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Hearing on "Your Data, Their Profit: The Consumer Cost of AI Surveillance Pricing"

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Chair Hawley, Ranking Member Durbin, and distinguished members of the Subcommittee, I am deeply honored to appear before you today and to witness democracy at work in one of America's highest institutions. Over forty years ago, I was drawn to this country by its promise of freedom and opportunity. Two PhDs later, I achieved my own American dream: becoming a professor at one of the nation's finest business schools. Today, that dream feels renewed. I feel a bit like Mr. Smith going to Washington, awed by and proud of this institution and this country.

I also thank you for the opportunity to address this timely issue. With full sensitivity to the concerns surrounding personalized pricing, my purpose today is to offer a broad economic perspective on its use when firms legally acquire that capability.

I came to the United States from China about 40 years ago. I have devoted more than three decades to pricing research and education. I would like to think I know a little about pricing, and also a little about surveillance. In my view, the term "surveillance pricing" is a misleading label for personalized pricing. It is also unnecessarily prejudicial. Personalized pricing is not inherently sinister when viewed through the lens of economics. It is not only about "your data" and "their profit"; it also affects consumer access, market competition, and social welfare. I will briefly explain why firms, consumers, and society all have a stake in personalized pricing, and how it can benefit all three when done properly.

Stakeholders in Personalized Pricing

A firm's motivation to use personalized pricing is rooted in a basic fact: consumers differ in their willingness to pay for the same product. Because of this heterogeneity, consumers also differ in price sensitivity. When a firm can charge only one uniform price, it faces a margin-volume trade-off. It may choose a high price to earn a high margin from customers with high willingness to pay, but it will lose volume. Alternatively, it may choose a low price to attract more price-sensitive customers, but it will sacrifice margin. Whatever uniform price the firm chooses will reflect its attempt to optimize this trade-off. But even when the firm optimizes, it may do less well than it could if it were able to serve different consumers at different prices.

How do consumers fare under a uniform price? The answer depends on the consumer. The uniform price will be low relative to what price-insensitive consumers are willing to pay, so those consumers benefit. But it will be high for price-sensitive consumers. Two things can then happen. First, these price-sensitive consumers may reduce their purchases. Second, some of them may be priced out of the product altogether. To the extent that higher-income consumers tend to be less price sensitive and lower-income consumers tend to be more price sensitive, all else being equal, a uniform price can make higher-income consumers better off while reducing access for lower-income consumers. In that light, a uniform price does not look especially fair, does it?

Society as a whole also has a stake. Because a uniform price is often too high for price-sensitive consumers, economists call the resulting loss of potential gains from trade "deadweight loss." Suppose a consumer is willing to pay $4 for a product that costs the firm $2 to produce, but the firm charges $5 to maximize profit. The consumer does not buy the product. As a result, society loses a potential $2 in social value: the firm could have produced the product for $2 and sold it to the consumer for $4.

Benefits of Personalized Pricing for All Stakeholders

Now imagine that the firm can distinguish between price-sensitive and price-insensitive consumers and is allowed to set prices freely. Guided by the same profit-maximization objective, the firm may move away from a uniform price and charge multiple prices: a higher price to less price-sensitive consumers and a lower price to more price-sensitive consumers. If it can do this effectively, the firm may increase profits by earning higher margins where possible while also expanding volume. In many cases, it may also manage capacity and pricing processes more efficiently, reducing costs. At the same time, three decades of research shows that firms may not always earn higher profits from personalized pricing. Personalized pricing can intensify price competition and reduce competing firms' profitability. The firms most likely to benefit are those that produce high-quality products, command consumer loyalty, and build strong brand equity, precisely the kinds of firms that policy and regulation may want to encourage.

Do consumers always get the short end of the stick when firms use personalized pricing? The short answer is no. For less price-sensitive consumers, prices may rise depending on the competitive setting. Even then, firms often have incentives to ease the pain. They may offer variable discounts rather than variable posted prices, keeping the list price stable while varying the discount. They may use versioning, creating different versions of a product at different prices. They may also pair higher prices with higher benefits, such as faster delivery, better packaging, or more convenient timing. For example, a customer who wants a cheeseburger might choose to visit at 2 p.m. for a discount, or at noon when timing is more convenient and the queue is shorter, but no discount is available. In either case, the customer chooses. Variable pricing can therefore expand consumer agency. For price-sensitive consumers, the benefits are more direct: lower prices and expanded access, both of which improve affordability. Indeed, research has shown that when markets are competitive and firms' information is accurate, all consumers, price sensitive or not, can benefit from personalized pricing.

Society also benefits from competitive personalized pricing because it can reduce deadweight loss and increase social welfare. In addition, a marketplace with competitive personalized pricing can reward firms that offer better quality, stronger brands, and greater consumer value.

It may be tempting to dismiss this discussion as abstract economic theory. It is not. Consider the airline industry. After deregulation in 1978, airlines developed one of the most sophisticated pricing tools in modern business: yield management. With yield management, many passengers on the same flight pay different prices. Consumers may not like the fares they face in particular moments, but the broader record is striking. Consumers and the U.S. economy have benefited substantially from an industry allowed to compete using personalized pricing. Over the past three decades, average U.S. domestic fares have fallen by nearly 40 percent after adjusting for inflation. Passenger volume has also grown dramatically, from an era when flying was largely for the rich and famous to a market in which approximately 978 million scheduled passenger enplanements fly each year. How have airlines fared in the process? According to Airlines for America, cumulative net profits for the U.S. airline industry from 1979 to 2024 totaled $28 billion over 45 years. After adjusting for inflation, that figure is essentially zero or slightly negative, close to what economic theory would predict for an industry with competitive personalized pricing.

Conclusion

The economic perspective on personalized pricing is clear: it is a critical competitive pricing tool in the modern age of information-intensive marketing. It can benefit firms, consumers, or at minimum lower-income consumers, and society when done properly.

In theory, it is possible that a firm can use personalized pricing to enrich itself at the expense of all consumers. But that firm must be a pure monopoly with perfect customer information, a theoretical construct that is difficult to find in the real world. If a true monopoly exists, the right response is to address the monopoly. I say this with great sensitivity to the fact that many consumers are concerned about personalized pricing, and that bad actors and abuses exist in business. The appropriate target is abusive surveillance and market power—not every form of price variation.