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## How Much Is That Laptop? It Depends on the Color of the Case. And That's Fair.

By ROBERT H. FRANK

IF I fly to Chicago from Ithaca, N.Y., later this month, Northwest Airlines will charge me $\$ 565$ if my trip does not include a Saturday night stopover, but only $\$ 410$ if it does. Similarly, if I order Apple's new MacBook laptop, the company will charge me \$1,499 for a machine in black, but only $\$ 1,349$ for an identically configured one in white.

As economists use the term, price discrimination means charging some buyers more than others for essentially the same product or service. Is it a bad thing? Buyers paying the higher prices understandably resent the practice. They might thus be surprised to learn that it often enables them to enjoy both lower prices and higher quality than would be possible if sellers charged the same price to everyone. Even more surprising, price discrimination often metes out rough justice among buyers, requiring those who are responsible for a greater share of sellers' costs to shoulder a greater share of the burden.

For these claims to hold, sellers' costs per unit must decline with the number of units sold. This test is met in many markets. According to Sandy Angers, a spokeswoman for Boeing, for example, the average cost per seat for a typical domestic flight is 25 percent lower for the company's 180 -seat 737-900ER than for its 110-seat 737-600.

Similarly, the average cost of laptop computers declines sharply with the number produced - largely because research and development costs are essentially fixed. When
the company produces more units, each buyer's share of these costs declines.

The upshot is that pricing schemes that enable companies to attract more buyers reduce the average cost per buyer served. And that frees resources that can be used to support higher quality - more frequent flights for travelers and more sophisticated laptops for computer buyers.

Among the ingenious tactics that sellers have developed for getting some buyers to pay more than others, many share a common feature: sellers offer discounts, but only to buyers who are first willing to jump a hurdle of some sort, like taking the trouble to mail in a rebate coupon. From the seller's perspective, the perfect hurdle is one that pricesensitive buyers can jump without difficulty but that other buyers find impossible to jump.

One of the best hurdles yet discovered is the airlines' Saturday stopover requirement. Business travelers are not only much less sensitive to fares than leisure travelers, they are also typically away from home during the week and reluctant to spend weekends away from their families. In contrast, leisure travelers, who are much more sensitive to fares, almost always take trips that include at least one weekend. Thus, few business travelers are willing to meet the Saturday hurdle, whereas most leisure travelers can meet it without effort.

The Saturday hurdle makes it possible for both groups to do better than if airlines charged the same fares to everyone. By enabling carriers to attract additional leisure travelers, it permits them to employ larger aircraft. The resulting reduction in cost per seat reduces the price premium required to support the frequent service that business travelers demand. At the same time, leisure travelers enjoy the convenience of frequent flights for the same low fares they once had to pay for seats on chartered jumbo jets.

Is it unfair that business travelers pay higher fares for seats on the same flights? Except for business travelers' demands for frequently scheduled flights, carriers could employ even larger aircraft than they currently do. So, the higher fares paid by business travelers are at least in part a reflection of the higher costs per seat associated with the smaller aircraft that carriers must use to accommodate their demands.

The issues are similar in the computer market. Although some people care a great deal about cutting-edge hardware and software, others would happily settle for simpler machines if that meant lower prices. Offering discounts to buyers of traditional white machines enables Apple to expand its market. And this reduces its cost per unit sold, freeing resources to develop even more sophisticated machines.

Apple's research program benefits all its buyers, but disproportionately those who care most about the new features it makes possible. In a just world, those buyers would pay a greater share of Apple's research costs. The premium price for new-look black machines is a crude device for identifying those buyers. People who are willing to pay it are largely the same ones who are willing to pay the most for the new machine's cutting-edge features.

Of course, discount hurdles do not apportion costs among buyers with precision. Some leisure travelers demand frequent service, for example, and would have been willing to pay for it, while some business travelers would have been willing to tolerate less frequent service if that meant lower fares. Similarly, some buyers who do not care much about a computer's technical abilities may have an overriding preference for machines in black, while others for whom those abilities are important may be equally happy with machines in white.

On balance, however, there appears to be at least rough justice in these and other hurdle
schemes. The buyers who care most about quality tend also to be those who are least willing to jump over discount hurdles. To the extent these hurdles work, business travelers and buyers of black laptops have little grounds for complaint.

Robert H. Frank is an economist at the Johnson School of Management at Cornell University.E-mail: rhf3@cornell.edu

