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Antitrust: What Went Wrong and How to Fix It

BY CARL SHAPIRO

Many Americans are distrustful of the federal government and feel that our governing institutions have been captured by powerful special interests, especially large businesses. Wealth and income inequality have grown to extreme levels. The share of the economic pie going to labor has dropped while the share going to the owners of large businesses has grown, and price/cost margins have generally risen in the United States in recent decades. Perhaps most visibly, the tech titans seems to grow without bound, and their market caps signal that their market dominance is durable.[1] On top of all that, the pandemic has gravely weakened many small businesses or caused them to fail, shifting yet more revenue and profits to larger firms. These established facts are my starting point.

Many people look to antitrust to reverse these changes in the structure of the American economy. After all, the body of law intended to control monopolies is a natural place to look to solve problems caused by concentrated private power. Looking to antitrust is all the more tempting once one recognizes that these problems have noticeably worsened over the past 30 to 40 years, roughly the period during which antitrust law shifted markedly in favor of antitrust defendants. However, antitrust is not a cure-all. For example, while stronger antitrust enforcement tends to lessen income inequality, the primary policies for that purpose are the tax system and government programs that help lower-income households obtain various goods and services, including nutrition, education, and health care. Those who over-promise what antitrust can realistically deliver are doing a disservice to the very people they profess they are trying to help. They also threaten to breed skepticism regarding the value of antitrust policy and enforcement if antitrust fails to deliver the broader social and economic transformation that has been promised.

Our antitrust statutes talk explicitly about economic concepts: monopolization, restraint of trade, and lessening of competition. They are fundamentally economic in nature, and they contain prohibitions on conduct, not on status, such as being a monopoly. Part of my thesis today is that the goal of antitrust law should be to *protect and promote competition*. Period.

Antitrust law does have broad social impacts. For example, low-income households especially benefit from the lower prices that result from competition, and under-represented groups with few stock market holdings especially benefit when competition reduces the profits of public companies by increasing the wages of workers or the quality of consumer products.[2] These beneficial byproducts of greater competition support the case for *strengthening* antitrust enforcement, but they do not provide a sound basis for changing the *mission* of antitrust. So long as the focus truly is on competition, economic concepts will continue to be fundamental to the substance of antitrust law.

As I see it, three camps are now engaged in a debate over the Future of Antitrust:[3]

- **Chicago School**. The approach to antitrust developed by Chicago School lawyers is heavily based on laissez faire ideology that gained ascendency during the 1980s and is now woven deeply into the case law. Market forces are generally counted on to erode monopoly power, despite economic theory and evidence to the contrary. Chicago School adherents have persistently advocated to narrow the reach of antitrust law and raise obstacles to antitrust plaintiffs, with considerable success. They do not see any fundamental failing with how antitrust law has evolved in recent decades.
- **Modern**. The Modern approach recognizes that antitrust law and policy have not been vigorous enough in recent years. Modernists favor stronger antitrust

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enforcement, building on what antitrust scholars and practitioners have learned in recent decades and reflecting how the economy has evolved over time, although they differ in the magnitude of the necessary corrections. Modernists understand that markets differ greatly and favor fact-based inquires as the best way to assess economic effects. They support the ongoing evolution of antitrust law in the common law tradition based on continuous learning. Modernists believe that antitrust should continue to focus on protecting and promoting competition, which is fundamentally about economic effects.

- **Populists**. Populists are deeply concerned about the political power of large companies. They favor deconcentrating the economy to reduce that power and thereby open up opportunities for small businesses, benefit workers, and lessen racial and economic inequities. They favor simple, bright-line rules and are highly skeptical of the role of economics and expertise in antitrust. They see the consumer welfare standard, which is deeply embedded in antitrust case law, as fundamentally flawed.

I put myself squarely in the Modern camp, which I believe offers the most promising path for the Future of Antitrust. This is because the Modern camp is the only one whose agenda for the Future of Antitrust is to protect and promote competition using the best current economic theory and evidence. Our antitrust statutes are general enough and flexible enough to accommodate the changes necessary to fix antitrust, if the courts cooperate. However, there are good reasons to doubt that the Supreme Court will adopt the Modern approach any time soon, so legislation may well be needed.

As explained below, the necessary changes could be accomplished by creating a number of rebuttable presumptions that would allow antitrust plaintiffs to shift the burden of proof to defendants. For example, in cases involving dominant firms, presumptions could be established against acquisitions of significant actual or potential rivals, below-cost pricing, and exclusive dealing requirements imposed on important trading partners. More generally, the courts could open routes for antitrust plaintiffs to prevail by showing likely harm to competition without the need to define a relevant market. Replacing the term "consumer welfare standard" with the term "protecting competition standard" would help foster these changes by clarifying that the goal of antitrust is to promote and protect competition, which can benefit workers and suppliers as well as consumers, and that the DOJ and the FTC need not quantify competitive harm to prevail.

A Brief History of Industrial Organization Economics

My central message is that the Future of Antitrust should be based in significant part on learning from the field of Industrial Organization (IO) Economics. IO Economics is the branch of microeconomics that studies market structure and market power. The mission statement of the Industrial Organization Program at the National Bureau of Economic Research, which was founded by former Deputy Assistant Attorney General, MIT Professor Nancy Rose, explains: "The Industrial Organization Program analyzes firm behavior and industry dynamics, including the determinants of market competition and of pricing decisions, as well as the effects of public policies such as anti-trust law and government regulation."[4]

My hope is that the disciplines of law and economics will work hand in hand as partners to restore sound antitrust enforcement. The partnership I have in mind is simple and powerful: IO Economics, motivated in part by important issues in antitrust policy, advances our understanding of market structure, market power, and various business practices, both in general and in specific cases. Then lawyers and judges rely upon those findings, together with other evidence, to effectuate the intent of Congress that our antitrust laws promote and protect competition by building sound economics into our legal standards.[5]

Fundamentally, IO Economics offers value to antitrust law in two reinforcing ways. First, IO economists have thought deeply about the implications of the profit motive for business strategies and market outcomes. The North Star of antitrust economics is the assumption that businesses are operated to maximize profits. IO theory helps us identify circumstances in which pursuing that profit motive will lead businesses to further the public interest, as per Adam Smith's invisible hand, versus circumstances in which the profit motive will lead them to harm the public interest by enhancing market power. Second, IO economists have studied many firms and markets empirically in considerable detail. This body of work tests various theories, offers valuable econometric tools, and provides an underlying empirical basis for antitrust policy.

During the first half of the 20th century, much of the research in IO Economics followed an "institutionalist" approach, which involved detailed case studies of various industries. But by the middle of the 20th century, IO Economics came to be dominated by the "Structure Conduct Performance" (SCP) framework. That framework was associated with University of California at Berkeley Professor Joe Bain, a student of Joseph Schumpeter at Harvard. The principal tenet of the SCP framework was that market structure determined conduct and thus industry performance. Good performance was measured by low prices and low price/cost margins. The focus of the SCP framework was on oligopolistic industries, especially in the manufacturing sector. The central implication of the SCP framework was that highly concentrated industries with entry barriers would be prone to tacit or express collusion and thus would perform poorly, exhibiting high prices or high price/cost margins.

But economic science does not stand still. By the time Bain retired from Berkeley in 1975, the SCP framework was

being replaced within IO Economics. Emerging empirical evidence confirmed that there was a connection between market structure and performance, but it was not as strong as Bain and his followers had believed, and (equally important) concentrated markets can *result* from vigorous competition.[6] In part, this new learning reflected changes in the American economy, as the share of GDP generated by manufacturing declined, as the share of GDP generated by services grew, and as the rest of the world recovered from World War II, causing international trade to grow. But the decline of the SCP framework also reflected the fact that industries differ widely in their supply and demand characteristics. There was much to be said for the older case study methods that looked more closely at individual firms and markets.

By the end of the 1970s, IO Economics was looking in a more wide-ranging and open-minded way at the richness of the many markets and business strategies observed in the real world. IO Economics was freed from an excessive focus on market shares and market structure, and instead looked more closely at a far wider range of business conduct, focusing less on cartels and tacit collusion. IO Economics carefully examined strategic behavior and innovation. Schumpeter was back in vogue, and deservedly so.

As applicable to antitrust economics, while the SCP framework advanced our understanding of the relationship between market concentration and various forms of horizontal coordination, subsequent research in IO Economics provided the means for addressing a plethora of other antitrust challenges, such as the unilateral effects arising from horizontal mergers, potential adverse effects on competition resulting from vertical mergers, and the identification of anticompetitive harm resulting from various exclusionary business practices.[7]

IO Economics has made great strides over the intervening 40 years in addressing issues critical to the enforcement of antitrust law. Examples include the incentives of monopolists to build extra capacity or tie up critical inputs to deter entry, vertical contracting generally (Nobel prizes have been earned in contract theory), firms competing in the presence of network effects, firms engaging in patent licensing and cross-licensing and forming patent pools, the economics surrounding standard-essential patents, and firms merging with their rivals or their suppliers. Modern IO Economics offers a rich set of tools. In any given case, the antitrust economist uses the tools that work best given the details of the market and the antitrust issues raised. Antitrust lawyers routinely see antitrust economists use IO models and techniques in antitrust cases.

These advances, on the theoretical side, derived from the game theory revolution, which transformed IO Economics.[8] By employing well-grounded game theory, IO economists were able to go far beyond the classic questions about cartels and collusion. IO economists created a rich set of tools that we now use routinely to study the economic effects of many business strategies in markets with a few firms. This work also has profoundly influenced the field of competitive strategy for businesses, which has become a core part of the MBA curriculum.

On the empirical side, there was a great flowering of work using new econometric techniques to identify and quantify market power.[9] Today, the field of IO economics is dominated by researchers who build detailed models of demand and estimate those models using available data. Here too, antitrust lawyers routinely see antitrust economists using these techniques. For example, it is standard fare for antitrust economists to use econometric models to estimate damages in cartel cases and to predict price effects in merger cases using upward pricing pressure or merger simulations. There is a healthy, ongoing debate among IO economists over how to improve these techniques and make them more reliable.

During the past decade, economists in IO and related fields have identified systematic changes that have been taking place in the U.S. economy. I cannot do justice to that work here, but a few of these research findings are worth emphasizing: large and efficient "superstar firms" are responsible for a growing share of U.S. economic activity; market power has grown in some sectors, as reflected by larger price/cost margins and higher profits; and the overall body of evidence from merger retrospectives indicates that merger enforcement has been too lax.[10]

How Antitrust Law Lost its Way—Twice

But enough about economics. Let's get back to antitrust law—its past and then its future.[11]

During the 1960s and 1970s, both law and economics professors were explaining that a number of the Supreme Court antitrust decisions in favor of plaintiffs were badly misguided. These decisions suffered from serious deficiencies in economic reasoning, or a complete lack of economic reasoning. These grave shortcomings had caused the Court to reach faulty conclusions about the economic effects of various challenged business practices.

The fundamental problem is that the Court did not have a coherent view of the competitive process and thus lacked reliable principles to distinguish procompetitive business conduct from anticompetitive exclusion. The per se rule prohibiting a manufacturer from allocating geographic regions to retailers was not supported by microeconomics.[12] Nor was the Court's treatment of tying. Likewise, the Court's method of distinguishing legitimate price competition from predatory pricing was flawed, and its hostility to vertical and conglomerate mergers was unsupported by economic theory or evidence. Notably, the Court's treatment of horizontal mergers in *Philadelphia National Bank* does *not* belong on this list.[13]

Put simply, the Supreme Court lost its way during the 1960s by failing to incorporate sound microeconomics into its antitrust decisions. This failure embedded into legal *doctrine* a number of unsupported and incorrect assumptions

about the economic effects of various business practices.[14] Because the antitrust statutes are so broad and vague, the courts must breathe life into them and interpret them using a heavy dose of economics. That gives the Supreme Court enormous influence over how the antitrust laws actually operate, which makes it crucial that the economic assumptions underlying legal doctrine be well supported by economics.

Fortunately, and precisely because of the common law nature of the antitrust laws, these errors by the Supreme Court could be corrected—and many of them were. Many legal scholars and economists pointed out problems with the Supreme Court's economic reasoning. As a result, from the late 1970s through the mid-1980s the law changed significantly and became much better aligned with economic theory and evidence. The Harvard School and the Chicago School both deserve credit for this shift, although during this period of time the courts followed the Harvard School more closely.[15]

During the late 1970s and early 1980s, as scholars well-versed in the game-theoretic tools were revolutionizing industrial organization theory, the flawed Supreme Court antitrust cases noted above were just begging to be analyzed. They did not hold up well. Seeing some of the new learning from IO Economics incorporated into antitrust law was a welcome development.

But then, starting in the late 1980s, our story takes an unfortunate turn. The courts increasingly came under the influence of a group of lawyers and economists associated with the Chicago School. Antitrust law lost its way a second time. The drift was in the opposite direction, but the underlying cause was the same: a failure to follow the findings of IO Economics.[16]

Looking back, we can now see that what started in the 1970s as a healthy correction to antitrust law was taken too far by free-market Chicago School ideologues intent on dramatically shrinking antitrust law.[17] Under their continuing influence, antitrust case law has become encrusted with a constellation of pro-defendant doctrinal assumptions that are unsupported by the research findings of IO Economics. Take, for example, the assumption that predatory pricing can rarely, if ever, be profitable for a monopolist. This assumption is demonstrably false, especially in markets with significant entry barriers and in situations where a firm can establish a reputation for predatory behavior, which itself can deter entry.[18] However, once enshrined in doctrine, this proposition and others like it effectively become immune from continued advances in economic learning. The law has been unable to adjust in recognition of new facts and circumstances because those facts conflict with legal doctrine that only the Supreme Court can update. As a result, these doctrinal assumptions have prevented antitrust law from evolving to reflect new learning. Antitrust law ossified.[19]

The problem has now grown acute as, for decades, the courts have added more of these doctrinal assumptions to antitrust law. Initially, the courts largely followed well-reasoned reforms also supported by the Harvard School, but, over time, the courts increasingly adopted more extreme and unjustified doctrinal changes championed by the Chicago School. As a result, some parts of antitrust law are now far out of date as regards economic learning in a manner that systematically leads to under-enforcement. Much of this shift in favor of antitrust defendants has been political and ideological, in the sense that it occurred because the Supreme Court has become increasingly pro-business. The shrinking of antitrust law by the Supreme Court is part of a far broader story which encompasses that Court's general hostility to government regulation of business.

How did these forces play out in antitrust? Several highly influential lawyers associated with the Chicago School—most notably Robert Bork, Frank Easterbrook, and Richard Posner—managed to dramatically weaken the ability of our antitrust laws to control monopoly power. The approach they advocated went far beyond the changes to 1960s antitrust that were supported by economic theory or evidence. All the more striking, they achieved this coup by putting forward a series of assertions that sounded as if they were the work of economists but that were, in fact, deeply flawed and had not been subjected to the normal scientific process of peer review. Citing these authors, the Supreme Court began making broad doctrinal pronouncements that did not reflect mainstream IO Economics and were rooted in laissez faire philosophy.[20]

The mode of analysis often employed by these Chicago School lawyers was deeply *unscientific*. They would make a basic argument that had some validity in certain circumstances and then wildly over-generalize based on that argument. Robert Bork's enormously influential 1978 book, *The Antitrust Paradox*, perfectly illustrates the approach taken by these Chicago School lawyers.

My copy of Bork's book is heavily annotated with comments I made 40 years ago indicating that while some of Bork's economic arguments were valid, a great many were not. On top of that, his sweeping policy conclusions were quite detached from economic theory or evidence.

Chapter 11 in *The Antitrust Paradox*, "Vertical Mergers," offers a fine example of Bork's signature move. He lays out his position early in the chapter, writing: "Antitrust's concern with vertical merger is mistaken. Vertical mergers are a means of creating efficiency, not of injuring competition."[21] How did Bork support such a sweeping statement? He offered a series of theoretical economic propositions about the economic effects of vertical mergers. However, Bork was not an economist, and these propositions are either false or, at best, hold only in certain very fragile and overly simplistic economic models. Here, for example, is my notation from 40 years ago regarding Bork's assertion that prices and output would be unchanged if a monopoly manufacturer were to purchase all relevant retailers:[22]

> facturer would be paying for retailing services he did not want.
>
> We may suppose that the manufacturer purchases all of the retailers, converting that level of the industry to a second monopoly held by him. This will not change his price and output decisions at all. Though he now holds both manufacturing and retailing, the monopolist is still facing the same consumer demand and the same costs at both levels. The maximizing price to consumers, therefore, remains the same. The new retail subsidiary will not be permitted to act independently and restrict output further than the manufacturing level had already restricted it, since that would result in an output lower and a price higher than the maximizing level.

Bork conveniently omits from his reasoning any actual or potential rivals to the manufacturer. Even though the basic concern with a dominant manufacturer purchasing retailers is the foreclosure of rival manufacturers, Bork relies on an economic model in which that concern cannot arise because there are none. If one expands the model to include rival manufacturers, foreclosure can easily occur.[23] A bit later, Bork mentions the theory that entry may be deterred if a new firm must enter at both the manufacturing level and the retail level, but he summarily dismisses this perfectly valid theory by stating without evidence that "the effort to block entry in this manner will surely prove both costly and fruitless."[24]

Bork's book is a full of faulty arguments that follow this same structure: rely on an overly simple economic model and then misuse that model to reach broad antitrust policy conclusions that are biased against antitrust enforcement. Examples include his assertion that price cutting "does not provide a likely means of predation," his claim that placing restrictions on "any firm size created by internal growth," regardless of the tactics used to grow, will with "high probability" be harmful, and his argument that exclusive dealing "creates efficiencies and does not create restriction of output."[25]

The approach taken by Bork and other Chicago School lawyers would not withstand peer review, for two basic reasons. First, fragile conclusions based on very simple models are not reliable for policy recommendations. The Chicago School lawyers never checked the robustness of the simple models upon which they were relying, and they lacked the tools to do so.[26] Second, and directly contrary to what Chicago School *economists* proudly stood for, the Chicago School lawyers based their dramatic policy conclusions on little or no systematic empirical evidence.[27]

The advances in IO Economics during the 1970s and 1980s did not support the laissez faire approach to antitrust that we now associate with the Chicago School. There was no empirical finding that predatory pricing is rare or theoretical result that predatory pricing is irrational. There was no empirical or theoretical finding that all vertical mergers are procompetitive, and economic theory teaches otherwise. There was no empirical finding that exclusive dealing provisions used by a firm with substantial market power typically promote competition, and economic theory warns otherwise. Much of this was clear to many economists in the 1980s, and indeed starting in the 1980s a steady stream of "Post-Chicago" publications appeared.[28]

Yet Bork's cavalcade of errors still matters today because the courts have often adopted his reasoning and cited his work, and because similar errors have been propagated by other Chicago School lawyers. Put simply, these lawyers and their followers have successfully embedded into antitrust case law a series of propositions that were never established empirically and were never valid as a matter of economic theory in the first place. Jonathan Baker has identified a number of erroneous arguments put forward by the Chicago School using these tactics: markets self-correct through entry; markets self-correct because oligopolies compete and cartels are unstable; monopolies innovate; monopolists cannot obtain more than a single monopoly profit; and business practices prevalent in competitive markets cannot harm competition.[29]

Based on this distorted view of how markets operate, and freed from the strictures of sound economic analysis, Chicago School lawyers convinced the courts to erect greater and greater hurdles to antitrust plaintiffs, dramatically weakening antitrust enforcement, under the false pretense that they were bringing sound economics to the law. As a leading example, Frank Easterbrook undermined antitrust enforcement under cover of purportedly neutral "error cost" analysis.[30] Easterbrook's entire analysis was based on an economic *assumption* he made that "Monopoly is self-destructive. Monopoly prices eventually attract entry."[31] But his assumption that monopoly power erodes soon enough was based on ideology, not evidence. Then and now, IO economists understand that monopolies can last for a long time, especially (and ironically) if antitrust enforcement is as lax as Easterbrook favors. Easterbrook mirrors his economic assumption with a legal one: "If the court errs by condemning a beneficial practice, the benefits may be lost for good."[32] His assumption that erroneous condemnations are rarely if ever corrected was demonstrably false in 1984 and dramatically so today given how antitrust law has evolved. During the decade just before Easterbrook wrote his article, antitrust case law had been evolving rapidly, leading a number of older, pro-plaintiff cases to be narrowed or overruled.[33]

After stacking the deck, Easterbrook argued that antitrust courts should err on the side of defendants, because "judicial errors that tolerate baleful practices are self-correcting, while erroneous condemnations are not."[34] Like Bork, Easterbrook achieved his desired result based not on economic theory or empirical evidence, but by making strong and unjustified assumptions.[35]

I do not mean to suggest that the Chicago School has run the table over the past 40 years. There are certainly many sound antitrust decisions that rely on IO Economics, and even an occasional decision by the Supreme Court in favor of antitrust plaintiffs. But plaintiffs in antitrust cases now

face undue burdens in many cases as a result of Chicago School arguments that have been deeply embedded into the case law, especially as regards unilateral conduct.

Before discussing how we can fix this problem, it is worth noting that the story relating to cartels and horizontal mergers is quite different from that relating to monopolization and vertical practices. In other words, the story regarding coordination and collusion is very different from the story regarding exclusion. By and large, the Chicago School lawyers have supported vigorous antitrust enforcement against cartels, and antitrust law has been steadfast in condemning them. And horizontal merger enforcement has followed quite a different path, in part because the Supreme Court has not ruled on a horizontal merger in decades.

For horizontal mergers, IO Economics has greatly influenced agency enforcement and the development of the case law over the past 60 years. Back in the 1950s and 1960s, the SCP framework animated a generalized concern among IO economists about market concentration. The SCP framework lay behind the structural presumption that the Supreme Court articulated in 1963 in *Philadelphia National Bank*.[36] The primary antitrust concern with horizontal mergers during that era was what we now call "coordinated effects," which were the focus of the SCP framework. The SCP framework also provided the intellectual foundation for the 1968 Merger Guidelines. While the market concentration thresholds went up markedly in 1982, and then more in 2010, market concentration remains a central element of horizontal merger analysis.[37]

Over the past 50 years, the antitrust treatment of horizontal mergers has incorporated many aspects of new learning from IO Economics, most notably by including and elevating the role of unilateral effects in merger analysis and by giving greater consideration to innovation effects. I attribute this in large part to the influence of the Horizontal Merger Guidelines, first issued in 1968, and to the significant role played by economists at the DOJ and the FTC.[38] Nonetheless, the Chicago School influence can be felt in the area of horizontal mergers. The courts erected higher hurdles that the government must surmount to establish its prima facie case, weakened the structural presumption, became overly receptive to the entry defense, and required the government to do more to prove that a proposed remedy—usually behavioral—would not be adequate.[39] These obstacles to horizontal merger enforcement have become more problematic as evidence has mounted that mergers have harmed competition in some sectors of the economy.

Restoring Effective Antitrust Enforcement

In this section I sketch out how antitrust law can shed itself of Chicago School ideology unsupported by economics to adopt a Modern vision for the Future of Antitrust.[40]

I confine myself here to antitrust enforcement, which is but one part of competition policy. For a broader discussion of competition policy in the years ahead, including regulation, see Restoring Competition in the United States: A Vision for Antitrust Enforcement for the Next Administration and Congress.[41]

Protecting and Promoting Competition. My discussion in this section takes as a given that the goal of antitrust is to protect and promote competition. I revisit that below when I address Populist proposals to broaden antitrust's goals.

The courts commonly address whether a merger or challenged conduct is procompetitive or anticompetitive. Under current case law, this assessment is often made by applying the "consumer welfare standard." That term has outlived its usefulness and should be retired. I advocate replacing the term "consumer welfare standard" with the term "protecting competition standard" to make clear that the goal of antitrust is to protect and promote competition. This proposal involves a change in language, *not* a substantive change in the goal of antitrust law. Here is my definition of the protecting competition standard:[42]

> **A business practice is judged to be anticompetitive if it harms trading parties on the other side of the market as a result of disrupting the competitive process.**

By the "competitive process," I mean the dynamic process by which market participants seek to grow by offering more attractive terms and conditions to those with whom they trade. Disrupting the competitive process can involve blocking rivals by impeding their ability to make attractive offers to customers as well as short-circuiting competition by colluding with or merging with rivals. A firm does not disrupt the competitive process by taking an action that makes its offerings more attractive and does not block its rivals from competing on the merits.

I favor this change in language because the term "consumer welfare standard" has become confusing and counterproductive. Understanding how that happened is instructive.

During the middle of the 20th century, the courts struggled to distinguish business behavior that was a legitimate form of competition from behavior that harmed competition. The courts eventually came to understand one of the basic principles of IO Economics: many forms of legitimate competition harm rivals but benefit customers. In the canonical situation, a firm that lowers its price or improves the quality of its products harms its rivals and benefits its customers. Indeed, that is a fundamental property of competition to serve customers. In that context, the term "consumer welfare standard" usefully directed attention away from the impact of such business practices on rivals and toward their impact on customers. For the same reason, antitrust developed the mantra that "antitrust protects competition, not competitors."[43]

Unfortunately, the term "consumer welfare standard" never did a good job conveying the deeper underlying idea of protecting and promoting competition. To see why, consider a merger between two large employers that harms workers by creating or enhancing employer buyer power in a

local labor market. This merger lessens competition among employers for workers and thus is a problem under the "protecting competition standard." But a sensible person might well query whether the merger is a problem under the "consumer welfare standard." That term directs one's attention toward consumers, which is a distraction in this example.

As a substantive matter, antitrust law understands that a merger can enhance market power on the buyer side and anticompetitive conduct can harm sellers, including workers. In my example, the local labor market would be a relevant market, and one concern would be enhanced power on the buyer side of that market, i.e., by employers. But the public can all too easily be left with the impression that antitrust is just about final consumers and ignores the interests of workers, farmers, or business customers. Why keep using a term that is so prone to misunderstanding?[44]

A further problem with the term "consumer welfare standard" is that the courts have used it to impose additional burdens on antitrust plaintiffs to *quantify* consumer harm. That has led the courts in some cases to focus excessively on short-term price effects and discount longer-term effects on prices, product quality, or innovation that are harder to quantify. Naturally, merging parties respond strategically. For example, in the *T-Mobile/Sprint* merger case, the merging firms promised not to raise prices to consumers for three years, as though such a promise could turn an anticompetitive merger into a procompetitive one. In other cases, merging firms sign multi-year contracts with customers and then assert that these customers are protected so the merger should be allowed under the consumer welfare standard. That is dangerous. Under the "protecting competition standard," attention would be directed less toward short-term price effects and more toward how the merger would alter competition.

Above all, the protecting competition standard, with its language about "disrupting the competitive process," speaks more directly to the goal of antitrust and evokes market dynamics and innovation. Under the protecting competition standard, the claim that a monopolist can exclude a small rival because that rival is less efficient would fall flat.

Protecting Competition Using Existing Antitrust Statutes. The DOJ and the FTC can substantially influence the development of antitrust case law by using their authority and resources to persuade the courts to fashion legal rules that treat business practices based on their probable real-world economic effects, supported by accepted economic theory and reliable evidence, not based on outdated assumptions or laissez-faire ideology. If the DOJ and FTC are successful in this effort, I have some modest hope that, in time, the courts will reduce some of the obstacles to sound antitrust enforcement that are present today.[45] Here, I give a flavor for how that can be done. I do not attempt to offer a comprehensive enforcement agenda.

Create Rebuttal Presumptions in Favor of Antitrust Plaintiffs. The courts could create more paths by which antitrust plaintiffs can establish a rebuttable presumption that certain conduct harms competition, reduce the quantum of proof required to establish these presumptions, and/or require defendants to present stronger evidence to rebut them. This type of "quick look" analysis would follow the three-step burden shifting framework that is familiar to antitrust lawyers. This approach would greatly focus and simplify antitrust cases. By building better economics into the law, the scope and complexity of the economic expert testimony in many individual cases would be reduced. I am betting that judges and litigating attorneys would welcome that![46]

Economics provides an indispensable way to sift through a mountain of evidence to better understand the likely economic effects of various business practices in comparison with some suitable counterfactual. Economics is not "pro-defense" or "pro-plaintiff." Properly used, economics instructs us *what to look for* in a given case to assess effects. Economics is not about *what can never happen*. Those aiming to downplay the use of economics in antitrust confuse the role of economics in assessing economic effects with the distinct issue of how the courts have set legal standards and apportioned burdens of proof. In my examples below, I suggest building sound economics into the legal standard. That will strengthen antitrust enforcement, improve the accuracy of antitrust decisions, and simplify litigation.

Here are a few examples of some recent cases that would have been decided in a more plaintiff-friendly manner had the courts properly used economic theory and evidence and applied the protecting competition standard.[47]

- ***Actavis***:[48] The Supreme Court would have adopted a rebuttable presumption against any large transfer of value from a branded pharmaceutical company to a potential generic entrant as part of their settlement of a patent infringement case. The burden would then shift to the defense to show that any such transfer of value was made for a purpose other than delaying generic entry. The plaintiff would not have to prove that the transfer of value is "unexplained." This would be a very focused inquiry, simplifying these cases; there would be no need to define a relevant market. This approach is strongly supported by economic theory and overwhelming evidence that generic entry lowers prices.[49]
- ***American Express***:[50] The Supreme Court would have upheld the district court's opinion in favor of the plaintiffs based on the factual finding that American Express's no-steering rule disrupted the competitive process and elevated merchant acceptance fees by stifling price competition among credit cards for merchant acceptance. Those factual findings should have created a presumption that the rule was anticompetitive, which American Express failed to rebut.

  This case illustrates how Chicago School ideology has displaced common sense and sound economics

at the Supreme Court. Applying IO Economics, the Court would have started with deep skepticism about American Express blocking merchants from offering discounts on transactions *that do not involve American Express.* Yes, American Express should have the freedom to choose its own business model—high merchant acceptance fees and high rewards to cardholders. But that freedom does not extend to disrupting the ability of *other* payment systems to deploy their own distinct business models—lower merchant fees and lower rewards—especially if they threaten American Express by fomenting price competition. Instead, the Supreme Court went down a distracting and irrelevant rabbit hole relating to market definition.

- ***Qualcomm***:[51] The Ninth Circuit would have upheld the district court's opinion based on the district court's factual finding that Qualcomm's no-license/no-chip policy had the economic effects of raising the costs of Qualcomm's rivals (modem-chip makers) and raising the all-in price of modem chips to customers (manufacturers of cell-phones).

  Something is deeply wrong with antitrust law when the facts show that a monopolist has engaged in conduct that excludes competitors by raising their costs and harms customers by raising prices, yet an appellate court does not see an antitrust violation. My reading of the Ninth Circuit opinion is that the appeals court had difficulty understanding the economic effects of Qualcomm's no-license/no-chips policy, so it defaulted in favor of the defense. That instinct is very much in the Chicago School tradition.
- ***T-Mobile/Sprint***:[52] The district court would have blocked this merger if stronger evidence were required to rebut the structural presumption. The district court would not have discounted Sprint's ability to compete, given Sprint's sizeable market share and its own market share projections. The district court would have required more convincing evidence of Sprint's coming decline before accepting a speculative efficiency defense and a dubious, slow-acting remedy containing many conduct elements for years to come.

Many other areas of antitrust law would benefit from a recalibration in favor of plaintiffs, based on the current state of knowledge in IO Economics. To be clear: I am talking here about reducing the burden on plaintiffs for various types of conduct that already can be illegal under current antitrust case law. I generally favor the use of rebuttable presumptions rather than per se rules, but views on this differ among Modernists based on how they trade off accuracy vs. simplicity. To give a few more illustrative examples, presumptions against the following conduct by dominant firms are well worth considering: (1) acquisitions of significant actual or potential rivals; (2) open early/closed late strategies that exclude rivals; (3) below-cost pricing; and (4) exclusive dealing requirements imposed on important trading partners.[53]

The evidence required to rebut these presumptions will vary from one practice to another. For example, a dominant firm might defend below-cost pricing by pointing out that selling one product below cost generates profit margins on a complementary product, so it was not actually losing money on the sales in question. That defense could apply if the dominant firm is offering a free service to consumers to generate advertising revenue or selling a piece of durable equipment to generate profitable aftermarket sales of parts and service. My point is that the burden would rest on the dominant firm to explain its below-cost pricing, not on the plaintiff to prove that entry barriers are sufficiently high that recoupment will be possible in the future.

Allow Plaintiffs to Prevail Without Defining a Relevant Market. The courts also can simplify antitrust cases and make fewer errors by giving more weight to direct evidence of the economic effects of challenged practices and providing more plaintiffs with a path to success that does not require defining a relevant market.

The courts could first look for direct evidence of economic effects. This evidence might be qualitative or quantitative. Alternatively, the courts could define a relevant market in situations where market shares are informative about economic effects. This is by and large what the DOJ and the FTC do in their investigations. If they see harmful effects, they can reverse-engineer a relevant market in which those effects are situated, as part of preparing to litigate cases where the courts will require them to define a relevant market.

For example, in horizontal merger cases, the courts could allow the government to establish a presumption of harm to competition by showing that the two merging firms are substantial, direct rivals, without the need to define a relevant market. This would not prevent the government from alternatively invoking the *Philadelphia National Bank* structural presumption, which remains well grounded in economic research, as large increases in market concentration caused by horizontal mergers tend to lead to a substantial lessening of competition.

IO economists know that the actual economic effects of a practice do not turn on where one draws market boundaries. I have been involved in many antitrust cases where a great deal of time was spent debating arcane details of market definition, distracting from the real economic issues in the case. I shudder to think about how much brain damage among antitrust lawyers and economists has been caused by arguing over market definition.

Both the Chicago School and the Populist camps use the technical step of defining the relevant market as a vehicle to achieve the results they want—less or more antitrust enforcement as the case may be—rather than seeking to assess economic effects directly.

The Chicago School emphasizes market definition because antitrust defendants often win by arguing that the plaintiff has not properly defined the relevant market. Defendants have managed to turn market definition into a gating item under the case law, even if there is direct evidence of anticompetitive effects.[54] We see this in the *American Express* case, where the Supreme Court ruled in favor of the defendants based on the government's failure to properly define the relevant market, despite the district court finding *direct* evidence of significant anticompetitive effects.[55] This same tactic was used in the second *Staples/Office Depot* case where the defendants extensively cross-examined the FTC's economic expert (me) on the relevant market and market shares, but studiously avoided the most significant economic evidence in the case, which showed that the merging firms were the two leading bidders in many procurements for office supplies by large businesses.[56] In addition, after the relevant market has been defined, antitrust defendants often attempt to use market share metrics in an asymmetric way that favors them.[57]

Similarly, the highly structural approach favored by the Populists as a means to deconcentrate the economy necessarily relies heavily on defining relevant markets and measuring market shares in a way that is intended to favor plaintiffs. The Populists gloss over major challenges posed by their very heavy reliance on market definition. A highly structural approach driven by market definition may end up making antitrust more arcane and detached from reality, as even more cases turn on how the relevant market is defined. Such a focus may make antitrust cases harder, not easier, for plaintiffs to win.[58] Antitrust litigators know well that the more weight one puts on market definition and market shares, the more effort litigants will spend on those topics. Yet, as any economist will tell you, the economy is not partitioned neatly into various "relevant markets," especially today, where products and services are highly differentiated. In many cases, emphasizing market definition instead of economic effects would draw attention away from the real story and to an arcane boundary-drawing exercise.

Take horizontal mergers—which I consider critical for antitrust enforcement. In my experience, the government needs to tell a convincing story of harm to the public to convince a federal judge to block a proposed merger. I suspect this will remain true even if the law were to change so that lower concentration levels would trigger a stronger structural presumption. In that world, if the government does not tell a textured, coherent story about how the merger will harm trading partners, it will still be at serious risk of losing. The loss just would come in the form of an unconvinced court rejecting the government's relevant market, ruling that the government has not properly established the structural presumption. For this reason, I favor presumptions that are well connected to the underlying economic effects. The structural presumption based on the level of the HHI is well suited for mergers involving coordinated effects; the change in HHI and upward pricing pressure are well suited for mergers involving unilateral effects.[59]

By way of contrast, the Modern approach seeks to more accurately assess economic effects using the best available methods. Antitrust law can do that by establishing rebuttal presumptions that certain categories of conduct often harm competition, calibrating the legal standards of proof to reflect economic reality, and then narrowing attention in individual cases to the most probative evidence of economic effects.

In summary, the Modernist vision for the Future of Antitrust under the current antitrust statutes is to vigorously challenge mergers and business conduct that harm counterparties by disrupting the competitive process, based on the best evidence of likely economic effects. That will require perseverance. Antitrust defendants are well-counselled and well-funded and they will not readily cede ground, especially if they believe they have precedent on their side and will receive a favorable hearing on appeal, not an unreasonable expectation given the current judiciary.

This state of affairs is unsatisfactory in many ways. Based on my experience in antitrust litigation, I fear that any progress along these lines will be painfully slow. So let me turn to . . .

Updating the Antitrust Statutes. Many observers, myself included, are unwilling to wait 30 to 40 years for antitrust to correct itself through the slow evolution of the case law. Plus, one can hardly be confident that the case law will move at all in the direction of stronger antitrust enforcement over the next decade or two, based on recent decisions by the Supreme Court and its current makeup. For these reasons, I support legislative changes that codify the approach supported by the Modernists. To that end, along with a group of experienced antitrust practitioners and academics, I endorsed the bill recently introduced by Senator Amy Klobuchar, the "Competition and Antitrust Enforcement Reform Act of 2021."[60] I applaud Senator Klobuchar's efforts to strengthen horizontal merger enforcement and to overrule a number of faulty, pro-defendant Supreme Court cases involving conduct by large firms. For more details on the type of legislation that I support, see Restoring Competition in the United States: A Vision for Antitrust Enforcement for the Next Administration and Congress.

Even with new legislation, antitrust can and should only do so much. We very much need new sector-specific regulations, especially to deal with the tech titans. Article III courts are poorly suited to provide ongoing regulation of the terms and conditions on which one firm must deal with another, especially in the presence of rapidly changing technology. Plus, *ex post* antitrust enforcement is not a substitute for *ex ante* industrywide rules. As the rest of the world has realized, we very much need sector-specific regulation to reign in the power of the tech titans and to cure problems

associated with the misuse of personal data and with the spread of misinformation. Many of the ills requiring regulation do not involve the abuse of market power. For now at least, the United States will be watching from the sidelines as the UK and the EU move forward to regulate core platform providers who are "gatekeepers" in digital markets.

The Populist Challenge to Antitrust

I now turn to address the Populists, who are often called Neo-Brandeisians.

My starting point is that I share many sympathies with the Populists. Like them, I am deeply concerned about the excessive political power of large corporations. Like them, I believe that today's extreme levels of income and wealth inequality in America are very unhealthy for our democracy and for our society. Like them, I believe that the growing share of the economic pie going to shareholders and the declining share going to workers has contributed to this inequality. Like them, I believe that better public policies can go a long way to fixing these problems, if only we can find the political will to enact them. Like them, I believe that antitrust enforcement has been too lax, largely as a result of the durable influence of the Chicago School.

However, my assessment of what is *causing* these social and economic ills differs from the Populists' assessment. We both read the accumulating economic evidence as showing that market power has risen in a number of sectors of the U.S. economy and that antitrust enforcement has generally been too lax. However, where the Populists see an economy infested with monopolists, I see an economy that is dynamic and competitive in many respects, but can and should be more so. I see grave problems with market power in the health care sector and a number of others, but I also see vigorous competition in large portions of the U.S. economy.

The Populists implicate lax antitrust as the central cause of many of our social and economic problems, while I see other public policy failures—including weak voter-protection and anti-corruption laws, inadequate protections for workers, highly unequal access to education and health care, and a tax system that contains many regressive elements—as the central culprits. Indeed, many of the social and economic problems we are facing in the United States today can also be found in countries such as the U.K. and France, where competition policy has by no means been captured by free market ideology.

The Populists also implicate the use of economics in antitrust as counterproductive. Obviously, I strongly disagree with that assessment. Antitrust is about economic concepts, and the problems with antitrust law have come when it has departed from economic learning. Economics is a neutral tool that helps us understand the economic effects of various business practices. Louis Brandeis himself was deeply concerned about real economic effects, not legal formalisms.

What do these differences in diagnosis imply for antitrust policy? There are a number of distinct Populist voices, and the Populist approach to antitrust is still evolving, but some clear themes have emerged.[61] For starters, Modernists and Populists agree on many antitrust policy proposals that would reverse the Chicago School excesses. As one example, they agree that the Biden administration should rescind the Trump administration's misguided and poorly reasoned approach to standard-essential patents.[62] Both camps want more vigorous antitrust enforcement.

But there are some major differences between the policy proposals of the Populists and the Modernists, which stem from fundamental differences in what they want antitrust to accomplish. The Populists want to use antitrust to deconcentrate private power, while the Modernists want antitrust to protect and promote competition. Populists associate the "Curse of Bigness" with large firms, while Modernists recognize that many "superstar firms" have grown large by being highly efficient.

Here is a good litmus test: What should be done with companies that grow organically and come to have durable monopoly power solely as a result of effectively and efficiently serving the needs of their customers? Populists are quite willing to break up such companies. Modernists are not.

The basic idea of deconcentrating the U.S. economy to disperse private power is not new. In 1969, the Neal Report recommended that Congress pass the Concentrated Industries Act, which would have empowered the Attorney General to break up "oligopoly industries" so that the leading firm's market share would be no larger than 12.5 percent.[63]

William Kovacic has masterfully explained the recurrent impulse to use antitrust to break up large firms, and why this impulse has repeatedly met with failure. He also astutely predicted, some 30 years ago, that the impulse would emerge again.

> Why, then, will a new collection of enforcement officials set off to climb a mountain that routinely has conquered its challengers? The answer may be that the durability of the deconcentration impulse ultimately has little to do with realistic expectations that a broad-based program of Sherman Act divestiture suits will dissolve existing aggregations of market power. Its recurring hold on public policy instead derives from its attractiveness as a symbolic outlet for public antipathy toward large corporate size.[64]

Breaking up successful, efficient, and innovative companies merely because they have grown too large or powerful is antithetical to the competitive process. Economic theory and evidence indicate that a widespread campaign to break up large firms on a "no-fault" basis would slow economic growth by making our economy less competitive and less innovative. So would imposing line of business restrictions that block firms from exploiting economies of scope and thereby injecting competition into adjacent markets. In my opinion, these blunt deconcentration policies would cause the prices of many goods and services to go up, harming many American households. More fundamentally, breaking

up monopolies and oligopolies on a "no-fault" basis would be fighting against powerful, underlying economic forces associated with economies of scale and scope that are a pervasive feature of advanced economies around the world.

In any event, I do not believe that the American people would tolerate an economic system under which successful firms that have done nothing wrong are routinely broken up by the government. I shudder to think what Donald J. Trump would have done with that power, and I doubt very much that Congress will want to put such power in the hands of the executive branch. I hope not.

As much as I am concerned about the excessive political power of large corporations in the United States, I do not see widespread deconcentration of the economy as a wise response. The economic costs would be enormous. If there is sufficient political will to reduce the political power of large corporations, there are far better solutions that would not cause such damage to our economy. For example, shareholder votes could be required for any political contributions by public companies, public funding of candidates could be increased, and vastly more transparency into how corporations interact with and lobby the government could be mandated.

Conclusion

Antitrust law urgently needs to free itself of the laissez-faire ideology that the Chicago School has successfully embedded into the case law over the past several decades. This article explains how that can be done by replacing Chicago School doctrine with a constellation of rebuttable presumptions favoring antitrust plaintiffs that are based on economic theory and evidence. I hope that Modernists and Populists will make common cause with this effort.

In the months and years ahead, I expect to see the Biden administration generally pushing the boundaries of antitrust enforcement in a pragmatic way, recognizing that the case law in many respects is favorable to defendants and that losing cases weakens enforcement. I especially expect—and hope—to see challenges in cases where dominant firms are seeking to acquire nascent competitors that pose a real threat to their dominance. Protecting competition requires preserving those threats, especially when they are few in number. Those cases will likely involve both horizontal and vertical issues. How the agencies and the courts deal with the inherent difficulty of predicting the path of innovation and with claimed synergies will be critical.

We also will see a noticeable increase in enforcement activity if Congress substantially increases the budgets of the enforcement agencies. Those extra resources would do a great deal to turbocharge the efforts of the Biden administration to better deter anticompetitive mergers and conduct and to push the boundaries of antitrust law.

Finally, we have the prospect of major, substantive changes to the antitrust statutes to strengthen antitrust enforcement. Others are more qualified than I am to assess the likelihood of Congress passing such legislation, but if it does, we will see a wave of cases testing the boundaries of these new provisions. I would like to think that the courts would then get the message and finally move past the Chicago School biases against antitrust plaintiffs that have seeped into the case law over the years. Only time will tell. ■

[1] *See, e.g.*, David Autor et al., *The Fall of the Labor Share and the Rise of Superstar Firms*, 135 Q.J. Econ. 645 (2020); John Van Reenen, *Increasing Differences Between Firms: Market Power and the Macro-Economy* (Ctr. for Econ. Performance, CEP Discussion Paper No. 1576, 2018), https://ideas.repec.org/p/cep/cepdps/dp1576.html. The proper interpretation of this economic evidence for antitrust policy are emphasized in Jonathan B. Baker, The Antitrust Paradigm 11 (2019) (Ch. 1, Market Power in an Era of Antitrust); Carl Shapiro, *Antitrust in a Time of Populism* 61 Int'l J. Indus. Org. 714 (2018); and Carl Shapiro, *Protecting Competition in the American Economy: Merger Control, Tech Titans, Labor Markets*, 33 J. Econ. Persps., Summer 2019, at 69.

[2] As a recent report explains: "Strong antitrust enforcement directed at business conduct that harms competition can deliver many beneficial byproducts, among them reducing inequality, advancing the diversity of voices (a First Amendment goal), discouraging threats to democracy from concentrated political power, and expanding opportunities for small businesses to compete." Bill Baer, Jonathan Baker, Michael Kades, Fiona Scott Morton, Nancy Rose, Carl Shapiro & Tim Wu, *Restoring Competition in the United States: A Vision for Antitrust Enforcement for the Next Administration and Congress* (Wash. Ctr. for Equitable Growth, Nov. 2020).

[3] Of course, people have a wide range of views, so any attempt to create just a few categories will be imperfect and some members of each group will inevitably disagree with how I characterize that group. This is a global caveat.

[4] Nat'l Bureau of Econ. Rsch., *The Industrial Organization Program*, https://www.nber.org/programs-projects/programs-working-groups/industrial-organization?page=1&perPage=50.

[5] Jonathan Baker argues that this view of antitrust is democratic in that the courts and enforcement agencies are following Congressional intent. *See* Baker, *supra* note 1, at 9 (Section I, "The Market Power Paroxysm and the Antitrust Paradigm"). In Baker's view, the technocratic antitrust that operates day-to-day and case-by-case "is the means by which antitrust enforcers and courts implement the political bargain." *Id.* at 65. Part of that political bargain is that effective antitrust reduces the need for regulation.

[6] *See* Richard Schmalensee, *Inter-Industry Studies of Structure and Performance, in* 2 Handbook of industrial organization 951 (Richard Schmalensee & Robert Willig eds., 1989); Michael Salinger, *The Concentration-Margins Relationship Reconsidered*, 21 Brookings Papers on Econ. Activity 297 (1990). For a brilliant and creative synthesis, see John Sutton, Sunk Costs and Market Structure: Price Competition, Advertising, and Market Structure (1990).

[7] The Handbook of Industrial Organization, *supra* note 6, is a good place to look to get a sense of the breadth and depth of these advances. The first two volumes were published in 1989 and a third volume was published in 2007. A fourth volume is currently in the works.

[8] To get a flavor of this body of work, see Carl Shapiro, *The Theory of Business Strategy*, 20 RAND J. Econ. 125 (1989). For an extensive and masterful treatment, see Jean Tirole, The Theory of Industrial Organization (1988). Tirole's book has served to train a generation of economists on IO theory.

[9] *See* Timothy F. Bresnahan, *Empirical Studies of Industries with Market Power, in* 2 Handbook of Industrial Organization, *supra* note 6, at 1011.

[10] Autor et. al., *supra* note 1, find that the most efficient firms have expanded and gained share in many industries. Jan De Loecker, Jan Eeckhout & Gabriel Unger document rising price/cost margins since 1980 together with shifts in market share from lower-margin to higher-margin firms, in *The Rise of Market Power and the Macroeconomic Implications*, 135 Q.J. Econ.

561 (2020). Esteban Rossi-Hansberg, Pierre-Daniel Sarte & Nicholas Trachter, show that, in many industries, large national firms have expanded by entering more local markets and injecting competition into those markets, causing national measures of concentration to rise while local measures of concentration have fallen, in *Diverging Trends in National and Local Concentration*, 35 NBER Macroeconomics Ann. 115 (2020). Bruce Blonigen & Justin Pierce find that mergers and acquisitions are associated with higher price/cost markups but do not increase plant-level productivity, in *Evidence for the Effects of Mergers on Market Power and Efficiency* (Nat'l Bureau of Econ. Rsch., Working Paper No. 22750, 2016).

[11] For a short history of the use of economics in antitrust law up to 2000, see William E. Kovacic & Carl Shapiro, *Antitrust Policy: A Century of Economic and Legal Thinking*, 14 J. Econ. Persps. Winter 2000, at 43.

[12] Cont'l T.V., Inc. v. GTE Sylvania Inc., 433 U.S. 36 (1977), *overruling* United States v. Arnold, Schwinn & Co., 388 U.S. 365 (1967).

[13] United States v. Phila. Nat'l Bank, 374 U.S. 321 (1963). The animating principle behind this decision, that highly concentrated oligopolies tend to perform poorly, was widely recognized by economists as having both theoretical and empirical support. Indeed, that was the central teaching of the SCP framework. The key passage reads: "Specifically, we think that a merger which produces a firm controlling an undue percentage share of the relevant market, and results in a significant increase in the concentration of firms in that market, is so inherently likely to lessen competition substantially that it must be enjoined in the absence of evidence clearly showing that the merger is not likely to have such anticompetitive effects." *Id.* at 363. The Court added that this test "is fully consonant with economic theory," and provided supporting citations. Regarding what constituted an "undue" market share, the Court cited George Stigler for the position that "any acquisition by a firm controlling 20% of the market after the merger is presumptively unlawful." *Id.* at 397 n.41. The post-merger market share of Philadelphia National Bank was at least 30% in the market for commercial banking in the Philadelphia metropolitan area.

[14] *See, e.g.*, Brown Shoe Co. v. United States, 370 U.S. 294 (1962); United States v. Arnold, Schwinn & Co., 388 U. S. 365 (1967); United States v. Topco Assocs., 405 U.S. 596 (1972).

[15] Herbert Hovenkamp summarizes this shift nicely in Herbert J. Hovenkamp, *Whatever Did Happen to the Antitrust Movement?*, 94 Notre Dame L. Rev. 583 (2018). *See also* William Kovacic, *The Intellectual DNA of Modern U.S. Competition Law for Dominant Firm Conduct: The Chicago/Harvard Double Helix*, 1 Colum. Bus. L. Rev. 1 (2007).

[16] This story has been told before. For a very nice recent treatment, see Herbert J. Hovenkamp & Fiona Scott Morton, *Framing the Chicago School of Antitrust Analysis*, 168 U. Pa. L. Rev. 1843 (2020). "The early strength of the Chicago School was that it provided simple, convincing answers to everything that was wrong with antitrust policy in the 1960s, when antitrust was characterized by over-enforcement, poor quality economics or none at all, and many internal contradictions. The Chicago School's greatest weakness is that it did not keep up. Its leading advocates either spurned or ignored important developments in economics that gave a better accounting of an economy that was increasingly characterized by significant product differentiation, rapid innovation, networking, and strategic behavior. . . . As a result, the Chicago School went from being a model of enlightened economic policy to an economically outdated but nevertheless powerful tool of regulatory capture." *Id.* at 1844. And this pithy summary: "The [Chicago School] movement created what might be called 'Opportunistic Economics' by using economic analysis when it delivered the desired answer and ignoring it when it did not." *Id.* at 1853.

[17] There is abundant evidence that the program at Chicago led by Aaron Director was "derived from what might be called a deeply held belief system that political interference in market activities interfered with freedom and reduced societal welfare." George L. Priest, *The Limits of Antitrust and the Chicago School Tradition*, 6 J. Competition L. & Econ. 1, 2 (2009). *See also* Hovenkamp & Scott Morton, *supra* note 16.

[18] *See, e.g.*, C. Scott Hemphill & Philip J. Weiser, *Beyond* Brooke Group: *Bringing Reality to the Law of Predatory Pricing*, 127 Yale L.J. 2048 (2018). *Brooke Group* is an example of the court imposing an undue burden on the plaintiff to prove recoupment, in part by relying on a prior case involving an alleged conspiracy lasting 20 years to engage in predatory pricing, *Matsushita Electric Industrial Co. v. Zenith Radio Corp.*, 475 U.S. 574 (1986). A decade after *Brooke Group*, the DOJ lost a case where predation was likely taking place. *See* United States v. AMR Corp. 335 F. 3d 1109 (10th Cir. 2003).

[19] Robert Pitofsky called attention to this nearly 15 years ago. *See* How the Chicago School Overshot the Mark: The Effect of Conservative Economic Analysis on U.S. Antitrust (Robert Pitofsky ed., 2008).

[20] For a vivid recent illustration of this phenomenon, see Ohio v. American Express, 138 S. Ct. 2274 (2018). "The Supreme Court's American Express decision ignored fundamentals and embraced a series of economically incoherent principles in the guise of applying antitrust economics." Herbert J. Hovenkamp, *The Looming Crisis in Antitrust Economics*, 101 B. U. L. Rev. 489, 513 (2021).

[21] Robert Bork, The Antitrust Paradox 226 (1978).

[22] *Id.* at 229.

[23] Foreclosure does not arise in the special case where there is perfect competition and free entry among retailers, so rival manufacturers can easily create or sponsor their own retailing operations. That was the point of my note in the margin. However, in that special case, the retailing assets being acquired by the monopoly manufacturer are easily replicated. Vertical mergers in which the assets being acquired are easily replicated and not subject to economies of scale are not of practical concern. Here again, Bork assumes away the problem.

[24] Bork, *supra* note 21, at 239.

[25] *Id.* at 148, 178, and 303.

[26] Take, for example, the "one monopoly profit" argument that tying cannot be used to expand or entrench monopoly power. One can write down a very simple model in which that result holds, but there are many realistic models in which tying or a vertical merger can profitably be used to exclude rivals.

[27] George Stigler stands out as the pre-eminent industrial organization economist at the University of Chicago during this period. Stigler won the Nobel Prize in Economics in 1982 "for his seminal studies of industrial structures, functioning of markets, and the causes and effects of public regulation." Press Release, The Nobel Prize, This Year's Prize in Economics Is Awarded for Research on Market Processes and the Causes and Effects of Public Regulation (Oct. 20, 1982), https://www.nobelprize.org/prizes/economic-sciences/1982/press-release/. His publications do not suffer from the flaws found in Bork's writings.

[28] For a fine example of applying IO Economics to antitrust from the 1980s, see Thomas G. Krattenmaker & Steven C. Salop, *Anticompetitive Exclusion: Raising Rivals' Costs to Achieve Power Over Price*, 96 Yale L.J. 209 (1986).

[29] *See* Baker, *supra* note 1; *see also* Jonathan B. Baker, *Taking the Error Out of 'Error Cost' Analysis: What's Wrong with Antitrust's Right*, 80 Antitrust L.J. 1 (2015).

[30] Frank H. Easterbrook, *The Limits of Antitrust*, 63 Tex. L. Rev. 1 (1984).

[31] *Id.* at 2.

[32] *Id.*

[33] Notable examples include *Continental T.V. Inc. v. GTE Sylvania Inc.*, 433 U.S. 36 (1977) (ruling that vertical nonprice restraints must be analyzed under the rule of reason); *U.S. Steel Corp. v. Fortner Enterprises., Inc.*, 429 U.S. 610 (1977) (requiring plaintiffs in tying cases to establish that the defendant has significant market power); and *Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc.,* 429 U.S. 477 (1977) (requiring a private antitrust plaintiff to show that it suffered "antitrust injury.").

[34] Easterbrook, *supra* note 30, at 3.

[35] I have no objection to "error cost analysis" in principle. After all, it is nothing more than an example of decision-making under uncertainty, which is widely taught to MBAs. But Easterbrook's pro-defendant policy recommendations all flow from his biased assumptions, not from "error cost analysis" as such.

[36] *Philadelphia National Bank*, 374 U.S. 321.

[37] *See, e.g.*, U.S. Dep't of Justice & Fed. Trade Comm'n, Horizontal Merger Guidelines 18 (2010) (Section 5.3, "Market Concentration") [hereinafter

Horizontal Merger Guidelines]. The decline of the structural presumption has weakened merger enforcement. *See* Herbert Hovenkamp & Carl Shapiro, *Horizontal Mergers, Market Structure, and the Burden of Proof*, 127 Yale L.J. 1996 (2018).

[38] *See* Carl Shapiro, *The 2010 Horizontal Merger Guidelines: From Hedgehog to Fox in Forty Years*, 77 Antitrust L.J. 49 (2010). Recent economic evidence warrants moving to stricter enforcement of horizontal mergers—but not going all the way back to the 1968 Merger Guidelines in form or in substance. *See also* Jonathan Baker, *Why Did the Antitrust Agencies Embrace Unilateral Effects?*, 12 Geo. Mason L. Rev. 31 (2003).

[39] Herbert Hovenkamp & Carl Shapiro, *Horizontal Mergers, Market Structure, and Burdens of Proof*, 127 Yale L.J. 1996 (2018) (discussing the evolution of merger law and the weakening of the structural presumption).

[40] Of course, not all of those in the Modern camp will agree with every policy proposal offered here, but I am confident that many will agree with most of them.

[41] Bill Baer et al., *supra* note 2. I am one of the co-authors of this report.

[42] *See* Carl Shapiro, Address at the FTC-Georgetown University Hearings on Competition and Consumer Protection in the 21st Century The Protecting Competition Standard (2018), http://faculty.haas.berkeley.edu/shapiro/protectingcompetitionstandard.pdf; *The Consumer Welfare Standard in Antitrust: Outdated, or a Harbor in a Sea of Doubt?, Hearing Before the Subcomm. on Antitrust, Consumer Protection and Consumer Rights. of the S. Comm. on the Judiciary*, 115th Cong. (2017) (statement of Carl Shapiro), http://faculty.haas.berkeley.edu/shapiro/consumerwelfarestandard.pdf.

[43] Of course, any simple phrase can be taken out of context and abused. Exclusionary practices harm *both* competitors and competition, so the objections of competitors to a practice does not mean it is procompetitive. The Chicago School often dismisses the complaints of rivals even when they reflect anticompetitive exclusion.

[44] An additional problem with the term "consumer welfare standard" is that Robert Bork improperly used the term to refer to a *total* welfare standard (basically, consumer welfare plus profits), creating more confusion. Not coincidentally, his misuse of a well-established term in microeconomics served to favor antitrust defendants.

[45] My hope is very much tempered by the fact that case law, for good reasons, evolves slowly, and by the fact that the Supreme Court contains a number of justices who are enthusiastic adherents of the Chicago School. Hence my support for legislative change, as discussed below.

[46] When training economists as expert witnesses, I consistently press them to simplify their testimony. I often cite the famous dictum of Albert Einstein: "Everything should be made as simple as possible, but no simpler." I also employ a variation on Arthur C. Clarke's well-known third law, which states: "Any sufficiently advanced technology is indistinguishable from magic." My version for economic experts: "Any sufficiently complex economic testimony is indistinguishable from gibberish."

[47] I was an economic expert witness for the FTC in the *Actavis* and *Qualcomm* cases, I was Deputy Assistant Attorney General for Economics when the DOJ brought the *American Express* case, and I testified on behalf of a number of state attorneys general in the *T-Mobile/Sprint* case.

[48] FTC v. Actavis*,* 570 U.S. 136 (2013).

[49] *See, e.g.*, Aaron Edlin, Scott Hemphill, Herbert Hovenkamp & Carl Shapiro, *The* Actavis *Inference: Theory and Practice*, 67 Rutgers U. L. Rev. 585 (2015).

[50] *American Express Co.*, 138 S. Ct. 2274.

[51] FTC v. Qualcomm Inc., 969 F.3d 974 (9th Cir. 2020).

[52] New York v. Deutsche Telekom, 439 F. Supp. 3d 179 (S.D.N.Y. 2020).

[53] *See* Baker, *supra* note 1, at 97 (2019) (Section II, "Antitrust Rules and the Information Economy"). Baker argues that "courts should be encouraged to adopt a number of rules and (rebuttable) presumptions defended in this book." *Id.* at 208. *See also* Andrew I. Gavil & Steven C. Salop, *Probability, Presumptions and Evidentiary Burdens in Antitrust Analysis: Revitalizing the Rule of Reason for Exclusionary Conduct*, 168 U. Pa. L. Rev. 2107 (2020).

[54] The "smallest market principle" is a good example of how defendants use arcane market definition to win. The 2010 Horizontal Merger Guidelines walked away from this principle, stating: "The Agencies may evaluate a merger in *any* relevant market satisfying the [hypothetical monopolist] test." Horizontal Merger Guidelines, *supra* note 37, Section 4.1.1 at 9–10 (emphasis added).

[55] *American Express Co.*, 138 S. Ct. at 2286. Writing in dissent, Justice Breyer stated: "Consumers throughout the economy paid higher retail prices as a result, and they were denied the opportunity to accept incentives that merchants might otherwise have offered to use less-expensive cards. I should think that, considering step 1 alone, there is little more that need be said." *Id.* at 2294 (internal citations omitted).

[56] *See* FTC v. Staples, Inc., 190 F. Supp. 3d 100 (D.D.C. 2016).

[57] Defense-oriented economists (and defense-oriented lawyers) regularly argue in merger cases that low market shares should create a safe harbor but high market shares should not create a presumption of harm to competition.

[58] The Populists make much of how certain metrics show a trend of increasing concentration in the U.S. economy. However, the data sources they cite generally measure product categories and geographic regions far broader than the relevant markets defined by antitrust courts. Furthermore, the levels of concentration that the Populists regard as alarming are far below those that the enforcement agencies or the courts have found problematic in horizontal merger cases.

[59] The problem with the level of the HHI is that it can be driven by how the market is divided among non-merging firms, which is of secondary significance in cases involving unilateral effects. In contrast, the change in HHI is driven by the market shares of the merging firms. For some very nice, recent work on this point, see Volker Nocke & Michael D. Whinston, *Concentration Screens for Horizontal Mergers* (Nat'l Bureau of Econ. Rsch., Working Paper No. 27533, 2020). In cases involving differentiated products and unilateral price effects, upward pricing pressure is an even better simple metric. "The Agencies rely much more on the value of diverted sales than on the level of the HHI for diagnosing unilateral price effects in markets with differentiated products." Horizontal Merger Guidelines, *supra* note 54, at 21.

[60] S. 225, 117th Cong. (2021) (referred to the Senate Judiciary Committee on Feb. 4, 2021).

[61] For an excellent treatment of different strands of thought among the Populists and how those strands relate to recent antitrust practice, see Leon B. Greenfield, Perry A. Lange & Nicole Callan, *Antitrust Populism and the Consumer Welfare Standard: What Are We Actually Debating?*, 83 Antitrust L.J. 393 (2020).

[62] *See* Mark A. Lemley & Carl Shapiro, *The Role of Antitrust in Preventing Patent Holdup*, 168 U. Pa. L. Rev. 2019 (2020).

[63] Phil C. Neal et al., *Report of the White House Task Force on Antitrust Policy*, 2 Antitrust L. & Econ. Rev. 11 (1969).

[64] William Kovacic, *Failed Expectations: The Troubled Past and Uncertain Future of the Sherman Act as a Tool for Deconcentration*, 74 Iowa L. Rev. 1105, 1150 (1989).