BACK TO THE GOOD OR WERE THEY THE BAD OLD DAYS OF ANTITRUST?

A REVIEW ESSAY OF JONATHAN B. BAKER'S *THE ANTITRUST PARADIGM: RESTORING A COMPETITIVE ECONOMY*

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1. Introduction

In his important and provocative new book, *The Antitrust Paradigm*: *Restoring a Competitive Economy*, Jonathan B. Baker takes on the University of Chicago, in particular the ideas in the books by Posner (1976) and Bork (1978), which he characterizes as the major force behind a profound shift in antitrust policy that persists today and that has stripped antitrust of its ability to protect competition. Baker's fundamental arguments are that competition is inadequate in many U.S. markets and that antitrust could and should be strengthened to restore competition and benefit consumers.

Baker takes no prisoners in his unrelenting critique on what he believes is Chicago's harmful influence on what was once an effective antitrust policy. He wastes little time in asserting on page 2 of his introduction that "we now know that the Chicagoans lost their bet (on antitrust deregulation)." As a corrective, Baker argues that it is imperative for the United States to return to much stronger antitrust enforcement, especially because high-technology firms are increasingly able to engage in anticompetitive conduct. The possible alternative is a return to greater government price and entry regulation of U.S. industry, which could have grave consequences.

Baker represents himself as a strong advocate of protecting competition *not* competitors and thus appears to differ from a new wave of antitrust critics who, led by Khan (2017), believe that antitrust policy has failed to "level the playing field" and to protect competitors, even at the expense of consumer welfare. However, Baker summarizes Khan's views without raising any objections, whereas Litan (2018) and Shapiro (2018) argue that populist calls by Khan and others to abandon the consumer welfare standard in antitrust are not supported by the evidence and that no better alternative has been offered.

Baker, who is an economist and a lawyer, also does not go quite as far as Tim Wu, a law professor who entitled his 2018 book *The Curse of Bigness*: *Antitrust in the New Gilded Age,* in his zeal for strengthening antitrust. Wu, for example, recommends a *per se* ban on mergers that would reduce the number of major firms in an industry to less than four and he is a strong proponent of breakups rather than consent decrees to address alleged competition problems. Baker makes strong recommendations but he couches them in economic arguments. In fact, Baker does not even cite Wu in his book as a potential ally, perhaps signaling that he does not want to stray too far from the economics tribe. In the final analysis, Baker's advocacy for stronger antitrust enforcement is closely aligned with Shapiro (2019).

Baker's book is very timely, and it is likely to be read and debated widely because it raises fundamental questions about the extent of competition in the U.S. economy, which are of vital interest to economists, and because leading federal and state policymakers have set their sights on reforming antitrust and strengthening enforcement. Not since the early 1900s has antitrust been the focus in U.S. Presidential elections as it is today. President Trump and the U.S. Department of Justice have announced plans to launch an antitrust review that will focus on technology companies including Google, Facebook, Amazon, and Apple. Senator Elizabeth Warren has made stronger antitrust enforcement a centerpiece of her candidacy for the Democrat Party's nominee for President in the upcoming 2020 election. Finally, the states have launched two antitrust probes into high technology companies: (1) 48 states plus Puerto Rico and the District of Columbia are investigating whether Google's overarching control of online advertising has resulted in anticompetitive behavior that is harming consumers; and (2) 7 states plus the District of Columbia are investigating whether Facebook has harmed consumers by endangering their data.

For the purposes of this review essay, I compress Baker's ten chapters, which follow his introduction, and cast his central arguments into a framework that: (1) identifies four issues that economists and other interested analysts can debate, and (2) indicates the chapters in Baker's book that contain his views on those issues.

Issue 1: Competition in most markets is inadequate and consumers incur large welfare losses that are not reduced by market forces.

Chapter 1 discusses market power in an era of antitrust.

Issue 2: The Antitrust Authorities Are Undermined.

Chapter 2 discusses the lack of political support among policy officials for antitrust and chapter 3 discusses how ideology can adversely affect antitrust policy and enforcement.

Issue 3: The United States could realize significant welfare gains if the antitrust laws and enforcement were reformed to address the lack of competition and the growing dominance of high-technology firms.

Chapter 4 discusses the costs of errors in antitrust enforcement, chapter 5 critiques arguments against antitrust enforcement, and chapters 6 through 9 discuss the benefits of addressing market power and its abuse in the information economy.

Issue 4: The antitrust enterprise can be restored to become more effective and to benefit the public.

Chapter 10 discusses how antitrust policy can contribute to restoring a competitive U.S. economy.

Baker integrates his views on those issues to develop a detailed and coherent argument that includes the motivation for, historical constraints on, potential benefits from, and the practicality of strengthened and expansive antitrust enforcement. However, his discussion is less detailed when it comes to identifying opposing views and to explaining all the relevant counterarguments. Generally, the opposition is referred to as Chicagoans or conservatives—I am neither—without including others who might agree with and provide material that is consistent with the opposing views or who offer useful perspectives that go beyond the Baker-Chicago debate. Kovacic (2007), for example, draws particular attention to Areeda and Turner's famous (1975) paper that raised the standards that plaintiffs must satisfy to prevail in predatory pricing claims. He concluded that Areeda and Turner, who were professors at Harvard Law not Chicago Law School, were more instrumental than *any* other commentators in motivating a fundamental reassessment of U.S. doctrine governing dominant firms. Kovacic (2003) also takes a more nuanced view of Chicago's influence than Baker does by stressing the continuity and the cumulative nature of antitrust enforcement during its evolution of being too active in the 1960s and 1970s, too permissive in the 1980s, and properly moderate in the 1990s.

University of Chicago faculty members are also varied in their perspectives and analytical approach to assessing antitrust policy. Baker primarily focuses on law school faculty who wrote conceptual or theoretical critiques of activist antitrust. But he does not mention the law school's dean, Phil C. Neal, who chaired a task force report that was submitted to President Lyndon Johnson and that recommended expansive antitrust reforms (Brozen (1970)). Economists affiliated with the business school, such as Demsetz and Brozen, wrote articles that preceded Bork's and Posner's books and that raised important doubts about interpreting the relationship between concentration and profits as justifying a deconcentration policy to reduce excess profits and consumer losses.

Surprisingly, the stalwarts of the economics department, Milton Friedman and George Stigler, did not initially adhere to an anti-government Chicago party line. Stigler (1952) advocated strong enforcement of the antitrust laws against big business because he believed that big business was, in general, insufficiently competitive, while Friedman (1999) indicated that he initially believed that enforcing the antitrust laws was one of the few things that the government could do to promote more competition. Both, however, gradually changed their views because they came to believe that the antitrust laws were used by the people who they were supposed to regulate for their own benefit and thus wound up doing more harm than good.

Friedman and Stigler viewed themselves and Chicago as applying economic theory and empirical evidence to reach policy-relevant conclusions, but Baker characterizes Chicago as simply having strong priors that markets work. However, Baker appears to have equally strong priors that markets do not work.

In what follows, I summarize Baker's arguments on each of the four issues, including, where available, additional supporting material. My assessment, which often contains an alternative view, follows each summary. Finally, I discuss briefly Baker's book in the context of antitrust and research in industrial organization.

2. The Inadequacy of Competition in U.S. Industries

The motivation for Baker's book is that many industries are characterized by dominant firms that can exercise market power by setting prices above competitive levels. Importantly, despite the enforcement activities of the two federal antitrust enforcement agencies, the U.S. Justice Department's Antitrust Division (DOJ) and the Federal Trade Commission (FTC), Baker claims that market power is widening.

Baker offers 9 reasons, which include government failure from inadequate antitrust enforcement and from restraints on competition, such as occupational licensing and an excessive scope for patents, and the failure of market forces to curb anticompetitive behavior, to explain why market power is on the rise and why it is a problem:

(1) Insufficient deterrence of anticompetitive coordinated conduct;
(2) Insufficient deterrence of anticompetitive mergers;
(3) Insufficient deterrence of anticompetitive exclusion;
(4) Market power is durable;
(5) Increased equity ownership of rival firms by diversified financial investors;
(6)The rise of dominant information technology platforms;
(7) Oligopolies are common and concentration is increasing in many industries;
(8) Increased governmental restraints on competition; and
(9) The decline in economic dynamism.

The harmful static and dynamic costs of rising market power include: (1) wealth transfers from less affluent to more affluent people and deadweight losses; (2) wasteful rent seeking by firms and individuals; (3) slowed innovation and growth; and (4) greater inequality. Baker does not attempt to provide a summary estimate of those costs and to show that they can be explained empirically by the alleged government and market failures. However, the cumulative magnitude of their social costs is potentially enormous and, if a causal relationship between those costs and the state of competition and antitrust policy and enforcement could be established and defended, then Baker's antitrust reform agenda would be more defensible.

Recent research has raised concerns that U.S. market competition may have become less intense in recent years by providing some descriptive evidence that when industry concentration is measured at the national level, which may not coincide with relevant antitrust markets, it appears to have increased. Kahle and Stulz (2017) reported that the number of public corporations has declined sharply during the past 40 years, from roughly 5000 to less than 4000, but that those corporations invested more in research and development and their total profits were higher because profitability increases with firm size. Given fewer but larger firms, Kahle and Stulz found that concentration within three-digit NAICS (North American Industry Classification System) industries had increased, on average, during the past 20 years, even accounting for private but not foreign firms, whose importance had increased during the period.

The increase in industry concentration is at the heart of Baker's concerns because it may enable firms to charge higher price markups over cost, which harm consumers. In terms of empirical support, Blonigen and Pierce (2016) argued that mergers in recent years have increased price markups and De Loecker, Eeckhout, and Unger (2018) have attracted considerable attention by reporting that the weighted average of the markup ratio at the firm level has sharply risen from 1.21 in 1980 to 1.61 in 2016, with most of the increase taking place during the 1980s and 1990s.

Baker suggests that the antitrust authorities are partly to blame for the reduction in competition and the associated costs to consumers and workers, and some evidence exists that is consistent with that view. For example, Grullon, Larkin, and Michaely (2017) suggest that merger policy has allowed consolidations that may have been blocked in previous decades. One implication of which is that the higher prices of an average hospital stay are correlated with higher rates of hospital consolidation (Abelson (2018)). In addition, although criminal penalties, including fines and jail sentences, should act as a strong deterrent against price fixing by competitors, Gonzalez, Schmid, and Yermack (2019) find little evidence that the legal system holds managers of cartel firms that participate in price fixing accountable. Instead, managers enjoy greater job security and receive higher cash bonuses, while legal sanctions against individual managers are infrequent. To the extent that DOJ does levy penalties, they are against corporations instead of against their officers. Finally, Azar, Marinescu, and Steinbaum (2017) assert that antitrust enforcement has paid little attention to whether anticompetitive (monopsony) behavior has adversely affected labor markets.

3. An Alternative View of U.S. Industry Competition

As noted, Baker attributes market and government failures to the rise in market power. Given the importance of this issue for the motivation and for subsequent arguments in his book, I provide a detailed critique of Baker's concern about market power by: (1) clarifying when market power exists, (2) reporting additional evidence on estimated markups and their interpretation, (3) identifying the extent that the lack of antitrust enforcement has contributed to market power and significant price markups, and (4) summarizing the myriad ways that market forces curb market power.

Market Power and Markups

Economists have long questioned whether one can conclude from data on market shares and profits, either presented as regression results or in descriptive summaries, that a firm has market (monopoly) power and that it is abusing it to earn excessive profits. Demsetz (1973) argued that the source of high concentration in an industry's output could derive only from a few firms' superiority in producing and marketing products. In other words, some firms are simply much more efficient than others and have lower costs or are able to offer better products. Of course, as Demsetz noted, it is not easy to ascertain just why GM and IBM (times change!) perform better than their competitors, but their profit does not arise from reducing output or colluding. Recently, Autor et al. (2020) confirmed the Demsetz view with an international assessment that concludes that superstar firms are bigger because they are more productive than other firms.

Fisher (1979) pointed out that the relevant questions to determine whether a firm or firms have market power are: Can a firm raise prices and not attract entry? Can a firm maintain high prices and exclude competitors? Did a firm succeed in a very risky industry whereas less efficient firms failed? Was a firm's large market share obtained through conduct that led to greater efficiency and lower prices and/or better products, which we would expect in a competitive environment? Thus, as an empirical matter, an increase in concentration does not necessarily lead to a decrease in industry competition and consumer welfare because less-efficient firms may be displaced or acquired by more-efficient firms.

Importantly, competition should be measured in the markets where it actually occurs. For example, it has been appropriate to evaluate the evolution of competition in the deregulated airline industry by considering both the number and identity of airline carriers at the route level, not at the national level (Morrison and Winston (1995)). Phillipon (2019) fails to do this by claiming that airlines have become more concentrated at the national level, but ignoring the intense competition provided by low-cost (e.g., Southwest Airlines) and ultra-low-cost (e.g., Spirit Airlines) carriers that have put downward pressure on fares and led to service improvements at the route level.

Rossi-Hansberg, Sarte, and Trachter (2018) present evidence consistent with Kahle and Stulz that product-market concentration increased at the national level between 1990 and 2014; however, they also show that local measures of concentration decreased during the period. It is also noteworthy that economists who have served as Deputy Assistant Attorney General for Economics or Senior Economic Counsel in the Antitrust Division of the U.S. Department, Shapiro (2018) and Werden and Froeb (2018), have concluded that there is no evidence of a recent systematic decline in competition in the United States at the level of relevant antitrust markets.

De Loecker, Eeckhout, and Unger (2018) have reported the largest estimated increases in price markups since the 1980s. However, Basu (2019) contends that their estimates have implausible implications, including that a very large share of GDP is composed of pure economic profit, an output elasticity of capital that implies that firms' investments to accumulate capital reduce their output, and an implied markup on GDP that is enormously higher than standard estimates in the macro literature.

Previous research has pointed out that rising margins could reflect the fact that the most-efficient firms with the lowest costs or with technological advantages tend to remain in business and that less-efficient firms tend to exit, with little, if any, adverse effect on competition and a positive effect on industry profitability. Recent evidence is broadly consistent with this more benign view of price markups. Van Reenen (2018) argues that apparent increases in aggregate price markups reflect the fact that many industries feature a "superstar firm(s)" that has (have) become a "winner take most or all" because of new technologies and globalization. Bessen (2017) provides supporting evidence in an important context by documenting that firms' successful use of proprietary information technology systems have raised their productivity and that industries that have recently used the technology have become more concentrated and have earned higher profit margins. Finally, Peltzman (2018) finds that rising concentration has been, on average, associated with higher productivity growth; thus, widening margins of price over input costs reflect lower costs.

Are Antitrust Authorities at Fault?

Crandall and Winston (2003) did not find much empirical evidence that antitrust policy and enforcement both before and after the influence of Bork and Posner benefited consumers by promoting competition and by preventing firms from engaging in anticompetitive actions. Even in 2001 when the government was victorious in *United States v. Microsoft Corp*, retrospective studies have not reached a consensus that the government generated large consumer benefits by bringing the case. Certainly no one predicted that Google would dominate Internet search and integrate backwards into operating systems. In fact, it has been suggested that Microsoft was somewhat reluctant to compete against Google because of antitrust concerns. Generally, it is difficult to identify in any period a fundamental change in the antitrust authorities' economic effects, whereby their actions no longer significantly benefited consumers and were responsible for a decline in competition in many U.S. industries.

Researchers have also not documented that consumers have incurred significant losses from the alleged anticompetitive actions that have been permitted by lax antitrust enforcement.

The airline industry is often used an as an example of an industry that has become less competitive because of merger policy that has enabled the remaining large legacy carriers, American, United, and Delta, to solidify dominance of their hubs in large cities while they have reduced service to smaller cities. During the same period, however, low-cost carriers, such as Southwest and JetBlue Airlines, and ultra-low-cost carriers, which include Allegiant, Frontier, and Spirit Airlines, have gained a greater share of the U.S. market and they have offered new service in markets served by the merged legacy carriers and in markets abandoned by legacy carriers. No evidence suggests that those competitive dynamics have led to a notable long-run increase in airline fares and to a decline in service quality. In the most recent and comprehensive study, Carlton et al. (2019) assessed the effects of all the large legacy carrier mergers individually and simultaneously and concluded that overall they were procompetitive because they had no significant adverse effects on nominal fares and because they were associated with significant increases in passenger traffic and capacity. Policymakers could spur additional competition in the U.S. airline industry by granting cabotage rights to foreign airlines so that they could serve domestic routes, a policy option that Baker does not consider.

The mergers of the largest western U.S. railroads, Burlington Northern-Santa Fe and Union Pacific-Southern Pacific, initially reduced shippers' welfare because the merged Union Pacific-Southern Pacific railroad displaced experienced managers who had considerable knowledge of Southern Pacific's operations. Traffic began to back up, which caused a service meltdown throughout much of the western railroad network that lasted for a few years. Eventually, the merged carriers eliminated their service problems and in the long run, the mergers have had negligible effects on prices, and they have possibly increased shippers' welfare by reducing service times (Winston, Maheshri, and Dennis (2011)). Baker does not report evidence that the long-run effects of mergers in other industries have, on average, been notably harmful to consumers' welfare.

Finally, Litan (2018) discusses the efforts by the U.S. Department of Justice to bring cases against firms that conspire to fix prices. He points out that although DOJ has brought fewer price fixing cases over time, the fines that DOJ has imposed in cases where it has been victorious have gone up substantially over time. It is not clear, however, whether DOJ's actions have deterred unlawful conduct more strongly and that they have increased consumer welfare.

Market Forces

Baker and I appear to agree, undoubtedly for different reasons, that the antitrust authorities have not been particularly effective at addressing anticompetitive concerns, but we disagree that consumer welfare has been harmed by lax antitrust enforcement. The reason is that we also disagree on the strength of market forces in protecting consumer welfare. Baker addresses this issue in chapter 5, but it will be useful for me to address it here to substantiate my view about the state of competition in the United States.

In the long run, market forces have addressed potentially anticompetitive situations by: (1) reducing entry barriers, (2) encouraging international trade and foreign competition, (3) challenging industry leaders, and (4) enabling consumers to gain competitive advantages. Unfortunately, policymakers have periodically offset those sources of greater competition by adopting anticompetitive policies, such as occupational licensing, trade protection, and patent protection.

Reducing Entry Barriers. The entry of additional firms into a market is the most common and effective way that anticompetitive behavior is policed, and that consumer welfare is protected. In fact, the entry of new firms and the exit of unsuccessful firms occur so often that the efficacy of the process is probably overlooked by most consumers. Potential entry (Baumol and Willig (1986)) and adjacent entry (Morrison and Winston (2000)) have even more subtle effects. An example of the effect of the latter type of entry occurred when Southwest Airlines reduced fares on the route comprised of Washington Dulles Airport and San Francisco Airport by entering and charging low fares on the route comprised of Baltimore-Washington International Airport and Oakland Airport.

Importantly, markets can generate competition in cases where it may be believed that competition cannot occur as illustrated by the different ways that new entrants seek to reduce entry barriers to take market share from incumbent firms, including:

● Entry into regulated industries by firms and individuals who provide a product or service themselves, such as by private trucking before trucking was deregulated and, more recently, by households who have provided their own electricity in the short term by purchasing generators.

● Challenging patent protection by "designing around a patent" to develop an alternative product that does not infringe on the patent's claims. For example, Kremer (2001) indicated that firms have developed alternatives to certain vaccines that do not violate the original patent.

● Entry by foreign firms that can provide stronger competition than U.S. firms can provide, such as foreign automakers that steadily challenged the "Big Three," General Motors, Ford, and Chrysler, following the 1970s energy shocks. Today, more new cars are sold in the United States by Toyota, Honda, and Nissan than by the "Big Three," who are now known as the "Detroit Three." Huawei could play that role in telecommunications equipment if they are not burdened by security issues and concerns.

● Mergers that enable a firm to overcome entry barriers by merging with another firm that already serves the market. For example, firms in network industries such as railroads have consummated end-to-end or vertical mergers to avoid the possibly prohibitive expense of acquiring land and installing new track to serve additional markets and to provide single-line service that is viewed by shippers as superior to interline service. Krolikowski and Okoeguale (2018) argued that, in general, the restructuring that occurred in the aftermath of deregulation was an efficient response to greater competition.

International Trade and Foreign Competition. In general, foreign competition represents an important channel of entry that enables markets to prevent anticompetitive behavior and to enhance consumer welfare by reducing prices and increasing product variety. As pointed out by Melitz (2003), foreign competition is powerful because when a country opens its markets to international trade, the most productive firms expand their markets and the least productive are driven out by increased competition; thus, trade intensifies competition by increasing productivity.

Feenstra and Weinstein (2017) estimated that the increase in U.S. import shares between 1992 and 2005 raised U.S. welfare by nearly 1%, with the source of the gain equally accounted for by the decline in price-markups and by greater product variety. Amiti et al. (2017) found that China's imports to the United States following its entry to the World Trade Organization in 2001 improved consumer welfare by reducing the price of its inputs, which reduced the price of final manufactured goods 8%, while Bai and Stumpner (2019) estimated that Chinese imports led to roughly a 0.2 percentage point annual reduction in the price index for consumer tradables. Finally, even professional sports teams in the United States have relied on foreign inputs to increase their competitiveness. For example, Depta (2015) reports that baseball players from the Dominican Republic and Venezuela accounted for nearly 20% of major leaguers in 2015.

The disciplinary impact of foreign competition has been weakened, however, by the generally protectionist policies of the Trump Administration. Yet few, if any, politicians (or even academic scholars) who have been calling for much more aggressive antitrust enforcement have pointed to the importance of avoiding trade protection to enable market forces to flourish.

Challenging Industry Leaders. The large size and apparent dominance of technology firms have revived concerns that dominant firms may harm consumers because their supra-competitive prices would not attract entry in the long run that would reduce prices. Generally, free markets do not allow any firm that has reached even near-monopoly status to have a quiet life for long because disruptive competition can emerge from: (1) firms that take advantage of technological change to challenge an incumbent firm in a different industry, and (2) new entrants in the same industry as the incumbent firm that turn out to be more efficient and innovative.

Wadhwa (2017) provided several examples of disruptive firms that took advantage of technological advances in other industries to challenge incumbent firms, such as:

● Microsoft developing Skype more fully and Facebook creating WhatsApp to decimate the costs of texting and roaming and causing telecommunications companies to lose a large amount of long-distance revenues;

● Netflix using internet connectivity and putting Blockbuster video stores out of business;

● Uber taking advantage of advances in smartphones and GPS and threatening the viability of monopoly taxi companies;

● Airbnb using similar technology to connect people with alternative forms of lodging and reducing hotel patronage.

Currently, it appears that Amazon may disrupt all forms of retail and cloud services, and Tesla, or a less well-known firm, could shake up the automobile and energy industries by making a technological breakthrough in batteries.

Christensen (1997) observed that dominant firms are not well-prepared to compete effectively against disruptive firms that come from and that adopt technologies that were developed in other industries because they are often in denial about the threat that those firms pose. In 2018, Sears—the Amazon of its day—filed for bankruptcy after 132 years in business. Ultimately, the problem with Sears was that it lacked the vision to anticipate how the Internet would be used to fundamentally change retailing. By 1993, Sears closed its national network of warehouses and catalog business; in 1995, Amazon shipped its first book. Walmart, the Amazon of the late 20th century remains one of the world's largest employers at this writing, but it is struggling to compete with Amazon in online sales.

Reynolds (2018) summarized the succession of firms over a number of decades that have been technology industry leaders only to be displaced by a new entrant in personal computers, Internet browsing, the Internet portal, search engines, personal digital assistants and cellphones, online music, and social networking. Markey-Towler (2018) theorized that both the evolutionary characteristics of markets and the organizational and behavioral factors within a firm make it difficult for "monopolies" to last very long. Although monopolies do not last, firms that are successful and that grow to become very large attract the attention of regulators, which may have a dampening effect on the firms continuing to innovate if the effect of innovation were to make the firm larger and more financially successful.

Baker's response is that monopolies may last long enough so that they must be prevented from abusing their market dominance. The historical problem for antitrust enforcers, however, has been to obtain relief while it is still relevant. The AT&T antitrust case dragged on for eight years after filing before DOJ settled it, and even then, it took two more years for the courts to approve the final settlement. The Justice Department prosecuted the Microsoft case more quickly, obtaining a verdict roughly three years from the time it commenced the investigation, but because of appellate review, the final consent decree was not issued for four more years. Various scholars have suggested ways to speed up antitrust enforcement actions—especially in monopolization cases—but the problem still remains (Litan (2018)), while Baker does not offer solutions.

Enabling Consumers to Have Competitive Advantages. Thus far, I have considered the effect that the supply side of markets, represented by individual sellers or firms, has on protecting consumer welfare. Markets also enable consumers to enhance their welfare by gaining competitive advantages, including bargaining more effectively and becoming more informed about prices and service.

Consumers have organized as a bargaining unit to negotiate lower prices for many products and services. For example, shippers have been organized by third-party logistics firms to obtain lower freight transportation rates and consumers have effectively been organized by Costco, Sam's Club, and the like to purchase bulk products at discount prices. Similarly, consumers can join organizations, such as the American Automobile Association and AARP, to obtain lower prices on various services. Consumers can also "create" competition where it may not appear to exist. For example, Grimm and Winston (2000) provided evidence that shippers who face limited railroad competition have obtained lower rates by exploiting potential geographical competition (shipping outputs to different destinations served by different railroads) or potential product competition (receiving different inputs from different origins served by different railroads).

The Internet has enabled consumers to be more effective at creating competition by providing extensive information on alternative competitors, prices, and evaluations of product and service quality. Scott Morton (2006), for example, found that the Internet benefited retail consumers by enabling them to reduce the prices they paid for new cars, term life insurance, books, and other products and services. When competition appears to be lacking temporarily, social media can discourage price gouging by providing signals for other suppliers to get their goods to the market, which would reduce excessive prices, and by publicizing the actions of offending firms, which may hurt their reputations and future sales.

4. Constraints on the Performance of the Antitrust Enterprise

Because antitrust policy is made and enforced by government officials, it is subject to and potentially influenced by politics. The difficult question is whether it is possible to provide causal evidence on how political influences may be affecting the performance of the antitrust authorities, which could be used to guide reforms.

Baker's View

Baker suggests that political economy considerations may help to explain the failure of antitrust to play a significant role in increasing industry competition. He first points to the lack of political support and traces the history of antitrust policy and enforcement and how it has ebbed and flowed with political trends, with particular emphasis on the deregulation movement that accelerated as the Chicago perspective on limited antitrust intervention gained supporters in and out of government. Baker then discusses the important issue of political misuse of antitrust and draws a distinction between special interests and ideologues but argues that both could contribute to ineffective or even socially harmful antitrust policy. Baker does not recommend, however, that antitrust should be used to achieve non-economic goals, such as reducing a large firm's political power.

An Assessment

My main reaction to Baker's thoughtful discussion is that like other discussions of political economy, it is difficult for Baker or anyone else to provide persuasive empirical evidence that explains how various political factors compromise policymaking. Given the lack of contradictory empirical evidence, it is plausible that the lack of support for antitrust is consistent with the lack of evidence of it generating significant benefits to consumers. At the same time, there is little evidence that the political influences that may exist have influenced the antitrust authorities to lose cases that greatly harm consumers or not to pursue cases that could have resulted in significant benefits to consumers.

Ideology within the government could potentially compromise policy and enforcement and there is suggestive evidence that ideological preferences are increasingly becoming a more serious concern. It is widely believed that President Trump retaliated against CNN for its daily criticisms of him by influencing the U.S. Department of Justice to oppose the proposed vertical merger between AT&T and CNN's owner, Time-Warner. (Justice did not oppose the Disney-21st Century Fox merger because Fox is the parent company of Fox News, which until recently has strongly supported Trump). Alternatively, the Trump Administration may have honestly believed that they were providing benefits to consumers by opposing AT&T and Time-Warner's merger. In any case, a federal judge and appeals court did not share that belief and they struck down the government's opposition to the merger.

The Justice Department has also opened an antitrust inquiry into four automakers' defiance of Trump's efforts to roll back environmental rules set by the Obama Administration. Ford, Volkswagen, Honda, and BMW announced an agreement with California on emissions standards that would exceed the national standards sought by Trump. Justice is investigating whether the automakers are guilty of collusive activity, which is designed to reduce choice and raise prices, while critics of the administration claim Trump is using antitrust to bully the automakers into complying with his belief that concerns about climate change are overblown.

Recent empirical evidence suggests that the Supreme Court, which often rules on antitrust and other business matters, has become increasingly polarized along ideological lines. Epstein, Landes, and Posner (2013) performed a statistical analysis of business cases and concluded that the conservatives on the Roberts Court are extremely pro-business and that the liberals are only moderately liberal. Winston, Burk, and Yan (2019) controlled for the potential selectivity bias in the case petitions that the Roberts Court accepts and concluded that the Supreme Court justices have not moderated their ideological preferences over the past two decades; instead, their preferences appear to have grown stronger and more divisive. If the current trend continues, Baker is right to be concerned that ideology not facts will increasingly influence antitrust policy and outcomes.

The most important constraint on the effectiveness of antitrust, which may interact with political factors, is the inability of the authorities to predict market outcomes in merger (Section 7, Clayton) and monopolization (Section 2, Sherman) cases. In the former, they must determine if a merger "may substantially reduce competition or tend to create a monopoly." This is a difficult matter, as the debate in AT&T-Time Warner showed. What changes would streaming video over ever more-rapid Internet connections bring to media/communications markets? In monopolization cases, even if there were evidence of monopoly, what remedy would be appropriate? Crandall and Winston (2003) argued that there is little historical evidence to indicate that the government can prescribe a remedy that increases consumer welfare.

5. The Benefits from Reforming and Strengthening Antitrust Enforcement

Baker devotes most of the remainder of his book to arguing for reforming and strengthening antitrust enforcement. After suggesting that the presumptions that the courts have developed for deciding antitrust cases should be reformed given the growth in market power, Baker critiques the arguments against strengthened antitrust enforcement and takes a forward look at antitrust rules in the information economy.

Baker's Critique

Baker identifies nine assumptions made by antitrust conservatives that he thinks seek to sustain the current paradigm of lax enforcement, but that are erroneous and should be questioned by antitrust enforcers and courts. I summarize those assumptions, divided into assumptions about markets and institutions, and include one of Baker's counterarguments in parentheses for illustrative purposes.

Erroneous Assumptions about Markets:
(1) Markets Self-Correct through Entry (the claim that airline markets are contestable is no longer seriously maintained);
(2) Markets Self-Correct Because Oligopolies Compete and Cartels are Unstable (static, non-cooperative oligopoly models show a connection between market concentration and price elevation);
(3) Monopolies Innovate (firms facing product-market competition have incentives to escape that rivalry through innovation);
(4) Monopolists Cannot Obtain More than a Single Monopoly Profit (the single monopoly-profit theory is valid only in the extreme case that the monopolist has no rivals and potential entrants);
(5) Business Practices Prevalent in Competitive Markets Cannot Harm Competition (the use of practices in competitive markets, such as tying, exclusive dealing, and other vertical restraints, does not mean that they cannot be used to obtain or maintain market power).

Erroneous Assumptions about Institutions:
(6) Erroneous Judicial Precedents are more Durable than the Exercise of Market Power (Erroneous precedents may not disappear overnight, but neither do cartels nor single-firm dominance);
(7) Antitrust Institutions are Manipulated by Complaining Competitors (Unsuccessful rivals do not systematically enjoy better access to the enforcement agencies or exert systematically greater influence on them or on the courts than do large-firm defendants);
(8) Courts Cannot Tell Whether Exclusionary Conduct Harms Competition or Promotes it (If some rules provide insufficient guidance and predictability, adopting broad safe harbors, which amounts to abandoning antitrust enforcement, is not an appropriate response);
(9) Courts Cannot Control the Costs of Private Litigation (Decisions limiting private plaintiffs' access to the courts necessarily discourage some meritorious lawsuits and reduce the deterrent effects of antitrust).

Baker concludes his critique by asserting that the benefits of antitrust enforcement as a whole almost surely exceed the costs by a wide margin, referencing his 2003 *JEP* paper for support.

Antitrust Rules and the Information Economy

In the most original material in the book, Baker devotes several chapters to envisioning a U.S. economy that is dominated by information technology firms, which pose new challenges to antitrust. Baker raises concerns about anticompetitive actions that firms could take in this environment and he suggests strong presumptions that should guide the antitrust authorities in their efforts to address those potential problems. I summarize the anticompetitive actions and presumptions as follows:

Anticompetitive Action	*Presumption by Antitrust Authorities*
Reach agreements more effectively through algorithmic coordination.	Rival firms have reached an agreement on price when they use algorithms to set prices; a defendant could respond with evidence from a computer code that prices respond to shifts in cost and demand (Harrington, Jr. (2018)).
Use dominant platforms to facilitate exclusionary conduct.	Exclusionary conduct should not be presumed to be legal.
Threaten innovation by reducing competition.	Use Gilbert (2019) as a starting point to identify mergers that would reduce the number of firms post-merger by an amount that would threaten innovation.
Harm suppliers, workers, and platform users.	Welfare tradeoffs should be rejected unless net-benefits are strongly positive.

Scott-Morton et al. (2019) go beyond Baker's recommendations for addressing the growing dominance of high-technology firms. They suggest that Congress should consider creating a specialist regulator, the Digital Authority, which could be a regulatory partner that is tasked to enhance antitrust enforcement by creating general conditions conducive to competition among companies that have a digital platform.

An Alternative View of the Benefits from Antitrust Enforcement

Baker's case for reforming antitrust policy and strengthening enforcement begins by anticipating some arguments by defenders of markets and critics of antitrust institutions and proceeds to make a case why his proposed reforms would be necessary in the future. I certainly do not believe that U.S. industries are perfectly competitive. Consumers suffer welfare losses from prices that are elevated above marginal costs and from products and services of poor quality. However the alternative view of U.S. industry competition that I presented in Section 3 documented how markets have been relentless in finding alternative ways to reduce entry barriers, generating new sources of domestic and international competition that ensure that monopolies are short lived, and enabling consumers to protect and advance their interest in obtaining lower prices and higher quality products and services. Importantly, there is little evidence that antitrust policy has complemented—or even could complement—market forces and that it deserves much credit for preventing U.S. industry competition from declining.

In motivating the case for stronger antitrust enforcement, Baker implies that today's technological giants, Facebook, Google, Amazon, and Apple, dominate their markets much like Standard Oil and AT&T did in the previous century. But the relevant antitrust issue is whether the size of those firms and their market dominance has been illegally obtained or whether those firms have abused their dominance in some fashion that has harmed consumers. By those standards, the justification for strengthened antitrust action is dubious because there is no solid evidence that today's technological giants have committed major abuses, while they have offered improved products and services at a steady pace.

Although Baker appears to defend antitrust institutions, he sends mixed signals about their efficacy because his fundamental thesis is that Chicago has influenced the antitrust authorities to adopt a limited approach to intervention and enforcement for decades at considerable cost to social welfare. Baker is, in fact, a critic of the antitrust authorities and he should agree that they have done little to improve consumer welfare because DOJ and FTC have not shown visible signs of significantly exorcising their Chicago demons and of adopting policy reforms that would satisfy him.

This point is critical because Baker implicitly assumes that those same authorities would be receptive to his strong presumptions without providing much in the way of prospective evidence that those presumptions would generate large benefits to consumers and without addressing the real possibility that strengthened antitrust enforcement could do more harm than good. Baker would have been on stronger ground if his initial characterization of competition in U.S. industries today were less extreme or if he could show that a "stronger" merger or monopolization policy could be beneficial. He could then offer a balanced view of how competition might evolve in positive and negative ways, accounting for the growing influence of information technology firms, and using that discussion to motivate appropriate reforms in antitrust policy.

6. The Antitrust Enterprise Can be Restored and Effective

It is one thing for a scholar to make a passionate case for a fundamental change in public policy as Baker has done in the case for an antitrust enterprise that is no longer adversely influenced by Chicago and that can make the American economy competitive again (aka MTAECA). It is another thing for a scholar to outline how that change could plausibly occur.

Wither Chicago?

Baker argues that the essential force for change is populist pressures to protect the political bargain, which enables all three branches of the federal government to play a constructive role in restoring a competitive economy through more effective antitrust enforcement, albeit within a conservative judicial environment. For this to occur, Baker asserts that the public must become more aware of market power and its dangers and that candidates running for office on progressive economic platforms must nurture political mobilization against the exercise of market power. In addition, the antitrust enforcement agencies must take the lead in pushing the courts to strengthen antitrust; the Chicago approach must be challenged by plaintiffs and the lower courts; and plaintiffs before the Supreme Court must rely on persuasive economic arguments that are at variance with Chicago doctrines.

Baker's final plea for action is that the Chicago school academics were right but for the wrong reason. They were right to make economics the center of antitrust analysis, but they were wrong, in his view, because their goal of securing business dynamism has been thwarted by laissez-faire policies that have rejected antitrust enforcement and that have allowed market power to fill the vacuum.

An Alternative View

As I write this essay, I believe that Baker is correct that progressive Democrats, such as Elizabeth Warren, Bernie Sanders, Alexandria Ocasio-Cortez, and others, could possibly lead a populist uprising that spurs a fundamental overhaul of antitrust policy. However, I strongly doubt that the uprising would improve the use of economics in antitrust analysis. In fact, I am not clear why Baker believes that the progressives would improve on Chicago's economic arguments or why he believes that University of Chicago faculty members are unwilling to revise their views as appropriate to improve economic analysis of antitrust issues.

For example, consider some recent work by Dennis Carlton, a long-time Chicago faculty member. Carlton (2009) argues that we need to improve our knowledge about how to improve merger policy. He argues that we need to obtain data on: (1) the relevant market pre- and post-merger, and (2) specific predictions by the government agencies about the market post-merger, with the goal of identifying the types of government analyses that are correct and incorrect and the circumstances that lead to the most errors so that government analyses can be improved and the bias in overall merger policy—too lenient or too stringent—can be reduced.

Carlton and Heyer (2008) point out that although price discrimination is not itself a violation of antitrust law, practices whose sole purpose is to enable price discrimination, such as tied sales, are a violation. The authors recommend that price discrimination be permitted regardless of its effect on static welfare because policies that reduce a successful firm's ability to profit from its success threaten to stifle innovation and growth and lower economic welfare in the long run. This is not to say that tying could never be anticompetitive and reduce welfare. For example, Grimm, Winston, and Evans (1992), published in Chicago's *Journal of Law and Economics,* concluded that tying could have that effect if a single-line railroad used it for leverage to foreclose service by an interline competitor and, as discussed by Carlton and Waldman (2014), Bork argued that Microsoft employed tactics to preserve its existing monopoly position, including tying Internet Explorer to Windows, which were anticompetitive.

Finally, Luigi Zingales, another long-time Chicago faculty member, has cautioned that the dominant high-technology firms are raising the issue of whether an alternative to Chicago's approach to antitrust would be desirable (Wakabayashi (2019)). However, Zingales did not advance any specific proposals and indicate their likely effects.

7. Antitrust and Industrial Organization

Jonathan Baker and I have crossed paths before on antitrust in a 2003 *Journal of Economic Perspectives* symposium. In my view, his new book both strengthens and weakens his earlier case for greater antitrust enforcement. It weakens the case by being preoccupied with Chicago, which effectively puts him in a corner of having to argue that: (1) Chicago's influence has greatly weakened antitrust policy and enforcement, and (2) market forces have not addressed anticompetitive behavior and have allowed competition to decline. The two arguments raise concerns whether more effective antitrust policy and enforcement is actually possible and whether such efforts may do more harm than good because market forces are, in fact, a powerful deterrent to anticompetitive behavior.

Baker strengthens his case by looking to the future and to the growing dominance of high-technology firms. It is obvious but useful to point out that firms do not innovate; people innovate. Firms do not break the law; people break the law. History shows that people do both. No one knows what the future holds, but it is important for the antitrust authorities to be on guard against people who work at high-technology companies and at other companies who could inflict significant harm on consumers by breaking the law in ways that are difficult to envision today.

Baker clearly believes that antitrust enforcement should be much more active today and in the future and he interprets the available scholarly evidence on the decline in market competition as supporting his position. My opposing view is that antitrust enforcement should be restrained but strongly guard against: (1) horizontal agreements to fix prices or divide markets; (2) mergers that create monopolies; and (3) exclusionary behaviors by firms with market power that are harmful to consumers. I have summarized the available scholarship on market competition and the efficacy of the antitrust authorities that broadly supports my position.

The distance between our positions appears to suggest that the polarity in industrial organization policy debates is comparable to the notable polarity in macroeconomics policy debates. In fact, a sizable amount of the difference between Baker's and my views is probably due to the lack of policy research and lively policy debates in industrial organization.

In 1976, Nelson reviewed a book that included essays covering much of the empirical work on concentration and profits that underlie the debate at the time about an active deconcentration antitrust policy. Nelson argued that the weakness in oligopoly theory was at the heart of the weakness in industrial organization's theoretical structure and that it did not provide guidance on the key facts to be gathered and what the facts showed. Nelson concluded that the field was in deep intellectual trouble because of the old textbook microeconomic theory. Microeconomic theory, and specifically oligopoly theory, has evolved considerably since Nelson's remarks, and has characterized more possibilities for anticompetitive behavior. However, few, if any, of those possibilities should be regarded as the base case when assessing the potential benefits of an antitrust action. Thus, industrial organization is still struggling to find a way to provide a foundation to improve antitrust policy.

The 1968 Neal Report that recommended a deconcentration antitrust policy referred to studies that found a close association between high levels of concentration and persistently high rates of return on capital. That body of literature, which was largely discredited, seemed to spur Nelson's critical observations. Following Nelson, the papers by Goldman (1977) and Dansby and Willig (1979) on industry performance welfare measures were a promising approach to monitoring industries and to possibly providing empirical motivation for the antitrust authorities to investigate whether anticompetitive actions were reducing welfare provided by an industry. However, that line of research has not evolved.

Baker does not rely on much more than textbook microeconomic theory to advance most of his arguments nor does he draw on a well-developed and accepted body of empirical industrial organization literature to make his case. Importantly, he cannot be faulted for those choices. Einav and Levin (2010) surveyed empirical industrial organization and concluded that its new methods have diffused widely into, among other things, merger reviews and antitrust litigation. But the authors do not explain how this research has significantly advanced our understanding and improved our formulation of antitrust policy. Angrist and Pischke (2010), who are labor economists, criticized the use of empirical industrial organization methods for merger analysis because of their arbitrary assumptions and lack of transparency and they appeared to favor a simpler approach with a shorter route from facts to findings. However, they left the issue of which approach can be trusted to analyze antitrust issues for further research. Einav and Levin's response to Angrist and Pischke envisioned that the U.S. Justice Department would be better served in a merger case by a clear conceptual framework that enables one to account for all of the relevant potential effects, adding the best available evidence in a sensible way. We still await that framework and more compelling evidence.

In sum, industrial organization research has not a provided a persuasive theoretical and empirical basis for rejecting a limited antitrust enforcement policy, which is still broadly associated with the University of Chicago. Baker's book makes a valiant case in favor of greater antitrust enforcement and his book should encourage others who share his views to build on his arguments to strengthen that case and to alert those who disagree with him that more research is needed to guide antitrust policy as new technologies create challenges for markets to maintain a strong competitive environment and to protect consumer welfare.

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