text: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02011L0083-20220528>

<sup>50</sup> <https://eur-lex.europa.eu/eli/dir/2019/2161/oj>

<sup>51</sup> Commission notice Guidance on the interpretation and application of Directive 2011/83/EU of the European Parliament and of the Council on consumer rights (Text with EEA relevance) 2021/C 525/01 <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021XC1229%2804%29&qid=1640961745514>

<sup>52</sup> See Section 3.3.

<sup>53</sup> Commission notice - Guidance on the interpretation and application of Directive 2011/83/EU of the European Parliament and of the Council on consumer rights (Text with EEA relevance) 2021/C 525/01 <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021XC1229%2804%29&qid=1640961745514>

this information into the privacy policy of the trader.<sup>54</sup> Both Article 5(1) and 6(1) of the CRD require information to be provided in a 'clear and comprehensible manner'.

The underlying rationale is thus that it suffices to disclose to consumers that the prices they see are being personalised to make them 'clearly and prominently' informed and thus able to take into account the 'potential risks in the purchasing decision' (Rec. 45 of the Omnibus Directive). Interestingly however, the Recital does not describe personalised pricing as based on an assessment of individual willingness to pay (which forms the core of algorithmic price personalisation<sup>55</sup>) but rather discusses it as based on an assessment of individual 'purchasing power'.

This is both a narrower and less precise formulation as it leaves a grey area e.g., opportunities to capitalise on the determination of consumers who are facing difficult circumstances in life (e.g. product dependency) while not necessarily having a high purchasing power as such. This lack of clarity, not addressed in the revised Guidance document,<sup>56</sup> may create confusion and uncertainty for consumers who will not know whether their price will be adjusted based on e.g., the trader's assumptions about their wealth, or on an assessment of how much they could agree to pay.<sup>57</sup>

Terminology aside, the CRD's transparency-based approach has at least **two weak spots** from the consumer perspective<sup>58</sup>:

**a) It fails to account for any other risks and harm aside from consumers not knowing the price was personalised.**

The possible harm to consumers subjected to personalised pricing extend far beyond the risk of not knowing about the personalisation. When a personalisation profile is applied to modify the prices shown to consumers, objective price information ceases to exist. The consumer is not only being shown a price that is based on a 'market price' with markup or a discount; instead, the relationship between the consumer and the price-personalising trader becomes a market in itself and an overall 'market price' can only be identified within that one-person market.

As the popularity of personalised pricing techniques grows, it is easy to envisage a lock-in effect where the main retailers typically available to the consumer will have price personalisation in place. In this scenario, the consumer's ability to find out the 'reference price' in order to assess whether they are getting a 'good deal' would be reduced even further.

Notably, under normal circumstances, the market actors driving the prices down are often large traders, while independent retailers are usually ranked as more expensive in price comparison websites. As the big players are also those which are the most likely to deploy or offer personalised pricing to their business customers, the competing non-personalised offers from outside their ecosystems will likely be significantly higher still. This means that, in a shopping situation, the consumer will be faced with a choice of personalised prices from networked traders and a few much more expensive options from independent outlets. This will likely end up muddying the waters even further for the consumer who is trying to find out what the 'real' price would be under normal circumstances.

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<sup>54</sup> CRD Guidance document, Section 3.3.1.

<sup>55</sup> See Rott et al. (2022), p. 8 et seq.

<sup>56</sup> See fn. 51.

<sup>57</sup> In an extreme interpretation, it could be said that personalisation based on willingness to pay is not at all tackled in the revised CRD, which would put in question its applicability to the major part of such practices.

<sup>58</sup> There are also implications in the field of competition which are discussed in Section 3.7.

For example, a consumer on a lookout for a specific item will likely be shown only personalised prices from big retail networks containing an individual price hike, and a few (much higher) prices from independent retailers who have less focus on selling the particular good. In such a scenario, even if the product would normally be sold for peanuts, this particular consumer will never know because the algorithms already learned that this person has a strong interest in purchasing it.

Beyond the mere provision of information aspect, personalised pricing entails a considerable risk of economic and other harm which are not considered in the CRD, such as:

- Harm resulting from the algorithmic assessment of one's willingness to pay (as discussed in Section 1.4 above) which is likely to punish consumers for needing a certain specific good or service, particularly when they are in a position of vulnerability (e.g., resulting from the life situation or a high cost of switching). This will be discussed further in Section 3.4 on unfair commercial practices law.
- Harm resulting from discriminatory practices, e.g. where price personalisation may be used as a tool for locking 'undesired' consumers out of a service, simply by rendering it too expensive for them to afford.

**b) It assumes that disclosure leads to the consumers being informed about their situation and able to make an informed decision.**

Although the CRD seeks to remedy consumer harm by ensuring access to information, it should be noted that the scope (and thus the practical utility) of the disclosure it mandates is severely limited (and certainly not sufficient to enable the 'clearly informed' goal so that they can 'take into account the potential risks' in their purchasing decision.<sup>59</sup> As such, the mere disclosure of the fact of the personalisation taking place is not informative or meaningful.<sup>60</sup>

More specifically, despite the wording of Recital 45 of the Omnibus Directive, the mandated disclosure does not include information such as the factors used for determining the price, the types of personal data which were used for this purpose, or the weighing criteria applied by the trader to determine the price.

For example, a consumer shopping for a car is only to be presented with a notice saying that the price they are offered is personalised – but it will make no mention of whether the calculation takes into account e.g. their e-mail history, any earlier purchase history with this carmaker, the predicted economic status or the data on the dependence on private transportation in their residential area, and how these factors are weighed against e.g. insights about the consumer being a left-leaning progressive who would rather use a greener mode of transportation.

At the same time, however, under conditions of digital asymmetry where the consumer is faced with technologies too complex to easily comprehend (and to make use of such comprehension) presenting the consumer with disclosure detailed enough to be informative would also mean flooding them with voluminous disclosures that they would rarely have the time to read or the skill to properly analyse. As a result, the only utility value of the CRD's mandatory disclosure of price personalisation as a policy tool lies in enabling the consumer to walk away – but, as mentioned, as more and more traders adopt price

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<sup>59</sup> In this vein Rott et al. (2022) p. 32;

<sup>60</sup> BEUC (2018) Proposal for a better enforcement and modernisation of EU consumer protection rules – “Omnibus Directive”, p. 5-6 [https://www.beuc.eu/sites/default/files/publications/beuc-x-2018-081\\_omnibus\\_directive.pdf](https://www.beuc.eu/sites/default/files/publications/beuc-x-2018-081_omnibus_directive.pdf); see also Rott (2022) p. 32; on the limited utility value of disclosures, see the OECD's report conclusions as discussed in Section 1.3.



personalisation,<sup>61</sup> the list of alternatives will likely continue to shrink. Therefore, the **CRD's protective regime** based on 'informed' decision-making and the weak transparency requirement, not to mention the confusing definition of price personalisation, **cannot be seen as offering consumers a high level of protection** in regard to personalised pricing.

### 3.3. General Data Protection Regulation (GDPR)

Irrespective of the disclosure duty under the CRD, traders using personal data for price personalisation are subject to the requirements of the GDPR, both in terms of its general principles applicable to the processing of personal data such as the lawfulness, fairness and transparency of processing principles, purpose limitation and data minimisation; and in regard to the specific provisions on automated decision-making in Articles 13 and 22 GDPR.<sup>62</sup>

#### 3.3.1. Legal basis for processing personal data

The GDPR establishes principles of fair, lawful and transparent processing of personal data (Article 5(1) a)), requiring a valid legal basis for processing personal data (Article 6). In principle, companies could choose a legal basis amongst those described under Article 6 such as performance of the contract, legitimate interest or consent as there is no hierarchy between the legal bases. However, it would be very difficult for a data controller to demonstrate the processing of personal data to deliver a personalised price is "objectively necessary for the performance of the contract,"<sup>63</sup> as required under the European Data Protection Board (EDPB) guidance.<sup>64</sup> Similarly, a data controller is unlikely to succeed in invoking legitimate interest as a valid legal basis under the GDPR because the balancing test it has to conduct between the company's interest(s) and data subjects' interests and impact on their fundamental rights would likely result in the latter overriding the company's legitimate interest for conducting personalised pricing<sup>65</sup>.

Where processing of personal data for price personalisation is to be based on consent, it must meet all the requirements under Article 4 (11) GDPR (freely given, specific, informed and unambiguous) to have a valid legal basis.<sup>66</sup> Often, we witness that the way companies deploy personalised pricing would not meet these conditions. For example, consent cannot be considered freely given or specific where price personalisation is only generally mentioned in a privacy policy or when the consumer has no choice but to accept the personalised price given based on undisclosed personal data processing. Consent could, for example, not be considered informed where the consumer does not have a full understanding of the underlying mechanisms of price personalisation, or is not aware of the associated harm and impact on their fundamental rights.

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<sup>61</sup> Borgesius (2021) The demise of the fixed price.

[https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3792842](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3792842)

<sup>62</sup> For a discussion on applicability of the GDPR to personalised pricing techniques see Poort, Borgesius (2017) Online Price Discrimination and EU Data Privacy Law J Consum Policy 40, 347–366 (2017). <https://doi.org/10.1007/s10603-017-9354-z>

<sup>63</sup> Notably, the controller also needs to demonstrate the validity of the contract and that includes an assessment of whether their terms are fair and lawful as per consumer law. See Section 3.5 for a discussion about unfair contract terms.

<sup>64</sup> EDPB guidelines 2/2019 on the processing of personal data under Article 6(1)(b) GDPR in the context of the provision of online services to data subjects, paras. 26 *et seq.* [https://edpb.europa.eu/sites/default/files/files/file1/edpb\\_guidelines-art\\_6-1-b-adopted\\_after\\_public\\_consultation\\_en.pdf](https://edpb.europa.eu/sites/default/files/files/file1/edpb_guidelines-art_6-1-b-adopted_after_public_consultation_en.pdf)

<sup>65</sup> See CJEU case C-708/18, TK, paras. 53-59 and Working Party 29 Opinion 06/2014 on the notion of legitimate interests of the data controller under Article 7 of Directive 95/46/EC [https://ec.europa.eu/justice/article-29/documentation/opinion-recommendation/files/2014/wp217\\_en.pdf](https://ec.europa.eu/justice/article-29/documentation/opinion-recommendation/files/2014/wp217_en.pdf)

<sup>66</sup> See also EDPB guidelines 05/2020 on consent under Regulation 2016/679 [https://edpb.europa.eu/our-work-tools/our-documents/guidelines/guidelines-052020-consent-under-regulation-2016679\\_en](https://edpb.europa.eu/our-work-tools/our-documents/guidelines/guidelines-052020-consent-under-regulation-2016679_en)

As a result, unless there is a legal obligation to conduct price personalisation, processing of personal data to engage in personalised pricing could be considered illegal on the grounds of not having a valid legal basis to process personal data, thereby not complying with the lawfulness principle under the GDPR. However, such illegality would have to be assessed on a case-by-case basis, in addition to assessing compliance with other GDPR provisions. To enforce the GDPR in this case, a consumer would need to go to court, submit a complaint before their data protection authority (DPA) or resort to a consumer organisation or another NGO to represent them and engage in lengthy procedures to stop the practice of price personalisation by a given company.

### 3.3.2. Rules on automated decision-making

Among other things, Article 13 GDPR sets forth obligations to disclose:

- The identity of the data controller;
- The legal basis and purpose of processing;
- Meaningful information about:
  - o The logic involved in the automated decision-making, including profiling, as well as
  - o The "significance and the envisaged consequences of such processing for the data subject".

This information must be communicated to the consumer 'in a concise, transparent, intelligible and easily accessible form, using clear and plain language'<sup>67</sup>. Applying this requirement in practice, a trader wishing to apply personalised pricing is thus required to include a 'meaningful and concise' description of their use of personal data to personalise prices and its envisaged consequences. Some academics argue that the 'meaningful' transparency requirement obliges the trader to at least disclose the relevant criteria that are used, while the 'envisaged consequences' should be construed to mean that they need to warn the consumer about the risk of them paying more than they would otherwise.<sup>68</sup> However, the GDPR is not that clear on this point, thereby requiring a DPA and case law to clarify this aspect following lengthy administrative and/or judicial procedures.

The GDPR does not require more precise information, including an explanation of the specific way in which the (personalised) price was calculated. In any case, the disclosure will need to come when the data is collected and not when it is used, which means that this information will be included in the (usually voluminous) privacy policy of the service that the consumer will rarely open or read.<sup>69</sup>

On the other hand, Article 22 GDPR grants the data subject the right not to be subjected to automated decision-making, including profiling, when it "produces legal effects concerning him or her or similarly significantly affects him or her", unless necessary for the purposes of the contract, allowed by national law or consented to by the data subject.<sup>70</sup> The Article also prohibits profiling on grounds of sensitive data, unless consent is given or the public interest prevails.<sup>71</sup> The actual meaning of 'legal or similarly significant effect' is unclear. The European Data Protection Board considers that "only serious impactful effects" will be covered by Article 22.<sup>72</sup>

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<sup>67</sup> Article 12 (1).

<sup>68</sup> Rott et al. (2022) p. 27.

<sup>69</sup> See the discussion in Borgesius (2021) section 4.1.

<sup>70</sup> Article 22 (1) and (2) GDPR.

<sup>71</sup> Article 22 (4) in connection with Article 9(1) and (2) a) and g).

<sup>72</sup> Article 29 Data Protection Working Party (2018) Guidelines on Automated individual decision-making and Profiling for the purposes of Regulation 2016/679, WP251rev.01, p. 22.

The lack of clarity of Article 22 formulations can alone constitute a major obstacle in protecting consumers and has already been strongly criticised for being near-impossible to implement. As discussed above, traders could also seek to obtain consent from data subjects which, particularly under conditions of digital asymmetry, when consumers are used to being constantly required to agree to opaque disclosures, will likely be invalid as the requirements for consent under the GDPR are not always respected by companies.

This means that **any protections** that could be applicable in regard to personalised pricing under the GDPR are **weakened** by the way companies apply the GDPR, its **insufficient or slow enforcement** and the legal uncertainty about the interpretation of the specific Articles discussed above.

### 3.4. Unfair commercial practices law

#### 3.4.1. Vulnerable consumers and distortion of transactional decision-making

Despite being technically allowed under the CRD, price personalisation raises doubts under unfair commercial practices law. The general unfairness clause in Article 5 (2) of the Unfair Commercial Practices Directive (UCPD) considers as unfair a commercial practice that is contrary to professional diligence and materially distorts or is likely to materially distort the economic behaviour with regard to the product of the average consumer whom it reaches or to whom it is addressed. Under Article 5 (3), commercial practices which are likely to materially distort the economic behaviour only of a clearly identifiable group of consumers who are particularly vulnerable to the practice or the underlying product shall be assessed from the perspective of the average member of that group.

First-degree price personalisation maximises the benefit of the trader by extracting the full willingness to pay of the consumer. In a situation where the consumer's willingness to pay is artificially increased due to unfavourable life or market circumstances (e.g., shortage of alternative products, the necessity to use the given product, other products being too expensive) the consumer may become **particularly vulnerable** to the **practice** or **underlying product**.

This understanding is aligned with the revised Guidance to the UCPD which notes that vulnerable characteristics can also include context-dependent vulnerabilities<sup>73</sup> and the 'clearly identifiable group' can also be comprised of one person. As the Guidance notes, the concept of vulnerability in the UCPD is 'dynamic and situational, meaning, for instance, that a consumer can be vulnerable in one situation but not in others'. Also, for highly-personalised practices, the 'vulnerable consumer' benchmark may be formulated from the perspective of a **single person who was subject to the specific personalisation**.<sup>74</sup>

The Guidance also notes that any business-to-consumer practice that materially distorts or is likely to distort the economic behaviour of an average or vulnerable consumer could breach the trader's professional diligence requirements (Article 5).<sup>75</sup>

#### 3.4.2. Misleading practices

The UCPD recognises specific subtypes of unfair commercial practices based on misleading information or omission (Articles 6-7) and aggression (Articles 8-9).

Article 6 (1) offers that a misleading practice may take the form where, in any way, including overall presentation, it is untruthful, or:

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<sup>73</sup> UCPD Guidance document, section 2.6 – Vulnerable consumers.

<sup>74</sup> UCPD Guidance document, section 4.2.7 – Data-driven practices and dark patterns

<sup>75</sup> Id.

- Even if the information it provides is factually correct, it deceives or is likely to deceive the average consumer, as to the main characteristics of the product, such as e.g., its availability, composition, fitness for purpose, origin or material features (Article 6 (1) b)
- Causing or being likely to cause a transactional decision which the consumer would not have taken otherwise.

Price information serves a dual purpose: it sets the value of exchange in the transaction, but also allows the consumer to obtain an understanding beforehand of the range of prices that the given good or service has in the given market. Price personalisation obscures the market price from the consumer and replaces it with a price that has been algorithmically calculated as the maximum price this consumer might be willing to pay.

As such, a case could be made that, in certain situations, any consumer wishing to base their understanding of the quality of the product on the quotes received from the trader (or, in practice, from *any* trader using the personalisation technology of the given platform and its dataset) will then be deceived as to the value of the good or service as an expression of the main characteristics listed in Article 6 (1) b) discussed above. Moreover, the consumer could be misled further were they to try and use the personalised price they are quoted as means of comparison of the value of the product against other products, particularly ones whose prices may be personalised along a different pattern or using different data, or not personalised at all.

In both respects above, the value of the disclosure under the CRD would likely not prevent the consumer being deceived given its limited information value and the fact that, if applied by the largest platforms, price personalisation will likely not produce prices higher than those of independent suppliers, thus presenting the new market reality in a more favourable light to the consumer.

### **3.4.3. Aggressive practices**

Significant impairment of a transactional decision may also occur as a result of an aggressive practice (Articles 8 and 9 UCPD), by means of harassment, coercion, including the use of physical force, or undue influence. In the assessment of whether a commercial practice meets any of these criteria, the assessment is to entail, in particular, the exploitation by the trader of any specific misfortune or circumstance of such gravity as to impair the consumer's judgement, of which the trader is aware, to influence the consumer's decision with regard to the product (Article 9 c).

Applying this reasoning to the circumstances discussed in section 3.4.1. in case of unfavourable life circumstances of the consumer which are known to the trader because of the broad scope of the behavioural dataset, a case could be made that using price personalisation to profit from a consumer's situational vulnerability could constitute an aggressive practice under the UCPD.

This understanding appears to be aligned with that presented in the UCPD Guidance document which notes that 'use of information about the vulnerabilities of specific consumers or a group of consumers for commercial purposes is likely to have an effect on the consumers' transactional decision. Depending on the circumstances of the case, such practices could amount to a form of manipulation in which the trader exercises 'undue influence' over the consumer, resulting in an aggressive commercial practice prohibited under Articles 8 and 9 of the UCPD. When assessing the presence of undue influence, according to Article 9(c) one should take into account the exploitation of any specific misfortune or circumstance of such gravity as to impair the consumer's judgement, of which the trader is aware.'

#### 3.4.4. Psychographic profiling and digital vulnerability

Research suggests that the extremely detailed data profiles created through broad data collection on today's consumers enable traders to perform profiling which grants them the ability to build individual persuasion profiles, thus rendering each consumer permanently vulnerable in the digitalised environment.<sup>76</sup> The types of this vulnerability will differ from consumer to consumer but it is reasonable to expect that, just as the knowledge of individual pressure points can render it easy to exert individualised pressure, similarly the manipulation of price information, particularly when performed on a growing scale and prominent among the main market players, can benefit from such permanent vulnerabilities.

As demonstrated in the above paragraphs, consumer vulnerability can also be created (or strengthened) in a price personalisation scenario. A case could be made that price personalisation practices, although not prohibited by the UCPD (and seemingly allowed by the CRD)<sup>77</sup>, can meet the criteria of both **misleading** and **aggressive** practices under the UCPD. To clarify this discrepancy, BEUC has previously requested a **straightforward prohibition** to be introduced in the UCPD, based on use of psychographic profiles or similar approaches to exercise emotional or psychological pressure, as well as the use of psychographic profiles or similar approaches to personalise prices.<sup>78</sup>

#### 3.5. Unfair contract terms law

Article 3(1) of the Unfair Contract Terms Directive considers as unfair a contract term which:

- has not been individually negotiated (standard contract terms);
- runs counter to the requirement of good faith;
- causes a significant imbalance in the parties' rights and obligations arising under the contract, to the detriment of the consumer.

This is combined with a general prohibition of irrevocably binding the consumer using contract terms that (they) had no real opportunity of becoming acquainted with before the conclusion of the contract.<sup>79</sup>

Importantly, the following terms are excluded from the general fairness assessment under Article 4 (2), pertaining to:

- the definition of the main subject matter of the contract;
- to the adequacy of the price and remuneration;

if they are stated in 'plain intelligible language'.

As noted by the Guidance document to the UCTD, transparency serves three functions:

- Contract terms that are not drafted in plain, intelligible language have to be interpreted in favour of the consumer (Article 5).
- The main subject matter or the adequacy of the price and **remuneration can be subjected to the unfairness test** when they are not stated in plain, intelligible language.

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<sup>76</sup> BEUC (2022) EU Consumer Protection 2.0 - Protecting fairness and consumer choice in a digital economy <https://www.beuc.eu/position-papers/eu-consumer-protection-20-protecting-fairness-and-consumer-choice-digital-economy>. See also Micklitz, Helberger et al., (2021) EU Consumer Protection 2.0: Structural asymmetries in consumer markets, [https://www.beuc.eu/publications/beuc-x-2021-018\\_eu\\_consumer\\_protection.0\\_0.pdf](https://www.beuc.eu/publications/beuc-x-2021-018_eu_consumer_protection.0_0.pdf).

<sup>77</sup> See section 3.2. above.

<sup>78</sup> [https://www.beuc.eu/sites/default/files/publications/beuc-x-2022-015\\_protecting\\_fairness\\_and\\_consumer\\_choice\\_in\\_a\\_digital\\_economy.pdf](https://www.beuc.eu/sites/default/files/publications/beuc-x-2022-015_protecting_fairness_and_consumer_choice_in_a_digital_economy.pdf)

<sup>79</sup> UCTD Annex I (i).

- **Failure to meet the transparency requirements** can be a factor in the assessment of unfairness and even indicate unfairness.<sup>80</sup>

In other words, the construct of contractual fairness of the UCTD relies strongly on the requirement that contract terms presented to the consumer must achieve transparency by ensuring that they are stated in plain and intelligible language. When this criterion is not satisfied, even the exception of the core subject matter (this includes price information) cannot be excluded from the unfairness assessment. At the same time, as indicated above, the failure to ensure transparency can already indicate unfairness of a contract term.

Applying this construct to contract terms pertaining to price personalisation, a case can be made that only such contract terms that would be able to explain personalised pricing in clear, intelligible language (and the consumer has had a real opportunity to get acquainted with them before the sale) carry no risk of being found unfair in this respect.

As a result, a case could be made that standard contract terms which refer to price personalisation techniques which:

- have an adverse impact on consumer welfare;
- fail to achieve the mandated level of transparency, by explaining price personalisation in clear and intelligible language;

could indeed be subjected to an unfairness analysis – and potentially found to be unfair.

Lastly, achieving a satisfactory level of transparency might even be **outright impossible** in the case of personalised pricing, simply because of the complexity of the relevant algorithms (which, again, would have to be explained using only clear and intelligible language). This might be a factor further increasing the probability of such contract terms being found to be unfair.

### 3.6. Price Indication Directive

The Price Indication Directive<sup>81</sup> notes in its Recitals that 'transparent operation of the market and correct information is of benefit to consumer protection and healthy competition between enterprises and products' (Recital 1), whereas 'the obligation to indicate the selling price and the unit price contributes substantially to improving consumer information, as this is the easiest way to enable consumers to evaluate and compare the price of products in an optimum manner and hence to make informed choices on the basis of simple comparisons'. In other words, the Directive builds on the premise that transparent operation of the market benefits consumers and competition, while consumer information – including the selling price – enables consumers to evaluate and compare the prices of products to make informed choices.

The Price Indication Directive **clashes** with price personalisation at the level of **price transparency** (if every market player gets a different price point).<sup>82</sup> However, no specific requirements are enshrined in the Directive as regards the manner in which the price should be calculated; the Directive only contains provisions on the clarity of presentation of the final price under Article 4 (1) PID, stating that the selling price and the unit price must be unambiguous, easily identifiable and clearly legible. Some authors suggest that in view of this, the PID should be updated to include price personalisation.<sup>83</sup>

<sup>80</sup> [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019XC0927\(01\)](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019XC0927(01)) Section 3.1.; Case C-191/15 Verein für Konsumenteninformation v Amazon, point 2 of the operative part and paragraphs 65-71.

<sup>81</sup> <https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX:31998L0006>

<sup>82</sup> It also puts into peril one of the PID's main objectives which is to enable an effective price comparison.

<sup>83</sup> Rott (2022) p. 35.



### 3.7. Competition law

Although price personalisation may lead to anti-competitive effects when personalised prices are agreed in vertical relationships (where the personalisation contributes to an anti-competitive outcome),<sup>84</sup> from the perspective of an average consumer, the anti-competitive effect may likely be seen more often in pricing arrangements where no actual agreement exists among the traders. As demonstrated by the UK Competition and Markets Authority, use of algorithmic pricing environments increases the risk of tacit coordination<sup>85</sup> where the anti-competitive market outcome is achieved without the need for explicit communication between competitors. Applying this reasoning to consumers subjected to price personalisation, a consumer's chances of getting an 'objective' view on the market may be significantly hindered if they see similar (similarly personalised) prices wherever they turn.

The reasons for the 'tacit coordination' effect given by the CMA can be the following:

- The necessity to collect data on the competition's pricing techniques<sup>86</sup> which will then affect the trader's own algorithmic pricing patterns.
- High frequencies of price adjustments in the online environment (with the largest traders reaching even millions of price changes per day)<sup>87</sup> which leads to benefits in algorithms following any change nearly immediately.
- Algorithms reaching independently similar results in calculating the price.
- Choice of similar pricing algorithms or dataset (hub-and-spoke) which was seen as posing the most immediate risk<sup>88</sup> notable particularly for where a sufficiently large proportion of traders use a single algorithm to set prices<sup>89</sup> but it requires collusive intent (to resist the temptation to break the cartel and lower the price).<sup>90</sup> It is possible that 'true' personalised pricing would then weaken this structure as the traders would need to choose between personalising the price and keeping the uniformly high price.<sup>91</sup>
- Use of self-learning algorithms ('autonomous machines') which are allowed to experiment and will eventually decide that collusion is the most profit-effective method of pricing, absent of any intent from the trader.

From a consumer perspective, any of these scenarios would lead to a harmful outcome which might be difficult to detect (as the consumer would see the same or almost the same price across a number of services). This is not unlikely in a scenario where datasets and pricing algorithms are shared among businesses collaborating with a very large platform. Aside from tacit coordination, traders may join forces in applying personalisation practices, to suppress competition and then to act as a 'joint monopolist' applying price personalisation to extract consumer surplus.<sup>92</sup> Although not unfeasible, explicit collusion was however ruled out as unlikely to occur – yet still **anti-competitive effects can be created** simply by virtue of multiple traders in the given market applying price personalisation techniques.

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<sup>84</sup> De Streef A and Jacques F (2019) Personalised pricing and EU law, p. 14 et seq. <https://www.econstor.eu/bitstream/10419/205221/1/de-Streef-Jacques.pdf>

<sup>85</sup> UK CMA (2018) Pricing algorithms Economic working paper on the use of algorithms to facilitate collusion and personalised pricing [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/746353/Algorithms\\_econ\\_report.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/746353/Algorithms_econ_report.pdf) p. 28.

<sup>86</sup> OECD (2017) Algorithms and Collusion - Background Note by the Secretariat [https://one.oecd.org/document/DAF/COMP\(2017\)4/en/pdf](https://one.oecd.org/document/DAF/COMP(2017)4/en/pdf)

<sup>87</sup> UK CMA (2018) p. 29.

<sup>88</sup> UK CMA (2018) p. 31.

<sup>89</sup> Id, p. 27.

<sup>90</sup> Id, p. 25.

<sup>91</sup> Id, p. 44.

<sup>92</sup> UK CMA (2018) 43-44.

## 4. BEUC recommendations

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As evidence is showing increased application of personalised pricing by traders, legislation must step in to protect consumers from being harmed by price differentiation practices based on processing their personal data, including assessments of how much they could agree to pay. The harm ranges from the massive data collection and surveillance footprint to the effects on consumer welfare by extracting consumer surplus, punishing consumers with a strong need for a product or a service with a higher price, discriminatory practices depriving certain consumers access to a product or a service, as well as blocking all from an objective view of the market and a solid basis for any comparisons of the actual value of goods.

Current EU law does not protect consumers from the harm of personalised pricing based on intrusive algorithmic assessments of their behavioural data.<sup>93</sup> The weak disclosure obligation under the Consumer Rights Directive can indeed be read as permitting the practice, despite it being highly problematic on the grounds of a number of laws relevant to consumers, including privacy and data protection, unfair commercial practices, unfair contract terms, price indication law as well as competition law.

### **On this basis, BEUC recommends the following policy solution:**

- A **prohibition should be introduced on personalisation of prices** based on behavioural predictions made about the individual, such as assessing the individual willingness to pay. This should include related practices such as using profiling to predict the risk of switching to a different provider, or filtering the customer base by giving 'undesired' consumers overinflated prices.
- The ban should not extend to third-degree personalisation. As such, it should not affect e.g., group discounts or individual discounts based on a specific parameter (like loyalty points).
- Exceptions from the ban should allow price differentiation that is:
  - Fully transparent, including about the data and assessments involved, and
  - Limited to such data and types of assessment that are strictly necessary and directly relevant to performing the given service, such as insurance risk assessments.<sup>94</sup>
- In all cases, a reversal of the burden of proof is essential to remedy the lack of transparency that is commonly cited by empirical studies and renders it very difficult to the consumer and to the investigating authority to determine what exactly the applied commercial practice entails – while making it very easy to hide evidence of a lack of compliance. Due to this significant asymmetry of knowledge and power, the burden should be on the trader to demonstrate that their pricing policy has been in

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<sup>93</sup> Behavioural price personalisation, sometimes discussed as first-degree price discrimination, should not be confused with group discounts and other price reduction techniques that are meant to reward or incentivise consumers and do not require an invasive and privacy-intrusive assessment of their psychology, life circumstances and decision-making habits. Such discounts are already regulated to prevent misleading presentation of the prior price and are not within scope of this position.

<sup>94</sup> Notably, insurers are also increasingly engaging in unfair price personalisation practices which go beyond the necessary risk assessment – using factors such as predicted individual price sensitivity or the propensity to shop around. See BEUC (2020) The use of Big Data and artificial intelligence in insurance, [https://www.beuc.eu/sites/default/files/publications/beuc-x-2020-039\\_beuc\\_position\\_paper\\_big\\_data\\_and\\_ai\\_in\\_insurances.pdf](https://www.beuc.eu/sites/default/files/publications/beuc-x-2020-039_beuc_position_paper_big_data_and_ai_in_insurances.pdf). See also European Insurance and Occupational Pensions Authority 2023 supervisory statement on the same points: [https://www.eiopa.europa.eu/system/files/2023-03/EIOPA-BoS-23-076-Supervisory-Statement-on-differential-pricing-practices\\_0.pdf](https://www.eiopa.europa.eu/system/files/2023-03/EIOPA-BoS-23-076-Supervisory-Statement-on-differential-pricing-practices_0.pdf).



compliance with the law. Business secrecy, including secrecy of algorithms, cannot override this principle.

**Other recommendations**

- The provisions of Article 22 GDPR should be clarified to avoid uncertainty as to their applicability to price personalisation.
- Sweep investigations should be performed to see how traders have implemented the provisions of the Omnibus Directive (and their national transposed pendant) in regard to price personalisation.

END



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