

**DIRECTORATE FOR FINANCIAL AND ENTERPRISE AFFAIRS
COMPETITION COMMITTEE**

Personalised Pricing in the Digital Era – Note by BEUC

28 November 2018

This document reproduces a written contribution from BEUC submitted for item 1 of the joint meeting between the Competition Committee and the Committee on Consumer Policy on 28 November 2018.

More documentation related to this discussion can be found at:

www.oecd.org/daf/competition/personalised-pricing-in-the-digital-era.htm

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1. Introduction

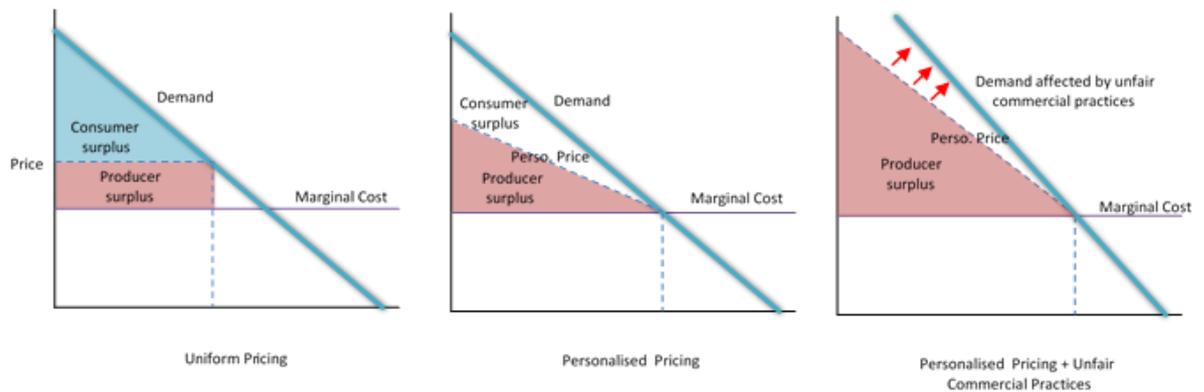
1. BEUC welcomes the discussion on personalised pricing in business-to-consumer relationships in the digital era from the perspectives of competition and consumer law.
2. Despite the fact that there has been little research on the use of personalised pricing, the technology allows for that possibility and there are indications that some firms that are able to collect considerable amounts of data to build profiles of consumers (or to get consumers profiles through other firms) might be applying personalised pricing.
3. This situation puts forward many questions concerning the legal grounds in which personalised pricing takes place and, on the eventual benefits of personalising prices for final consumers compared to traditional forms in which prices are defined.
4. As described in the background document by the secretariat, there are different degrees in which prices can be personalised. This note focuses on first-degree price personalisation, which would take place when each consumer is charged his or her full (or almost full) willingness to pay.

2. Personalised pricing and consumer welfare

5. BEUC takes note of the preliminary conclusion of the background document that personalised pricing may entail pro-competitive effects and enhance consumer welfare, particularly in competitive markets. We would like however to highlight that there are additional factors that need to be taken into account when assessing the impact of personalised pricing on consumers, which might lead to a more nuanced conclusion:
 - First, while traditional economic theory suggests that personalised pricing can improve market efficiency, the gap between a) the amount that the consumer would be willing to pay, and b) the price resulting from the personalisation of the offer might actually be smaller than what traditional economics foresee. This would therefore reduce the optimistic consumer surplus forecast. The reason is that the technology does not only allow firms to obtain detailed profiles of their customers (especially the regular ones) regarding their personal characteristics and consumption habits, but also to implement techniques aiming at lifting the price consumers would be willing to pay by exploiting their biases. For example, firms implement different techniques to introduce anxiety on consumers such as ‘last minute deals’ pop-ups or by enhancing competition with other consumers presumably interested on the same offer *e.g.* ‘3 other customers are viewing this offer’. From an economic perspective, this is a very important factor to take into account because as indicated by existing literature, firms through the use of unfair practices can manipulate the demand curve in their own favour therefore increasing

the producers' surplus in detriment of the less sophisticated consumers¹ (see figure 1).

Figure 1.



- Secondly, the most obvious benefit of personalised pricing would be given by the possibility for consumer that are under the market price to acquire goods and services that they would be otherwise excluded from. This is because, under traditional economic theory, firms applying personalised pricing would be able to keep or increase their margin benefits by increasing the price for those that would be willing to pay more and reduce the price to those willing to pay less. While at first this idea seems correct if we take into account the heterogenous expectations of consumers; the opposite can also be true: First, the most affluent consumers, who according to traditional economic theory would in principle be willing to pay more, can also be the most informed consumers and therefore be more aware of the consequences of the use of personalised pricing and might well try to avoid it while the less affluent consumers, often more vulnerable to the use of technology, could end up paying more. Secondly, it should not be underestimated that the fluctuation of the consumer purchasing power can play against their own interest in a price personalisation scenario. An example could be seasonal shopping: it is well-know that consumers pay more for goods or services that they need for a certain date, *e.g.* Christmas, due to the increase of the demand around the same period of time for the same type of goods or services and the hectic of last-minute shopping. In a price personalisation scenario, willingness to pay can be artificially increased by allowing firms to extract the maximum possible price from consumers, including for those that would have been under normal conditions below the price of a uniform pricing scenario.
- Thirdly, an important aspect that must not be set aside under the arguable benefits of price personalisation related to consumer trust on markets and firms. There is evidence showing that consumers are reluctant to be subject to price personalisation. This is because price personalisation requires a firm not only to constantly monitor the activity of their clients, but to build detailed profiles of them. While some consumers might find this useful *e.g.* to obtain personalised offers, the wide majority are sceptical of businesses data practices. For example, our UK

¹ See among others G. Gabaix and D. Laibson, "Shrouded Attributes, Consumer Myopia and Information Suppression in Competitive Markets", *The Quarterly Journal of Economics*, May 2006.

member *Which?* found in a survey what when it comes to attitudes toward data collection and use, only a small proportion of the UK population (13%) are unlikely to be concerned about the potential ways in which the data could be used. On the contrary, the wide majority feels powerless about how firms use their data, including for the purpose of tailoring offers.² In a survey carried out by Citizens Advice in the UK, 84% of people said they felt uncomfortable with personalised pricing in essential service markets and 3 in 4 people say that if they encountered personalised pricing they wouldn't trust their provider³. Similarly, a survey in the US showed that consumers rejected discounts based on what they do on the website they are visiting (62%), on what they do on other websites they visited (78%) and on what they do offline (78%).⁴ Thus, there are reasonable grounds to believe that the use of the price personalisation could jeopardise consumer trust on digital markets, especially if consumers would not have the possibility to access offers that are not based on their profiles and consumption habits.

- Furthermore, it is important to consider the impact of personalised pricing on vulnerable consumers. This is because these consumers are less sensitive to price changes and under a price personalisation scenario they could pay significantly more for goods and services. Thus, a pertinent question concerns the distributional impact of personalised pricing: who will end up absorbing the cost saved by some consumers?
- Finally, competition market authorities should pay particular attention to personalised pricing in essential services. This is for many reasons, including the following: First the drastic inelasticity of the demand curve at least to the point where the service is essential, might not increase as fast as the appropriation effect -where the producer captures consumer welfare. Second, because the consumers with more needs (and sometimes willingness to pay) may also include those who are in a vulnerable situation or in lower income. They might have more needs because of long term illness requiring a better heat environment, or they might simply not be able to pay “substitutes” in the long term such as increasing household efficiency in energy (or face other barriers as is the case of tenants). This put them high up in the curve. Finally, because of effects on inactive consumers (or also called loyalty penalty). Note that in essential markets these features appear due to the long-term nature of the contracts (often undetermined length). More sophisticated algorithms will likely be able to recognise the most sophisticated consumers that will be able to switch later on. They can do that not only through the information received through online shopping but by understanding their consumer patterns or other information. This will capture the consumers and price

2 Which?, “Control, Alt or Delete? The Future of Consumer Data” (2018), Policy Report, <<https://www.which.co.uk/policy/digitisation/2659/control-alt-or-delete-the-future-of-consumer-data-main-report>> p. 17

3 Citizens Advice, “A Price of One’s Own. An investigation into personalized pricing in essential markets”, <<https://www.citizensadvice.org.uk/Global/CitizensAdvice/Consumer%20publications/A%20price%20of%20one's%20own%20final.pdf>> p. 1.

4 Joseph Turow et al., “Contrary to what marketers say, Americans reject tailored advertising and three activities that enable it”, <<https://ssrn.com/abstract=1478214>> p.15.

them up, whilst they might lower their consumption. Sometimes the less sophisticated or less able to shop around are those with less income – these can be through higher searching costs or other barriers⁵. Those higher priced in the case of inactivity might still consume less, reducing overall welfare.

3. Studies from European consumer organisations

6. Consumer organisations have started to monitor the use of personalised pricing by firms operating in online markets. Below we include a summary of studies carried out by our Italian and Austrian members.

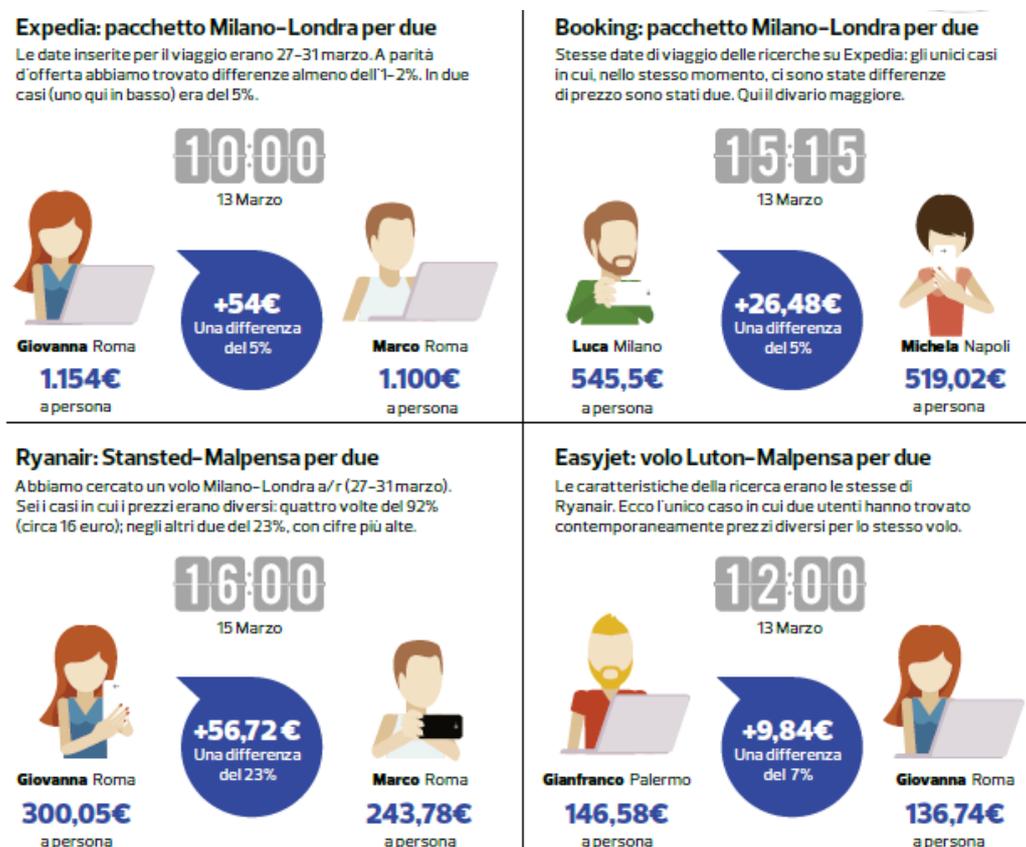
3.1. Italy

7. In June 2018, the Italian consumer organisation Altroconsumo published the results of a mystery shopping exercise in the market of online bookings⁶. While the travel and accommodation sector are known for the use of dynamic pricing, the research of Altroconsumo showed that firms might be also engaging on personalised pricing without consumers being aware of that situation. In this regard, they carried out purchases of hotels and flights using different profile users and devices at the same time. The result was differences in prices for the same product at the same time ranging from 5% to 23% (see figure 2).

⁵ see the conclusions of the CMA report on the Energy Market Investigation on the Adverse effect of competition in the adverse effect on competition of price discrimination, p. 524 <<https://assets.publishing.service.gov.uk/media/5773de34e5274a0da3000113/final-report-energy-market-investigation.pdf>>

⁶ Altroconsumo, “C’era una volta un prezzo”, 326 Altroconsumo, June 2018.

Figure 2.



Source: Altroconsumo, 2018

3.2. Austria

8. In 2017 the Austrian Chamber of Labour, Arbeiterkammer, carried out an online shopping exercise⁷. The goal was to identify if personalised and dynamic price differentiating exists in online sales and if there are price differences between the German and Austrian websites of the companies at hand.

9. From 14 to 25 March 2017, the testers checked each Tuesday, Thursday and Friday 33 prices from different webshops (Amazon, Lufthansa, Opodo, booking.com etc.). They used different devices in different locations in Austria and a PC in Düsseldorf (Germany).

10. The results showed that, especially in the services sector, prices were not transparent and that it was not possible to exclude that they were not personalised. Prices differed by more than 80 Euro within a 5 minutes time frame or differed on the basis of the device which was used. However, testers did not discover a trend of users of more high-end devices, iPhone or iPad, paying more. Prices did also vary a lot in time with difference ranging from 11 Euro to 232 Euro in the two-week time-frame.

7 Arbeiterkammer, Preisdifferenzierung im online-handel, <https://media.arbeiterkammer.at/wien/PDF/Preisdifferenzierung_im_Online-Handel_2017.pdf>

3.3. UK

11. In August 2018, our UK member Citizens Advice published a report concerning the impact of personalised pricing on essential services⁸. While personalised pricing is currently not taking place in the UK for energy and telecom services, the report indicates that the rollout of smart meters will significantly change the amount of information held by providers in the energy sector, creating the conditions for personalised pricing. The report highlights several concerns related to the use of personalised pricing in energy markets including:

- Due to the lack of switching in essential markets, consumers risks paying a higher ‘loyalty penalty’ since they would be less likely to change providers in case of a price increase. This is particularly concerning for vulnerable consumers, who often are the ones that pay the most.
- Personalised pricing can increase inertia. Particularly for bundled offers, consumers who already have problems to compare offers will find it even more difficult to make a meaningful choice between bundled services that would be priced taking into account the user’s profile and consumption habits.
- Personalised pricing can weaken consumer trust in regulated markets. Research shows that consumers trust less services when prices fluctuate. As consumers become more aware of personalised pricing in essential markets, there is a risk that the level of trust in these markets will collapse even more.

12. Similar concerns are found in the telecoms sector, where companies also hold significant amounts of usage data. Personalised pricing is expected to increase the complexity of the telecom markets, dissuading consumers from finding the best value product and leaving them often with their current provider⁹.

4. Enforcement response

13. Although personalised pricing is not prohibited per se under EU law, different areas of law are concerned about this pricing technique, namely competition law, data protection law and consumer law. It is important to highlight that in the case of personalised pricing these branches of EU law do not exclude but complement each other. This has as a practical consequence that different authorities might concur to investigate the same behaviour.

- Competition law is concerned by the use of personalised pricing mainly due to the fact that the widespread application of this form of pricing could have profound impacts on the demand curve, which in combination with unfair commercial practices can lead to enlarging the producer’s surplus in detriment of consumers who would end up paying higher prices for goods or services that under an scenario in which prices are set by the offer and the demand could end up costing less. Regarding the specific forms of abuse, personalised pricing could be seen as a form of excessive pricing when applied by a dominant undertaking. Although the

⁸ Citizens Advice, “A Price of One’s Own. An investigation into personalized pricing in essential markets”, < <https://www.citizensadvice.org.uk/Global/CitizensAdvice/Consumer%20publications/A%20price%20of%20one's%20own%20final.pdf>>

⁹ Page 16.

threshold for intervention in this field is very high, we cannot exclude such scenario if personalised pricing is used in utility markets with limited competition.

- Consumer law is an important tool to fight unfair commercial practices and bring more transparency to this form of pricing. The Unfair Commercial Practices Directive (UCPD) addresses practices which distort or are likely to distort the consumers' economic behaviour. This would encompass under aggressive practices, a sub-category of unfair commercial practices, spamming consumers with persistent and unwanted commercial communications. Another relevant practice that can concern personalised pricing relates to practices aiming at influencing the consumers purchasing willingness by providing misleading information related to limited offers e.g. falsely claiming that only few tickets are available¹⁰. However, nor UCPD or the Consumer Rights Directive requires traders to inform consumers when the final price is the result of price personalisation. In this regard, under current rules, consumers have the right to receive essential information about the product or service, for example its characteristics or its price. However, EU law does not set out information items on the automated decision-making process, personalised or dynamic pricing. It is worth noting that the proposed Directive on the modernisation and enforcement of consumer law suggests the inclusion of new information pieces related to the parameters of ranking. However, information about the underlying algorithms are not included in the transparency standard. Another example is the Unfair Contract Terms Directive. The current rules are formulated in an abstract way, without giving due consideration to the specificities of data processing, big data, or algorithms. Other pieces of legislation, such as the Price Indication Directive simply do not apply to digital services and do not take into account flexible offers based on algorithms. This is relevant because personalised pricing would de facto impede the ability of consumers to compare prices¹¹.
- Data protection law sets the legal grounds for the processing of personal data in the EU. Since a pre-condition of personalised pricing is the collection of data concerning consumers' personal characteristics and conduct, the General Data Protection Regulation (GDPR) will always kick-in. The GDPR contains a specific provision related to profiling of users. According to Article 22 a consumer (as a data subject) has "the right not to 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." The collection of personal data for the purpose of personalising prices would meet these provided that there is no meaningful human intervention in the profiling and that produces legal effects (e.g. the conclusion of a contract between the consumer and the trader applying personalised pricing) or effects that are significantly similar. According to the guidelines issued by the Article 29 Working Party on the issue of automated

10 See European Commission's Guidance Document on the implementation of the Unfair Commercial Practices Directive, p. 135.

11 See BEUC position paper "Automated Decision Making and Artificial Intelligence – A Consumer Perspective", <https://www.beuc.eu/publications/beuc-x-2018-058_automated_decision_making_and_artificial_intelligence.pdf>

decision making under the GDPR¹², for data processing to significantly affect someone in this context the automated decision must have the potential to significantly affect the circumstances, behaviour or choices of the individuals concerned; have a prolonged or permanent impact on the data subject; or at its most extreme, lead to the exclusion or discrimination of individuals. Automated decision-making that results in differential pricing based on personal data or personal characteristics could therefore very well have a significant effect even if the contract is not concluded if, for example, prohibitively high prices effectively bar someone from certain goods or services.

14. Thus, the use of personal data for personalised pricing based on automated profiling would require the explicit consent of the consumer (Article 22(2) c)), unless the provider can claim that it is necessary for the performance of, or entering into, a contract with the consumer (Article 22(2)a)) or this use of personal data is authorised by specific Union or Member State law. In terms of the necessity for the performance of a the contract, data protection authorities have indicated that the use of this legal basis for processing personal data must be interpreted strictly and does not cover situations where the processing is not genuinely necessary for the performance of a contract, but rather unilaterally imposed on the data subject by the data controller¹³. The controller must be able to show that this type of processing is necessary, taking into account whether a less privacy-intrusive method could be adopted.¹⁴ It must also not be overlooked that under the GDPR, companies processing consumers' personal data have the obligation to inform them about the existence of automated decision making, including profiling, that falls under in Article 22 of the GDPR. This obligation includes giving consumers information about the logic involved in this profiling, as well as the significance and the envisaged consequences of such profiling¹⁵.

15. Moreover, even if the use of personal data for personalised pricing purposes would not meet the requirements to fall under Article 22 of the GDPR, all the regular obligations related to the processing of personal data would apply. This means for example, that personal data has to be processed fairly and in a transparent manner¹⁶. Consumers shall be clearly informed about the purposes for which their data is being used and which legal basis out of those envisaged in Article 6 of the GDPR¹⁷ the data controller is relying upon. Given the impact on the rights and freedoms of data subjects, unless it can be demonstrated that profiling for personalised pricing purposes is necessary for the performance or entering into a contract, this type of personal data processing should normally require the consumers' prior consent.

12 Guidelines on Automated individual decision-making and Profiling for the purposes of Regulation 2016/679

13 See WP29 Opinion 06/2014 on the notion of legitimate interests of the data controller under Article 7 of Directive 95/46/EC, page 16.

14 See WP29 Guidelines on Automated individual decision-making and Profiling for the purposes of Regulation 2016/679, page 23.

15 Article 13.1f) and Article 11.1f) GDPR

16 Article 5 GDPR

17 Article 13.1c) and Article 14.1c) GDPR

5. Conclusion

16. Although further research is needed to assess the impact of personalised pricing on consumers and markets, based on the existence evidence there are reasonable grounds to doubt whether consumers would truly benefit from such pricing technique. Traditional economic might provide an optimistic scenario but it is unlikely to reflect how consumers and firms behave in reality: consumers decision-making process is influence by multiple factors and business would tend to take advantage of that situation to maximise profits. From our preliminary assessment, we can conclude that the current legal framework might not be sufficient to address the concerns raised by this pricing technique on consumers.