## Algorithmic Price Personalization and Law: The way ahead

The algorithmic price personalization is an increasingly ubiquitous phenomenon on the online market. Some firms (such as Amazon and Uber) provide each customer with a customized price on a take-it-or-leave-it basis. The others (like Airbnb) offer dynamic, tailor-made pricing schemes, based on algorithmic calculation, as an option, hence nudging contractors to adopt particular price floors.

Although the idea of pricing various customers differently is not new as such, it has become substantially transformed and extensively invigorated with the rise of the algorithmic-based tools. The development of massive data harvesting techniques, combined with robust computation skills employed to processing them, does not merely make the price calculation much more sophisticated and multicomponent than ever before. It also opens an entirely new chapter in understanding the relation between the individual on the market and the value of a good or service. In the world of algorithms-enhanced commerce, clients are offered prices on a case-by-case basis, depending on how a machine allocates them against the dataset about the particular population. In doing so, it makes a particular behavioral prediction about and individual, estimating her willingness to pay particular price in the given circumstances (as is e.g. the case of surging prices for car sharing when the weather conditions deteriorate).

The algorithmic personalization of prices is about to get ubiquitous. Is the law equipped to deal with it? As citizens, consumers, data subjects, small businesses, and large corporations, what do we worry about when we think about price personalization? What background information do we need to make informed decisions about whether or not and, if so, under what conditions we are willing to live in societies where we are systematically offered prices of our own, algorithmically calibrated to make us pay as much as possible? Will this technology lead to more accumulation of wealth, or will it intensify competition and increase access at the margin, with progressive distributive effects? Which jurisdictions, if any, have taken the lead on the governance of personalized prices?

The paper attempts, first of all, to grasp various layers of ethical and legal concerns in the domain of price discrimination. It attempts to foster better understanding which of these arguments are economically and legally valid (such as the issue of consumer triggered by pricing consumers close to their reservation price) and which are based on misconceptions or conceptual confusion (such as the idea of "price discrimination", often used in the literature without any deeper consideration of its actual meaning).

<sup>&</sup>lt;sup>1</sup> Assistant Professor, NOVA School of Law, Lisbon (fabrizio.esposito@novalaw.unl.pt).

<sup>&</sup>lt;sup>2</sup> Senior Research Fellow, Max Planck Insitute for Comparative and International Private Law, Hamburg; Affiliated Fellow, Information Society Project, Yale Law School (grochowski@mpipriv.de).

Secondly, the authors take an in-depth look into the existing policy proposals. In particular they consider the EU approach based on disclosure paired with an opt-out right, and into the US approach where the major emphasis is put on antitrust measures. The authors critically evaluate the current state of policy debate and legislative actions. In particular, they voice their sunstantial concern about usefulness of discloseure-based instruments, which do not seem to address any actual information-based needs of consumers. Finally, the authors also evaluate a recent proposal of BEUC (The European Consumer Organization) to outlaw in principle any price personalization. The authors consider this proposal as overly simplistic, and not entirely consistent the the existing market practice in the area of algorithmic price personalization.

Building on these foundations, in the third part of the paper authors discuss alternative approaches towards regulating price personalization. In particular, they discuss various approaches towards creating a "benchmark" price that would provide consumers with an actual point of reference in deciding whether to stay with the offered price, or to choose another contract available on the market. The authors believe, that such a benchmark price will provide consumers with more exact knowledge on the relation between the personalized price and the actual market value – and thereby, with a more meaningful market choice.

In this vein, the authors delve into various methods for establishing such a benchmark. In so doing, it puts in spotlight the idea of 'impersonal price', as the price of a good or service set in accordance with the overall market dynamic (and without taking into account any particular details on the transaction and the customer). To conclude, the authors discuss the feasibility and desirability of three consumer-data subjects rights: the right to be offered an integer impersonal price; the right to know also the impersonal price; and the right to choose the impersonal price.

The paper is a part of the forthcoming volume: The Cambridge Handbook of Algorithmic Price Personalization and the Law (Fabrizio Esposito, Mateusz Grochowski eds., 2024). The book presents a multidisciplinary depiction of price personalization as a legal and economic phenomenon. It attempts to grasp the essence of regulatory and ethical challenges posed by personalized pricing, and to better understand the advantages and downsides of various regulatory approaches advocated for price personalization worldwide. The volume puts together contributions by legal scholars, economists, behavioral scientists and data scientists, and it combines them with comparative insights from several jurisdictions (EU, US, Canada, China, India and Brazil). Overall, the book shows that the technology is evolving steadily, but legal academics struggle to identify common normative premises on which to build coherent and effective regulatory responses on the basis of existing legal materials or through legal reform. The book is the first comprehensive publication that puts together the various threads of discussion that are of concern to academics and policymakers in various parts of the globe. In so doing, the volume not only frames the existing scholarly discourse but also contributes to the ongoing debate over correct and incorrect paths for regulating personalization in the consumer economy in the European Union, the US, and other parts of the world.