# Assessing the Revolution in Antitrust

New learning and evidence on market concentration do not justify a return to the dark ages of antitrust and regulation.

# **◆◆** BY DENNIS W. CARLTON AND KEN HEYER

his essay discusses the major changes that

have occurred in antitrust thinking and practice over the past half century. We approach the issue from somewhat varied backgrounds. Since the 1970s, Carlton has been a professor at the University of Chicago, been affiliated with the antitrust consulting firm Compass Lexecon, and been an adviser to the Federal Trade Commission and the Justice Department's Antitrust Division, where he also served as the deputy assistant attorney general. Heyer joined the Antitrust Division in 1982, where he served as its director of economics, and also served as deputy to the chief economist in the FTC's Bureau of Economics. Together, our experiences provide us with a useful vantage point from which to assess the antitrust revolution. It also means that certain of the cases and firms mentioned in this article are ones for

In this article, we evaluate the effects of the antitrust revolution and the growing role played by economic analysis. The next section describes what we believe that revolution was. Indeed, there were actually two revolutions. The first was the use and development by economists and other academics of economic insights to improve the understanding of market structure and firm behaviors. This included the increased application of advanced empirical techniques to large data sets. The second was a revolution in legal jurisprudence, as both the federal competition agencies and the courts increasingly accepted and relied on the insights emanating from the economic research.

which the authors may have worked or are working.

DENNIS W. CARLTON is the David McDaniel Keller Professor of Economics at the Booth School of Business at the University of Chicago and a research associate at the National Bureau of Economic Research. KEN HEYER is retired from serving at the Federal Trade Commission and the Department of Justice. The authors thank Gregory Pelnar, Paul Godek, Sam Peltzman, and Theresa Sullivan for helpful comments. This article is condensed from a forthcoming article in the Antitrust Bulletin.

The following section asks whether the revolution has been successful and whether, as some critics claim, it has gone too far. Our view is that it has generally been beneficial, though—as with any policy—it can be improved. After that, we discuss some of the hot issues in antitrust today and, in particular, what some critics say about the state of the revolution. The final section concludes with the hope that those wishing to turn back the clock to the antitrust and regulatory policies of 50 years ago more closely study that experience. Otherwise, they risk having its demonstrated deficiencies be repeated by throwing out the revolution's baby with the bathwater.

# WHAT WAS THE REVOLUTION?

As just noted, there were really two antitrust revolutions. The first involved advances in economists' thinking about the effects of high and/or increasing concentration, the efficiency of business practices, the goals of antitrust, and the economic effects of regulation. We date this revolution as beginning in earnest in the 1950s and continuing to the present. The second had to do with the application of price theory and economic evidence to antitrust issues by federal agencies and the courts. We date this revolution as beginning about 1969 and continuing to the present. We use that year as a touchstone in telling our story.

**Pre-1969**/ The use of price theory and its application to antitrust cases was a hallmark of what came to be called "the Chicago School" of thought, dating back to University of Chicago economist Aaron Director in the 1950s. As applied by Director and many of his students, as well as by academics at other institutions, especially Harvard, economic analysis often revealed that the logic employed by courts in evaluating antitrust cases was flawed, frequently confusing harm to competitors with harm to competition and consumers.

The basic antitrust doctrine pre-1969 can somewhat crudely be summarized as the belief that "big is bad" and that constraints imposed upon some firms by others likely reduce competition and harm consumers. As Ronald Coase wryly observed in his 1972 article "Industrial Organization: A Proposal for Research," "One important result of this preoccupation with the monopoly problem is that if an economist finds something—a business practice of one sort or other-that he does not understand, he looks for a monopoly explanation. And as in this field we are very ignorant, the number of ununderstandable practices tends to be rather large, and the reliance on a monopoly explanation, frequent." Furthermore, the standards applied by courts in interpreting the antitrust laws contained a confusing and often internally inconsistent amalgam of objectives.

Regarding horizontal mergers, the U.S. Supreme Court in Brown Shoe v. U.S. (1962) blocked a merger combining two firms that made and distributed shoes, ruling that though their combined market share would be small, a combined market share of as little as 5% sufficed to trigger antitrust liability. In U.S. v. Von's Grocery (1966), the Court blocked a merger of two supermarket chains that would have had a combined market share of 7.5%. In U.S. v. Philadelphia National Bank (1963), the Court circumscribed efficiencies defenses and established a subsequently widely used presumption of harm from fairly modest post-merger concentration levels.

The Supreme Court's decision in FTC v. Proctor and Gamble (1967) reflected the confused state of antitrust thinking at the time and went further than Philadelphia National Bank in dismissing efficiencies. P&G ruled that efficiencies generated by the proposed merger did not constitute a legally cognizable defense, stating, "Potential economies cannot be used as a defense to illegality, as Congress struck the balance in favor of protecting competition." Indeed, the Court found that the transaction might make entry more difficult because an entrant would face a larger rival, and that was a reason to block the merger.



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In 1968, the Department of Justice issued guidelines stating that horizontal mergers in unconcentrated markets would be challenged if each firm had 5% of the market. For vertical mergers, a firm with a 6% market share would not be allowed to purchase a supplying firm with a 10% share. By today's standards, these shares are extremely low and would not raise anticompetitive concerns. Of course, if efficiencies cannot justify a merger, one might logically argue that virtually all mergers should be blocked.

For civil non-merger practices involving contractual restrictions, there was general hostility. Exclusive territories, resale price maintenance, tying, and other vertical practices were either treated as illegal per se or, at a minimum, assumed to be highly suspicious.

With respect to the involvement of professional economists at the federal competition agencies, it was not until 1973 that the DOJ formally established an internal group of economists to work on antitrust issues, and at the FTC the influence of economists was highly limited until the 1970s.

**Post-1969**/ Beyond increased reliance on price theory, a major economic insight influencing antitrust came from Harold Demsetz in his 1973 article "Industry Structure, Market Rivalry, and Public Policy." He made a simple but powerful point. The prevailing paradigm in studying markets was structure-conduct-performance, where improved performance (e.g., lower price) was assumed to be negatively correlated with market structure (e.g., concentration). Demsetz explained how that logic could easily be reversed. If efficient firms grew, concentration could increase and simultaneously prices could fall, quality could improve, and output could rise. Demsetz's idea and other academic contributions offered empirical and theoretical support for his hypothesis, creating a revolution in thinking about when or whether concentrated markets are inherently objectionable.

Following the tradition of Coase's 1937 article "The Nature of the Firm" and the use of price theory to understand business practices, Oliver Williamson's 1975 book *Markets and Hierarchies* illustrated how efforts to minimize transactions costs across firms explained a lot of conduct that had previously been assumed to be anticompetitive. Transactions cost analysis could help explain, for example, why restrictions on distributors might be a desirable way to encourage distributors' selling effort or manufacturers' investments in marketing.

Another major development was the publication of Richard Posner's 1976 book *Antitrust Law: An Economic Perspective* and Robert Bork's 1978 book *The Antitrust Paradox.* One of the most significant achievements of both books, but especially identified with Bork's, was that they helped transform antitrust into a policy focused solely on the concept of consumer welfare. (Bork used "consumer welfare" to mean total welfare, not simply the welfare of consumers. As discussed later, however, we think this distinction is minor from a practical viewpoint.) Bork's clear advocacy for the proposition that consumer welfare—not protection of small businesses, not access by competitors to "essential" facili-

ties created by others, not the guarantee of full employment or whatever other goal one could name—was (and should be) the goal of antitrust proved extremely influential. The consumer welfare standard came to be widely accepted and employed throughout the antitrust community and in the courts. That consensus has recently been questioned, an issue we discuss below.

In addition, Frank Easterbrook's 1984 article "The Limits of Antitrust" framed antitrust policy in a way that continues to influence analysis greatly. Easterbrook explained that a decision maker must rely on inherently imperfect evidence when deciding whether to permit or condemn some behavior, and thus must consider the likely costs and benefits of at-times-incorrect decisions. These decisions, in turn, come to be influenced by the decision maker's "priors." We return to these ideas later when we discuss current criticisms of antitrust.

A final important development has to do with the efficiency properties of regulation as a substitute for the market. In his 1971 article "The Theory of Economic Regulation," George Stigler explained that, in contrast to the widely held view that regulators are omniscient and act always in the public interest, regulators themselves have imperfect information, respond to financial and political incentives, and will often be swayed to act in the interests of—be "captured by"—the regulated. These factors have frequently resulted in the hoped-for cure being worse than the alleged disease.

Economic thinking and empirical knowledge have of course advanced since the 1970s, and those advancements have helped refine or replace some earlier ideas and policies. One cannot seriously argue that antitrust policy should be frozen in place and fail to adapt to new evidence and new learning. Below, we consider recent theoretical and empirical work claiming that the antitrust revolution has not been a success because it has failed to effectively constrain the growth of market power.

Changes in antitrust case law during the past half century have been remarkable. Many horizontal mergers that the Justice Department's 1968 Guidelines would likely have challenged would not even appear on the radar screen today as potentially, let alone presumptively, harmful. There is now less emphasis on market shares and a greater emphasis on economic effects, and empirical evidence along with modern price theory are today important ingredients in just about every merger investigation—including ones involving highly concentrated markets.

Regarding vertical mergers, government enforcement efforts declined from pre-1969. Vertical mergers have been viewed as far less troubling than horizontal ones, both because there is no relevant market in which the number of suppliers is reduced and because of the efficiencies deemed likely to occur. Vertical Merger Guidelines issued by the Antitrust Division in 1984 were widely viewed as being highly permissive, though they have recently been replaced by ones containing more modern economic insights and reflecting a greater skepticism that vertical mergers are necessarily benign.

The 2010 Horizontal Merger Guidelines and 2020 Vertical Merger Guidelines both discuss the importance of efficiencies

as part of the competitive impact analysis. Rarely (if ever) have courts, having found that a merger otherwise would be harmful to consumers, permitted the merger to go forward because of the claimed efficiencies. Efficiencies do, however, at times play a significant role in the agencies' internal decision-making process. Despite the P&G case, government agencies and courts today evaluate carefully the parties' claimed efficiencies, treating them-at least in principle—as a defense rather than an offense.

Since 1969, vertical and exclusionary practices once viewed as generally anticompetitive and treated as illegal per se-including resale price maintenance, exclusive territories, and exclusive dealing-are now considered untroubling in most circumstances and are evaluated under the rule of reason balancing test. Predation cases require a demonstration that the defendant has both priced below cost and can likely recoup its losses, raising significantly the bar to winning such cases.

As for the use of economists, both federal competition agencies have for decades employed dozens of full-time PhD economists, who are integrated into virtually all antitrust analyses.

# DID THE REVOLUTION SUCCEED IN IMPROVING ANTITRUST POLICY?

The answer to that question, in our view, is yes.

In the area of cartel enforcement, though there has been little change in antitrust's general hostility toward price-fixing, there has been a substantial increase in enforcement activity. There have also been policy changes, grounded in economic theory, that have helped further deter the formation, or shorten the duration, of cartels. Changes in the law have led to a marked increase in the number of criminal prosecutions and in the severity of criminal penalties, and the Justice Department has employed an "amnesty" program to help uncover and prosecute cartels. Under this program, widely copied by authorities in other countries, when certain conditions are met, substantial leniency is afforded participants who reveal to authorities the existence of a cartel.

As regards horizontal merger policy, blocking procompetitive mergers can harm the economy by depriving consumers of the benefits from competition among more efficient firms. Most mergers in the United States raise no competitive issues and the agencies investigate only a small number intensively. Although we have seen no study, we suspect that if one looked at all the mergers that have passed scrutiny under the Merger Guidelines since 1982 but would not have done so under the 1968 Guidelines, even modest assumptions about small efficiencies would imply significant benefits from the revised merger policy.

Potentially anticompetitive mergers continue to be reviewed carefully; however, this does not rule out the possibility-indeed, the near-certainty, given our limited ability to predict the future that some anticompetitive mergers might occur. One needs to be cautious before concluding that this constitutes a failure of merger enforcement, however, because ex ante one can never know with certainty exactly which mergers are anticompetitive. If, say, 10 out of 100 potentially problematic mergers will lead to price increases while 90 are procompetitive, but one cannot tell in advance which are which, the only way to stop all the anticompetitive ones would be to stop all 100—which can be quite costly to the economy.

Vertical mergers, unlike horizontal ones, have no associated change in the number of suppliers and so are less likely to raise competitive issues than horizonal mergers. Moreover, they commonly enable more efficient coordination between firms participating at different levels of production and distribution, including pricing efficiencies through the elimination of double (monopoly) margins. Though once rather hostile toward them, there is general agreement that over the past half century antitrust policy has become less so. Although vertical mergers have become a hot topic that we discuss in more detail below, we think the lessened concern over vertical mergers-certainly relative to horizontal ones—has been appropriate and desirable.

It is widely accepted that allowing firms to engage in efficient practices, such as exclusive territories or exclusive dealing, which constrain the behavior of others, can benefit consumers through lower prices or improved products or both. The changes in antitrust policy described earlier drew heavily on economic scholarship showing that such practices are not invariably harmful, and the law now tries to identify and allow these practices when they promote efficiency. That said, there remain policy areas in need of improvement, with the antitrust treatment of tying being one prominent example. The recognition that vertical restrictions can be economically beneficial would seem to be an improvement in policy. However, firms with market power may claim that their practices are efficient when, in fact, they harm rivals, harm competition, and thereby harm consumers. This is a tough area for enforcers because, depending on the facts, the very same form of conduct that harms rivals can be efficient or can be harmful to competition. One might try to distinguish these by looking at whether output rises or is likely to rise as a result of the conduct. Unfortunately, however, even that test can be difficult to apply if the conduct is new, has been ongoing for a long period of time, or if various elements of product quality change over time.

Finally, antitrust enforcers have largely abandoned the protectionist policies of the 1936 Robinson-Patman Act, which benefited small, inefficient purchasers by creating possible liability from giving discounts to large buyers. Though the act remains on the books, government cases under this law have declined dramatically over the past half century. This is a development that any who support either a consumer or a total welfare standard should applaud.

# **CURRENT ISSUES AND CRITICS**

The policy debate today is almost the reverse of what it was in 1969. Critics are calling for increased antitrust enforcement, with some wanting to break up large companies and others wanting to regulate more of them. (Carlton has worked and may be currently working for or against some of these firms.) Curiously, the characteristics of the industries whose performance the pre-

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1969 critics wanted to improve through deregulation—network features, scale and scope economies—are similar to those that critics now want to restrain through increased regulation. Then, the industries included railroads and airlines, and later telephone services. Today, they involve digital giants such as Google, Facebook, Microsoft, Apple, and Amazon.

Support offered for a more aggressive antitrust policy, and perhaps for more regulation, comes partly from studies claiming to show that concentration in the U.S. economy has generally increased, that competition in the U.S. economy has greatly diminished, and that market power has significantly increased. These studies have been subject to criticism, including that concentration measures have used industry definitions that are a poor proxy for antitrust markets and that high margins do not necessarily imply lack of competition.

While concentration or market power may have increased in certain antitrust markets, broad-brush claims about significantly increased market power throughout the U.S. economy are likely off the mark. More importantly, the evidence is fully consistent with Demsetz's claim about concentration increasing as a result of efficient firms expanding. Markets, however imperfectly defined, in which concentration has increased are also ones in which productivity has increased. Concentration may

have increased; however, the evidence does not show that increased concentration is associated systematically with increased prices or other harms to consumers. Claims that productivity and innovation would have been even greater if only antitrust and regulation had been more aggressive are at best speculative, and in any event may be subject to the Nirvana fallacy's assumption that government institutions actually perform better in the real world than history suggests they do. Moreover, the largest increases in measured market power appear to be in industries subject to many regulations (e.g., finance, health care, and utilities), raising the possibility that regulation may be an important causal factor in—rather than, as some contend, a solution to—any diminution of competition.

Several antitrust economists have called for more stringent merger control, claiming that one important cause for the alleged poor performance of our economy is that government is allowing too many mergers that harm competition to go unchallenged. There is, to be sure, evidence from retrospective studies that certain horizontal mergers have both increased concentration significantly and also led to price increases. As discussed earlier, however, unless one can readily identify such mergers at the time the merger is proposed, the policy implications of these findings are unclear. Prohibiting too many mergers can be as costly as prohibiting too few, and increasing merger stringency risks reducing the number of efficient mergers. This would impose real costs not only on firms but on the economy as well.

The fact that rigorous merger retrospectives have not been based on a representative sample of industries is another reason for our reluctance to use them as justification for broad policy changes. We agree with Orley Ashenfelter, Daniel Hosken, and Matthew Weinberg, who in their 2014 article "Did Robert Bork Understate the Competitive Impact of Mergers?" conclude that mergers in oligopolies are not invariably benign, but also that mergers in oligopolistic markets do not always raise price. Close scrutiny of highly concentrating mergers is certainly warranted. Fortunately, the competition agencies already do (or in our experience certainly try to) scrutinize these carefully in advance when deciding whether to challenge them.

The FTC's retrospectives of hospital mergers are an excellent illustration of how well-done economic studies can, and should, have an influence on policy and on the courts. Those studies sup-

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ported the FTC's position that hospital mergers frequently give rise to anticompetitive effects, and by drawing on this research the FTC lawyers started to see their challenges sustained by the courts. Retrospectives of a particular industry can be useful in helping identify ex ante which mergers are especially likely to be problematic. Whether industry-specific studies provide a very useful guide for policies across markets other than those being studied carefully is, however, far more ambiguous.

Regarding vertical mergers, there has been an upsurge of interest in having a more aggressive policy. As described in the newly issued guidelines, vertical mergers can at times lead the merged firm to raise the costs of its rivals. While there is no doubt that vertical mergers can sometimes harm competition, and while we would not favor per se legality for them, we think it appropriate generally to continue the antitrust policy of presuming that a vertical merger is of far less concern than a horizontal one, even where one or both of the upstream and downstream markets may be concentrated. Only a horizontal merger reduces the number of rivals and, as noted earlier, efficiencies seem inherently more likely in the vertical context than in the horizontal one.

We do not believe that the antitrust revolution has resulted in widespread and systematic errors in policy or jurisprudence, though we can think of one significant area—antitrust treatment of so-called "two-sided" markets—in which recent legal precedent may create systemic problems. A two-sided market is one where, roughly speaking, it is important to get economic actors on both sides "on board" in order for the product or service to be provided—or to be provided most efficiently. One example could be a platform such as Microsoft's operating system, where the number of people using it influences the number of applications written for it and vice-versa. The way in which courts have begun applying the academic literature on two-sided markets creates potentially significant problems for antitrust policy.

An example is the Supreme Court's recent ruling in *Ohio et al. v* American Express (2018). The industry was credit cards and the two sides of the market were merchants and retail customers. (Carlton has worked and is working adverse to credit card companies.) The Court ruled that in a two-sided market the plaintiff has the legal burden not only to show clear harm on one side of the market but also to demonstrate that potentially positive effects on the other side are not large enough to outweigh those harms. This shifting of the legal burden from the defendant to the plaintiff may have substantial negative implications for plaintiffs. Normally it is the defendant—who has greater knowledge of possible pro-competitive efficiencies—who bears the burden of showing that they outweigh any competitive harm demonstrated by the plaintiff. Reversing the burden makes it far more difficult for the plaintiff to prevail, even where clear harm is manifest to at least one set of economic actors. Given the growing significance of two-sided platforms, this burden-shifting formulation seems likely to make anticompetitive conduct far harder to prosecute.

The antitrust revolution told policymakers to pay attention to one thing: the process of competition as measured by its effect on consumer welfare. It stressed that antitrust should not be used to help achieve other objectives, however desirable the objective or well-intentioned the advocate. We view recent proposals to replace or "supplement" the consumer welfare standard as more likely to do harm than good.

To illustrate the problem, consider income inequality, an issue that some would like antitrust policy to address. How it would do so is unclear. Should anticompetitive mergers, or even cartels, be permitted when the beneficiaries are predominantly lower-income suppliers serving higher-income consumers? Should efficient practices benefiting everyone be prohibited when wealthy shareholders benefit more than consumers do? Adding objectives other than consumer welfare to antitrust's mission inevitably generates tradeoffs that antitrust is ill-equipped to handle. Moreover, there are typically better tools than antitrust policy for dealing with them. To address social concerns over inequality, for example, a more efficient mechanism for dealing with it would be through programs targeted toward the alleviation of poverty.

Some critics explain that total welfare rather than consumer welfare is what should matter for antitrust policy. Perhaps a total welfare standard should be embraced more explicitly because the profits that firms earn create incentives for them to compete through innovation to the benefit of consumers. As a practical matter, however, we note that such a change is unlikely to have

much effect. Rarely in our experience would outcomes be altered by applying one standard rather than the other. In any event, antitrust law and policy already are concerned-in our view, appropriately—with market power whether on the selling side (e.g., monopoly) or on the buying side (e.g., monopsony). In this sense, at least, it is already adopting a type of total welfare standard.

Finally, we return briefly to the topic of regulation. Where market failure can be shown to exist, regulation may be appropriate, at least "in theory." Some widely cited studies and reports have recently called for widespread regulation of successful two-sided platforms, alleging that antitrust is not up to the job. As Stigler showed long ago and numerous studies have confirmed, however, regulation often leads to costly inefficiency. The dangers seem especially great in rapidly changing industries where regulation can wind up delaying innovations. Of course, the flip-side of this argument is that courts move too slowly for such industries. However, given the risks of making things much worse rather than better, we would advise extreme caution before concluding that regulation can do better than the marketplace as supplemented by appropriately targeted and perhaps appropriately speeded up antitrust enforcement.

# CONCLUSION

The antitrust revolution has greatly improved antitrust policy. Rigorous analysis based on economic theories and empirical evidence has largely replaced legal formalisms and muddled objectives, to the benefit of consumers and the economy as a whole. To the extent that new learning and new evidence refine or replace the insights applied to policy during the past half century, this should be viewed as the triumph and continuation of the revolution, not as a repudiation justifying a return to the dark ages of antitrust and regulation.

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