

The Invisible Digital Hand

Virtual Competition

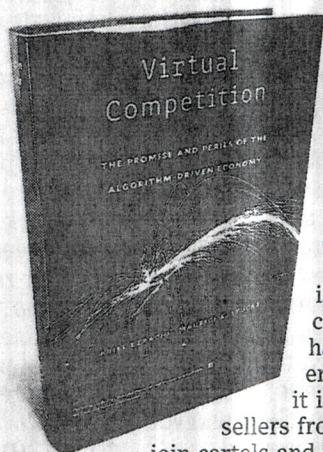
By Ariel Ezrachi and Maurice E. Stucke
(Harvard, 356 pages, \$29.95)

We are all aware of the enormous potential benefits to consumers from the use of the internet. From my smartphone or PC I can access goods and services from competitive sellers at lower prices than are available from local retailers and service providers. I am able to access a range of helpful reviews, and the constellation of different platforms has reduced the time and expense of searching for the particular product or service I desire. With the growth of new search engines and price-comparison websites, it would appear that we are moving rapidly toward a more competitive and efficient economy.

But in "Virtual Competition," Ariel Ezrachi and Maurice E. Stucke, two legal scholars, make a convincing argument that there can be a darker side to the growth of digital commerce. The replacement of the invisible hand of competition by the digitized hand of internet commerce can give rise to anticompetitive behavior that the competition authorities are ill equipped to deal with.

The authors observe that it is possible for digital sellers to collude and fix prices just as we have seen in the non-digital environment. Longstanding laws, it is true, can prevent online sellers from giving specific directions to join cartels and fix prices. But the situation gets murky when the computer algorithms of sellers are designed to learn what others are charging and to change prices in response. Will computers learn to collude? Can the use of artificial intelligence allow computer self-learning to produce the same results as tacit collusion and actually raise prices? The authors present several scenarios whereby computers can cartelize a market by monitoring "cheating" and punishing all defections.

Messrs. Ezrachi and Stucke also examine how online sellers, by using technology to gather far more detailed information about their potential customers than was previously possible, can engage in "almost perfect" behavioral price discrimination. Naturally, the tracking and collecting of personal data enables firms to target their offerings with the right price and best emotional pitch. But the authors go further, suggesting that internet sellers can charge different prices to different consumers—the price discrimination determined by an estimate of how much the customer is willing to pay. Two-thirds of online shoppers, for example, abandon their carts after initial click-through. Sellers might then determine that such buyers are more price sensitive and can be induced to finalize their purchases if offered discounts or other inducements. Obviously, such a selling strategy need not always cause concern, and readers may think there is no obvious harm in offering discounts to price-sensitive shoppers. But, the authors argue, the ability of internet marketers to harvest data on our behavior and preferences can "affect other important values, such as privacy, equality and fairness."



Thanks to sophisticated data about their potential customers, online sellers engage in 'almost perfect' behavioral price discrimination.

An entire section of the book is devoted to the "frenemy" relationship between "super-platforms" and their independent apps. For example, Uber, which operates a platform connecting drivers and riders, sits on and depends on platforms. So Uber is a "friend" of Apple and Google and relies on the mapping technology supplied by Google. But Uber and those super-platforms will increasingly become competitors (enemies). Google is developing self-driving cars and could eventually nudge its users toward its own Uber-like apps.

The asymmetry in bargaining power between the app developer and the super-platform is central to the frenemy dynamic. Even Facebook has worried about how super-platforms could degrade its functionality and interfere with its ability to distribute its products. And the super-platform could even kick apps it did not want off its platform. Disconnect, a privacy app to block the tracking of one's personal information, claims that it was kicked out for disrupting a Google super-platform's ability to extract personal information. The independent apps cannot rely on current antitrust laws to protect them from abuses by the super-platforms.

"Virtual Competition" displays a deep understanding of the internet world and is outstandingly researched. The polymath authors illustrate their arguments with relevant case law as well as references to studies in economics and behavioral psychology. There are almost 100 pages of endnotes. But the writing is clear and lucid, and the text is sprinkled with wonderful illustrative vignettes. There is the story—a "joke in IT circles"—of the man who excused himself in the middle of an important business meeting because he noticed several advertisements for alarm systems popping up on his smartphone. He was convinced that his house had just been burgled. And the story of the man who complained to Target because his high-school-age daughter was receiving promotions for baby clothes and cribs: "Are you trying to encourage her to get pregnant?" Later he apologized. "It turns out there's been some activities in my house I haven't been completely aware of. She's due in August."

The most controversial issue raised by the book concerns what governmental responses and intervention are appropriate. One view would be that any regulation should be "light touch." An attempt to overregulate is likely to stifle innovation and interfere with the most dynamic sectors of our economy. On the other hand, the super-platforms have enormous power, and as they expand their data advantage and market power they will increase their competitive advantage. The two largest mobile super-platforms, Apple and Google (Alphabet), are the world's most valuable companies in market capitalization. Facebook, Amazon and Microsoft are not far behind. "We cannot assume that the digitized hand will always protect our welfare," say Messrs. Ezrachi and Stucke. At the very least we need to ask ourselves if the 20th-century regulatory framework is appropriate for the 21st-century digital economy. "Virtual Competition" is a very useful step in that direction.

Mr. Malkiel, chief investment officer of Wealthfront, is the author of "A Random Walk Down Wall Street."