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The Chicago School's Limited Influence on International Antitrust

Anu Bradford,[†] Adam S. Chilton,^{††} & Filippo Maria Lancieri[‡]

Beginning in the 1950s, a group of scholars primarily associated with the University of Chicago began to challenge many of the fundamental tenants of antitrust law. This movement, which became known as the Chicago School of Antitrust Analysis, profoundly altered the course of American antitrust scholarship, regulation, and enforcement. What is not known, however, is the degree to which Chicago School ideas influenced the antitrust regimes of other countries. By leveraging new datasets on antitrust laws and enforcement around the world, we empirically explore whether ideas embraced by the Chicago School diffused internationally. Our analysis illustrates that many ideas explicitly rejected by the Chicago School—such as using antitrust law to promote goals beyond efficiency or regulate unilateral conduct—are common features of antitrust regimes in other countries. We also provide suggestive evidence that the influence of the antitrust revolution launched by the Chicago School has been more limited outside of the United States.

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INTRODUCTION

The rise of law and economics introduced profound changes in a wide range of legal fields. In few fields, however, did the movement have a more profound effect than in antitrust. The law and economics movement led antitrust law and scholarship in the United States to become increasingly informed by economic theories. Formalistic per se rules that used to characterize US antitrust doctrine gave way to a case-by-case assessment of the economic effects of firm conduct. As a result, antitrust enforcement increasingly began to rely on economic experts, theoretical models, and econometrics studies that are now all but mandatory in antitrust litigation.¹

This shift in US antitrust policy marked the triumph of ideas championed by scholars associated with the University of Chicago.² The “Chicago School of Antitrust Analysis”³ (Chicago School) used rigorous microeconomic analysis to change antitrust enforcers’ focus from economic power to economic incentives.⁴ This new focus, combined with a more conservative judiciary, led to a gradual reversal of many previously established antitrust doctrines⁵—from the prosecution of vertical mergers⁶ to the per se treatment of several forms of unilateral conduct.⁷

¹ See Michael R. Baye and Joshua D. Wright, Is Antitrust Too Complicated for Generalist Judges? The Impact of Economic Complexity and Judicial Training on Appeals, 54 J Law & Econ 1, 6, 8 (2011) (conducting a survey of 714 antitrust cases in federal and administrative courts and finding that, collectively, the cases mentioned the terms “expert reports” 332 times, “statistics” 290 times, “expert witnesses” 230 times, and “regression” 113 times). See also Patrick R. Ward, Comment, Testing for Multisided Platform Effects in Antitrust Market Definition, 84 U Chi L Rev 2059, 2070–71 (2017) (commenting on the rise of complex economic arguments in market definition).

² See, for example, Andrew I. Gavil, William E. Kovacic, and Jonathan B. Baker, Antitrust Law in Perspective: Cases, Concepts, and Problems in Competition Policy 66–67 (West 2d ed 2008) (noting how the Chicago School “altered the terms of antitrust debate” to include price theory and concepts such as market power, entry, and efficiency).

³ See Richard A. Posner, The Chicago School of Antitrust Analysis, 127 U Pa L Rev 925, 925–26 (1979).

⁴ Filippo Maria Lancieri, Digital Protectionism? Antitrust, Data Protection, and the EU/US Transatlantic Rift, 7 J Antitrust Enforcement 27, 33 (2019).

⁵ See id.

⁶ An example of a vertical merger challenge is the Supreme Court’s decision in Brown Shoe Co. Inc v United States, 370 US 294 (1962). In that case, the Court enjoined a merger in which the combined vertical market share of both companies did not reach 10 percent of the national market, and, as evidence of potential anticompetitive harm, the Court noted that in 118 cities the combined horizontal market share of companies exceed 5 percent. Id at 327, 343. See also Michael H. Riordan and Steven C. Salop, Evaluating Vertical Mergers: A Post-Chicago Approach, 63 Antitrust L J 513, 513–14 (1995) (discussing how the Chicago School’s critique of Brown Shoe and other challenges to vertical mergers led to a more permissive policy).

⁷ See Continental Television, Inc v GTE Sylvania Inc, 433 US 36, 57 (1977); State Oil Co v Khan, 522 US 3, 18 (1997); and Leegin Creative Leather Products, Inc v PSKS, Inc, 551 US 877, 907 (2007) (reversing per se policies that had been in force for decades).

Although antitrust scholars may disagree on the appropriateness of the Chicago School ideas, few would question the profound influence those ideas have had on US antitrust policy.

An open question remains, however, whether the Chicago School has influenced the antitrust policies of other countries. Anecdotal examples indicate a complex picture. For instance, several countries recognize an efficiency defense—that is, justifications used to approve an otherwise anticompetitive merger because of the various efficiencies the merger is expected to generate—in assessing the competitive effects of mergers.⁸ This practice is very much in line with the Chicago School’s ideas. But at the same time, enforcement against unilateral conduct of dominant firms remains vigorous in many jurisdictions (at least when compared to the United States), including the European Union.⁹ This practice is in tension with the Chicago School view that unilateral conduct rarely calls for an antitrust intervention.¹⁰ Moreover, Chicago Scholars also strongly condemned the use of antitrust laws for redistributive ends or the promotion of industrial policy. For them, it would be disconcerting to learn that several countries list the promotion of employment or of national industries as a goal of antitrust laws or evaluate mergers based on whether they advance the “public interest.”

In this Essay, we seek to go beyond these anecdotes and empirically measure the Chicago School’s international influence. To do so, we leverage two recently created datasets on antitrust regimes around the world.¹¹ The first—the Comparative Competition Law Dataset—provides detailed coding on the provisions of the antitrust statutes of 131 jurisdictions from their first adoption through 2010. The second—the Comparative Competition Enforcement Dataset—provides data on the enforcement resources and activities of 112 antitrust agencies between 1990 and 2010. Together, these datasets provide a detailed picture of the world’s antitrust regimes across countries and over time.

See also *Jefferson Parish Hospital District No. 2 v Hyde*, 466 US 2, 12–18 (1984) (upholding the per se rule against tying, but nonetheless limiting courts’ ability to find such conduct illegal in the absence of market power).

⁸ See Anu Bradford and Adam S. Chilton, *Competition Law Around the World from 1889 to 2010: The Competition Law Index*, 14 J Competition L & Econ 393, 410 (2018) (noting that as of 2010, at least forty-five countries had an efficiency defense).

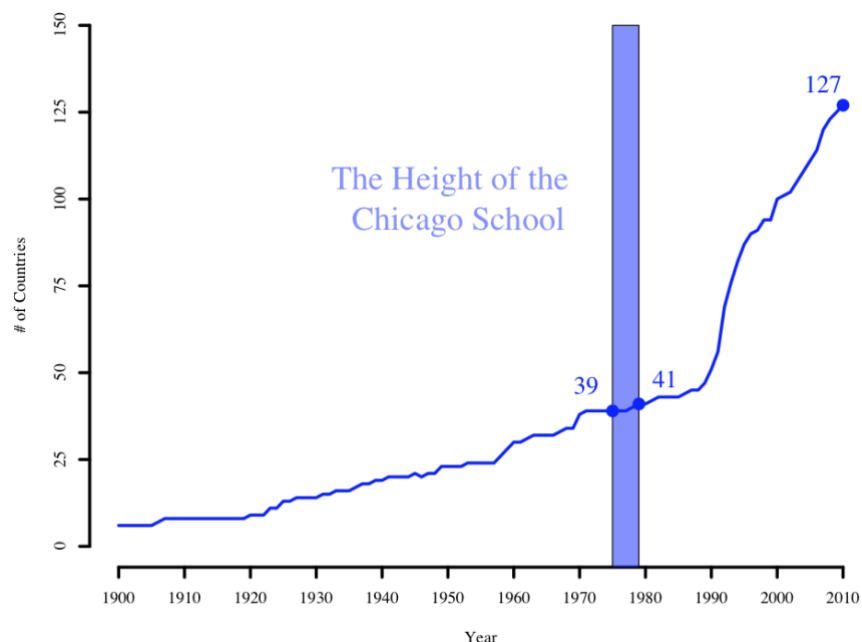
⁹ See, for example, *Google Search (Shopping)*, EComm 1 (AT.39740) (June 27, 2017) (finding that Google infringed on EU antitrust rules by displaying its own shopping service more favorably than competing shopping services in its search results); *Antitrust: Commission Fines Google €4.34 Billion for Illegal Practices Regarding Android Mobile Devices to Strengthen Dominance of Google’s Search Engine* (European Commission, July 18, 2018), archived at <https://perma.cc/2955-H28S>.

¹⁰ See Posner, 127 U Pa L Rev at 928 (cited in note 3).

¹¹ See Anu Bradford, et al, *Competition Law Gone Global: Introducing the Comparative Competition Law and Enforcement Datasets*, 16 J Empirical Legal Stud 411, 412–13 (2019). See also Bradford and Chilton, 14 J Competition L & Econ at 394–95 (cited in note 8).

As these data illustrate, since the Chicago School’s antitrust revolution, the number of countries with antitrust regimes has soared. Figure 1 shows that in 1979, at the end of the period when the Chicago School’s most prominent intellectual contributions were made,¹² just 41 countries had an antitrust regime in place.¹³ But by 2010, 127 countries had adopted an antitrust regime.¹⁴ Our data thus allows us to examine whether these 86 antitrust regimes that were adopted after the Chicago School’s prominence in the US incorporate the insights of the Chicago School into their regime, and also whether the countries that already had antitrust regimes amended their laws to reflect Chicago School theories.

FIGURE 1: COUNTRIES WITH ANTITRUST STATUTES, 1900 TO 2010



We specifically use these datasets to examine the influence of the Chicago School in three areas. First, we examine the goals and exemptions that countries have codified in their antitrust statutes. This analysis reveals that many countries have explicitly endorsed ideas in their antitrust laws that are antithetical to Chicago School theories. For instance, by 2010, 50 percent of countries with antitrust regimes had explicitly codified goals in their antitrust laws unrelated to efficiency—including the protection of small companies or promotion of

¹² See Part I.A for an explanation of why we designate this window as the height of the Chicago School.

¹³ Data on file with authors.

¹⁴ Bradford, et al, 16 *J Empirical Legal Stud* at 412 (cited in note 11).

exports.¹⁵ Second, we examine the provisions of countries' antitrust regimes that regulate unilateral conduct. These data reveal that a majority of countries with antitrust regimes prohibited several kinds of conduct that Chicago School scholars had argued were unlikely to reduce competition. For instance, in 2010, 63 percent of countries with antitrust regimes prohibited unfair pricing. Moreover, in 2010, there were more investigations opened around the world into abuses of dominance than into cartels. Third, we examine merger review policies globally. Again, this analysis illustrates that many countries with merger review regimes have laws that incorporate ideas that were rejected by the Chicago School. For example, by 2010, 42 percent of countries with antitrust regimes had merger defenses unrelated to efficiency—including the promotion of general “public interest.”

That said, from the outset, it is important to acknowledge that there are several reasons why the global influence of the Chicago School is difficult to quantify.¹⁶ First, the Chicago School's ideas are perhaps best understood as a commitment to a certain method of antitrust enforcement rather than an agreement on specific policy outcomes. This analytical method—including the general endorsement of an effects-based analysis of competitive conduct—may not always have been codified in antitrust laws the way a clear rule or policy prescription would be, making it difficult to detect. Second, the ideas associated with the Chicago School are not always easy to theoretically or empirically separate from other schools of thought that endorse economic analysis of antitrust laws.¹⁷ As a result, our evidence may be best understood as capturing the diffusion of economic analysis of antitrust laws generally as opposed to the diffusion of the Chicago School ideas specifically. Finally, the primary data we use to study the influence of the Chicago School are based on countries' antitrust statutes, which do not always reflect how laws are enforced in practice. These limitations may lead us to either under- or overestimate the extent of Chicago School's global influence.

Given these limitations, we are unlikely to settle the debate on the Chicago School's contribution to international antitrust. But we hope that our results paint a more nuanced view of the Chicago School's thrust than currently exists. Specifically, we hope to shed light on whether the Chicago School remained largely a US phenomenon, with a limited ability to shape antitrust thinking abroad, or whether its ideas diffused more broadly. We also hope that our results help enlighten the ongoing

¹⁵ See *infra* Figure 3.

¹⁶ Part II.C more extensively discusses the limitations of our approach.

¹⁷ See Posner, 127 U Pa L Rev at 933–44 (cited in note 3) (discussing the convergence between the Chicago and Harvard schools of thought).

debate on the potential need to reassess antitrust enforcement, and the Chicago School, in the United States and beyond.

This Essay proceeds as follows. Part I summarizes the Chicago School's main ideas. Part II discusses existing evidence on the international influence of the Chicago School and the difficulties that arise when trying to empirically measure this influence. Part III describes our data and empirical findings.

I. THE CHICAGO SCHOOL OF ANTITRUST

A. Background

The so-called Chicago School is the result of decades of academic scholarship on antitrust law and policy by professors associated with the economics and law departments of the University of Chicago. While it is hard to pinpoint an exact beginning and end, the Chicago School is said to have started forming around the 1950s, reflecting the teaching and influence of the University of Chicago law professor Aaron Director and the ideas developed by his students and colleagues, including Professors George Stigler, Harold Demsetz, Ward Bowman, John McGee, and Lester Telser, and Judges Robert Bork, Richard Posner, and Frank Easterbrook.¹⁸ More than articulating a cohesive theory on antitrust policy, Director instigated his peers to use microeconomics and price theory to challenge what were, at the time, key antitrust doctrines related to tie-ins, predatory pricing, and vertical conduct such as resale price maintenance and exclusive dealing.¹⁹ The Chicago School advocated that scholars and courts should focus on the incentives of economic agents and not on the structure of the market to determine the competitive effects of mergers and firm conduct.²⁰ This view directly challenged the more structuralist approach associated with the so-called Harvard School, which was concerned with market concentration.²¹ By doing so, the Chicago School promoted a more benign view of corporate conduct, one that warranted less antitrust intervention based on a belief that markets would largely self-correct while governmental intervention could entrench monopolies.²²

¹⁸ See Posner, 127 U Pa L Rev at 925–26 (cited in note 3); Andrew I. Gavil, et al, Antitrust Law in Perspective: Cases, Concepts and Problems in Competition Policy 71 (West 3d ed 2017).

¹⁹ See Posner, 127 U Pa L Rev at 928 (cited in note 3); Gavil, et al, Antitrust Law in Perspective at 72 (cited in note 18); A. Douglas Melamed, et al, Antitrust Law and Trade Regulation: Cases and Materials 52–53 (Foundation 7th ed 2018).

²⁰ See, for example, Frank H. Easterbrook, Workable Antitrust Policy, 84 Mich L Rev 1696, 1698 (1986).

²¹ See Gavil, et al, Antitrust Law in Perspective at 70–73 (cited in note 18) (discussing the shift from a structuralist view to an incentives view).

²² Posner, 127 U Pa L Rev at 932–33 (cited in note 3); Robert H. Bork, The Antitrust Paradox: A Policy at War with Itself 133 (Basic Books 1978).

The Chicago School's influence peaked in the 1970s and 1980s.²³ The enactment of new federal Merger Guidelines, which largely reflected the teachings of Chicago School scholars, demonstrated their profound impact on administrative agencies tasked with enforcing antitrust laws.²⁴ At the same time, a more conservative US judiciary also started to incorporate Chicago School ideas into US case law by reverting or qualifying important antitrust doctrines, such as those around intrabrand vertical restraints or tying.²⁵

The Chicago School's influence in the United States started to gradually wane around the 1990s and 2000s, at least in academia.²⁶ Around that time, other scholars began to combine the Chicago School's own methodological foundations with a more in-depth use of game theory to challenge, or at least qualify, some of its basic tenets including rationales for market exclusion and the Single Monopoly Profit Theorem.²⁷ This criticism of the Chicago School ideas gave birth to what some have called the post-Chicago School, which combines industrial organization, game theory, and empirical tools to measure the extent to which firms compete with one another.²⁸

B. The Chicago School Approach to Antitrust

The Chicago School approach to antitrust is difficult to summarize because there is variation in the ideas embraced by

²³ See Gavil, et al, *Antitrust Law in Perspective* at 75 (cited in note 18).

²⁴ See *id.*

²⁵ See *Continental Television, Inc v GTE Sylvania Inc*, 433 US 36, 57 (1977); *Jefferson Parish Hospital District No 2 v Hyde*, 466 US 2, 12–18 (1984); *Reiter v Sonotone Corp*, 442 US 330 (1979). Other important cases focused on how to define antitrust harm and predatory pricing, and other topics that were also impacted by the work of Harvard scholars like Professors Areeda and Turner. See William E. Kovacic, *The Intellectual DNA of Modern US Competition Law for Dominant Firm Conduct: The Chicago/Harvard Double Helix*, 2007 Colum Bus L Rev 1, 46–47. These scholars warned of the dangers of overenforcement of antitrust laws by private litigators. See *id.* at 51–54. See also *Brunswick Corp v Pueblo Bowl-O-Mat, Inc*, 429 US 477, 487 (1977); *Matsushita Electric Industrial Co v Zenith Radio Corp*, 475 US 574, 582 (1986); *Brooke Group Ltd v Brown & Williamson Tobacco Corp*, 509 US 209, 221–25, 227, 232–33, 238–39 (1993).

²⁶ See Gavil, et al, *Antitrust Law in Perspective* at 75–77 (cited in note 18) (cited in note 2) (discussing the rise of the “post-Chicago” school). The Chicago School still had important wins in the judiciary, such as the cases around resale price maintenance. See *State Oil Co v Khan*, 522 US 3, 18 (1997); *Leegin Creative Leather Products, Inc v PSKS, Inc*, 551 US 877, 907 (2007).

²⁷ See Thomas G. Krattenmaker and Steven C. Salop, *Anticompetitive Exclusion: Raising Rivals' Costs to Achieve Power over Price*, 96 Yale L J 209, 225–27 (1986); Einer Elhauge, *Tying, Bundled Discounts, and the Death of the Single Monopoly Profit Theory*, 123 Harv L Rev 397, 400 (2009); Herbert Hovenkamp, *The Antitrust Enterprise: Principle and Execution* 38–39 (Harvard 2008).

²⁸ See Herbert Hovenkamp, *Antitrust Policy After Chicago*, 84 Mich L Rev 213, 260–64 (1985) (discussing how the Chicago School models did not consider appropriately real-world problems and ignored many forms of strategic behavior). See also Gavil, et al, *Antitrust Law in Perspective* at 76 (cited in note 18). For a review on the problems of these “School” divisions, see Kovacic, 2007 Colum Bus L Rev at 72–80 (cited in note 25).

scholars associated with the School.²⁹ To simplify, we briefly explain the basic arguments of Judges Robert Bork and Richard Posner in three of their seminal works: Bork's Antitrust Paradox, Posner's Antitrust Law: An Economic Perspective, and Posner's The Chicago School of Antitrust Analysis.³⁰ We choose to focus on the works of Bork and Posner not only because of their prominent role as judges who applied the Chicago School teachings to concrete antitrust cases, but also because of their tendency to articulate largely similar and comprehensive views on how the Chicago School should impact antitrust policy.³¹

According to the Chicago School, the main goal of antitrust was the promotion of consumer welfare, which Judge Bork understood as general or total welfare.³² The Chicago School ignored "small-business welfare"³³ and the protection of competition for competition's sake.³⁴ For instance, it decried the Robinson-Patman Act³⁵ as an example of small-business antitrust that represented unsound redistributive antitrust policy.³⁶ More broadly, antitrust policy should not concern itself with redistributing surplus between consumers and firms or among different firms. This type of redistribution is better left for private bargaining, markets, and Congress.³⁷ Nor should antitrust policy be deployed for the pursuit of industrial policy.

For Chicago School scholars, price theory is the proper lens to study the competitive behavior of firms.³⁸ Courts should not infer market power from market shares (save at very high concentration levels), and should demonstrate the existence of market power and consumer harm in order to justify an antitrust intervention. Judge Bork in particular was against "incipiency"

²⁹ Posner, 127 U Pa L Rev at 932 (cited in note 3). See also Einer Elhauge, Harvard, Not Chicago: Which Antitrust School Drives Recent US Supreme Court Decisions?, 3 Competition Pol Intl 59, 71–72 (2007) (distinguishing "Judge Posner's Chicago School view" from "Judge Easterbrook's Chicago School position"); Bruce H. Kobayashi and Timothy J. Muris, Chicago, Post-Chicago, and Beyond: Time to Let Go of the 20th Century, 78 Antitrust L J 147, 154 (2012) (discussing the "many disagreements regarding the appropriate scope of policy among Chicago School scholars").

³⁰ See generally Bork, Antitrust Paradox (cited in note 22); Richard A. Posner, Antitrust Law: An Economic Perspective (Chicago 1976); Posner, 127 U Pa L Rev (cited in note 3).

³¹ It is important to acknowledge that Judges Bork and Posner did disagree on important topics, such as how to characterize predatory pricing or the dangers of parallel conduct. See note 101 and accompanying text.

³² Bork, Antitrust Paradox at 7 (cited in note 22) ("[T]he only legitimate goal of antitrust is the maximization of consumer welfare.").

³³ *Id.* at 17, 51.

³⁴ See *id.* at 58–61.

³⁵ 49 Stat 1526 (1936), codified as amended in various sections of Title 15.

³⁶ See *id.* at 64, 386.

³⁷ See Bork, Antitrust Paradox at 55–56 (cited in note 22). Bork specifically rejects granting judges the power to define trade-offs in terms of winners or losers of economic surplus. *Id.* at 80 ("Striking the balance is essentially a legislative task.").

³⁸ See Posner, 127 U Pa L Rev at 932 (cited in note 3); Bork, Antitrust Paradox at 117 (cited in note 22).

theories—that is, the proposition that courts are able to identify anticompetitive conduct before it takes place.³⁹ The Chicago view was that false positives are costlier than false negatives because the market has strong incentives to self-correct, while speculative government intervention may lead to consumer harm and a waste of taxpayer money.⁴⁰

This enforcement philosophy led the Chicago School to advocate a minimalist antitrust policy that focuses on egregious competitive restraints that have no efficiency justification.⁴¹ The goal was to fight deadweight loss: in particular, output restrictions that raise consumer prices in an artificial manner.⁴² Antitrust enforcement should therefore focus on dismantling cartels and preventing large horizontal mergers (that is, mergers between competitors) that lead to inefficient monopolies or facilitate collusion.⁴³ The Chicago School also warned against using the intent to exclude competitors as a proxy for a competition violation, as all businesses have the intent to exclude their rivals,⁴⁴ and argued that consumers would typically benefit from the exclusion of inefficient rivals.⁴⁵

The Chicago School's antitrust minimalism was supported by the School's resounding faith in efficient business conduct and self-correcting markets. The Chicago School promoted the view that most corporate conduct was efficient, further justifying the narrow scope for government intervention. This view subsequently translated into an expanded use of the efficiency defense for all forms of mergers and unilateral conduct.⁴⁶ Similarly, the Chicago School emphasized the ability of new entrants to discipline most types of anticompetitive behavior. It thereby attacked an expansive view of barriers to entry in markets, arguing that such barriers are less common than conventionally envisioned.⁴⁷

³⁹ Bork, *Antitrust Paradox* at 17, 48 (cited in note 22).

⁴⁰ See Posner, 127 U Pa L Rev at 932–33 (cited in note 3); Bork, *Antitrust Paradox* at 133 (cited in note 22).

⁴¹ See Bork, *Antitrust Paradox* at 133 (cited in note 22).

⁴² See *id.* at 35, 122–23.

⁴³ See Posner, 127 U Pa L Rev at 928, 933 (cited in note 3).

⁴⁴ See Bork, *Antitrust Paradox* at 39 (cited in note 22).

⁴⁵ See *id.* at 56.

⁴⁶ See *id.* at 19, 25–26, 88, 111. Here some clarification is needed. Antitrust initially included efficiency defenses, but the Brandeis Supreme Court movement largely set them aside. In addition, Judge Bork was initially against an efficiency defense in mergers as proposed in Oliver E. Williamson, *Economies as an Antitrust Defense: The Welfare Tradeoffs*, 58 Am Econ Rev 18, 33 (1968), arguing that courts would not be able to properly measure it. See Bork, *Antitrust Paradox* at 111–12 (cited in note 22). For him, efficiency should be largely presumed as a result of mergers. See *id.* Nonetheless, we believe that Chicago School scholars were largely responsible for bringing discussions on the efficiency of mergers back to antitrust policy, similarly to what they have done to discussions around efficiency in many other areas.

⁴⁷ See Bork, *Antitrust Paradox* at 310–29 (cited in note 22). In particular, the Chicago School argued that economies of scale, product differentiation, expenditures on

The presumption that mergers generally lead to efficiencies lent support for a narrow merger regime limited to reviewing large, horizontal mergers.⁴⁸ The Chicago School was not concerned about simple increases in market shares (save at very high concentration levels).⁴⁹ It also criticized American courts for neglecting this efficiency justification, in particular the Supreme Court's Brown Shoe Co, Inc v United States⁵⁰ and United States v Von's Grocery Co⁵¹ decisions.⁵² The Chicago School scholars defended vertical mergers as generally efficient, asserting that they rarely lead to foreclosure concerns.⁵³ Similarly, conglomerate mergers were seen as typically efficient, warranting little antitrust intervention.⁵⁴

Chicago School scholars further believed that firms cannot generally obtain or enhance monopoly power through unilateral action. This is because, in most cases, firms would just preserve or gain market share at the expense of profits.⁵⁵ In addition, antitrust law should not be concerned with attacking companies in monopolized or oligopolized industries when their size has been achieved by internal growth, as larger firms are normally more efficient than smaller ones.⁵⁶ As previously noted, they also viewed oligopolies as largely competitive.⁵⁷ Judge Bork goes as far as to say that exclusionary conduct by dominant firms is a class of illegal behavior that does not exist.⁵⁸ For example, predatory pricing is generally procompetitive, as subsequent attempts to recoup losses from below-cost pricing will inevitably face new entry that erodes monopoly profits. Even if strategic behavior in specific circumstances could lead to predatory pricing, the high administrative costs of separating legitimate discounts from predatory pricing should prevent authorities from focusing enforcement on such conduct.⁵⁹ Given the Chicago School's

advertising and promotion, rebates, and dealership deals and capital requirements in general do not constitute entry barriers. See *id.*

⁴⁸ See *id.* at 221, 231 (arguing that “[horizontal] mergers up to 60 or 70 percent of the market should be permitted” and that “there is no reason for the law to oppose [vertical] mergers”).

⁴⁹ See *id.* at 180–81. That is because many oligopolies were seen as actually competitive.

⁵⁰ 370 US 294 (1962).

⁵¹ 384 US 270 (1966).

⁵² See Bork, Antitrust Paradox at 198–204 (cited in note 22) (attacking the decisions in Brown Shoe Co and Von's Grocery Co).

⁵³ See Bork, Antitrust Paradox at 227 (cited in note 22). Cases in which products are not consumed in fixed proportions may be exceptions, but even in those cases vertical mergers may increase efficiency by enabling price discrimination.

⁵⁴ See *id.* at 246. Conglomerate mergers are defined as any merger that is neither horizontal (fear of coordination) nor vertical (fear of foreclosure).

⁵⁵ See Posner, 127 U Pa L Rev at 928 (cited in note 3).

⁵⁶ See Bork, Antitrust Paradox at 164, 178 (cited in note 22).

⁵⁷ See *id.* at 103–04, 180–81.

⁵⁸ See *id.* at 171.

⁵⁹ See Posner, 127 U Pa L Rev at 939–40 (cited in note 3).

benevolent view of unilateral conduct, it resisted the idea of breaking up monopolies.⁶⁰

The Chicago School also viewed many other competition restrictions as efficiency enhancing. For example, intrabrand restraints were seen as generally procompetitive given their tendency to spur interbrand competition.⁶¹ Similarly, price discrimination allowed the monopolist to serve additional consumers and mitigate deadweight loss.⁶² The Chicago School also emphasized the efficiencies associated with maximum and minimum resale price maintenance,⁶³ exclusive dealing and long-term contracts,⁶⁴ territorial restraints,⁶⁵ conditional discounts,⁶⁶ and tying.⁶⁷

II. THE GLOBAL INFLUENCE OF THE CHICAGO SCHOOL

As the above discussion illustrates, the Chicago School advocated a much smaller role for antitrust enforcement than what existed at the time in the United States.⁶⁸ But beyond the acknowledgement of the gradual adoption of antitrust law and economics in the EU and a few other jurisdictions, there has been limited scholarship on the whether the Chicago School's more minimalist approach—or what Judge Easterbrook called “workable” antitrust policy⁶⁹—disseminated outside of America. In this Part, we first discuss what is known about the ways Chicago School ideas—and law and economics more generally—have shaped antitrust policies around the world. We then explain why the specific ideas associated with the Chicago School seem to have gained limited traction. Finally, we address the difficulty of empirically testing the extent of the Chicago School's influence.

⁶⁰ See *id.* at 944–45; Bork, *Antitrust Paradox* at 178 (cited in note 22). The reason for opposing breakups as a remedy was twofold: either competition is feasible, in which case new entrants are more efficient than governments in transforming uncompetitive oligopolies into competitive markets; or markets are simply not competitive (for example, natural monopolies), in which case breaking up firms would lead to a loss of scale and inefficiencies. Posner, 127 U Pa L Rev at 944–45 (cited in note 3).

⁶¹ See Bork, *Antitrust Paradox* at 156–57 (cited in note 22). Interventions in these cases should be restricted to the few cases in which the market shares of the company involved are very high (approximately 80–90 percent) and there is proof of intent to harm competition. *Id.* at 157.

⁶² See Posner, 127 U Pa L Rev at 926 (cited in note 3); Bork, *Antitrust Paradox* at 240 (cited in note 22).

⁶³ See Posner, 127 U Pa L Rev at 926 (cited in note 3); Bork, *Antitrust Paradox* at 280–81 (cited in note 22).

⁶⁴ See Posner, 127 U Pa L Rev at 927 (cited in note 3); Bork, *Antitrust Paradox* at 309 (cited in note 22).

⁶⁵ See Posner, 127 U Pa L Rev at 927 (cited in note 3); Bork, *Antitrust Paradox* at 297–98 (cited in note 22).

⁶⁶ See Bork, *Antitrust Paradox* at 326 (cited in note 22).

⁶⁷ See Posner, 127 U Pa L Rev at 926 (cited in note 3); Bork, *Antitrust Paradox* at 375 (cited in note 22).

⁶⁸ See Kovacic, 2007 Colum Bus L Rev at 17–18, 21–22 (cited in note 25).

⁶⁹ Easterbrook, 84 Mich L Rev at 1700–01 (cited in note 20).

A. What We Know About the Influence of the Chicago School

While a significant body of scholarship discusses the influence of the Chicago School on US antitrust law, we are unaware of any notable literature examining the influence of the Chicago School across the world. The existing scholarship recognizes the international influence of the law and economics movement in general, but it pays little attention to the role of the Chicago School in particular. While this literature suggests that law and economics has gained some traction outside the US, the influence of the Chicago School seems more tentative.⁷⁰ Some commentators even suggest that outside the US, “the Chicago model has in general been studied more for its pitfalls than for its accuracy and appropriateness.”⁷¹ But the Chicago School ideas may have diffused selectively as part of some foreign jurisdictions’ willingness to embrace principles associated with law and economics.

In particular, over the last two decades, the law and economics movement has become more influential in some parts of the world, even though foreign jurisdictions have embraced it more selectively and deployed its ideas with more caveats compared to the US.⁷² As a result, a growing number of antitrust jurisdictions “are creating, analyzing, and enforcing law with an eye toward its economic consequences, usually defined in terms of allocative efficiency.”⁷³ For instance, the Small but Significant and Non-transitory Increase in Price (SSNIP) test—an economic test used to identify the smallest relevant market within which a monopolist could profitably impose a significant increase in price—is now the most commonly used method for market definition across jurisdictions.⁷⁴

The evolution of EU antitrust law illustrates the growing influence of law and economics outside the United States. As of the late 1990s and early 2000s, the EU has increasingly embraced economic analysis of antitrust law, including some aspects of the Chicago School.⁷⁵ The goal of EU antitrust law has increasingly

⁷⁰ See Spencer Weber Waller, *The Law and Economics Virus*, 31 *Cardozo L Rev* 367, 401 (2009).

⁷¹ Mel Marquis, *Idea Merchants and Paradigm Peddlers in Global Antitrust*, 28 *Pac McGeorge Global Bus & Dev L J* 155, 203 (2015).

⁷² See Waller, 31 *Cardozo L Rev* at 401 (cited in note 70).

⁷³ *Id.* at 368.

⁷⁴ See United Nations Conference on Trade and Development Board, *The Use of Economic Analysis in Competition Cases* *8 (Apr 28, 2009), archived at <https://perma.cc/YX8M-C6VN>.

⁷⁵ See, for example, Richard A. Posner, *The Future of the Law and Economics Movement in Europe*, 17 *Intl Rev L & Econ* 3, 5 (1997) (discussing the “rapid growth of the [law and economics] field in Europe”); Wolfgang Wurmnest, *The Reform of Article 82 EC in Light of the “Economic Approach”*, in Mark-Oliver Mackenrodt, Beatriz Conde Gallego, and Stefan Enchelmaier, eds, *Abuse of Dominant Position: New Interpretation, New Enforcement Mechanisms?* 1, 1–2 (Springer 2008) (noting that since the late 1990s, the European Commission’s attempts to modernize EC competition law have been focused

centered on consumer welfare:⁷⁶ the broader goals that characterized the earlier decades of EU's antitrust policy are no longer key drivers of EU enforcement, even if some, such as market integration, remain important.⁷⁷ Various European Commission enforcement guidelines similarly emphasize the effects-based analysis and the central role of the efficiency defense.⁷⁸ On mergers, the European Commission's approach is similar to the United States'.⁷⁹ On unilateral conduct, the Commission has abandoned its prior, overly formalistic analysis in favor of a more effects-based analysis of anticompetitive behavior—even if the Commission continues to be criticized for falling short of the economic analysis endorsed in its own Article 102 guidelines, or deeming (almost) per se illegal certain types of conduct that are (almost) per se legal in the United States.⁸⁰

As evidence of this general shift toward greater acceptance of economic analysis of EU antitrust law, the former Director General of Competition for the European Commission, Philip Lowe, argued in a 2003 speech for the need for a “comprehensive reassessment of practice under Article [102] in the light of economic thinking [because] [a] credible policy on abusive conduct must be compatible with mainstream economics.”⁸¹ Suggesting that the EU had learned from US doctrine, Lowe emphasized the need to focus on “economic analysis” and apply economic theory to existing case law.⁸² The shift in tone took place in merger review after the European Commission experienced a string of humiliating defeats before the European Court of Justice, which in 2002 overturned three of the Commission's merger prohibitions at the appeal stage in a close sequence, strongly criticizing the

on “an increased role of economics in competition law,” with “strong emphasis [] placed on the promotion of economic efficiency and consumer welfare”).

⁷⁶ See Robert O'Donoghue and Jorge Padilla, *The Law and Economics of Article 102 TFEU* 6 (Hart 2d ed 2013) (“[I]t is more than tolerably clear that consumer welfare is now the primary objective of EU competition law”). The interpretation of consumer welfare in the EU diverges from the United States in important ways, in particular given the requirements of Article 101(3) TFEU. See Jacques Crémer, Yves-Alexandre de Montjoye, and Heike Schweitzer, *Competition Policy for the Digital Era* *40 (EU 2019), archived at <https://perma.cc/8K4J-Q6BB>.

⁷⁷ See Wurmnest, *The Reform of Article 82 EC* at *17 (cited in note 75) (noting that an EU approach to competition law “places welfare considerations next to the traditional objectives, such as market integration”).

⁷⁸ See O'Donoghue and Padilla, *Article 102 TFEU* at 79–80, 225–26 (cited in note 76).

⁷⁹ See Waller, 31 *Cardozo L Rev* at 398 (cited in note 70).

⁸⁰ See O'Donoghue and Padilla, *Article 102 TFEU* at 270 (cited in note 76); Alison Jones and Brenda Sufrin, *EU Competition Law: Text, Cases, and Materials* 365 (Oxford 6th ed 2016) (discussing the EU application of effects analysis in unilateral conduct). For a brief EU/US analysis, see Lancieri, 7 *J Antitrust Enforcement* at 34–36 (cited in note 4).

⁸¹ Philip Lowe, *Speech Delivered by Philip Lowe at the Fordham Antitrust Conference in Washington* *2 (Fordham Corporate Law Institute, Oct 23, 2003), archived at <https://perma.cc/B3KN-LGZB>.

⁸² *Id.* at *3, 7.

Commission's inadequate economic assessment.⁸³ This criticism prompted the Commission to reassess its antitrust policy, and contributed to its greater willingness to embrace economic analysis as a cornerstone of the EU's antitrust enforcement. A 2009 study by the United Nations Conference on Trade and Development (UNCTAD) also documents the shift in EU antitrust policy, citing the recent reforms in EU antitrust law "from a form-based towards a more effects-based approach [as] an example of greater reliance on economic analysis."⁸⁴ In particular, the UNCTAD emphasizes the EU's adoption of the SSNIP test for defining relevant markets in 1997, the revision of its rules on vertical and horizontal restraints in 1999 and 2000, and its revised merger regulations in 2004 and 2007.⁸⁵

Despite these developments, many key elements of EU antitrust law that are contrary to Chicago School principles have remained intact. For example, the EU continues to challenge vertical and conglomerate mergers contrary to the Chicago School's teachings that emphasize these types of mergers' pro-competitive effects.⁸⁶ In a similarly stark departure from the Chicago School ideas, vertical agreements that contain territorial restrictions or restrict the resale price of goods or services often lead to per se antitrust liability in the EU.⁸⁷ Additionally, the EU treats exclusionary conduct by dominant firms with suspicion and actively pursues these firms' tying, discounting, exclusive dealing, as well as predatory, discriminatory, or unfair pricing practices.⁸⁸ By continuing to subject such a broad range of conduct to antitrust scrutiny, the EU shows it has not relinquished its rather "maximalist" approach to antitrust, which is antithetical to the Chicago School's antitrust minimalism.

Some scholars have suggested that the way law professors and students are trained explains why law and economics takes hold in certain places. For example, Professor Spencer Weber Waller argues that law and economics became more influential in the EU as increasing "direct study and personal, professional, and academic contacts between the U.S. and E.U. competition communities . . . inevitably expose[d] E.U. decision-makers to Chicago School jurisprudence."⁸⁹ Similarly, in Japan, law and economics became more prominent as young Japanese faculty

⁸³ See Waller, 31 *Cardozo L Rev* at 397–98 (cited in note 70).

⁸⁴ United Nations Conference on Trade and Development Board, The Use of Economic Analysis at *3 (cited in note 74).

⁸⁵ See *id.* at *3 n 3.

⁸⁶ See Bradford, et al, 16 *J Empirical Legal Stud* at 436 (cited in note 11).

⁸⁷ See Ioannis Apostolakis, Resale Price Maintenance and Absolute Territorial Protection: Single Market Integration, the Ancillary Restraints Doctrine and the Application of Article 101 TFEU to Vertical Agreements, 38 *World Competition* 215, 215–17 (2015); Bhawna Gulati, Minimum Resale Price Maintenance Agreements: Economic & Commercial Justifications, 9 *Manchester J Intl Econ L* 92, 95 (2012).

⁸⁸ Waller, 31 *Cardozo L Rev* at 395 & nn 97–98 (cited in note 70).

⁸⁹ *Id.* at 397.

were increasingly completing at least part of their training in the United States.⁹⁰ One empirical study attributed the popularity of law and economics in some countries, but not others, to different structural incentives in each academic community: in countries such as Israel, the Netherlands, and the United States, writing law and economics papers is viewed as more valuable when considering academic appointments and promotions, leading to greater influence of law and economics there in comparison to countries like Germany.⁹¹

Frequent interactions among antitrust enforcers have also contributed to the dissemination of economic theories. The US and the EU antitrust agencies have concluded several bilateral cooperation agreements with their foreign counterparts.⁹² These formalized channels of interaction, together with cooperation on technical assistance and training, have enabled greater diffusion of basic economic theories underlying antitrust enforcement in the United States and the EU.⁹³ The Organisation for Economic Cooperation and Development (OECD) and the International Competition Network have also provided important settings for voluntary cooperation and diffusion of best practices, including economic analysis of antitrust law. However, these networks have not fully embraced the Chicago School's vision of antitrust law. Instead, they have endorsed a more expansive notion of antitrust enforcement while emphasizing the benefits of economic principles as a foundation of sound antitrust policy.

B. Why the Chicago School's International Influence May Be Limited

The growing popularity of law and economics in some jurisdictions begs the question why the Chicago School has had a more limited international influence. One explanation is that the Chicago School never intended to have a global reach. Its creators and promoters were primarily focused on transforming American antitrust doctrine and lacked any self-conscious objective to spread its teachings abroad. Yet the absence of a "missionary agenda" likely also reflects the thin international antitrust landscape at the height of the Chicago School's influence. Only forty-one jurisdictions had adopted an antitrust law by 1979.⁹⁴ Few likely predicted in the early 1970s that the world in 2019

⁹⁰ See Shozo Ota, *Law and Economics in Japan: Hatching Stage*, 11 *Intl Rev L & Econ* 301, 302 (1991); J. Mark Ramseyer, *Law and Economics in Japan*, 2011 *Ill L Rev* 1455, 1461.

⁹¹ See Oren Gazal-Ayal, *Economic Analysis of "Law & Economics"*, 35 *Cap U L Rev* 787, 797–803 (2007).

⁹² See Marquis, 28 *Pac McGeorge Global Bus & Dev L J* at 176 (cited in note 71).

⁹³ See *id.* at 177 (noting that the first general bilateral agreements "enabled agencies to build a communicative infrastructure and to intensify personal contacts, develop trust, and exchange expertise").

⁹⁴ Bradford, et al, 16 *J Empirical Legal Stud* at 417 (cited in note 11).

would have over 130 jurisdictions with a domestic antitrust law or saw the extent to which the conduct of US corporations would be constrained by EU and other foreign antitrust regulators.⁹⁵ Thus, there was no perceived need to internationalize the Chicago School ideas at the time.

More recently, there has been a growing understanding in the United States of the globalization of antitrust law, which has led to a more concerted effort to export US-style antitrust laws and economics abroad. However, by the time the significant internationalization of antitrust law had become clear, the more coherent ideas of the Chicago School had given way to a more diffuse set of economic ideologies, shaped by multiple different schools of thought. Thus, when the DOJ and the FTC began to engage with their foreign counterparts in earnest in the late 1990s, their “export product” was a more diluted version of the Chicago School. In other words, the economic principles they endorsed no longer followed the pure tenants of Chicago School ideas, and they instead embraced variations of Harvard School and post-Chicago School economics that had since become mainstream in US antitrust thinking.

Relatedly, what may also have compromised the direct influence of the Chicago School ideas is the lack of a scholarly consensus over which facets of US antitrust law were actually influenced by them, as opposed to a hybrid Chicago-Harvard or post-Chicago ideas. If this was not clear in the United States, it was likely even less clear for any foreign jurisdiction looking to import ideas from abroad. Any country seeking to emulate US antitrust policies hence was less likely to make the distinction among these variants of economic thinking, adopting some elements of each as opposed to any pure variant of the Chicago School. Further, even those elements were more likely adopted to fit the local needs and circumstances, further blending the theories that came to guide the various domestic antitrust laws.

What may have further compromised the global diffusion of Chicago School ideas is that by the time most foreign jurisdictions adopted an antitrust law, they had an alternative antitrust model to follow and often preferred to turn to the EU antitrust laws instead. While the United States has attempted to promote the “development of sound antitrust laws” abroad,⁹⁶ historically, the EU system has had more direct influence on countries seeking to implement competition policies for the first time.⁹⁷ There are several reasons for this, including that the EU actively promotes

⁹⁵ Id.

⁹⁶ Wendell L. Willkie II, *Antitrust Goes International*, 59 *Antitrust L J* 563, 563 (1991).

⁹⁷ Anu Bradford, et al, *The Global Dominance of European Competition Law over American Antitrust Law*, *J Empirical Legal Stud* *12, 16 (forthcoming), archived at <https://perma.cc/NJ76-GG87> (examining 126 countries’ first competition law adopted and finding that more countries have implemented laws similar to the EU than to the US).

its model through preferential trade agreements and has an administrative template that is easy to emulate due to its relative statutory precision.⁹⁸ Former FTC Chairman William E. Kovacic suggests that unlike the EU, the United States does not have the consolidated bargaining power to induce potential trade partners into adopting its antitrust models; it instead must persuade those jurisdictions that its experience and theories are superior.⁹⁹ The United States' attempts to emphasize the superiority of its policy, however, have rarely been successful. Indeed, we show elsewhere how the EU's antitrust model eclipsed that of the US in the 1990s as the template for new antitrust jurisdictions.¹⁰⁰

However, the EU's gradual adoption of economic analysis, in turn, may have contributed to the diffusion of the law and economics movement around the world. Thus, the United States' ideas of antitrust law and economics have most successfully diffused only once the EU started to embrace and promote them as part of its own legal regime. Yet the EU never embraced a strong version of the Chicago School and has been hesitant to spread many of its principles. This partially explains why the variant of law and economics that has gained traction abroad is the variant embraced by the EU. As we show in the next Part, many jurisdictions around the world continue to follow the EU's lead in prohibiting a broad range of anticompetitive conduct by a monopolist and restricting many types of vertical agreements that the Chicago School considered *per se* procompetitive. However, by recognizing efficiency defenses and enforcing their laws against the benchmarks of consumer welfare or efficiency, these jurisdictions also acknowledge the broader contours of law and economics as key to their antitrust policies.

Even though the Chicago School's international influence may be limited in practice, an argument could be made that the Chicago School's philosophy would have served many foreign jurisdictions well. The Chicago School's minimalist doctrine could well have been simpler for many jurisdictions to follow compared to the more nuanced analytical models associated with post-

⁹⁸ Id at *23, 28. See also William E. Kovacic, The United States and Its Future Influence on Global Competition Policy, 22 Geo Mason L Rev 1157, 1157 (2015) (suggesting that "the compatibility of the EU's antitrust institutions with civil law states that were new adopters of competition law contributed to its increased influence"); Dina I. Waked, Adoption of Antitrust Laws in Developing Countries: Reasons and Challenges, 12 J L Econ & Pol 193, 202 (2016) (noting that "the EU has been extremely active in the process of spreading its competition law to developing countries. . . . to the extent where some argue that today the EC competition law is the dominant model of competition law in the world") (quotation marks omitted).

⁹⁹ See Kovacic, 22 Geo Mason L Rev at 1159–60 (cited in note 98). See also Marquis, 28 Pac McGeorge Global Bus & Dev L J at 181–82 (cited in note 71) (suggesting that "unlike the EU, the U.S. may not hold a comparable trump card strong enough to insist on an isomorphic remodeling of its trade partner's substantive arrangements in the field of competition law").

¹⁰⁰ Bradford, et al, J Empirical Legal Stud at *16 (cited in note 97).

Chicago School. This may be true in particular for countries with few resources and hence the ability to engage only in selective antitrust interventions. The inadequate economics training of many agencies and judges in some countries may make it difficult for those jurisdictions to pursue conduct when pro- and anticompetitive effects are difficult to separate. For example, unilateral conduct, vertical agreements, and vertical mergers are difficult to investigate as they often present complex trade-offs between pro- and anticompetitive effects. The narrow focus on hard-core cartels or horizontal mergers could therefore have presented a legitimate enforcement agenda that would have been more feasible to carry out.

Despite the advantage of the Chicago School's narrow enforcement agenda, some jurisdictions may not have had the domestic support for the strong promarket ideology that was associated with the Chicago School. For instance, the markets in some developing countries were less robust and more prone to failure, inviting an antitrust agenda that was broader and more interventionist. Also, public support for the pursuit of unilateral conduct by monopolies was high in many of the jurisdictions, in particular in economies where the state still controls many large enterprises or where privatization has merely shifted the ownership of large conglomerates from public to private hands. There was thus no fertile political economy ground for the Chicago School ideas in their pure forms to take hold.

C. Why the Chicago School Influence Is Difficult to Test

Testing the international influence of the Chicago School empirically is difficult, which likely explains the few attempts to do so to date. As mentioned in the introduction, our own attempt to do so faces three important limitations: (1) the Chicago School is a commitment to analytical methods rather than specific statutory provisions or policy outcomes; (2) the the Chicago School's propositions are intertwined with the broader growth of the law and economics movement; and (3) our database reflects mostly antitrust statutes around the world, which may fail to capture subtleness in policy changes. While we do our best in this Essay to overcome these limitations, we readily acknowledge the limitations to our analyses.

First, as we explained in Part I.B, the Chicago School was more of a commitment to deploy certain methods, like price theory, to understand firm behavior than it was a specific substantive philosophy. This means that even Chicago School scholars disagreed on policy outcomes.¹⁰¹ This creates two

¹⁰¹ For example, Judges Bork and Posner disagreed on how to treat predation claims, with Bork advocating an almost per se legality to predation and Posner affirming that it can be damaging in specific circumstances. Compare Bork, *Antitrust Paradox* at 154 (cited

challenges: first, it allows us to, in theory, pick the most favorable results to our analysis and then justify them on some variation of the Chicago School; and second, the Chicago School methods normally lead to most forms of firm behavior being evaluated under the rule of reason—a process not always reflected in formal rules that form the core of our database.

Second, some of the ideas associated with the Chicago School are somewhat intertwined with a more general use of economic analysis of law. This is a limitation that we cannot effectively address. Therefore, the results below, to the extent they indicate a spread of the Chicago School, can be interpreted more broadly to capture the diffusion of economic analysis of antitrust laws generally as opposed to specific diffusion of the Chicago School's ideas—although the Chicago School was a key driver behind the emergence and evolution of economic analysis of antitrust.

Third, the data we deploy to study the Chicago School's influence consists of comprehensive coding of the world's antitrust statutes and selected aggregate information on enforcement actions taken by antitrust authorities around the world. To the extent that these laws and cases do not reflect the actual enforcement practice of a given country, our results may underestimate or overestimate the extent of the Chicago School's global influence.¹⁰²

III. EMPIRICAL EVIDENCE

We are not aware of previous attempts to study empirically the international influence of the Chicago School. The goal of this study is therefore to explore the international influence of the Chicago School with the help of novel data. We first briefly introduce our data on antitrust laws and enforcement around the world. We then examine whether countries' antitrust regimes are consistent with Chicago School ideas in three ways: (1) the goals and exemptions they explicitly incorporate into their antitrust laws, (2) their regulation of unilateral conduct, and (3) their provisions on the review of mergers.

A. Data

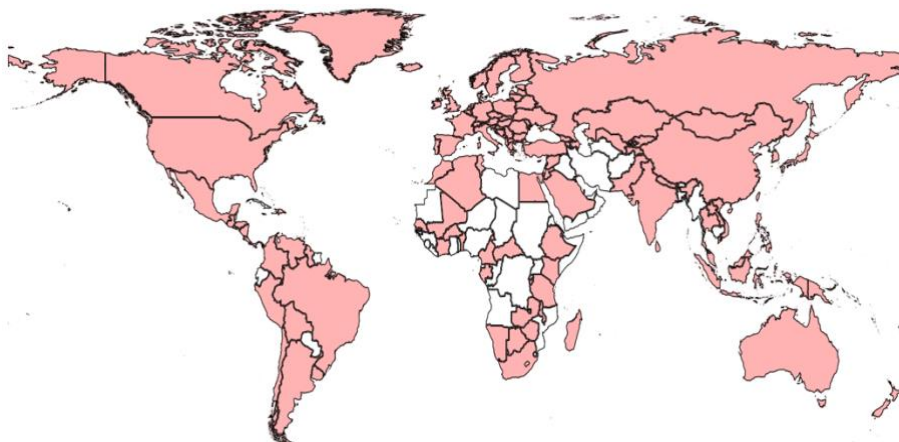
In order to test the international influence of the Chicago School, we use data that we recently collected as part of the

in note 22) (concluding that “[i]t seems unwise” to create predatory pricing rules, because predation likely does not exist or exists only in rare cases), with Posner, *Antitrust Law* at 187 (cited in note 30) (arguing that predatory pricing should not be freely permitted and noting the “social costs” of predation). See also generally Fred S. McChesney, *Antitrust and Regulation: Chicago's Contradictory Views*, 10 *Cato J* 775 (1991).

¹⁰² An example is the Robinson-Patman Act in the United States, which is still on the books but rarely enforced by courts. See D. Daniel Sokol, *Analyzing Robinson-Patman*, 83 *Geo Wash L Rev* 2064, 2080 (2015). Our database would indicate that this law is against the teachings of the Chicago School, while actual enforcement data would say otherwise.

Comparative Competition Law Project.¹⁰³ We specifically draw from two distinct datasets. Although these datasets both have limitations, we believe they provide the most comprehensive picture currently available of antitrust regimes around the world. To provide a sense of their scope, Figure 2 shows the countries that are included in at least one of the datasets.

FIGURE 2: COUNTRIES IN THE COMPARATIVE COMPETITION LAW AND ENFORCEMENT DATASETS



First, our data on antitrust laws is from the Comparative Competition Law Dataset.¹⁰⁴ This dataset was constructed over a period of six years by employing a team of over seventy Columbia Law School students with relevant legal training and language skills.¹⁰⁵ To construct the dataset, we first identified all the antitrust statutes, relevant sector-specific regulations, and other laws that contained provisions related to regulating market competition that any jurisdiction with an antitrust regime had passed at any time prior to 2010. For each law, we had two coders complete a 171-part survey that documented relevant elements of the jurisdictions' antitrust regime, including whether it, for example, prohibits resale price maintenance, provides for criminal sanctions or recognizes a public interest defense in merger reviews. We then had a third, more experienced, coder review discrepancies and create a final consensus coding for every antitrust provision. In total, we coded 700 laws for 131 jurisdictions, including 126 countries and 5 regional organizations.¹⁰⁶

¹⁰³ See generally Bradford, et al, 16 J Empirical Legal Stud (cited in note 11).

¹⁰⁴ For a more detailed explanation of this dataset, see Bradford, et al, 16 J Empirical Legal Stud at 415–24 (cited in note 11).

¹⁰⁵ Id at 416.

¹⁰⁶ Id at 417. There are four jurisdictions that we are aware of having an antitrust regime prior to 2010 for which we were unable to code: ASEAN, Djibouti, the Faroe Islands, and Iran. Id at 413 n 4.

These data focus on the antitrust laws codified in statutes. This may seem like a significant limitation from the US perspective as courts play a major role in the development of antitrust law in the US. However, this is not the case in most countries.¹⁰⁷ To confirm this, we conducted an expert survey of antitrust experts from around the world that asked about the role that courts play in the development of antitrust law.¹⁰⁸ In total, 166 experts from 86 countries completed our survey. Of those countries, the experts responded that courts play a large or extensive role in the development of antitrust law in just twelve countries.¹⁰⁹ As a result, for most countries, our coding of countries' antitrust laws on the books should accurately capture the content of their antitrust regimes.

Second, our data on antitrust enforcement is from the Comparative Competition Enforcement Dataset.¹¹⁰ This dataset was constructed over a period of five years by employing a team of over forty Columbia Law School and University of Chicago Law School students that also had relevant legal training and language skills. To construct this dataset, we identified jurisdictions with an antitrust agency in place any time between 1990 and 2010. We collected publicly available information on variables such as the agencies' resources (for example, staff and budget), investigations opened, and investigations closed with remedies. After reviewing all publicly available information for each agency, we then created specifically tailored questionnaires that we sent directly to each agency to ask for more information on their enforcement activities. Through this process, 103 agencies provided us with at least some data and, in total, we were able to collect at least some data from 112 agencies across 100 jurisdictions.¹¹¹

B. Goals and Exemptions

We begin by exploring the goals that countries explicitly state in their antitrust statutes. As previously noted, the Chicago School emphasizes that the appropriate goals of antitrust policy are related to efficiency. But instead of following Chicago School teachings and stipulating that the goals of their antitrust regime are simply efficiency, consumer welfare, or total welfare (“Efficiency-Related Goals”), some countries explicitly articulate

¹⁰⁷ See *id.* at 419.

¹⁰⁸ For more information on the survey, see Anu Bradford and Adam S. Chilton, *Trade Openness and Antitrust Law*, 62 *J L & Econ* 29, 48–49 (2019).

¹⁰⁹ *Id.* The twelve countries that received an average score of 4 or higher are: Argentina, Australia, Austria, Germany, Hong Kong, Ireland, Israel, New Zealand, Nicaragua, Spain, United Kingdom, and United States. *Id.* at 49 n 15.

¹¹⁰ For a more detailed explanation of this dataset, see Bradford, et al, 16 *J Empirical Legal Stud* at 424–37 (cited in note 11).

¹¹¹ *Id.* at 425–26.

goals aimed at broader industrial or social policy (“Non-Efficiency-Related Goals”).

FIGURE 3: PREVALENCE OF EFFICIENCY-RELATED GOALS IN ANTITRUST STATUTES

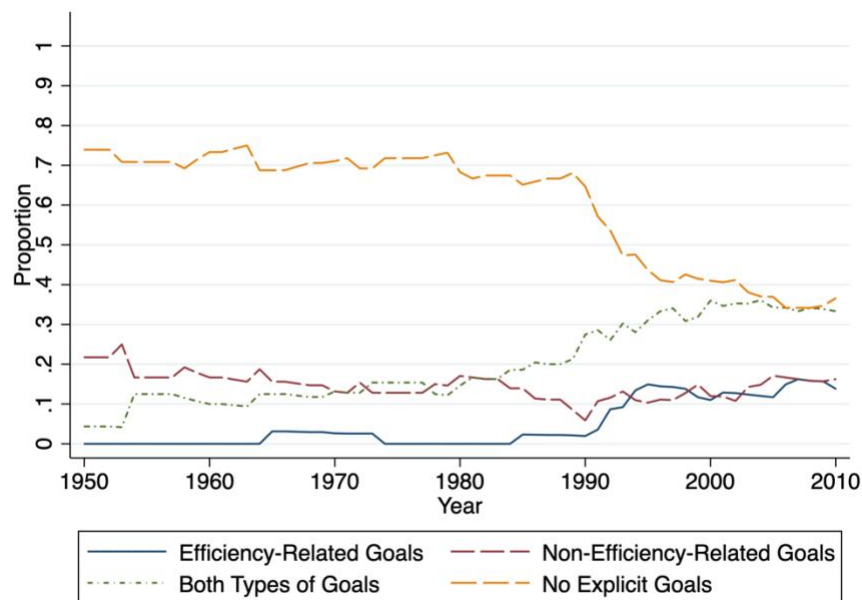
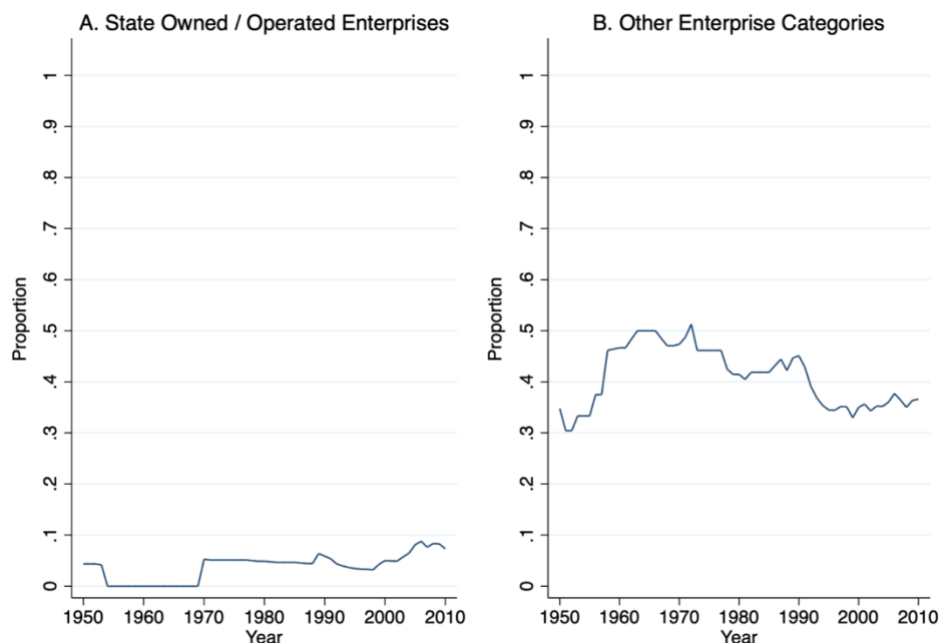


Figure 3 shows the proportion of countries with an antitrust law in place in a given year that articulated only Efficiency-Related goals, only Non-Efficiency-Related Goals, both types of goals, or no explicit goals. It reveals that, through 1990, roughly 70 percent of regimes did not explicitly stipulate any goals. After 1990, there was an increase in the number of countries that explicitly stipulated exclusively Efficiency-Related Goals: by 2010, 14 percent of countries had goals codified in their antitrust statutes that were exclusively Efficiency-Related. However, even more countries adopted goals that were not purely related to efficiency: by 2010, 16 percent of countries had goals codified in their antitrust statutes that were exclusively Non-Efficiency-Related and 33 percent of countries had goals codified in their antitrust statutes that were both Efficiency and Non-Efficiency Related. In other words, of the countries that stipulated goals in their antitrust statutes, just 22 percent focused exclusively on efficiency. Or put another way, contrary to the teachings of the Chicago School, 50 percent of countries with antitrust regimes had explicitly codified Non-Efficiency-Related Goals in their antitrust laws by 2010.

In addition to rejecting the use of antitrust policy to advance goals unrelated to efficiency, the Chicago School unambiguously rejected the use of antitrust policy for protectionist ends or to

advance industrial policy. Of course, countries are unlikely to explicitly stipulate that industrial policy is a goal of their antitrust law. Instead, if a country is using antitrust policy in pursuit of industrial policy, it is more likely to exempt categories of enterprises from the scope of its antitrust regime.

FIGURE 4: PREVALENCE OF ENTERPRISE EXEMPTIONS IN ANTITRUST STATUTES

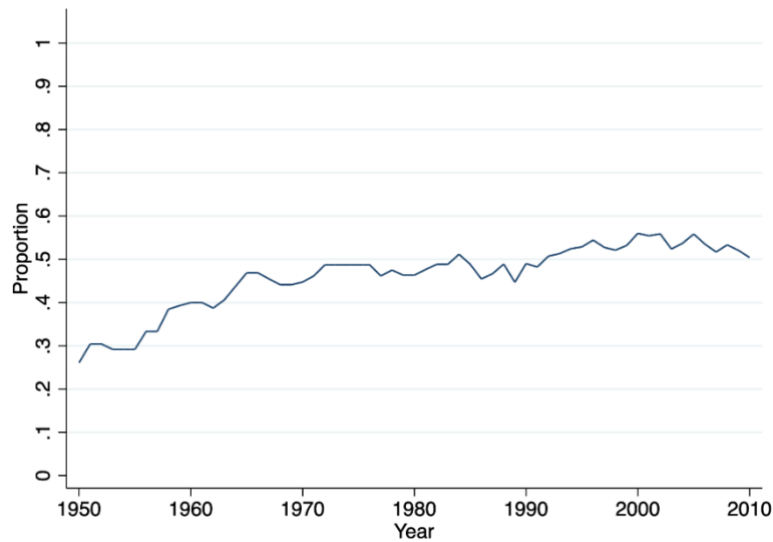


To test this, Figure 4 reports the proportion of countries with an antitrust law in place in a given year that provide complete exemptions to certain categories of enterprises.¹¹² Panel A specifically breaks out countries that include an explicit exemption for state-owned enterprises or state-operated enterprises. It makes clear that, while these exemptions are rare, they do exist. For instance, by 2010, 7 percent of countries included them in their antitrust laws. Panel B breaks out countries that have other kinds of enterprise exemptions. These include, for example, designated monopolies or export cartels. Again, although the majority of countries do not include any of these complete exemptions in their antitrust regimes, they have remained common. In 1980, they were included in 41 percent of countries' antitrust laws, and by 2010, they were included in 37 percent of countries' antitrust laws. In other words, although the proportion of countries has slightly decreased since the

¹¹² Our dataset codes whether countries' antitrust laws included either complete or partial enterprise exemptions. Figure 4, however, only graphs countries with complete enterprise exemptions. This is because, depending on the type and their rationale, partial exemptions may be consistent with the economic theories advanced by the Chicago School.

Chicago School emerged, over a third of countries with antitrust regimes have exempted entire categories of enterprises from the scope of those laws.

FIGURE 5: PREVALENCE OF INDUSTRY EXEMPTIONS



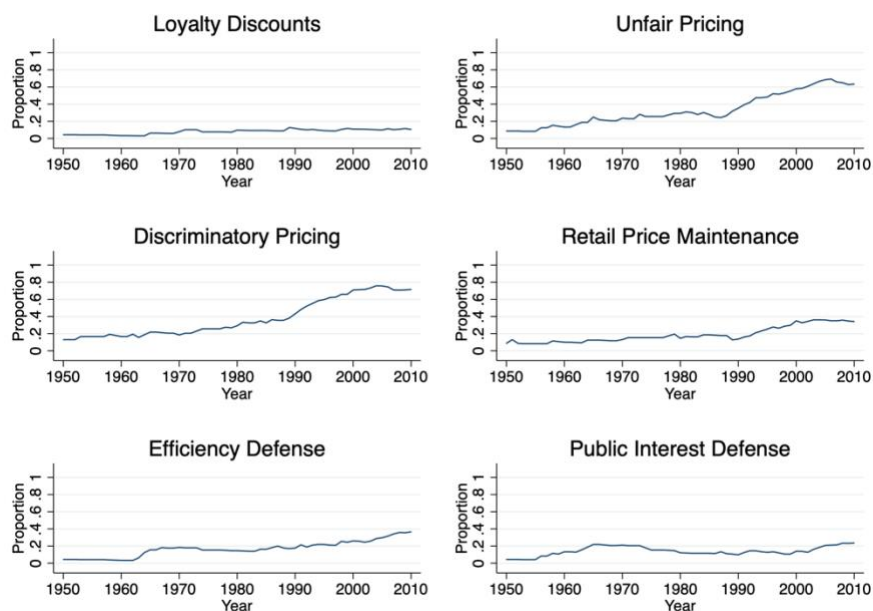
Finally, another way to examine if a country's antitrust policy is used to pursue industrial policy, is to examine if it exempts entire industries from the scope of its antitrust laws. Figure 5 reports the proportion of countries with an antitrust law in place in a given year that exempt at least one industry entirely from the scope of their laws. Again, this trend has also notably increased over time, and the increase has been pronounced in the period after the height of the Chicago School in the 1970s. In 1950, 26 percent of countries had an industry exemption; in 1990, 49 percent of countries had an industry exemption; and by 2010, 50 percent of countries exempted at least one industry from their antitrust regime.

C. Unilateral Conduct

One of the defining features of the Chicago School was its skepticism of the need to police unilateral conduct by monopolies. By emphasizing the importance of scale economies, the Chicago School often viewed large firms as efficient, and argued that such firms' unilateral actions likely improved consumer welfare. As a result, antitrust authorities should refrain from challenging various types of unilateral conduct that traditional antitrust law had condemned as anticompetitive. As Figure 6 shows, however, many countries' antitrust laws continued to directly address a range of unilateral conduct. Notably, in 2010, 63 percent of countries with antitrust regimes included provisions prohibiting unfair pricing while 72 percent prohibited discriminatory pricing.

Figure 6 thus suggests that many countries that passed laws after the Chicago School's peak of influence in the United States continued to draft laws that prohibited conduct that Chicago School scholars argued was unlikely to reduce efficiency. In addition, the data shows that only 37 percent of countries allowed efficiency defenses in unilateral conduct investigations—a Chicago School scholar would argue that efficiency defense should be allowed in all unilateral cases. On the other hand, 24 percent of countries allowed a public interest defense, something that falls clearly outside of the Chicago School framework.

FIGURE 6: PREVALENCE OF PROHIBITIONS ON UNILATERAL CONDUCT

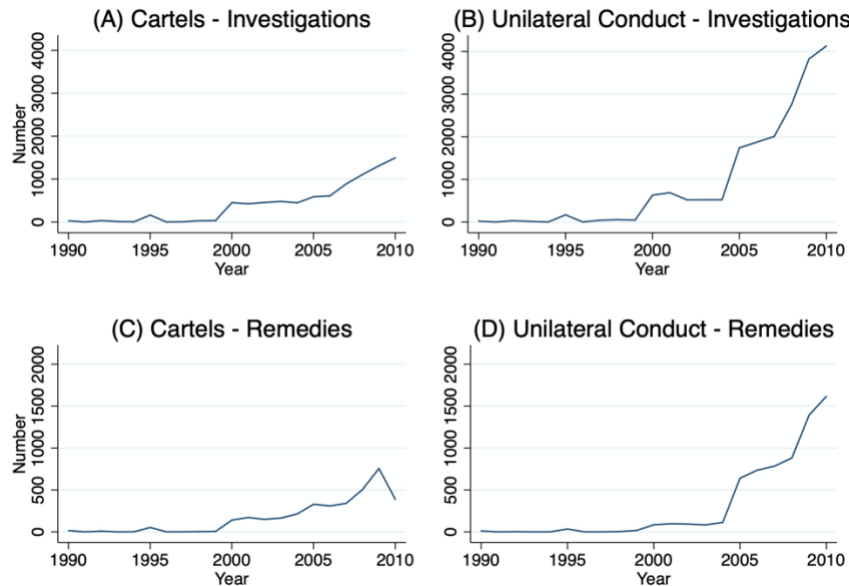


Chicago School philosophy would suggest that cartel enforcement should be the focus of antitrust policy whereas few resources should be dedicated to challenge unilateral conduct. To examine whether countries have followed this philosophy, Figure 7 compares enforcement activities for both cartel and unilateral conduct cases from countries around the world from 1990 to 2010. Contrary to the Chicago School ideas, Figure 7 suggests that, around the world between 1990 and 2010, the agencies that reported their activities carried out considerably more unilateral conduct investigations than cartel investigations. For instance, in 2010, there were 1,495 cartel investigations and 4,128 abuse of dominance investigations around the world. The same story emerges for investigations that were actually closed with remedies. In 2010, there were 388 cartel investigations that were closed with fine or other remedies, which is a small number

compared to the 1,617 abuse of dominance investigations that were closed with remedies.

FIGURE 7: COMPARING THE ENFORCEMENT AGAINST CARTELS AND UNILATERAL CONDUCT

That said, the enforcement data behind Figure 7 have limitations. Notably, the total number of investigations and remedies are likely undercounted because not all agencies reported their data. Moreover, these data count all investigations



as equal, and thus do not tell us anything about the amount of resources that were dedicated to each investigation. For instance, it is possible that the unilateral conduct investigations were small while the cartel investigations were more substantial. Finally, an extremely large percentage of the abuse of dominance investigations were initiated by a single country: Russia. In 2010, for example, Russia initiated 66 percent of the world's abuse of dominance investigations (2,736 out of 4,128 total). In 2010, Russia also was responsible for an astounding 90 percent of the world's abuse of dominance investigations closed with remedies (1,453 out of 1,617 total). In comparison, Russia was responsible for 41 percent (607 out of 1,495 total) of the world's cartel investigations in 2010, and for 52 percent (393 out of 756 total) of the world's cartel cases closed with remedies in 2009 (Russia did not provide data on cartel investigations closed with remedies for 2010). There are several reasons for Russia's distinct enforcement pattern, including that the Russian agency also uses antitrust

law to curb inflation and to control prices.¹¹³ Although Russia was the world leader of abuse of dominance cases, even excluding Russia, the rest of the world still opened more abuse of dominance investigations than cartel investigations in 2010. This provides at least some evidence that countries have ignored the Chicago School teachings according to which unilateral conduct should rarely be the focus of antitrust enforcement.

D. Merger Review

As previously explained, another area in which the Chicago School was critical of existing antitrust doctrine was merger review. Indeed, as seen above, Judge Bork scolded the Supreme Court's decisions in Brown Shoe Co, Inc v United States¹¹⁴ and United States v Von's Grocery Co,¹¹⁵ and affirmed the primacy of allocative efficiency as the core criterion to evaluate a transaction amongst two competitors.

Therefore, another way to indirectly assess the influence of the Chicago School is to look at the types of defenses that companies can invoke when confronted with a challenge to their proposed transaction. The existence of an efficiency defense in a jurisdiction recognizes the pro-competitive benefits of mergers, and is therefore very much in line with the Chicago School's teachings. The opposite is true if countries allow for other non-efficiency-related public policy considerations to inform merger review.

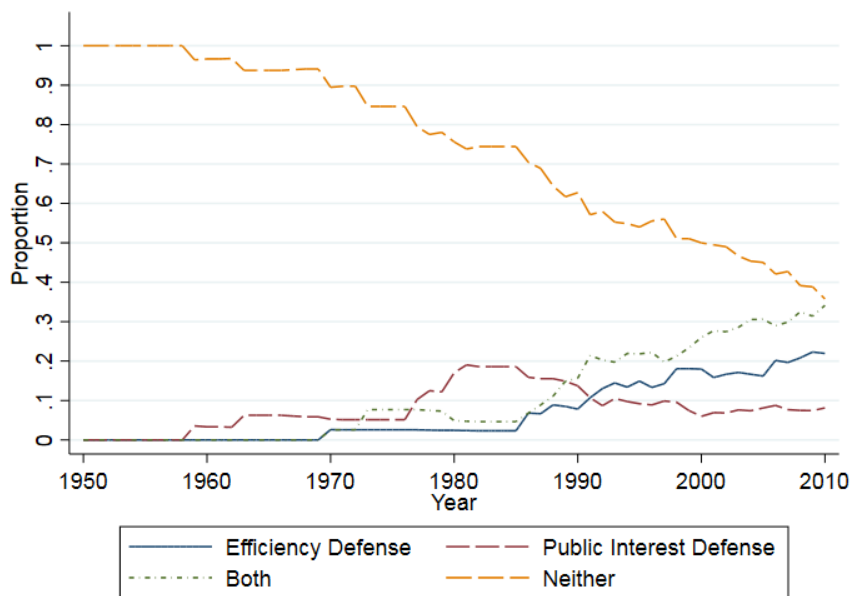
Figure 8 graphs the prevalence of merger defenses in antitrust regimes around the world from 1950 to 2010. More specifically, for countries with an antitrust statute, it shows the share of countries that had an efficiency defense, a public interest defense, both defenses, or neither defense. Notably, the share of countries with explicit defenses in their statutes has increased over time. By 2010, only 36 percent of countries had neither efficiency nor public interest defenses. Instead, 22 percent of countries had only efficiency defenses, 8 percent had only public interest defenses, and 34 percent of countries had both efficiency and public interest defenses. Taken together, Figure 8 reveals that 42 percent of countries with antitrust regimes had adopted merger defenses unrelated to efficiency reasons by 2010—in opposition to the Chicago School's teachings.

¹¹³ OECD Economic Surveys: Russian Federation 2011 *81 (OECD, Dec 2011), archived at <https://perma.cc/WF7J-YL23>.

¹¹⁴ 370 US 294 (1962).

¹¹⁵ 384 US 270 (1966).

FIGURE 8: PREVALENCE OF EFFICIENCY AND PUBLIC INTEREST MERGER DEFENSES



CONCLUSION

Judges Posner and Bork published their treatises more than forty years ago, marking one of the high points of decades of intellectual work by scholars associated with the University of Chicago. Since then, antitrust policy has undergone a revolution: US antitrust enforcement changed significantly, reflecting many of the teachings of the Chicago School. In the decades that followed, antitrust regimes around the world also multiplied. However, despite the Chicago School’s vast influence in the United States, the evidence we have presented in this Essay suggests that the Chicago School’s international penetration was less pervasive than many would imagine.

More recently, as public attention in the United States has begun to focus on increased market concentration, lessening competition, and rising economic inequality,¹¹⁶ the US Congress and enforcement agencies are facing mounting calls to strengthen the antitrust laws and their enforcement. Many influential scholars are arguing that the United States needs to rethink its approach to antitrust policy,¹¹⁷ with some specifically blaming the

¹¹⁶ See *World Economic Outlook: Growth Slowdown, Precarious Recovery* *56–58 (IMF, Apr 2019), archived at <https://perma.cc/AL4Z-THLV> (studying almost one million firms to answer questions regarding market power, its effect on income distribution, and whether market competition needs to be strengthened).

¹¹⁷ See, for example, Jonathan B. Baker, *The Antitrust Paradigm: Restoring a Competitive Economy* 2–7 (Harvard 2019); Eric A. Posner, Fiona M. Scott Morton, and E. Glen Weyl, *A Proposal to Limit the Anticompetitive Power of Institutional Investors*, 81 *Antitrust L J* 669, 669–70 (2017); Suresh Naidu, Eric A. Posner, and Glen Weyl, *Antitrust*

Chicago School for providing the intellectual foundation for the lax US antitrust enforcement of the past decades.¹¹⁸ While our research does not directly address whether the Chicago School was too lenient on large corporations, or whether and how US antitrust policy should be reformed, our data provides a more nuanced view of the Chicago School's global reach. It also suggests that, if the United States wants to reevaluate many of the core Chicago School teachings and reinvigorate its antitrust enforcement, it has many examples around the world to turn to.

Remedies for Labor Market Power, 132 Harv L Rev 536, 547–49 (2018) (arguing that FTC and DOJ should enforce antitrust laws more often in labor market concentration cases).

¹¹⁸ See, for example, Lina M. Khan, Amazon's Antitrust Paradox, 126 Yale L J 710, 717–37 (2017); Maurice E. Stucke and Marshall Steinbaum, The Effective Competition Standard: A New Standard for Antitrust, 87 U Chi L Rev *3–6 (forthcoming 2020), archived at <https://perma.cc/Z4NV-S2UJ>.