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Antitrust and Unfair Competition Law

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The Journal of the
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The Section is proud to present the Fall 2024 edition of *Competition* which contains works of scholarship on topics running the gamut of antitrust and unfair competition law. This phenomenal publication would not be possible without the extraordinary work of our authors, editors, support staff, and other contributors. I wish to extend my sincere appreciation to them all.

Competition is one element of the incredible work of the Section. Over the past year, the Section has taken on greater challenges and covered more ground than we have ever done. We held two fabulously successful flagship conferences—the 33rd Annual Golden State Institute (GSI) and the 2nd Annual Consumer and Unfair Competition Law Institute (CUCLI). Save the date for both events in the coming months: GSI will be held in San Francisco on October 24, 2024, and CUCLI will be held in Los Angeles on January 31, 2025. We look forward to celebrating Paul Riehle as the Antitrust Lawyer of the Year at GSI.

The Section's programming highlights the best in our practice. We held our Seventh Annual Celebrating Women in Competition in California last March, bringing together an extraordinary panel of attorneys from across the bar—plaintiff counsel, defense counsel, in-house attorneys, and government enforcers—to share their experiences and challenges in our practice. Our educational offerings have been tremendous as well. We've sponsored a variety of webinars and in-person panels covering antitrust economics, collusion through artificial intelligence, government enforcement priorities, and other topics. Our monthly E-Briefs, News and Notes has provided timely, substantive updates on key matters in our practice which has seen extraordinary developments through private litigation, public enforcement, and new state law initiatives over the past year. Once again, we've updated the Section's beloved treatise, the comprehensive guide to California competition law.

The Section placed renewed focus on our diversity and new lawyer initiatives this year. We doubled our commitment to expanding our practice to students from underrepresented groups, awarding our Inclusion & Diversity Fellowships to two aspiring law students who received summer internships in government agencies, a \$10,000 stipend each, and mentorship throughout the year. The Section renewed our mentorship program to match lawyers in their first eight years of practice with seasoned veterans of the antitrust and consumer bar. We engaged law students throughout the State with programming and networking events dedicated to opening the bar to so many individuals who are looking for a professional home. And the Section awarded our Lawyers to Watch Award to an inaugural class of five attorneys in the first eight years of their legal careers who have exhibited outstanding achievements in the practice of antitrust and unfair competition law during the previous year.

I am proud of these accomplishments, as they represent the incredible work of our Section. None of this would be possible, however, without the tireless dedication of the

members of our Section's Executive Committee, Advisors, and countless volunteers. I have been fortunate to observe their tremendous leadership day in and day out over the past year. I am humbled by their commitment and honored to have had the opportunity to serve as the Section's Chair.

As has long been said, there is more work to do, and our best days are ahead of us. As I pass the baton to our incoming Chair, Shira Liu, I am confident that the Section remains in capable hands and will continue to provide extraordinary benefits for our members.

Aaron Sheanin
San Francisco, California

The views expressed do not necessarily reflect those of the United States Department of Justice.

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AI AND ANTITRUST: “THE ALGORITHM MADE ME DO IT”

By Robin Feldman¹, Caroline A. Yuen

As the dawn of artificial intelligence (“AI”) rises rapidly, competition authorities should contemplate the potential for hazy days ahead. Undoubtedly, AI’s already ubiquitous presence² offers exciting possibilities, from enhancing efficiency,³ to leveling the playing field for non-native speakers,⁴ to enabling scientific discovery.⁵ Despite these breathtaking advancements, however, recent data from the Pew Research Center reveal

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- 1 Robin Feldman is Arthur J. Goldberg Distinguished Professor of Law, Albert Abramson ’54 Distinguished Professor of Law Chair, Director of the AI Law & Innovation Institute, University of California Law. Caroline A. Yuen is Adjunct Professor of Law, University of California Law and Senior Researcher at the AI Law & Innovation Institute, University of California Law. The authors wish to thank Alexander Whisnant for outstanding research assistance. We are also deeply grateful to Zachary Henderson, Merav Magen, and Gideon Schor for their insights and comments on various drafts of the work.
 - 2 See McKinsey & Company, *The state of AI in 2023: Generative AI’s breakout year* (Aug. 1, 2023), <https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai-in-2023-generative-AIs-breakout-year> (survey finding one-third of all respondents reporting that their organizations regularly used generative AI in at least one function); Joe McKendrick, *AI Adoption Skyrocketed Over the Last 18 Months*, Harv. Bus. Rev. (Sept. 27, 2021), <https://hbr.org/2021/09/ai-adoption-skyrocketed-over-the-last-18-months>; Michelle Faverio & Alec Tyson, *What the Data Says About Americans’ Views of Artificial Intelligence*, Pew Rsch. Ctr. (Nov. 21, 2023), <https://www.pewresearch.org/short-reads/2023/11/21/what-the-data-says-about-americans-views-of-artificial-intelligence/> (survey showing ninety percent of Americans have heard “at least a little” about artificial intelligence).
 - 3 See, e.g., Trevor Laurence Jockims, *How Spotify AI Plans to Know before You Do What Your Brain Wants to Listen to*, CNBC (Apr. 14, 2024, 11:35 AM), <https://www.cnbc.com/2024/04/14/how-spotify-ai-plans-to-know-whats-going-on-inside-your-head.html> (discussing Spotify’s AI disc jockey); Barbara Krasnoff, *Google Gemini, Explained*, Verge (June 12, 2024, 7:39 AM), <https://www.theverge.com/24176860/google-gemini-explained-ai-assistant> (explaining the various uses of Google’s Gemini AI including its function in summarizing search results).
 - 4 See, e.g., Salvador Ordorica, *Comparing and Contrasting AI and Human Translation*, Forbes (June 5, 2023, 10:15 AM), <https://www.forbes.com/councils/forbesbusinesscouncil/2023/06/05/comparing-and-contrasting-ai-and-human-translation/> (recognizing AI translation as a “blossoming subfield of natural language processing. . .”); Petr Malyukov, *How Global Businesses Can Use AI Translation To Improve Productivity*, Forbes (last updated Mar. 11, 2022), <https://www.forbes.com/councils/forbesbusinesscouncil/2022/03/10/how-global-businesses-can-use-ai-translation-to-improve-productivity/> (“Language barrier difficulties are already being successfully tackled by AI translators. Recent breakthroughs in the field of machine learning have helped translation evolve by leaps and bounds”).
 - 5 See, e.g., Adam Zewe, *Scientists Use Generative AI to Answer Complex Questions in Physics*, MIT News (May 16, 2024), <https://news.mit.edu/2024/scientists-use-generative-ai-complex-questions-physics-0516> (discussing the use of AI to detect phase changes); Shira Polan, *AI Uncovers Hidden Differences in Male and Female Brain Structures*, Neuroscience News (May 14, 2024), <https://neurosciencenews.com/ai-brain-sex-differences-26101/> (noting the use of AI to distinguish between biological male and female brains by identifying patterns in structure and complexity); Sara Frueh, *How AI is Shaping Scientific Discovery*, Nat’l Acads. (Nov. 6, 2023), <https://www.nationalacademies.org/news/2023/11/how-ai-is-shaping-scientific-discovery> (highlighting how AI can be used to identify trends in large datasets, predict outcomes, and simulate complex scenarios).

that only 15% of adults surveyed were “more excited than concerned about the increasing use of AI in daily life,” with 46% expressing “an equal mix of concern and excitement.”⁶

Policymakers also manifest concerns about AI, exemplified by the extent to which government actors are racing to pass laws, benchmarks, and guidelines to regulate the development and use of AI technology.⁷ And in the intellectual property realm, courts have seen a wave of copyright cases brought by individual and business content creators over the use of copyrighted work in the training of generative AI tools.⁸

6 Brian Kennedy et al., *Public Awareness of Artificial Intelligence in Everyday Activities*, Pew Rsch. Ctr. (Feb. 15, 2023), <https://www.pewresearch.org/science/2023/02/15/public-awareness-of-artificial-intelligence-in-everyday-activities/>. See also Simon Fondrie-Teitler & Amritha Jayanti, *Consumers Are Voicing Concerns About AI*, Fed. Trade Comm’n (Oct. 3, 2023), <https://www.ftc.gov/policy/advocacy-research/tech-at-ftc/2023/10/consumers-are-voicing-concerns-about-ai>.

7 See, e.g., Maneesha Mithal et al., *Colorado Passes First-in-Nation Artificial Intelligence Act*, Wilson Sonsini (May 21, 2024), <https://www.wsgr.com/en/insights/colorado-passes-first-in-nation-artificial-intelligence-act.html> (Colorado made history as the first US State to pass its own comprehensive AI Act); Joshua M. Goodman et al., *AI and Algorithmic Pricing: Current Issues and Compliance Considerations*, Morgan Lewis (Apr. 29, 2024), <https://www.morganlewis.com/pubs/2024/04/ai-and-algorithmic-pricing-current-issues-and-compliance-considerations> (citing to the flurry of policy and legislative activity surrounding AI issues since February 2024).

8 See, e.g., *In re OpenAI ChatGPT Litigation*, No. 23-cv-03223-AMO (N.D. Cal. Mar. 1, 2024) (consolidating three lawsuits brought by authors alleging copyright infringement related to OpenAI’s ChatGPT tool); Getty Images (US), Inc. v. Stability AI, Inc., No. 23-cv-00135-JLH (D. Del. filed Feb. 3, 2023) (alleging that Stability AI infringed the copyright of millions of photographs in training their AI product, Stable Diffusion); Andersen et al. v. Stability AI Ltd. et al., No. 23-cv-00201-WHO (N.D. Cal. Aug. 12, 2024) (class action brought by artists against Stability AI, Midjourney Inc., and DeviantArt alleging that the companies used copyrighted materials to create each company’s respective generative AI tools).

Generative AI and AI more broadly are not only making waves in the courtroom;⁹ these waves have reached legal academia as well.¹⁰ Although there is an abundance of literature focused on AI and its effects on intellectual property (“IP”) law,¹¹ IP’s antagonistic cousin, competition law, is gently coming to the fore.¹² Emerging competition

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- 9 See, e.g., *Intercept Media Inc. v. OpenAI, Inc.*, No. 1:24-cv-01515 (S.D.N.Y. filed Feb. 28, 2024) (alleging DMCA violations for inclusion of journalists’ work in training data for AI product); *N.Y. Times Co. v. Microsoft Corp.*, No. 1:23-cv-11195-SHS (S.D.N.Y. filed Dec. 27, 2023) (alleging defendant infringed copyrights by using journalistic reporting as training data for generative AI product); *Authors Guild v. OpenAI, Inc.*, No. 1:23-cv-08292 (S.D.N.Y. filed Feb. 2, 2024) (alleging copyright infringement when defendant used authors’ voices, characters, and stories to train AI product); *Silverman v. OpenAI, Inc.*, No. 3:23-cv-03416 (N.D. Cal. filed July 7, 2023) (alleging defendant violated state unfair competition law by using plaintiff’s copyrighted works to train AI product). See also Pamela Samuelson, *Generative AI Meets Copyright*, 381 *Sci.* 158 (2023); Matthew Sag, *Copyright Safety for Generative AI*, 61 *Hous. L. Rev.* 295 (2023); Daryl Lim, *Generative AI and Copyright: Principles, Priorities and Practicalities*, 18 *J. Intell. Prop. L. & Prac.* 841 (2023). See also *supra* note 6.
- 10 See, e.g., Rowena Rodrigues, *Legal and Human Rights Issues of AI: Gaps, Challenges and Vulnerabilities*, 4 *J. Responsible Tech.* 100005 (2020) (discussing the human rights challenges arising out of AI use); Simon Chesterman, *Artificial Intelligence and the Limits of Legal Personality*, 69 *Int’l & Compar. L. Q.* 819 (2020) (discussing the legal status of artificial intelligence); Sara Gerke et al., *Ethical and Legal Challenges of Artificial Intelligence-Driven Healthcare*, in *Artificial Intelligence in Healthcare* 295 (Adam Bohr & Kaveh Memarzadeh eds., 2020) (highlighting the areas within healthcare that will likely be affected by artificial intelligence and the attendant ethical and legal challenges). In addition to scholarly research, many institutions have introduced new institutes and centers focused on exploring AI and law. See, e.g., *Stanford Artificial Intelligence & Law Society (SAILS)*, Stan. L. Sch., <https://law.stanford.edu/stanford-artificial-intelligence-law-society-sails/> (last visited Sept. 12, 2024); *AI, Platforms, and Society Center*, Berkeley L., <https://www.law.berkeley.edu/research/bclt/project-on-artificial-intelligence-platforms-and-society/> (last visited Sept. 12, 2024); *AI Law & Innovation Institute*, UC L. SF, <https://www.uclawsf.edu/center-for-innovation/ai-law-innovation-institute/> (last visited Sept. 12, 2024); *Artificial Intelligence and the Law*, Berkman Klein Ctr. for Internet & Soc’y at Harvard U., <https://cyber.harvard.edu/projects/artificial-intelligence-and-law> (last visited Sept. 14, 2024).
- 11 See, e.g., Daryl Lim, *AI & IP: Innovation & Creativity in an Age of Accelerated Change*, 52 *Akron L. Rev.* 813, 815 (2018) (arguing that although AI is already affecting the “fundamental notions underlying how and why we incentivize creation and innovation[,]” the current legal landscape can adapt to the “Fourth Industrial Revolution”); Mark A. Lemley, *How Generative AI Turns Copyright Law Upside Down*, 25 *Sci. & Tech. L. Rev.* 21 (2024) (examining the challenges and transformations in copyright law brought about by generative AI technologies); Michael Grynberg, *AI and the “Death of Trademark”*, 108 *Ky. L. J.* 199 (2019) (discussing the potential implications of AI on trademark law); Simon Chesterman, *Good Models Borrow, Great Models Steal: Intellectual Property Rights and Generative AI*, *Pol’y & Soc’y* 1 (2024) (exploring the legal and policy implications of training generative AI models and owning AI output).
- 12 See, e.g., Nicolas Petit, *Antitrust and Artificial Intelligence: A Research Agenda*, 8 *J. Eur. Competition L. & Prac.* 361 (2017) (“[t]he hype around ‘Artificial Intelligence’ [] has reached the antitrust community.”)

law literature has begun to explore effects of using algorithms on competition.¹³ Moreover, recent cases increasingly assert antitrust claims against algorithmic collusion.¹⁴

This paper seeks to add to this emerging antitrust and AI scholarship. As AI becomes a more accurate and skillful tool, it could conceivably lead to more anticompetitive hub-and-spoke arrangements that current competition laws may not be fully equipped to evaluate. Building on Feldman's previous work concerning the pharmaceutical supply chain and competition-related issues raised by algorithms,¹⁵ this paper examines the pharmaceutical supply chain as an example of an industry with concentrated intermediaries. We argue that the widespread adoption of increasingly powerful algorithms will exacerbate the susceptibility of such industries to anticompetitive effects. Specifically, as intermediaries become equipped with more accurate and skillful AI-driven algorithms, the intermediaries will become better facilitators of tacit collusion. Moreover, a concentrated intermediary level enhances that power.

Finally, we outline some thoughts on mechanisms that have the potential to curtail such collusion. Inspired by anti-money laundering compliance schemes adopted around the world, we propose designing a model for anti-collusion compliance, and we outline the crucial characteristics that such a model should possess.

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- 13 See, e.g., Ariel Ezrachi & Maurice E. Stucke, *Artificial Intelligence & Collusion: When Computers Inhibit Competition*, 2017 Univ. Ill. L. Rev. 1775 (2017) (discussing how sophisticated computer algorithms including artificial intelligence are changing the competitive landscape and considering four scenarios in which artificial intelligence can foster collusion and raise legal challenges); Emilio Calvano et al., *Artificial Intelligence, Algorithmic Pricing, and Collusion*, 110 Am. Econ. Rev. 3267 (2020) (studying experimentally the effects on pricing when applying artificial intelligence algorithms to oligopoly environments); Michal Gal & Daniel L. Rubinfeld, *Algorithms, AI and Mergers* (NYU L. & Econ. Rsch. Paper, Working Paper No. 23-36, 2023) (identifying how algorithms may affect market dynamics and demonstrating how such effects can exacerbate anticompetitive conduct); Maria José Schmidt-Kessen & Max Huffman, *Antitrust Law and Coordination Through AI-Based Pricing Technologies*, in *Multidisciplinary Perspectives on Artificial Intelligence and the Law* (2023) (providing a taxonomy of computerized pricing technologies to date and identifying legal effects of these technologies on U.S. and EU antitrust law); Daryl Lim, *Antitrust's AI Revolution*, 89 Tenn. L. Rev. 679, 722 (2022) (discussing the uncertainty of antitrust rules and arguing for "employing AI as a positive forensic and predictive tool" in antitrust rulemaking and enforcement).
- 14 See *United States v. RealPage, Inc.*, No. 1:24-cv-00710 (M.D.N.C. Aug. 23, 2024); *In re RealPage, Inc.*, No. 3:23-md-03071 (M.D. Tenn. Dec. 28, 2023); *Duffy v. Yardi Sys., Inc.*, No. 2:23-cv-01391-RSL (W.D. Wash. Apr. 18, 2024); *Karen Cornish-Adebiyi, et al. v. Caesars Ent., Inc.*, et al., No. 1:23-cv-02536-KMW-EAP (D.N.J. filed May 9, 2023); *Gibson v. MGM Resorts Int'l*, No. 2:23-cv-00140-MMD-DJA (D. Nev. Oct. 24, 2023). See also *infra* text accompanying notes 102–143.
- 15 See, e.g., Robin Feldman, *Drugs, Money, and Secret Handshakes* (Cambridge Univ. Press 2019) [hereinafter *Secret Handshakes*]; Robin Feldman, *May Your Drug Price Be Evergreen*, Oxford J.L. & Biosci. 1 (2018); *The Future of Pharmaceuticals: Examining the Analysis of Pharmaceutical Mergers—FTC-DOJ Workshop Summary*, Fed. Trade Comm'n 5 (June 14, 2022), https://www.ftc.gov/system/files/ftc_gov/pdf/Future_of_Pharma_Workshop—Summary.pdf (summarizing the author's presentation regarding increased consolidation in the pharmaceutical industry) [hereinafter *FTC-DOJ Workshop*]; Robin Feldman & Evan Frondorf, *Drug Wars: How Big Pharma Raises Prices and Keeps Generics off the Market* (Cambridge Univ. Press 2017); Robin C. Feldman & Mark A. Lemley, *Atomistic Antitrust*, 63 Wm. & Mary L. Rev. 1869 (2022).

I. UNDERSTANDING THE RELEVANT DOMAINS: AI, ANTITRUST, AND THE PHARMACEUTICAL SUPPLY CHAIN.

Each of the domains—AI, antitrust, and the pharmaceutical supply chain—constitutes a complex arena. Understanding the intersection of the three requires a brief tour of the relevant aspects of each, with a deeper dive to follow.

A. ARTIFICIAL INTELLIGENCE

It is difficult to remember when hearing the term “artificial intelligence” would *not* bring to mind ChatGPT. Before November 2022, however, the notion of artificial intelligence conjured up images of WALL-E,¹⁶ Marvin the Paranoid Android,¹⁷ and Ava.¹⁸ Today, the term “artificial intelligence” or “AI” feels familiar; but ask almost anyone what AI is, and the term becomes elusive.

In its broadest sense, artificial intelligence describes technology that can mimic and perhaps surpass human intelligence.¹⁹ Although the idea of AI in its broadest sense could be said to have been present as early as in ancient Greece,²⁰ efforts to create artificial intelligence did not begin in earnest until the 1950s, marked by the publication of Alan Turing’s seminal paper, *Computing Machinery and Intelligence*.²¹ In his paper, Turing posed the simple question “Can machines think?” While recognizing the challenge of defining “machine” and “think,” he answered his own question in the form of a thought experiment: the imitation game,²² now widely known as the Turing Test. The test is simple and consists of three participants: a human interrogator, a human participant, and a machine participant. If after posing several questions to the two participants, the human

16 Wall-E (Pixar Animation Studios 2008) (depicting a lonely trash-picking robot left on earth who falls in love and helps reconnect humans to the earth they had deserted).

17 Douglas Adams, *The Hitchhiker’s Guide to the Galaxy* (Pan Books 1979) (explaining that, after Earth’s destruction, Arthur Dent meets Marvin the Paranoid Android, who is a depressed robot with a “brain the size of a planet” but is stuck doing menial tasks).

18 *Ex-Machina* (Universal Pictures 2014) (depicting a computer programmer who after winning a week-long stay at his company CEO’s home, is told by the CEO that he had built a humanoid robot named Ava. The film follows Ava’s attempts to escape into the outside world).

19 *What is artificial intelligence (AI)?*, IBM, <https://www.ibm.com/topics/artificial-intelligence> (last visited Sept. 14, 2024) (“Artificial intelligence, or AI, is technology that enables computers and machines to simulate human intelligence and problem-solving capabilities.”); *Artificial Intelligence*, Stan. Encyclopedia of Phil., <https://plato.stanford.edu/entries/artificial-intelligence/#HistAI> (last visited July 12, 2018) (“So far we have been proceeding as if we have a firm and precise grasp of the nature of AI. But what exactly *is* AI? Philosophers arguably know better than anyone that precisely defining a particular discipline to the satisfaction of all relevant parties (including those working in the discipline itself) can be acutely challenging.”).

20 Adrienne Mayor, *An AI Wake-Up Call From Ancient Greece*, Project Syndicate (Oct. 15, 2018), <https://www.project-syndicate.org/commentary/artificial-intelligence-pandoras-box-by-adrienne-mayor-2018-10> (explaining that the original ancient Greek myth of Pandora described Pandora as a “cunning automaton” that was “made, not born” for the purpose of punishing mankind).

21 Alan M. Turing, *Computing Machinery and Intelligence*, 49 *Mind* 433 (1950).

22 *Id.*

interrogator cannot distinguish between the responses of the human and those of the machine, then that machine can think.²³

This simple conception of “thinking” may partially explain why models such as ChatGPT gained widespread popularity overnight.²⁴ Unlike old-fashioned computer chatbots, which used rule-based programming to recognize certain keywords in user prompts and provide pre-loaded responses,²⁵ ChatGPT can respond to *any* prompt, and respond in a human-like way.

Consider ELIZA, one of the earliest examples of a computer chatbot, developed at the MIT Artificial Intelligence Lab by Joseph Weizenbaum²⁶ to act as a therapist. Weizenbaum described ELIZA’s inner workings this way:

The gross procedure of the program is quite simple; the text is read and inspected for the presence of a *keyword*. If such a word is found, the sentence is transformed according to a *rule* associated with the keyword, if not a content-free remark or, under certain conditions, an earlier transformation is retrieved. The text so computed or retrieved is then printed out.²⁷

Though the actual details of that process are more complicated, ELIZA’s performance was ultimately limited by its preprogrammed responses and the user’s input.²⁸ If the user withholds information, there is only so much that ELIZA can do, and very soon the conversation feels inauthentic:

Eliza: Hello, I am Eliza. I’ll be your therapist today.

User: How should I deal with sadness

Eliza: Are such questions on your mind often?

User: Yes

23 *Id.*

24 Andrew R. Chow, *How ChatGPT Managed to Grow Faster than TikTok or Instagram*, TIME (Feb. 8, 2023), <https://time.com/6253615/chatgpt-fastest-growing/> (describing technologists’ surprise over the popularity of ChatGPT and noting that “[w]hereas many chatbots only know how to respond to certain keywords or triggers, ChatGPT can respond to complex questions and spit out comprehensive, essay-length answers on virtually any topic.”).

25 Consider Eliza, one of the earliest examples of a computer chatbot developed at the MIT Artificial Intelligence Lab. See Joseph Weizenbaum, *ELIZA—A Computer Program for the Study of Natural Language Communication Between Man and Machine*, 9 COMM’NS. ACM 1 (1966).

26 See Michael Wallace & George Dunlop, *ELIZA: a Very Basic Rogerian Psychotherapist Chatbot*.

27 Weizenbaum, *supra* note 24, at 37 (emphasis in original).

28 David Pierce, *From Eliza to ChatGPT: why people spent 60 years building chatbots*, Verge (Feb. 28, 2024, 7:00 AM), <https://www.theverge.com/24054603/chatbot-chatgpt-eliza-history-ai-assistants-video> (“The tech behind Eliza was incredibly primitive: users typed into a text field, and the bot selected from a bunch of predefined responses based on the keywords in your question. If it didn’t know what to say, it would just repeat your words back—you’d say ‘My father is the problem’ and it would respond ‘Your father is the problem.’ But it worked!”).

Eliza: I see. Let's explore that a bit more.

User: I feel worried about the earth's future

Eliza: Do you often feel worried about the earth's future?²⁹

When ELIZA does not have a prepared response, it simply reverts to repeating what the user said in the form of a question.³⁰ In short, ELIZA was programmed by a human who gave ELIZA a specific set of instructions to follow—an algorithm. Like a parrot repeating phrases it hears without understanding the content of what is parroted, when a user provided an input, ELIZA went through its algorithm to search for keywords, and if found, then inserted them in preprogrammed sentence structures. This is now commonly known as traditional or classical computer programming.³¹

In contrast to the likes of ELIZA, ChatGPT can respond in a human-like way to any prompt. Using the same initial prompt “How should I deal with sadness,” ChatGPT responded with a 7-point answer and ended with the sympathetic encouragement to “[r]emember, everyone experiences sadness at times, and it's a normal part of life. You're not alone, and there are people and resources available to support you through this.”³² Unlike ELIZA, who recycles through its preprogrammed responses, ChatGPT's response to the

29 This was generated using the JavaScript version of ELIZA developed by Michael Wallace with further enhancements by George Dunlop.

30 *Id.*

31 See, e.g., *What is Machine Learning*, GeeksforGeeks, <https://www.geeksforgeeks.org/ml-machine-learning/> (May 26, 2024) (describing traditional programming as “rule-based code [] written by the developers depending on the problem statements.”); Sriram Parthasarathy, *Difference between Traditional Programming Versus Machine Learning from a PM Perspective*, Medium (Apr. 21, 2019), <https://productcoalition.com/difference-between-traditional-programming-versus-machine-learning-from-a-pm-perspective-3802b02bc7f6> (describing traditional programming as “a manual process—meaning a person (programmer) creates the program. But without anyone programming the logic, one has to manually formulate or code rules.”); Ali Alkan, *Classical Programming vs Machine Learning: Mastering Different Tools for Problem-Solving*, Medium, <https://medium.com/low-code-for-advanced-data-science/classical-programming-vs-machine-learning-mastering-different-tools-for-problem-solving-84a33ede08c7> (June 26, 2024) (“Classical programming offers precise control, while machine learning allows for adaptation and learning.”).

32 This was generated using ChatGPT 3.5 on June 26, 2024. The full response read “Dealing with sadness can be challenging, but there are several strategies that can help: Acknowledge your feelings: It's okay to feel sad. Allow yourself to recognize and accept your emotions without judgment. Talk about it: Reach out to someone you trust—a friend, family member, or therapist. Sharing your feelings can provide comfort and support. Take care of yourself: Engage in self-care activities that you enjoy, such as exercise, hobbies, or relaxation techniques like deep breathing or meditation. Focus on the present moment: Practice mindfulness to stay grounded and avoid dwelling on negative thoughts. Seek professional help if needed: If your sadness persists or affects your daily life, consider speaking with a mental health professional who can provide guidance and support. Connect with others: Social support is important during difficult times. Spending time with loved ones or participating in social activities can uplift your mood. Give yourself time: Healing takes time, so be patient with yourself as you navigate through your emotions. Remember, everyone experiences sadness at times, and it's a normal part of life. You're not alone, and there are people and resources available to support you through this.”

same prompt is different every time;³³ it can even revise its initial response. For example, when asked to “please summarize [your response] in three sentences[.]” ChatGPT’s new response became: “To deal with sadness effectively, acknowledge and accept your feelings without judgment. Talk to trusted individuals or a therapist for support and comfort. Engage in self-care, practice mindfulness, and seek professional help, if necessary, while giving yourself patience and time to heal.”³⁴

ChatGPT’s astounding performance, in comparison to ELIZA, can be explained by the difference in how the model functions. ChatGPT was trained through reinforcement and deep learning,³⁵ each a subfield of machine learning. Although delving into the technological details of machine learning is beyond the scope of this paper, one key detail is important to understand: unlike traditional programming, which relies on rules and is deterministic,³⁶ machine learning relies on data and through adjusting its internal parameters, adapts and learns.³⁷ As Arthur Samuel explained, machine learning is the field of study that gives computers the ability to learn without explicitly being programmed.³⁸ In very simple terms, machine learning takes a vast amount of data, feeds it through a machine-learning model, which tries to identify patterns in data. The accuracy of the model is evaluated and the model’s internal parameters—knobs and dials—are adjusted to improve the accuracy of its predictions. This process is repeated until a certain level of accuracy is reached. Remarkably, given that a machine-learning system is not simply following a set of rules, the system can recognize patterns and relationships in datapoints that humans might miss.³⁹ The trained system can then output descriptions of that new data, make predictions based on that data, or prescribe what to do given that data.⁴⁰

This technology extends far beyond chatbots. The use of machines to recognize patterns and generate outputs has been deployed in advanced pricing algorithms in many industries. As will be explained in more detail, pricing algorithms—a computer program

33 See Winnie Jones, *Does ChatGPT Generate the Same Response?* Medium (Mar. 21, 2023) (“ChatGPT uses a process called sampling to generate responses, which involves randomly selecting words from its vocabulary to create a response. This means that even if the text input is the same, ChatGPT can generate different responses each time because of the randomness involved in the sampling process.”).

34 *Id.*

35 See *GPT-4*, OpenAI (Mar. 14, 2023), <https://openai.com/index/gpt-4-research/> (explaining how GPT-4 has been built using reinforcement learning with human feedback and deep learning).

36 Used here to describe the manual process of a programmer writing rule-based code that instruct the machine on how to perform a given task.

37 See Sara Brown, *Machine learning, explained*, MIT Mgmt. Sloan Sch. (Apr. 21, 2021), <https://mitsloan.mit.edu/ideas-made-to-matter/machine-learning-explained> (summarizing how machine learning works and outlining the various strands of machine learning).

38 Arthur L. Samuel, *Some Studies in Machine Learning Using the Game of Checkers*, 3 IBM J. Rsch & Dev. 210, 211 (1959) (“We have at our command computers with adequate data-handling ability and with sufficient computational speed to make use of machine-learning techniques, but our knowledge of the basic principles of these techniques is still rudimentary. Lacking such knowledge, it is necessary to specify methods of problem solution in minute and exact detail, a time-consuming and costly procedure. Programming computers to learn from experience should eventually eliminate the need for much of this detailed programming effort.”).

39 See Brown, *supra* note 6.

40 *Id.* (“In some cases, machine learning can gain insight or automate decision-making in cases where humans would not be able to. . .”).

specifically designed for the purpose of outputting the optimal price—similarly evolved from traditional programming to machine learning systems.

Thus, we consider AI not in the broad context of machines capable of human-like intelligence, but in the narrower context of self-learning algorithms that process large swathes of data to recognize patterns and solve complex problems, such as pricing.⁴¹

B. OVERVIEW OF COLLUSION—FROM SMOKE-FILLED ROOMS TO TACIT COLLUSION TO ALGORITHMIC COLLUSION

Political cartoonists of the early 1900s captured the notion of conspiracy among competitors with drawings of smoky rooms full of well-fed men in suspenders chomping on cigars and plotting to keep prices high. Artificial intelligence, however, could lead to a completely different kind of collusion. Yet, despite the differences, the algorithmic version merely lies a little further down the evolutionary pathway. The following section will trace algorithmic collusion and its implications back to its roots in early U.S. antitrust law.

Among many other provisions, the Sherman Act and the Clayton Act together prohibit agreements among competitors to unreasonably restrain trade.⁴² Section 1 of the Sherman Act of 1890 declares as illegal “[e]very contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade. . . .”⁴³ To prove an illegal conspiracy in restraint of trade, one must show (1) an agreement among separate competitors and (2) that the agreement constitutes an unreasonable restraint on trade.⁴⁴ Thus, section 1 concerns concerted action between two or more actors. In contrast, section 2 of the Sherman Act concerns monopolistic (that is, unilateral) action.

In addition to the Clayton and Sherman Acts, Section 5 of the Federal Trade Commission Act (“FTC Act”) also makes unlawful any “[u]nfair methods of competition . . . and unfair or deceptive acts or practices in or affecting commerce. . . .”⁴⁵ This broadly drafted provision has been the subject of fierce debate, particularly with respect to its ability to be invoked as a stand-alone provision separate from the Sherman and Clayton Acts.⁴⁶ Indeed, the FTC recently filed an administrative complaint against three of the largest pharmacy benefit managers alleging that they have violated Section 5

41 See Robin Feldman, *Artificial Intelligence and Cracks in the Foundation of Intellectual Property*, (UC S.F. Rsch. Paper, Working Paper, 2024).

42 15 U.S.C. § 1 (2024).

43 *Id.*

44 *Am. Needle v. NFL*, 560 U.S. 183, 189–90 (2010).

45 15 U.S.C. § 45(a)(1).

46 See, e.g., Lina M. Khan, *Section 5 in Action: Reinvigorating the FTC Act and the Rule of Law*, 11 J. Antitrust En’t 149 (2023) (discussing the evolution of Section 5 of the FTC Act over the years since its passing and emphasizing the importance of the section in FTC’s enforcement work); William E. Kovacic & Mark Winerman, *Competition Policy and the Application of Section 5 of the Federal Trade Commission Act*, 20 Minn. J. Int’l L. 274 (2010) (setting forth a framework for using Section 5 for anticompetition enforcement); James C. Cooper, *The Perils of Excessive Discretion: The Elusive Meaning of Unfairness in Section 5 of the FTC Act*, 3 J. Antitrust En’t 87 (2015) (discussing the lack of certainty with respect to the conception of unfairness under Section 5).

of the FTC Act.⁴⁷ Given the intended scope of this paper, however, the authors focus on Section 1 of the Sherman Act, setting the FTC Act debate to the side.

Whether an agreement constitutes an unreasonable restraint on trade under Sherman Act Section 1 depends on the type of restraint and the nature of the relationship involved. Within these, a small category of restraints is thought to be so egregious in their anticompetitive effects that they are deemed, per se, unreasonable, regardless of any procompetitive effects or the intentions of the parties involved.⁴⁸ In particular, an agreement between competitors—that is, a horizontal agreement to fix prices or divide up and allocate the market—is per se illegal.⁴⁹ Once the agreement is proven, the court generally makes no further inquiry into the parties’ motives or the actual impact of the restraints, even if the agreement might have procompetitive effects.⁵⁰ Thus, in per se cases, the most important determination for the court to make is simply the existence of an agreement.

In contrast, most other alleged violations of Section 1 are analyzed through the rule of reason standard by balancing the procompetitive and anticompetitive effects of the restraint to see whether the net effect of the challenged activity is anticompetitive.⁵¹ In such cases, the court might look to the parties’ intention and motives as relevant factors in determining whether there has been a Section 1 violation. Under Supreme Court precedent, vertical agreements are analyzed under the rule of reason standard.⁵²

1. THE RELATIONSHIP OF THE PARTIES

The stringency in the court’s treatment of agreements among competitors makes intuitive sense. In a well-functioning, competitive market, we expect direct competitors to compete tooth-and-nail to attract customers. We would not expect them to compare

47 Complaint, Caremark Rx, LLC, FTC Docket No. 9437 (Sept. 26, 2024), https://www.ftc.gov/system/files/ftc_gov/pdf/d9437_caremark_rx_zinc_health_services_et_al_part_3_complaint_public_redacted.pdf.

48 N. Pac. Ry. Co. v. United States, 356 U.S. 1, 5 (1958) (“[T]here are certain agreements or practices which because of their pernicious effect on competition and lack of any redeeming virtue, are conclusively presumed to be unreasonable and therefore illegal without elaborate inquiry as to the precise harm they have caused or the business excuse for their use.”).

49 Broad. Music, Inc. v. Columbia Broad. Sys., Inc., 441 U.S. 1, 8 (1979); see also Herbert Hovenkamp, *The Rule of Reason*, 70 Fla. L. Rev. 81, 83 (2018) (explaining that in antitrust per se cases, “power generally need not be proven and anticompetitive effects are largely inferred from the conduct itself.”).

50 United States v. Socony-Vacuum Oil Co., 310 U.S. 150, 218 (1940) (“[N]o showing of so-called competitive abuses or evils which those agreements were designed to eliminate or alleviate may be interposed as a defense.”).

51 Standard Oil Co. v. U.S., 221 U.S. 1, 60 (1911) (“[I]t was intended that the standard of reason which had been applied at the common law and in this country in dealing with subjects of the character embraced by the statute, was intended to be the measure used for the purpose of determining whether in a given case a particular act had or had not brought about the wrong against which [the Sherman Act] provided.”). For an in-depth discussion regarding the complexities of the rule of reason versus per se analysis approach, see generally Hovenkamp, *supra* note 47 (criticizing the court’s conceptualization of the rule of reason as being a balancing exercise and arguing that the rule of reason produces arbitrary results).

52 Leegin Creative Leather Prods. v. PSKS, Inc., 551 U.S. 877, 899 (2007).

notes, let alone enter into agreements with one another. As a result, communications between competitors generally rouse suspicion.

To illustrate this intuitive outlook on markets, consider the Lysine cartel, which operated between 1991 and 1995 on a global level to fix the price of the common food additive lysine.⁵³ Archer-Daniels-Midland Company (“ADM”) and other lysine producers met and agreed over several meetings how to raise the price of lysine via coordinated price hikes, as well as how to allocate sales volumes among themselves.⁵⁴ The FBI was able to obtain direct evidence of the conspiracy through an ADM insider,⁵⁵ who recorded hundreds of hours of conversations and videos of the secret meetings, proving, beyond a shadow of a doubt, that ADM and the other lysine producers were working in concert to fix the price of lysine. Unsurprisingly, the executives representing ADM at the meetings were all convicted of violating Section 1 of the Sherman Act and sentenced to lengthy terms of imprisonment.⁵⁶ ADM also agreed to a fine of \$100 million, which was the largest criminal recovery in the history of the Sherman Act, at the time.⁵⁷

Of course, cases backed up by direct evidence of actual agreements to restrain trade are rare.⁵⁸ As the Supreme Court noted in *Falstaff Brewing*, “circumstantial evidence is the lifeblood of antitrust law.”⁵⁹

2. TACIT COLLUSION

Under current antitrust law, not every instance of collusion will lead to a finding of actionable behavior. Rather, the behavior may fall within the more subtle activity known as “tacit collusion.” Tacit collusion, or conscious parallelism, refers to coordinated activities between firms without there being an explicit agreement to coordinate.⁶⁰

Take for example *In re Text Messaging Antitrust Litigation*.⁶¹ There, the defendants were a trade association and four wireless network providers that offered text messaging

53 Scott D. Hammond, Deputy Assistant Att’y Gen., Antitrust Div., U.S. Dep’t Just., Caught in the Act: Inside an International Cartel (Oct. 18, 2005), <https://www.justice.gov/atr/speech/caught-act-inside-international-cartel>. See also *United States v. Andreas*, 216 F.3d 645 (7th Cir. 2000).

54 *Andreas*, 216 F.3d at 651–54.

55 The story of the lysine cartel and its unravelling was adapted into a movie, *The Informant!*, starring Matt Damon as Mark Whitacre, who remarkably blew the whistle on the cartel and worked with the FBI to obtain an abundance of direct evidence of price fixing and collusion.

56 Sharon Walsh, *3 Former Officials at ADM Get Jail Terms*, Wash. Post (July 9, 1999, 8:00 PM), <https://www.washingtonpost.com/archive/business/1999/07/10/3-former-officials-at-adm-get-jail-terms/68b63662-d02b-4db8-a234-fd859eb6f403/>.

57 *Id.*

58 See, e.g., *United States v. Snow*, 462 F.3d 55, 68 (2d Cir. 2006) (“[C]onspiracy by its very nature is a secretive operation, and it is a rare case where all aspects of a conspiracy can be laid bare in court with [] precision . . .”); *Interstate Cir., Inc. v. United States*, 306 U.S. 208, 221 (1939) (“As is usual in cases of alleged unlawful agreements to restrain commerce, the Government is without the aid of direct testimony. . . .”).

59 *United States v. Falstaff Brewing Corp.*, 410 U.S. 526, 534 n.13 (1973).

60 See, e.g., *infra* text accompanying note 62.

61 *In re Text Messaging Antitrust Litig.*, 782 F.3d 867 (7th Cir. 2015).

services to consumers.⁶² The plaintiffs alleged that the defendants agreed to fix the price of texting. Defendants sought to prove price-fixing through a series of parallel behaviors, as well as aspects of industry structure and industry practices, which they claimed facilitated collusion on text messaging prices.⁶³ In its opinion, the 7th Circuit took the opportunity to stress the difference between express and tacit collusion, noting that: “Express collusion violates antitrust law; tacit collusion does not.”⁶⁴ The court further elaborated:

It is true that if a small number of competitors dominates a market, they will find it safer and easier to fix prices than if there are many competitors of more or less equal size. For the fewer the conspirators, the lower the cost of negotiation and the likelihood of defection; and provided that the fringe of competitive firms is unable to expand output sufficiently to drive the price back down to the competitive level, the leading firms can fix prices without worrying about competition from the fringe. But the other side of this coin is that the fewer the firms, the easier it is for them to engage in “follow the leader” pricing (“conscious parallelism,” as lawyers call it, “tacit collusion” as economists prefer to call it)—which means coordinating their pricing without an actual agreement to do so.⁶⁵

In other words, where a few firms dominate one industry, it is very easy for the resulting behavior of the firms to look collusive even if the competing firms did not actually *agree* to coordinate their behaviors. Indeed, in oligopolistic markets, tacit collusion is highly likely.⁶⁶

This is the crux of the challenge in such cases: Is there an actual agreement, or is this a case of mere tacit collusion? Where the parallel conduct of competitors can be explained by legitimate business rationale, something beyond those parallel actions will be needed to prove an agreement exists.

This point was further clarified in the 2007 Supreme Court case, *Twombly*. The Court held that in a tacit collusion case “plus factors” are needed to trigger antitrust scrutiny.⁶⁷ The Supreme Court explained:

62 *Id.* at 870.

63 *Id.*

64 *Id.* at 872.

65 *Id.* at 871 (emphasis added).

66 See, e.g., Richard A. Posner, *Oligopoly and the Antitrust Laws: A Suggested Approach*, 21 Stan. L. Rev. 1562 (1969); Donald F. Turner, *The Definition of Agreement under the Sherman Act: Parallelism and Refusals to Deal*, 75 Harv. L. Rev. 655, 666 (1962) (“[T]here is fair ground for argument that oligopoly price behavior can be described as individual behavior—rational individual decision in light of relevant economic facts—as well as it can be described as ‘agreement.’ It can readily be said that each seller in this situation, in refraining from price competition, is not agreeing with his competitors but simply throwing their probable decisions into his price calculus as impersonal market facts.”).

67 *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 554 (2007) (“An antitrust conspiracy plaintiff with evidence showing nothing beyond parallel conduct is not entitled to a directed verdict . . . ; proof of a § 1 conspiracy must include evidence tending to exclude the possibility of independent action”).

[A]n allegation of parallel conduct and a bare assertion of conspiracy will not suffice. Without more, parallel conduct does not suggest conspiracy, and a conclusory allegation of agreement at some unidentified point does not supply facts adequate to show illegality. Hence, when allegations of parallel conduct are set out in order to make a § 1 claim, they must be placed in a context that raises a suggestion of a preceding agreement, not merely parallel conduct that could just as well be independent action.⁶⁸

With the right configuration of conspirators, however, competitors may not need to communicate directly at all.

3. HUB-AND-SPOKE CONSPIRACY

Imagine an old-fashioned wagon wheel. It has a hub at the center, with spokes radiating out from the hub until they reach the outside rim. All the spokes touch the hub and the rim, but they never touch each other. This is the structure of what is known as a “hub-and- spoke” conspiracy. Competitors (the spokes) are able to collude without ever interacting with each other. Instead, an entity that interacts with all the competitors, such as a supplier, coordinates a conspiracy on behalf of the competitor spokes.⁶⁹

The hub-and-spoke structure involves both vertical and horizontal agreements.⁷⁰ The vertical agreements run between each spoke and the hub; the horizontal agreement exists among all of the spokes and reflects their agreement to participate in the hub’s scheme.⁷¹ Thus, this horizontal agreement is often thought of as the rim of the hub-and-spoke wheel.⁷² Given the combination of vertical and horizontal components with hub-and-spokes cases, the law generally abandons its more lenient view regarding vertical agreements.⁷³

The potential for hub-and-spoke agreements is drawing modern attention with the explosion of AI-powered pricing tools, but these types of conspiracies are not new.⁷⁴ In what is considered the first hub-and-spoke case, the Supreme Court in 1939 accepted the allegation of a conspiracy among theater distributors, orchestrated through a theater

68 *Id.* at 556–57.

69 *United States v. Apple, Inc.*, 791 F.3d 290, 314 (2d. Cir. 2015).

70 *See, e.g.,* Bradley C. Weber, *Hub-and-Spoke Conspiracies: Can Big Data and Pricing Algorithms Form the Rim?*, 26 SMU Sci. & Tech. L. Rev. 25, 27 (2023) (“The classic structure of such a conspiracy includes a firm at one level of a supply chain—such as a buyer or supplier—who acts like the ‘hub’ of a wheel. Vertical agreements up or down the supply chain act as the ‘spokes’ and, most importantly, a horizontal agreement among the spokes acts as the ‘rim’ of the wheel. The distinguishing feature of a hub-and-spoke conspiracy is the participation of the vertically-aligned hub in the middle of the horizontal agreement.”).

71 *Id.*

72 *Apple*, 791 F.3d at 314 n.15.

73 *See supra* note 49 and accompanying text.

74 *See, e.g., Roundtable on Hub-and-Spoke Arrangements—Background Note by the Secretariat*, OECD, Directorate Fin. & Enter. Affs. Competition Comm. 5 (Nov. 25, 2019), [https://one.oecd.org/document/DAF/COMP\(2019\)14/en/pdf](https://one.oecd.org/document/DAF/COMP(2019)14/en/pdf) (“E-commerce phenomena such as pricing algorithms, price monitoring software or online platforms can be instrumental in supporting hub-and-spoke arrangements, or can lead to similar market outcomes.”) [hereinafter *OECD Background Note*].

operator, without any evidence of communications—let alone agreement—between the direct competitors.⁷⁵

The case concerned an alleged conspiracy between eight film distributors who, together, distributed seventy-five percent of all first-class feature films in the United States.⁷⁶ These were the spokes, the ones who should have been competing in the market.

The hub of the scheme was Interstate Circuit, a movie theatre exhibitor who operated forty-three, first-run and second-run theatres throughout Texas.⁷⁷ Interstate had a complete monopoly of first-run theatres in almost all the cities in which they operated.⁷⁸

At the heart of the case was a letter that Interstate Circuit (the hub) sent to each of the eight film distributors in which Interstate demanded compliance with two conditions if the distributors wanted Interstate's theaters to continue showing the distributors' films.⁷⁹ The conditions included a minimum price for evening admissions and a double features policy with a requirement that a feature film could not be shown in conjunction with any other feature film.⁸⁰

There was no direct evidence of an agreement between the eight distributors. However, the court focused on their knowledge and motive, noting that they were each copied on the letters, and that they were each aware of the other distributors having been sent the same letter.⁸¹ The Court emphasized:

The O'Donnell letter named on its face as addressees the eight local representatives of the distributors, and so from the beginning each of the distributors knew that the proposals were under consideration by the others. Each was aware that all were in active competition and that without substantially unanimous action with respect to the restrictions for any given territory there was risk of a substantial loss of the business and good will of the subsequent-run and independent exhibitors, but that with it there was the prospect of increased profits. There was, therefore, strong motive for concerted action, full advantage of which was taken by Interstate and Consolidated in presenting their demands to all in a single document.⁸²

While the Court in *Interstate Circuit* did not coin the term “hub-and-spoke,” the name emerged across time as a description for the behavior exemplified in the case.

75 Interstate Cir., Inc. v. United States, 306 U.S. 208, 226–27 (1939).

76 *Id.* at 214.

77 *Id.* at 215.

78 *Id.*

79 *Id.* at 215–17.

80 *Id.*

81 *Id.* at 221–22.

82 *Id.* at 222 (emphasis added).

As the *Interstate Circuit* decision established, knowledge and motive of the parties are highly relevant to determining the existence of agreement. This is because, in this configuration, communication and/or agreement between the competitors is made unnecessary by the common third party. Competitors coordinate their conduct through the third party precisely so that they can circumvent the need to directly communicate with each other. This can make collusion harder to detect given that the only agreements that do exist are vertical between each spoke and the hub. Moreover, as discussed earlier in the article, vertical agreements and communication usually are considered a legitimate and common occurrence in a competitive market.⁸³

Hub-and-spoke conspiracies can serve as highly effective collusive mechanisms: As an OECD publication noted, “the hub creates collusive efficiency by reducing the need for horizontal coordination . . . [and] vertical agreements entered to effectuate the horizontal agreement may be harder for authorities to detect.”⁸⁴ Given that actual agreements among the spokes are unlikely to exist, and would be difficult to prove in any event, the existence of an agreement turns on other plus factors. Although no prescriptive list of such factors exist, examples include the spokes’ knowledge of the agreements made between the hub and other spokes; a sudden and abrupt change to the business practice of the spokes; and spokes acting against their own self-interest.⁸⁵ The existence of any of the plus factors is not dispositive, and the courts take a totality of the circumstances approach towards finding an agreement based on circumstantial evidence.⁸⁶

Hub-and-spoke conspiracies blur the lines between express collusion (forbidden) and tacit collusion (normally not actionable), as well as horizontal actions (forbidden) and vertical actions (normally not actionable). This blurring of lines, along with the difficulty of developing methods for establishing proof, can sometimes create an uncomfortable result. In *Interstate Circuit*, for example, each distributor arguably had an independent good commercial reason for agreeing to the exhibitor’s requests after seeing that the competitors had been sent the same request. Although the court found an agreement among the competitors to collude, one cannot help but wonder whether the distributors actually wanted to collude. Perhaps not. As the dissent in the case explained:

83 See *supra* Part I.B. See also *OECD Background Note, supra* note 72, at 5 (“The topic [of hub-and-spoke conspiracies] raises interesting questions, as it essentially requires enforcement agencies to clearly define the point where a day-to-day, legitimate business occurrence, namely the exchange of often confidential information between suppliers and distributors, turns into an illegal horizontal agreement or concerted action that can be subject to harsh sanctions, and in some regimes criminal prosecution.”).

84 OECD, *Hub-and-spoke arrangements—Note by the United States 2* (Nov. 28, 2019), https://www.ftc.gov/system/files/attachments/us-submissions-oecd-2010-present-other-international-competition-fora/oecd-hub_and_spoke_arrangements_us.pdf.

85 See, e.g., *Interstate Cir., Inc. v. United States*, 306 U.S. 208, 221–22 (1939) (knowledge of arrangements between other competitors and abrupt changes to business practices); *Apple*, 791 F.3d at 316 (knowledge of arrangements between other competitors); *Toys “R” Us v. FTC*, 221 F.3d 928, 935 (2000) (abrupt shift from past business practices and competitors depriving themselves of a profitable sales outlet).

86 See, e.g., *7-UP Bottling Co. v. Archer Daniels Midland Co. (In re Citric Acid Litig.)*, 191 F.3d 1090, 1097 (9th Cir. 1999) (“[T]he crucial question is whether all the evidence considered as a whole can reasonably support the inference that [the defendant] conspired with the admitted conspirators to fix prices.”).

The Government stresses the fact that each of the distributors must have acted with knowledge that some or all of the others would grant or had granted Interstate's demand. But such knowledge was merely notice to each of them that, if it was successfully to compete for the first-run business in important Texas cities, it must meet the terms of competing distributors or lose the business of Interstate.⁸⁷

The choice for the distributors was to participate or lose significant business. Regardless of any discomfort, *Interstate Circuit* launched the notion of the hub-and-spoke conspiracy, albeit without coining the name.

C. BRINGING IN THE LAST PIECE—THE PHARMACEUTICAL SUPPLY CHAIN

As pricing and other AI algorithms advance, competition officials have begun to examine the potential implications. For example, recognizing the increasing popularity and capability of algorithmic decision making, the intergovernmental Organization for Economic Co-operation and Development (“OECD”) held roundtables in June 2017 and again in June 2023 for experts to discuss and explore the potentially anticompetitive effects of widespread use of algorithms.⁸⁸ In the U.S., legislation has been proposed to regulate the use of algorithms to facilitate collusion,⁸⁹ the Federal Trade Commission (“FTC”) has published multiple statements setting out its position with respect to algorithms,⁹⁰ and the Department of Justice (“DOJ”) is stepping up its antitrust enforcement efforts.⁹¹

Potential concerns over algorithmic collusion are heightened in markets where competition is concentrated within a small number of firms. One such market is the U.S. pharmaceutical drug market. As will be described in more detail later,⁹² the pharmaceutical drug market is mindbogglingly complex, and much ink has been spilled over the rising

87 *Interstate Cir.*, 306 U.S. at 240.

88 See *Algorithms and collusion*, OECD, <https://www.oecd.org/competition/algorithms-and-collusion.htm> (last visited Sept. 20, 2024); *Algorithms and collusion: Competition policy in the digital age*, OECD (Sept. 14, 2017), <https://www.oecd.org/competition/algorithms-collusion-competition-policy-in-the-digital-age.htm>.

89 See Press Release, Sen. Amy Klobuchar, *Klobuchar, Colleagues Introduce Antitrust Legislation to Prevent Algorithmic Price Fixing* (Feb. 2, 2024), <https://www.klobuchar.senate.gov/public/index.cfm/2024/2/klobuchar-colleagues-introduce-antitrust-legislation-to-prevent-algorithmic-price-fixing>.

90 See, e.g., Hannah Garden-Monheit & Ken Berber, *Price fixing by algorithm is still price fixing*, Fed. Trade Comm'n Bus. Blog (Mar. 1, 2024), <https://www.ftc.gov/business-guidance/blog/2024/03/price-fixing-algorithm-still-price-fixing>; Andrew Smith, *Using Artificial Intelligence and Algorithms*, Fed. Trade Comm'n Bus. Blog (Apr. 8, 2020), <https://www.ftc.gov/business-guidance/blog/2020/04/using-artificial-intelligence-algorithms>; see also Press Release, *infra* note 130; FTC-DOJ Workshop, *supra* note 14.

91 See text accompanying *infra* notes 131-138.

92 See *infra* Section II.C.

prices of prescription drugs.⁹³ Important for now, however, is that at the center of more visible players—such as the drug makers and the health plans—lies the pharmacy benefit managers. Pharmacy benefit managers, or PBMs, stand in the middle of the prescription drug supply network offering services to the other players, the manufacturers, the health plans, and the pharmacies.⁹⁴ The concern is that if these middlemen, armed with copious nonpublic data from the players they service in the drug market, turn increasingly to algorithmic decision making, they could become hubs through which they and other players in the market can collude.

II. THE BASIC CONCEPTS IN A MODERN SETTING

The basic competition doctrines have been on the books for almost a century. In addition, the structure of the modern pharmaceutical supply chain developed long before generative AI systems like ChatGPT burst onto the scene. Nevertheless, the modern pathways of AI—which travel well beyond the contours of generative AI systems—are prompting new concerns for competition law.

A. THE AGE OF AI ALGORITHMS

AI has breathed new life into the topic of pricing algorithms and hub-and-spoke conspiracies, with new cases placing the focus on how algorithm providers and/or developers facilitate collusion.⁹⁵ As outlined above pricing algorithms have undergone an evolution brought about by warp-speed advances in the field of AI, similar to the evolution brought about by chat-bots. In particular, older pricing algorithms were rule-based programs which took manually inputted pieces of data—such as market demand, supply levels, and competitor pricing—and applied a preprogrammed set of rules to the inputs to compute and return an optimal price.⁹⁶ Consider the way one might punch numbers and functions into a calculator to obtain a solution. The calculator takes the user’s input, runs it through its preprogrammed rules and calculates the correct answer. These traditional pricing algorithms relied heavily on human input.⁹⁷ Just as with the

93 See, e.g., William V. Padula, *State and Federal Policy Solutions to Rising Prescriptions Drug Prices in the U.S.*, 22 J. Health Care L. & Pol’y 15 (2019); Arielle Bosworth et al., Off. of Health Pol’y, Dep’t of Health and Hum. Serv., HP-2023–25, *Changes in the List Prices of Prescription Drugs, 2017–2023* (2023); Sydney Lupkin, *Senators ask CEOs why their drugs cost so much more in the U.S.*, NPR (Feb. 8, 2024, 5:35 PM), <https://www.npr.org/sections/health-shots/2024/02/08/1230174586/high-us-drug-prices>.

94 See generally Rebecca Robbins & Reed Abelson, *The Opaque Industry Secretly Inflating Prices for Prescription Drugs*, N.Y. Times (June 21, 2024), <https://www.nytimes.com/2024/06/21/business/prescription-drug-costs-pbm.html?smid=url-share>; Secret Handshakes, *supra* note 14, at 11–17 (Cambridge Univ. Press 2019).

95 See *supra* note 11.

96 See, e.g., Zach Y. Brown & Alexander MacKay, *Competition in Pricing Algorithms*, 15 Am. Econ. J.: Microeconomics 109, 115–16 (2023) (explaining how a pricing algorithm determines prices using a formula.)

97 See, e.g., *AI Revenue Management: Hands-On Experience Building a System for Airline Dynamic Pricing*, AltexSoft (Apr. 4, 2024), <https://www.altexsoft.com/blog/ai-revenue-management-dynamic-pricing/> (describing the early approach by airlines to forecast demand for flights and adjust prices based “mainly on the gut feeling of industry experts” which was used to build pricing models).

case of chatbots, however, pricing algorithms are now increasingly powered by machine learning.⁹⁸

Although there are many different ways an AI algorithm⁹⁹ could work, the crucial leap forward is in the modern AI algorithm's relative independence from humans and its ability to adapt and learn.¹⁰⁰ Pricing and other AI algorithms today are trained to learn and adapt by ingesting swathes of data and identifying patterns and correlations in new data that even humans may not have recognized.¹⁰¹ These AI algorithms are likely to become more accurate over time, as both the science improves and the algorithms' input data and learning improve.¹⁰² As Calvano, Calzolari, Denicolo and Pastorello succinctly put it:

[A]lgorithmic pricing is not new, but the software has recently evolved from rule based to reinforcement learning programs. These latter programs are much more “autonomous” than their precursors. Powered by [AI], they develop their pricing strategies from scratch, engaging in active experimentation and adapting to the evolving environment. In this learning process, they require little or no external guidance.¹⁰³

Pricing algorithms can have procompetitive effects.¹⁰⁴ Nevertheless, particularly in concentrated industries, where there is a high risk of using the same algorithm or similar algorithms trained on the same datasets, the use of AI algorithms might lead to uniform excessive prices.¹⁰⁵ These pricing algorithms have, thus, unsurprisingly formed the basis of many hub-and-spoke antitrust cases.

For example, in *Meyer v. Kalanick*,¹⁰⁶ an Uber rider filed an action against Uber co-founder Travis Kalanick alleging that Kalanick “conspired with Uber drivers to use Uber’s pricing algorithm to set the prices charged to Uber riders, thereby restricting

98 See generally Qiaochu Wang et al., *Algorithms, Artificial Intelligence and Simple Rule Based Pricing* (Apr. 24, 2023) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4144905 (describing different types of pricing algorithms and studying their respective effectiveness); Marco Bertini & Oded Koenigsberg, *The Pitfalls of Pricing Algorithms*, Harv. Bus. Rev. (Sept.-Oct. 2021), <https://hbr.org/2021/09/the-pitfalls-of-pricing-algorithms> (describing AI pricing algorithms as those algorithms that are “intended to help firms determine optimal prices on a near real-time basis.”).

99 AI algorithm is not a term of art, but we use it throughout this paper to distinguish it from its more primitive ancestor, the traditionally programmed algorithm.

100 Emilio Calvano et al., *Artificial Intelligence, Algorithmic Pricing and Collusion*, 110 Am. Econ. Rev. 3267, 3268 (2020) (studying experimentally the effects on pricing when applying artificial intelligence algorithms to oligopoly environments).

101 See, e.g., *id.*

102 *Id.*

103 *Id.*

104 See, e.g., Calvano et al., *supra* note 12; Bruno Salcedo, *Pricing Algorithms and Tacit Collusion* (Nov. 1, 2015), <https://brunosalcedo.com/docs/collusion.pdf> (unpublished manuscript); John Asker et al., *Artificial Intelligence and Pricing: The Impact of Algorithm Design* (Nat’l Bureau of Econ. Rsch., Working Paper No. 28535, 2021).

105 See, e.g., Brown & Mackay, *supra* note 92; *infra* Section II.B.

106 *Meyer v. Kalanick*, 174 F. Supp. 3d 817 (S.D.N.Y. 2016).

competition among drivers to the detriment of Uber riders.”¹⁰⁷ The plaintiff alleged that by using the Uber app, drivers agreed not to compete on price and to set their fee as determined by the Uber algorithm.¹⁰⁸ Moreover, Uber’s “surge pricing” model, a feature of the Uber app that increases standard ride fares during times of high demand, allegedly led to pricing above what would be charged in a normal competitive market.¹⁰⁹ The plaintiffs relied on evidence Uber organized events for drivers, and provided drivers with information about upcoming popular events that would likely boost demand for Uber drivers.¹¹⁰ Remarkably, Uber allegedly occupied eighty percent of the market for “mobile app-generated ride-share” services, with its chief competition, Lyft, occupying a mere twenty percent of the market.¹¹¹ Kalanick was eventually successful in forcing the case into arbitration,¹¹² although not before the District Court had a chance to consider Kalanick’s motion to dismiss.

At the motion to dismiss stage, Kalanick relied heavily on the lack of any horizontal agreement among the drivers to argue that there was no evidence of a conspiracy.¹¹³ Kalanick argued that each driver *independently decided* that it was in his or her best interest to enter into contract with Uber, which facilitates payment and rider-matching.¹¹⁴ Kalanick argued that while it was a condition of the agreement with Uber that drivers use Uber’s pricing algorithm, this did not diminish the independence of the drivers’ decisions.¹¹⁵ In other words, Kalanick sought to classify the case as one of pure tacit collusion (one without any plus factors), rather than express collusion. The District Court denied Kalanick’s motion to dismiss and, in the process, recognized the capacity of technological advancements to facilitate this type of collusion:

Defendant argues, however, that plaintiff’s alleged conspiracy is “wildly implausible” and “physically impossible,” since it involves agreement “among hundreds of thousands of independent transportation providers all across the United States.” [] Yet as plaintiff’s counsel pointed out at oral argument, the capacity to orchestrate such an agreement is the “genius” of Mr. Kalanick and his company, which, through the magic of smartphone technology, can invite hundreds of thousands of drivers in far-flung locations to agree to Uber’s terms. [] The advancement of

107 *Id.* at 820.

108 *Id.* at 822–23.

109 *Id.* at 821.

110 *Id.*

111 Recall that this market concentration at the hub level—as opposed to the spoke level—also existed in *Interstate Circuit*. *See id.*

112 Kalanick argued that as a rider, Meyer was bound by the compulsory arbitration clause in the terms of service. In 2016, the District Court held that Meyer was not bound by the terms of service, but that order was subsequently vacated by the Second Circuit and remanded back to the District Court in 2017. In 2018, the case was sent to arbitration. The arbitrator found for Kalanick and Uber.

113 Meyer v. Kalanick, 174 F. Supp. 3d 817, 823 (S.D.N.Y. 2016).

114 *Id.*

115 *Id.*

technological means for the orchestration of large-scale price-fixing conspiracies need not leave antitrust law behind.¹¹⁶

Uber is the hub, and the spokes are the uber drivers. Indeed, technology has advanced even further in the eight years since the Uber judgment. In *In re RealPage*,¹¹⁷ a company that provided rental-property pricing software, took pricing and supply data from property owners and managers and used its software to produce price recommendations for rental units.¹¹⁸ The company is said to have acted as a hub by serving as an intermediary between the horizontal property owner and manager competitors. The plaintiffs, private lessees, alleged that RealPage promised its lessor clients that they will outperform the market with software that uses a database of rental prices in each client's area (including competitors' prices) and provides the optimal price to charge prospective tenants.¹¹⁹ Users of RealPage's software must allow the company to use their pricing and supply data in its algorithms to help the client set their own rent prices but also to help set rent prices of its horizontal competitors.¹²⁰ By 2022, RealPage's software was being used to price over four million multifamily housing units across the United States.¹²¹

The RealPage case involved consolidated class actions in multidistrict litigation. Both classes alleged a hub-and-spoke conspiracy, although the evidence differed for each, and the case also involved other allegations. The district court ruled on the motion to dismiss in December of 2023, granting dismissal in part and denying dismissal in part. On the hub- and-spoke allegations, the court held that although the evidence alleged was not sufficiently strong to fall within the purview of a per se finding for either class,¹²² one of the classes alleged sufficient factors to constitute a plausible allegation under the rule of reason.¹²³

RealPage had urged the court to fully dismiss the hub-and-spoke allegations based on *Gibson*, in which the district court dismissed allegations that a group of Las Vegas hotels used a revenue management system to collude in setting room rates. The court was not convinced by the *Gibson* comparison, however, pointing out that unlike *Gibson* where it was unclear whether the revenue management system recommendations were based on confidential inputs, the plaintiffs here alleged that RealPage's software produces recommendations based on confidential competitor inputs.

In rejecting the *Gibson* comparison, the court emphasized the undisputed evidence that each client provided RealPage its proprietary commercial data *knowing* that it would require the same from its horizontal competitors in order to recommend rental prices.¹²⁴

116 *Id.* at 825–26 (emphasis added).

117 *In re RealPage, Inc.*, No. 3:23-md-3071 (M.D. Tenn. Dec. 28, 2023).

118 *Id.*

119 *Id.*

120 *Id.*

121 *Id.*

122 *Id.* at 23, 24.

123 *Id.* at 30.

124 *Id.*

In other words, sharing one's proprietary information generally is not in one's own interests. Thus, absent knowing that competitors would follow suit, the "spokes" chose an action that would have been against their interests and in this kind of case, knowing that competitors would follow suit can thus provide plausible evidence of engaging in a conspiracy.

Again, in line with *Interstate Circuit*, this case turned on the knowledge of the horizontal competitors. As the court put it:

It would clearly not be in any individual Defendant's economic self-interest to contribute its data to RealPage without knowing that it would benefit from its horizontal competitors doing the same. Put another way, the contribution of sensitive pricing and supply data for use by RealPage to recommend prices for competitor units is in Defendants' economic self-interest if and only if Defendants know they are receiving in return the benefit of their competitors' data in pricing their own units.¹²⁵

In a similar vein, a series of cases relating to real property have arisen, each alleging that a pricing algorithm enabled competitors to collude.¹²⁶ In *Duffy v. Yardi*,¹²⁷ the plaintiff alleged that a group of landlords used Yardi's pricing algorithms to allegedly inflate rental prices.¹²⁸ Specifically, the plaintiffs alleged that Yardi and its clients exchanged confidential information with each other through Yardi's automated pricing software, as well as that the defendants engaged in direct conversations with their competitors about pricing through market surveys.¹²⁹ Along the same lines, in *Cornish-Adebisi v. Caesars*,¹³⁰ the plaintiffs alleged that a group of hotels used a revenue management company called Cendyn, which provides an algorithmic pricing software known as "Rainmaker" that gathers real-time pricing and occupancy data from the hotels, to generate an optimal room rate for the hotels at supra-competitive rates.¹³¹

As outlined above, this phase of antitrust action against algorithmic collusion was shaped initially by aggrieved private litigants. Although the DOJ and the FTC had been increasingly vocal over the use of algorithms and the attendant anticompetition

125 *Id.*

126 See, e.g., *Gibson v. MGM Resorts Int'l*, No. 2:23-cv-00140-MMD-DJA (D. Nev. Oct. 24, 2023) (alleging unlawful restraint of trade by multiple hotels agreeing to use a common third-party pricing software).

127 Class Action Complaint, *Duffy v. Yardi*, No. 2:23-cv-1391 (W.D. Wash. Sept. 8, 2023), ECF No. 1.

128 *Id.* ¶¶ 4–5.

129 *Id.* ¶¶ 4–5, 18.

130 Class Action Complaint, *Cornish-Adebisi v. Caesars*, No. 1:23-cv-2536 (D.N.J. May 9, 2023), ECF No. 1.

131 *Id.* ¶¶ 5–6, 12–13.

risk factors,¹³² until August 2024, this was largely relegated to filing joint statements of interest in pending algorithmic collusion cases.¹³³ The trajectory of antitrust enforcement concerning pricing algorithms is now, however, witnessing a seismic shift. What began as a series of lawsuits spearheaded by aggrieved private parties has now burgeoned into a broader regulatory offensive marked by the DOJ’s lawsuit against RealPage, Inc., and their landlord clients.¹³⁴ In its recent lawsuit the DOJ, joined by 8 states, alleges various violations of antitrust law, underscoring two crucial facts that the District Court had emphasized in *In Re RealPage*.¹³⁵ First, the DOJ asserted that each landlord used RealPage’s software “**knowing or learning** that RealPage will use this data to train its models and provide . . . pricing not only for the landlord, but for the landlord’s competitors (and vice versa).”¹³⁶ Second, the DOJ stressed that each landlord had agreed to provide to each other “nonpublic, competitively sensitive transactional data” through providing such data to RealPage for use in its algorithmic models.¹³⁷

The DOJ further argued that in certain industries, such as the rental multifamily housing industry, widespread use of algorithms can facilitate coordination among competitors making such use more likely to “restrain, rather than promote, competition.”¹³⁸ Specifically, the DOJ identified inelastic demand for rental housing, and concentration among landlords in local markets as “industry characteristics [that] exacerbate the harm to the competitive process[.]”¹³⁹ Although the connection between rental properties and pharmaceutical drugs may not be immediately apparent, the inelastic demand and market concentration that the DOJ identified could, as will be shown below, just as well be used to describe the pharmaceutical drug industry.¹⁴⁰

132 Alden Abbott, *Why Antitrust Regulators Are Focused On Problematic AI Algorithms*, Forbes (Mar. 13, 2024, 12:14 PM), <https://www.forbes.com/sites/aldenabbott/2024/03/13/why-antitrust-regulators-are-focused-on-problematic-ai-algorithms/>; Press Release, Fed. Trade Comm’n, FTC Restores Rigorous Enforcement of Law Banning Unfair Methods of Competition (Nov. 10, 2022) (on FTC website, <https://www.ftc.gov/news-events/news/press-releases/2022/11/ftc-restores-rigorous-enforcement-law-banning-unfair-methods-competition>); Statement of Interest of the United States, *Cornish-Adebiyi*, 1:23-cv-2536 (D.N.J. Mar. 28, 2024), ECF No. 96.

133 See Statement of Interest of the United States, *In re: RealPage*, No. 3:23-md-3071 (M.D. Tenn. Nov. 15, 2023), ECF Nos. 627, 628; Statement of Interest of the United States, *Duffy*, No. 2:23-cv-1391 (W.D. Wash. Mar. 1, 2024), ECF No. 149; Statement of Interest of the United States, *Cornish-Adebiyi*, 1:23-cv-2536 (D.N.J. Mar. 28, 2024), ECF No. 96.

134 United States v. RealPage Inc., No. 1:24-cv-00710 (M.D.N.C., Aug. 23, 2024).

135 See *supra* text accompanying notes 113–121.

136 Complaint at ¶¶ 225, 237–40, No. 1:24-cv-00710 (M.D.N.C., Aug. 23, 2024) (emphasis added).

137 *Id.* at ¶¶ 226–27, 236.

138 *Id.* at ¶ 76.

139 *Id.* at ¶ 73.

140 See *infra* Section II.C.

Although the cases described above concern the use of AI algorithms in the context of real property, AI algorithms are ubiquitous.¹⁴¹ For example, in May 2024, a class action complaint was filed on behalf of healthcare providers against a company that provided a pricing algorithm to health plans.¹⁴² The complaint alleges that MultiPlan, Inc., a company that helps health plans “identify and negotiate fair reimbursements for out-of-network claims[.]”¹⁴³ suppressed and fixed the rates at which its health plan clients reimbursed providers for out-of-network services.¹⁴⁴ According to the plaintiffs, plans including the powerhouses Cigna, Aetna, and UnitedHealth¹⁴⁵ agreed to allow MultiPlan to use their “competitively sensitive reimbursement data to help drive [MultiPlan’s] algorithm[.]” which “repriced” out-of-service providers’ reimbursement rates to “near-uniform suppressed rates[.]”¹⁴⁶ The plaintiffs argue that this collusion is a per se horizontal price-fixing conspiracy and that, in the alternative, the conduct constitutes an unlawful hub-and-spoke conspiracy.¹⁴⁷ As will be discussed,¹⁴⁸ under the right market conditions, algorithmic decision-making tools make collusion amongst competitors not just a possibility, but a near certainty.

B. EXISTING LITERATURE ON AI AND COMPETITION

As previously discussed, the use of algorithms is not new. However, academic literature discussing the impact of AI on competition law is a more recent development. In a series of publications, Professors Ezrachi and Stucke make significant strides in

141 Zach Brown & Alexander MacKay, *Are Online Prices Higher Because of Pricing Algorithms*, Brookings, <https://www.brookings.edu/articles/are-online-prices-higher-because-of-pricing-algorithms/> (July 7, 2022) (discussing the use of pricing algorithms by online retailers); Holli Sargeant, *Algorithmic Decision-Making in Financial Services: Economic and Normative Outcomes in Consumer Credit*, 3 AI & Ethics 1295 (2023) (discussing the use of algorithms in consumer credit markets); Bernard Marr, *The True Value Of Data and AI in Human Resources*, Forbes (Dec. 5, 2023, 2:55 AM), <https://www.forbes.com/sites/bernardmarr/2023/12/05/the-true-value-of-data-and-ai-in-human-resources/> (discussing the use of algorithms in Human Resources departments); Jeremy Bowman, *How AI is Being Used in the Travel Industry*, Motley Fool (Aug. 5, 2024, 11:52 AM), <https://www.fool.com/investing/stock-market/market-sectors/information-technology/ai-stocks/ai-in-travel/> (discussing the use of algorithms in the travel industry); Neil Sahota, *Streaming into the Future: How AI Is Reshaping Entertainment*, Forbes (Mar. 18, 2024, 10:00 AM), <https://www.forbes.com/sites/neilsahota/2024/03/18/streaming-into-the-future-how-ai-is-reshaping-entertainment/#> (discussing the use of algorithms in the streaming industry).

142 Live Well Chiropractic PLLC v. Multiplan, Inc. et al, No. 1:24-cv-03680 (N.D. Ill. filed May 6, 2024).

143 It is difficult to describe in one sentence what Multiplan does. On its website under “About Multiplan” the company simply states that “MultiPlan’s team of experts helps healthcare payors manage the cost of care, improve their competitiveness and inspire positive change.” MultiPlan, <https://www.multiplan.us/> (last updated July 19, 2024).

144 Class Action Complaint at ¶ 2, *Live Well Chiropractic PLLC*.

145 *Id.*

146 *Id.* at ¶¶ 6, 9.

147 *Id.* at ¶ 11

148 See *infra* Section II.B.

helping frame the way one might think about algorithmic collusion.¹⁴⁹ They identify four scenarios of collusion that might occur using computer algorithms. They call these scenarios: Messenger, Hub-and-spoke, Predictable Agent, and Autonomous Machine.¹⁵⁰

In the Messenger scenario, humans orchestrate the collusion but are aided by computers.¹⁵¹ Professors Ezrachi and Stucke explained that in this “basic” scenario, the enforcement is straightforward.¹⁵² An agreement between the humans to collude and restrict competition does not become legal just because they used a machine to facilitate it.¹⁵³

Their second category, Hub-and-spoke, envisions a single algorithm dictating market prices that will be charged by multiple users of the algorithm.¹⁵⁴ The authors argue that in this scenario, although a single agreement between the algorithm provider and the user may not in itself produce any anticompetitive effect, the result could become anticompetitive if a cluster of such agreements exists.¹⁵⁵ They emphasize the importance of intent evidence here, in what they view as a “classic hub-and-spoke conspiracy,” and give the example of companies agreeing to use the same algorithm to raise prices.¹⁵⁶

Predictable Agent, their third category, involves humans each separately designing a machine to achieve a specific goal by reacting to definite changes in the market.¹⁵⁷ Assuming no intentional agreement or coordination in the market exists, but that an industry adopts similar algorithms, Ezrachi and Stucke argue that such a market “may exhibit the conditions for tacit collusion.”¹⁵⁸

The final scenario, the Autonomous Machine, hypothesizes a market in which competitors separately and independently create a computer algorithm to achieve a definite goal, and the machines autonomously, through self-learning, decide how to achieve the goal.¹⁵⁹ Ezrachi and Stucke regard this category of possible collusion to be most tricky.¹⁶⁰

Ezrachi and Stucke’s framework provides a useful tool for conceptualizing the ways in which AI might impact competition law. In this paper, however, we consider AI and

149 Ezrachi & Stucke, *supra* note 12; Ariel Ezrachi & Maurice E. Stucke, *Sustainable and Unchallenged Algorithmic Tacit Collusion*, 17 Nw. J. Tech. & Intell. Prop. 217 (2020); Ariel Ezrachi & Maurice E. Stucke, *The Role of Secondary Algorithmic Tacit Collusion in Achieving Market Alignment*, 26 Vand. J. Ent. & Tech. L. 461 (2024); Ariel Ezrachi & Maurice E. Stucke, *Virtual Competition: The Promise and Perils of the Algorithm-Driven Economy* (Harv. Univ. Press 2016).

150 Ezrachi & Stucke, *supra* note 12, at 1782–84.

151 *Id.* at 1782.

152 *Id.*

153 *Id.* at 1785.

154 *Id.* at 1782.

155 *Id.*

156 *Id.*

157 *Id.* at 1783.

158 *Id.*

159 *Id.*

160 *Id.* at 1783–84.

competition in its industry context. Indeed, Ezrachi and Stucke recognized that some markets will be more susceptible to algorithmic collusion than others: “Undoubtedly, concerns within the legal and economic communities about the phenomenon increased with the improvement in computing power that enabled more robust market data collection. In concentrated markets, algorithmic tacit collusion may form a business strategy rather than merely reflect a market outcome.”¹⁶¹

The next sections, therefore, build on Feldman’s earlier work regarding both the pharmaceutical supply chain and competition concerns posed by algorithms.¹⁶² We will take a deeper dive into how hub-and-spoke collusions may arise specifically in the pharmaceutical drug market and how AI algorithms could exacerbate already significant antitrust concerns.

C. THE PHARMACEUTICAL DRUG INDUSTRY: ALL ROADS LEAD TO PBMS

The pharmaceutical drug-delivery system, which brings a drug from the manufacturer across multiple steps to the consumer, is staggeringly complex.¹⁶³ For example, pharmaceutical companies invest in research and develop a brand drug; physicians write prescriptions for the drug; pharmacies fill the prescriptions; and health insurance plans, or employer-sponsored plans, foot the bill (the payor). Finally, there is the patient. These players will no doubt be familiar. However, weaved in among these players are intermediaries who may be foreign. These are Group Purchasing Organizations, Wholesalers, Pharmacy Services Administrative Organizations, and arguably the most central intermediary of them all, Pharmacy Benefit Managers (PBMs) and their consultants. To try to follow the pharmaceutical drug distribution pipeline, one would eventually come across a PBM.¹⁶⁴ In theory, PBMs work for the payor, helping to ensure that claims are processed properly and to keep drug prices low. However, as will become clear, the interests of the PBMs and the payors often diverge.

PBMs offer various services to the payor. First, PBMs help payors process patient and pharmacy claims.¹⁶⁵ After you see the doctor, your doctor’s office submits a bill to the insurer. Although the bill is submitted to the payor, it is the PBM that processes the claim to figure out the coverage that you—the patient—has, whether any copayments are needed, whether you have met your deductible, and ultimately what the insurance needs to pay. The next stage arises when you go to the pharmacy to obtain medicine prescribed to you. The pharmacy will likely charge you an out-of-pocket fee for the

161 Ezrachi & Stucke, *The Role of Secondary Algorithmic Tacit Collusion in Achieving Market Alignment*, *supra* note 148, at 472.

162 *See supra* note 14.

163 *See, e.g.*, Secret Handshakes, *supra* note 14, at 16 (a chart illustrating the complicated flow of money and drug products, and the numerous players involved in the system); Inmaculada Hernandez & Anna Hung, *A Primer on Brand-Name Prescription Drug Reimbursement in the United States*, 30 J. Managed Care & Specialty Pharm. 99, 99 (2024) (setting out the various players and their roles in the “complex enterprise” of prescription drug distribution).

164 For a succinct but comprehensive walkthrough of the pharmaceutical drug pipeline, see Hernandez & Hung, *supra* note 163.

165 *See id.*; Secret Handshakes, *supra* note 14.

prescription, which may reflect your deductible and/or copayments or coinsurance under your policy. After the pharmacy charges you, however, it submits a claim to the PBM for reimbursement of the insurer's share of the prescription dispensed. This is because pharmacies front much of the cost of the drugs when first obtaining the drugs from wholesalers, so the drugs will be sitting on the shelves when the patient walks in. Thus, in addition to processing your doctor's claim, the PBMs also process these claims from pharmacies based on the rate that the PBMs previously negotiated with the pharmacy.

Second, PBMs negotiate drug prices with drug manufacturers on behalf of payors.¹⁶⁶ How does this work? A drug company sets an initial price for its drug; this is the drug's list price. A PBM representing a payor says to the drug company, "I have one million lives under this payor's plan; I can offer you access to these patients, in return for a discount on the drug." This is a request for a simple volume discount. Put simply, if the pharmaceutical company can boost its sales volume of the drug that they manufacture, the company's overall revenue may increase even if that means tightening the profit margin per unit. Thus, pharmaceutical companies agree to give a discount, which in this industry, comes in the form of a rebate delivered to the plan later on, rather than as a discount on the price at the front end.

As the industry has evolved, however, the PBMs' remuneration from their payor clients is based on the rebate that the PBM promised to achieve.¹⁶⁷ Thus, the payor might say to its PBM, "negotiate the biggest discount you can get on the drug prices, and I'll give you half the discount." Of course, the PBM *could* try to negotiate tooth and nail with the pharmaceutical company to bring the list price of a drug down. However, should the pharmaceutical company simply decide to increase the list price and offer a bigger rebate, a PBM can hardly be expected to resist. It's a win-win: The PBM gets paid significant sums of money, and the pharmaceutical company can expect high sales volume from the happy PBM. In this way, the original lofty goal of helping its payor client keep drug prices low is subverted by the PBM's own financial interests.

As a side note, on top of payment from the payors for their services, PBMs also get paid by the pharmaceutical companies—the very same companies with whom they are supposed to negotiate. A recent study funded by the Pharmaceutical Research and Manufacturers of America (PhRMA) identified at least three additional sources of income for PBMs paid by the manufacturer: administrative fees, data and data portal fees, and the group purchasing organization vendor fees.¹⁶⁸ These fees generally rise when drug prices rise, again aligning the interests of the intermediary and the drug companies—

166 See Hernandez & Hung, *supra* note 163; Secret Handshakes, *supra* note 14.

167 See Secret Handshakes, *supra* note 14, at 19–20 nn.4–8. It is worth noting that PBMs' contracts with their payor clients are based on the rebate levels that the PBM *thinks* it can achieve. The actual rebate negotiated between PBM and drug company is never divulged to the payor. See Secret Handshakes, *supra* note 14, at 19.

168 Pharmacy Group Purchasing Organizations (GPOs) are a relatively new invention in the PBM industry. It is unclear what benefits GPOs provide, if any, and at least some commentators consider GPOs to be yet another cloaking vehicle for PBMs to hide behind. Eric Percher, *Trends in Profitability and Compensation of PBMs and PBM Contracting Entities*, Nephron Rsch. (Sept. 18, 2023), <https://nephronresearch.com/trends-in-profitability-and-compensation-of-pbms-and-pbm-contracting-entities/>.

given that both benefit when prices go up—against whom they are supposed to be negotiating vigorously.

Apart from volume, PBMs hold another key, one that opens the gate to the formulary.¹⁶⁹ Formularies are yet another confusing aspect of the U.S. healthcare system. The formulary is a list of drugs covered by a health plan. If a drug is not on a health plan's formulary, patients will not be reimbursed by the plan if they purchase the drug. In a formulary, drugs are divided into tiers, in which each tier represents a level of patient cost-sharing.¹⁷⁰ In addition to cost-sharing, the drug might also be subject to what is known as "utilization management"—a set of restrictions on that drug to reduce costs for the payor—which, unless satisfied, could result in the drug price not being covered by the plan. These utilization management restrictions could require patients to obtain prior authorization from the plan before they fill their prescription. Another common utilization management tool is to restrict the quantity of a drug that will be covered by the plan. The formulary, therefore, not only lists all the drugs that the plan will cover, but also determines the extent of the patients' out of pocket costs and the ease with which a patient can obtain (and a physician can prescribe) the drug through utilization management.¹⁷¹ Thus, PBMs are, quite literally, the gatekeepers to whether and how a drug will be covered by payors.

Drug manufacturers want their drugs to be on the formulary, and they also want their drugs in favorable positions on the formulary,¹⁷² ideally with as few utilization controls as possible. If a competing drug in the same class could be excluded from the formulary, then that would be great for the manufacturer, too.¹⁷³ Who holds the key to the formulary? The PBMs, a fact that is not immediately obvious to most. Often, on health plan websites, formulary decisions are said to be made by a pharmacy and therapeutics (P&T) committee (or equivalent entity) of doctors and pharmacists,¹⁷⁴ who consider the drug's effectiveness,

169 For a template formulary, see Model Part D Comprehensive Formulary (Aug. 8, 2005), https://www.hhs.gov/guidance/sites/default/files/hhs-guidance-documents/comprehensive%20formulary-model_pdp_12_0.pdf. For a real example, see Blue Shield Cal., Blue Shield Rx Plus (PDP) 2024 Formulary (List of Covered Drugs) (Aug. 20, 2024), <https://blueshieldca.adaptiverx.com/web/pdf?key=8F02B26A288102C27BAC82D14C006C6FC54D480F80409B68BEC6880E527BF1C2>.

170 See Cole Werble, *Formularies*, Health Affs. (Sept. 14, 2017), <https://www.healthaffairs.org/content/briefs/formularies>.

171 T. Joseph Mattingly 2nd et al., *Pharmacy Benefit Managers: History, Business Practices, Economics, and Policy*, 4 *Jama Health F.* 1, 3 (2023); Secret Handshakes, *supra* note 14, at 13.

172 A favorable position on the formulary is usually one where a branded product is placed on a lower cost-sharing tier or where it is subject to fewer utilization controls than a generic alternative. See Mariana P. Socal et al., *Favorable Formulary Placement of Branded Drugs in Medicare Prescription Drug Plans When Generics Are Available*, 179 *JAMA Internal Med.* 832 (2019).

173 See Secret Handshakes, *supra* note 14, at 20 nn.10–13.

174 See *Formulary Management*, AMCP (last visited Sept. 26, 2024), <https://www.amcp.org/about/managed-care-pharmacy-101/concepts-managed-care-pharmacy/formulary-management#:~:text=The%20medications%20and%20related%20products,in%20the%20health%20care%20field>. See also Robert B. Goldberg, *Managing the Pharmacy Benefit: The Formulary System*, 26 *J. Managed Care & Specialty Pharmacy* 341 (2020).

safety, and cost.¹⁷⁵ However, when one looks closely, our omnipresent friend rears its head again. PBMs offer formulary design services. For many plans, rather than having its own P&T committee, the plan chooses to contract with a PBM for its formulary design services. The PBM, using its own P&T committee or equivalent, then performs the role of developing formularies for the plan, saving the plan significant amounts of administrative labor.¹⁷⁶ There is no doubt that the PBMs hold great power through their control over formulary design, and formulary design can have a significant effect on patients.¹⁷⁷

The PBM's salient position in the pharmaceutical drug supply network gives it unparalleled access and control over nonpublic claims data. As processor of patient and even pharmacy claims, the PBM possesses a wealth of information that provides insight into consumer buying patterns: the impact of different drug formulary positions on consumer behavior, the effect of pricing and utilization management decisions, etc. The data flows from more than a single plan. The PBM has that data with respect to patients covered by each of the payors it works for. No single payor has access to this wealth of nonpublic data. Even within a single payor, the contract that a payor signs with the PBM usually allows only limited audit rights if any at all. Furthermore, the PBM does not divulge any information with respect to its negotiations with the pharmaceutical companies, not even the rebated price *per drug*.¹⁷⁸ This secrecy that the PBMs perpetrate keeps the extent of rebates obtained, the net price per drug negotiated, and the PBMs' remuneration structures hidden. In short, this creates an information asymmetry. Although this has led to recent calls for legislation that would force PBMs to disclose their remuneration

175 *Drug formulary FAQs*, Blue Shield Cal. (last updated Oct. 1, 2023), <https://www.blueshieldca.com/en/home/be-well/pharmacy/formulary-faqs> (under “How are Blue Shield drug formularies developed?”: “The Blue Shield Pharmacy and Therapeutics (P&T) Committee develops Blue Shield drug formularies. The P&T Committee reviews medical literature concerning safety, effectiveness, and current use in therapy to determine which drugs should be included on our formularies. The medical information reviewed is from a variety of nationally recognized sources such as Medline, other databases, pharmaceutical manufacturers, medical professional associations, and peer-reviewed journals.”); *Medicare Drug List Formulary*, Cigna Healthcare <https://www.cigna.com/medicare/member-resources/drug-list-formulary> (last updated Mar. 8, 2024) (“Cigna Healthcare doctors and pharmacists pick these drugs for their effectiveness, safety, ease of use, and cost.”).

176 See Martha M. Rumore & F. Randy Vogenberg, *PBM P&T Practices*, 42 *Health Care & L.* 330, 330 (2017) (“PBMs serve as third-party administrators of prescription programs for commercial health plans, self-insured employer plans, Medicare Part D plans, the Federal Employees Health Benefits Program, and state government employee plans. They play a critical role in the prescription drug supply chain by performing a number of P&T-related activities, such as developing, maintaining, and enforcing the formulary. . . .”); Goldberg, *supra* note 174, at 342 (“Most PBMs have their own P&T committees that develop and approve a master formulary for the PBM. The P&T committee of the MCO can then take this formulary, along with the clinical and financial research provided by the PBM, and develop its own subset or custom formulary.”).

177 Gordon D. Schiff et al., *A Prescription for Improving Drug Formulary Decision Making*, 9 *PLoS Med.* 1, 1 (2012) (“formularies can unquestionably exert a powerful influence on prescribing decisions and medication utilization.”); Rumore & Vogenberg, *supra* note 176, at 330 (“Because of the large percentage of Americans covered by PBMs, the commercial success of a drug in the U.S. depends largely on its inclusion on as many formularies as possible.”).

178 See *Secret Handshakes*, *supra* note 14, at 9 (“List prices, of course, are only the beginning of the story. Drug companies enter into a variety of contracts that provide for rebates from the list price. Although these price concessions are a closely guarded secret, and it is difficult to tease out the actual net price that different entities pay along the drug chain, the net price paid to the drug company is substantially less than the list price.” (footnote omitted)).

structure and deals with pharmaceutical companies,¹⁷⁹ these attempts have been met with rigorous pushback from the PBM industry.

In addition, the PBM industry is extremely concentrated. Just three PBMs manage roughly 80% of the U.S. prescription drug market.¹⁸⁰ Given such dominance, and the fact that pharmaceutical companies are also feeding a PBM information in the form of sensitive pricing data, the PBM will have effectively funneled multiple data sources into one, including multiple levels of data that other vertical and horizontal players cannot access. Moreover, in recent years, the PBM industry, and pharmaceutical industry more broadly, have seen aggressive consolidation through mergers and acquisitions.¹⁸¹ PBMs own and are owned by insurers. They also own their own pharmacies and increasingly have physician practices. Through these tactical corporate maneuvers over the years, the lines between PBM, pharmacy, provider, and insurer are much fuzzier than one would expect.¹⁸² Undoubtedly, the convergence of roles makes the PBM even more powerful. Nevertheless, these tactical maneuvers have largely escaped antitrust scrutiny.¹⁸³

One might wonder why health insurance companies tolerate a system that drives up the drug prices that they ultimately pay for. After all, many insurance companies are well-funded and sophisticated market players. Why would they continue to participate in a market transaction that appears to place them at a disadvantage?

A number of market factors may explain the failure of health insurers to hold the line on rising drug prices. First, an insurer's business is health care. The nitty gritty of patient and provider claims administration, adjudication, and processing is not the insurer's core business, and, therefore, may be of less interest from a business perspective. Delegating that task, however, has inadvertently led to relinquishing the data associated with all these claims—data that, as discussed, PBMs guard fiercely.

179 Congress is currently considering a number of bills that seek to address PBM-related issues, including the lack of disclosure. *E.g.*, Pharmacy Benefit Manager Transparency Act of 2023, S. 127, 118th Cong. (2023); Pharmacy Benefit Manager Reform Act, S. 1339, 118th Cong. (2023); Protecting Patients Against PBM Abuses Act, H.R. 2880, 118th Cong. (2023). One bill has already been approved by the House of Representatives. Lower Costs, More Transparency Act, H.R. 5378, 118th Cong. (2023).

180 U.S. Fed. Trade Comm'n, Off. Pol'y Planning, Pharmacy Benefit Managers: The Powerful Middlemen Inflating Drug Costs and Squeezing Main Street Pharmacies 1 (2024) ("[T]he three largest PBMs now manage nearly 80 percent of all prescriptions filled in the United States."); Adam J. Fein, *The Top Pharmacy Benefit Managers of 2023: Market Share and Trends for the Biggest Companies—And What's Ahead*, Drug Channels (Apr. 9, 2024), <https://www.drugchannels.net/2024/04/the-top-pharmacy-benefit-managers-of.html> ("For 2023, nearly 80% of all equivalent prescription claims were processed by three companies: the Caremark business of CVS Health, the Express Scripts business of Cigna, and the Optum Rx business of UnitedHealth Group.").

181 *The Role of Pharmacy Benefit Managers in Prescription Drug Markets Part II: Not What the Doctor Ordered: Hearing Before the H. Comm. on Oversight & Accountability* (2023) (statement of Hugh Chancy, RPh), <https://oversight.house.gov/wp-content/uploads/2023/09/House-Oversight-testimony-Chancy.pdf>; Adam J. Fein, *Mapping the Vertical Integration of Insurers, PBMs, Specialty Pharmacies, and Providers: A May 2024 Update*, Drug Channels (May 7, 2024), <https://www.drugchannels.net/2024/05/mapping-vertical-integration-of.html>.

182 For an alarming illustration of this problem, see *id.*

183 See, however, text accompanying *supra* note 46.

With the increasing importance of data in the modern context, that relinquishment now creates outsized disadvantages for the insurer. Thus, some insurers—particularly those who wield strength in the market through their size and patient flow—have begun to request access to their PBM’s files for claims, rebates, and other data at least with respect to its own plans. The “big three” PBMs, however, tend to move in lockstep, offering the same client terms to all comers. Conversations Feldman has had with large players suggest that they are unable to negotiate access to their own data in their contracts with the major PBMs during the complexity of contract negotiations.¹⁸⁴ Even if access is granted, an insurer would need to dedicate a significant amount of time and money to analyze—not to mention to develop the expertise—to understand and interpret the masses of complicated claims and pharmaceutical data. Smaller PBMs might be willing to deviate from the standard terms offered, but they may not have the capacity to handle a major health insurer’s flow, or they may not be able to offer the experience that a profit-making large health insurer would need to justify transferring its business. Most importantly, this discussion assumes the payor is a large and sophisticated insurance company, rather than a smaller health insurer.

Moreover, when the health insurer is a large player in the market, PBMs have begun to offer “price-protection” plans, if the insurer presses for access to its own data. Why would an insurer want to engage in the cost and difficulty of interpreting masses of complex data, when the PBM guarantees that the plan’s bottom-line costs for drugs will not increase more than 2%, 4%, or something alike? Drug prices are the only bottom-line issue clamoring for an insurer’s attention. Of course, that deal allows the current system to continue—one that locks in current high prices as a floor and can operate to disadvantage newer and less-expensive competitors, given the intricacies of the current pharmaceutical supply chain system.¹⁸⁵

In a similar vein, insurance companies, in theory, could also negotiate a pass-through of rebates. This model requires a PBM to pass on a greater percentage or all of the negotiated rebates to the insurance company as the payor.¹⁸⁶ Yet, for a PBM to agree to forego such a lucrative revenue stream, the PBM will demand certainty in the form of

184 See, e.g., Scott McEachern & Patrick Cambel, *PBM Contracts: Understand then Optimize*, Milliman White Paper (2020) (discussing the complexities of contracts with PBMs including the potential financial effects of small nuances in technical definitions); *What to Know About Contracting with Pharmacy Benefit Manager*, ProspHire (May 19, 2022), <https://www.prospshire.com/blog/how-can-a-pharmacy-benefit-manager-help-protect-you/> (“Often these [PBM] contracts contain lengthy sections filled with nuances that dictate the type of arrangement the Plan and PBM are entering. Definitions are one key section that requires complete understanding and agreement.”); Letter from PhRMA to DOJ Antitrust Div., HHS, & FTC, Request for Information on Consolidation in Health Care Markets (Docket No. ATR 102) (June 5, 2024), https://phrma.org/-/media/Project/PhRMA/PhRMA-Org/PhRMA-Refresh/Comment-Letters/PhRMA_FTC-DOJ-HHS-RFI-on-Consolidation_Final.pdf (“Lack of transparency and the complexity of PBM arrangements can make it difficult for plan sponsors to assess PBM performance on their behalf.”) [hereinafter PhRMA Letter].

185 See generally, Secret Handshakes supra note 14.

186 PBMs with full pass-through pricing models do exist. Take, for example, Costco Health Solutions, a PBM with a pass-through model that makes money solely through an administrative fee. See *Why Costco Health Solutions?*, Costco, <https://www.costcohealthsolutions.com/pages/TheCostcoDifference.aspx#:~:text=Why Costco Health Solutions%3F,any other sources of revenue> (last visited Sept. 27, 2024).

charging its insurer client higher administrative fees.¹⁸⁷ Some insurers might opt for pass-through pricing models but some might reasonably decide that all that hassle with data, plus higher administrative fees, is simply not worth it. Even in cases where PBMs do pass rebates through to the health insurer, that does not necessarily mean those savings are passed to the patients.¹⁸⁸ Critically, PBMs in the last few years have begun to outsource certain activities to what are being called “rebate GPOs,” often located off-shore—a move that insulates rebate activity from falling within the definition of money flows that must be passed through to the payor.¹⁸⁹

In addition, today the largest payors *are* the PBMs.¹⁹⁰ With recent integration, the three largest PBMs, CVS Caremark, Express Scripts, and OptumRx are vertically integrated with the three largest health insurance companies, Aetna, Cigna, and UnitedHealthcare.¹⁹¹ Indeed, according to a study by the American Medical Association, 69% of commercial drug insurance coverage in 2023 was provided by health insurers that are vertically integrated with a PBM.¹⁹² Some suggest this integration might explain why even where PBMs received significant pharmaceutical company rebates, and why, in the case where a sizeable portion of rebates were passed to the payors, less than 1% of the rebate was passed on to the patients.¹⁹³ Vertical integration is not necessarily problematic on its own. Given the intricacies of the health insurance system and the pharmaceutical supply chain industry, however, the configuration may raise concerns in certain circumstances.

The consolidation of PBMs and insurers also leaves smaller PBMs and smaller insurers in a tough position. A PBM’s value depends heavily on a network effect. The higher the number of big insurance clients it has, the more lives it can offer pharmaceutical companies, and the more it can leverage volume in negotiations against pharmaceutical companies. Thus, insurance companies will be more inclined to entrust their plans to the biggest PBMs reinforcing the industry concentration. Smaller PBMs are also hard-pressed not to partner with larger PBMs,¹⁹⁴ which again intensifies concentration in the PBM market. This occurs in a market where many large insurers have little motivation to challenge their PBMs, and smaller insurers have little bargaining power against their PBMs.

Finally, it is important to realize that in certain circumstances, the incentives can stack up in such a way that insurers might actually prefer *higher* drug prices, given unintended consequences from: 1) the way in which the Affordable Care Act of 2010 limits a plan’s

187 See Secret Handshakes *supra* note 14, at 33.

188 See H. Comm. on Oversight & Accountability, The Role of Pharmacy Benefit Managers in Prescription Drug Markets 49 (2024) (reporting that in Texas, where state laws require PBMs to file annual reports, PBMs received \$2.2 billion in manufacturer rebates, of which \$91 million were retained by PBMs, and \$2.07 billion were passed on to the payors, with only \$15 million pass on to patients.)

189 See *id.* at 33–35.

190 See text accompanying *supra* notes 178–179.

191 See *id.* See also PhRMA Letter *supra* note 183 at 5–6.

192 José R. Guardado, *Policy Research Perspectives: Competition in PBM Markets and Vertical Integration of Insurers with PBMs: 2024 Update* 10.

193 See *supra* note 184.

194 See PhRMA Letter *supra* note 183 at 5.

ability to profit from insurance dollars, unless input costs rise and 2) the fact that with Medicare plans, higher prices push patients sooner into the territory in which the government pays for more of the cost of the drug through reinsurance.¹⁹⁵ In short, as with any profit-making entity, most insurance companies are ultimately driven by the bottom line. In that context, lack of effective action from insurance companies is unsurprising.¹⁹⁶

D. PBMS AS THE HUB

In a less technologically advanced era, and before PBMs developed their current level of concentration, the idea of a PBM collecting, processing, and analyzing even nonpublic claims data might have sounded innocuous. After all, in a less technologically advanced era, processing, analyzing, and making predictions based on—often voluminous—data might seem more like a burden than an opportunity. With current technological capabilities, however, PBMs can process swathes of claims data using AI algorithms that are designed to optimize pricing and decision-making. As is the nature with AI, these models will learn from more and more data, getting better at recognizing patterns and making predictions.¹⁹⁷ From the facts above, the idea that the PBM might play a critical role in collusion starts to take shape, and it does not take a giant leap to see why the pharmaceutical industry presents such a perfect opportunity.

Consider this hypothetical: Manufacturer A produces a drug, Life Elixir, which has three therapeutically equivalent alternatives produced by Manufacturers B, C, and D. Ideally, each company could maximize its market share by ensuring that patients use, and physicians prescribe, their version of Life Elixir, and maximize profit by putting the price of Life Elixir and its alternatives up as high as possible. PBM-X has all the historic data of patient claims made under Plan A, Plan B, and Plan C, all of which are clients of PBM-X. Being one of only three PBMs in the market, PBM-X also has relationships with Manufacturers B, C, and D. Therefore, PBM-X also has pricing information relating to the Life Elixir alternatives.

Here, PBM-X could, on its own, develop the optimal package of pricing and formulary factors that would increase all the Life Elixir companies' income, avoid competition, and

195 See, e.g., *Health Insurance Rights & Protections*, [HealthCare.Gov](https://www.healthcare.gov/health-care-law-protections/rate-review/), <https://www.healthcare.gov/health-care-law-protections/rate-review/> (last visited Sept. 27, 2024); *CMS.gov*, Medical Loss Ratio Data and System Resources, <https://www.cms.gov/marketplace/resources/data/medical-loss-ratio-data-systems-resources> (last visited Aug. 13, 2024); Secret Handshakes *supra* note 14, at 35; John Weeks, *The 80/20 Rule: Why Medical Insurers Are Not Interested in Cost Cutting (or Integrative Health)...* Plus More, 15 *Integrative Med.* 18 (2016) (describing insurers as “cost-plus operators” and arguing that “[t]he more that medical services cost, the greater the dollars in their cut, long term. Insurers are not now, and will not ever be, major buddies of implementing designs for cost savings based on integrative health approaches.”); Juliette Cubanski & Tricia Neuman, *Changes to Medicare Part D in 2024 and 2025 Under the Inflation Reduction Act and How Enrollees will Benefit*, KFF (Apr. 20, 2023), <https://www.kff.org/medicare/issue-brief/changes-to-medicare-part-d-in-2024-and-2025-under-the-inflation-reduction-act-and-how-enrollees-will-benefit/>; Secret Handshakes *supra* note 14, at 39. For a helpful hypothetical illustrating the Affordable Care Act’s profit limitation—known as the 80/20 rule—using a child’s request for a bowl of ice cream, see Secret Handshakes *supra* note 14, at 36.

196 For a more in-depth discussion of the role insurance companies play in the pharmaceutical drug pipeline, see Secret Handshakes, *supra* note 14, at 32–43.

197 See *supra* Section I.A.

maximize the PBM's own income, which is also based on higher prices. The circumstance would be a win-win for everyone—except for competition and the consumer.

Any of the companies—or more likely all of them—could ask PBM-X “what can we do to keep our market share up and profits as high as possible?” PBM-X could then run the masses of data it has through an algorithm whose objective is to produce the optimal price and formulary positions of each of the versions of Life Elixir to allow each company to maximize profits. PBM-X then can suggest each of these strategies to Manufacturers A, B, C, and D.

Whether the manufacturers ask for the strategy, or PBM-X came up with the strategy of its own volition, the hypothetical could play out in a few different ways. In one scenario, the pharmaceutical companies intended to collude. In this scenario, a few pharmaceutical companies purposefully approached the PBM knowing that each of the other pharmaceutical companies was doing the same. In this scenario, a case could be made that the pharmaceutical companies *agreed* to collude since they used an algorithm supplied by the hub *knowing* that their competitors would do the same thing and that such convergence would likely lead to uniformity in the output. Indeed, this is the scenario that Ezrachi and Stucke envisaged; it is also in line with the FTC and DOJ's position.¹⁹⁸

An alternative scenario is that none of the pharmaceutical companies intended to collude. They are simply operating as they would within this market. The contrast between this scenario and the one above is explained in the United States' Note to the OECD. Where competitors entered into agreements with one company to use their pricing algorithm, and there is evidence to show that they did so “with the common understanding that all of the other competitors would use the identical algorithm, that evidence could be used to prove an agreement among the competitors.”¹⁹⁹ This is in contrast to situations where a company enters into an agreement with the hub to use a pricing algorithm while completely oblivious to the fact that its competitors are doing the same.²⁰⁰ In these cases, even if the use of the same or similar algorithms has the effect of aligning prices, no antitrust liability attaches.²⁰¹ Thus, a prosecutor might try to argue that each pharmaceutical company *knowingly* used the same PBM, who clearly offered the same algorithm, but the argument is not without its flaws. The pharmaceutical companies would simply reply that the market is structured this way, and it is not their fault that there are effectively only three PBMs in the market to choose from. To access the health plan

198 See *supra* notes 132–140. See also *supra* Section II.B.

199 OECD, *Algorithms and Collusion—Note by the United States* 6 (May 26, 2017), [https://one.oecd.org/document/DAF/COMP/WD\(2017\)41/en/pdf](https://one.oecd.org/document/DAF/COMP/WD(2017)41/en/pdf).

200 *Id.* (“Absent concerted action, independent adoption of the same or similar pricing algorithms is unlikely to lead to antitrust liability even if it makes interdependent pricing more likely. For example, if multiple competing firms unknowingly purchase the same software to set prices, and that software uses identical algorithms, this may effectively align the pricing strategies of all the market participants, even though they have reached no agreement. Even when firms do not all adopt identical algorithms, the use of algorithms may increase price transparency and help to stabilize prices. However, enforcement agencies normally police the risk for interdependence through merger control (due, in part, to the difficulties in crafting an adequate remedy to interdependence) while prosecuting collusion directly. This distinction remains appropriate when evaluating the use of algorithms.”).

201 *Id.*

clients, the pharmaceutical companies need to negotiate with the PBMs, and of course they knew their competitors are likely negotiating with PBM-X, given the lack of choice of PBMs.

Moreover, even if the pharmaceutical company, on some level, suspects that its competitors are using the same or a similar algorithm, the pharmaceutical company still has a rejoinder. There are seemingly no actions they could possibly take to demonstrate good-faith efforts to comply with the law. What safe-harbors or behavior could they follow?

To be perfectly fair, is there any way that pharmaceutical companies could benefit from a PBM's algorithm without violating antitrust laws? Where there are no real market alternatives, competitors cannot help but converge on a single or set of similar algorithms. If it is not a hub-and-spoke conspiracy with PBM-X, it would be a hub-and-spoke conspiracy with PBM-Y.

This is a challenging aspect of the pharmaceutical supply chain: The PBM industry itself is oligopolistic.²⁰² As with *In re Text Messaging*, many of the actions by the PBMs and the pharmaceutical companies do not in fact require any agreement or intent to collude. Anticompetitive effects may arise irrespective of agreement or intent due to the oligopolistic markets at play.

Moreover, this oligopolistic characteristic can be seen not only at the PBM level but also at the pharmaceutical company level. An APSE study²⁰³ found that about 300 simple molecule drugs (16% in 2022) had two to three manufacturers, and about 150 drugs (8% in 2022) had four to five manufacturers. Similarly, thirty-four biologic products (13%) had two to three manufacturers, and twelve products (4%) had four to five manufacturers. Only six biologic products had more than five manufacturers.

Although many commentators describe the pharmaceutical industry as monopolistic,²⁰⁴ it is the oligopolistic structures that are of interest to our analysis here. Specifically, this article has discussed the potential of AI to facilitate collusion, which can only arise where

202 See *supra* note 177 and accompanying text.

203 *Competition in Prescription Drug Markets, 2017-2022*, Off. Assistant Sec'y for Planning & Evaluation (ASPE) (2023), <https://aspe.hhs.gov/sites/default/files/documents/1aa9c46b849246ea53f2d69825a32ac8/competition-prescription-drug-markets.pdf> [hereinafter *ASPE Report*].

204 See, e.g., David Blumenthal, *It's the Monopolies, Stupid!*, Commonwealth Fund (May 24, 2018), <https://www.commonwealthfund.org/blog/2018/its-monopolies-stupid/>; Robert Pearl, *Pharma Companies: A Conglomerate Of Monopolies*, *Forbes* (Jan. 31, 2023, 4:30 AM), <https://www.forbes.com/sites/robertpearl/2023/01/31/pharma-companies-a-conglomerate-of-monopolies/?sh=133819be1ce1>. A recent study by the APSE, which examined prescription drug expenditures between 2017 and 2022, found that about 800 prescription small molecule drugs (43% of drugs in 2022) and 166 biologics (79% of biologic products) had only one manufacturer. *ASPE Report*. There is much literature on the various games that pharmaceutical companies play to unreasonably sustain their monopoly. See generally, Feldman, *May Your Drug Price Be Evergreen*, *supra* note 14; Secret Handshakes, *supra* note 14; Feldman & Frondorf, *Drug Wars: How Big Pharma Raises Prices and Keeps Generics off the Market*, *supra* note 14; Robin Feldman, *The Price Tag of "Pay-for-Delay"*, 23 *Colum. Sci. & Tech. L. Rev.* 1 (2021); Patricia M. Danzon, *Competition and Antitrust Issues in the Pharmaceutical Industry* 26 (2014), <https://faculty.wharton.upenn.edu/wp-content/uploads/2017/06/Competition-and-Antitrust-Issues-in-the-Pharmaceutical-IndustryFinal7.2.14.pdf>. Equally, many of these games are becoming increasingly scrutinized by various legislative, regulatory, and rule-making bodies. See *ASPE Report*, *supra* note 202.

there are at least two independent firms competing in a market. Thus, our focus is on the pharmaceutical industry's oligopolies.

Looking further into the future, there is yet another alternative and perhaps more complicated scenario. Humans are less than perfect creatures, and the human brain puts its individualistic stamp on each, less-than-perfect decision. As algorithms continually improve, each one may increasingly be able to approach the perfect answer to the problem of maximizing profits. In other words, if there is a perfect answer, and algorithms continually improve, we may reach a point when our near perfect algorithms are all capable of reaching the same close-to-perfect answer. In that case, you have three PBMs, each occupying a large part of the market, each operating its own algorithms whose purpose is simply to decide on the best strategies for maximizing profit. Over time, these three algorithms would converge on outcomes, driving prices up and eliminating pharmaceutical company competition. In such a case, does it matter whether any of the PBMs, or the pharmaceutical companies, intended to collude?

III. THE OUTLOOK

Pressure on pharmacy benefit managers is boiling over.²⁰⁵ Yet, how PBMs operate is still a matter of extreme secrecy. One cannot determine the rebate-per-drug in a PBM's contract with a pharmaceutical company. Nor can one determine the base on which the PBM has contracted to receive fees from pharmaceutical companies. Nor can we determine how many patients need what drug and at what level of coverage. PBMs not only possess this data, but also, thanks to technological advances, they are now capable of using the data to train AI models that will make increasingly accurate predictions relating to the pharmaceutical industry. This is especially problematic given their already-dominant position in the supply chain. The addition of PBM consultants, using AI algorithms to advise PBMs, may further muddy the waters by adding yet another layer of insulation between the pharmaceutical companies and the algorithm.²⁰⁶

205 See, e.g., *Regulators Take Aim at Pharma Price Fixing*, Arnold Ventures (Oct. 29, 2020), <https://www.arnoldventures.org/stories/regulators-take-aim-at-pharma-price-fixing> (discussing efforts by states and other policymakers to investigate alleged pharmaceutical price fixing and litigate the same); Robbins & Abelson, *supra* note 92. See also the FTC's administrative complaint against the three biggest PBMs *supra* note 46.

206 See, e.g., Amy Sayers & Chris Stebbins, *PBM companies turn to AI to improve operations and deliver better customer experiences*, EXL, <https://www.exlservice.com/insights/white-paper/pbm-companies-turn-ai-improve-operations-and-deliver-better-customer-experiences> (last visited Sept. 27, 2024). For examples of pharmacy benefit consultants; see, e.g., *Who we serve*, prescriptive, <https://prescriptive.com/> (last visited Sept. 27, 2024); *Data-Driven Decisions for Smarter Pharmacy Benefit Management*, xevant, <https://www.xevant.com/> (last visited Sept. 27, 2024).

These concerns over collusion within the pharmaceutical industry are hard to overstate.²⁰⁷ It is no secret that the United States has some of the highest drug prices in the world. A study published in February 2024 found that U.S. prices for brand drugs were 422% of prices in comparison to OECD countries, or 322% when adjusted for estimated rebates in the United States.²⁰⁸ Concerns over exorbitant drug prices are widely expressed by academics, policymakers, patients, and health providers, with even drug companies themselves acknowledging the problem.²⁰⁹

U.S. competition authorities lack the requisite tools to promote a competitive marketplace while treating all players in the market fairly and reasonably. This requires a much clearer hub-and-spoke framework that works for the pharmaceutical industry and enables better detection of collusive agreements among players such as pharmaceutical companies and PBMs, especially in light of today's and tomorrow's advancements in AI.

Although significant further research and development is required, the authors hypothesize a compliance mechanism modelled on Know Your Client (KYC) and Anti-Money Laundering compliance schemes. Broadly speaking, these mechanisms place banks, and other facilitators of transactions, under a legal obligation to conduct certain checks with respect to taking on new clients and monitoring transactions to identify and effectively resolve suspicions of money laundering. The actual requirements of these compliance

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- 207 See, e.g., Class Action Complaint, *Osterhaus Pharmacy Inc. et al. v. Express Scripts Inc.*, No. 2:24-cv-00039 (W.D. Wash. Jan. 9, 2024) (alleging that Express Scripts Inc. conspired with three competitors to fix the price of pharmacy reimbursement rates and fees); Complaint for Disgorgement, Injunctive Relief and Declaratory Judgment, *State of Ohio v. Ascent Health Servs. LLC*, No. 2:23-CV H 03 0179 (Ct. Com. Pl. Del. Cnty. Mar. 27, 2023). Several investigative pieces by journalist Bob Herman at Axios reveal details of problematic anticompetitive behaviors in the pharmaceutical industry. See, e.g., Bob Herman, *Documents reveal the secrecy of America's drug pricing matrix*, Axios (Dec. 6, 2021), <https://www.axios.com/2021/12/06/aon-express-scripts-contract-employers-drug-price-data> (revealing that Aon, a benefits consulting firm, works exclusively with the three major PBMs, forming a “drug pricing coalition” and guarding data on drug costs from employers sponsoring the health benefit such that they cannot independently assess whether the prices are reasonable); Bob Herman, *How consultants and pharmacy middlemen work the drug pricing system*, Axios (Sept. 27, 2018), <https://www.axios.com/2018/09/27/big-consultants-pbms-drug-prices-employers> (describing the role of PBMs and consultants and how the big companies keep their market share by charging lower administrative fees and promising large rebates).
- 208 *International Prescription Drug Price Comparisons: Estimates Using 2022 Data*, ASPE (2024), <https://aspe.hhs.gov/sites/default/files/documents/277371265a705c356c968977e87446ae/international-price-comparisons.pdf>.
- 209 See, e.g., Aaron S. Kesselheim et al., *The High Cost of Prescription Drugs in the United States: Origins and Prospects for Reform*, 316 JAMA 858 (2016); Hagop Kantarjian et al., *High Cancer Drug Prices in the United States: Reasons and Proposed Solutions*, 10 J. Oncology Prac. e208 (2014); *Changes in the List Price of Prescription Drugs, 2017-2023*, ASPE (Oct. 6, 2023), <https://aspe.hhs.gov/reports/changes-list-prices-prescription-drugs#:~:text=Over%20the%20period%20from%20January,to%20%24590%20per%20drug%20product; Our position on medicine pricing, novo nordisk, https://www.novonordisk.com/sustainable-business/access-and-affordability/pricing-position.html> (last visited Sept. 27, 2024) (“Many Americans struggle to pay for our medicines and we are focused on working collaboratively toward sustainable solutions.”); *2022 U.S. Pricing Transparency Report*, Janssen Pharms., Inc. (2024) (accepting that “the reality for millions of patients is growing affordability and health equity gaps” though rejecting responsibility for the problem and arguing that the cause is “underinsurance and inadequate insurance benefit design driven by middlemen, including pharmacy benefit managers.”).

regimes vary around the world.²¹⁰ However, they are often guided by the Financial Action Task Force (FATF), an intergovernmental money laundering watchdog.²¹¹ The FATF makes recommendations for a comprehensive anti-money laundering framework that form the basis on which countries can build their own regulations.²¹² The FATF also identifies jurisdictions vulnerable to money laundering and urges them into action.

Anti-money laundering regimes usually require, at first, a risk assessment of a transaction based off a checklist of potential red flags.²¹³ The obligation to perform these risk assessments is usually placed on a facilitator of the transaction—such as banks and law firms. These red flags can be raised over the purpose of a transaction, the country from which the money originates, the political exposure of the person making the transaction, and so on. After the level of risk is determined, a correspondingly comprehensive investigation must take place, taking care not to tip off the person making the transaction. If the legitimacy of the transaction cannot be verified, the matter gets referred to an internal appointed compliance officer. Finally, if still unsatisfied with the legitimacy of the transaction, the officer is empowered to make a suspicious activity report to the relevant regulatory authority.

This kind of model for compliance has three key strengths that could help in the detection of potentially collusive agreements:

- (1) The mandatory risk assessment.²¹⁴ An antitrust compliance checklist is not a new idea. Indeed, law firms around the world help their clients establish internal antitrust policies to curb the risk of being found in violation of national antitrust

210 See generally *Anti-Money Laundering (AML)—How it works and why it matters*, fraud.com, https://www.fraud.com/post/anti-money-laundering-aml#AML_KYC_in_UK_Europe_and_rest_of_the_world (last visited Sept. 27, 2024). In the United States, the anti-money laundering regulatory scheme started with the Bank Secrecy Act of 1970, which requires banks to report and identify certain transactions and clients and to maintain paper trails of financial transactions. Other federal laws have since been enacted that further strengthen the scheme. See *History of Anti-Money Laundering Laws*, FinCen, <https://www.fincen.gov/history-anti-money-laundering-laws> (last visited Sept. 27, 2024). In the U.K., the regulatory scheme is similarly made up of various pieces of legislation, including the Proceeds of Crime Act 2002, the Serious Organised Crime and Police Act 2005, and other laws. See *UK Law And Guidance*, Inst. Fin. Accts., <https://www.ifa.org.uk/technical-resources/aml/uk-law-and-guidance> (last visited Sept. 27, 2024). In the EU, a similar combination of laws is used. See *Anti-money laundering and countering the financing of terrorism at EU level*, Eur. Comm'n, https://finance.ec.europa.eu/financial-crime/anti-money-laundering-and-countering-financing-terrorism-eu-level_en (last visited Sept. 27, 2024).

211 See generally *What we do*, FATF, <https://www.fatf-gafi.org/en/the-fatf/what-we-do.html> (last visited Sept. 27, 2024).

212 *Id.*

213 See FATF, *International Standards on Combating Money Laundering and the Financing of Terrorism & Proliferation: The FATF Recommendations* 16–18 (2023), https://www.fatf-gafi.org/content/dam/fatf-gafi/recommendations/FATFRecommendations_2012.pdf.coredownload.inline.pdf [hereinafter *The FATF Recommendations*].

214 Though broadly uniform, many countries' risk assessment checks vary depending on the size of the business carrying out the check such that the obligations do not become unduly burdensome for smaller firms. See *id.* at 34–35 (“The nature and extent of any assessment of money laundering and terrorist financing risks should be appropriate to the nature and size of the business.”).

laws.²¹⁵ These checklists are voluntary; there is no obligation on the business to have an anticompetition policy in place. While some big companies do set out anticompetition policies,²¹⁶ there is no uniform framework set up for market participants to follow.

- (2) An obligatory system of compliance forces the firm to keep a paper trail of checks performed and decisions made. Of course, anti-money laundering checks do not always prevent money laundering. Nevertheless, banks have a clear set of obligations that they need to satisfy in order to discharge their duty. Moreover, when the regulator comes knocking, parties are sure to have a clear paper trail to show that they complied. The paper trail might assist regulators in monitoring activities within industries that could have an anticompetitive effect. It could also assist companies with developing a framework for compliance, rather than being buffeted by the vagaries of the moment.
- (3) The run-up-the-ladder reporting mechanism. Under normal circumstances, the bank has many privacy obligations owed to its clients. However, this privacy concern is superseded by its obligation to report suspicious activity, provided that the bank has good reasons for its suspicions. In the pharmaceutical industry, this is particularly important given that many aspects of the industry are shielded in secrecy. Calls for more public transparency regarding, for example, a PBM's remuneration terms have been met with the argument that such transparency would actually make collusion more likely.²¹⁷ This more limited form of transparency could enable regulators to, in appropriate situations, take a peek behind the curtain so that they can in fact assess what has happened.

A decision would of course need to be made as to the level at which to impose such an obligation. Further research is also needed to develop a uniform checklist that would in fact serve the purpose of preventing collusion, rather than becoming an easy way for a market player to claim it has done its duty.

While we, as a society, wait to see just how far and wide AI will go, the path ahead will become increasingly clear. For now, what is clear is that the convergence of AI,

215 See, e.g., Jacqueline Arena & Andrew Foster, Antitrust Compliance Tools for In House Lawyers, ACC Docket, https://www.skadden.com/-/media/files/publications/2018/03/antitrust_compliance_tools_for_inhouse_lawyers.pdf (last visited June 10, 2024); Latham & Watkins, Competition Compliance Risk Checklist, <https://www.lw.com/admin/Upload/Documents/Competition-Law-Compliance-Checklist.pdf> (last visited June 10, 2024); Baker McKenzie, Antitrust & Competition Hub: Distribution Antitrust Risk Tool (DART), <https://www.bakermckenzie.com/en/insight/topics/antitrust-and-competition> (last visited June 10, 2024).

216 See, e.g., Compete Fairly, Walmart Ethics, https://www.walmartethics.com/content/walmartethics/en_us/code-of-conduct/build-trust-in-our-business/compete-fairly.html (last visited June 10, 2024).

217 See The Role of Pharmacy Benefit Managers in Prescription Drug Markets, Part II: Not What the Doctor Ordered, Hearing Before the United States House of Representatives Committee on Oversight and Accountability, 118th Cong. 4, 8 (Sept. 19, 2023) (written testimony of Juan Carlos “JC” Scott, President and CEO of Pharmaceutical Care Management Association) (“In almost every industry and especially healthcare, the most effective way to lower costs is through increased competition. Mandating public disclosure of confidential information will only invite drug companies to collude and raise drug costs.”).

antitrust law, and the pharmaceutical industry necessitates proactive regulatory measures to safeguard competition and consumer welfare. By proactively addressing hub-and-spoke collusion facilitated by AI algorithms, policymakers can foster a more competitive and transparent pharmaceutical market, ultimately benefiting patients and society at large.

TRENDS IN NON-COMPETE LITIGATION AND ENFORCEMENT

By Bonnie Lau¹, Margaret Webb², Anissa Chitour³

INTRODUCTION

Prosecution of no-poach agreements has been a recent focus for the Department of Justice (DOJ) Antitrust Division. But in the past two years, DOJ has seen several losses, including a judgment of acquittal from the bench in *United States v. Patel*,⁴ a jury acquittal in *United States v. DaVita*,⁵ and a voluntary dismissal by the Division in November 2023.⁶ Despite DOJ's recent string of losses in its criminal prosecution of no-poach agreements, federal and state enforcement agencies have continued to closely scrutinize employment agreements through new legislation and rulemaking intended to crack down on a wide range of "non- compete" clauses. Private plaintiffs also have been aggressively exploring novel avenues of potential liability.

California has prohibited such provisions in employment agreements for years. California recently expanded its legislation, and other states have enacted similar legislation. The California Department of Justice's Antitrust Division has signaled a renewed interest in criminal enforcement of its antitrust statute, alongside heavy scrutiny of non-compete agreements.

The Federal Trade Commission (FTC) issued a final rule banning nearly all non-competes nationwide in April 2024. The rule was swiftly challenged in litigation by industry organizations, with different federal district courts taking different approaches to the final rule. On August 20, 2024, the Northern District of Texas issued a permanent nationwide injunction blocking the FTC rule. The FTC filed a notice of appeal on October 18, 2024. In contrast, the Eastern District of Pennsylvania denied a motion for preliminary injunction on July 23, 2024, and the plaintiff voluntarily dismissed the case.

Thus, the reach and application of the new laws, to the extent they survive legal challenge, remains an open question for the courts to answer, and counsel should stay apprised of these new developments and be prepared to adapt to the rapidly shifting regulatory environment.

CALIFORNIA: LEADING THE WAY

California's Business & Professions Code Section 16600 states that all contracts that restrain employees from engaging in "a lawful profession, trade, or business of any

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4 *United States v. Patel*, No. 3:21-cr-220 (VAB) (D. Conn. Apr. 28, 2023).

5 *United States v. DaVita*, No. 1:21-cr-00229-RBJ (D. Colo. Apr. 15, 2022), ECF No. 264.

6 *United States v. Surgical Care Affiliates, LLC*, No. 21-cr-00011-L (N.D. Tex. 2021), ECF No. 204.

kind” are void. For years, employees and employers have litigated the contours of this prohibition and, more recently, federal and state courts have applied Section 16600 to a wide range of contractual provisions, including restrictions on employment with a competitor, restrictions on use of information acquired during employment, non-disclosure agreements, and agreements barring solicitation of the former employer’s customers or employees.

Effective January 1, 2024, the California legislature revised the statute in several respects that serve to bolster the prohibition.⁷ First, it affirmed the reading of Section 16600 as consistent with the California Supreme Court’s ruling in *Edwards v. Arthur Andersen*, “void[ing] the application of any non-compete agreement in an employment context, or **any** noncompete clause in an employment contract, no matter how narrowly tailored. . . .” unless it is covered by the statutory exceptions for the sale or dissolution of corporations, partnerships, or limited liability companies.⁸ Second, the statute requires employers to provide notice of non-compete provisions to current employees and certain former employees under such contracts.⁹ Third, a void non-compete clause is unenforceable regardless of where it was signed and whether the employment was “maintained outside of California.”¹⁰ Fourth, Section 16600.5 now permits affected employees to petition for injunctive relief or actual damages, and prevailing plaintiffs can recover attorneys’ fees.¹¹ Finally, the amended statute applies retroactively to non-compete clauses signed prior to January 1, 2024.

While these amendments undoubtedly strengthen California’s already robust ban on employee non-competes, it will be up to federal and state courts across the country to decide whether and how to apply California’s statute, particularly where the employee lives and works in a state lacking such a stringent prohibition on non-compete provisions. California’s exceptions are narrow, and even “safer” restrictions, such as those narrowly tailored to protect trade secrets, could arguably be at risk given the sweeping language reflected in the legislative amendments.

In the months after these changes were signed into law, several plaintiffs’ counsel announced their intent to amend their complaints and/or file new lawsuits in California courts where there is a California nexus in the employment relationship, even where the employer or the employee reside elsewhere. For example, in *CG Enterprises v. WSP*, filed January 1, 2024 in California state court and later removed to federal court, an Arizona-based plaintiff sued a New York-based defendant for attempting to enforce a non-compete provision that would prevent the plaintiff from working for a California-based competitor.¹² Several other cases filed in California state courts in recent months likewise refer to the newly enacted provisions as persuasive authority for California’s

7 Cal. Bus. & Prof. Code §§ 16600, 16600.1, 16600.5 (2024).

8 Cal. Bus. & Prof. Code § 16600; *see* *Edwards v. Arthur Andersen*, 189 P.3d 285 (Cal. 2008).

9 Cal. Bus. & Prof. Code § 16600.1.

10 *Id.* § 16600.5.

11 *Id.*

12 *CG Enters. Holdings, LLC v. WSP U.S., Inc.*, No. 24-cv-00292-VC (N.D. Cal. Jan. 1, 2024).

strong public policy against non-competes in employment agreements.¹³ Additional cases and challenges will undoubtedly follow, both in California and elsewhere.

FTC RULEMAKING: A NATIONAL BAN ON NON-COMPETES

On January 5, 2023, the FTC published its notice of proposed rulemaking, laying out a draft rule which would prohibit “non-compete clauses” in employment agreements across the country.¹⁴ During the public comment period, the FTC received more than 26,000 comments, and on April 16, 2024, the FTC announced a special Open Commission Meeting to hold a vote on whether to authorize public disclosure of the text of the final rule and to subsequently present the rule.¹⁵

On April 23, 2024, following a 3-2 vote in favor, the FTC issued the final rule,¹⁶ which prohibits any “non-compete clause” that:

[p]rohibits a worker from, or penalizes a worker for, or functions to prevent a worker from: (i) Seeking or accepting work in the United States with a different person where such work would begin after the conclusion of the employment that includes the term or condition; or (ii) Operating a business in the United States after the conclusion of the employment that includes the term or condition.¹⁷

Standing alone, the definition of “non-compete” does not provide much guidance, but the rule offers a non-exhaustive list of examples of so-called “*de facto* non-compete clauses,” including the following:

- (1) A non-disclosure agreement between an employer and a worker that is written so broadly that it effectively precludes the worker from working in the same field after the conclusion of the worker’s employment with the employer.
- (2) A contractual provision between an employer and a worker that requires the worker to pay the employer or a third-party entity for training costs if the worker’s employment terminates within a specified time period, where the required payment is not reasonably related to the costs the employer incurred for training the worker.

13 Banks v. Willis Pers. Lines LLC, No. 30-2024-01371826-CU-OE-CJC (Super. Ct. San Diego Jan. 8, 2024); Axia Med. Sols. LLC v. Prodigy Health LLC Imaged, No. 37-2024-00000135-CU-MC-CTL (Super. Ct. San Diego Jan. 2, 2024); Diamond Chem. Co. v. Gurtler Indus., No. 5:23-cv-06075 (N.D. Cal. Nov. 22, 2023); Khalaf v. HUB Int’l Ins. Servs. Inc., No. 37-2023-00048295-CU-OE-CTL (Super. Ct. San Diego Nov. 6, 2023).

14 Non-Compete Clause Rule, 88 Fed. Reg. 3482 (proposed Jan. 19, 2023) (to be codified at 16 C.F.R. pt. 910), <https://www.govinfo.gov/content/pkg/FR-2023-01-19/pdf/2023-00414.pdf>.

15 FTC Announces Special Open Commission Meeting on Rule to Ban Noncompetes (Apr. 16, 2024), <https://www.ftc.gov/news-events/news/press-releases/2024/04/ftc-announces-special-open-commission-meeting-rule-ban-noncompetes>.

16 Press Release, Federal Trade Comm’n, FTC Announces Rule Banning Noncompetes (Apr. 23, 2024), <https://www.ftc.gov/news-events/news/press-releases/2024/04/ftc-announces-rule-banning-noncompetes>.

17 16 C.F.R. § 910.1(1) (2024).

“Worker” is defined broadly as “a natural person who works or who previously worked, whether paid or unpaid, without regard to the workers’ title or status under [the] law. . . .”¹⁸ Thus, the rule as enacted would apply to employees, independent contractors, interns, volunteers, apprentices, those who work for franchisees or franchisors, any person who provides services to another person, and sole proprietors.¹⁹ However, franchisees in franchisee–franchisor relationships are excluded.

Although its application is expansive, the final rule does not contain a private right of action for workers subject to purportedly unlawful non-compete agreements. Instead, the final rule requires employers to provide notice to affected workers that their non-compete agreement will not and cannot be legally enforced against the workers, and includes model language for such a notice.²⁰ Provision of the notice to the worker pursuant to the sample language constitutes a safe harbor for the notice provision requirement.²¹

In the supplementary information accompanying the final rule, the FTC provides a lengthy list of recent settlements, court opinions, and press coverage to illustrate the range of practices that would be prohibited, including: a steelmaker prohibiting its executive from working for “any business engaged directly or indirectly in competition with” the company anywhere in the world for a year following the conclusion of the executive’s employment;²² a contract prohibiting a sales representative from “engag[ing] directly or indirectly, either personally or as an employee, associate, partner, or otherwise, or by any means of any corporation or legal entity, or otherwise, in any business in competition with Employer. . . .” within a 100-mile radius of the employment location for two years;²³ and a medical services firm barring an ophthalmologist from the practice of medicine for two years in two Idaho counties without payment of a “practice” fee of either \$250,000 or \$500,000.²⁴

The final rule includes a carve-out for existing non-compete clauses for “senior executives,” defined as workers in policy-making positions and earning more than \$151,164 annually.²⁵ Such compensation can include base pay and incentives, but would not include fringe benefits such as health insurance, contributions to retirement plans, or payments for life insurance.²⁶ The final rule also includes exceptions for: (1) the bona fide sale of a business entity, (2) existing causes of action, and (3) enforcement or attempted enforcement of a non-compete clause where a person “has a good-faith reason to believe that [the rule] is inapplicable.”²⁷

18 *Id.*

19 *Id.* § 910.1.

20 *Id.* § 910.2(b).

21 *Id.* § 910.2(b)(5).

22 *AK Steel Corp. v. ArcelorMittal USA, LLC*, 55 N.E.3d 1152, 1156 (Ohio Ct. App. 2016).

23 *Osborne v. Brown & Saenger, Inc.*, 904 N.W.2d 34, 36 (N.D. 2017).

24 *Intermountain Eye & Laser Ctrs., P.L.L.C. v. Miller*, 127 P.3d 121, 123 (Idaho 2005).

25 16 C.F.R. §§ 910.1, 910.2(a)(2).

26 *Id.* § 910.1.

27 *Id.* §§ 910.3(a)–(c).

The FTC rule has yet to take effect and is already embroiled in litigation, with the Northern District of Texas recently issuing a nationwide injunction against it. The FTC filed its notice of appeal on October 18, 2024.²⁸ However, should the rule survive these legal challenges, it will have far-reaching implications. The FTC rule would apply to a wide range of employment agreement provisions and to nearly all workers in the United States, with only limited exceptions.

CHALLENGES TO THE FTC’S FINAL RULE

Ryan, LLC, a business tax services and software firm, filed suit in the Northern District of Texas almost immediately after the FTC’s announcement of the final rule,²⁹ and was quickly followed by the U.S. Chamber of Commerce (the “Chamber”) filing in the Eastern District of Texas.³⁰

In its amended complaint, Ryan, LLC argued: (1) the FTC exceeded the bounds of the statutory authority granted by Congress, and even if granted, that delegation of authority is unconstitutional; (2) non-compete agreements are beneficial to workers, employers, and the economy more broadly; (3) enforceability should be determined on a case-by-case basis; (4) there was no precedent until very recently for the FTC action against non-compete agreements; and (5) the final rule would outlaw “nearly all” non-compete agreements.³¹ Ryan, LLC also requested expedited briefing for its accompanying motion for a stay of the effective date of the FTC final rule and preliminary injunction.³² In its parallel complaint in the Eastern District of Texas, later stayed under the first-to-file rule, the Chamber of Commerce focused on the FTC’s lack of constitutional and statutory authority, the ability of the states to establish laws regarding non-compete agreements separately from the FTC, and the FTC’s lack of precedent in challenging non-compete agreements.³³ The Northern District of Texas later permitted the Chamber to intervene in the *Ryan, LLC* litigation, alongside other interested parties: the Texas Association of Business, Business Roundtable, and Longview Chamber of Commerce.³⁴

BATTLE OF THE AMICI

Numerous amici have submitted briefing in the *Ryan, LLC* litigation, both supporting and opposing the FTC’s final rule. The following amici submitted briefs in support of the FTC’s position: Public Citizen and the National Employment Law Project (ECF No. 90), administrative law scholars (ECF No. 106), local elected officials in Texas (ECF No. 108), the Texas AFL-CIO (ECF No. 113), Small Business Majority and Professor Evan Starr (ECF No. 138), the American Academy of Emergency Medicine (ECF No. 140),

28 *Ryan*, ECF No. 213 (N.D. Tex. Oct. 18, 2024).

29 *Ryan LLC v. FTC*, Case No. 3:24-cv-00986-E (N.D. Tex. April 23, 2024).

30 *U.S. Chamber Commerce v. FTC*, Case No. 6:24-cv-00148 (E.D. Tex. Apr. 24, 2024).

31 *Ryan*, ECF No. 22 at 1–2 (N.D. Tex. May 1, 2024).

32 *Id.*, ECF No. 25 (N.D. Tex. May 1, 2024).

33 *U.S. Chamber Commerce*, ECF No. 1 (E.D. Tex. Apr. 24, 2024).

34 *Id.*, ECF No. 37 (N.D. Tex. May 9, 2024).

U.S. Representative Matt Gaetz (ECF No. 128), and a group of legal scholars (ECF No. 115). Plaintiffs have also received support from a variety of amici, including a combination of professional industry organizations (ECF No. 53), the National Association of Manufacturers (ECF No. 55), multiple financial services industry organizations (ECF No. 57), the Society for Human Resource Management (ECF No. 72), and the Partnership for New York City (ECF No. 73).

In support of Plaintiffs' position, certain amici emphasized the FTC's overreach beyond the bounds of its Congressional authority. For example, the Partnership for New York City argued that the FTC's interpretation of the FTC Act, is "fatally flawed," as the pertinent section of the statute granting authority for rulemaking regarding "unfair methods of competition" relates solely to the FTC's investigative powers, not its authority to prohibit "other categories of business conduct."³⁵ Others raised concerns about the FTC's failure to substantiate anticipated benefits and underestimation of costs to businesses, including the anticipated cost of compliance. Still others highlighted the costs stemming from decreased sharing of confidential information and loss of trade secrets because non-disclosure agreements are an inadequate substitute for non-competes.³⁶ Certain amici, including industry organizations, argued that non-compete agreements are not used coercively and that the FTC's alleged harms do not flow to consumers.³⁷

The FTC, in its rulemaking, relied on both quantitative and qualitative data, which it published as part of the proposed rule and the final rule. Plaintiffs' amici also questioned the underlying data utilized by the FTC to articulate the purported harms of non-compete agreements to workers and the economy, arguing that the data were cherry-picked.³⁸ The Society for Human Resources Management, for example, argued that the FTC arbitrarily and capriciously disregarded evidence of benefits of noncompete agreements in violation of the Administrative Procedure Act and failed to consider less restrictive alternatives to the rule.³⁹

On the other hand, the amici supporting the FTC emphasized the importance of worker protections and the effect of non-competes on lower wages, particularly the harms to low-wage workers and reduced job mobility. Others argued that non-competes restrict economic freedom for workers and the public at large, with workers bearing the burden of protecting themselves from overly restrictive agreements.⁴⁰ Public Citizen and the National Employment Law Project challenged the use of non-compete agreements for

35 Brief of Amicus Curiae The Partnership for New York City, ECF No. 73, at 6–7 (N.D. Tex. May 28, 2024).

36 Brief of Amici Curiae Securities Industry and Financial Markets Association *et al.*, ECF No. 57-2, at 25 (N.D. Tex. May 15, 2024); *see also* Brief of Amicus Curiae National Association of Manufacturers, ECF No. 50-2 (N.D. Tex. May 14, 2024).

37 Brief of Amici Curiae National Retail Federation *et al.*, ECF No. 49-1 (N.D. Tex. May 14, 2024).

38 *See id.*

39 *See, e.g.*, Brief of Amicus Curiae Society for Human Resource Management, ECF No. 65-1 (N.D. Tex. May 24, 2024).

40 *See, e.g.*, Proposed Brief of Amicus Curiae Texas AFL-CIO, ECF No. 109-1 (N.D. Tex. May 31, 2024).

workers who lack meaningful consent to the restrictions.⁴¹ The amici administrative law professors contended that the FTC is acting within its authority under the FTC Act and is doing so in a manner consistent with its prior practice regarding non-competes.⁴²

DIFFERENT APPROACHES, DIFFERENT RESULTS

On July 3, 2024, the Northern District of Texas granted Ryan, LLC’s request for a preliminary injunction and postponed the effective date of the rule as to the plaintiffs, noting that it intends to rule on the “ultimate merits” of the action—including whether to issue a nationwide injunction—on or before August 30, 2024.⁴³ The court held that the plaintiffs were likely to succeed on the merits because, by a plain reading of the FTC Act, Section 6(g) does not expressly grant the FTC authority to promulgate substantive rules regarding unfair methods of competition.⁴⁴ The court also found that there is a substantial likelihood that the final rule is arbitrary and capricious, imposing a “one-size-fits-all” approach with no end date, and without evidence as to why such a rule is necessary.⁴⁵ In issuing the preliminary injunction, the court followed Fifth Circuit precedent that the “nonrecoverable costs of complying with a putatively invalid regulation typically constitute irreparable harm” for the purpose of a preliminary injunction, and compliance with the final rule would result in financial injury to the plaintiffs.⁴⁶ Both plaintiffs and defendants in *Ryan, LLC* filed motions for summary judgment, with various amici filing briefs in support.

On August 20, 2024, the Northern District of Texas granted plaintiffs’ motion for summary judgment and issued a permanent nationwide injunction, barring the FTC from enforcing or otherwise making effective the final rule.⁴⁷ “Similar to the court’s reasoning in granting injunctive relief,” the court held that the FTC lacks the statutory authority to regulate competition through promulgation of substantive rules, that the history of the FTC Act and subsequent amendments support its finding, and that the rule is arbitrary and capricious.⁴⁸

Two other lawsuits are currently pending in the U.S. District Courts for the Eastern District of Pennsylvania⁴⁹ and the Middle District of Florida.⁵⁰ The Eastern District of Pennsylvania reached a different conclusion than the *Ryan, LLC* court, denying ATS Tree Services’ request for a preliminary injunction on July 23, 2024, even though many of the

41 Brief of Amici Curiae Public Citizen and National Employment Law Project, ECF No. 90 (N.D. Tex. May 30, 2024).

42 See Brief of Amici Curiae Administrative Law Scholars, ECF No. 106 (N.D. Tex. May 31, 2024).

43 *Ryan, LLC v. FTC*, No. 3:24-cv-00986-E (N.D. Tex. July 3, 2024).

44 *Id.*

45 *Id.*

46 *Id.* (citing *Rest. L. Ctr. v. U.S. DOL*, 66 F.4th 593, 597 (5th Cir. 2023)).

47 *Ryan, LLC*, No. 3:24-cv-00986-E (N.D. Tex. Aug. 20, 2024).

48 *Id.*

49 *ATS Tree Servs., LLC v. FTC*, No. 2:24-cv-01743 (E.D. Pa. Apr. 25, 2024).

50 *Props. Vills., Inc. v. FTC*, Case No. 5:24-cv-00316 (M.D. Fla. June 21, 2024).

same amici filed briefs in both actions.⁵¹ Unlike in *Ryan, LLC*, the Pennsylvania federal court held that: (1) the plaintiff failed to establish more than a speculative or attenuated harm, with non-recoverable compliance costs not sufficient; (2) the FTC has authority under the FTC Act to issue the final rule and it is not limited to adjudication; and (3) the FTC did not exceed its statutory authority by banning nearly all non-compete clauses. The court also explicitly held that the major questions doctrine—which was not addressed by the *Ryan, LLC* court—does not apply to the final rule because it “falls squarely within [the FTC’s] core mandate, and [the FTC] has previously used its Section 6(g) rulemaking power in similar ways.”⁵² The plaintiff voluntarily dismissed the case on October 4, 2024.

In the Middle District of Florida, plaintiff Properties of the Villages sought and obtained a preliminary injunction on August 15, 2024, relying in part on established Florida law permitting non-compete agreements.⁵³ However, before any further briefing on the merits, the FTC obtained a suspension of responsive pleading deadlines in light of the *Ryan, LLC* nationwide permanent injunction. The FTC has filed notices of appeal in both cases.⁵⁴

If ultimately effective, litigants agree that the FTC rule would have a significant impact on both businesses and employees, as it would apply to millions of workers in every U.S. state in nearly every profession, field, and discipline, with only narrow carve-outs.

FUTURE EXPANSION?

The FTC and California reflect just two examples of the growing appetite for legislative and regulatory restrictions on employment non-competes. Indeed, the nebulous reach of Section 16600, alongside recent parallel efforts in other states, could limit or even prohibit agreements historically deemed “safe” or “reasonable,” or outside California’s regulatory domain. This evolving landscape could create confusion for employers and employees alike—all while the FTC rule remains subject to litigation, with its ultimate effect and application hanging in the balance.

In contrast to California, many large states—including New York, Texas, and Florida—broadly permit “reasonable” non-compete agreements, with limited, industry-specific restrictions. New York’s governor recently vetoed a non-compete ban passed by the legislature, but indicated that she would consider signing a narrower ban into law, citing the desire to protect “middle-class and low-wage workers,” while permitting employers to use non-competes for higher-wage workers.⁵⁵ Certain states have enacted focused restrictions, such as banning post-termination non-competes,⁵⁶ voiding non-

51 *ATS Tree Servs., LLC*, No. 2:24-cv-01743.

52 *Id.*

53 Motion for Preliminary Injunction, ECF No. 25 (M.D. Fla. July 2, 2024).

54 *Ryan*, ECF No. 213 (N.D. Tex. Oct. 18, 2024); *Props. Vills., Inc.*, ECF No. 64 (Sept. 24, 2024).

55 Gov. Kathy Hochul Veto Letter (Dec. 22, 2023), <https://www.documentcloud.org/documents/24252095-hochul-veto-133-2023>.

56 S.F. No. 3035, 93rd Sess. (Minn. 2023).

competes except for certain “highly compensated workers,”⁵⁷ or carving out exceptions for customer non-solicitation provisions.⁵⁸ Others, including Indiana, New Hampshire, Delaware, Massachusetts, and Rhode Island, have limited non-competes to physician non-compete agreements,⁵⁹ and the Florida legislature and Louisiana legislature have proposed similarly limited bans, which remain pending.⁶⁰

Even in states that have not followed California’s approach, their focus on medical professionals may reflect the recognized impact of non-competes in certain industries, indicating that other states may be more amenable to passing industry-specific or otherwise targeted non-compete prohibitions. For example, in 2017, a Louisiana appellate court invalidated a non-compete provision that prohibited a doctor from engaging “in the practice of medicine” or rendering “any medical services” similar to those provided by the former employer.⁶¹ In 2022, another Louisiana court invalidated a non-compete that purported to restrict the plaintiff from employment in the marketing field.⁶²

Thus, certain states have elected to focus on protecting competition for physicians and medical professionals, while others have barred non-competes only for lower-wage workers. These prohibitions have been the subject of litigation, and in some states, the courts have pushed back on prior lenience towards non-competes and rejected them as unreasonable restraints on trade.

For example, in Wyoming, which previously permitted “reasonable” non-competes not contrary to public policy,⁶³ the Supreme Court recently rejected an arbitral panel’s ruling that “Wyoming law strongly supports covenants not to compete,”⁶⁴ and overturned a lower court’s grant of a preliminary injunction to an employer where it could not establish that a non-compete provision was consistent with public policy or a reasonable restraint on trade.⁶⁵ The Pennsylvania Supreme Court followed similar reasoning in applying a “first impression” test to find that a no-hire provision was unenforceable, as it was broader than necessary to protect the employer’s interest and created a “probability” of harm to the public.⁶⁶ Likewise, although Georgia does not categorically prohibit restrictive covenants, the Georgia Court of Appeals in 2023 invalidated a non-compete

57 Colo. Rev. Stat. § 8-2-113 (2024); Press Release, Off. Att’y Gen. for D.C., Worker Alert: Noncompete Provisions Are Now Illegal for Many DC Workers, <https://oag.dc.gov/blog/worker-alert-noncompete-provisions-are-now-illegal> (Feb. 21, 2023); 820 Ill. Comp. Stat. 90/10 (2024).

58 Okla. Stat. tit. 15 § 219A (2024).

59 Leslie Bonilla Muñiz, *Indiana Likely to Wait on Further Noncompete Legislation—Pending Lawsuit, Industry Impacts*, Ind. Cap. Chron. (Sept. 20, 2023, 7:00 AM), <https://indianacapitalchronicle.com/2023/09/20/indiana-likely-to-wait-on-further-noncompete-legislation-pending-lawsuit-industry-impacts/>.

60 CS/CS/SB 458 (Fla. 2024); SB 165 (La. 2024).

61 *Paradigm Health Sys., L.L.C. v. Faust*, 218 So.3d 1068, 1073 (La. Ct. App. 2017).

62 *Advanced Med. Rehab. L.L.C. v. Manton*, 362 So. 3d 703, 713 (La. Ct. App. 2022), *reh’g denied* (Mar. 10, 2022), *writ denied*, 338 So. 3d 494 (La. June 1, 2022).

63 *Hopper v. All Pet Animal Clinic, Inc.*, 861 P.2d 531, 540 (Wyo. 1993).

64 *Skaif v. Wyo. Cardiopulmonary Servs., P.C.*, 495 P.3d 887, 897, 900–01 (Wyo. 2021).

65 *Brown v. Best Home Health & Hospice, LLC*, 491 P.3d 1021, 1027–33 (Wyo. 2021).

66 *Pittsburgh Logistics Sys., Inc. v. Beemac Trucking, LLC*, 249 A.3d 918, 935–36 (2021).

agreement because it failed to include a geographic limitation, and the Georgia Supreme Court granted certiorari in December 2023.⁶⁷

GROWING APPETITE FOR CRIMINAL ENFORCEMENT IN CALIFORNIA?

In March 2024, the California Department of Justice’s Antitrust Chief Paula Blizzard announced at the American Bar Association’s National Institute on White Collar Crime that her division will be “reinvigorating” criminal prosecution of the Cartwright Act, California’s primary antitrust statute.⁶⁸ This would mark a significant departure from the last two decades, where the California DOJ has focused on civil enforcement for anticompetitive conduct. To date, the Department has not announced any criminal Cartwright Act prosecutions. But given the backdrop of heightened scrutiny of non-compete agreements both in California and across the country, together with the U.S. DOJ’s recent series of no-poach prosecution losses, the California DOJ’s announcement may signal a shift towards an increasing role for states in criminal prosecution of anticompetitive conduct, including non-compete agreements.

In her remarks, Blizzard emphasized the close relationship and coordination between the California DOJ and the U.S. DOJ. She also highlighted the California legislature’s “very clear” intent that “non-competes are illegal, and no-poach agreements are illegal—flat out.”⁶⁹ Although she did not specifically articulate any desire on the part of the state Antitrust Division to bring a non-compete case as the first Cartwright Act prosecution in decades, her comments focused heavily on employer non-competes, which should be viewed within the broader context of the recent expansion of Section 16600. As it has done with Section 16600, California—which, as Blizzard noted, is the fourth largest economy in the world—may set an important precedent for other states, or it may catalyze further interest and the ongoing coordination with the federal DOJ. Given Section 16600’s sweeping scope and California’s role as home to many of the world’s largest and most cutting-edge companies, California may position itself as a leader not only in civil and private challenges to non-compete agreements, but also in expanding criminal antitrust enforcement writ large.

However, it remains to be seen whether California’s stated focus on criminal antitrust enforcement will follow a similar path to the U.S. DOJ and FTC’s 2016 joint announcement that the U.S. DOJ would prosecute no-poach and wage-fixing agreements criminally. It took several years before the U.S. DOJ began prosecuting these cases in earnest, and it has generally been unsuccessful in its no-poach prosecutions. Only time will tell if California’s enforcement approach, and success, will carve a different path.

While the FTC lacks authority for criminal enforcement of its final rule, and while it is unclear whether and when the rule may go into effect, these recent developments should be weighed carefully and collectively when evaluating potential future risks. The

67 N. Am. Senior Benefits, LLC v. Wimmer, 889 S.E.2d 361 (2023), *cert. granted* (Dec. 19, 2023).

68 Bonnie Eslinger, *Top Calif. Antitrust Atty Says Criminal Cases On The Horizon*, Law360 (Mar. 6, 2024, 11:38 PM), <https://www.law360.com/articles/1810754/top-calif-antitrust-atty-says-criminal-cases-on-the-horizon>.

69 *Id.*

FTC final rule, as drafted, specifies that no provision of the rule “shall be construed as altering, limiting, or affecting the authority of a State attorney general or any other regulatory or enforcement agency or entity or the rights of a person to bring a claim or regulatory action” arising under any state laws or regulations.⁷⁰ That is, the FTC rule, if enacted, would work alongside Section 16600—and the many other laws regulating non-competes. Even despite the U.S. DOJ’s latest losses in its no-poach prosecutions, when considered together,

Blizzard’s remarks, the FTC’s final rule, California’s newly expanded Section 16600, and the increased hostility towards non-competes in multiple other states certainly portend a more complex regulatory and compliance landscape for employers, both in California and elsewhere.

RECOMMENDATIONS FOR NAVIGATING A NEW STATUS QUO

Despite the uncertain future of the FTC’s final rule, practitioners should take care to stay apprised of the rapidly shifting landscape for employee non-competes, both at the state and federal level. Although the court has enjoined the FTC rule from taking effect in fall 2024, the FTC has filed its notice of appeal and litigation will continue. California has taken significant measures to police non-competes and other anti-competitive conduct, with other states likely to follow. Thus, both in-house counsel and outside counsel should familiarize themselves with the FTC rule and conduct a thorough review of existing agreements that may fall within the scope of the rule, including an analysis of applicability of the senior executive exemption for any such existing employees. The potential exceptions to the rule are limited, but the FTC is prepared to enforce the rule if it goes into effect in the future, and the California DOJ has made its priorities clear.

Firms should also consider compliance training for human resources teams, managers, and recruiters, as the FTC’s final rule would apply not only to written agreements, but also to oral agreements. Equally important is consideration of protection of trade secrets and sensitive business information. This is particularly essential for tech companies, where non-competes often focus on retention of and access to trade secret and commercially sensitive information, which are vital to competition. Employers should consider whether, in the potential absence of previously permitted non-compete agreements, state and federal trade secret law offer sufficient protection for their most sensitive information—or whether internal access policies and information sharing protocols should be revised, including addition of provisions mandating the sharing of information only on a need-to-know basis. If the FTC rule goes into effect and confidentiality agreements are weakened or unenforceable, it is also possible that the courts may see a rise in trade secret litigation as firms are required to act to protect their most valuable information.

CONCLUSION

The FTC’s rule, if it takes effect, would enact a nationwide ban on most non-compete provisions, and the nation’s largest state has sought to expand its authority to prohibit non-competes. Although the FTC’s non-compete ban faces fierce opposition and is currently enjoined, state legislatures and federal and state courts still have a long road

⁷⁰ 16 C.F.R. § 910.4(b) (2024).

ahead to clarify and interpret the evolving non-compete landscape. California's recent expansion of its law has yet to be tested more broadly, and courts will need to grapple both with its intended extraterritorial application and its conflict with other existing states' regulations. The California Department of Justice's recent announcement of renewed interest in criminal enforcement of the Cartwright Act represents yet another variable in the challenging landscape of competition compliance for California employers. Even in more permissive states, the trend is towards more aggressive non-compete regulations, including industry-specific restrictions and protections for lower-wage workers. Thus, a robust and comprehensive review of potentially covered agreements is recommended, in tandem with continued monitoring of the ongoing litigation challenging the FTC's final rule and how its enforcement and applicability will shift following the courts' ultimate determinations.

ECONOMIC EVIDENCE IN CRIMINAL LABOR CASES

By Erin Johnson, Ph.D.¹

California has led the states in enacting and enforcing legislative worker protections, including pay equity protections, pay transparency laws, and bans on non-compete agreements.² Consistent with that leading role, California was the first state antitrust enforcer to indicate that agreements between horizontal competitors for labor would be prosecuted as criminal violations of its state antitrust law, the Cartwright Act.³ This comes after, and aligns California with, the Department of Justice (DOJ) and the Federal Trade Commission (FTC)’s announcement of their intention to bring criminal labor cases under the Sherman Act in 2016, with the DOJ subsequently following through and bringing cases alleging criminal no-poach and wage-fixing violations in various labor markets.⁴ Since 2016 the California AG’s office has filed a number of amicus briefs in support of both criminal and civil no-poach and wage-fixing cases.⁵ As a further indication of California’s support for antitrust protections for workers, in 2023 California AG Rob Bonta stated, “[w]orkers should be able to move freely to another job—one that might pay them better, or have better hours, or better benefits, or be closer to their home.”⁶

With no precedent for criminal wage-fixing and no-poach cases under California state law, the federal precedent is informative for practitioners. In criminal cases, the DOJ has argued to exclude economic evidence, claiming that it is not informative regarding the existence of or intent behind *per se* unlawful antitrust conspiracies.⁷ However, economic evidence has recently proved important in two federal criminal cases, and it may prove

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2 The California Equal Pay Act was enacted in 1949 and amended most recently in 2015. California’s Pay Transparency Act, S.B. 1162, went into effect on January 1, 2023. California’s original ban on non-competes dates to 1872, and S.B. 669B/A.B.1067 updated the law beginning as of January 2024 to make noncompete agreements void even if initiated outside of California.

3 Ms. Blizzard made the statements during a panel discussion on criminal antitrust enforcement on March 6, 2024, at the American Bar Association’s annual National Institute on White Collar Crime. See Bonnie Eslinger, *Top Calif. Antitrust Atty Says Criminal Cases On The Horizon*, Law360 (Mar. 6, 2024, 11:38 PM), <https://www.law360.com/articles/1810754/top-calif-antitrust-atty-says-criminal-cases-on-the-horizon>.

4 U.S. Dep’t of Just. Antitrust Division & Fed. Trade Comm’n, Antitrust Guidance for Human Resource Professionals (2016), <https://www.justice.gov/atr/file/903511/dl>. The guidance stated, “Naked wage- fixing or no-poaching agreements among employers, whether entered into directly or through a third-party intermediary, are *per se* illegal under the antitrust laws.” *Id.* at 3 (emphasis added).

5 For example, California filed amicus briefs in support of the appeal of the decision in *Deslandes v. McDonald’s USA LLC*, No. 22-2333 (7th Cir. Aug. 25, 2023), and in opposition to the district court’s decision in *Giordano v. Saks Inc.*, 654 F. Supp. 3d 174 (E.D.N.Y. 2023).

6 Attorney General Bonta’s August 29, 2023 statement was in response to a decision in a federal no-poach case involving fast food franchises. See Press Release, Cal. Dep’t of Justice, Attorney General Bonta Issues Statement on Favorable Court Decision Regarding McDonald’s Use of “No-Poach” Agreements (Aug. 29, 2023), <https://oag.ca.gov/news/press-releases/attorney-general-bonta-issues-statement-favorable-court-decision-regarding#:~:text=“Workers should be able to,%2C” said Attorney General Bonta>.

7 See, e.g., *United States v. Patel*, No. 3:21-CR-220 (D. Conn. Dec. 2, 2022) and *United States v. DaVita*, No. 1:21-CR-00229-RBJ5 (D. Colo. Jan. 28, 2022).

increasingly important moving forward as regulators act on their continued commitment to addressing antitrust issues in labor markets.⁸ This article makes the case that economic evidence is important for evaluating key questions that arise in criminal wage-fixing and no-poach cases. The first section defines wage-fixing and no-poach agreements and provides an overview of criminal cases to date. The second section describes the economic mechanisms and theories of harm for no-poach and wage-fixing agreements with reference to the academic literature in labor economics. With this underpinning, the third section explains that economic evidence is relevant to key questions, including questions related to determining the existence and intent of an alleged conspiracy as well as whether the *per se* standard applies. This section also discusses the court's decisions regarding the admissibility of economic arguments in the recent *United States v. DaVita Inc., et al.* (2022) ("*DaVita*") and *United States v. Patel et al.* (2021) ("*Patel*") cases, and the final section describes the economic evidence and opinions that were submitted in *DaVita* and *Patel*.

I. DEFINITIONS AND OVERVIEW OF CASES

Wage-fixing and no-poach agreements are agreements between competitors for labor. This section defines wage-fixing and no-poach agreements and provides a brief description of the criminal cases that have involved wage-fixing and no-poach allegations in the United States to date. The discussion that follows makes use of product market analogs to facilitate definitions, but the next section makes it clear that there are important differences between product and labor markets.

A. WAGE-FIXING AGREEMENTS

Wage-fixing agreements are the labor market analog to price fixing agreements in product markets. In price fixing, a group of firms that compete in the product market set the price of the product above the competitive price (or, equivalently, the quantity of production below the competitive quantity). In wage-fixing, a group of firms that compete in the labor market set the price they pay for labor below the competitive price (or, equivalently, the quantity of labor below the competitive quantity).⁹

The DOJ has brought four such cases since 2016. In chronological order, the cases are:

- *United States v. Jindal, et al.* (2020) ("*Jindal*"): In *Jindal* the government alleged that leaders at a staffing company entered into an agreement with other staffing

8 Assistant AG Jonathan Kanter, head of the Antitrust Division, stated in October 2023 that "protecting workers from criminal behavior that harms their ability to get better wages, to realize upward mobility in their lives by getting access to better jobs, better training, and opportunities to provide for their families is fundamental and foundational to the work we do as antitrust enforcers." See *A Conversation with FTC Chair Lina Khan and DOJ Assistant Attorney General Jonathan Kanter on Antitrust Enforcement*, Brookings Inst. (Oct. 5, 2023), https://www.brookings.edu/wp-content/uploads/2023/08/gs_20231005_antitrust_transcript.pdf.

9 Collusion in product markets can also involve agreements not to compete on dimensions other than price and quantity, such as product quality or innovation. Similarly, collusion in labor markets can involve agreements not to compete in the provision of employment benefits, working conditions, or other characteristics of jobs.

companies to fix wages of physical therapists in the Dallas-Fort Worth area.¹⁰ In a motion to dismiss, Defendants argued that wage-fixing agreements differ from price fixing agreements and should not be considered *per se* violations.¹¹ The court decided that the *per se* standard applied, and the case went to trial in April 2022, resulting in acquittal.¹²

- United States v. Hee, et al. (2021) (“*Hee*”): In *Hee* the government alleged that a staffing company entered an agreement with a competitor to fix wages of nurses working in public schools in Nevada.¹³ The case resulted in a plea agreement involving a criminal fine for the company and community service for the manager of the staffing company. The government included language in the plea agreement describing the conduct as subject to the *per se* standard.¹⁴
- United States v. Manahe, et al. (2022) (“*Manahe*”): In *Manahe* the government alleged that the owner/operators of four home healthcare agencies in Maine agreed not to poach one another’s workers and conspired to reduce wages for home health workers.¹⁵ Defendants claimed the agreements were ancillary to procompetitive collaborations between the companies, but the court decided that the *per se* standard applied at the motion to dismiss stage.¹⁶ At trial, Defendants presented evidence that they did not lower wages to disprove the existence of the alleged agreement and all parties were acquitted.¹⁷
- United States v. Lopez (2023) (“*Lopez*”): In *Lopez* the government alleged that the owner of a home healthcare staffing company entered an agreement with competitors to fix the wages of home health nurses in Las Vegas, Nevada. The defendant in *Lopez* did not contest application of the *per se* rule at the motion to dismiss stage, and *Lopez* remains pending.¹⁸

10 Superseding Indictment, United States v. Jindal, No. 4:20-cr-00358 (E.D. Tex. Apr. 15, 2021).

11 Motion to Dismiss, United States v. Jindal, No. 4:20-cr-00358-ALM-KPJ (E.D. Tex. May 25, 2021).

12 The jury acquitted both Defendants of agreeing to fix wages, but convicted the owner of obstructing the investigation. See Verdict of the Jury, United States v. Jindal, No. 4:20-cr-00358-ALM-KPJ (E.D. Tex. Apr. 14, 2022), ECF No. 112. Memorandum Opinion and Order, United States v. Jindal, No. 4:20-cr-00358 (E.D. Tex. Nov. 29, 2021).

13 The indictment also alleged that the staffing companies agreed not to hire nurses from each other. See Criminal Indictment, United States v. Hee, No. 2:21-cr-00098-RFB-BNW (D. Nev. Mar. 26, 2021).

14 Plea Agreement, United States v. Hee, No. 2:21-cr-00098-RFB-BNW (D. Nev. Oct. 27, 2022), ECF No. 106.

15 Indictment, United States v. Manahe, et al., No. 2:22-cr-00013-JAW (D. Me. Jan. 27, 2022), ECF No. 1.

16 Motion to Dismiss, United States v. Manahe et al., No. 2:22-cr-00013 (D. Me. Jan 27, 2022).

17 Judgment of Acquittal, United States v. DaVita, Inc., No. 1:21-cr-00229-RBJ (D. Colo. Apr. 20, 2022), ECF No. 266.

18 Superseding Criminal Indictment, United States v. Lopez, No. 2:23-cr-00055-CDS-DJA (D. Nev. Sept. 6, 2023).

B. NO-POACH AGREEMENTS

According to the FTC and the DOJ, no-poach agreements in the labor market are analogous to market division or customer allocation agreements in product markets.¹⁹ In the product market, customer allocation involves competitors dividing sales territories or otherwise agreeing not to compete for customers. In no-poach agreements, firms agree not to “poach” one another’s incumbent workers, with the definition of poaching varying across allegations. Some cases involve alleged agreements not to cold call or otherwise solicit workers from firms within the agreement; those types of agreements often allow workers to switch between firms within the agreement so long as the *worker* initiates the conversation about switching, such that the worker was not affirmatively cold called, solicited, or recruited to switch. Others allege agreements that amount to outright hiring bans, with firms within the agreement committing not to hire one another’s workers under any circumstances, even if the worker applies for a position through their own initiative.²⁰ In either case, no-poach agreements differ from customer allocation agreements, leading some to question the government’s view that they are analogous.²¹ Customer allocation typically eliminates competition for groups of customers, but no-poach agreements do not restrict competition for workers new to the industry or otherwise outside of the agreement, and they may not restrict workers from moving across firms by first quitting their job or by way of intervening employment at a firm outside of the agreement. No-poach agreements that only limit active recruitment on the part of employers may not restrict any worker mobility in situations where workers are not affirmatively recruited by firms within the agreement and instead *workers* initiate efforts to switch employers. Also in contrast with product market allocation, no-poach agreements may enable vertical relationships or teaming arrangements between firms, and they can enable efficient investment in workers.²²

Since 2016 the DOJ has brought four criminal no-poach cases. In chronological order, the cases are:

- United States v. Surgical Care Affiliates LLC (SCA), et al. (2021) (“SCA”): In SCA the government alleged that SCA entered into an agreement with other

19 See Fed. Trade Comm’n, Market Division or Customer Allocation, <https://www.ftc.gov/advice-guidance/competition-guidance/guide-antitrust-laws/dealings-competitors/market-division-or-customer-allocation> (last visited Sept. 6, 2024). Note also that the DOJ argued that the no-poach agreements in the Patel and DaVita criminal cases were *per se* market allocation agreements. See also Indictment, United States v. DaVita Inc., No. 1:21-cr-00229-RBJ (D. Colo. 2021); Indictment, United States v. Patel, No. 3:21-cr-00220-VAB (D. Conn. Dec. 15, 2021).

20 For example, in Patel the government alleged that the Defendants would not hire each other’s engineers under any circumstances, but the government alleged that DaVita entered into agreements with other companies not to solicit one another’s workers.

21 See, e.g., Perry A. Lange et al., *The State of “No-Poach” Prosecution: Is It Just Like Market Allocation After All?*, 38 Antitrust 12 (2024).

22 No-poach agreements can enable cooperation between firms that might not otherwise occur due to concerns that the cooperation or joint venture would lead to worker attrition. No-poach agreements can also enable investment in workers that may not occur if employers anticipate turnover. This can be to the benefit of workers, firms, and productivity. For a discussion of efficient investments in vertical relationships, see Dennis W. Carlton & Jeffrey Perloff, *Modern Industrial Organization*, Ch. 12 (4th ed. 2005).

outpatient medical centers not to poach one another's high-level workers.²³ The United States dropped the case against SCA in November 2023.²⁴

- *DaVita*: In *DaVita* the government alleged that DaVita and its CEO entered into agreements with other operators of outpatient medical facilities, including SCA, not to poach each other's high-level workers.²⁵ In response to a motion to dismiss, the court decided that the prosecution could proceed with the *per se* allegations, but the jury instructions at trial stated that the Plaintiffs had to prove "beyond a reasonable doubt that Defendants entered into an agreement with the purpose of allocating the market," opening the door for economic evidence, as I explain below.²⁶ *DaVita* was the first criminal labor case to go to trial, and it resulted in acquittal for all Defendants.²⁷
- *Patel*: In *Patel* the government alleged that Pratt & Whitney, an aerospace engineering firm, and a number of outsourcing firms that supplied it with workers entered into agreements not to hire one another's workers.²⁸ In the motion to dismiss phase, the judge ruled that the *per se* standard applied, despite the vertical relationship between some defendants.²⁹ At trial, however, the judge allowed economic and other evidence for certain purposes, including to support Defendants' ancillary restraints defense, a defense that, if proven, removes an agreement from *per se* scrutiny and invites a rule of reason inquiry into the competitive effects of the agreement.³⁰ The judge ultimately acquitted Defendants after the government presented its case and before the jury could deliberate. In his decision, the judge stated that the *per se* standard did not apply, despite his prior decision. His decision was also notable in its assertion that there was an agreement, but a reasonable jury could not conclude that the agreement caused a "cessation of 'meaningful competition.'"³¹

23 The indictment included two counts, one alleging an agreement between SCA and a "Texas-based company" and one alleging an agreement between SCA and a "Colorado-based company," *DaVita*. See Indictment, *United States v. Surgical Care Affiliates, LLC*, No. 3:21-cr-00011-L (N.D. Tex. Jan. 5, 2021).

24 See Bryan Koenig, *DOJ Abandons Last Remaining No-Poach Prosecution*, Law360 (Nov. 14, 2023, 6:10 PM), <https://www.law360.com/articles/1766482/doj-abandons-last-remaining-no-poach-prosecution>.

25 Superseding Indictment, *United States v. DaVita, Inc.*, No. 1:21-cr-00229-RBJ (D. Colo. Nov. 3, 2021). The three other operators of outpatient medical facilities that DaVita allegedly conspired with were SCA, Hazel Health, and Radiology Partners.

26 Order on Pending Motions, *United States v. DaVita, Inc.*, No. 1:21-cr-00229 (D. Colo. Mar. 21, 2023), ECF No. 210; Order Resolving Disputes on Proposed Jury Instrs. 10, *United States v. DaVita, Inc.*, No. 1:21-cr-00229 (D. Colo. Mar. 25, 2023), ECF No. 214.

27 Judgment of Acquittal, *United States v. DaVita, Inc.*, No. 1:21-cr-00229-RBJ (D. Colo. Apr. 20, 2022), ECF No. 266.

28 Indictment, *United States v. Patel*, No. 3:21-cr-00220-VAB (D. Conn. Dec. 15, 2021), ECF No. 20.

29 Order Denying Mot. to Dismiss at 21, *United States v. Patel*, No. 3:21-cr-00220-VAB (D. Conn. 2023), ECF No. 257.

30 *United States v. Patel*, No. 3:21-CR-220 (D. Conn. Mar. 27, 2023).

31 Rule 29 Motion, *United States v. Patel*, No. 3:21-CR-00220 (D. Conn. Apr. 28, 2023).

- *Manahe*: As described above, Plaintiffs alleged Defendants in *Manahe* agreed not to poach one another's workers as well as to reduce the wages of home health workers in Maine.³²

II. ECONOMIC THEORIES OF HARM

The frameworks economists use to understand labor markets make some necessary departures from product market frameworks to reflect the fact that individuals sell their own work as the “product” in these markets. This section briefly describes the economic theory of competition in labor markets. It explains how wage-fixing and no-poach agreements can potentially harm workers and some factors that determine whether and to what extent there is an effect. It also provides the requisite framework for the discussion of the role of economic evidence in criminal labor cases in the next section.

A. LABOR MARKET ECONOMICS

Like in product markets, economic theory says that the intersection of supply and demand determine the market price in perfectly competitive labor markets.³³ In these markets the equilibrium price of labor, termed the “wage,” is equal to the marginal product of labor (MPL), or the increase in firm revenue that results from the marginal worker’s efforts. This is analogous to the condition that price equals marginal cost in perfectly competitive product markets.³⁴

Labor markets can depart from perfect competition for several reasons, even in the absence of any anticompetitive agreement. There are two main categories of models used to analyze labor markets under imperfect competition. “Cournot-style models” are used to analyze oligopolistic labor markets, and “search-and-matching models” are used to analyze labor markets with differentiated jobs and “search frictions,” or factors that make looking for a job costly.³⁵ The former show that market concentration can lead wages to

32 Indictment, *United States v. Manahe, et al.*, No. 2:22-cr-00013-JAW (D. Me. Jan. 27, 2022), ECF No. 1.

33 N. Gregory Mankiw, *Principles of Economics* ch. 18 (8th ed. 2018).

34 The supply of labor refers to the number of workers that are available and willing to work, and it depends on factors like the size and skills of the available working population and the alternative employment options available to workers. Demand for labor refers to the number of workers firms want to employ, and it depends on factors like the production level of firms, the technology used, and the productivity of workers. In labor markets, the “wage” can include hourly pay or annual salary as well as other components of compensation that can be important in equilibrating supply and demand. These components include bonuses, employment benefits, career advancement opportunities, and working conditions.

35 Job differentiation refers to differences in jobs along dimensions like geographic location or working conditions. In job differentiation models, workers typically differ in the amount they value the different characteristics of jobs. This sets job differentiation models of labor markets apart from models of product differentiation. Kenneth Burdett & Dale T. Mortensen, *Wage Differentials, Employer Size, and Unemployment*, 39 *Int'l Econ. Rev.* 257 (1998).

be suppressed relative to the MPL under certain conditions,³⁶ although concerns about concentration are less than in product markets when labor markets are broader than a single industry.³⁷ Search-and- matching models also show that wages can be below the MPL without any anticompetitive agreements.³⁸

B. WAGE-FIXING AND NO-POACH AGREEMENTS

According to economic theory, no-poach and wage-fixing agreements have no impact in perfectly competitive markets. If a group of firms suppresses wages in a perfectly competitive market, their workers leave and join a firm outside the agreement that is paying the MPL.³⁹ In Cournot-style models, wage-fixing and no-poach agreements can impact wages under certain conditions. For an agreement to have an effect in these models, it has to increase effective concentration to a large enough extent that the parties can successfully suppress wages given worker behavior, especially movements of workers to employers outside the agreement.⁴⁰ Without providing an exhaustive list of conditions, the effects of an agreement in these models will depend on whether the parties adhere to the agreement, whether the parties compete on other dimensions, e.g., benefits or working conditions, and whether barriers to entry are present to prevent other employers from entering the market.

In search-and-matching models, wage-fixing and no-poach agreements can reduce worker mobility and wages if they meaningfully reduce “effective competition” for workers.⁴¹ The degree to which agreements affect wages in these models ultimately depends on the degree to which they reduce effective competition, which depends on many of the aforementioned conditions as well as the nature of competition and worker

36 Conditions include that workers cannot be too sensitive to wage changes and employers must compete as in the Cournot framework. Note also that, in the long-run, entry of employers would lead wages to return to the competitive level. In markets characterized by barriers-to-entry, wages can theoretically remain below the MPL in the long-run. See Efraim Benmelech et al., *Strong Employers and Weak Employees: How Does Employer Concentration Affect Wages?* (Nat’l Bureau of Econ. Rsch., Working Paper No. 24307, 2018); José Azar et al., *Labor Market Concentration*, 57 J. Hum. Res. S167 (2022); Kevin Rinz, *Labor Market Concentration, Earnings Inequality, and Earnings Mobility* (Ctr. for Admin. Records Rsch. & Applications, Working Paper 10, 2018), <https://www.census.gov/content/dam/Census/library/working-papers/2018/adrm/carra-wp-2018-10.pdf>.

37 While some highly specialized workers or workers tied to geographic areas with few employers may only be able to work for a small number of employers, labor markets can be broader than a single industry or occupation. See Ian M. Schmutte, *Free to Move? A Network Analytic Approach for Learning the Limits to Job Mobility*, 29 Labour Econ. 49 (2014); Giuseppe Moscarini & Kaj Thomsson, *Occupational and Job Mobility in the US*, 109 Scandinavian J. Econ. 807 (2007).

38 David Card et al., *Firms and Labor Market Inequality: Evidence and Some Theory*, 36 J. Lab. Econ. (2018); Sydnee Caldwell & Oren Danieli, *Outside Options in the Labor Market* (2018) (unpublished manuscript), https://scholar.harvard.edu/files/danieli/files/danieli_jmp.pdf; Sydnee Caldwell & Oren Danieli, *Outside Options in the Labor Market*, Rev. Econ. Stud. (2024).

39 N. Gregory Mankiw, *Principles of Economics* ch. 18 (8th ed. 2018).

40 The aggregate elasticity of labor supply determines the extent to which the wage decreases in response to reductions in the quantity of labor demanded.

41 Suresh Naidu, *Recruitment Restrictions and Labor Markets: Evidence from the Postbellum U.S. South*, 28 J. Lab. Econ. 413–45 (2010).

mobility in the market.⁴² As an example, an agreement not to cold call workers would not have any impact in a market where job offers are initiated by workers not employers.

In analyzing potential impacts in labor markets, it is important to recognize that firms that compete in a relatively concentrated product market may account for only a small fraction of the labor markets in which they participate.⁴³ Moreover, firms that compete in a national product market may compete in many local geographic labor markets, or vice-versa, and the geographic boundaries of labor markets can vary across jobs and areas depending on labor mobility and worker preferences.⁴⁴ It is also important to note that agreements between competitors for labor can have procompetitive benefits. No-poach agreements can promote efficient investment in the employer-employee relationship, for example by ensuring that employers have incentives to invest in the socially efficient level of training for their workers.⁴⁵ In addition, wage-fixing and no-poach agreements can facilitate cooperation and joint ventures between firms and can enable vertical relationships or collaborations that benefit workers and would not otherwise be possible.⁴⁶

III. ECONOMIC EVIDENCE IN CRIMINAL CASES

In their 2016 Antitrust Guidance for HR Professionals, the FTC and DOJ jointly assert that naked wage-fixing and no-poach agreements are *per se* illegal. With regard to no-poach agreements, the document states, “[t]hese types of agreements eliminate competition in the same irredeemable way as agreements to fix product prices or allocate customers. . . .”⁴⁷ The document recognizes the ancillarity doctrine, allowing that the agreement must be “separate from or not reasonably necessary to a larger legitimate collaboration between the employers” to be “deemed illegal without any inquiry into its competitive effects.”⁴⁸ However, the government did not view the agreements in *Patel* or

42 See, e.g., Alan B. Krueger & Orley Ashenfelter, *Theory and Evidence on Employer Collusion in the Franchise Sector* (Nat’l Bureau of Econ. Rsch., Working Paper No. 24831, 2018).

43 Ian M. Schmutte, *Free to Move? A Network Analytic Approach for Learning the Limits to Job Mobility*, 29 Labour Econ. 49 (2014); Giuseppe Moscarini & Kaj Thomsson, *Occupational and Job Mobility in the US*, 109 Scandinavian J. Econ. 807 (2007).

44 Alan Manning & Barbara Petrongolo, *How Local Are Labor Markets? Evidence from a Spatial Job Search Model*, 107Am. Econ. Rev. 2877 (2017); Ferdinando Monte et al., *Commuting, Migration, and Local Employment Elasticities*, 108 Am. Econ. Rev. 3855 (2018).

45 Intuitively, if a no-poach agreement decreases attrition, it can increase returns to investment by employers in workers. The increase in investment can benefit workers through increases in productivity and career opportunities. In *Deslandes v. McDonalds*, the Seventh Circuit acknowledged that the need to recoup investments in worker hiring and training could justify restrictions on hiring, see *Deslandes v. McDonald’s USA LLC*, No. 22-2333 (7th Cir. Aug. 25, 2023).

46 In some cases, they may enable vertical relationships or collaborations that benefit workers and would not otherwise not be possible due to concerns that the collaboration would lead to costly attrition of workers. For example, a staffing agency might not be willing to supply workers to a firm if it expects the firm to poach its best workers. As an example, in *Aya Healthcare Servs. v. AMN Healthcare, Inc.*, 9 F.4th 1102, 1109 (9th Cir. 2021)), the no-poach agreement was determined to be ancillary to the companies’ collaboration in supplying traveling nurses to hospitals.

47 U.S. Dep’t of Justice & Fed. Trade Comm’n, Antitrust Guidance for Human Resources Professionals 4 (2016), <https://www.justice.gov/atr/file/903511/dl>.

48 *Id.* at 3.

Manafe as ancillary, despite a vertical relationship between defendants in the former and possible collaborations between defendants in the latter.⁴⁹

Under the *per se* standard, the only relevant questions are whether an illegal agreement existed and whether it was entered into with the intent to allocate the market, which the government has interpreted as prescribing a limited role for economic evidence. However, recent decisions in the courts have revealed a willingness on the part of judges to allow economic evidence in criminal matters for the purposes of determining existence and intent as well as whether the *per se* standard applies.⁵⁰ In this section, I make the case that economic evidence can be relevant for each of these purposes, and I explain that this view is supported by the courts' decisions in *DaVita* and *Patel* to admit evidence from economics experts.

First, economic evidence is informative regarding ancillarity and the applicability of the *per se* standard. The ancillarity doctrine states that an agreement between horizontal competitors can be handled under the rule of reason rather than the *per se* rule if it is “subordinate and collateral” to a “separate, legitimate transaction or collaboration” and “reasonably necessary to achieving that transaction’s procompetitive purpose.”⁵¹ In the case of joint ventures and collaborations as well as vertical relationships, evaluating ancillarity requires determination of the extent to which the agreement enabled the collaboration as well as the benefits of the collaboration to workers. These are fundamentally economic questions that require an understanding of labor markets, and the courts’ decisions regarding the admissibility of economic evidence in *DaVita* and *Patel* reflect this fact. In both cases, the courts allowed ancillarity to be addressed at trial despite having upheld the *per se* standard at the motion to dismiss stage.⁵² In *Patel* the Judge noted, “[e]vidence concerning the ancillary restraints defense is also likely admissible,” noting that he would decide the relevance of particular evidence at a later date “in light of the Government’s evidence of the charged conspiracy.”⁵³ In fact, the judge in *Patel* placed the burden of proof on the government, requiring it to show that the doctrine did not apply.⁵⁴

In both *DaVita* and *Patel*, the courts required more than non-ancillarity to determine that the agreements were *per se* illegal at trial. In *Patel*, the court required that the agreement constituted a “meaningful cessation of competition” for labor, citing to the decision in *Bogan v. Hodgkins* stating that “a horizontal market allocation requires cessation

49 In their opposition to the Defendants’ motion to dismiss in *Manafe*, the government pointed out that the Defense did not describe the collaboration. United States’ Opp’n to Defs.’ Mot. to Dismiss the Indictment, United States v. Manafe, et al., No. 2:22-cr-00013-JAW (D. Me. June 21, 2022), ECF No. 89.

50 See the discussion of the judges’ decisions in *DaVita* and *Patel* below. In both cases, the judge upheld the *per se* standard at the motion to dismiss stage.

51 *Aya Healthcare Servs., Inc. v. AMN Healthcare, Inc.*, 9 F.4th 1102, 1109 (9th Cir. 2021).

52 Order on Pending Motions, United States v. DaVita, No. 1:21-cr-00229-RBJ (D. Colo. Mar. 21, 2023), ECF No. 210; Order Denying Mot. to Dismiss at 21, United States v. Patel, No. 3:21-cr-00220-VAB (D. Conn. 2023), ECF No. 257.

53 Ruling and Order on Motions, United States v. Patel, et al., No. 3:21-cr-220-VAB (D. Conn. 2023).

54 Order Denying Mot. to Dismiss at 21, United States v. Patel, No. 3:21-cr-00220-VAB (D. Conn. 2023), ECF No. 257.

of ‘meaningful competition’ in the allocated market.”⁵⁵ Similarly, in *DaVita* the jury was instructed to deliberate based on instructions that stated, “the government will have to prove more than that Defendants had entered into a non-solicitation agreement—it will have to prove that Defendants intended to allocate the market,” and that they “may not find that a conspiracy to allocate the market for the workers existed unless” they found “that the alleged agreements and understandings sought to end meaningful competition for the services of the affected workers.”⁵⁶

Second, economic evidence is relevant to evaluating whether an agreement was intended to allocate a market. Economic evidence on the procompetitive benefits of an alleged agreement speaks to intent by revealing whether there was an alternative, procompetitive purpose. Evaluating procompetitive benefits in labor markets requires understanding the incentives employers have to invest in workers and how attrition affects these incentives, as well as the possible benefits to workers in the form of productivity improvements and improved career opportunities. These are fundamental questions in labor economics.⁵⁷ As in the case of ancillarity, the judges’ decisions in *DaVita* and *Patel* reflect the importance of economic evidence on procompetitive benefits.⁵⁸ In *DaVita*, the judge denied the motion to exclude this evidence, stating that it “might be relevant to the question whether Defendants entered into an agreement to allocate the market and did so with the intent to allocate the market, as charged in the indictment.” In *Patel*, the judge took an even broader view, stating “[t]he procompetitive evidence at issue here is relevant because it relates to whether Defendants joined the charged conspiracy, whether the conspiracy existed as alleged, and whether Defendants had the requisite intent to join such a conspiracy.”⁵⁹ Empirical evidence on the impact of an alleged agreement on workers can also inform as to intent. It is less likely that Defendants entered into the agreement for the purpose of allocating the market if the agreement in its implementation did not suppress wages or reduce flows of workers between the companies.

Third, economic evidence is relevant to evaluating whether an agreement existed. Empirical analysis of wages and worker movements informs directly as to whether the agreement restricted competition for workers. The judges’ decisions regarding admissibility in *DaVita* and *Patel* reflect the relevance of this information. In both cases, the judges permitted economic evidence on the impact of the alleged agreements on wages and on

55 Jury Instructions, *United States v. Patel*, No. 3:21-cr-00220 (D. Conn.2023), ECF 456.

56 Jury Instructions, *United States v. DaVita*, No. 1:21-cr-00229 (D. Colo. 2022).

57 See the literature on the investment decisions of employers, determinants of worker productivity, and career concerns of workers.

58 It should be noted that procompetitive evidence was only permitted in regards to the existence of a market allocation agreement and the intentions regarding parties entering into the agreements at issue. For example, in *DaVita*, the jury instructions stated, “[i]f defendants entered into an agreement or understanding with the intent to allocate the market, it is immaterial whether such an agreement or understanding was actually good for the company or even good for the market as a whole.” Jury Instructions, *United States v. DaVita*, No. 1:21-cr-00229 (D. Colo. 2022).

59 Ruling and Order on Motions, *United States v. Patel*, et al., No. 3:21-cr-220-VAB (D. Conn. 2023).

the movement of workers.⁶⁰ In *Patel*, the judge agreed with Defendants’ claim that the experts’ opinion on wage impacts was “relevant to show that ‘the Government cannot meet its burden to prove the existence of an agreement or an intent to conspire.’”⁶¹

Finally, in addition to the evidence on ancillarity, procompetitive benefits, and impacts, in *Patel*, the judge also allowed evidence on market definition, agreeing with Defendants’ statement that the expert’s opinion “on the relevant market share of workers ‘rebut[s] the very existence of a market allocation by demonstrating why the alleged agreement never could have achieved the Government’s claimed purpose that Defendants sought to suppress wages or allocate a labor market.’”⁶² In addition, in *Patel* the judge allowed the economics expert to opine on the design and implementation of the agreement, stating that these opinions were relevant to “rebutting that purported financial motive or otherwise undermining the alleged purpose of the agreement.”⁶³

IV. ECONOMIC EVIDENCE IN *DAVITA* AND *PATEL*

The prior section explained that economic evidence, including evidence regarding ancillarity, procompetitive impacts, and impacts on wages and worker movements, can be relevant to key questions in criminal labor cases. It also explained that this view is supported by the courts’ decisions to admit economic evidence in *DaVita* and *Patel*. In this Section I describe the economic evidence presented at the *DaVita* trial and included in the economic expert’s report in *Patel*.⁶⁴

In *DaVita*, Defendants argued that the agreements at issue had procompetitive benefits as evidence that the agreement was not intended to meaningfully reduce competition. Specifically, they noted that the agreements required workers to notify their employer prior to applying for a job at one of the other companies, and they argued that this enabled *DaVita* to compete for these workers, which they did by offering raises and promotions.⁶⁵

In addition, in *DaVita* the economics expert testified regarding his empirical analyses of wages, worker turnover, and worker movement. In his analyses of wages and worker turnover, the expert compared the wages and turnover rates of *DaVita* workers during the agreements with benchmarks including other industries and the period before the agreements. The expert testified that neither wages nor turnover were suppressed relative

60 Reporter’s Transcript, United States v. *DaVita, Inc.*, No. 1:21-cr-00229-RBJ (D. Colo. 2022); Ruling and Order on Motions, United States v. *Patel, et al.*, No. 3:21-cr-00220-VAB (D. Conn. 2023).

61 Ruling and Order on Motions, United States v. *Patel, et al.*, No. 3:21-cr-00220-VAB (D. Conn. 2023).

62 *Id.*

63 *Id.*

64 For *DaVita* I rely on the trial transcript for information on the economic evidence presented. Because the judge decided *Patel* before Defendants presented any evidence, I rely on discussions of the economic evidence in the memoranda in support of and in opposition to the motion to exclude the economic expert’s opinions, as well as the judge’s final ruling on the pre-trial motions, to understand the economic evidence that was prepared prior to trial.

65 Reporter’s Transcript, United States v. *DaVita, Inc.*, No. 1:21-cr-00229-RBJ (D. Colo. 2022).

to benchmarks.⁶⁶ In his analysis of worker movement, the expert used data from online resumes to compare flows of workers between *DaVita* and firms inside the agreement with flows between *DaVita* and firms outside of the agreement. He also compared flows between *DaVita* and firms inside the agreement before and after the alleged conduct period. The expert concluded from this analysis that agreements did not meaningfully impact worker movements. Ultimately, he testified that the evidence on wages, turnover, and worker movements was consistent with competition and was not consistent with market allocation.⁶⁷ The jury requested clarification on the definition of “meaningful competition” just prior to reaching the decision to acquit, suggesting that the expert’s evidence on wages and worker movements may have factored into the final decision.⁶⁸

While *Patel* ended before Defendants presented evidence at trial, the pre-trial motions and decision are informative regarding the economic evidence that was prepared for trial. According to these documents, the economics expert offered four main opinions. The first opinion pertained to market definition, and Defendants claimed that this opinion was informative regarding intent, writing that it “rebut[s] the very existence of a market allocation by demonstrating why the alleged agreement never could have achieved the Government’s claimed purpose.”⁶⁹

The expert’s second main opinion in *Patel* related to the expert’s empirical analysis of worker movements and his regression analysis of the impact of the agreement on wages. With respect to worker movements, the court summarized the expert’s opinion “that the lateral movement of engineers generally increased year-over-year” and Defendants’ conclusion that it “directly undermines the existence of the alleged conspiracy.”⁷⁰ With respect to the analysis of wages, the court summarized the expert’s opinion that he found “no statistical support in his economic regression for the notion that a restraint had an adverse effect on compensation.”⁷¹

The expert’s third main opinion in *Patel* related to procompetitive benefits, and the court summarized it as claiming “that benefits to competition can arise from no-poach restraints among companies in the same supply chain.”⁷² The expert’s fourth main opinion related to the “design and application of the alleged restraint,” and the court quoted the expert’s opinion as follows: “because the conspiracy was not comprehensive enough, or because Defendants made exceptions to their no-poach agreement, Defendants appear to have lacked an anticompetitive purpose.”⁷³ As in *DaVita*, the economic evidence appears to have been impactful on the outcome of the trial. The judge cited the economic

66 *Id.*

67 *Id.*

68 *Id.*

69 Ruling and Order on Motions, *United States v. Patel, et al.*, No. 3:21-cr-00220-VAB (D. Conn. 2023).

70 *Id.*

71 *Id.*

72 *Id.*

73 *Id.*

evidence in his acquittal decision, stating that job switching between companies was “commonplace” throughout the alleged agreement period.⁷⁴

To summarize, in *DaVita* and *Patel*, economic experts prepared evidence that pertained to the impacts of the agreements on wages and worker movements to inform questions of either intent or the existence of an agreement, and this evidence appears to have been impactful. In addition, in *Patel*, the economic expert prepared evidence that pertained to procompetitive benefits, market definition, and the “design and application” of the agreement.

V. CONCLUSION

The economic theory of labor markets and the *DaVita* and *Patel* cases show that economic evidence is relevant to determining key questions in no-poach cases. Since *Patel*, the DOJ has continued to argue that no-poach cases constitute *per se* illegal market allocation. In response to a motion to dismiss in *SCA*, the DOJ stated that the *Patel* decision was “contrary to [U.S.] Supreme Court and Fifth Circuit precedent” and that *SCA*’s position based on the *Patel* decision “amounts to an assertion that two competitors can agree not to compete with each other at all through solicitations, and can agree on other restrictions to limit their competition with each other for workers, as long as the agreement does not altogether foreclose hiring or worker movement.”⁷⁵ Because the government dismissed *SCA*, we do not know how the judge would have responded to the motion to dismiss, and we do not know whether economic evidence would have been permitted if the case went to trial. It will be interesting to see the role economic evidence plays in future criminal no-poach cases and the influence of the *DaVita* and *Patel* decisions on future cases.

74 See Bryan Koenig & Nadia Dreid, *DOJ’s Latest, Biggest No-Poach Trial Thrown Out*, Law360 (Apr. 28, 2023, 10:36 AM), <https://www.law360.com/articles/1602209>.

75 DOJ’s Response to *SCA*’s Motion to Dismiss, *U.S. v. Surgical Care Affiliates LLC et al.*, No. 3:21-cr-00011-L (N.D. Tex. May 16, 2023).

A DEVIL'S BARGAIN?—THE COMPETITIVE BIRTH AND FRACTURING OF NILS FOR THE STUDENT ATHLETE

By Samuel Smith¹, Thomas Burt²

\$10 million dollars. That number represents how much money previous number one overall pick Caleb Williams made at USC for his Name, Image, and Likeness (“NIL”).³ A number that would have sparked countless controversies, suspensions, and revocation of his Heisman trophy—just ask former USC football player Reggie Bush⁴—only five years ago. However, since 2021, high profile athletes making millions of dollars in college from their NIL has become common.⁵ In 2021, the U.S. Supreme Court’s decision in *National College Athletic Association v. Alston*, followed by states on the verge of passing NIL laws, led to the NCAA implementing NIL policies that opened up the flood gates.⁶ The decision to allow college athletes to receive compensation for their NILs did not happen overnight.

The tension between the multi-million dollar institutions of college football and basketball, and the amateur status of their athletes, has been rising for decades. While in other sports, young athletes headed to the elite ranks forgo college and develop in a professional environment, in these two sports, college is the preferred or almost exclusive development environment for future top-level professionals. In a free market, these athletes would be able to sell their valuable services to the highest bidders. But the operation of that market has been until recently almost entirely controlled by the NCAA, and its member conferences and schools. Athletes could not bargain for pay, or for the value of their name, image, and likeness . . . not even for scholarships covering the full cost of attendance. To many observers, this screams unfairness: sports awash in money, and talent compelled to spend years developing, risking injury, with strictly limited compensation.

In response, three separate approaches to compensating student athletes have emerged, particularly but not exclusively in basketball and football, the two most lucrative sports. The first treats student athletes as employees; this has gained the least traction. The other two are antitrust concepts: either that the student athletes should be permitted to bargain for greater educational and health benefits from the schools they play for (the *Alston* approach, as described below); or that they should be permitted to bargain for and retain some of the value of their NIL. The NCAA has been battling lawsuits against athletes for decades now, but both the NIL theory and *Alston* recently exploded forward and changed the financial world for student athletes.

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3 Ricardo Sandoval, *USC Football: Caleb Williams Reportedly Made Millions in NIL Deals*, Sports Illustrated (Feb. 28, 2024), <https://www.si.com/college/usc/football/usc-football-caleb-williams-reportedly-made-millions-in-nil-deals-rks97>.

4 See Chuck Schilken, Q & A: *Why Did Reggie Bush Lose His Heisman Trophy? How Did the Former USC Star Get It Back?*, LA Times (Apr. 25, 2024), <https://www.latimes.com/sports/story/2024-04-25/why-did-reggie-bush-lose-his-heisman-trophy-how-did-former-usc-star-get-it-back>.

5 *On3 NIL 100*, On3, <https://www.on3.com/nil/rankings/player/nil-100/> (last updated Oct. 10, 2024).

6 *NCAA v. Alston*, 594 U.S. 69 (2021).

But the changes are likely not complete. These cases represent one step in the history of student-athletes versus NCAA, with more cases and litigation expected to arise.⁷ These rapid changes pose two questions, how did we get here, and where are we going?

I. NCAA SPORTS IS A BILLION DOLLAR INDUSTRY

We got here because of the paradox of “amateur” sports supporting a billion-dollar industry. As economist James Koch wrote:

[d]espite the claims of the National Collegiate Athletic Association (NCAA) that it is a champion of amateur athletics and physical fitness in colleges and universities, the NCAA is in fact a business cartel composed of university-firms which have varying desires to restrict competition and maximize profits in the area of intercollegiate athletics.⁸

This statement, written in 1973, has become more obviously true with each decade.

During the fiscal year of 2022-23, the NCAA made \$1.3 billion in revenue.⁹ \$945 million came from media and marketing deals tied to championship events, with \$900 million coming from the CBS and Warner Bro. Discovery rights to the NCAA men’s basketball tournament.¹⁰ Division 1 football is subdivided, with the top teams included in the College Football Playoffs, which is also known as the bowl subdivision (“FBS football”). The College Football Playoffs, which the NCAA does not have direct involvement in, brings in \$470 million of revenue annually.¹¹ The Power 5 conferences, recently reduced to 4 with the practical end of the Pac-12, brought in \$3.55 billion in revenue.¹² The conferences roughly distributed to each member school 6% of their total revenue.¹³ The majority of the money comes from NCAA football and men’s basketball.¹⁴ However, football and men’s basketball athletes only receive about 7% of the revenue in the form of scholarships and living stipends.¹⁵

7 See *Bloom v. NCAA*, 93 P.3d 621 (Colo. App. 2004), *O’Bannon v. NCAA*, 802 F.3d 1049 (9th Cir. 2015), *Alston*, 594 U.S. at 69–102.

8 James V. Koch, *A Troubled Cartel: The NCAA*, 38 L. & Contemp. Probs. 135–50 (1973).

9 *NCAA Generates Nearly \$1.3 Billion in Revenue for 2022-23. D-1 Payouts Reach 669M*, Fox Sports (Feb. 2, 2024), <https://www.foxsports.com/stories/college-football/ncaa-generates-nearly-1-3b-in-revenue-for-2022-23-d-i-payouts-reach-669m>.

10 *Id.*

11 *Id.*

12 Will Backus, *Big Ten Remains Power Five Revenue Leader with \$880 Million Haul for 2023 Fiscal Year, Per Report*, CBS Sports (May 23, 2024), <https://www.cbssports.com/college-football/news/big-ten-remains-power-five-revenue-leader-with-880-million-haul-for-2023-fiscal-year-per-report/#:~:text=Power%20Five%20conferences%20generated%20over,records%20obtained%20by%20USA%20Today>.

13 See *id.*

14 Tommy Beer, *NCAA Athletes Could Make \$2 Million a Year If Paid Equitably, Study Suggest*, Forbes (Apr. 14, 2022), <https://www.forbes.com/sites/tommybeer/2020/09/01/ncaa-athletes-could-make-2-million-a-year-if-paid-equitably-study-suggests/?sh=305607db5499>.

15 *Id.*

The amount of money that FBS football and men's college basketball make departs radically from the remainder of intercollegiate sports. The difference makes them the "Money Sports" of intercollegiate athletics. The amateur sports model that is deep in the NCAA's tradition which is rooted in athletes playing for pride, championships, Olympic chances, or professional careers after college works for the majority of intercollegiate sports because the schools, conferences, and NCAA are not becoming wealthy off the student-athletes' labor. That is the opposite however in the Money Sports. Schools, conferences, and the NCAA become vastly wealthy because of the athletes' labor. Everyone involved—coaches, commissioners, presidents, etc.—reaps the benefits except the athletes.

The problem is that the Money Sports are themselves an industry. An industry in which the athletes are the economic actors selling their athletic ability, which we recognize in the professional context as work.¹⁶ However, what the athletes can bargain in exchange for their athletic ability is determined by the NCAA. Even though the NCAA is "non-profit," the negotiations and compensation that schools enter into to recruit Money Sports athletes are necessarily commercial because of the billions of dollars the athletes bring in for the schools. Schools compete against each other for athletes' athletic abilities by offering educational quality, coaching and training reputation, athletic and non-athletic career potential, grants-in-aid for academic expenses and a living stipend while in school, anticipated success of the team, opportunities for media exposure for the athlete and opportunities for compensation for use of their name, image and likeness. But all the categories of benefits schools can use to recruit athletes are limited by what the NCAA and the schools have agreed upon, which is different and lower in value than what would be available in a free market.

The athletes have no alternative market in which to sell their athletic performance. The National Football League recruits overwhelmingly through the draft from NCAA schools, and particularly the bowl subdivision. Alternative routes to the NFL through development leagues are marginal at best.¹⁷ As a result, the athletes have to accept the agreements that the NCAA and schools have on recruiting if they want to play intercollegiate sports.¹⁸ The Money Sports athletes are forced to sell their athletic ability for the limited benefits that can be offered to them while the schools, conferences, and the NCAA make an extraordinary amount of revenue off the athlete's athletic abilities. Student-athletes must take on a full-time student academic schedule, while also committing to hours of practices, weight training, rehab, film, travel, games, and other miscellaneous events for their sports. The athletes are also sacrificing their ability to work during the school year due to their busy schedule. In addition, the athletes are also normally unable to obtain summer internships due to summer training/ practices. This inability to gain work experience can negatively affect athletes' post-graduation employment opportunities. The

16 The top levels of the four American major team sports are not only professional, the players are unionized workforces, represented respectively by the NFL Player's Association, the MLB Player's Association, and so forth. NFLPA, <https://nflpa.com/> (last visited Oct. 10, 2024). MLBPA, <https://www.mlb.com/mlbpaa> (last visited Oct. 10, 2024). NBPA, <https://nbpa.com/> (last visited Oct. 10, 2024). NHLPA, <https://nhlpa.com/> (last visited Oct. 10, 2024).

17 NCAA, Estimated Probability of Competing in College Athletics, https://ncaaorg.s3.amazonaws.com/research/pro_beyond/2023RES_ProbabilityBeyondHSFiguresMethod.pdf (last updated Apr. 1, 2024) (259 out of 259 NFL draft picks were from the NCAA in 2023).

18 See *NCAA v. Alston*, 594 U.S. 69, 90 (2021).

athletes are effectively working full-time football or basketball jobs on top of attending school, resulting in many benefits for their colleges, including economic gain.¹⁹

The Money Sports athletes also sacrifice their short-term and long-term health in addition to sacrificing their educational benefits because of the constraint on their academic options due to travel and games, and general decreased available time they have in their daily schedules due to commitments required by their sports. Not only do the athlete's athletic schedules effect their time commitment to their education, their athletic schedules effect the classes that they are able enroll in. The athlete's inability to freely choose classes effects the educational major they pursue. Resulting in athletes gravitating towards certain education majors that fit into their athletic schedule. Therefore, athletes are having to choose degrees they may not prefer. A few athletes will work extremely hard and pursue the major they desire, but often summer classes and extra years are required to graduate.

The NCAA's role, in short, is to place a wall between the high-dollar industry around the athletes' performances, and the athletes themselves, compensated only in the partial cost of an education, that due to their athletic schedules they cannot fully use. That arrangement and the general discomfort with it are why we are where we are today, in the middle of on- going litigation.

The three solutions advanced to date for these problems are employment, bargaining for payment of services, and NIL. It has repeatedly been seen that the arguments that the athletes are employees have failed and for various reasons, stakeholders including fans dislike it as an option.²⁰ Bargaining for non-cash payment of services, in the form of full cost of attendance and additional educational and personal benefits, has gotten significant traction because of *Alston*. For example, subsequent rules revisions in response to *Alston* allow student athletes to bargain for life-long healthcare and further education, including the next degree.²¹ The recent settlement between the NCAA and Power Five conferences, if accepted, will allow schools to share up to \$20 million in revenue annually with athletes, potentially expanding athletes' bargaining for payment of services.²² NIL is the most unorthodox solution in that it splits the actual athletic performance from the brand value generated by that performance, which is sold in a different market: the university bargains for the athletic labor, but others including apparel makers and the producers of video games want to make use of the name, image, and likeness. This solution has the most transformative potential, and has been most completely embraced by the NCAA because it most completely preserves nominal amateurism and places the least pressure on the universities in bargaining. However, in the long run, NIL allows athletes in Money Sports,

19 Agnew v. NCAA, 683 F.3d 328, 347 (7th Cir. 2012).

20 Dawson v. Nat'l Collegiate Athletic Ass'n/PAC-12 Conf., 932 F.3d 905, 908 (9th Cir. 2019). Berger v. NCAA, 843 F.3d 285, 293–94 (7th Cir. 2016). *Alston*, 594 U.S. at 101.

21 See *Alston*, 594 U.S. at 103–07. Steve Berkowitz, *NCAA Sets New Benefits for Division 1 Athlete, Drawing Some Qualified Congressional Praise*, USA Today (Apr. 26, 2023), <https://www.usatoday.com/story/sports/college/2023/04/26/ncaa-sets-new-benefits-athletes-drawing-some-praise-congress/11747900002/>.

22 Jacob Lev & Kyle Feldscher, *NCAA and Power Conferences Agree to Settlement Paving the Way for Schools to Pay Student-Athletes*, CNN (May 24, 2024), <https://www.cnn.com/2024/05/23/sport/ncaa-settlement/index.html>.

and also in non-money sports to make millions, and may most permanently alter which athletes play for universities, and why.

II. WHERE DID THE PROBLEM GROW FROM AND WHAT HAVE THE SOLUTIONS BEEN

“The NCAA’s business model would be flatly illegal in almost any other industry in America.”²³

A. THE ORIGIN OF COLLEGIATE AMATEURISM AND THE NCAA

Arguably the first intercollegiate competition was a rowing competition between Harvard and Yale in 1850.²⁴ The model for this competition was drastically different to what we know of intercollegiate athletics today because the athletes were compensated with an all-inclusive trip, prizes, and unlimited alcohol.²⁵ However, by 1880 intercollegiate football, primarily between Yale and Princeton, was the center point of intercollegiate sports.²⁶ In 1905, after years of crisis with many life-ending injuries happening in collegiate football, President Theodore Roosevelt eventually created what is now known as the NCAA.²⁷ After years of limited change and universities providing monetary compensation to players, in 1948 the NCAA came out with the “Sanity Code” that essentially abolished all pay for play in the NCAA. The rules have been expanding ever since.²⁸ The basic rule that college athletes are students, and not paid players representing the schools, has held to this day. Most collegiate sports earn relatively modest revenue, and student athletes rarely place their sporting careers over their non-sporting future prospects. There are two exceptions: men’s college football and college basketball are regional and even national industries.

The NCAA brings in over a billion in revenue, with football and men’s basketball both pulling in hundreds of millions in revenue per year.²⁹ The athletes that are playing in the games do not see any of the revenue go into their pockets, even though the athletes are the reason why people watch and allow the NCAA to bring in the enormous amount of revenue that it does.³⁰ The NCAA has for a long time argued the reason to not allow athletes to receive compensation for their athletic services is to preserve “amateurism” and to keep competitive balance between institutions.³¹

23 *Alston*, 594 U.S. at 109 (Kavanaugh, J., concurring).
24 *Id.* at 74 (Gorsuch, J., majority).
25 *Id.*
26 *Id.* at 75.
27 *Id.* at 75–76.
28 *Id.* at 76–77.
29 *NCAA Generates Nearly \$1.3 Billion in Revenue for 2022-23*, ESPN (Feb. 1, 2024), https://www.espn.com/college-sports/story/_/id/39439274/ncaa-generates-nearly-13-billion-revenue-2022-23.
30 *NCAA v. Alston*, 594 U.S. 69, 79–80 (2021).
31 *Id.* at 82.

Amateurism for the players, who at the top levels hope for lucrative professional careers, sits oddly with the amateurism of student athletes in other sports. Major League Baseball and NHL hockey, for example, stock their starting rosters with players shaped by minor or junior leagues that begin before college and only secondarily incorporate former intercollegiate players.³² These sports operate like international (soccer) football, where seamless professional development of teens with professional prospects is the norm. The NFL, and to a lesser extent the NBA, maintain development leagues only as a secondary feeder, and take most of their starting rosters from former NCAA athletes. Comparatively few NFL players never played for an NCAA school, or even a non-Division 1 NCAA school.³³ For these two sports, spending one to five years in an unpaid apprenticeship, bearing most of the risk of career-ending injury, is virtually mandatory.

Nor does the amateur status of the athletes prevent individual schools from paying their coaches and staff millions of dollars.³⁴ Indeed, the highest paid public employee in 43 states are coaches at an athletic powerhouse at a large public university.³⁵ The level of coaches and quality of facilities are equivalent, if not better than their sports professional leagues.³⁶ Coaching staffs on FBS football teams are larger than NFL coaching rosters.³⁷ To add, the NCAA president makes close to four million per year and the head of the major conferences between two to three million per year.³⁸ It appears in almost all aspects that NCAA football and men's basketball operate closer to how professional leagues run, compared to how amateur high school athletics are run. The only difference is that the players for the NCAA are not allowed to be paid for their athletic capabilities.

The glaring imbalance in these sports expresses itself in two ways. First, the universities themselves are the recipients of the student-athlete's labor. The universities field teams, the conferences organize competition, which they sell as an entertainment product. ESPN's television rights to the College Football Playoffs was previously 12-years for \$5.47 billion,

32 Will Butcher, *NHL Rosters Feature Heavy College Hockey Influence*, College Hockey Inc. (Oct. 5, 2023) (234 out of 736 active players on opening-night played college hockey). Jeffrey May, *Why Isn't College Baseball a Bigger Deal?*, Diario AS S.L. (Mar. 5, 2022), https://en.as.com/en/2022/03/05/mlb/1646501180_395427.html (In 2020, 47% of MLB players played college baseball).

33 *Colleges with the Most Players Drafted in 2024*, NCAA (Apr. 29, 2024), <https://www.ncaa.com/news/football/article/2024-04-27/colleges-most-players-drafted-2024-nfl-draft#:~:text=The 2024 NFL draft has,being selected across seven rounds> (All 257 player in the 2024 NFL draft played college football and most came from FBS schools).

34 Brad Crawford, *Dabo Swinney, Kirby Smart Lead College Football's 15 Highest-Paid Coaches in 2024*, 247Sports (Feb. 9, 2024), <https://247sports.com/longformarticle/dabo-swinney-kirby-smart-lead-college-footballs-15-highest-paid-coaches-in-2024-226807052/>.

35 Michael Calabrese, *It Pays to Be the Head Coach: Highest Paid State Employees in the US*, [OLBG.com](https://www.olbg.com), <https://www.olbg.com/us/blogs/it-pays-be-head-coach-highest-paid-state-employees-us> (Feb. 19, 2024) (36 being college football coaches, 11 men's basketball coaches, and 1 men's hockey coach).

36 *NCAA v. Alston*, 594 U.S. 69, 76 (2021).

37 Matt Astbury, *How Many Coaches Are in an NFL Team?*, DAZN (Sept. 20, 2023), <https://www.dazn.com/en-US/news/american-football/how-many-coaches-are-in-an-nfl-team/1libbciedtgg16st5jgmnbey5>; *11.7 Limitations on the Number and Duties of Coaches and Noncoaching Staff Members*, NCAA (Aug. 1, 2024), <https://web3.ncaa.org/lstdbi/search/bylawView?id=36976> (Usually 12 coaches are on an NFL team). *2024 Football Staff*, Univ. Ala., <https://rolltide.com/sports/football/coaches> (last visited Oct. 11, 2024) (Alabama has 14 people designated to coaching football).

38 *Alston*, 594 U.S. at 80.

and was recently extended 6-years for \$7.8 billion.³⁹ Additionally, CBS and TBS recently extended their March Madness basketball tournament deal that was previously 14-years for \$10.8 billion, an additional 8-years for \$8.8 billion.⁴⁰ The student-athletes' on-field or on- court performances were necessary inputs to these entertainment products that brought the schools millions and the conferences billions. But their compensation was less, even, than the full cost of attending the university.⁴¹ The students are in effect paying to intern during the early years of their sporting careers.

The second way this imbalance has expressed itself, is that the student athletes have become media personalities. Particularly in basketball, their distinctive images are tremendously valuable, especially as high-dollar video games use the distinctive players to draw buyers in to paying for the games. The NCAA Football video games made around \$125 million annually in revenue for EA Sports.⁴² In just two weeks, the new NCAA Football 25' video game made \$500 million in sales.⁴³

B. WHAT HAVE THE COURTS DECIDED?

1. COLLEGE ATHLETES AS EMPLOYEES

The first possible solution to the problem is to determine that student-athletes are employees of the university. Characterizing the athletes as employees would allow the athletes to bargain for wages, benefits, and hours. It would also allow the athletes to unionize and open up federal labor laws to the athletes. It would also be consistent with many athletes' eventual transition to the professional ranks, where NFL and NBA players are employed by the teams they play for, and with the development environments in baseball and hockey, where the minor league players are employed by their teams.

In *Dawson v. National Collegiate Athletic Ass'n*, a group of FBS Football players sought to establish that the NCAA and the PAC-12 conference were their joint employers.⁴⁴ The Ninth Circuit likewise found that student-athletes are not employees of the university under California law, and that there is no authority that would support that student-athletes are employees of the conference or NCAA.⁴⁵

39 *Current College Sports Television Contracts*, Bus. Coll. Sports (last updated Mar. 19, 2024), <https://businessofcollegesports.com/current-college-sports-television-contracts/>.

40 *Id.*

41 *O'Bannon v. NCAA*, 802 F.3d 1049, 1054 (9th Cir. 2015).

42 Kristi Dosh, *How Much Did Schools Make from EA Sports's NCAA Football Previously?*, Bus. Coll. Sports (May 17, 2023), <https://businessofcollegesports.com/name-image-likeness/how-much-did-schools-make-from-ea-sportss-ncaa-football-previously/> (Individual schools were roughly making between 50,000-150,000 for NCAA football licenses and between 18,000-27,000 NCAA basketball licenses).

43 Kenneth Teape, *EA Sports College Football 25 Putting Up Massive Sale Numbers*, NIL Daily on SI (July 31, 2024), <https://www.si.com/fannation/name-image-likeness/nil-news/ea-sports-college-football-putting-up-massive-salenumbers#:~:text=In%20two%20short%20weeks%2C%20more,%24500%20million%20in%20sales%20already.>

44 *Dawson v. Nat'l Collegiate Athletic Ass'n/PAC-12 Conf.*, 932 F.3d 905, 907 (9th Cir. 2019).

45 *Id.* at 915.

Recently, there have been a few decisions that have given some traction to the argument that athletes are employees. In *Johnson v. Nation Collegiate Athletic Ass'n*, a group of athletes argued that they were employees of the universities they played for.⁴⁶ The court held that student-athletes are not barred from bringing Fair Labor and Standard Act (FLSA) claims simply because of the long history of amateurism.⁴⁷ The *Johnson* court accepted that the athletes may be employees under FLSA if “the athlete and college or NCAA reveal an economic reality that is of an employee-employer.”⁴⁸ In addition, Dartmouth men’s basketball was allowed to unionize over the objection of the Trustees of Dartmouth College because the National Labor Relations Board denied the request to stop the election until after further review.⁴⁹ Although this is a speck of traction in the direction of student-athletes as employees, it is facing a phalanx of contrary precedent. *Dawson*, *Alston*, and *Berger v. National Collegiate Athletic Ass'n* have all addressed in one way or another, if student-athletes were employees to the university, conferences, or the NCAA, it would run counter to the long-accepted tradition of amateurism in college sports.⁵⁰

Employing the student athletes represents a full abandonment of amateurism. The main resistance, legally and probably culturally, is that amateurism is part of the product.⁵¹ As the *Alston* court said, “courts should take care when assessing the NCAA’s restraints on student-athlete compensation, sensitive to their procompetitive possibilities.”⁵² The procompetitive possibilities are referring to the tradition of amateurism in college sports, which was argued to increase consumer demand.⁵³

Not only has considering student-athletes as employees not been accepted by the court, certain other negatives effects could arise if they were to be. If universities had to pay their athletes, which unless they play a Money Sport the university is already losing money by supporting the team,⁵⁴ the university may decide that from an economic standpoint they cannot afford to pay the athletes and ultimately just cut the program. That is why it may be seen as a surprise that Dartmouth’s men’s basketball team wanted to unionize because the Ivy league already has a deep tradition focused on amateurism

46 *Johnson v. NCAA*, 108 F.4th 163, 167 (3rd Cir. 2024).

47 *Id.* at 182.

48 *Id.* at 180.

49 Andrea Hsu, *Dartmouth Men’s Basketball Team Votes to Unionize, Shaking Up College Sports*, NPR (Mar. 5, 2024), <https://www.npr.org/2024/03/05/1235877656/ncaa-dartmouth-mens-basketball-union-election-nlrb>.

50 *Dawson v. Nat’l Collegiate Athletic Ass’n/PAC-12 Conf.*, 932 F.3d 905, 908 (9th Cir. 2019). *NCAA v. Alston*, 594 U.S. 69, 101 (2021). *Berger v. NCAA*, 843 F.3d 285, 293–94 (7th Cir. 2016).

51 *Alston*, 594 U.S. at 94.

52 *Id.* at 92.

53 *Id.* at 94.

54 See *Analysis: Who Is Winning in the High-Revenue World Of College Sports?*, PBS (Mar. 18, 2023), <https://www.pbs.org/newshour/economy/analysis-who-is-winning-in-the-high-revenue-world-of-college-sports>.

and academics as they don't allow any athletic scholarships.⁵⁵ Combined with the fact the team did go 6-21 in the 2023-24 season,⁵⁶ if it is decided that the student-athletes are employees and Dartmouth must pay them wages, nothing would stop Dartmouth from discontinuing the program because it does not make economic sense, and the history of amateur athletics would have essentially ended.⁵⁷

2. BARGAINING FOR PAYMENT OF SERVICES

In 2016, *O'Bannon v. NCAA* was decided by the Ninth Circuit of the U.S Court of Appeals.⁵⁸ The case was brought by two former athletes who had appeared in NCAA basketball and football video games.⁵⁹ The players brought a claim under Section 1 of the Sherman Act that the NCAA NIL rules were an unlawful restraint of trade.⁶⁰ In *NCAA v. Bd. of Regents of the Univ. Okla.*,⁶¹ it was decided that because of the unique need of the NCAA to have a certain level of cooperation between institutions, a rule of reason test must be used.⁶² *Bd. of Regents* dealt with television rights of member institutions.⁶³ The *O'Bannon* court decided that because of the same need for a level of cooperativeness, that a full rule of reason test should be applied to the current case.⁶⁴

The district court, after performing a rule of reason analysis, determined that the NIL rules were an unreasonable restraint of trade.⁶⁵ The district court held that the NCAA did present procompetitive justifications, such as to preserve amateurism and to promote competitive balance.⁶⁶ The district court then determined that the NCAA could achieve the same result by a less restrictive alternative: allowing schools to provide athletes with full cost of tuition scholarships and \$5,000 of extra cash compensation after graduation unrelated to academics.⁶⁷ The Ninth Circuit ruled that allowing athletes full

55 Mike Scarcella, *Ivy Leaguers Blast Schools' Bid to Dismiss Lawsuit Over Athletic Scholarship*, Reuters (June 30, 2023), <https://www.reuters.com/legal/litigation/ivy-leaguers-blast-schools-bid-dismiss-lawsuit-over-athletic-scholarship-bans-2023-06-30/> (The Ivy League scholarship ban is currently under litigation with the student athletes claiming the ban has no procompetitive purpose, rather it is only in place to benefit the universities bottom line).

56 *2024-25 Men's Basketball Schedule*, Dartmouth, <https://dartmouthsports.com/sports/mens-basketball/schedule> (last visited Oct 11, 2024).

57 It is beyond the scope of this article, but if student-athletes were employees possible unfavorable tax consequences to the student-athletes may happen, such as, all of their scholarships could be considered taxable income. Diego Areas Munhoz & Samantha Handler, *College Athlete Unions Raise Specter of Scholarship Tax Hit*, Bloomberg L. (Apr. 8, 2024), <https://news.bloomberglaw.com/daily-labor-report/college-athlete-unions-raise-specter-of-scholarship-tax-hit>.

58 *O'Bannon v. NCAA*, 802 F.3d 1049 (9th Cir. 2015).

59 *Id.* at 1055.

60 *Id.*

61 *NCAA v. Bd. Regents*, 468 U.S. 85 (1984).

62 *O'Bannon*, F.3d. at 1063. *Bd. Regents*, 468 U.S. at 102.

63 *Bd. Regents*, 468 U.S. at 91-94.

64 *Id.* at 1069.

65 *See id.* at 1070-76.

66 *Id.* at 1052-53.

67 *Id.* at 1053.

cost of tuition scholarships was a less restrictive alternative, however, allowing \$5,000 of compensation unrelated to academics was not a less restrictive alternative to preserve amateurism.⁶⁸ The court essentially said that people watch college football because of the amateur aspect, which means players do not get paid, and that this feature is a reason for the NCAA's success.⁶⁹ In weighing the argument that amateurism is key to the economic success of NCAA football and basketball, the Ninth Circuit accepted the comparison of those intercollegiate sports to minor league baseball, which has only local viewership and lacks the market NCAA football and basketball enjoy.⁷⁰

The court in *O'Bannon* had to decide how expansively to define the procompetitive benefit of amateurism.⁷¹ The court accepted the *Bd. of Regents* holding that preserving amateurism was a procompetitive purpose. But the NCAA further asked the court in *O'Bannon* to hold that **any** rule that served to promote amateurism was therefore lawful.⁷² Preserving amateurism is such a through-line in NCAA regulations that accepting the procompetitive benefit of that purpose without seriously weighing less restrictive alternatives would essentially exempt the NCAA from antitrust scrutiny.⁷³ The court in *O'Bannon* ultimately agreed that preserving amateurism was a procompetitive justification, but weighed the restraints with procompetitive purpose against less restrictive alternatives.⁷⁴ Amateurism does have a procompetitive effect because the appeal of college sports to the consumer is increased because of the amateur status of the athletes.⁷⁵ However, giving student-athletes full cost of attendance scholarships does not violate the NCAA's concept of amateurism because the scholarships would go to covering legitimate costs of attendance.⁷⁶ Consumers of college sports would not correlate full cost of attendance scholarships with impeding the amateur aspect of the student-athlete relationship.⁷⁷ Allowing full cost of attendance scholarships is a less restrictive alternative that does not decrease the procompetitive purpose of amateurism.⁷⁸

College football and basketball athletes in a different suit against the NCAA, *NCAA v. Alston*, alleged that the NCAA and member institutions were violating section 1 of the Sherman Antitrust Act because they were agreeing to restrict compensation colleges and universities could offer student-athletes.⁷⁹ The district court, with no contest of the NCAA, found that the NCAA and the 11 Division 1 conferences were in agreement to restrain compensation to student-athletes. The district court then proceeded into the

68 *Id.* at 1079.

69 *Id.* at 1073, 1076.

70 *Id.* at 1074.

71 *Id.* at 1063–64.

72 *Id.*

73 *Id.* at 1063.

74 *Id.* at 1063–64.

75 *Id.* at 1073

76 *Id.* at 1075

77 *Id.*

78 *Id.*

79 *NCAA v. Alston*, 594 U.S. 69, 74 (2021).

rule of reason test.⁸⁰ The NCAA has near complete dominance for the market of college basketball and football athletes.⁸¹ The athletes have no viable substitute and that results in the NCAA and member schools ability to restrain compensation to any extent they want without the risk of losing their market dominance.⁸² Member schools still compete in the recruiting of student-athletes but at artificial caps the NCAA and member schools created.⁸³ The district court determined in a market without restraints student-athletes would receive higher compensation.⁸⁴

In a free market, without any restraints the athletes would be able to bargain for increased compensation. The athletes provide enough value to their schools that the NCAA would increase compensation given to athletes in order for the schools to experience economic gain.⁸⁵ That is why the NCAA and the member schools created the restraint. The member schools do not want to compete with each other to compensate the athletes for what they are realistically economically worth because that would result in lower margins. Instead, because the NCAA is a private organization, the schools cooperate with the NCAA to place restraints on compensation to student-athletes in order to increase their own profits.

The district court, recognizing the procompetitive justification of amateurism, looked to see if there was a less restrictive alternative.⁸⁶ Similar to the reasoning in *O'Bannon*, the district court found that caps on educational-related benefits, scholarships for graduate school, payments for tutoring, and paid post eligibility internships do not effect amateurism.⁸⁷ The general public would not confuse these types of compensation with a professional salary and does not ruin the consumer demand for college sports with amateur athletes.⁸⁸

The NCAA appeals up to the Supreme Court of the United States arguing that the lower courts improperly subjected the NCAA to the rule of reason test.⁸⁹ The NCAA did not challenge them and its member schools are horizontally price fixing in a market where they have monopoly control and are restraining athletes' compensation where in a free market the athletes would receive greater compensation.⁹⁰

The Court's analysis was focused on the third step of the rule of reason test that requires the plaintiffs to prove a less restrictive alternative.⁹¹ The NCAA tried to make

80 *Id.* at 80–81

81 *Id.* at 81.

82 *Id.* at 81–82.

83 *Id.* at 82.

84 *Id.*

85 *Id.*

86 *Id.* at 83–84.

87 *Id.* at 84.

88 *Id.*

89 *Id.* at 96.

90 *Id.* at 86.

91 *Id.* at 100.

an argument that the district court required the NCAA to demonstrate their rules were the least restrictive alternative. The Court denied this argument and noted that the district court never expressed this, but rather expressed that once they found the NCAA restraints were clearly stricter than necessary to achieve the procompetitive benefits, it was a violation of Sherman act section 1.⁹²

The Court ultimately ruled that the NCAA is enjoined from prohibiting educational-related compensation, academic and graduation compensation, and in-kind benefits.⁹³ The court addressed the NCAA concerns and stated the scope of the injunction did not prohibit the NCAA to implement rules that ban educational benefits from third parties, compensation unrelated from educational activities (e.g., NIL), and in-kind benefits unrelated to educations (e.g., giving an athlete a Lamborghini).⁹⁴

The case outlined that NCAA football and basketball players are selling their athletic services, which is to say their labor, to NCAA institutions.⁹⁵ In a free market, the athletes would be receiving greater compensation; however, the need to preserve amateurism is a procompetitive justification that allows the NCAA and member schools to restrict cash payments for play.⁹⁶ By this logic, the NCAA is not allowed to restrict compensation, except where that compensation would demonstrably defeat the perception of the athletes' amateur status and thereby risk losing consumer demand.⁹⁷ Essentially, student-athletes are independent contractors that can seek compensation in non-cash forms, in the form of educational and health insurance benefits.

Alston is a distinct decision for collegiate athletes. Student-athletes are able to take the holding only so far. *Alston* respects the procompetitive purpose of amateurism and accepts the amateur aspect of FBS football and NCAA men's college basketball as an important reason why they are both hundred-million-dollar industries.⁹⁸ Athletes can expand *Alston* presumably to the extent that they are able to bargain for non-cash payment of services.⁹⁹ Student-athletes have expanded it to include life-long health insurance and further education.¹⁰⁰ The recent agreement by the NCAA to stop enforcing their transfer eligibility rules will allow athletes each year to bargain for payment of services that are allowed under *Alston* without any consequences to their eligibility.¹⁰¹ Furthermore, additional benefits the athletes may seek to bargain for in the future that is not pay for play

92 *Id.* at 100–01.

93 *See id.* at 103–07.

94 *Id.*

95 *Id.* at 90.

96 *See id.* at 106.

97 *Id.* at 101–02.

98 *Id.* at 92–93.

99 *Id.* at 105.

100 Steve Berkowitz, *NCAA Sets New Benefits for Division 1 Athlete, Drawing Some Qualified Congressional Praise*, USA Today (Apr. 26, 2023), <https://www.usatoday.com/story/sports/college/2023/04/26/ncaa-sets-new-benefits-athletes-drawing-some-praise-congress/11747900002/>.

101 David Steele, *NCAA to End Transfer Rules in Deal with DOJ*, LAW360 (May 30, 2024), <https://www-law360-com.us1.proxy.openathens.net/articles/1842664/ncaa-to-end-transfer-rules-in-deal-with-doj>.

cash payments are limited. A couple examples that may be able to be bargained for under the holding from *Alston* would be paid education for their children (the results may differ between children they already have before college, have during college, and have after college) and paid education for spouses.

Soon after the decision in *Alston*, when many states were on the verge of passing NIL laws, the NCAA released a policy allowing NIL rules.¹⁰²

C. THE BIRTH AND EXPANSION OF THE LUCRATIVE WORLD OF NIL

On June 30, 2021, the NCAA announced their first interim policy that would allow student-athletes to make money off of their NILs.¹⁰³ Currently, the majority of states have proposed or enacted their own NIL laws, with some states pushing to have athletic departments to have the ability to be more involved in the process.¹⁰⁴ The NCAA was motivated to adopt NIL because of the increase pressure against the NCAA through litigation to fix the problem, specifically in the Money Sports, of the NCAA making billions and the athletes not even getting their full cost of attendance covered.¹⁰⁵ *O'Bannon* and *Alston*'s holdings demonstrate courts agree that amateurism is a procompetitive purpose, but disagree with the NCAA as to what type of compensation would eliminate the amateur status of the athletes and hurt NCAA's consumer demand.¹⁰⁶

Bloom v. National Collegiate Athletic Association decided in 2004 shows how far we have come in just twenty years with college athletes making money off of their NIL.¹⁰⁷ Bloom was a talented skier and football player.¹⁰⁸ Bloom had a professional skiing career but also wanted to play football at the University of Colorado.¹⁰⁹ Skiing, an expensive sport, requires athletes to raise much of their money through prize money and other endorsements in order to fund their career.¹¹⁰ University of Colorado on behalf of Bloom asked the NCAA for a waiver to allow him to keep his modeling and endorsement deals that were connected to his skiing career in order to maintain his skiing career and not have the endorsements be a violation of the NCAA eligibility rules in order for him to be eligible to play football.¹¹¹ Bloom argued that the money he was making through his NIL

102 Michelle Brutlag Hosick, *NCAA Adopts Interim Name, Image, and Likeness Policy*, NCAA (June 30, 2021) <https://www.ncaa.org/news/2021/6/30/ncaa-adopts-interim-name-image-and-likeness-policy.aspx>.

103 *Id.*

104 *Tracker: Name, Image, and Likeness Legislation by State*, Bus. Coll. Sports (July 28, 2023), <https://businessofcollegesports.com/tracker-name-image-and-likeness-legislation-by-state/>.

105 See *NCAA v. Alston*, 594 U.S. 69, 101–02 (2021); *O'Bannon v. NCAA*, 802 F.3d 1049, 1075 (9th Cir. 2015).

106 *NCAA v. Alston*, 594 U.S. 69, 101–02 (2021); *O'Bannon v. NCAA*, 802 F.3d 1049, 1075 (9th Cir. 2015).

107 *Bloom v. NCAA*, 93 P.3d 621 (Colo. App. 2004).

108 *Id.* at 622.

109 *Id.*

110 *Id.*

111 *Id.*

was solely connected to his ski career, and not connected to his football career.¹¹² The court ruled that it was impossible to separate the two and did not accept his waiver.¹¹³ The case demonstrates a zero tolerance the NCAA had for NIL compensation.

The NCAA realized after *Alston* that compensation for NIL is completely disconnected from the compensation that member schools offer. *Bloom* was essentially arguing this, but took it further to say that his fame was unrelated to college athletics and the court still denied the argument.¹¹⁴ The NCAA and member schools were restraining the athlete's ability to be compensated for their celebrity status by people and companies unrelated to the member school. In a free market with no restraints, the athletes would be able to make significant compensation similar to non-athletes with similar celebrity status. The NCAA realized because of how disconnected NIL—or in theory should be disconnected—is from the athletic programs, allowing student-athletes NIL would not ruin the athlete's amateur status in the public's eyes and would not hurt consumer demand. The NCAA essentially realized that allowing NIL is a less restrictive alternative to the procompetitive purpose of amateurism because NIL is disconnected from the member schools and would not be viewed as the member schools paying professional cash salaries to the athletes. Thus, keeping the consumer demand for amateur athletics.

The result seems to have worked. Out of the top 50 NIL earners, 44 are Money Sport athletes, football and men's basketball.¹¹⁵ A large part of the success NIL compensation has had is because of NIL collectives. NIL collectives are independent from the university and the goal is to pool funds from businesses and boosters to help facilitate NIL deals and offer ways for the athlete to monetize their NIL.¹¹⁶ The three main collective types are marketplace collectives, donor-driven collectives, and dual collectives.¹¹⁷ Marketplace collectives allow for a common meeting space to connect for possible NIL opportunities.¹¹⁸ Donor-driven collectives are the most common collectives where boosters and supporters pool their money, which is then paid to the players in an NCAA-compliant manner by the collective.¹¹⁹ Dual collectives are a combination of marketplace and donor-driven collectives.¹²⁰

On its face it appears that NIL compensation has done what it was intended to do: allow Money Sport athletes to be compensated based on their celebrity status/ fame. In addition, NIL compensation has leaked out to the non-money sports and have allowed for non-money sports athletes to make money off of their fame. For example, LSU gymnast

112 *Id.* at 627.

113 *Id.*

114 *Id.* at 622.

115 See *On3 NIL 100*, On3, <https://www.on3.com/nil/rankings/player/nil-100/> (Oct. 14, 2024).

116 Pete Nakos, *What Are NIL Collectives and How Do They Operate?*, On3NIL (July 6, 2022), <https://www.on3.com/nil/news/what-are-nil-collectives-and-how-do-they-operate/>.

117 *Id.*

118 *Id.*

119 *Id.*

120 *Id.*

Livvy Dunne is third in total NIL revenue.¹²¹ The positive effects of that could be great for college sports and sports in general. For Olympic and individual performer sports, such as gymnastics, golf, tennis, swimming and diving, and track and field, where often times the best athletes never attend college, or leave college early to focus on their professional careers, NIL may have positive effects. NIL could increase the number of athletes who stay in college because of the ability to now be compensated while in college and not have to turn professional to gain compensation. We may even see an increase in the level of competition for NCAA hockey and baseball. Both NHL and MLB currently gather their players from the college ranks as a secondary option,¹²² but now with the ability to gain NIL compensation, athletes may opt for college instead of junior hockey or minor league baseball where their salaries are low, and opportunity to sell their NIL is not as high as compared to the NCAA.

A problem with NIL is that athletes and schools are using NIL to circumvent the restrictions that the NCAA has on bargaining for payment of services. The top four earners in NIL during 2023–2024 school year was Shedeur Sanders, Livvy Dunne, Bronny James, and Travis Hunter.¹²³ Those four can be seen in sponsorships, ads, podcast, etc., and are truly making money off of their name, image, and likeness. However, athletes like Arch Manning (quarterback at University of Texas) and Carson Beck (quarterback at University of Georgia) were both in the top 10 of NIL.¹²⁴ Both post minimally on social media.¹²⁵ An easy assumption can be made that the reason they have NIL money is more accurately attributable to their athletic ability and not NIL. NIL collectives have made that option happen.

The use of NIL to circumvent what student-athletes can bargain for payment of services may only be expanding. The NCAA has rules to stop colleges from using NIL to recruit athletes to their programs.¹²⁶ Although athletes are still committing to schools knowing they have million-dollar NIL deals, the programs are not allowed to directly recruit using NIL. Seven states are suing the NCAA to change this rule.¹²⁷ Depending on the outcome of that suit, it shows how NIL can be used to go beyond what is allowed from *Alston*. Essentially, college athletic programs are allowed to promise pay for play to athletes because the money is not being paid to the athletes by the school, but rather boosters and companies that are not associated with the university.

121 NCAA v. Alston, 594 U.S. 69, 86 (2021).

122 *NCAA Generates Nearly \$1.3 Billion in Revenue for 2022-23*, ESPN (Feb. 1, 2024), https://www.espn.com/college-sports/story/_/id/39439274/ncaa-generates-nearly-13-billion-revenue-2022-23.

123 *NIL Valuation and Rankings*, On3, <https://www.on3.com/nil/rankings/> (last visited Oct. 14, 2024).

124 *Id.*

125 Arch Manning (@archmanning), Instagram, <https://www.instagram.com/archmanning/?hl=en> (last visited Oct. 14, 2024). Carson Beck (@carsonbeck), Instagram, <https://www.instagram.com/carsonbeck/?hl=en> (last visited Oct. 14, 2024).

126 David Steele, *Fla., NY, DC Join Suit Demanding Halt to NCAA's NIL Policies*, LAW360 (May 1, 2024), <https://www-law360-com.us1.proxy.openathens.net/articles/1831844/fla-ny-dc-join-suit-demanding-halt-to-ncaa-s-nil-policies>.

127 *Id.*

While the natural consequences of NIL on intercollegiate sports may still be unknown, it appears that NIL has not affected the competitive balance of the Money Sports, or non-money sports. If anything, NIL may have helped even out competitive balance of Money Sports because athletes can now weigh how much NIL they will get at different schools when considering who to give their athletic abilities to. Before NIL, the biggest consideration for recruits were contending for a championship, quality of facilities, playing time, quality of coaching, professional playing career matriculation, and educational prestige. Athletes may sacrifice playing time and educational prestige, for a chance to win a championship and go to a school that has a reputation of sending players to professional leagues. However, now that millions of dollars may be on the table for athletes, schools who may have not had a chance of getting the high recruits, now because of NIL, are at the table and in the conversation of landing the high recruits.

III. CONCLUSION

Employment, bargaining for payment for services, and NIL each have had a unique path to how far they have gotten today. Each also have possible next steps that are to come in the future and will have natural consequences because of those steps. This article has looked deeper into employment, bargaining for payment for services, and NIL and covered the path of how each have gotten to where they are today, and more importantly what the next steps are for each, and the natural consequences of those steps.

Employment seems to be a dead end. Courts agree that amateurism is a procompetitive justification and if players would be paid wages, they would be getting cash payments to play, ending the amateur aspect that consumers demand.¹²⁸ To add, for the majority of athletes, especially who play non-money sports, or at schools where even the Money Sports operate at an economic loss, a requirement to pay the athletes wages could risk universities just ending the program altogether.

Bargaining for payment of services has been great for athletes and there has been continued expansion over the years. However, *Alston* seems to have made bargaining for payment of services self-limiting. Student-athletes can only bargain for compensation that cannot be considered cash payments for play.¹²⁹ After future education and life-long health insurance has been allowed to be given to athletes,¹³⁰ there may not be much left to bargain for down that route.

NIL is the opposite. How the collectives currently operate, and depending how the current litigation plays out, NIL may be able to be offered expressly in recruiting and would essentially circumvent the limits given in *Alston* because the payments are not being made by the university, ultimately, resulting in pay for play for the athletes. Not only has NIL helped solve the problem of allowing the Money Sports athletes to receive fair compensation for the labor they put into a billion-dollar industry, but it also has positive

128 See *Dawson v. Nat'l Collegiate Athletic Ass'n/PAC-12 Conf.*, 932 F.3d 905, 908 (9th Cir. 2019). *NCAA v. Alston*, 594 U.S. 69, 101 (2021). *Berger v. NCAA*, 843 F.3d 285, 293–94 (7th Cir. 2016).

129 *Alston*, 594 U.S. at 105.

130 Steve Berkowitz, *NCAA Sets New Benefits for Division 1 Athlete, Drawing Some Qualified Congressional Praise*, USA Today (Apr. 26, 2023), <https://www.usatoday.com/story/sports/college/2023/04/26/ncaa-sets-new-benefits-athletes-drawing-some-praise-congress/11747900002/>.

knock-on effects for non- money sports. As explained earlier, the ability for all athletes to make NIL compensation may bring Olympic-level athletes to college or keep them in college longer. Another potential knock-on effect is seeing more professional caliber NHL and MLB players in the NCAA, where currently college operates as a secondary feeder to the professional leagues, because of the ability to gain NIL compensation. NIL Compensation that may be more than if they were to play in junior and minor leagues. NIL has been and will continue to be used and expanded to give bargaining power back to the athletes that are making the NCAA billions where *Alston* cannot. However, we cannot know in advance if a high-dollar NIL environment actually preserves, in the eyes of the fans, the alleged pro-competitive benefits of amateurism. If the fans come to see NIL-compensated athletes as professionals, this may be true beyond football and basketball, to every sport with celebrity athletes representing universities, will consumer demand decrease for all intercollegiate athletics? Therefore, if amateurism, such as it is, truly represents an essential differentiator for college sports, will the NIL regime forfeit it far beyond the bounds of the two sports litigation has primarily addressed?

EVOLVING OR RUNNING IN PLACE? EMPIRICAL APPROACHES TO “COMMON IMPACT” IN ANTITRUST CLASS ACTIONS

By Michael Kheyfets

I. INTRODUCTION

- (1) In class action litigation, a court’s decision as to whether a particular class should be certified turns, in part, on the question of predominance.¹ In antitrust class actions in particular, the predominance assessment relies heavily on economic analysis. Plaintiffs’ expert economists offer opinions on whether evidence common to the proposed class can establish antitrust impact—i.e., paying actual prices higher than in a “but-for” world absent the alleged conspiracy—to all (or nearly all) members of that class. Defendants’ expert economists are asked to assess those opinions.
- (2) Plaintiffs’ expert economists generally rely on three broad categories of economic evidence to assess issues of predominance. The first category involves analysis of what is referred to as “common industry characteristics.” Plaintiffs’ expert may describe certain characteristics of the industry at issue—e.g., a small number of competitors, high barriers to entry, and absence of substitutable products—and opine that economic theory predicts a higher likelihood of classwide impact in industries where such characteristics are present.² This type of analysis is generally not definitive because it offers no objective criteria to test the proposition of classwide impact. There is no test or bright line rule, for example, dictating how concentrated the industry at issue should be to establish that the alleged conduct harmed the entire proposed class.
- (3) A second type of economic evidence often offered by plaintiffs’ expert economists as part of the predominance inquiry involves “pooled” regression models that aim to statistically identify overcharges (i.e., price elevations resulting from the

1 Fed. R. Civ. P. 23(b)(3) requires that “questions of law or fact common to class members *predominate* over any questions affecting only individual members. . . .” (emphasis added).

2 See, e.g., Memorandum L. in Support of Direct Purchaser Plaintiffs’ Motion for Class Certification at 50–51, *In Re: Domestic Drywall Antitrust Litig.*, No. 2:13-md-2437-MMB (Aug. 3, 2016) [hereinafter *Drywall Class Certification Motion*] (Plaintiffs’ expert “establish[ed] market factors that made it far more likely that the Cartel would be successful in widely imposing conspiratorial prices across the Class. . . . Such factors include: Market concentration and Co- Conspirators’ domination of the Drywall market, . . . Lack of economic substitutes, . . . High barriers to entry.”); Direct Purchaser Plaintiffs’ Motion for Class Certification, & Memorandum L. In Support at 13, *In re Capacitors Antitrust Litig.*, No. 3:14-cv-03264-JD (June 15, 2017) (Plaintiffs’ expert “described various characteristics of the capacitor industry that would cause economists to deem it susceptible to collusion, . . . including Defendants’ market power in a concentrated industry, . . . high barriers to entry, . . . and inelastic and declining demand.”); Memorandum L. In Support Direct Purchaser Plaintiffs’ Motion For Class Certification at 4–5, *In Re: Interior Molded Doors Antitrust Litig.*, No. 3:18-cv-00718-JAG (Mar. 9, 2021) [hereinafter *IMD Class Certification Motion*] (“Class-wide evidence shows that the IMD market possesses characteristics that facilitate (1) collusion, and (2) widespread harm on all Class members. These include: Dominant market power, [...] Significant barriers to entry exist, [...] Demand for IMDs is inelastic as there are no reasonable economic substitutes, [...] IMDs are commodities. . . .”).

alleged conduct). These models are referred to as “pooled” because they combine sales data across proposed class members and estimate a single average overcharge. The shortcomings of pooled regression models for the predominance inquiry have been extensively discussed in the economic literature.³ Pooled overcharge models are generally referred to as “representative” evidence—i.e., evidence meant to “represent” the experiences of class members through an average, rather than directly assess each *individual* class member’s experience (which may or may not be different than the average).⁴

- (4) Given the limitations of the pooled overcharge model for establishing injury to all (or nearly all) members of a given proposed class, plaintiffs’ expert economists often offer a third type of economic evidence, which is referred to as analysis of “common impact.” This type of analysis—which has been implemented in the form of several different empirical methodologies—seeks to supplement the pooled overcharge models and fill the analytical gap with respect to assessing injury on a classwide basis.⁵ However, any such “common impact” techniques should be evaluated rigorously, as they often go no further than the pooled regressions they intend to supplement in terms of addressing issues of masking individualized differences and sweeping in uninjured class members.
- (5) As the economic analysis of antitrust class certification continues to become more complex and data intensive, “courts have continued to scrutinize average-pricing models, the propriety of which depends not only on a proposed class’s theory of liability but on the degree to which they account for variation of injury between class members.”⁶ A variety of economic methodologies have emerged with the supposed intent of assisting courts in this scrutiny. Some—called “price structure” methodologies—seek to *supplement* the pooled overcharge model and

3 See e.g., Laila Haider et al., *Turning Daubert on its Head: Efforts to Banish Hypothesis Testing in Antitrust Class Actions*, 30 Antitrust 53 (2016) [hereinafter Haider et al.]; ABA Antitrust L. Section, *Econometrics: Legal, Practical, And Technical Issues* 357 (Lawrence Wu et al. eds., 2d ed. 2014) [hereinafter ABA Econometrics]; John H. Johnson & Gregory K. Leonard, *Economics and the Rigorous Analysis of Class Certification in Antitrust Cases*, 3 J. Competition L. & Econ. 341 (2007); John H. Johnson & Gregory K. Leonard, *Rigorous Analysis of Class Certification Comes of Age*, 77 Antitrust L.J. 569 (2011); Bret M. Dickey & Daniel L. Rubinfeld, *Antitrust Class Certification: Towards an Economic Framework*, 66 NYU Ann. Surv. Am. L. 459 (2011); Pierre Cremieux et al., *Proof of Common Impact in Antitrust Litigation: The Value of Regression Analysis*, 17 Geo. Mason L. Rev. 939 (2010); Michelle M. Burtis & Darwin V. Neher, *Correlation and Regression Analysis in Antitrust Class Certification*, 77 Antitrust L.J. 495 (2011) [hereinafter Burtis & Neher (2011)].

4 By way of a simple example with only two proposed class members, if one was overcharged by 20 percent while the other was not overcharged at all, a pooled overcharge model may find an average 10 percent overcharge across the two class members. Such an overcharge could only represent the average experience of the entire class, not each individual member’s actual experience and potential injury.

5 See, e.g., Drywall Class Certification Motion, *supra* note 2, at 3–4 (“DPPs’ impact analysis proceeds in two steps: (i) demonstrating that Drywall prices were artificially inflated generally due to the Cartel; and (ii) showing that a price structure exists, making it highly likely that Class members broadly paid those artificially inflated prices.”).

6 William F. Cavanaugh et al., *Trends in Class Certification*, US Cts. Ann. Rev. (2023), globalcompetitionreview.com/review/us-courts-annual-review/2023/article/trends-in-class-certification.

do not, in and of themselves, rely on that type of model. Others—called “but-for price” methodologies—seek to *extend* the results from the pooled overcharge model. But are these techniques advancing the ball in terms of helping courts deliberate on the question of predominance? Or are they simply repackaging the same issues under the guise of supposedly increased rigor and precision? Given the increasingly technical nature of these “common impact” methodologies, this paper aims to arm practitioners and courts with a better understanding of how they work and where they may (or may not) add value.

II. “PRICE STRUCTURE” AS A PROPOSED METHODOLOGY FOR ASSESSING COMMON IMPACT

- (6) The “price structure” methodology is one approach that has been offered as a supplement to the pooled overcharge regression model. This methodology seeks to establish that prices in the relevant industry, while not necessarily the same across all proposed class members, nonetheless follow a common and predictable “structure,” i.e., they tend to move together over time in response to economic forces.⁷ This approach is typically used to argue that because of an existing “price structure,” it would be unlikely that many (or potentially any) proposed class members could avoid the average overcharge estimated by the pooled regression model.⁸ Put differently, even if the average overcharge does not separately establish impact for Customer A and Customer B, the price structure analysis is meant to establish that the two customers’ prices follow similar patterns, so that an average overcharge is adequate to represent the experiences of both. Likewise, a finding of “price structure” also purports to show that common pricing factors predominate over individualized ones.
- (7) Attempts to analyze predominance issues in antitrust class actions using a “price structure” framework are not new. Nor are the issues raised by this framework with respect to whether it is actually showing class-wide impact, inferring it, or simply studying an issue that does not bear on the question of predominance at all. For example, in 2007, Johnson and Leonard explained that this is “not a standard

7 The exact definition of “price structure” varies across experts and cases, but the notion of prices “tending to move together over time in response to economic forces” generally captures this concept. See, e.g., ABA Econometrics, *supra* note 3, at 354 (“While the term ‘price structure’ often is not precisely defined, it usually refers to a situation where prices stay in fixed relation to each other over time. Furthermore, the concept of a pricing structure is not well-established in the economics literature or profession.”); Drywall Class Certification Motion, *supra* note 2, at 49 (“prices to customers and across sellers tend to move together over time, and that a common factor affecting prices (such as Cartel behavior) will be experienced across the market.”); IMD Class Certification Motion, *supra* note 2, at 31 (“the prices customers paid, regardless of the seller, tended to move together over time, and that a common factor affecting prices (such as conspiratorial behavior) will be experienced across the market.”).

8 Economic experts relying on “price structure” arguments typically contend that it leads to the inference that substantial individualized differences across class members are unlikely and that representative evidence such as average overcharges indeed represents each class member’s individual experience. To continue with the simple example in footnote 4, the expert would opine that a finding of “price structure” would imply the average 10 percent overcharge would be representative of both class members, and that it would be unlikely for one of the class members to have avoided impact from the alleged conduct.

concept found in the economic literature” and discussed contemporaneous approaches which relied on visual inspection of pricing graphs as lacking scientific rigor.⁹ In 2011, Burtis and Neher discussed a variety of antitrust class actions where plaintiffs offered arguments based on “price structure” theories, as well as correlation analyses offered in support of those theories.¹⁰

- (8) The concept of “price structure” continues to be offered as a prong of the predominance analysis.¹¹ While “price structure” analyses have evolved from visual inspections of graphs to more sophisticated statistical and econometric techniques, this evolution has not resolved the fundamental maladaptation of the “price structure” concept for assessing impact across members of a given proposed class. Despite some evolution over the last decade in how they are implemented technically, “price structure” methodologies have little to add to the analysis of class-wide impact because they offer neither (i) an objective definition of what constitutes such a “structure” nor (ii) any direct relationship between any such “structure” and whether none, some, or all members of a given class suffered impact from an alleged course of antitrust misconduct.
- (9) One statistical methodology that has been used by plaintiffs’ economic experts to purportedly assess “price structure” is called hedonic price regression. These types of regression models are based on the assumption that prices for products at issue are determined by their discrete characteristics, and they attempt to decompose prices into the corresponding values for each standalone characteristic.¹² An example of these models’ application is estimating real estate prices based on a

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- 9 John H. Johnson & Gregory K. Leonard, *In the Eye of the Beholder: Price Structure as Junk Science in Antitrust Class Certification Proceedings*, 22 *Antitrust* 108, 110 (2008).
 - 10 Burtis & Neher, *supra* note 3, n.2 (citing *In re Urethane Antitrust Litig.*, 237 F.R.D. 440 (D. Kan. 2006); *In re Rubber Chems. Antitrust Litig.*, 232 F.R.D. 346, 353 (N.D. Cal. 2005); *Winoff Indus. v. Stone Container Co. (In re Linerboard Antitrust Litig.)*, 305 F.3d 145, 153 (3d Cir. 2002); *In re Dynamic Random Access Memory (DRAM) Antitrust Litig.*, No. M 02-1486 PJH (N.D. Cal. June 5, 2006), *aff’d*, 546 F.3d 981 (9th Cir. 2008); *In re Static Random Access (SRAM) Antitrust Lit.*, No. C 07-01819 CW (N.D. Cal. Sept. 29, 2008); *In re Pressure Sensitive Labelstock Antitrust Litig.*, No. 3:03-MDL-1556 (M.D. Pa. Nov. 19, 2007); *In re Graphics Processing Units Antitrust Litig.*, 253 F.R.D. 478, 493 (N.D. Cal. 2008); *In re Catfish Antitrust Litig.*, 826 F. Supp. 1019, 1041 (N.D. Miss. 1993).
 - 11 See, e.g., *Drywall Class Certification Motion*, *supra* note 2, at 49 (“The Presence of a Price Structure Confirms Common Impact.”); *IMD Class Certification Motion*, *supra* note 2, § IV.B.1.b.ii.a (“A Pricing Structure Exists in the IMD Market Such That Prices Responded Similarly to Coordinated Pricing Activity.”)
 - 12 More specifically, the assumption underlying hedonic price regression is that consumers separately value the characteristics of the products rather than the products themselves. As a result, and under certain assumptions, different consumer valuations result in prices for the relevant products that are based on each product’s characteristics. (See, e.g., Frederick V. Waugh, *Quality Factors Influencing Vegetable Prices*, 10 *J. Farm Econ.* 185 (1928); Kelvin J. Lancaster, *A New Approach to Consumer Theory*, 74 *J. Pol. Econ.* 132 (1966); Sherwin Rosen, *Hedonic Prices and Implicit Markets: Product Differentiation in Pure Competition*, 82 *J. Pol. Econ.* 34 (1974); Jae Bong Chang et al., *The Price of Happy Hens: A Hedonic Analysis of Retail Egg Prices*, 35 *J. Agric. & Res. Econ.* 406 (2010); Jeffrey Anstine, *Organic and All-Natural: Do Consumers Know the Difference?*, 26 *J. Applied Econ. & Pol’y* 15 (2007); Bing-Hwan Lin et al., *Organic Premiums of Fresh Produce*, 23 *Renewable Agric. & Food Sys.* 208 (2008); Laura O. Taylor, *Hedonics*, in *A Primer on Nonmarket Valuation* 331 (Patricia A. Champ et al. eds., 2003).

given property's characteristics such as the numbers of bedrooms and bathrooms, square footage, and lot size. In such an application, the hedonic price regression models would seek to estimate the effect of an incremental change in one of the characteristics—e.g., an additional bedroom, bathroom, or square foot—on a property's price.

- (10) In recent years, hedonic regression models have been incorporated into analysis of common impact issues in the antitrust class certification context.¹³ The concept these models purport to study is how much of the variation in prices for the products at issue can be explained by their characteristics, rather than differences across the proposed class members that purchased them. For example, if a large share of price variation could be explained by product characteristics (and thus, only a small share of the variation would relate to class member-specific factors), then there must be an overarching “structure” governing prices. Put differently, if it is simply the case that some class members purchased a more expensive version of the product and others purchased a cheaper version—but all prices are subject to a “structure”—then (the argument goes) there are no individualized class member-specific issues beyond the need to account for what any individual purchased.
- (11) In general, the “share of price variation explained by products characteristics” has been assessed using a statistical measure called the “R-squared.”¹⁴ However, R-squared analysis—like the correlation analysis described in the price structure literature from a decade ago—is subject to issues that ultimately render it of little value for assessing the economic questions of common impact. First, to the extent that “price structure” relates to the co-movement of prices *across purchasers* and *over time*, hedonic price regressions appear to be a misguided instrument to study it. Because they only seek to decompose prices into underlying characteristics, hedonic price regressions specifically *do not* study price movements across purchasers or over time. Nor do they attempt to assess whether any price movements across purchasers or over time were common. The R-squared statistic of hedonic price regressions therefore bears no relationship to the “price structure” concept as it has been defined in the class certification context.

13 See, e.g., IMD Class Certification Motion, *supra* note 2, at 32 (Plaintiffs’ expert “performed regressions that examined each Defendant’s sales in each month of the Class Period. . . . The results of this regression analysis show that ‘85 to 91 percent of all variation in the price of IMDs is explained by the common characteristics, suggesting that common factors explain nearly all variation in prices at any given point in time.’”).

14 The R-squared statistic takes values between 0 and 1 and measures the share of variance in prices (the “dependent” variable in the regression) that can be explained by product characteristics (the “independent” variables in the regression). As widely noted in the econometrics literature, the R-squared is generally not a meaningful measure of regression reliability. (See, e.g., Damodar N. Gujarati & Dawn C. Porter, *Basic Econometrics* 206 (5th ed. 2004) [hereinafter Gujarati] (“[A] warning is in order: Sometimes researchers play the game of maximizing R², that is, choosing the model that gives the highest R². But this may be dangerous, for in regression analysis our objective is not to obtain a high R² per se but rather to obtain dependable estimates of the true population regression coefficients and draw statistical inferences about them [... A] high R² is not evidence in favor of the model and a low R² is not evidence against it.”). See, also, Rubinfeld, 2011, p. 345; Wooldridge 5th ed., pp. 39, 200; Robert S. Pindyck & Daniel L. Rubinfeld, *Microeconomics* 704 (8th ed. 2009); *Econometrics* 100 (ABA 2014).

- (12) Moreover, like the correlation analyses described in the price structure literature from a decade ago, there are no objective, established, or widely accepted criteria to determine what threshold levels of R-squared constitute a substantial enough share of variation such that it is indicative of a “price structure.” The R-squared statistic calculated from a given regression may be equally “high” irrespective of whether all, some, or even none of the proposed class has been impacted. In fact, the mathematical and statistical properties of the R-squared in a hedonic price regression make it a particularly paradoxical metric of “price structure” because it tends to mechanically increase—purportedly implying *more* “price structure”—as the number and variety of products included in the model increases. The notion that increased diversity in the set of products at issue leads to a *higher* degree of “price structure”—described in the literature as the “diversity paradox”¹⁵—does not make sense as a matter of economics and suggests that a “high” R-squared value from the hedonic price regressions cannot be interpreted as evidence of “common impact.”

III. “BUT-FOR PRICES” PREDICTED BY POOLED REGRESSIONS AS PROPOSED METHODOLOGY FOR ASSESSING COMMON IMPACT

- (13) The hedonic “price structure” methodologies discussed above seek to *supplement* the pooled overcharge model and do not, in and of themselves, rely on that type of model. However, in several antitrust class actions in recent years,¹⁶ plaintiffs’ economic experts have also offered another type of methodology, which seeks to *extend* the pooled overcharge model. The basic premise of this “extension” is that it calculates “predicted but-for prices” using the pooled overcharge model and then compares those predictions to actual prices paid, purporting to evaluate antitrust impact for every transaction—and thus determine whether each class member suffered injury.
- (14) This extension of the pooled overcharge model tends to conflate the generally uncontroversial premise that antitrust injury should be evaluated by comparing

15 Burtis and Neher (2011) call this property of the R-squared statistic the “diversity paradox” and explain that “the more diverse the products and consumers in a putative class, the higher the R-squared in the regression model that attempts to ‘control’ for this diversity.” (Burtis & Neher, *supra* note 3, at 521.)

16 See, e.g., Memorandum re: Direct Purchaser Plaintiffs’ Motion for Class Certification at 49 & 52, *In Re: Domestic Drywall Antitrust Litig.*, No. 2:13-md-2437-MMB (Aug. 23, 2017) (Plaintiffs’ expert “concludes from his model that because the overcharge indicator variables are positive and statistically significant, this shows that prices were artificially inflated by the alleged cartel” [and] “then conducts two additional empirical analyses to show that all or virtually all drywall purchasers were affected by the conspiratorial price increase. . . .”); IMD Class Certification Motion, *supra* note 2, at 33 (Plaintiffs’ expert “performed another analysis—one built on the regression model used to find that the Conspiracy artificially inflated prices during the Class Period—that used a ‘predicted pricing approach’ to estimate Class member-specific overcharges.”); *In re Capacitors Antitrust Litig.*, Transcript of Proceeding, September 17, 2019, at 6 (Plaintiffs’ expert describing an “econometric methodology [that] is applied [...] in two steps. The first step is testing a hypothesis of whether or not prices were elevated above what would be predicted by normal market factors. [...] And the second step—once the model is estimated—is to drill down to the individual transaction and customer level with that model.”)

actual and reliably estimated but-for prices,¹⁷ and the specific shortcoming of pooled models’ usefulness for the predominance inquiry. As discussed above, the well-documented issue with pooled overcharge regression models in the context of class certification analysis is that they purport to “represent” the experiences of class members through an average but have no ability to directly assess each *individual* class member’s experience—i.e., whether any individual’s experience differs from the average. Applying the single average overcharge generated by a pooled model to each class members’ purchases does not somehow “individualize” the pooled model—i.e., it does not allow the model to directly assess each individual class member’s experience. Rather, it provides the appearance that the pooled model is capable of individualized analysis of antitrust impact while simply repackaging the single average overcharge.

- (15) Consider a stylized version of the standard pooled overcharge regression, summarized in equation [1]:

$$\text{Actual Price}_i = \beta_0 + \beta_1(\text{Supply Factors}) + \beta_2(\text{Demand Factors}) + \beta_3(\text{Affected Transaction}) + \varepsilon_i \quad 1)$$

This model framework seeks to explain actual prices proposed class members paid (as represented on the left side of the equation). On the right side of the equation, the model includes factors that economic theory suggests explain those prices. For example, if the cost of raw materials or labor needed to manufacture a product increases, the price of that product may increase to cover the additional cost. The coefficient β_1 on the right side of equation [1] represents the relationship between a change in cost (and any other relevant supply factors) and prices paid. Similarly, if demand for a product changes, economic theory would suggest that prices change as well. The coefficient β_2 on the right side of equation [1] represents the relationship between a change in demand and prices paid.

- (16) Any effects resulting from alleged anticompetitive behavior would be separate from the ordinary forces of supply and demand. In fact, “the economic model used must **isolate** the effect of the anticompetitive conduct”¹⁸ from the effects of these ordinary economic forces. The model in equation [1] includes a variable labeled “Affected Transaction,” which aims to capture any effects resulting from anticompetitive behavior. That is, this variable identifies transactions alleged to have been affected by anticompetitive behavior and the coefficient β_3 seeks to measure any elevation in the prices paid in those transactions that *cannot* be explained by ordinary economic forces.
- (17) Another relevant element of the model in equation [1] is the “prediction error” or “error term,” represented by ε_i . Prediction error is inherent to regression analysis—

17 ABA Section of Antitrust Law, *Proving Antitrust Damages: Legal and Economic Issues* chs. 8.A, 9.C.2. (3d ed. 2017) [hereinafter *Proving Antitrust Damages*] (“This analysis starts with the translation of the legal theory of harm into economic effects, which requires a comparison of the economic situation of the plaintiff with (the actual world) and without (the but-for world) the anticompetitive conduct.”)

18 *Id.* at ch. 4.C. (emphasis added)

even in models that are properly specified¹⁹—because models are simplifications of real-life phenomena. There are several well-recognized sources of these errors. For example, many real-life phenomena are affected by a large number of factors, some of which may not lend themselves to adequate quantification for the purposes of inclusion in regression analysis. The error term may capture measurement error associated with the included explanatory variables when those variables cannot be precisely quantified. The error term can also be thought of as capturing the inherent randomness in human behavior, which may yield different outcomes even in identical circumstances.²⁰ In the context of the price model in equation [1], the error term ε_i captures the variation in prices that “simply cannot be explained by the model.”²¹ It does not reflect any effect of the alleged anticompetitive conduct.²²

- (18) When the price model in equation [1] is applied to a set of transaction-level sales data points, it seeks to find “the best-fitting straight line through [that] set of points.”²³ In practice, this means the regression seeks to model actual prices paid based on ordinary economic factors as well as any potential effects from anticompetitive conduct. However, for the reasons described above—namely, that models are simplifications of real-life phenomena—the actual prices *modeled* by the regression are not necessarily the same as the actual prices that proposed class members paid. The difference between *actual prices* and *modeled actual prices* is the model’s “prediction error.” As equation [2] shows, the error term ε_i is not part of the modeled actual price.²⁴

$$\begin{aligned} \text{Modeled Actual Price}_i = & \widehat{\beta}_0 + \widehat{\beta}_1(\text{Supply Factors}) \\ & + \widehat{\beta}_2(\text{Demand Factors}) \quad (2) \\ & + \widehat{\beta}_3(\text{Affected Transaction}) \end{aligned}$$

- (19) Each of the “betas” (also called “coefficients”) in equation [2] represents a numerical value produced by the regression model that represents the relationship between a particular economic factor and prices paid. For example, the coefficient $\widehat{\beta}_3$ would be a numerical value representing elevation in prices in transactions affected by the alleged anticompetitive conduct that cannot be explained by ordinary economic factors. If the model estimates that the alleged anticompetitive conduct elevated prices by approximately 10 percent, the model would produce a coefficient $\widehat{\beta}_3$ that would be approximately equal

19 For purposes of discussion here, assume the stylized model in equation [1] is properly specified. However, if the regression model is mis-specified, the resulting coefficient estimates may be biased and unreliable, which would affect the error terms as well. (See, e.g., *id.* at 163–64.)

20 See e.g., Peter Kennedy, *A Guide to Econometrics* 3–4 (5th ed. 2008).

21 A. H. Studenmund, *Using Econometrics: A Practical Guide* 9 (6th ed. Pearson 2021) [hereinafter *Using Econometrics*].

22 See, e.g., Gujarati, *supra* note 14, at ch. 2.5 (“the disturbance term *ui* is a surrogate for all those variables that are omitted from the model but that collectively affect Y.”)

23 Daniel L. Rubinfeld, *Reference Guide on Multiple Regression* 335 (3d ed. 2011).

24 Coefficients with a “hat” sign on top correspond to the estimated regression values of the true coefficients.

to 0.1. Importantly, the model in equation [2] is designed to estimate a single “pooled” overcharge across all transactions subject to the alleged conduct. Thus, a $\widehat{\beta}_3$ estimate approximately equal to 0.1 would represent an average 10 percent overcharge across all transactions included in the model and would not necessarily represent an overcharge of that size on all (or even any) individual transactions.²⁵

- (20) The above represents the type of “pooled” overcharge model that is often presented in antitrust class actions. The extensions of these pooled models as purportedly informing the issue of “classwide impact” proceed as follows. Based on the generally uncontroversial premise that antitrust injury should be evaluated by comparing actual and reliably estimated but-for prices, the economist proffering this approach calculates but-for prices “predicted” by the pooled model for each transaction. This calculation, represented in equation [3], removes the overcharge (β_3) from the prices modeled by the regression.

$$\text{Modeled But for Price}_i = \widehat{\beta}_0 + \widehat{\beta}_1(\text{Supply Factors}) + \widehat{\beta}_2(\text{Demand Factors}) \quad (3)$$

Once these but-for prices are calculated, the economist proffering this approach determines “impact” corresponding to each sales transaction by comparing the calculated but-for prices from equation [3] to the actual price paid. The comparison is shown in equation [4].

$$\text{Overcharge}_i = \text{Actual Price}_i - \widehat{\text{Modeled But for Price}}_i \quad (4)$$

Any transaction where the actual price is greater than the calculated but-for price is deemed in this type of analysis to have been impacted by the alleged conduct, and any proposed class member with at least one such transaction is deemed to have suffered antitrust injury as a result of the alleged anticompetitive conduct.

- (21) This seemingly straightforward approach for purportedly comparing actual and but-for prices for each individual transaction has two crucial elements. One is the single pooled overcharge coefficient this model estimates—represented by $\widehat{\beta}_3$ in equation [2]. The other is the transaction-specific error term—represented by ε_i in equation [1]. Mathematically, the transaction-level overcharge calculated through this approach for affected transactions is equivalent to:

$$\text{Overcharge}_i = \widehat{\beta}_3 + \widehat{\varepsilon}_i \quad (5)$$

Thus, the supposedly transaction-level overcharge calculated by this approach is the sum of (i) the single pooled overcharge (i.e., the 10 percent in the illustration above), and (ii) the portion of the price paid in a given transaction that “simply cannot be explained by the model.”²⁶ The only variation in these supposedly

25 Recall the simple example in footnote 4, where the average overcharge was 10 percent despite neither of the class members having individually paid that specific overcharge.

26 Using Econometrics, *supra* note 29, at 9.

transaction-level overcharges results from the latter component—which captures the inherent randomness and not the effects of anticompetitive conduct. In other words, there is no transaction-level (or class member-level) estimate of the effects of anticompetitive conduct in this calculation.

(22) Consider the following illustrative example of this issue, summarized in **Exhibit 1**:

- Five different proposed class members purchased the same product, each negotiating different prices which ranged from \$0.82 to \$1.15 (column [b] in the exhibit).
- Because the pooled overcharge regression model only estimates “common” supply and demand relationships, as well as a “common” overcharge (represented by $\hat{\beta}_0, \hat{\beta}_1, \hat{\beta}_2$, and $\hat{\beta}_3$ in equation [2]), it models uniform actual and but-for prices for all proposed class members. In this example, the regression predicts:
 - an actual price of \$1.00 for each customer (column [c] in the exhibit), meaning the “prediction errors” generated by the regression range from $-\$0.18$ (for Customer A) to $\$0.15$ (for Customer E) (column [d] in the exhibit).
 - a but-for price of \$0.90, meaning the estimated average overcharge is $\$0.10$, or 10 percent (columns [e] and [f] in the exhibit).²⁷

The “individual overcharges” that would be calculated by this methodology for each proposed class member are shown in column [g] of the exhibit.

Customer	Actual Price (Equation [1])	Predicted Actual Price (Equation [2])	Prediction Error (e_i)	Predicted But-For Price (Equation [3])	Pooled Overcharge (β_i)	"Individual" Overcharge (Equation [4])
[a]	[b]	[c]	[d]=[b]-[c]	[e]	[f]=1-[e] / [c]	[g]=[d]+([c]-[e])
A	\$0.82	\$1.00	-\$0.18	\$0.90	10%	-\$0.08
B	\$0.96	\$1.00	-\$0.04	\$0.90	10%	\$0.06
C	\$0.99	\$1.00	-\$0.01	\$0.90	10%	\$0.09
D	\$1.08	\$1.00	\$0.08	\$0.90	10%	\$0.18
E	\$1.15	\$1.00	\$0.15	\$0.90	10%	\$0.25

EXHIBIT 1. ILLUSTRATIVE CALCULATION OF PURPORTED “INDIVIDUAL OVERCHARGES” USING A POOLED OVERCHARGE REGRESSION

In this hypothetical example, Customer A would have a negative “overcharge”—because it paid \$0.82 but supposedly should have paid \$0.90 in the but-for world. The other four customers would each have a positive overcharge, ranging from \$0.06 (for Customer B, with an actual price of \$0.96 and a but-for price of \$0.90) to \$0.25 (for Customer E, with an actual price of \$1.15 and a but-for price of \$0.90). An economic

27 The overcharge represents the share of actual price that is attributable to the alleged conduct. Note that it is not necessary to the example that the modeled actual and but-for prices—which in this example are \$1.00 and \$0.90, respectively—be identical across customers. Even if they are not, the construction of the pooled overcharge model would estimate a single overcharge percentage across all customers.

expert proffering this type of methodology would draw the conclusion that 80 percent (i.e., four out of five) of the proposed class members were impacted and sustained damages because of the alleged conduct, since their actual price was above their but-for price.

- (23) While this methodology generates seemingly individualized results (which would ostensibly be used to assess impact class member by class member), it is inappropriate to attribute the regression’s error term—i.e., the portion of the price paid in a given transaction that “simply cannot be explained by the model”²⁸—entirely and explicitly to the alleged anticompetitive conduct. Doing so contradicts the foundational premise that estimation of antitrust injury must be *causally* tied to the alleged conduct.²⁹
- (24) The fact that the “common impact” methodology described above not only fails to resolve the issues with the pooled overcharge approach, but also is inherently unreliable for the assessment of individualized impact, can be illustrated by the fact that it will *necessarily* show “impact” even when no anticompetitive conduct occurred. In fact, this approach will find that a substantial number of customers were “impacted” during periods of competition, when there was no “overcharge” due to any conspiracy, simply due to regression models’ inability to perfectly model actual prices.
- (25) **Exhibit 2** shows the same actual pricing pattern as **Exhibit 1**, but with no overcharge caused by anticompetitive conduct. That is, the “predicted actual price” in column [c] of the exhibit is the same as the “predicted but-for price” in column [e]. The overcharge in column [f] is zero. In this scenario, the pooled regression model would generate the same pattern of prediction errors (in column [d] of the exhibit).

Customer	Actual Price	Predicted Actual Price	Prediction Error	Predicted But-For Price	Pooled Overcharge	"Individual" Overcharge
	(Equation [1])	(Equation [2])	(ϵ_i)	(Equation [3])	(β_3)	(Equation [4])
[a]	[b]	[c]	[d]=[b]-[c]	[e]	[f]=1-[e] / [c]	[g]=[d]+([c]-[e])
A	\$0.82	\$1.00	-\$0.18	\$1.00	0%	-\$0.18
B	\$0.96	\$1.00	-\$0.04	\$1.00	0%	-\$0.04
C	\$0.99	\$1.00	-\$0.01	\$1.00	0%	-\$0.01
D	\$1.08	\$1.00	\$0.08	\$1.00	0%	\$0.08
E	\$1.15	\$1.00	\$0.15	\$1.00	0%	\$0.15

EXHIBIT 2. ILLUSTRATIVE CALCULATION OF PURPORTED “INDIVIDUAL OVERCHARGES” USING A POOLED OVERCHARGE REGRESSION IN THE ABSENCE OF ANTICOMPETITIVE CONDUCT

28 Using Econometrics, *supra* note 29, at 9.

29 See, e.g., Fed. Jud. Ctr., Reference Manual on Scientific Evidence 432 (3d ed. 2011) (“The first step in a damages study is the translation of the *legal theory of the harmful event* into an analysis of the economic impact of *that event*.”) (emphasis added); Proving Antitrust Damages, *supra* note 17, at 57, 62, 130 (“Plaintiff’s damages case must be consistent with its liability case, particularly with respect to the alleged anticompetitive effect of the violation.” “In a price-fixing case, for example, there must be an analysis that provides evidence of a clear link between the agreement to fix prices and an increase in prices that is not explained by other factors.”).

As it does in the example in **Exhibit 1**, the “common impact” methodology would simply combine the pooled overcharge (in this case, zero) with the customer-specific error terms, illustrated in column [d] of the exhibit.³⁰ The methodology would thus purport to show “antitrust impact” to Customers D and E because their actual prices were above the predicted but-for prices. Put differently, in this example, the “common impact” methodology would find 40 percent (two out of five) of class members to have been “impacted,” even though there was no anticompetitive conduct. The reason for this is that the model does not in fact estimate separate overcharges for different customers, but rather provides the appearance of customer-level analysis through the mechanical inclusion of prediction errors generated by the pooled regression model, which are not explicitly related to the effects of a conspiracy.

- (26) The result illustrated in **Exhibit 2** is not specific to the simplifying assumptions of this illustration. Rather, this type of methodology will consistently show such “false positive” findings of “impact” because all regressions generate error terms that are positive for approximately half of the transactions in the data set³¹—and which the methodology would incorrectly interpret as “overcharges.” This is disqualifying for this “common impact” approach, as a methodology that consistently purports to show impact where none can exist cannot be reliable.

IV. CONCLUSION

- (27) To date, courts have largely not engaged with the technical elements of the “common impact” methodologies described in this paper, nor with the issues raised by these methodologies. The general response from proponents of these methodologies has been that they are meant to be applied only in periods of anticompetitive conduct—and that applying them to periods where no anticompetitive conduct existed (as a showing of the “false positive” results they generate) is somehow not relevant or appropriate. This argument, however, seems to turn the notion of statistical testing on its head.³² A reliably designed methodology should not find widespread antitrust impact when tested against a period where there is no anticompetitive conduct. One that *does* find injury that does not exist should raise red flags about its viability as proof of common impact.

30 Note that in the case of zero overcharge, the prediction errors in column [d] of **Exhibit 2** are the same as the purported “individual overcharges” in column [g].

31 Error terms, by construction, have an average value of zero across the data set. See, e.g., Gujarati, *supra* note 14, at ch. 2.4.

32 See, e.g., Haider et al., *supra* note 3, for additional relevant discussion.

BEYOND MAGNUSON-MOSS AND KODAK— “RIGHT TO REPAIR” AS AN ANTITRUST ISSUE

By Ryan Sandrock¹

The “right to repair”—a product purchaser’s right to use parts or get service from someone besides the original product seller—is both an old and new antitrust concept. Old because the anti-tying provision of the Magnuson-Moss Warranty Act of 1975 barred conditioning a warranty on use of authorized parts or service and because the Supreme Court’s 1992 decision in *Eastman Kodak Co. v. Image Technical Servs., Inc.*² discussed when aftermarket parts restrictions could harm competition in an aftermarket. New because until recently neither the agencies nor private plaintiffs showed much interest in these theories and *Kodak* frequently served as a checklist for dismissal. But now there is antitrust energy behind the right to repair—advocacy groups talk of a “right to repair movement,”³ the FTC is dusting off Magnuson-Moss,⁴ and plaintiffs have filed and withstood motions to dismiss in single-brand aftermarket cases against Tesla and John Deere.

This article discusses the past, present, and future of right to repair claims, closing with a discussion of the uncertain future for manufacturers now that some courts may not be following the old understanding that single-brand aftermarket claims should rarely pass muster.

First some terminology: a “primary market” or a “foremarket” refers to competition for the initial sale of a product (say the sale of a tractor or an electric vehicle); an “aftermarket” refers to competition for a subsequent sale related to the product (say the sale of tools to repair the tractor or the electric vehicle); a “single-brand market” is a market (almost always an aftermarket) limited to a single-brand (say tools to repair one brand of tractor or electric vehicle); an “ISO” is an “independent service organization,” a term sometimes used to describe a company who seeks to provide service in an aftermarket and is independent of the seller in the foremarket; and, finally, “R2R” is the new shorthand for right to repair used in social media and elsewhere.

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2 *Eastman Kodak Co. v. Image Tech. Servs.*, 504 U.S. 451 (1992).

3 See *This is your right to repair.*, [repair.org](https://www.repair.org), <https://www.repair.org/stand-up> (last visited Sept. 28, 2024).

4 See Fed. Trade Comm’n, *Nixing the Fix: An FTC Report to Congress on Repair Restrictions* (2021), https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf. The FTC in 2022 also filed Magnuson-Moss actions against BMW, Weber Grill, and MWE Investments (generators).

MAGNUSON-MOSS

Congress passed the Magnuson⁵-Moss Warranty Act in 1975. This law governs many aspects of warranties, but the one relevant here is the “anti-tying” provision, making it illegal to condition a warranty “on the consumer’s using, in connection with such product, any article or service (other than article or service provided without charge under the terms of the warranty) which is identified by brand, trade, or corporate name. . . .”⁶ Put differently, a company cannot void a warranty *automatically* simply because a consumer uses unauthorized parts or services.

FTC guidance identifies examples of unlawful attempts to limit warranties based on use of authorized parts:

“To keep your new Plenum Brand Vacuum Cleaner warranty in effect, you must use genuine Plenum Brand Filter Bags. Failure to have scheduled maintenance performed, at your expense, by the Great American Maintenance Company, Inc., voids this warranty.”

and

“This limited warranty shall not apply if the warranty seal has been broken, removed, erased, defaced, altered, or is otherwise illegible,” where a device cannot be repaired without such effects.⁷

In theory, a company can condition a warranty on use of authorized parts if the parts are provided free or if the warrantor receives a waiver from the FTC, but few companies choose those options. Instead, companies with able antitrust counsel will say that the warranty does not apply to damage caused by use of unauthorized parts. The FTC’s guidance provides that the following is a permissible provision:

Necessary maintenance or repairs on your AudioMundo Stereo System can be performed by any company. Damage caused to the AudioMundo Stereo System by you or any non-authorized third party, however, may void this warranty.⁸

The rule is relatively simple to apply: a company cannot take away my warranty simply because I crack open the back of my computer with a butter knife and use rubber cement to stick some chips together; but, when/if my homemade solution damages my computer, they can take away my warranty because my use of unauthorized parts caused damage.

5 Washington Senator Warren Magnuson was one of the bill’s sponsors. Last year’s Academy Award winning film *Oppenheimer* showed Senator Magnuson chairing the Senate Commerce Committee and rejecting the nomination of Lewis Strauss (an *Oppenheimer* enemy) for Secretary of Commerce. Antitrust lawyers watching the movie, including this author, no doubt saw the Senator Magnuson nameplate on screen and thought about right to repair for a moment before returning to Robert Downey Jr.’s Academy-Award winning performance.

6 15 U.S.C. § 2302(c) (2024).

7 *Businessperson’s Guide to Federal Warranty Law*, Fed. Trade Comm’n (Dec. 2006), <https://www.ftc.gov/business-guidance/resources/businesspersons-guide-federal-warranty-law#Magnuson-Moss>.

8 *Id.*

Magnuson–Moss, like right to repair in general, is both a consumer protection and antitrust issue. But the ideas behind Magnuson–Moss originate from antitrust. First is the idea that, after the sale of an original product, there can be a separate market for the sale of service and parts for the original product. Second is the idea that it is anti-competitive to tie products in separate markets together.

KODAK—LOCK-IN BECAUSE OF LACK OF KNOWLEDGE REQUIRED

The second pillar of right to repair is the Supreme Court’s decision in *Kodak*. This decision applied the same aftermarket and anti-tying concepts behind Magnuson–Moss to Sherman Act claims. *Kodak* involved sales of copiers and restrictions on how those copiers could be repaired. Kodak began refusing to sell repair parts for its copiers to independent service organizations—so only authorized Kodak repair shops could repair Kodak copiers. Disgruntled ISOs brought Section 1 and Section 2 claims against Kodak.⁹

The district court granted summary judgment to Kodak, saying that a manufacturer has a “right to select its customers and to refuse to sell to others” and that Kodak’s “natural monopoly over the market for parts it sells under its name [imposed] no duty on it to sell to plaintiffs.”¹⁰ The district court emphasized that there was competition in the market for copiers (from Xerox and others) and accepted the idea that a company facing competition in a primary market could impose limitations on its own products in an aftermarket. The Ninth Circuit reversed and remanded, emphasizing the predicament of consumers who purchased an expensive copier and had no options for parts.¹¹

The Supreme Court agreed with the Ninth Circuit that the district court should not have granted summary judgment.¹² The majority opinion rejected Kodak’s argument that there could not be liability for restrictions in the aftermarket if the defendant lacked market power in the foremarket.¹³ The majority emphasized the possibility that, even though there was competition in the foremarket for equipment, a plaintiff might be able to provide evidence of harm to competition in the aftermarket.

Justice Scalia’s dissent warned that the majority’s opinion would lead to a “torrent” of aftermarket claims.¹⁴ Later courts looked to the dissent to find a way to stop that torrent: a rule that if a consumer knows about the aftermarket restriction when making the purchase in the primary market, there is no antitrust claim. Justice Scalia had noted, somewhat in passing, that Kodak had changed its policy and had not always barred consumers from turning to ISOs for repair.¹⁵ He wrote that Kodak would be immune from *per se* scrutiny if “Kodak—from the date of its market entry—consistently pursued an announced policy

9 *Image Tech. Servs., Inc. v. Eastman Kodak Co.*, No. C-87-1686-WWS (N.D. Cal. Apr. 15, 1988).

10 *Id.*

11 *Image Tech. Serv. v. Eastman Kodak Co.*, 903 F.2d 612 (9th Cir. 1990); *cert. granted*, 501 U.S. 1216 (1991).

12 *Eastman Kodak Co. v. Image Tech. Servs.*, 504 U.S. 451 (1992).

13 *Id.* at 466–67.

14 *Id.* at 489.

15 *Id.* at 491 (Scalia, J., dissenting).

of limiting parts sales in the manner alleged in this case, so that customers bought with the knowledge that aftermarket support could be obtained only from Kodak.”¹⁶

Following *Kodak*, antitrust lawyers pushed the ideas in Justice Scalia’s dissent to the forefront.¹⁷ The lesson of *Kodak* was that pre-purchase clarity about post-purchase repair restrictions barred antitrust claims based on those restrictions.¹⁸ There only could be a single-brand aftermarket if there was “lock in” so that “competition in the foremarket cannot ‘discipline’ [competition in] the aftermarkets.”¹⁹ Put differently, although the Supreme Court’s decision identified circumstances in which a single-brand aftermarket claims could work, many later decisions cited *Kodak* to explain why single-brand aftermarket claims generally did not work.

In the Ninth Circuit, the two most important post-*Kodak* decisions on single-brand aftermarkets, *Newcal Indus., Inc. v. IKON Office Solution*²⁰ and *Epic Games v. Apple*,²¹ both emphasized the narrow path available to plaintiffs asserting such claims. *Newcal*, explaining *Kodak*, dictated that courts should consider whether initial purchasers fairly accepted aftermarket limitations—either because they entered into a contract that limited aftermarket choice or had knowledge of those limitations.²² *Newcal* was another case about copiers. *Epic* involved markets more familiar to middle-schoolers than office managers—payments on mobile devices for features on video games like Fortnite. *Epic* then is not

16 *Id.*

17 See, e.g., *PSI Repair Servs. v. Honeywell, Inc.*, 104 F.3d 811, 819 (6th Cir. 1997) (“Both the First and the Seventh Circuits have interpreted *Kodak* to be limited to situations in which the seller’s policy was not generally known.”) (citing *Digital Equip. Corp. v. Uniq Digital Tech.*, 73 F.3d 756, 763 (7th Cir. 1996), *Lee v. Life Ins. Co. of N. Am.*, 23 F.3d 14, 20 (1st Cir. 1994), *cert. denied*, 513 U.S. 964 (1994)); *Oracle Am., Inc. v. CedarCrestone, Inc.*, 938 F. Supp. 2d 895, 900 (N.D. Cal. 2013) (“The Court finds that CedarCrestone has not alleged that Oracle changed its policy in order to lock-in customers, that it misrepresented its tying practices, or that its tying policy was otherwise not generally known. Therefore, unlike the plaintiffs in *Kodak*, *Newcal*, and *Datel*, CedarCrestone has not alleged sufficient facts showing that Oracle’s ERP software licensees were prevented from realizing that their choice in the initial market will impact their freedom to shop in the aftermarket.”); *Océ N. Am., Inc. v. MCS Servs., Inc.*, 795 F. Supp. 2d 337, 345 (D. Md. 2011) (“In accordance with the holdings of the First, Third, Sixth, and Seventh Circuits as well as numerous federal courts and commentators, . . . an antitrust plaintiff cannot succeed on a Kodak type theory where the defendant has not . . . exacted supracompetitive prices by implementing a restrictive anticompetitive change of policy that locked in customers, or used other coercive anticompetitive methods to deceive customers about the prices they would have to pay for parts and service.”); *In re Apple & AT&TM Antitrust Litig.*, 596 F. Supp. 2d 1288, 1305 (N.D. Cal. 2008) (“Ultimately, the dispositive issue is whether Plaintiffs ‘knowingly placed [Defendants] in a monopoly position’ in the alleged . . . aftermarket.”).

18 Jonathan I. Gleklen, *The ISO Litigation Legacy of Eastman Kodak Co. v. Image Technical Services: Twenty Years and Not Much to Show for It*, 27 Antitrust 56 (2012), provides crisp analysis of the limited success for single-brand aftermarket claims from 1992–2012. The article provides a healthy number of citations of the many decisions rejecting single-brand aftermarket claims in the first two decades post-*Kodak*, including many of those cited in the last footnote.

19 *Epic Games, Inc. v. Apple, Inc.*, 67 F.4th 946, 976–77 (9th Cir. 2023) (quoting *Eastman Kodak Co. v. Image Tech. Servs.*, 504 U.S. 451, 486 (1992)).

20 *Newcal Indus. v. IKON Off. Sol.*, 513 F.3d 1038, 1048 (9th Cir. 2008).

21 *Epic Games, Inc.*, 67 F.4th at 976–77.

22 *Id.* at 1049.

technically a right to repair case, although the foremarket and aftermarket principles are the same.

Epic stated a rule, later followed in *Tesla*, that:

to establish a single-brand aftermarket, a plaintiff must show: (1) the challenged aftermarket restrictions are “not generally known” when consumers make their foremarket purchase; (2) “significant” information costs prevent accurate life-cycle pricing; (3) “significant” monetary or non-monetary switching costs exist; and (4) general market-definition principles regarding cross-elasticity of demand do not undermine the proposed single-brand market.²³

The district court had found that plaintiffs could not establish these factors, also warning that single-brand markets are “extremely rare” and “[i]t is an understatement to say that single-brand markets are disfavored.”²⁴

THE NEW KODAK CASES—MORE LENIENT ON LOCK-IN?

Two important *Kodak* right to repair decisions came out last November—one in a case against Tesla and the second in a case against John Deere. And while there certainly was antitrust and right to repair momentum behind these cases, there was not much post-*Kodak* authority to support the single-brand aftermarket theories alleged in those cases. Skepticism for those claims remained at Justice Scalia levels.

The first decision came in a case in the Northern District of California involved Teslas. Plaintiffs claimed that Tesla improperly required repairs with Tesla parts and at Tesla service centers. The court granted Tesla’s motion to dismiss on several grounds, including that plaintiffs had not alleged single-brand aftermarkets for Tesla repair services or compatible parts under *Kodak*. The court found that plaintiffs had to allege that the aftermarket restrictions “are not generally known” and concluded that plaintiffs had not met this requirement.

The Northern District of California rejected the *Kodak* claim because plaintiffs failed to allege sufficiently that Tesla owners did not know about the aftermarket restrictions. The court wrote that:

[N]owhere do Plaintiffs allege that consumers are in fact unaware of the supposedly supracompetitive prices and exorbitant wait times in the relevant aftermarkets. [] To the contrary, they allege that such problems are “widely documented.” [] Plaintiffs thus fail to allege that any restrictions are not generally known.²⁵

The district court noted that plaintiffs had alleged that Tesla misled them about the available repairs but that consumer confusion did not matter because there was widespread

23 *Id.* at 977.

24 *Epic Games, Inc. v. Apple, Inc.*, 559 F. Supp. 3d 898, 1021 (N.D. Cal. 2021).

25 *Lambrix v. Tesla, Inc.*, No. 23-cv-00145-TLT (N.D. Cal. Nov. 17, 2023)

knowledge about issues about Tesla’s repair limitations.²⁶ The court did allow plaintiffs to file a second amended complaint, with the briefing on the motion to dismiss that complaint taking place in 2024. Justice Scalia’s dam still held back the torrent.

Ten days after the first *Tesla* decision, a crack in the dam appeared. The Northern District of Illinois allowed a *Kodak* claim to proceed in a case involving John Deere tractors. Plaintiffs claimed that John Deere improperly limited access to repair software and tools—with a focus on an aftermarket for repair services for John Deere tractors. Plaintiffs alleged that Deere “designed its Tractors so that both the diagnosis and the completion of a repair frequently requires [Deere] software tools and [other Dealership-only] resources.”²⁷

Deere moved for judgment on the pleadings. Among its many arguments, Deere argued that there could not be a single-brand aftermarket because consumers knew about aftermarket restrictions when making purchases in the primary market. Deere argued that “absent some sort of lock-in problem, courts presume ‘competition in the initial market suffices to discipline anticompetitive practices in the aftermarkets.’”²⁸ Deere argued that there was no lock-in because Deere had not made a policy change and had not hidden its repair policies.

The Department of Justice filed an amicus brief arguing that Deere was wrong about single-brand aftermarket claims. The government said that full information—“no deception or surprise”—in the primary market did not absolutely bar claims based on disclosed restrictions:

Deere would have the Court presume that, in every other circumstance, a competitive foremarket (as Deere argues the tractor market to be) necessarily shields consumers from any possible market power or monopoly power in a single-brand aftermarket (such as the market for Deere repair services). Deere is wrong. Deere’s proposed presumption contravenes the Supreme Court’s decision in *Kodak* and the weight of circuit court authority. *Although deception or surprise can be relevant to a proper Kodak analysis, they are not alone dispositive or required.*²⁹

The district court, in a lengthy opinion, held that plaintiffs had stated a *Kodak* claim. The court found that plaintiffs had alleged that Deere had misrepresented its repair policies: “The reasonable inference from these allegations is that Deere—by itself or through its agents—repeatedly made public statements that purchasers could make repairs to their own Tractors but the reality was that they couldn’t.”³⁰ The court concluded that

26 *Id.*

27 *In re Deere & Co. Repair Servs. Antitrust Litig.*, 703 F. Supp. 3d 862, 870 (N.D. Ill. 2023).

28 *In re: Deere & Co. Repair Servs. Antitrust Litig.*, No. 3:22-cv-50188, Dkt. 105, Motion for Judgment on the Pleadings, p. 15 (quoting *Epic Games*, 559 F. Supp. 3d at 1024).

29 *Id.* at Dkt. 120, Statement of Interest of the United States, at 8 (emphasis added).

30 *In re Deere*, 703 F. Supp. 3d at 894.

these misrepresentations constituted a policy change or “bait-and-switch” similar to what happened in *Kodak*.³¹

The court also found a second-basis for lock-in, concluding that plaintiffs had sufficiently alleged a lack of information.³² The lack of information finding based in part on the alleged misrepresentations by Deere about the scope of available repair services—the Court in the section on lack of information referred back to its finding on the “change of policy/bait- and-switch theory” and also the allegations in “totality.”³³ In sum, Deere made extensive disclosures about access to repair but, rather than protect it from a *Kodak* claim, these disclosures became the basis for it to face a *Kodak* claim because the disclosures were allegedly inaccurate.

Not surprisingly, the plaintiffs in *Tesla* tried to take advantage of the *John Deere* ruling in the briefing on the motion to dismiss the second amended complaint. Their briefs cited the Northern District of Illinois’s decision repeatedly for the proposition that consumer confusion about access about aftermarket restrictions suffice to state a *Kodak* claim.

The Northern District of California issued its ruling in June 2024, this time denying the motion to dismiss and allowing plaintiffs’ right to repair claims to continue. Another crack. The decision recited the history of *Kodak* before settling on the Ninth Circuit’s decision in *Epic Games* as summarizing the applicable law. The Northern District repeated the standard from *Epic* for *Kodak* single-brand aftermarket claims, requiring that the aftermarket restrictions are “not generally known,” significant information costs, significant switching costs, and consistency with general market-definition principles.³⁴ The court added that these factors would be less important in cases in which the defendant had market power in the foremarket.³⁵ The court then concluded that plaintiffs had pleaded that Tesla had market power in a foremarket for EVs. But the court found that, even if plaintiffs had not alleged market power in the foremarket, plaintiffs had met all four *Epic Games* factors.

The court’s key finding was that—contrary to what it concluded about the prior complaint—plaintiffs had alleged that they that were unaware of Tesla’s restrictions on repair. Tesla had argued that the court’s initial decision recognized that consumers were aware of the restrictions and therefore there was no bait-and-switch. The court nevertheless concluded that “Based on evidence cited by Plaintiffs, it is plausible that a significant portion of Tesla purchasers were unaware of their vehicles’ forthcoming service and repair issues at the time of purchase.”³⁶ The court credited plaintiffs with providing “an assortment of evidence that makes a plausible showing that consumers were generally unaware of the aftermarket restrictions.”³⁷

31 *Id.* at 899.

32 *Id.*

33 *Id.* at 896.

34 *Lambrix v. Tesla*, No. 23-cv-00145-TLT (N.D. Cal. June 17, 2024) (citing *Epic Games, Inc. v. Apple, Inc.*, 67 F.4th 946, 977 (9th Cir. 2023)).

35 *Id.*

36 *Id.*

37 *Id.*

The court noted that Tesla owners had experienced “unexpected headaches”³⁸ with their cars as evidence of lack of knowledge—although it is probably always the case that plaintiffs filing claims based on aftermarket restrictions suffered headaches. And the court said that Tesla’s statements about the car’s reliability also misled consumers into thinking that Teslas require little maintenance³⁹—although every seller makes statements about the reliability of their product. The court made findings as to each part of the *Newcal/Epic* test—not just “generally unaware,” but also “significant information costs,” and “high switching costs”—but the thrust of each part of the analysis was that some customers might not have fully understood aftermarket limitations at the time of purchase. In other words, the *Tesla* court, like the *John Deere* court, concluding that plausible allegations of consumer confusion about aftermarket repair restrictions was sufficient to state a claim.

These new decisions arguably expand *Kodak* claims beyond the Supreme Court’s initial boundaries. Single-brand aftermarket claims, like unilateral refusal to deal claims or predatory pricing claims, have long been near the edges of antitrust—unlikely even to get past the pleadings stage. That might be changing, at least for some judges. Accepting the idea that consumer confusion about aftermarkets is comparable to a bait and switch change in policy seems to tilt the playing field in favor of plaintiffs. Justice Scalia warned against a regime in which claims that “may have implicated truth-in-advertising or other consumer protection concerns” would also trigger antitrust laws. Some practitioners might see the recent decisions allowing single-brand claims based on concerns about misleading statements to consumers as improperly mixing consumer protection and antitrust, just as Justice Scalia feared.

Of course, these are just two fact-specific decisions from two district court in different circuits, and categorizing the allegations as describing mere consumer confusion might go too far. Certainly, future defendants will try to limit these cases to very narrow facts—for instance that in *Tesla*, the court found that plaintiffs had alleged Tesla’s market power in an EV foremarket and therefore lack of general knowledge was less important. *Tesla* and *John Deere* may have strong arguments in the pending cases against any liability.

WHERE RIGHT TO REPAIR GOES NOW

The *Tesla* and *John Deere* cases likely will encourage more single-brand aftermarket claims.⁴⁰ What is less certain is whether courts will see *Tesla* and *John Deere* as like cases persuasively clarifying *Kodak* in a plaintiff-friendly matter or as cases wrongly decided or limited to the particular facts and allegations. And it is of course more than possible that one or both of *Tesla* or *John Deere* prevail at class certification, summary judgment, or trial. It is one thing to conclude a complaint, filed in a right to repair friendly climate,

38 *Id.*

39 *Id.*

40 In January 2024, plaintiffs sued HP in the Northern District of Illinois, alleging a *Kodak*-theory based on restrictions in an alleged aftermarket for printer cartridges. Plaintiffs’ opposition to the motion to dismiss not surprisingly cited the *Deere* decision numerous times. *Robinson, et al. v. HP, Inc.*, No. 24-00164 (N.D. Ill Jan. 5, 2024).

survives *Twombly*, it is quite another for those allegations to hold up through summary judgment and trial.⁴¹

Another path for right to repair expansion could come through legislation. The recent right to repair movement arguably began as a push for Apple to allow greater access to iPhones. iPhone owners wanted to be able to go to mom-and-pop repair shops to fix their phones but Apple opposed legislation that would open the doors to these shops. Apple opposed various “fair repair” acts, arguing that requiring independent repair shops to have access to certain iPhone features would threaten consumer security and privacy.⁴² Repair advocates criticized Apple for its stance and Apple now has supported some state right to repair laws, including California’s law.⁴³

Repair advocates and state legislatures recently have broadened their right to repair push. Massachusetts passed aggressive automobile-specific legislation giving drivers and repair shops access to almost all mechanical data.⁴⁴ There is ongoing litigation about the scope of that law, but there is no doubt that the move in Massachusetts will be towards more consumer access. Other states pushing on R2R include Colorado, which passed an agriculture R2R law,⁴⁵ and California, which passed an electronics R2R law.⁴⁶

At the federal level, Senator Klobuchar has reintroduced legislation that would dramatically change the Sherman and Clayton Acts, expanding the definition of “exclusionary conduct” to mean any conduct that “materially disadvantages 1 or more actual or potential competitors” or “tends to foreclose or limit the ability of 1 or more actual or potential competitors to compete.” If enacted, this language (and other parts of the legislation) arguably would force courts to start from scratch, throwing out *Kodak* in favor of new analysis that could be even more favorable to single-brand aftermarket claims.

This potential for change puts manufacturers in a pickle. Up until recently, companies faced very little risk if they followed two simple R2R rules: (1) do not automatically void a warranty based on use of unauthorized part or service and (2) disclose any aftermarket limitations. Those rules still apply but there now is greater risk of facing enforcement activity or litigation even if a company follows those rules. The recent *Kodak* decisions raise the unsettling possibility that no good deed goes unpunished: by providing more frequent, accessible, and detailed disclosures of aftermarket repair alternatives, companies will give plaintiffs more opportunities to claim that there is consumer confusion after the precise scope of those limitations. The new R2R energy also arguably understates the

41 Defendants in several key older cases prevailed at summary judgment. See, e.g., *Digital Equip. Corp. v. Uniq Digital Tech.*, 73 F.3d 756 (7th Cir. 1996); *PSI Repair Serv’s v. Honeywell, Inc.*, 104 F.3d 811 (6th Cir. 1997).

42 Letter from D. Michael Foulkes, Dir., State & Loc. Affs., Apple, to N.Y. Governor Kathy Hochul, Re: Apple Inc. Veto Request for SB 4104A (Aug. 11, 2022), <https://www.eff.org/document/re-apple-inc-veto-request-sb-41-04a>.

43 Thorin Klosowski, *Apple, Long a Critic of Right to Repair, Comes Out in Support of California Bill*, Elec. Frontier Found. (Aug. 28, 2023), <https://www.eff.org/deeplinks/2023/08/apple-long-critic-right-repair-comes-out-support-california-bill>.

44 MASS. GEN. LAWS ch. 93K, § 2 (West 2024).

45 H.B. 1011 (Colo. 2023).

46 S.B. 244 (Cal. 2023).

very legitimate and pro-competitive reasons manufacturers may have for imposing some aftermarket restrictions—including security and privacy.

DOES THE COMPELLED-SPEECH DOCTRINE LIMIT THE DUTY TO DISCLOSE PRODUCT DEFECTS?

By Robert J. Herrington¹, Michael E. McCarthy²

In recent years, plaintiffs' lawyers have filed countless class actions under statutes like California's Unfair Competition Law (UCL) and Consumers Legal Remedies Act (CLRA) alleging consumers were "deceived" because they bought a product with a "defect" that the manufacturer or retailer did not disclose. These cases share a common fact pattern: consumer buys product X and experiences a problem after some period of use. The consumer goes online and sees others have complained about something similar. Sometimes the consumer makes a claim under the product warranty but often does not. Eventually, a class action lawyer gets involved and files a complaint alleging that product X is "defective," defendant knew of the defect (pointing to publicly available complaints), and defendant should return the "price premium" associated with the alleged defect.

But consider the perspective of the manufacturer. No product is perfect or lasts forever, and products can have problems unrelated to design or manufacture, including from misuse or overuse. The company already provides a limited warranty covering actual defects in materials or workmanship and remains strictly liable for defects that cause physical injury. Does the company also have a duty to disclose or highlight problems that could occur in a small subset of products, which in effect, would require the company to criticize itself? As explained below, the answer, which may surprise some, is: "in certain situations, yes."

Yet one issue that has received little attention is whether the First Amendment has any bearing on this type of consumer-fraud theory. The compelled-speech doctrine generally limits what the government can require someone to say, with regulations that require controversial or nonfactual speech often violating the First Amendment. This paper explores the developing law on the duty to disclose product defects in California and how the compelled-speech doctrine may limit such a duty.

I. ORIGINS OF THE DUTY TO DISCLOSE

In California, the duty to disclose can be traced to *Outboard Marine Corp. v. Superior Court*, a 1975 decision involving a partial representation claim under the CLRA,³ as well as *LiMandri v. Judkins*, a 1997 decision explaining when there is a duty to disclose material facts about a transaction.⁴

The *Outboard Marine* decision involved a defendant that manufactured off-road vehicles and represented they were "designed to operate within the parameters" of certain specifications, including gradeability (100 percent grade or 45 degrees plus); side hill ability of 45 degrees; traction "to get . . . up grades as steep as 100 percent and even greater;" and

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3 *Outboard Marine Corp. v. Superior Ct.*, 124 Cal. Rptr. 852 (1975).

4 *LiMandri v. Judkins*, 60 Cal. Rptr. 2d 539 (1997).

smooth runs “over rocks, stones and rough places[.]”⁵ The defendant allegedly knew, but did not disclose, that the vehicle would not operate within its design criteria, was unstable, would roll over (forward) on a downgrade, and had a “totally defective” braking system.⁶ Comparing the affirmative representations with the undisclosed limitations, the court explained that the CLRA’s proscription against “[r]epresenting that goods . . . are of a particular standard . . . if they are of another” includes a prohibition on “concealment of the characteristics . . . contrary to that represented.”⁷

Although the case did not involve CLRA or UCL claims, the *LiMandri* court explained that there are:

four circumstances in which nondisclosure or concealment may constitute actionable fraud: (1) when the defendant is in a fiduciary relationship with the plaintiff; (2) when the defendant had exclusive knowledge of material facts not known to the plaintiff; (3) when the defendant actively conceals a material fact from the plaintiff; and (4) when the defendant makes partial representations but also suppresses some material facts.⁸

The court emphasized that, for there to be a duty, there must be a transaction: a “duty to disclose may arise from the relationship between seller and buyer, employer and prospective employee, doctor and patient, or parties entering into any kind of contractual agreement.”⁹ All of these relationships “are created by transactions between parties from which a duty to disclose facts material to the transaction arises under certain circumstances.”¹⁰

II. SCOPE OF THE DUTY TO DISCLOSE

Building on these standards, consumers continued to test the bounds of the CLRA and UCL with nondisclosure theories like those asserted in *Bardin v. DaimlerChrysler Corp.*¹¹ There, plaintiffs alleged consumer fraud because the defendant used tubular steel in the exhaust manifolds of certain vehicles instead of more durable and expensive cast iron, knowing that the tubular steel could crack and fail prematurely.¹² In other words, plaintiffs claimed that the manufacturer had a duty to disclose that the steel used in its vehicles could fail earlier than if it used different, more expensive metal. Rejecting this theory, the court

5 *Outboard Marine*, 124 Cal. Rptr. at 854–55.

6 *Id.* at 854.

7 *Id.* at 855–57.

8 *LiMandri*, 60 Cal. Rptr. 2d at 543.

9 *Id.* at 543. Strict vertical privity is not necessarily required for a duty to disclose in consumer transactions. Countless cases have involved claims that manufacturers owed consumers a duty despite that the consumers purchased the products from third-party retailers.

10 *Id.* at 543–44. Later decisions, including *Falk v. GMC*, 496 F. Supp. 2d 1088, 1095 (N.D. Cal. 2007), applied these factors from *LiMandri* when evaluating a nondisclosure claim under the UCL and CLRA.

11 *Bardin v. DaimlerChrysler Corp.*, 39 Cal. Rptr. 3d 634 (2006).

12 *Id.*

found no basis for a duty of disclosure, because defendant had made no representations about the steel quality in the exhaust manifolds, and plaintiff did not allege that the consuming public had any reasonable expectations about the steel used in the manifolds.¹³

Other theories have had more success, including those alleging a failure to disclose defects creating a potential safety hazard. For example, in *Garcia v. Harley-Davidson Motor Co.*, plaintiff alleged that defendant’s motorcycle included a defective antilock braking system (“ABS”) prone to premature failure during normal operation.¹⁴ Plaintiff alleged this created a safety hazard that defendant had a duty to disclose, because the defect disabled the ABS system—which is intended to prevent a motorcycle from skidding when braking hard—thus increasing the chances of a motorcycle crashing when the rider attempts to stop quickly.¹⁵ Rejecting defendant’s argument that the risk was speculative, the court found the allegations plausibly alleged “a safety risk as a result of the purported defect” in the motorcycle that, at least at the pleading stage, defendant needed to disclose.¹⁶

The Ninth Circuit, however, reached a different conclusion in *Williams v. Yamaha Motor Co.*¹⁷ There, plaintiff alleged that defendant’s motorboat had inherent design defects that caused severe, premature corrosion in the motor’s dry exhaust system and posed an unreasonable safety hazard, including a risk of onboard fires and steering loss.¹⁸ The court explained that, to state a claim for failing to disclose a defect, a party must allege “(1) the existence of a design defect; (2) the existence of an unreasonable safety hazard; (3) a causal connection between the alleged defect and the alleged safety hazard; and [4] that the manufacturer knew of the defect at the time a sale was made.”¹⁹

Concluding that plaintiff had not alleged enough to show an “unreasonable safety hazard,” the court explained that the purported defect merely accelerated the normal and expected process of corrosion in outboard motors. “Were we to conclude that [plaintiff’s] allegations of premature but otherwise normal wear and tear plausibly establish an unreasonable safety hazard, we would effectively open the door to claims that *all* of [defendant’s] outboard motors eventually pose an unreasonable safety hazard.”²⁰ Finding that “the alleged safety risk [wa]s speculative and unsupported,” the court noted that plaintiff failed to allege “that any customer, much less any plaintiff, experienced such a fire—a notable omission if the alleged unreasonable safety hazard arises in *all* [defendant’s] outboard motors sooner or later.”²¹ The court also ruled that the “loss of steering power, while plausibly hazardous, is a potential boating condition of which [defendant] expressly warns consumers.” And “the nature of the alleged defect as being primarily one of

13 *Id.*

14 *Garcia v. Harley-Davidson Motor Co.*, No. 19-cv-02054-JCS (N.D. Cal. Nov. 15, 2019).

15 *Id.*

16 *Id.*

17 *Williams v. Yamaha Motor Co.*, 851 F.3d 1015, 1019 (9th Cir. 2017).

18 *Id.* at 1019–20.

19 *Id.* at 1025.

20 *Id.* at 1028.

21 *Id.* at 1028–29.

accelerated timing rather than the manifestation of a wholly abnormal condition weighs against its characterization as ‘unreasonable.’”²²

III. IS THE DUTY LIMITED TO “SAFETY ISSUES”?

Picking up on these “safety hazard” cases, defendants have argued that the duty to disclose is limited to product defects that create such a hazard. For example, in *Hodsdon v. Mars, Inc.*, plaintiffs alleged that California’s consumer protection laws required food manufacturers to disclose, on their products’ labels, that the products’ supply chain may involve child or slave labor.²³ Defendants responded by arguing that the duty was limited to defects that created an unreasonable safety hazard. Rejecting this argument, the Ninth Circuit reviewed California state court decisions applying *LiMandri* to find a duty to disclose when “[first,] plaintiff alleges that the omission was material; second, the plaintiff . . . plead[s] that the defect was central to the product’s function; and third, the plaintiff . . . allege[s] one of the four *LiMandri* factors.”²⁴ Although the court rejected the “safety hazard” limitation, the court ruled for defendants, holding that “in this pure omissions case concerning no physical product defect relating to the central function of the chocolate and no safety defect, Plaintiff has not sufficiently pleaded that [defendant] had a duty to disclose on its labels the labor issues in its supply chain.”²⁵

Since *Hodsdon*, courts have tried to clarify this duty and how it may be affected by product warranties. For example, in *Taleshpour v. Apple Inc.*, plaintiffs alleged that defendant failed to disclose a defect that caused the screens on their laptop computers to stop working properly, thus shortening the useful life of the computers.²⁶ The court explained that “[w]hen a defect does not relate to an unreasonable safety hazard, a defendant has a duty to disclose when (1) the omission is material; (2) the defect is central to the product’s function; and (3) at least one of the following four [*LiMandri*] factors is met: the defendant is the plaintiff’s fiduciary; the defendant has exclusive knowledge of material facts not known or reasonably accessible to the plaintiff; the defendant actively conceals a material fact from the plaintiff; or the defendant makes partial representations that are misleading because some other material fact has not been disclosed.”

Reviewing *Hodsdon* and other omission cases, the court explained that “a manufacturer has a duty to disclose any defects that fall within the warranty period, whether relating to safety or to costly repairs, that would have caused the consumer to not purchase the [product] if they had been disclosed.”²⁷ But if the defect “arises outside of the warranty period, however, then the manufacturer only has a duty to disclose ‘safety issues.’”²⁸ “The purpose of this limitation in the post-warranty context is to ensure that durational limits

22 *Id.* at 1029.

23 *Hodsdon v. Mars, Inc.*, 891 F.3d 857, 859 (9th Cir. 2018).

24 *Id.* at 863.

25 *Id.* at 865.

26 *Taleshpour v. Apple Inc.*, 549 F. Supp. 3d 1033, 1042 (N.D. Cal. 2021).

27 *Id.* at 1044.

28 *Id.*

on express warranties are not rendered meaningless.”²⁹ Because the plaintiff in *Taleshpour* did not allege that the screen defect arose during the warranty period or created a safety issue, there was no duty to disclose.

IV. BUT WHAT ABOUT COMPELLED COMMERCIAL SPEECH?

The First Amendment affords protection to both commercial and noncommercial speech.³⁰ The Supreme Court has defined commercial speech as speech that “does no more than propose a commercial transaction.”³¹ For commercial speech to receive First Amendment protection, it must concern lawful activity and not be inherently or actually misleading.³² Thus, the First Amendment “accords a lesser protection to commercial speech than to other constitutionally guaranteed expression.”³³ And because of its subsidiary status, commercial speech can be subjected to modes of regulation that might be impermissible in the realm of noncommercial expression. For instance, “there can be no constitutional objection to the suppression of commercial messages that do not accurately inform the public about lawful activity.”³⁴

Two different tests may apply to regulation of commercial speech. First, under *Central Hudson Gas & Electric Corp. v. Public Service Commission of N.Y.*, the government may restrict commercial speech “that is neither misleading nor connected to unlawful activity, as long as the governmental interest in regulating the speech is substantial.”³⁵ Under this intermediate level of scrutiny, the law at issue must “‘directly advance the governmental interest asserted’ and must not be ‘more extensive than is necessary to serve that interest.’”³⁶ Second, under *Zauderer v. Office of Disciplinary Counsel of Supreme Court of Ohio*, the government may require commercial speakers to disclose “purely factual and uncontroversial information” about commercial products or services, as long as the disclosure requirements are “reasonably related” to a substantial government interest and are neither “unjustified [n]or unduly burdensome.”³⁷

Understanding the interplay between these tests is important. *Zauderer’s* narrowly crafted exception does not dispense with *Central Hudson’s* intermediate scrutiny.³⁸ Rather, the burden under intermediate scrutiny is effectively met when the government commands

29 *Id.*

30 *Bigelow v. Va.*, 421 U.S. 809, 818 (1975).

31 *Va. State Bd. of Pharmacy v. Va. Citizens Consumer Council*, 425 U.S. 748, 776 (1976); *Bd. Trs. v. Fox*, 492 U.S. 469, 482 (1989).

32 *Cent. Hudson Gas & Elec. Corp. v. Pub. Serv. Comm’n*, 447 U.S. 557, 566 (1980).

33 *Id.* at 563.

34 *Id.*

35 *Am. Beverage Ass’n v. City & Cnty. of S.F.*, 916 F.3d 749, 755 (9th Cir. 2019) (quoting *Cent. Hudson*, 447 U.S. at 564).

36 *Id.* (quoting *Central Hudson*, 447 U.S. at 566).

37 *Zauderer v. Off. Disciplinary Couns. Sup. Ct.*, 471 U.S. 626, 651 (1985); *Nat’l Inst. of Fam. & Life Advoc. v. Becerra*, 585 U.S. 755, 768 (2018) (“our precedents have applied more deferential review to some laws that require professionals to disclose factual, noncontroversial information in their ‘commercial speech.’”).

38 *Am. Meat Inst. v. U.S. Dep’t of Agric.*, 760 F.3d 18, 45 (2014).

purely factual and noncontroversial disclosures to prevent deceptive advertising.³⁹ In other words, *Zauderer* is a shortcut “where several of *Central Hudson’s* elements have already been established.”⁴⁰

Regardless of which standard applies, the party seeking to uphold a restriction on commercial speech carries the burden of justifying it,⁴¹ which in a case involving an allegedly undisclosed product defect, is the plaintiff.⁴²

In 2022, the Ninth Circuit applied these standards to uphold a preliminary injunction against a state law that would have required manufacturers of food containing acrylamide to provide a notice that the products contain a substance “known to the State of California to cause cancer.”⁴³ Reviewing compelled-speech case law, the court explained that the relevant standard had three requirements: “whether the notice is (1) purely factual, (2) noncontroversial, and (3) not unjustified or unduly burdensome.”⁴⁴ The court found that the required disclosure was not “purely factual” or “noncontroversial” based on evidence showing “robust disagreement by reputable scientific sources” about whether low levels of acrylamide in food may cause cancer in humans.⁴⁵

The D.C. Circuit reached a similar conclusion in *National Association of Manufacturers v. Securities and Exchange Commission*.⁴⁶ There, the SEC enacted a rule mandating companies using certain minerals originating in the Democratic Republic of Congo to disclose on their website that their products have “not been found to be DRC conflict free.”⁴⁷ The court explained that this was not a “purely factual” or “noncontroversial” disclosure: “We put it this way: Products and minerals do not fight conflicts. By compelling an issuer to confess blood on its hands, the statute interferes with that exercise of the freedom of speech under the First Amendment.”⁴⁸ The SEC also could not rely on a statutory definition of “conflict free” to prove that the required disclosure was factual and noncontroversial, because otherwise “there would be no end to the government’s ability to skew public debate by forcing companies to use the government’s preferred language.”⁴⁹

Recently, the Ninth Circuit applied similar reasoning again in *National Association of Wheat Growers v. Bonta*, holding that California cannot require Proposition 65 warnings

39 See *Zauderer*, 471 U.S. at 651.

40 *Am. Meat Inst.*, 760 F.3d at 27.

41 *Ibanez v. Fla. Dep’t of Bus. & Pro. Regul.*, 512 U.S. 136, 142–43 (1994).

42 See *Monster Bev. Corp. v. Herrera*, No. EDCV 13-00786-VAP (OPx) (C.D. Cal. Aug. 22, 2013) (upholding First Amendment compelled-speech claim when plaintiff sent letter demanding safety disclosures about plaintiff’s product).

43 *Cal. Chamber of Commerce v. Council for Educ. & Rsch. on Toxics*, 29 F.4th 468, 472 (9th Cir. 2022).

44 *Id.* at 477.

45 *Id.* at 478–79; see also *Nat’l Ass’n of Wheat Growers v. Becerra*, 468 F. Supp. 3d 1247, 1259 (E.D. Cal. 2020) (reaching similar conclusion in case involving cancer warnings for glyphosate).

46 *Nat’l Ass’n of Mfrs. v. SEC*, 800 F.3d 518 (D.C. Cir. 2015).

47 *Id.* at 531.

48 *Id.*

49 *Id.* at 530.

for exposures to glyphosate, a chemical commonly used in herbicides.⁵⁰ The threshold question was what level of scrutiny applied to the glyphosate warning. Recognizing the scientific debate over glyphosate's carcinogenicity and that "the overall message that glyphosate is unsafe" was "at best disputed[.]" the Ninth Circuit found that intermediate scrutiny applied.⁵¹ Applying intermediate scrutiny, the Ninth Circuit held that "compelling sellers to warn consumers of a potential 'risk' never confirmed by any regulatory body—or of a hazard not 'known' to more than a small subset of the scientific community" was unconstitutional.⁵² Although the decision involved California Proposition 65 and glyphosate, the principles applied could extend to compelled warnings more generally.

V. APPLYING THE COMPELLED-SPEECH DOCTRINE TO OMISSION CASES

Turning back to consumer-fraud cases involving claims that a business needed to disclose a product "defect," the question is whether the evolving standards requiring such a disclosure are consistent with compelled-speech restrictions. One initial reaction to this question might be the familiar notion that "[m]isleading advertising may be prohibited entirely."⁵³ But this argument's premise assumes the truth of the conclusion. And in the acrylamide, conflict minerals, and glyphosate cases discussed above, the courts could have resolved them using the same basic principle but did not. Consumers may find it material that the products they are consuming contain substances that may cause cancer or fund foreign wars, and thus argue that it was materially misleading not to disclose that information. Yet the courts focused on whether the required disclosures were "purely factual," "noncontroversial," "justified," and "not unduly burdensome."

Those same considerations should apply to omission claims based on an undisclosed product defect.⁵⁴ In these cases, plaintiffs argue that consumers were misled because, had they known of the undisclosed "defect," they would not have bought the product or would have paid less. Thus, plaintiffs are essentially arguing for a compelled disclosure that the product had a defect—one that creates an unreasonable safety hazard or may manifest during the warranty period to impair the product's central function. Applying the compelled-speech cases would require that plaintiffs also show the disclosures they are demanding are "purely factual," "noncontroversial," and "not unduly burdensome."

50 Nat'l Ass'n of Wheat Growers v. Bonta, 85 F.4th 1263 (9th Cir. 2023).

51 *Id.* at 1281.

52 *Id.* at 1283.

53 *In re R. M. J.*, 455 U.S. 191, 203 (1982).

54 The authors have not identified decisions addressing this argument substantively for a pure omission claim, but defendants have asserted it before. For example, in *Hodsdon*, the defendant argued in the district court that, if "California law requires disclosure of the labor practices of a manufacturer's suppliers, then that mandatory disclosure violates the First Amendment[.]" *Hodsdon v. Mars, Inc.*, 162 F. Supp. 3d 1016, 1019–20 (N.D. Cal. 2016). The district court did not reach the argument, however, "[b]ecause Mars did not have a duty to disclose information about child labor in its supply chain. . . ." *Id.* at 1020; *see also* *Dana v. Hershey Co.*, 180 F. Supp. 3d 652, 669 (N.D. Cal. 2016) ("In light of the holdings above that each of Dana's claims must be dismissed, the Court need not reach the parties' arguments . . . that the relief Dana seeks would compel Hershey's speech in violation of the First Amendment[.]").

When the alleged defect is rare or the cause is uncertain (or potentially attributable to misuse or overuse), it may be difficult to prove that the disclosure is “purely factual” and “noncontroversial”—just like California could not prove that requiring a cancer disclosure for glyphosate or foods containing acrylamide was purely factual and noncontroversial because the science was uncertain. Similarly, when the plaintiff’s individual product has not manifested the alleged defect, it may be difficult to show that the disclosure is noncontroversial and not unduly burdensome. Defense counsel handling these cases may wish to explore arguments based on compelled-speech principles to help defend omission-based claims.



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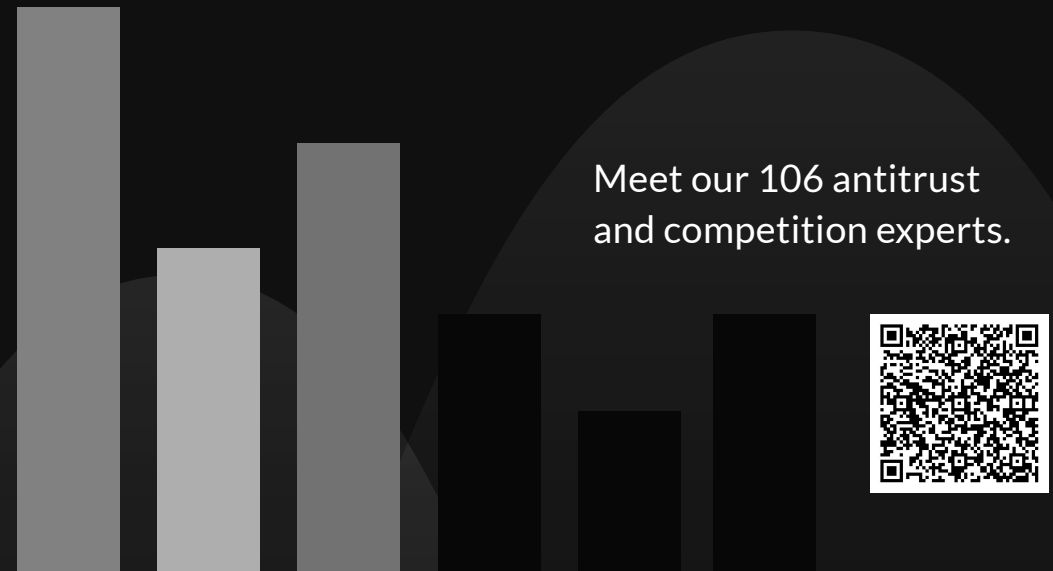
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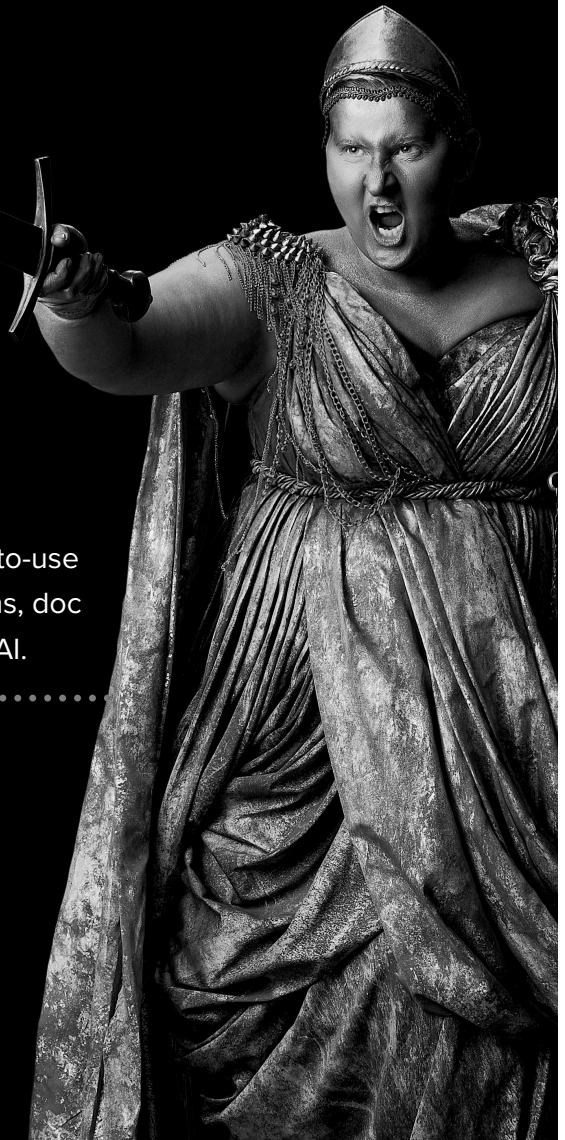
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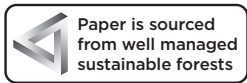
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