## You Paid How Much for that Seat?

by Robert F. Graboyes Federal Reserve Bank of Richmond Equilibria #6, 1998/99

This article is an edited version of a recent exchange that occurred on the Federal Reserve Bank of Richmond's economic chatboard.

Two people sit side-by-side on an airplane. They bought their tickets the same day. One paid \$220, and the other paid \$1000+. What gives?

Question by Paul A. Mantegani March 09, 1999, 9:01 a.m.

I just read an article in the Sunday *New York Times* Business section (March 7, 1999) about weekend travelers who rely on last-minute e-mail postings by airlines regarding bargain basement fares for unsold seats. Round-trip, New Jersey-to-Seattle was about \$220. The article pointed out that a same-day purchase of the ticket at the counter would have been well over \$1,000.

Airfare prices have always boggled me. Here we have the same last-minute travelers paying both the highest and lowest fares for the same flight, depending on whether they buy on line or in the ticket line. I guess that could be explained by one venue being a "buyer's" market, and the other being a "seller's" market.

This situation makes me wonder why we enforce laws against scalping tickets and other black market operations. Are these discrepancies in prices the result of deregulation? Would they likely occur in a regulated market?

Response by Robert F. Graboyes March 16, 1999, 12:17 p.m.

## Here's the short version:

- 1. What you've described is price discrimination, a term that describes any situation in which a seller charges different prices to different buyers according to their willingness or ability to pay.
- 2. Where and how you buy your ticket tells the airline a lot about the price you are willing or able to pay.
- 3. Price discrimination is especially good for the seller, but also can benefit society as a whole.
- 4. Price discrimination most certainly does occur in regulated markets. And it's probably a good bet that pricediscrimination designed by politicians or regulators will yield screwier results than price discrimination that emerges from markets.
- 5. Like you, economists wonder why we enforce laws against scalping tickets, since these laws often hurt performers, theater owners, and spectators and primarily help scalpers.

## And now the long version:

- 1. In perfectly competitive markets, sellers can only charge one price. Otherwise, there will be arbitrage—if you charge me \$10 for beef and you charge John Doe \$20, I'll be sorely tempted to buy beef for \$10 and sell it to John for somewhere between \$10 and \$20. A seller needs some monopoly power to prevent people like me from intervening in this way.
- 2. The person in line and the person online are likely to be very different people. Let's stereotype: Ms. Inline is already at the airport. Maybe she finished her business early and is anxious to see her family, rather than spending another night in a motel in New Jersey. Or maybe Bill Gates asked her to come that evening to discuss a big deal. You can concoct a thousand stories, but the fact that she's at the airport means that she's probably willing to pay more than the average traveler to get on that plane. In contrast, Mr. Online has no need to visit Seattle. Maybe he's heard the coffee and microbeers are good out there. Maybe he likes *Frasier* and wants to see where the street scenes were shot. He's not willing to pay a whole lot, but if a good deal comes along, he'll pack his bag and go. The airline knows that Mr. Online is not likely to hang around the airport, and they know Ms. Inline isn't likely to be surfing the Web. So, they can charge two different prices to these very different customers.
- 3. The seller does well financially by practicing price discrimination, but so does society. Suppose Ms. Inline is willing to pay \$500 for the last-minute ticket and Mr. Online is only willing to pay \$100. (Suppose, too, that no one else is interested in the two remaining seats.) If the airline asks both to pay \$500, they'll get \$500 from Ms. Inline, Mr. Online will stay home and surf the Web, one seat will go empty, and the airline will get \$500 in revenues. If the airline asks both to pay \$100, then Mr. Online will head to the airport, Ms. Inline will dance all the way into the plane, but the airline will only get \$200 in revenues. But, if the airline asks Ms. Inline to pay \$500 and Mr. Online to pay \$100, both will fly, both will be happy, and the airline will get \$600 in revenues.

Price discrimination makes the airline wealthier, but it also does a service for society. At the end of the day, both seats are filled, both passengers are happy to be going to Seattle, and the airline's shareholders are happy. Suppose a regulator commanded that, "Thou shalt not charge different prices to different customers." It's likely in this case that the airline would ask more than \$100 in hopes that someone else would show up at the airport. If so, one seat will go unfilled, and Mr. Online won't get his trip to Seattle.

We see price discrimination in many economic activities, and people do benefit. Doctors traditionally charged lower fees to poorer patients. Grocery stores charge less to people with time to clip store coupons (often retirees on fixed incomes, the unemployed, or stay-at-home partners in one-income families). Insisting that all buyers pay the same prices would yield some highly unpleasant results.

4. Price discrimination occurs in all sorts of regulated markets. Health care providers charge myriad prices for the same services, depending on whether you're Medicare, Medicaid, indigent, privately insured, etc. Telephone companies charge different rates to business and residential customers. New York City has several different kinds of taxis, each of which has a different pricing scheme. Amtrak effectively offers different prices to seniors, children, people who travel in pairs, people who travel in groups, people who fly Alaska Airlines or United Airlines, people who ski, people who want

Broadway tickets, and people who want *Lady and the Tram*p videos or *Where in the USA Is Carmen Sandiego*? CD-ROMs. Now Yogi Berra is doing commercials, offering special rates for people willing to "pair up in threes."

5. Scalpers raise some interesting issues. Scalpers often appear because laws restrict the amount that sellers can charge for tickets. I believe this was true in New York City for Broadway theaters. The idea, ostensibly, was to keep ticket prices low so that more people could afford to attend. But legally mandated box office price limits carry unintended consequences. They lessen theater revenues, making it harder to turn a profit and remain in business. They force down what one can pay actors and stage personnel. They create scarcities of tickets, so it's harder for workers to get tickets when the leisure set can wait in line from 8:00 a.m. till noon on a workday. And, they set the stage for scalpers, who merely earn the profits that the laws have forbidden the theaters to make.

To an economist, a scalper is performing a service. He's offering tickets to people willing to pay the price. However much you may dislike scalpers, their customers are happier with the tickets than they were with the money that they spent on the tickets. I used to live in New York City; in the theater district, scalpers were highly sought-after folks and produced a lot of satisfied customers.

Interesting thing—the more effective the anti-scalping laws, the more the scalpers charge. Some city out west (Phoenix, I think), took a novel approach. At first they banned scalping and, predictably, the scalpers reaped astronomical prices. Then they changed the law—they legalized scalping but forced scalpers to operate in a centralized location. Just as economic theory would predict, the prices plummeted. Why? Because customers had choices of vendors. Before, they didn't know whether their scalper was the last one in town with tickets. In the centralized market, they can do comparison shopping.