

Q2. Technology now allows personalised pricing. If this came to be widely used, what effects should we expect?

The Dissolution of the Public Price: What Widespread Personalised Pricing Would Unmake

I. The Question Beneath the Question

When evaluating personalised pricing, the practice, now technically mature, of quoting each consumer a price derived from their individual data profile and inferred willingness to pay, evaluators assess whether it increases total welfare or redistributes surplus from buyers to sellers. However, these are legitimate but not the deepest question: *what kind of institution is a market, and what happens to it when prices cease to be public facts?* Answering that question produces a more unsettling verdict than either the efficiency advocates or the fairness critics have so far rendered.

The analytical literature has produced genuine insights. A 2023 study in the *Journal of Political Economy* found that, while total consumer surplus declines under personalised pricing, over 60 per cent of individual consumers may benefit, particularly price-sensitive buyers who gain access to goods previously beyond their means.¹ The Computer and Communications Industry Association adduces airline and ride-hailing research to suggest that algorithmic personalisation expands output, trims deadweight loss, and directs gains toward lower-income, price-sensitive households.²

II. Price as a Public signal

Hayek's celebrated insight was that the price system performs a feat of sui generis social coordination: it aggregates dispersed, inarticulate knowledge into a single signal that guides the decisions of strangers without requiring them to communicate.³ A price is not merely the outcome of a transaction between two parties. It is a piece of shared information that flows outward through an entire economy, signalling to producers what to make, to consumers what to forgo, and to rivals what to challenge. For Hayek, the signal-value of price laid in its *publicity*: the fact that it was the same number confronting everyone in the market at a given moment.

Polanyi, writing in the same decade but to a different effect, argued that the market is not a natural phenomenon but a social institution, one that depends on publicly intelligible norms and shared conventions to sustain the trust on which exchange rests.⁴ Markets, on his account, are "instituted processes": they do not merely happen; they are held together by rules, expectations, and the tacit assumption that buyers inhabit a common informational world. The posted price is the most elementary expression of that common world. It is a shared public declaration that underpins trust and fairness in market exchanges.

Personalised pricing, deployed at scale, does not merely alter prices. It destroys the publicness of price altogether. When every consumer sees a number generated specifically for them, derived from behavioural data and inferred willingness to pay⁵, there is no longer a price in the Hayekian sense. There is no signal radiating outward. There is only a discreet, algorithmically conducted, one-sided negotiation with absolute information asymmetry. The market, in Polanyi's terms, has been uprooted from its social foundations and is closer to a system of private bilateral contracts masquerading as market exchange.

III. The Privatisation of Commerce

Consider what price comparison that most basic exercise of consumer rationality actually requires. It requires that the prices being compared are stable enough to compare, so that the number a buyer sees today is roughly the same as the one visible to her neighbour, available on a rival site, or quoted to a friend. Personalised pricing

dissolves this foundation. Delta Airlines' president declared in 2024 that the company's ambition was to offer "a price that's available on that flight, on that time, to you, the individual", with no fixed prices at all.⁶ If that ambition were realised industry-wide, the very concept of the airline ticket price would become incoherent. There would be no price; there would be six million prices, each invisible to every other buyer.

A January 2025 report by the Federal Trade Commission, examining eight major intermediary companies that sell algorithmic pricing technology to retailers, found that consumer signals as granular as mouse movements across a webpage and products left in abandoned shopping carts were being harvested to infer willingness to pay⁷. The firm sees everything; the consumer sees nothing. A 2024 survey found that 66 per cent of Americans oppose online retailers pricing differently based on personal information, and 72 per cent oppose basing discounts on browsing history.⁸ This is not merely a preference for fairness. It is a tacit recognition that something has been taken from them: the shared informational ground on which trust depends.

This is what might be called the epistemic privatisation of commerce. Knowledge of what things cost, previously a public good, accessible to anyone who cared to look, becomes proprietary information owned by the seller. The buyers are not merely disadvantaged; they are structurally hermetically excluded from the kind of knowledge. They cannot know whether the price is fair because there is no reference point. Consumer advocacy, collective bargaining, and market discipline through competition all presuppose the possibility of comparison. Personalised pricing forecloses that possibility by design.

IV. The Case for Personalised Pricing

The natural response from egalitarian critics is to invoke John Rawls: a just arrangement could be endorsed from behind a veil of ignorance, without knowing whether one would end up as the affluent consumer, who is systematically extracted or the price-sensitive buyer who is offered the discount.⁹ Rawls's maximin criterion, that we should maximise the welfare of the worst-off, has been deployed, interestingly, in both directions. A 2020 paper in the *Journal of Business Ethics* argues that progressive personalised pricing (charging more to high-income consumers, less to low-income ones) actually outperforms uniform pricing under both utilitarian and Rawlsian welfare functions, because the least well-off consumer benefits from discounted access.¹⁰ Airlines, for instance, have long charged corporate travellers more so that leisure travellers can fly cheaply. If algorithmic personalisation could reliably direct discounts to those who most need them, some Rawlsian case for it could be sustained.

More fundamentally, defenders of personalised pricing may argue that uniform pricing is itself economically crude and morally arbitrary. A single posted price ignores large differences in both willingness and ability to pay, often excluding lower-income consumers from goods and services that wealthier consumers can comfortably afford. From this perspective, algorithmic personalisation appears not as a corruption of markets but as their refinement: a system capable of expanding access by matching prices more precisely to individual circumstances. If more consumers can purchase flights, subscriptions, medicines, or transport because firms can tailor prices downward where necessary, then personalised pricing may increase not only efficiency but also inclusion.

The difficulty is that this argument assumes precisely what the market cannot guarantee: that willingness to pay is a reliable proxy for ability to pay, that the firms' classification algorithms are accurate and equitable, and that the surplus extracted from high-willingness consumers is reinvested rather than captured as profit. None of these assumptions holds in practice. Willingness to pay correlates imperfectly with income; it also reflects urgency,

information deficits, and behavioural vulnerabilities. A parent searching frantically for a baby thermometer at 2 a.m. may have a very high willingness to pay and a very low income, a case the FTC cited explicitly.¹¹ The algorithm sees the willingness; it does not see the desperation.

V. Why the case fails in practice

Along with the structural damage to market institutions, personalised pricing generates particular harms that compound existing inequalities. Algorithms trained on historical data will tend to reproduce the biases embedded in that data. Where browsing patterns, device types, and neighbourhood characteristics correlate with race, gender, or socioeconomic status, the machine will learn to treat those attributes as proxies for willingness to pay. No one needs to instruct the system to discriminate; the discrimination emerges from the optimisation objective.

Orbitz's practice of displaying more expensive hotel options to visitors to maximise expenditure, and browsing from Apple computers, was an early, mild expression of this logic.¹² What the FTC's 2025 report describes is more systemic: firms using credit history, demographic inference, and location data to derive individualised price points at scale. The UK Competition and Markets Authority flagged algorithmic personalised pricing as a competition and consumer risk as early as 2018, noting that algorithms were already being used to personalise not just prices but rankings and advertisements.¹³

VI. When personalised pricing becomes hazardous

It would be intellectually dishonest to ignore the efficiency case entirely. Differentiated pricing is not historically unusual. Student discounts, geographical tiering, and negotiated prices have long been socially tolerated. The question is not whether differentiated pricing is permissible in principle, but to what extent bespoke pricing maintains trust in the market.

The welfare case for personalised pricing is strongest in competitive markets where consumers can easily switch providers and compare prices. If firms know that customers can leave after receiving an unfair offer, pricing power remains limited. In such markets, specifically, airlines on over-contested routes, this practice may increase access without fundamentally undermining competition.

The case weakens sharply in markets dominated by data-rich platforms. Firms with extensive behavioural data can use personalised pricing not merely to compete, but to extract the maximum possible value from each consumer. Since rivals lack comparable data, competition weakens, consumers struggle to judge whether better offers exist elsewhere, and dominant firms are able to further entrench their market power.

VII. regulating the invisible market

The appropriate regulatory response follows from the nature of the harm. If personalised pricing becomes dangerous when prices cease to be publicly intelligible, then regulation should focus less on preventing price differences themselves and more on limiting opacity. The central question is not whether two consumers pay different prices, but whether consumers can still understand and meaningfully compare the offers they receive.

Three measures would substantially reduce the danger without prohibiting legitimate forms of price differentiation.

First, firms should be required to disclose when a personalised price has been generated and what broad categories of data were used to produce it. Consumers do not need access to proprietary algorithms, but they should know when their behaviour, location, or purchase history shapes the prices they see.

Second, consumers should have access to a reference price, the standard price available without behavioural profiling. This preserves the possibility of comparison and allows consumers to judge whether exchanging personal data for discounts is actually beneficial.

Third, regulators should prohibit pricing systems that indirectly rely on sensitive characteristics such as race, gender, or medical vulnerability through proxy variables. In markets with major data asymmetries, independent audits of pricing systems may be necessary to detect discriminatory outcomes. Where firms exploit inferred urgency, such as emergencies or medical need, personalised extraction should be prohibited.

VIII. The Price That Vanishes

Imagine a town square where every merchant displays a different price to every customer who enters, invisibly generated from a dossier compiled without the customer's knowledge. The prices are, on average, close to what each customer would have paid anyway. Aggregate welfare, by one measure, remains the same, but something essential has vanished from the square: the customers do not know what things cost. They cannot argue that a price is unfair because they do not know what prices others are receiving.

That is what widespread personalised pricing would produce. Not merely a redistribution of economic surplus, but price would be obsolete as a signal for value. In Hayek's terms, the signal that coordinates strangers without requiring them to speak would fall silent. In Polanyi's terms, the market would be disembedded from the very thing on which it is predicated and stripped of the trust that explains its function. In Rawlsian terms, a market cannot remain fair if consumers cannot fathom and contest the prices imposed on them.

The ultimate danger of personalised pricing is not that consumers will sometimes pay different amounts. It is that the market, as a shared institution in which prices remain publicly intelligible and broadly comparable, will begin to disappear. In its place, a system of individually calibrated extraction will emerge: invisible to outsiders, difficult to contest, and corrosive of the trust on which both commerce and much of civic life depend.

Bibliography

1. Dube, J.-P., et al. (2023). 'Personalised Pricing and Consumer Welfare.' *Journal of Political Economy*, 131(1). The study found personalisation improves firm profits by 19% beyond baseline market power, while total consumer surplus declines, though over 60% of individual consumers may benefit from personalised discounts.
2. Wagener, T. (2025). 'Personalised Discounts, Public Gains: The Welfare Case for Algorithmic Pricing.' Computer & Communications Industry Association. Citing a 2022 NBER working paper finding that algorithmic pricing raises airline revenues 4-5% and consumer surplus approximately 3%, and Castillo, J.C. (2024) finding that Uber surge pricing raises total welfare by 2.15% of gross revenue.
3. Hayek, F.A. (1945). 'The Use of Knowledge in Society.' *American Economic Review*, 35(4), 519–530. Hayek argued that the price system transmits information about relative scarcities that no central authority could possess or process.
4. Polanyi, K. (1944). *The Great Transformation: The Political and Economic Origins of Our Time*. Farrar & Rinehart. Polanyi argued that the self-regulating market is an instituted process depending on social foundations.
— including trust and shared norms — that it cannot itself generate.
5. Federal Trade Commission (2025). 'FTC Surveillance Pricing Study Indicates Wide Range of Personal Data Used to Set Individualised Consumer Prices.' Press release, 17 January 2025. The FTC found that consumer signals, including mouse movements and shopping cart abandonment patterns, are harvested to infer individual willingness to pay.
6. Reported in Gadallon (2025). 'Personalised Pricing: History, Economics, and Impact of AI-Driven Price Discrimination.' Delta's president stated: 'We will have a price that's available on that flight, on that time, to you, the individual.'
7. Federal Trade Commission (2025), op. cit. The FTC issued orders to Mastercard, Revionics, Bloomreach, JPMorgan Chase, Task Software, PROS, Accenture, and McKinsey & Co., examining their surveillance pricing products and the data used to set individualised consumer prices.
8. Electronic Privacy Information Center (EPIC) (2024–25). 'Surveillance Pricing.' Surveys conducted in May 2024 and January 2025 finding 66% of Americans oppose differential online pricing based on personal information, and 72% oppose discounts based on browsing history and past purchases.
9. Rawls, J. (1971). *A Theory of Justice*. Harvard University Press. The veil of ignorance is introduced in Part I as a device for selecting principles of justice that no party could rationally reject, given ignorance of their position in society.
10. Waddams Price, C. and Zhu, M. (2020). 'Progressive Pricing: The Ethical Case for Price Personalization.' *Journal of Business Ethics*. The paper tests personalised pricing against utilitarian, egalitarian, and Rawlsian (maximin and leximin) social welfare functions, finding that progressive personalised pricing consistently outperforms uniform pricing.
11. Federal Trade Commission (2025), op. cit. The FTC cited the case of a seller using recent baby-product purchases and illness-related searches to identify a vulnerable new parent and apply fast-delivery premium pricing to baby thermometers.

12. Angwin, J. and Mattu, S. (2012). 'Orbitz Shows Higher Prices to Mac Users.' Wall Street Journal, 23 August 2012. Orbitz sorted search results to show Apple computer users more expensive hotel options, having found that Mac users spent on average \$20–30 more per night and were 40% more likely to book 4- or 5-star hotels.

13. Competition and Markets Authority (2018). Pricing Algorithms: Economic Working Paper on the Use of Algorithms to Facilitate Collusion and Personalised Pricing. CMA, London. The CMA flagged that, while evidence of fully individualised pricing was limited in 2018, algorithms were already being used to personalise rankings, advertisements, and discounts.