

# Laws offer limited protection against price differentiation by algorithms

July 14 2020

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Online stores can use algorithms to charge some customers higher prices than others. European laws only offer limited protection against such price differentiation. Frederik Zuiderveen Borgesius, Professor of ICT and Private Law at Radboud University, has written about this very topic in an article that was published in the European Business Law Review.

Online stores like Bol.com and Amazon use many algorithms to tempt consumers to spend their money more quickly. The average user is probably used to seeing recommended products that are based on previous purchases and flashing notifications when stocks have run out, but what if an algorithm was used to display an individual retail price for each customer? Online stores could adjust prices for certain postal codes, or even individual customers on the basis of IP addresses and other characteristics.

## Algorithmic discrimination and contractual freedom

Stores that use algorithms rarely harbour discriminatory intent, but the use of algorithms can also inadvertently lead to [discrimination](#). This was the case when an American tutoring institution charged higher prices for certain areas. The residents in these neighbourhoods were mainly people with an Asian background, who had to pay more for tutoring. In some cases, the price difference for each course was as high as \$1,800.

In principle, the law permits price differentiation. Contractual freedom

plays a major role in European law, which implies that sellers may determine their own retail price. But if price differentiation leads to discrimination against groups with protected characteristics, such as ethnicity or gender, non-discrimination law will come into play.

European non-discrimination rules protect against various forms of discrimination, including discrimination based on ethnicity and gender. Indirect discrimination is also forbidden. In short, indirect discrimination occurs if a practice is neutral at first glance, but still leads to discrimination against people with a certain ethnicity (or a protected characteristic).

## **Difficult to discover**

If an [online store](#) adapts its prices to the customer's postal code, this is considered a neutral practice. However, if the people who live in that area mostly have an immigrant background, the practice may entail a forbidden form of indirect discrimination. Non-discrimination law therefore seems to protect people against certain forms of price differentiation.

"But protection against price differentiation is limited", explains Zuiderveen Borgesius. To begin with, algorithmic discrimination can remain hidden. "Suppose an online store charges a higher price in an area where a majority of the residents have a Turkish background. It's difficult for the people within this area to see a difference in prices. It's only when these prices are compared to someone else's prices outside the area that you can see the difference. And even if some consumers did figure out that they paid more than others, they still wouldn't know that people with a Turkish background pay more in general. Hence, the consumers would still not be aware of the indirect discrimination. If consumers don't realise that they're being subjected to discrimination, they won't exercise their right to non-discrimination."

A second problem is that the ban on indirect discrimination includes a nuanced exception, which is often difficult to apply in a specific case. Indirect discrimination is not forbidden if the company pursues a legitimate goal and its neutral practice constitutes a reasonable (proportional) means.

"If a company tried to make extra profit, a judge would probably consider this a legitimate goal", says Zuiderveen Borgesius. More complex is the question of whether price differentiation is a reasonable means. This answer depends on many factors. How big is the price difference? Does it concern caviar or other luxury products, or supermarket products that people use daily? Such a nuanced rule has advantages, but the nuance comes at the expense of clarity. In sum, there is no hard and fast rule that clearly dictates which types of price differentiation are permitted and which are forbidden.

## **Browser preferences and new types of discrimination**

Zuiderveen Borgesius: "In addition, algorithms allow a distinction to be made between consumers on the basis of a large number of characteristics. European laws recognise discrimination based on ethnicity, gender, and other such characteristics. However, the browser that you use or the postal code area in which you live is not a protected characteristic. An online store could consequently make people pay extra when they use a certain browser. Non-discrimination law says little about this, as long as the practice doesn't affect people with a certain ethnicity or another protected characteristic."

Although currently there hardly seem to be any online stores that are using algorithms to determine different [prices](#) for different consumers, there is a strong chance that this will change in the future. It is partly for this reason that Dutch Minister Sander Dekker announced in a letter to the House of Representatives that the Ministries of the Interior and

Justice and Security are investigating how discrimination can be prevented when offering goods and services. Zuiderveen Borgesius: "It's likely that new legislation will be needed to provide better protection. When it comes to the question of how we can protect people from the discriminatory effects of algorithms, more research and debate are needed."

**More information:** Zuiderveen Borgesius, Frederik, Price Discrimination, Algorithmic Decision-making, and European Non-discrimination Law (July 2, 2019). European Business Law Review (Forthcoming), Available at SSRN: [ssrn.com/abstract=3413556](https://ssrn.com/abstract=3413556)

Provided by Radboud University

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