

ARE PRIVATE EQUITY FUNDS LIABLE FOR ANTICOMPETITIVE ACQUISITIONS?

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ABSTRACT

Private equity acquisitions grew tenfold over the past two decades. Over the same period, their focus shifted from financial engineering to industry consolidation, raising antitrust concerns. Heightening these concerns, privately backed acquisitions of competitors historically escaped detection by federal antitrust authorities in their incipiency because they fell below the reporting thresholds of the Premerger Notification Program. However, academic studies and agency investigations are now unearthing these transactions. Most salient is a recent complaint filed by the Federal Trade Commission challenging a series of acquisitions stretching back ten years.

In the wave of litigation that is likely to follow this “groundbreaking” case, serious problems may arise. Even after remedies are factored in, these transactions could be profitable for the firms that formulated and financed them, undermining deterrence. Moreover, the damages, which will accrue over several years and be statutorily tripled, could far exceed what portfolio companies can pay, which may be limited by factors such as their indebtedness. Ultimately, whether future antitrust violations are deterred and victims are paid the sums they are awarded depends critically on whether private equity funds that formulated and financed the portfolio companies’ acquisitions are held liable.

This paper provides the first evidence that privately backed consolidation extends far beyond what the FTC’s recent lawsuit alleges. Next, it identifies the unique features of these transactions that limit deterrence and restitution. Finally, it introduces a novel doctrinal framework to determine the liability of private equity funds that finance and direct mergers among rival firms.

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INTRODUCTION

Acquisitions backed by private equity (PE) grew rapidly over the past three decades. By most measures, privately backed transactions now exceed ones involving public companies. As just one example, a single software-focused PE firm, Thoma Bravo, has acquired more companies in the last few years than Google, Facebook, Microsoft, Amazon, and Apple combined.¹ Over the same period, PE pivoted from financial engineering to *rolling up* industries—orchestrating mergers among competitors—which raises antitrust concerns.²

Compounding these concerns, acquisitions that comprise rollups often escape detection by federal antitrust authorities in their incipiency.³ However, academic studies and agency investigations have started unearthing these transactions and measuring their effects on welfare. One immediate consequence was recent litigation filed by the Federal Trade Commission (FTC). The case—called “groundbreaking” and “novel” by leading antitrust practices—challenges a series of acquisitions in the anesthesia industry stretching back ten years.⁴ Alluding to how these deals initially flew under the agency’s radar, the FTC Chair borrowed a term we coined in an earlier work, calling the acquisitions a “stealth consolidation scheme.”⁵

As this Article will later demonstrate, the recently challenged transactions in the anesthesia industry are merely the tip of the iceberg of privately backed concentration of ownership. Given the prevalence of stealth consolidation, the deterrent effect of antitrust laws warrants renewed attention, and a wave of litigation challenging

1. Pitchbook reports that between 2022 and 2025, Thoma Bravo completed 164 transactions, while Alphabet (Google), Meta (Facebook), Microsoft, Amazon, and Apple together completed 94 transactions. Based on median deal values, the total value of Thoma Bravo’s deals over this period is much larger (\$108 billion vs. \$21 billion). Based on “mega deals”—deals valued above \$3 billion—the value of Thoma Bravo’s deals is slightly smaller (\$87 billion vs. \$134 billion). These data can be obtained from the PitchBook Private Market Data and Financial Research Platform. The data are also on file with the authors.
2. The juxtaposition of this sentence with the preceding one should not be read to imply that any of Thoma Bravo’s acquisitions raised antitrust concerns. For an in-depth analysis of private equity, see Matthew Wansley & Samuel Weinstein, *Antitrust, Private Equity & Venture Capital*, in RESEARCH HANDBOOK ON THE STRUCTURE OF PRIVATE EQUITY AND VENTURE CAPITAL (2024).
3. Thomas G. Wollmann, *Stealth Consolidation: Evidence from an Amendment to the Hart-Scott-Rodino Act*, 1 AM. ECON. REV.: INSIGHTS 77, 79 (2019); Thomas G. Wollmann, *How to Get Away with Merger: Stealth Consolidation and Its Effects on US Healthcare* (Nat’l Bureau of Econ. Rsch. Working Paper No. 27274, 2024).
4. See Noah Brumfield, *FTC Sues PE Fund and Its Portfolio Company, Signaling Continued and Growing Focus on PE Funds and Roll-Up Acquisitions*, A&O SHEARMAN (Sept. 26, 2023), <https://perma.cc/H23B-H9UE>; see also David C. Kully et al., *FTC Sues Private Equity Firm, Portfolio Company Over Anesthesiology Roll-Up Strategy*, HKLAW (Sept. 26, 2023), <https://perma.cc/G5WY-UTVP>.
5. Press Release, Fed. Trade Comm’n, *FTC and DOJ Seek Info on Serial Acquisitions, Roll-Up Strategies Across U.S. Economy* (May 23, 2024), <https://perma.cc/6RRW-YNJM>; Press Release, Fed. Trade Comm’n, *FTC Challenges Private Equity Firm’s Scheme to Suppress Competition in Anesthesiology Practices Across Texas* (Sept. 21, 2023), <https://perma.cc/ERH8-RRN9>.

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consummated acquisitions may follow. Antitrust law has long recognized that anti-competitive conduct is difficult to detect and costly to litigate. Indeed, it is precisely for this reason—to increase detection and deterrence—that antitrust law grants treble damages for private enforcement.⁶

As this Article later shows, rollups will likely remain profitable for the PE firms that formulated and financed them even after remedies are imposed if PE funds are not held liable.⁷ As a result, the absence of PE fund liability undermines deterrence. Moreover, damages, which will accrue for years and be statutorily tripled, can far exceed what portfolio companies can pay, which will be reduced by structural remedies and encumbered by senior debt. As an immediate consequence, whether future antitrust violations are deterred and victims are paid the sums they are awarded will turn critically on whether PE funds that backed and devised the portfolio companies' acquisitions are held liable for the harm they caused.

Is there a legal basis for doing so? We argue yes. To see this clearly, consider an archetypical rollup—a PE fund makes an initial acquisition in a market and then directs the target to acquire one or more rivals. When this occurs, funds incur liability through five separate means.

Two arise from a plain reading of Section 7 of the Clayton Act. First, the statute prohibits acquisitions where the “use of an ownership” may substantially lessen competition, yet this is precisely what happens when a fund directs its portfolio company to acquire its competition.

Second, the statute likewise bars “indirect” acquisitions that reduce competition, but in the situation described above, the fund directly acquires the first company and indirectly acquires the subsequent ones.

Third, a novel yet logical extension of the *Copperweld* doctrine to Section 7 would expose a PE fund to liability. Originally developed under the anti-cartel provision of the Sherman Act, *Copperweld* treats a parent and its majority-owned subsidiary as a single entity. Applied to a rollup, the doctrine suggests that each time a portfolio company acquires a competitor, the fund shares responsibility for the anticompetitive effects.

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6. *Reiter v. Sonotone Corp.* 442 U.S. 330, 344 (1979) (“Congress created the treble-damages remedy of §4 precisely for the purpose of encouraging *private* challenges to antitrust violations. These private suits provide a significant supplement to the limited resources available to the Department of Justice for enforcing the antitrust laws and deterring violations.”) (emphasis original). See also *Atlantic Richfield Co. v. USA Petroleum*, 495 U.S. 328, 330 (1990) (“[P]rivate actions not only compensate the injured, but also deter wrongdoers.”); *California v. ARC Am. Corp.*, 490 U.S. 93, 102 ([B]road purposes of antitrust law [are]: deterring anticompetitive conduct and ensuring the compensation of victims of that conduct.”); *American Soc’ of Mechanical Eng’rs, Inc. v. Hydrolevel Corp.* 456 U.S. 556, 557 (1982); *Pfizer, Inc. v. India*, 434 U.S. 308, 314 (1978); *Illinois Brick Co. v. Illinois*, 431 U.S. 720, 746, 748, 749 (1977).
 7. We use terms such as “harm” and “anticompetitive” to characterize certain conduct and transactions. However, unless explicitly stated, such use represents the opinions of the authors and not the findings of any court. Also, at the time of writing, aforementioned litigation was ongoing, so claims made by the FTC are allegations. For expositional and analytical purpose, we take the allegations of facts made in the complaint at face value (i.e. we assume they are true). See *supra* note 5; *infra* note 27.

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Fourth, the same logic carries over to Section 1 of the Sherman Act: when a portfolio company enters into agreements to acquire rivals, the fund is equally liable for restraining trade in violation of the statute.

Finally, of course, plaintiffs might pierce the corporate veil between the PE fund and its portfolio companies and go after the fund's assets to recover damages.

* * *

This Article makes three main contributions. First, we show that PE-led consolidation extends far beyond the anesthesia industry. To do so, we construct an original dataset that tracks acquisitions and measures concentration in medical specialty markets. Hospital-based physician practices, including urology, radiology, and gastroenterology are especially affected. In the anesthesia industry, rollups sharply raise prices, so if the same occurs in these other medical markets, then consumers are owed large damages, which are trebled under antitrust laws.⁸

Second, we show that absolving private equity funds of liability and confining liability to portfolio companies will, in many cases, substantially weaken deterrence. Moreover, portfolio companies will often be unable to satisfy plaintiffs' claims if a violation is found. We demonstrate this point by characterizing a representative roll-up, calculating the resulting damages, and comparing them to the portfolio companies' unencumbered assets.

Third, we develop a novel doctrinal framework—drawing on merger law, anti-cartel law, and business organization principles—to determine whether PE funds are liable for the rollups they finance and direct. We introduce five distinct theories of harm, enumerated above. Critically, PE funds typically cannot invoke the merger law's investment-only exemption for passive investors. Ample evidence—from the FTC lawsuit and the funds' own disclosures—shows that these firms often take an active role in managing their portfolio companies, negotiating on their behalf, and directing investment strategy. This active involvement disqualifies the funds from the exemption and exposes them to liability.

Funds' partial ownership of their portfolio companies offers no safe harbor either. The Supreme Court *Du Pont* decision confirms that even partial stakes can trigger merger liability, and anti-cartel law routinely holds all parties to an anticompetitive agreement liable as co-conspirators.

This Article proceeds as follows. Section I traces the rise of PE, the rollup strategy, and the discovery of stealth consolidation—two developments that gave rise to the recent litigation. Section II examines rollups in depth, quantifying their growing prevalence, reviewing the first antitrust case targeting a consummated rollup, summarizing existing research on the price and consumer welfare effects of anesthesia rollups, and introducing novel empirical evidence of rollups in other sectors. Section III presents the economic model of damages. Section IV sets out the four antitrust-based theories of fund liability, tied to the fund's role in the rollup. Section V presents the fifth legal theory rooted in business organization law. Section VI concludes by summarizing our empirical findings and our doctrinal framework on fund liability in rollups. In

8. Aslihan Asil, Paulo Ramos, Amanda Starc & Thomas G. Wollmann, *Painful Bargaining: Evidence from Anesthesia Rollups* (Nat'l Bureau of Econ. Rsch., Working Paper No. 33217, 2024).

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the Appendix, we formalize the economic model for damages presented in Section III and calibrate it using real-world parameters.

I. ORIGINS OF LIABILITY

A. Private Equity

PE refers to professionally managed investments in companies that are not traded on stock markets. PE firms pool capital from institutional investors (e.g., pension funds, university endowments, and sovereign wealth funds) as well as high net worth individuals. In exchange, investors share in the profit generated by the companies and the proceeds generated from their sale. To minimize taxes, manage ownership, and offer better terms to larger investors, PE firms tailor business organization structures to their particular sources and uses of capital.⁹ On a more basic level, though, all firms employ the same structure. Capital is pooled in a fund, which takes the form of a partnership, with the PE firm playing the role of general partner and investors serving as limited partners.

PE gained widespread prominence in the 1980s, entering popular culture through high-profile deals like the buyout of RJR Nabisco.¹⁰ Since then, PE has grown rapidly. As we reported in Asil et al. (2023), PE investments increased ten-fold in the past two decades.¹¹ PE deal value, standing at approximately \$100 billion in 2001, reached \$1.25 trillion in 2021.¹² During the same period, the share of all U.S. deals that are backed by PE grew from 10% to around 60%.¹³

Over the same period, PE changed strategies. Initially, it focused on financial engineering, which typically takes the form of a leveraged buyout, or “LBO.” At its core, an LBO creates value by optimizing the target firm’s capital structure. Operational changes are typically confined to the discipline imposed on managers by debt. Targets are sourced from any sector of the economy where opportunities arise. Today, however, PE firms often employ a very different strategy—a rollup—which we describe below.¹⁴

9. For example, individuals and organizations that pay taxes prefer that PE firms use “pass through” entities, such as limited liability companies. Such a structure ensures that profit passes directly to the investor without any intermediate taxation. In other words, it avoids “double taxation.” However, a nonprofit requires a different structure, since it could lose its tax-exempt status by receiving untaxed business income. To prevent this from happening, institutions such as organizations require PE firms to pass profit through an intermediate entity, called a “blocker,” which takes the form of a corporation. See Aslihan Asil, John Barrios & Thomas G. Wollmann, *Misaligned Measures of Control: Private Equity’s Antitrust Loophole*, 18 VA. BUS. & L. REV. 51, 61 (2023).

10. John Steele Gordon, *A Short (Sometimes Profitable) History of Private Equity*, WALL ST. J. (Jan. 2012), <https://www.wsj.com/articles/SB10001424052970204468004577166850222785654>.

11. Asil et al., *supra* note 8, at 57.

12. *Id.*

13. *Id.*

14. *Id.* at 59-60.

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B. The Rollup

The rollup, or buy-and-build, strategy was pioneered by Carl Thoma and his partners in the 1980s. It is easy to characterize. A financial sponsor—typically a PE fund—finances and directs a series of acquisitions over time that consolidate ownership. The fund makes an initial acquisition, known as the “platform,” and subsequently acquires other firms in the same industry, referred to as “add-ons.”

Over the past two decades, add-on acquisitions have surged to historically high levels, both in terms of transaction value and deal count. As shown in Panel A of Figure 1, there were fewer than 500 add-ons in 2002, a number that rose to approximately 5,000 by 2022. Panel B reveals a similar dramatic increase in total transaction value, rising from around \$6 billion in 2002 to \$250 billion in 2022.

By definition, rollups involve multiple acquisitions in the same industry. These transactions often occur in the same market, meaning that platforms and add-ons may be close competitors. The acquisition of competitors diminishes the parties’ incentives to price their goods and services competitively, to innovate, or to improve quality. As a result, antitrust concerns arise under Section 7 of the Clayton Act, which prohibits anticompetitive acquisitions, and Section 1 of the Sherman Act, which bans agreements—including merger agreements—that unreasonably restrain trade. Such concerns are further heightened by the problem described below.

Most federal governments require firms that are interested in merging to notify competition authorities in advance. The U.S. is no exception. The Hart-Scott-Rodino (HSR) Antitrust Improvements Act established the Premerger Notification Program, which requires that merging parties notify the FTC and the DOJ prior to closing a transaction. However, exemptions apply. For example, transactions that fail to reach certain size thresholds set forth in the Act are not subject to reporting. At the time of writing, deals that are below \$126.4 million are exempt.¹⁵ Moreover, HSR does not aggregate deals by the same acquirer over time.

C. Stealth Consolidation

Size-based exemptions effectively create a loophole in antitrust law. The conceptual problem is straightforward. In highly segmented industries, even relatively low-value deals can profoundly affect market structure, firm behavior, and consumer welfare. To illustrate this point, consider the competitive consequences of a merger that creates a monopoly among rural healthcare providers that previously competed for patients. Such a “merger to monopoly” eliminates all direct competition, leaving patients with no alternative providers and potentially leading to higher prices, reduced quality, or diminished access to care. Although these deals are subject to the exact same substantive legal standard as high-value transactions, they may nonetheless effectively escape antitrust enforcement simply because they fly under the agencies’ radar.

We identified the loophole in Wollmann (2019, 2024) and described the effects on

15. *New HSR Threshold and Filing Fees for 2025*, FED. TRADE COMM’N (Feb. 6, 2025), <https://perma.cc/S83R-3LZP>.

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market structure as “stealth consolidation.”¹⁶ These studies show that premerger notification exemptions reduce enforcement by 90%. Moreover, infrequent enforcement reduces deterrence: when firms know they are unlikely to be scrutinized, they are more likely to attempt anticompetitive mergers in the first place.¹⁷ Citing Wollmann (2019), *The Wall Street Journal* noted that “stealth consolidation may be as harmful, if not more so, than the much publicized and criticized practices.”¹⁸

The loophole widens for PE investments.¹⁹ In Asil et al. (2023), we showed that when the HSR Act’s exemptions are applied to the typical PE investment structure, acquisitions that would otherwise be reportable are exempt.²⁰ PE structures commonly involve multiple co-managed entities. The HSR Act treats each co-managed investment vehicle as a separate entity, even though the PE firm—acting as the general partner in each vehicle—exerts managerial control over all of them. When the Act views each co-managed investment vehicle in isolation, the jurisdictional tests that determine reportability are applied separately to each entity. This fragmented approach creates the appearance that each entity’s acquisition confers only insignificant control over the target, thereby exempting the transaction from reporting. In reality, however, the aggregate value of interests over which the PE firm obtains managerial control typically exceeds the jurisdictional thresholds. The same reasoning applies to every acquisition undertaken within the PE investment structure. As a result, when a typical PE structure acquires competing firms, such acquisitions—despite raising competitive concerns—fall outside the Act’s reporting requirements.

Using merger and filing data, we demonstrated that PE-backed acquisitions are reported at significantly lower rates than comparable public equity transactions, even after controlling for the transaction size.²¹

Agencies and lawmakers have responded to these discoveries. In 2020, the FTC issued special orders expressing concern about stealth consolidation and required major technology firms to disclose previously nonreportable acquisitions.²² Around the same time, several state legislatures established targeted notification programs designed to detect anticompetitive merger activity that falls outside federal reporting requirements.²³ In early 2024, the DOJ and the FTC jointly launched a public inquiry into

16. Furthermore, Barrios and Wollmann highlight the regulatory deterrence of public disclosure requirements and their limitations. See John M. Barrios & Thomas G. Wollmann, *A New Era of Midnight Mergers: Antitrust Risk and Investor Disclosures* (Nat’l Bureau of Econ. Rsch., Working Paper No. 29655, 2022). The authors find that regulators’ reliance on public data to identify such deals creates incentives for managers of publicly traded firms to withhold merger announcements—particularly when acquiring a competitor. *Id.* at 3.

17. Wollmann, *supra* note 3, at 79; Wollmann, *supra* note 3.

18. Greg Ip, *How “Stealth” Consolidation is Undermining Competition*, WALL ST. J. (June 19, 2019), <https://www.wsj.com/articles/how-stealth-consolidation-is-undermining-competition-11560954936>.

19. Asil et al., *supra* note 8.

20. *Id.*

21. *Id.* at 80.

22. Press Release, Fed. Trade Comm’n, Statement from Commissioner Christine S. Wilson, Joined by Commissioner Rohit Chopra (Feb. 10, 2020), <https://perma.cc/Z9QX-UWXJ>.

23. H.B. 2222, 103rd Gen. Assem. (Ill. 2023), <https://perma.cc/U7YY-6T9F>; Mark Gidley et

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potentially anticompetitive rollups. In announcing the initiative, FTC Chair Lina Khan emphasized the agency's heightened focus on stealth consolidation, stating that the FTC "will continue to scrutinize and challenge . . . stealth consolidation schemes that unlawfully undermine fair competition and harm the American public."²⁴

One likely implication of the recent focus on stealth consolidation is that, for the first time in fifty years, courts may see a surge in litigation of consummated deals.²⁵ Courts will be required to consider not only structural remedies sought by government enforcers but also treble damages pursued by private plaintiffs.²⁶ As a result, the issue of remedies in consummated deals—historically overlooked due to the relative rarity of post-acquisition litigation—is likely to receive greater attention. The remedies will also continue to determine the deterrent effect that the statutes impose on key decisionmakers.

Add-ons have also grown in size, although the vast majority still fall below the premerger notification threshold. Panel C of Figure 1 underscores the gravity of stealth consolidation in add-on acquisitions. In nearly every year between 2002 and 2022, the median transaction value of add-ons remained below the reporting threshold, making it highly unlikely that the agencies would be alerted to these deals in their incipiency. This persistent pattern raises the question of whether courts will soon encounter a wave of litigation over PE-backed consummated acquisitions. As the next subsection explains, such litigation has already begun.

II. RECENT DEVELOPMENTS

A. *FTC v. USAP*

In October 2023, the FTC filed the first rollup-based antitrust lawsuit in the U.S. history.²⁷ The agency challenged the acquisitions made by the platform company U.S.

al., *New York's Sweeping New Antitrust Bill—Requiring NY State Premerger Notification (\$9.2M Filing Threshold) and Prohibiting "Abuse of Dominance"—Inches Closer to Becoming Law*, WHITE & CASE (June 11, 2021), <https://perma.cc/DE4A-JJEA>.

24. Reed Abelson & Margot Sanger-Katz, *F.T.C. Sues Anesthesia Group Backed by Private-Equity Firm*, N.Y. TIMES, Sept. 21, 2023, <https://perma.cc/6ANG-NVQY>.
25. The sole purpose of the HSR Act is to notify federal antitrust agencies about mergers in their incipiency. The Act does not determine which mergers are lawful, and it does not guide agencies on which transactions to prosecute. As a result, mergers and acquisitions that are exempt from the HSR Act's Premerger Notification remain subject to challenge under substantive antitrust laws—such as Section 7 of the Clayton Act and Section 1 of the Sherman Act—if they reduce competition or tend to create a monopoly.
26. Section 4 of the Clayton Act allows any person "injured in his business or property by reason of anything forbidden in the antitrust laws" to sue in federal court to recover treble damages. 15 U.S.C. § 15.
27. The FTC's lawsuit against U.S. Anesthesia Partners and its private equity sponsor Welsh, Carson, Anderson & Stowe marks a groundbreaking development in federal antitrust enforcement, as it is the first to directly challenge a consummated rollup under the Clayton Act. Past landmark cases—such as *American Tobacco*, *Standard Oil*, and *Grinnell*—were brought under the Sherman Act and focused on monopolization and restraints of trade rather than mergers. In contrast, *USAP* is brought under the Clayton Act and challenges a series of consummated acquisitions. *United States v. American Tobacco*, 221 U.S. 106

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Anesthesia Partners and backed by the PE firm Welsh, Carson, Anderson & Stowe in the anesthesia markets of Houston, Dallas, and Austin, Texas.²⁸ The complaint alleges that the defendants executed a rollup, buying up nearly every large anesthesia practice in Texas to create a single dominant provider.

According to the complaint, Welsh Carson established USAP in 2012 “for the purpose of rolling up anesthesia practices in Texas” through “an aggressive strategy to consolidate practices with high market share in a few key markets.”²⁹ “At USAP’s founding in 2012, Welsh Carson owned 50.2% of the company.”³⁰ Although it sold about half of its stake in late 2017 to another PE fund, the complaint states that Welsh Carson “in its own words—maintained control over USAP ‘in all practical respects’ because it held the voting rights of almost all of the company’s other shareholders.”³¹

The complaint further asserts that USAP’s rollup substantially consolidated ownership in large metropolitan areas, with significant consequences for patients, including an estimated annual increase of tens of millions of dollars in healthcare costs Texas.³² Following these acquisitions, USAP controlled around half of the market for hospital-only anesthesia in Houston, Dallas, and Austin.³³ According to the complaint, “USAP now controls nearly 60% of hospital-only anesthesia costs statewide, and approximately 43% of cases [...] In fact, USAP is larger than the ten next-largest groups in Texas combined.”³⁴

The FTC invokes multiple antitrust statutes in challenging these rollups. It alleges that the acquisitions substantially lessened competition or tended to create a monopoly

(1911); *Standard Oil Co. of New Jersey v. United States*, 221 U.S. 1 (1911); *United States v. Grinnell*, 384 U.S. 563 (1966). Although the FTC challenged the series of completed acquisitions of competing dairy companies under Section 7 in *Beatrice*, the acquirer in that case was itself a dairy company not backed by a financial sponsor, whereas in the present case the acquisitions are backed by financial sponsors, i.e. private equity firms. In the Matter of *Beatrice Foods Co.*, 67 F.T.C. 473 (1965), <https://perma.cc/X6PA-9G2K>.

While prior enforcement actions—such as those involving Dean Foods, Dairy Farmers of America, and JAB Consumer Partners—imposed pre-acquisition notification requirements to prevent future serial acquisitions, none directly challenged a completed rollup. See Press Release, Dep’t of Justice, *Justice Department Reaches Settlement with Dean Foods Company*, Mar. 29, 2011, <https://perma.cc/6W4W-DBMM>; Press Release, U.S. Dep’t of Just., *Justice Department Requires Divestitures as Dean Foods Sells Fluid Milk Processing Plants to DFA out of Bankruptcy*, May 1, 2020, <https://perma.cc/P2DC-TA8V>; see also Press Release, Fed. Trade Comm’n, *FTC Acts to Protect Pet Owners from Private Equity Firm’s Anticompetitive Acquisition of Veterinary Services Clinics*, June 13, 2022, <https://perma.cc/Y65W-2DYJ>; Press Release, Fed. Trade Comm’n, *FTC Takes Second Action Against JAB Consumer Partners to Protect Owners from Private Equity Firm’s Rollup of Veterinary Services Clinics*, June 29, 2022, <https://perma.cc/47MV-XNYW>.

28. FTC Takes Second Action Against JAB Consumer Partners to Protect Owners from Private Equity Firm’s Rollup of Veterinary Services Clinics, *supra* note 27.

29. Complaint at 15, Fed. Trade Comm’n v. U.S. Anesthesia Partners, Inc., No. 4:23-CV-03560, 2024 (S.D. Tex. May 13, 2024), *appeal dismissed*, No. 24-20270, 2024 (5th Cir. Aug. 15, 2024).

30. *Id.*

31. *Id.* at 16.

32. *Id.* at 12.

33. *Id.* at 37, 44 & 82.

34. *Id.* at 84.

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in violation of Section 7 of the Clayton Act.³⁵ The complaint further asserts that USAP, controlled and directed by Welsh Carson, acquired and maintained monopoly power, and that USAP and Welsh Carson conspired to monopolize the market in violation of Section 2 of the Sherman Act.³⁶ Finally, the agency alleges that the rollups constituted an unfair method of competition in violation of Section 5(a) of the FTC Act.³⁷ The FTC brought the case in federal district court—the Southern District Court of Texas—under its Section 13(b) authority, which permits the agency to seek injunctive relief directly in federal court when the Commission “has reason to believe” that an entity “is violating or is about to violate” the antitrust laws.³⁸

The agency’s case against USAP remains pending.³⁹ However, the district court dismissed FTC’s complaint against the PE firm, reasoning that Section 13(b) does not authorize an action against Welsh Carson directly brought in federal court “based on long-past conduct without some evidence that the defendant ‘is’ committing or ‘is about’ to commit another violation.”⁴⁰ The court held that holding a minority stake in a company that reduces competition does not constitute actionable conduct.⁴¹

In early 2025, the FTC reached a settlement agreement with Welsh Carson, resolving a potential second antitrust case that challenged the PE firm’s role in the consolidation of anesthesia services in Texas.⁴² The FTC filed this new complaint after the Southern District of Texas granted Welsh Carson’s motion to dismiss in the initial case, while denying the motion to dismiss filed by co-defendant USAP.⁴³ Under the content decree, Welsh Carson must curtail its involvement with USAP and provide advance

35. *Id.* at 96, 99 & 101. *See also* 15 U.S.C. §18 (2024).

36. Complaint at 95, 97-98 & 100, Fed. Trade Comm’n v. U.S. Anesthesia Partners, Inc., No. 4:23-CV-03560, 2024 (S.D. Tex. May 13, 2024), *appeal dismissed*, No. 24-20270, 2024 (5th Cir. Aug. 15, 2024). Section 2 of the Sherman Act, which prohibits monopolization and attempts to monopolize, provides in relevant part: “Every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce [. . .] shall be deemed guilty of a felony.” 15 U.S.C. § 2.

37. Complaint at 99 & 101-102, Fed. Trade Comm’n v. U.S. Anesthesia Partners, Inc., No. 4:23-CV-03560, 2024 (S.D. Tex. May 13, 2024), *appeal dismissed*, No. 24-20270, 2024 (5th Cir. Aug. 15, 2024). *See also* 15 U.S.C. §45(a) (2024). The agency further challenged USAP’s fixed price billing and market division agreements under Section 1 of the Sherman Act. *See* Complaint at 103-104, Fed. Trade Comm’n v. U.S. Anesthesia Partners, Inc., No. 4:23-CV-03560, 2024 (S.D. Tex. May 13, 2024), *appeal dismissed*, No. 24-20270, 2024 (5th Cir. Aug. 15, 2024). Section 5(a) of the Federal Trade Commission Act, which prohibits “unfair methods of competition” and gives the agency authority to police anticompetitive conduct. 15 U.S.C. § 45.

38. 15 U.S.C. §53(b).

39. *Id.*

40. Fed. Trade Comm’n v. U.S. Anesthesia Partners, Inc., No. 4:23-CV-03560, 2024 (S.D. Tex. May 13, 2024), *appeal dismissed*, No. 24-20270, 2024 (5th Cir. Aug. 15, 2024).

41. *Id.* at 11.

42. Press Release, Fed. Trade Comm’n, FTC Secures Settlement with Private Equity Firm in Antitrust Roll-Up Scheme Case (Jan. 17, 2025), <https://perma.cc/HJ8T-8DPT>.

43. Fed. Trade Comm’n v. U.S. Anesthesia Partners, Inc., No. 4:23-CV-03560, 2024 (S.D. Tex. May 13, 2024) (mem. op.).

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notice to the FTC of certain future investments in anesthesia and other physician practices.⁴⁴

In two related cases, employee benefit plans and patients sued USAP and Welsh Carson for anticompetitive practices, alleging that they paid artificially high rates.⁴⁵ The District Court for the Southern District of Texas dismissed the claims against the PE firm in September 2024 and August 2025, respectively, as time-barred, while the cases against USAP continue.

Court documents redact information about market outcomes (e.g. price, quality, and quantity) and restrict attention to USAP and Texas. To provide a more comprehensive understanding of the scope and effects of rollups in anesthesia, we assembled nationwide data on market structure, price, quantity, and quality for research described in the following subsection.

B. Emerging Research

In Asil et al. (2024), we studied the competitive effects of anesthesia rollups nationwide between 2012 and 2021.⁴⁶ Our research supports the FTC's claims that USAP consolidated major Texas markets, and it identifies fifteen other rollups spread across the country, from Syracuse to Phoenix.⁴⁷ Rollups are the main force shaping market structure in these areas, driving sharp increases in concentration across all markets. Herfindahl-Hirschman Index (HHI) rose by more than 1,000 points in several cases and by as much as 2,500 points in others.⁴⁸ To illustrate the significance of this consolidation, it is worth noting that under the 2023 Merger Guidelines, a merger in a highly concentrated market—defined as a market with an HHI above 1,800—that results in an increase of more than 100 points is presumptively illegal.⁴⁹ The markets we examine, all of which were already highly concentrated, experienced increases in concentration roughly ten times greater than the threshold for the presumption of illegality. Our research also showed that anesthesia prices rose sharply after acquisitions, increasing on average, by 30-40%.⁵⁰

Finally, we developed a structural model of payor-provider bargaining and evaluated potential remedies typically employed in antitrust litigation.⁵¹ Our analysis

44. *Id.*

45. *Elec. Med. Tr. v. U.S. Anesthesia Partners, Inc.*, No. 4:23-CV-04398, 2024 LX 23997, (S.D. Tex. Sep. 27, 2024); *Musharbash v. U.S. Anesthesia Partners, Inc.*, No. 4:25-CV-00116, (S.D. Tex. Aug. 26, 2025).

46. Asil et al., *Painful Bargaining: Evidence from Anesthesia Rollups* 9 (Nat'l Bureau of Econ. Rsch., Working Paper No. 33217, Nov. 2024).

47. *Id.* at 2, 12.

48. The Herfindahl-Hirschman Index (HHI) is a widely used measure of market concentration that quantifies the distribution of market shares among firms to assess how competitive or monopolistic a market is.

49. U.S. Dep't of Justice & Fed. Trade Comm'n, *Merger Guidelines* (2023), 5-6, <https://perma.cc/6MCR-XK58>.

50. Asil et al., *supra* note 8, at 15-16.

51. *Id.* at 19-32.

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showed that unwinding these acquisitions through divestitures would generate savings to payors of about \$100 million annually across the rolled-up markets. It found additional savings of \$40 million from deterrence, as court-ordered unwinding reduces the likelihood that sponsors attempt future anesthesia rollups.⁵²

These findings beg the question of whether rollups similarly impact other markets. To precisely answer this question, we extend our analysis in this paper to observationally similar rollups across other specialties within the U.S. healthcare sector—the largest sector of the U.S. economy.⁵³

C. New Evidence

We present here novel empirical evidence showing that the problem identified by Asil et al. (2024) and litigated in *FTC v. USAP* is not confined to the anesthesia industry and is more widespread than previously recognized. We identify US healthcare markets where rollups have substantially consolidated ownership, focusing on three specialties that appear especially affected.

The biggest challenge is data. Most add-on acquisitions are missing from even the most comprehensive transaction databases due to the relatively small size of the targets and the limited reporting requirements faced by their acquirers. Additionally, when such databases enumerate the markets in which the merging parties operate, their market definitions rarely align with ones that would be accepted in antitrust litigation. Notably, agency staff encounter the same obstacles when they attempt to monitor nonreportable mergers.

We employ a dataset of U.S. clinicians and their organizational affiliations to measure concentration and identify acquisitions. This dataset allows us to document platforms, add-ons, relevant geographic and product markets, the timing of each rollup by year and month, and other practices operating in the same market.⁵⁴ We then link these acquisitions to specific PE firms and funds using data on financial sponsors

52. *Id.* at 27-29.

53. See IBISWORLD, BIGGEST INDUSTRIES BY REVENUE IN THE US IN 2025 (2025), <https://perma.cc/ZR2J-LUA7>.

54. To investigate this broader pattern, we obtain a dataset of U.S. clinicians and their organizational affiliations from the Doctors and Clinicians National File (“Physician Compare”), published by Centers for Medicare & Medicaid Services (CMS). This dataset includes each clinician’s unique identifier (i.e., their National Provider Identifier, or “NPI”), associated group practice, and affiliated facilities. We use annual snapshot of the file from 2012 through 2022. Practices may change their names and identifiers. For instance, “Anesthesia Consultants LLC” changed its name to “Anesthesia Consulting Group LLC” in 2015. As evidence that they are one and the same, all 20 clinicians associated with “Anesthesia Consultants LLC” in 2014 were associated with “Anesthesia Consulting Group LLC” in 2015. To account for this, we construct constant identifiers by assuming that if at least 80% of a practice’s clinicians appear under a different practice in the following year, then we carry forward the preceding practice’s identifier. Critically, doing so does not obscure acquisitions, since we track firms and practices separately. For example, when we observe Greater Houston Anesthesiology acquirer North Houston, we carry North Houston’s constant identifier forward but change the firm identifier.

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and firm disclosures.⁵⁵ Our analysis focuses on specialties in which rollups occurred across at least three separate, economically important geographic markets.

To assess how rollups changed market structure, we compare two trends within each market. The first, depicted by the solid blue line in Figure 2, reflects the actual evolution of market concentration over time. The second, shown as a dashed red line, estimates how concentration would have changed solely as a result of add-on acquisitions. The second measure therefore isolates the effect of rollups on market concentration from other market dynamics, such as entry, exit, and the expansion of incumbent practices. In each case, we summarize market structure using the Herfindahl-Hirschman Index (HHI)—the same measure used by the agencies to define the structural presumption of illegality in the Merger Guidelines.⁵⁶ To construct the first trend, we calculate the HHI for each market and year, and we track changes relative to the initial year shown in each figure. For the second trend, we rely on the fact that, all else equal, a merger mechanically increases HHI by twice the product of the preacquisition market shares of the target and the acquirer.⁵⁷ We apply this formula to each add-on deal and sum up the effects over time.⁵⁸

Two striking patterns emerge in graphs presented in Figure 2. First, each of these markets exhibits exceptional consolidation. For example, we observe increases in HHI on the order of 2,000 points. For context, the *Merger Guidelines* consider acquisitions that produce a 100-point increase in HHI to be presumptively anticompetitive.⁵⁹ The changes observed here are twenty times that threshold.

Second, there is a close correspondence between the actual HHI changes and those predicted based solely on the rollups. This indicates that, in all markets studied, the rollups are unambiguously the primary drivers of increased concentration. Yet, as of this writing, none of these markets has been the subject of federal antitrust

55. To track ownership changes, we rely on four primary data sources. Platform acquisitions are identified through *Pitchbook*, while add-on acquisitions are recorded using *Pitchbook*, *Becker's Hospital Review*, *Refinitiv*, and press releases issued by the PE firms and their platform companies.

56. *Merger Guidelines*, supra note 49, at 5.

57. Formally, we index markets, time, and firms by m , t , and f , respectively. We denote f 's market share by s_{smtf} , represent the set of firms in m at t using \mathcal{F}_{mt} , and define HHI_{mt} equal to $\sum_{f \in \mathcal{F}_{mt}} s_{smtf}^2$. For ease of exposition, we refer to acquired practices as targets, index them by r , and index their acquirers by $\alpha(r)$. We define ΔHHI_r equal to $2s_{m,t-1,r} s_{m,t-1,\alpha(r)}$. This measure is derived as follows. Recall that $HHI_{mt} = \sum_{f \in \mathcal{F}_{mt}} s_{smtf}^2$, and assume that acquirer $\alpha(r)$ will buy target r . Before the acquisition, their combined contribution to the market HHI is $s_{m,t-1,r}^2 + s_{m,t-1,\alpha(r)}^2$. After the acquisition, all other firms' market shares are unchanged, so the change in the market HHI reflects only the effect of the merger between the acquirer and the target. Post-acquisition, the contribution of the merged target and acquirer to the market HHI is $[s_{m,t-1,r} + s_{m,t-1,\alpha(r)}]^2$, which is equal to $s_{m,t-1,r}^2 + 2s_{m,t-1,r} s_{m,t-1,\alpha(r)} + s_{m,t-1,\alpha(r)}^2$. The difference between the pre- and post-merger contribution of the target and the acquirer is therefore $2s_{m,t-1,r} s_{m,t-1,\alpha(r)}$.

58. This measure equals the sum of ΔHHI_r over targets acquired in that market between the first and last years indicated in the plot.

59. Under the 2023 Merger Guidelines "Markets with an HHI greater than 1,800 are highly concentrated, and a change of more than 100 points is a significant increase." Every market studied in this paper satisfies the HHI-level threshold. *Merger Guidelines*, supra note 49, at 5.

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enforcement.

These findings raise important questions about the impact of such consolidation on consumers—and the adequacy of available remedies, which the next section examines.

III. DETERRENCE AND RESTITUTION IN ROLLUPS

This section analyzes a representative rollup to assess deterrence and to compare a portfolio company's assets with potential antitrust damages. For the purposes of this analysis, consider a PE fund that acquires a company, and then finances and directs that company to acquire a competitor. Both acquisitions will be partially financed by debt, which is secured by the acquired companies' assets. Since the companies are no longer in competition after the acquisition, they raise prices and increase profits once they are merged. All of these profits will be paid out as dividends to the PE fund—common practice in these scenarios.

After several years of supracompetitive pricing, private plaintiffs file an antitrust lawsuit. If successful, the court orders the divestiture of the add-on, causing prices, profits, and company valuations to revert to premerger levels. The court also imposes retrospective remedies and awards damages. The key questions are, "Can the portfolio companies pay?" and "Will future harm be deterred?"

To answer the first question, we begin by quantifying the damages. Assume that the platform and the add-on are symmetric in size, each selling 1 million units at a cost of \$1 per unit before any acquisition.⁶⁰ Based on recent research, assume the companies earn 40% profit margins prior to the merger, and raise prices by 30% afterward.⁶¹ This implies pre- and postmerger prices of \$1.67 and \$2.17 per unit, respectively. Under this scenario, each company overcharges consumers by \$500,000 annually. Since there are two portfolio companies, total overcharges equal \$1 million per year.⁶² The Clayton Act imposes a four-year statute of limitations for private actions, so we assume that consumers have been overcharged by \$4 million by the time they challenge the rollup.⁶³ Because the Act also trebles damages, consumers are owed \$12 million.

We next assess the portfolio company's ability to pay. Postmerger profits total \$2.34 million.⁶⁴ Applying an 11x valuation multiple—an industry metric that estimates a company's value as a multiple of its annual profits—per Pitchbook, the merged entity is valued at \$25.74 million.⁶⁵ With a typical 44% leverage ratio, it carries \$11.33

60. For simplicity, we further assume that there is no quantity response to the postmerger price increases—i.e. quantity sold does not change after the merger.

61. Asil et al., *Painful Bargaining: Evidence from Anesthesia Rollups*, NBER No. 33217 (Nov. 2024).

62. Consumers overpay by 50 cents per unit. Multiplying this by the 2 million units sold by the combined entity yields \$1 million in total overcharges.

63. 15 U.S.C. §15 (2024).

64. Multiplying 2 million units sold by the postmerger profit margin of \$1.17 per unit yields \$2.34 million in total profits.

65. Pitchbook, *U.S. MIDDLE MARKET PRIVATE EQUITY REPORT (2023)* (EV/EBITDA ratio is 12.6X and 11.1X for 2022 and 2023, respectively.)

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million in debt.⁶⁶ After divestiture, competition resumes between the portfolio companies, reducing their total profit to \$1.34 million and combined value to \$14.74 million.⁶⁷ Assuming joint liability for damages, the unencumbered assets of the portfolio companies total \$3.41 million.⁶⁸

Based on this analysis, consumers are owed \$12 million, but the portfolio companies' assets total only \$3.41 million. The assets fall far short of covering the statutorily owed damages. As a result, antitrust plaintiffs are unlikely to recover what they are owed from a typical roll-up.

In fact, the problem is more severe than this example suggests. First, the target's preacquisition valuation in the original example was \$7 million.⁶⁹ Yet, acquisitions of targets worth up to \$126.4 million—over 17 times larger—are exempt from the Premerger Notification Program.⁷⁰ Scaling the damages and the asset shortfall accordingly yields that unreviewed rollups could result in up to \$206 million in damages and asset shortfalls as high as \$78 million.⁷¹

Second, recall that we assumed a single add-on for simplicity. In reality, rollups typically involve multiple add-ons, implying greater damages and a higher risk of asset shortfalls. For instance, if the PE fund directed and finances the acquisition of three competitors instead of just one, then total available assets, damages, and the shortfall would be \$6.82 million, \$16 million, and \$9.18 million, respectively.⁷²

However, if the PE fund were liable, the fund and the companies would be able

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66. *Id.* (“The average debt/value ratio for new jumbo loans backing LBOs and financed in the broadly syndicated market plunged to 44.1% in 2023, down from 50.8% in 2022.”). Multiplying 2 million units sold by the post-divestiture profit margin of \$0.67 per unit yields \$1.34 million in total profits. Multiplying \$1.34 million in profits with 11 results in \$14.74 million in combined value.
67. After divestiture, the companies revert to their pre-merger pricing. Each firm earns \$0.67 in profit per unit sold and sells 1 million units yielding combined profits of \$1.34 million. Applying a valuation multiple of 11, their total value is estimated at \$14.74 million.
68. For simplicity, we assume that the companies do not pay interest on their debt.
69. Before the acquisition, each firm earns \$0.67 in profit per unit sold and sells 1 million units. Applying a valuation multiple of 11, the preacquisition value of a firm equals \$7.37 million.
70. Revised Jurisdictional Thresholds for Section 7A of the Clayton Act, 90 Fed. Reg. 7,697 (Feb. 21, 2025), <https://perma.cc/FM7S-JVEB>. See also Fed. Trade Comm’n, *New HSR Threshold and Filing Fees for 2025* (Feb. 6, 2025), <https://perma.cc/56A5-55VD>.
71. Under the assumption of symmetry between the platform and the add-on, the add-on’s premerger value in the original stylized example was \$7.37 million. Because the Hart-Scott-Rodino Act Premerger Notification Program exempts acquisitions of targets up to 17 times larger, scaling the damages and the asset shortfall by this factor yields \$206 million and \$147.51 million, respectively. This assumes that the target is acquired at its premerger value. In practice, however, transaction prices reflect bargaining between the buyer and the seller, with the purchase price often incorporating some of the expected postmerger gains. If the buyer and the seller split the gains evenly, the purchase price would approximate the average of pre- and postmerger valuations—about \$10 million. Since a rollup with a \$10 million target falls \$8.59 million short in assets relative to damages, exempt acquisitions can produce asset shortfalls of up to \$108.6 million.
72. Because a rollup with three add-ons involves four portfolio companies, the values are derived by doubling those in the original stylized example, which involved two.

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to pay the statutory damages. The shortfall the fund must cover is \$8.59 million.⁷³ By assumption, the fund owned the portfolio companies for at least four years, over which time they earned \$2.34 million annually. In total, they earned at least \$9.36 million, which was paid out to the fund in the form of periodic dividends. Additionally, the fund extracted another \$4.84 million from the portfolio companies in the form of a one-time dividend when it leveraged them.⁷⁴ Abstracting away from logistical issues that arise from clawbacks, both the \$9.36 million and \$4.84 million are available to cover the aforementioned shortfall.

To answer the second question, we study deterrence by comparing the PE fund's expected profits with and without fund liability. To do so, we calculate profits in three relevant scenarios: (1) the rollup is not detected; (2) the roll-up is detected and successfully litigated, but the fund is not held liable; and (3) the roll-up is detected, successfully litigated, and the fund is held liable. After quantifying these profits for a representative rollup, we assume that one out of every three rollups is detected by plaintiffs and successfully litigated. We then compute the fund's expected profits with and without liability.⁷⁵

First, we calculate the fund's profits if the rollup is not detected. The private equity firm invests \$14.74 million in total in the two entities.⁷⁶ In the absence of litigation, the two portfolio companies continue operating as a merged entity, generating \$2.34 million in annual profits.⁷⁷ These profits imply a valuation of \$25.74 million for the merged entity.⁷⁸ The PE firm captures the difference between its initial investment and the value of the merged entity, yielding profits of \$11 million from the rollup if it is not detected.⁷⁹

Second, we calculate the fund's profits if the rollup is detected but the fund is not held liable. In this scenario, the fund earns profit from the merged entity only during

73. Consumers are owed \$12 million, but the portfolio companies' assets total only \$3.41 million, creating a shortfall of \$8.59 million. *See supra* p. 79.

74. The fund acquires the portfolio companies at 11 times their premerger profit for a total of \$14.74 million. It employs leverage of 44%, or \$6.49 million, and pays the remainder in cash. As soon as both transactions are complete, it refinances the debt, increasing the leverage to \$11.33 million, or 44% of the merged entity's value. The difference, \$4.84 million, is paid out to the fund in the form of a one-time dividend.

75. We assume that one in three rollups is uncovered by plaintiffs and successfully litigated. This assumption is motivated by the treble-damages provision in Section 4 of the Clayton Act. Treble damages can be understood as a mechanism for offsetting imperfect detection: if only one out of three antitrust violations is detected and successfully litigated, trebling damages ensures that expected liability equals single damages on average.

76. This value includes both debt and equity. *See supra* p. 79. Because the amount of remains unchanged, it cancels out when calculating the difference between the post-merger valuation and premerger total investment. For this reason, we do not deduct it from the premerger investment.

77. Valuation is found by multiplying annual profits with the 11x valuation multiplier. *See supra* note 66.

78. *See supra* p. 78.

79. The PE firm's final profit from its investment in the rollup is equal to the difference between the final value of the merged portfolio companies and the PE firm's initial equity investment in these companies: \$25.74 million - \$14.74 million = \$11 million.

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the four-year period preceding the lawsuit and divestiture. With annual profits of \$2.34 million, the PE fund's total profit from the rollup over this period equals \$9.36 million.⁸⁰ The PE fund invests \$8.25 million in equity before the merger.⁸¹ Subtracting this initial equity investment yields net profit of \$1.11 million for the PE fund in the event of a successful lawsuit without fund liability.

Having calculated the fund's profits in the absence of litigation and in the event of litigation without fund liability, we can now compute the fund's expected profits when antitrust law imposes no liability on the fund. We assume that one in every three rollups is detected and successfully litigated.⁸² Under this assumption, the PE fund's expected profit from the rollup in the absence of fund liability equals \$7.77 million.⁸³

We now turn to assessing the fund's expected profits when liability is imposed on the fund. To do so, we calculate the fund's profits in the event of successful litigation in which the court finds the fund liable. Under this scenario, the fund earns \$9.36 million in profits, is required to pay \$8.59 million in damages not covered by the portfolio companies' assets, and loses its initial equity investment of \$8.25 million.⁸⁴ Hence, the fund loses \$7.48 million under this scenario.⁸⁵ Accounting for a one-in-three probability of detection and successful litigation, we conclude that the PE fund's expected profit from the rollup under fund liability is \$4.91 million.⁸⁶

Accordingly, if the fund is not held liable, its expected profit from the rollup equals \$7.77 million. If the fund is held liable, then this figure equals \$4.91 million. As a result, imposing liability reduces the fund's expected profit by 37%.

The takeaway from this analysis is clear. Whether antitrust law provides sufficient deterrence and whether statutorily owed damages are paid depends critically on whether PE funds are held liable. The remainder of the paper is devoted to answering this question.

80. For simplicity, we abstract from the time value of money and do not discount future profits. After the merger, the portfolio companies jointly generate annual profits of \$2.34 million. Assuming the joint entity operates for four years, total profits equal \$9.36 million. *See* p. 80.

81. The post-merger value of the two portfolio companies is \$14.74 million. Assuming a leverage ratio of 44%, equity represents 56% of the combined entity, amounting to \$8.25 million.

82. *See supra* p. 80.

83. The expected profit is calculated as $(0.333 \times \$1.1 \text{ million}) + (0.667 \times \$11.1 \text{ million}) = \7.77 million .

84. For profits, *see supra* note 80. To calculate fund's damages liability, we note that the total damages amount to \$12 million, of which only \$3.41 million is covered by the portfolio companies' assets. *See supra* p. 79. The fund is therefore liable for the remaining \$8.59 million.

85. The fund's profits in the event of successful litigation with fund liability equal the difference between profit (an inflow), and the sum of the initial equity investment and damages (outflows): $\$9.36 \text{ million} - 8.59 \text{ million} - 8.25 \text{ million} = -7.48 \text{ million}$. The negative profit simply reflects the loss of the fund's initial equity investment; it does not imply that damages are paid using the fund's non-rollup related assets.

86. The expected profit is calculated as $(0.333 \times -\$7.48 \text{ million}) + (0.667 \times \$11.1 \text{ million}) = \4.91 million .

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IV. PARTICIPATORY LIABILITY

A PE fund may be held liable for its role in an anticompetitive rollup—a concept we refer to here as “participatory liability.” This form of liability can arise under four distinct statutory avenues, which we examine in detail below.

A. Use of Ownership

Conceptually, when funds rollup ownership, they use their ownership in platforms to reduce competition. However, Section 7 states that

No person shall acquire, directly or indirectly, the whole or any part of the stock [...] where [...] the effect of such acquisition [...] or *of the use of such stock* by the voting or granting of proxies or otherwise, may be substantially to lessen competition, or to tend to create a monopoly.⁸⁷

Accordingly, the statute prohibits an entity from “using its ownership” in another to restrict competition. As a result, Section 7 of the Clayton Act imposes antitrust liability on a fund that initiates and finances a rollup.

Four natural objections to this application may arise. First, defendants may invoke Section 7’s “investment-only” exemption, which immunizes acquisitions made solely for investment purposes.⁸⁸ To qualify, the acquirer must refrain from “using the [stock] by voting or otherwise to bring about, or in attempting to bring about, the substantial lessening of competition.”⁸⁹ Thus, it protects passive investors who do not contribute to the anticompetitive activity.

However, as the Supreme Court held in *Du Pont*, the investment-only exemption does not shield investors who deploy their stake to harm competition.⁹⁰ Even a purchase made solely for investment falls within the statute’s purview if any subsequent

87. 15 U.S.C. §18 (2024) (emphasis added).

88. “This section shall not apply to persons purchasing such stock solely for investment and not using the same by voting or otherwise to bring about, or in attempting to bring about, the substantial lessening of competition.” *Id.* See also *United States v. Tracinda Inv. Corp.*, 477 F. Supp. 1093, 1102 (C.D. Cal. 1979) (allowing partial acquisition because it was “squarely within the investment exemption and thus no violation of Section 7 of the Clayton Act can be shown”); *Anaconda Co. v. Crane Co.*, 411 F. Supp. 1210, 1216, 1218–19 (S.D.N.Y. 1975) (granting the passive investor exemption to the acquisition, as the acquirer agreed abstain from voting its shares for anticompetitive purposes).

89. *United States v. E. I. Du Pont de Nemours & Co.*, 353 U.S. 586, 590 (1957).

90. In that case, the Department of Justice accused Du Pont, a supplier of automotive finishes and fabrics, of acquiring and employing its 23% ownership in General Motors (GM), a major automobile manufacturer, to exclude other GM suppliers. The defendants argued that the “Government could not maintain this action [...] because §7 is applicable only to the acquisition of stock and not to the holding or subsequent use of the stock.” *Id.* at 598. The Supreme Court rejected this argument, stating that “this argument misconceives the objective toward which §7 is directed.” *Id.* at 597. It held that Du Pont violated Section 7 by using its ownership stake in GM to insulate a large portion of GM’s market from free competition, creating a significant likelihood of monopolization.

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use of the ownership produces anticompetitive effects.⁹¹ As the Court explained, “[e]ven when the purchase is solely for investment, the plain language of §7 contemplates an action at any time the stock is used to bring about, or in attempting to bring about, the substantial lessening of competition.”⁹² In other words, any use of the stock beyond passive investment at any time falls within the statute’s scope and can result in liability. Active uses—such as seeking board representation, influencing management or purchasing decisions, acquiring or attempting to acquire control of the target company, or cultivating close ties with the target—therefore trigger liability.⁹³

A PE fund’s active involvement in a rollup can place its acquisition outside the scope of the exemption. In cases before the courts, parties have alleged facts that, if proven, could suggest such involvement. For example, according to the FTC, “Welsh Carson created USAP to execute [a] consolidation strategy,” employed one of its partners to act as “USAP’s chief negotiator [in a] market allocation agreement” with a competitor, committed “\$1-\$2 million to set-up shop, develop a market roadmap, and diligence acquisition candidates,” and even hired a consulting firm “to develop a methodology for identifying attractive regions for acquisitions and practice groups in each region.”⁹⁴ It was Welsh Carson, along with USAP’s precursor New Day, that “submitted a formal Letter of Intent to acquire [the largest anesthesia physician practice group in greater Houston].”⁹⁵ After the first acquisition in Houston, USAP’s CEO and a Welsh Carson director on USAP’s board met with a Welsh Carson team “to develop an acquisition strategy and discuss potential targets.”⁹⁶ Such alleged hands-on involvement, if established, could fall outside Section 7’s narrowly construed investment-only

91. *Id.* at 597-98.

92. *Id.*

93. See *Swift & Co. v. FTC*, 8 F.2d 595, 599 (7th Cir. 1925), rev’d on other grounds, 272 U.S. 554 (1926) (it would be “difficult to conceive of any case where one corporation purchased all of the stock of its competitor solely for investment”). *Crane Co. v. Harsco Corp.*, 509 F. Supp. 115, 123 (D. Del. 1981) (“The issue controlling the applicability of the investment exemption, then, is the likelihood that the acquisition would allow the offeror to influence significantly or control management of the target firm. In the instant case, Crane’s interest in Harsco will be slightly larger than 20%. The Court holds that there is a substantial likelihood that with a 20% interest, Crane may have significant influence over Harsco.”); *United States v. Wilson Sporting Goods Co.*, 288 F. Supp. 543, 556 (N.D. Ill. 1968) (“The merger cannot be defended as a mere ‘investment; once it appears that the acquiring company intends to vote its stock and exercise control.”). Moreover, some scholars contend that certain market structures warrant an even narrower construal of the investment-only exemption. For example, Professors Areeda and Hovenkamp in their eminent treatise say, “[the investment-only exemption] must be qualified by evidence indicating that structural cross-ownership, where a small number of investors own significant stock in competing corporations, can lead to higher prices even if the shareholders behave passively.” PHILLIP AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION §1204 (3d ed. 2012).

94. Complaint, *Fed. Trade Comm’n v. U.S. Anesthesia Partners, Inc.*, No. 4:23-CV-03560, at 2 (S.D. Tex. May 13, 2024), appeal dismissed, No. 24-20270 (5th Cir. Aug. 15, 2024). *Id.* at 4 (“Welsh Carson partner [. . .] acted as USAP’s chief negotiator [in a] market allocation agreement” with a competitor.”); *Id.* at 27.

95. *Id.* at 29.

96. *Id.* at 31.

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exemption.

Is this level of involvement unique to Welsh Carson? Certainly not. All major PE firms boast about how closely they are involved in the management of their portfolio companies.⁹⁷ Blackstone champions its role as a collaborative partner, stating “[a]s partners to our portfolio companies, we provide both empathy and experience as we help our companies create and accelerate value.”⁹⁸ Kohlberg, Kravis, Roberts (KKR) similarly asserts that “[t]he companies we invest in benefit from more than just our capital.”⁹⁹ It adds “[a]s trusted partners, we aim to help them achieve operational excellence and provide expertise across a variety of industries and markets.”¹⁰⁰ EQT states, “[it] invests in good companies across the world with a mission to help them develop into even greater companies. By providing access to ownership skills and operational expertise, EQT can help portfolio companies grow and prosper, both under EQT’s ownership and with future owners.”¹⁰¹ Carlyle highlights its “experienced investment team that brings the full resources of Carlyle’s global platform to each of [its] portfolio companies, supporting their growth through bespoke value creation plans that leverage [Carlyle’s] global network and deep industry expertise.”¹⁰² Thoma Bravo states, “[o]ur investment philosophy is centered around working collaboratively with existing management teams [...] we execute through a partnership-driven approach supported by a set of management principles, operating metrics and business processes. We support our companies by investing in growth initiatives and strategic acquisitions.”¹⁰³ Vista Equity Partners “provide financial capital and *operational strategies* to build better businesses, drive digital innovation, and deliver high and consistent returns to our investors.”¹⁰⁴ Together, these commitments illustrate why the investment-only exemption may not shield PE funds.

Second, funds may object on the ground that their stakes are only partial. Generally, greater equity shares imply greater control. Indeed, Philip Areeda and Donald Turner observe, “a noncontrolling acquisition has no intrinsic threat to competition at all.”¹⁰⁵ Yet, as Steve Salop and Daniel O’Brien caution, “this intuition is not always correct.”¹⁰⁶ They note that “one generally assumes that the larger the acquiring firm’s

97. *Private Equity International*, a global provider of insights and data for the PE industry, ranks the largest PE firms worldwide, all of which highlight their hands-on involvement. *PEI 300: The World’s Largest Private Equity Firms*, PRIVATE EQUITY INTERNATIONAL (June 2, 2025), <https://perma.cc/QQ83-C6QA>.

98. *Blackstone Operating Team*, BLACKSTONE, <https://perma.cc/C8RG-EKYP> (last visited Mar. 25, 2025).

99. *About*, KKR, <https://www.kkr.com/about> (last visited Mar. 25, 2025).

100. *Id.*

101. *Playbook*, EQT GROUP, <https://perma.cc/Y65W-C77D> (last visited Mar. 25, 2025).

102. *Global Private Equity*, CARLYLE, <https://www.carlyle.com/our-firm/global-private-equity> (last visited Mar. 25, 2025).

103. *About Us*, THOMA BRAVO, <https://perma.cc/62HZ-UY9R> (last visited Mar. 25, 2025).

104. *Our Private Equity Approach*, VISTA EQUITY PARTNERS, <https://perma.cc/RBD6-GATY> (last visited Mar. 25, 2025).

105. 5 PHILLIP AREEDA & DONALD F. TURNER, ANTITRUST LAW ¶ 1203d, at 322 (1980).

106. Steve Salop & Daniel O’Brien, *Competitive Effects of Partial Ownership: Financial Interest and*

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financial interest in the acquired firm the greater its degree of control will be. However, this relationship is not immutable. The degree of control obviously also is related to the structure of the financial interests of the other owners."¹⁰⁷

Salop and O'Brien find that in horizontal ownership structures, "partial investments can raise either larger or smaller concerns than complete merger."¹⁰⁸ "This may seem surprising," they explain, "since a partial acquisition would appear to align the parties' interests less in all cases than would a complete merger."¹⁰⁹ The authors distinguish between two aspects of partial ownership: financial interest, which refers to "the right to receive the stream of profits generated by the firm from its operations," and corporate control, which "refers to the right to make the decisions that affect the firm."¹¹⁰ In brief, they conclude that "if the acquiring firm has no [corporate] control or influence over the rival, the acquired firm, that rival's incentives to compete may be unaffected. However, if the acquiring firm also has [corporate] control over the rival, then the rival's incentives to compete are affected."¹¹¹

Indeed, partial ownership—both in the horizontal context and more broadly—can grant acquirers substantial influence over a target's managers and competitive strategy. The Supreme Court has recognized that these acquisitions can violate Section 7 of the Clayton Act. In *Du Pont*, the Court held that the company's 23% stake in GM was used to restrain trade in GM's input market, violating the statute. This principle was reaffirmed in *Rio Grande*, where the Court stated that "[a] company need not acquire control of another to violate [Section 7 of the] Clayton Act."¹¹² Accordingly, a PE fund with only partial ownership can still face Section 7 liability if it uses that stake to facilitate anticompetitive acquisitions.

Third, funds may argue that they cannot harm competition because they do not operate in the markets of their portfolio companies. However, the Supreme Court in *Du Pont* held that,

[Section] 7 [...] plainly is framed to reach not only the corporate acquisition of stock of a competing corporation, [...], but also the corporate acquisition of stock of any corporation, competitor or not, where the effect may be either (1) to restrain commerce in any section or community, or (2) tend to create a monopoly in any line of commerce.¹¹³

Corporate Control, 67 ANTITRUST L. J. 559, 562 (2000) ("partial investments can raise either larger or smaller concerns than complete mergers.").

107. *Id.* at 577.

108. *Id.* at 322.

109. *Id.*

110. *Id.* at 569.

111. *Id.* at 571.

112. In this case, the Interstate Commerce Commission had deferred consideration of the Clayton Act implications of an agreement between a railway express agency and an express bus company for the purchase of 40% of the railway's outstanding stock. *Denver & R. G. W. R. Co. v. United States*, 387 U.S. 485 (1967). *Id.* at 501.

113. *E. I. Du Pont De Nemours & Co.*, 353 U.S. at 590.

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This broad reading reflects a key change introduced by the Celler-Kefauver Act, which extended Section 7's prohibition of acquisitions between competitors to any acquisition that may harm competition, regardless of whether the parties compete.¹¹⁴ Applied to rollups, a PE fund's lack of direct operational presence in its portfolio companies' markets does not shield it from liability under Section 7, provided the other doctrinal requirements are satisfied.

Finally, PE funds may argue that the passage of time between the acquisition and the alleged harm negates any liability under Section 7. However, the *Du Pont* Court rejected this timing-based defense, holding that Section 7 applies to the anticompetitive use of ownership, regardless of when that use occurs. The Court explained that "[the] aim [of Section 7] was primarily to arrest apprehended consequences of inter corporate relationships before those relationships could work their evil, which may be at or *any time after* the acquisition, depending upon the circumstances of the particular case."¹¹⁵ Philip Areeda and Herbert Hovenkamp reinforce this view, stating that "the continued holding of stock violates §7 if a current acquisition would do so. This conclusion is clearest when the anticompetitive threat results from subsequent active use of the acquired stock."¹¹⁶ Thus, if a PE fund later directs its portfolio company to pursue anticompetitive add-on acquisitions, it would be liable under Section 7—even if that conduct occurs years after the initial investment.

B. Indirect Acquisition

A rollup can also be conceptualized as the fund's direct acquisition of a platform company and, through that platform, its indirect acquisition of add-ons. However,

114. Section 7 of the Clayton Act as passed in 1914 bans acquisitions "that may [. . .] substantially lessen competition between the corporation whose stock is so acquired and the corporation making the acquisition." 38. Stat. 731 (1914). In their report on the Celler-Kefauver Act, the House Committee states, "[b]ecause section 7, as passed in 1914, prohibited, among other things, acquisitions which substantially lessened competition between acquiring and the acquired firms, it has been thought by some that this legislation applies only to the so-called horizontal mergers. But in the proposed bill [. . .] the test of the effect on competition between the acquiring and the acquired firm has been eliminated. [A] reason [for the bill] [. . .] is to make it clear that the bill applies to all types of mergers and acquisitions, vertical and conglomerate as well as horizontal, which have the specified effects of substantially lessening competition or tending to create a monopoly." H. R. Rep. No. 1191, 81st Cong., 1st Sess. (1949). As Gordon Hampton states, "in the first thirty-five years of the administration of the Act, not once did the Government, either through the Federal Trade Commission or the Department of Justice, urge the application of Section 7 in a vertical or a conglomerate context. Indeed, as late as 1955, the FTC specifically declared that the original version of Section 7 applied only to horizontal acquisitions, although it then asserted that the Celler-Kefauver amendment had broadened the Act's application to both verticals and conglomerates." Gordon F. Hampton, *The Merger Movement in Historic Perspective: A Lawyer's View*, 25 BUS. L. 653, 655 (1970) (citing *F.T.C. Report on Corporate Mergers and Acquisitions*, H.R. Doc. No. 169, 84th Cong., 1st Sess. 168 (1955)).

115. *E. I. Du Pont de Nemours & Co.*, 353 U.S. at 597.

116. PHILLIP AREEDA & HERBERT HOVENKAMP, *ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION* §1204 (3d ed. 2012).

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Section 7 of the Clayton Act prohibits an entity from “acquir[ing], directly or *indirectly*, ... where ... the effect of such acquisition may be substantially to lessen competition, or tend to create a monopoly.”¹¹⁷ The House Committee Report on the Celler-Kefauver Act of 1950—which amended Section 7—clarified that this prohibition extends to “not only direct acquisitions but also indirect acquisitions, whether through a subsidiary or an affiliate or otherwise.”¹¹⁸ The Supreme Court later cited this language in *Philadelphia National Bank* in 1963.¹¹⁹

That the fund can incur Section 7 liability for its indirect acquisition of an add-on is further supported by *Community Publishers v. Donrey*, the most instructive case on indirect acquisitions.¹²⁰ In that case, Donrey, a business entity, owned a local newspaper in Arkansas. Its investors formed a separate entity, NAT, to acquire a competing newspaper. According to the decision, one reason for creating a new business entity was that Donrey’s Chairman, Assistant Chairman, President, CFO, and COO “were all aware of the possibility that antitrust laws might apply to a Donrey acquisition of the *Times* [the competing newspaper], including the possibility that they might have to file a notice with the Federal Trade Commission under the Hart-Scott-Rodino Act to get a transaction approved under the antitrust laws.”¹²¹

Donrey moved to dismiss the case, arguing that the complaint failed to state a claim against it. The central issue before the court was whether Donrey had indirectly acquired the competing newspaper. Acknowledging the novelty of the issue, the court observed, “the court can find no precedent with identical facts.”¹²² It then held that the plaintiff had stated a valid claim under Section 7 concerning Donrey’s alleged indirect acquisition of the competing newspaper. Referring to the House Committee Report discussed above, the District Court explained,

The inclusion of the catch-all phrase “or otherwise” in the legislative history is very telling, as it indicates that the term “indirectly” must be broadly interpreted, lest persons and firms manipulate corporate structures in order to avoid the appearance of direct acquisition. This case provides a perfect example of the fluidity of corporate forms and the potential dangers they present [...] [T]he term “directly or

117. 15 U.S.C. §18 (2024).

118. Indirect acquisitions were addressed in the original Section 7 of the Clayton Act of 1914, 38 Stat. 731 (1914) (“That no corporation engaged in commerce shall acquire, directly or *indirectly*, the whole or any part of the stock or other share of another corporation engaged also in commerce where the effect of such acquisition may be to substantially lessen competition between the corporation whose stock is so acquired and the corporation making the acquisition or to restrain such commerce in any section or community, or tend to create a monopoly of any line of commerce.”). However, the House Committee Report on Celler-Kefauver Act of 1950 further clarifies the scope of the statute. See H. R. Rep. No. 1191, 81st Cong., 1st Sess. (1949). See also *United States v. Philadelphia Nat. Bank*, 374 U.S. 321, 346 (1963).

119. *Philadelphia Nat. Bank*, 374 U.S. at 346.

120. *Community Publishers, Inc. v. Donrey Corp.*, 882 F. Supp. 138 (W.D. Ark. 1995).

121. *Id.* at 140.

122. *Id.*

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indirectly” should be interpreted as broadly as necessary to accomplish the purposes of antitrust laws.¹²³

In other words, consistent with our reasoning, the District Court interpreted “indirect acquisitions” broadly.

In a rollup, the fund’s ownership in the platform makes the platform its subsidiary or affiliate.¹²⁴ Given Congress’s broad language— “a subsidiary or an affiliate or otherwise”—this relationship falls within the scope of Section 7. As such, acquisitions by the platform can be attributed to the fund as indirect acquisitions.

Based on this reasoning, we respectfully disagree with the *USAP* Court’s conclusion that the Welsh Carson fund was not liable as an indirect acquirer. The Court, we contend, erred in holding that partial indirect acquisitions fall outside the scope of Section 7:

The FTC has not cited a case in which a minority, noncontrolling investor—however hands-on—is liable under Section 13(b) because the company it partially owned made anticompetitive acquisitions. Such construal of Sections 7 and 13(b) would expand [...] liability to minority investors whose subsidiaries reduce competition. This Court will not adopt this novel interpretation.¹²⁵

In doing so, the Court erroneously limited *Du Pont* to direct acquisitions, finding it inapplicable due to differences in ownership structure: “The differences between *Du Pont* and the present case, though, are that *Du Pont* involved a direct acquisition, [...] and *Du Pont* did not involve a defendant with a minority, noncontrolling stake in the purchasing entity.”¹²⁶ However, nothing in the language of Section 7 supports a distinction between direct and indirect acquisitions, nor does it suggest that ownership percentage governs applicability. Consistent with the statute’s text and broad scope, the Supreme Court in *Du Pont* found Section 7 liability for partial owners without restricting its reasoning to direct acquirers. As that Court explained,

123. *Id.* at 140-141.

124. As detailed in the previous subsection, partial acquisitions violate Section 7 if they are anticompetitive. Therefore, we disregard the percentage of ownership in this subsection, as it does not affect the legal conclusions. *See supra* Section IV Subsection A.

125. Fed. Trade Comm’n v. U.S. Anesthesia Partners, Inc., No. 4:23-CV-03560, 2024 WL 2137649, at *12-13. (S.D. Tex. May 13, 2024), *appeal dismissed*, No. 24-20270, 2024 (5th Cir. Aug. 15, 2024). The *USAP* court noted that the Federal Trade Commission had filed the case under its Section 13(b) authority, which allows the agency to seek an injunction in district court for ongoing or imminent antitrust violations without a concurrent administrative proceeding. As the scope of the FTC’s Section 13(b) authority is beyond the purview of this article and was addressed in the Supreme Court’s unanimous *AMG Capital Management* decision in 2021, we do not address that issue. *See* *AMG Cap. Mgmt., LLC v. Fed. Trade Comm’n*, 593 U.S. 67 (2021).

126. *FTC v. U.S. Anesthesia Partners, Inc.*, 2024 WL 2137649, at *4 (S.D. Tex. May 13, 2024), *appeal dismissed*, No. 24-20270, 2024 (5th Cir. Aug. 15, 2024).

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Section 7 is designed [...] to arrest in their incipency restraints or monopolies in a relevant market which, as a reasonable probability, appear at the time of suit likely to result from the acquisition by one corporation of *all or any part* of the stock of any other corporation."¹²⁷

Notably, the Supreme Court did not confine its reasoning to direct acquisitions or exclude indirect acquisitions from its holding. This is especially significant given that the statute—cited and extensively analyzed in *Du Pont*—has expressly recognized the potential for anticompetitive *indirect* acquisitions since its enactment in 1914.

Furthermore, the *USAP* Court's concern about overreach toward minority investors conflicts with the statute's text. As previously discussed, the statute explicitly exempts passive investors: "[Section 7] shall not apply to persons purchasing such stock solely for investment and not using the same by voting or otherwise to bring about, or in attempting to bring about, the substantial lessening of competition."¹²⁸ This exemption adequately protects minority investors who do not engage in their companies' anticompetitive conduct. At the same time, its narrow scope underscores Congress's intent: only those purchasing solely for investment are excluded. Any ownership stake that ventures beyond passive investment, therefore, falls within Section 7's purview. Thus, the *USAP* court's concern for minority investors is misplaced, and its reluctance to apply the statute's broad language is inconsistent with the statutory text itself.

The *USAP* Court also appears to have misinterpreted key facts of *Donrey*. For one, it summarized *Donrey* as holding that "Section 7 applied to a parent company that acquired stock through its subsidiarity [sic]," distinguishing on the grounds that "the parent and subsidiary had 'substantially overlapping ownership.'"¹²⁹ This is inaccurate. In *Donrey*, the indirect acquirer held no ownership stake in the direct acquirer. The two were not parent and subsidiary but distinct businesses linked only through common investors.

For another, the *USAP* Court described *Donrey*'s ownership structure as follows: "99% of the parent stock was owned by an entity called "SGL," which was owned entirely by a *family trust*. The subsidiary, meanwhile, was owned 95.5% by the very same *family trusts*."¹³⁰ This is also inaccurate. *Donrey* involved separate trusts for different family members, not a single unified trust. The *Donrey* court emphasized this point: "Although there is no common parent in the sense of a single legal entity that owns both subsidiaries, there is certainly a claim concerning whether or not *Donrey* and *NAT* are affiliated corporations."¹³¹

This distinction matters. At the time of the *USAP* decision, *Donrey* was the only precedent, to the best of our knowledge, addressing partial indirect acquisitions. The *USAP* Court declined to apply it based on perceived differences in ownership

127. E. I. Du Pont De Nemours & Co., 353 U.S. at 590.

128. 15 U.S.C. § 18 (2024).

129. *FTC v. U.S. Anesthesia Partners, Inc.*, 2024 WL 2137649, at *5 (S.D. Tex. May 13, 2024), *appeal dismissed*, No. 24-20270, 2024 (5th Cir. Aug. 15, 2024).

130. *Id.*

131. *Community Publishers, Inc. v. Donrey Corp.*, 882 F. Supp. 138, 140 (W.D. Ark. 1995).

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structure. Yet, *Donrey* did not involve a single investor with complete ownership of the operating company. In fact, the individual investors in *Donrey* held *smaller* stakes than Welsh Carson did in *USAP*. And unlike in *USAP*, the indirect acquirer in *Donrey* had *no* ownership in the direct acquirer. Accordingly, *Donrey* supports the view that partial indirect acquisitions fall within Section 7. The *USAP* Court's effort to distinguish it is unpersuasive.

Finally, the *USAP* Court misapplied *Donrey's* reasoning. It relied on formalistic distinctions in investment structure—emphasizing the ownership percentage—to draw a line between the cases. But *Donrey* explicitly rejected such formalism. The decision looked to economic substance, not corporate form, asking whether the acquisition eliminated independent economic units—consistent with antitrust law's primary objective of protecting competition. As *Donrey* explained, “[i]n varying contexts, the courts have refused to take a formalistic approach to corporate structures in order to effectively implement the antitrust laws [...] [F]ormal corporate structures should not be used as a tool to flout the antitrust laws.”¹³²

C. Section 7 Liability under *Copperweld*

Funds can also incur liability through a novel yet logical extension of the *Copperweld* doctrine. In its 1984 *Copperweld* decision, the Supreme Court held that a parent company and its wholly owned subsidiary could not conspire in violation of Section 1 because they constituted a “single entity” with unified economic interests.¹³³ Subsequent case law has extended this defense to parent companies with majority ownership of a subsidiary, though courts differ on the precise ownership threshold required for *Copperweld* protection.¹³⁴ In *American Needle*, the Supreme Court clarified that courts must look to the “competitive reality” of the arrangement and ask whether the challenged agreement joins independent centers of decision-making.¹³⁵

132. *Id.* at 140-42.

133. *Copperweld Corp. v. Indep. Tube Corp.*, 467 U.S. 752, 771 (1984) (“A parent and its wholly owned subsidiary have a complete unity of interest. Their objectives are common, not disparate; their general corporate actions are guided or determined not by two separate corporate consciousnesses, but one [. . .] If a parent and a wholly owned subsidiary do “agree” to a course of action, there is no sudden joining of economic resources that had previously served different interests.”)

134. See *Lenox MacLaren Surgical Corp. v. Medtronic, Inc.*, 847 F.3d 1221, 1239 (10th Cir. 2017) (“The question of what must be shown in order to hold a particular affiliated corporation liable as part of an inter-corporate scheme appears to be uncharted territory at the federal circuit level.”); *Arandell Corp. v. Centerpoint Energy Services, Inc.*, 900 F.3d 623, 630 (9th Cir. 2018) (“Although the Plaintiffs’ application of the principles laid out in *Copperweld* is novel, we must agree.”); *Siegel Transfer, Inc. v. Carrier Express, Inc.*, 54 F.3d 1125, 1133 & n.7 (3d Cir. 1995) (99.2% control was de minimis difference) (citing cases holding that as much as 80% control was considered a de minimis deviation from 100%). See also Harry S. Davis, Michael E. Swartz & Matthew S. Wild, *Private Equity Groups under Common Legal Control Constitute a Single Enterprise under the Antitrust Laws*, 3 N.Y.U. J.L. & BUS. 231 (Fall 2006).

135. *Am. Needle, Inc. v. NFL*, 560 U.S. 183, 184, (2010) (“The key is whether the alleged “contract, combination, or conspiracy” is concerted action—that is, whether it joins together separate decisionmakers. The relevant inquiry, therefore, is whether there is a “contract,

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A consistent interpretation of antitrust laws arguably requires the doctrine's offensive use to impose liability on all entities within the single economic unit.¹³⁶ Specifically, if two firms are exempt from Section 1 liability in their dealings with each other because they are deemed a single economic unit, antitrust liability should extend to both entities when one violates the Sherman Act. Failing to apply the *Copperweld* doctrine offensively while permitting its defensive use creates both an inconsistency and a potential loophole.

To illustrate the loophole, consider two entities, A and B, where A holds a majority ownership stake in B. Under *Copperweld*, they are treated as a single economic unit, exempting A from antitrust liability for any anticompetitive conduct arising from its dealings with B. Now suppose B engages in anticompetitive conduct while under A's control. If *Copperweld* is not applied offensively, then A is again shielded from liability.¹³⁷ Thus, A avoids antitrust claims both for its coordination with B and for B's conduct under its ownership.

Indeed, the Ninth Circuit reached the same conclusion in its 2018 *Arandell Corp. v. Centerpoint Energy Servs., Inc.* decision:

Defendants cannot have the *Copperweld* doctrine both ways. It would be inconsistent to insist both (1) that two affiliates are incapable of conspiring with each other for purposes of Section 1 of the Sherman Act because they "always" share a "unity of purpose," and (2) that one affiliate may escape liability for its own conduct—conduct necessary to accomplish the illegal goals of the scheme—by disavowing the anticompetitive intent of the other, even where the two acted together.¹³⁸

Applying this reasoning, the Ninth Circuit held that a wholly owned subsidiary shared its parent's anticompetitive intent: "*Copperweld* supports the following rule: A wholly owned subsidiary that engages in coordinated activity in furtherance of the anticompetitive conduct of its parent and/or commonly owned affiliates is deemed to engage in such coordinated activity with the purposes of the single 'economic unit' of which

combination, or conspiracy" amongst "separate economic actors pursuing separate economic interests," such that the agreement "deprives the marketplace of independent centers of decisionmaking," and therefore of "diversity of entrepreneurial interests," and thus of actual or potential competition.").

136. Lenox MacLaren, 847 F.3d at 1221. ("Parent and subsidiary companies [. . .] were single enterprise, and thus while they could not engage in concerted action with one another as required for Sherman Act liability for conspiracy to restrain trade or conspiracy to monopolize, they could be held liable under Sherman Act for monopolization or attempted monopolization based on their collective conduct, without proof that specific companies independently satisfied each necessary element of non-conspiracy monopolization and attempted monopolization.")

137. The exempt entity is referred to as A, without loss of generality. Similarly, the exempt entity could just as well be B. More broadly, at least one entity will almost always be exempt from antitrust liability in all of its dealings as part of the single unit.

138. *Arandell Corp.*, 900 F.3d at 631–32.

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it is a part.”¹³⁹

To maintain doctrinal consistency and avoid conflicts across antitrust statutes, the *Copperweld* doctrine should not be confined to Section 1 of the Sherman Act. Consistency is critical because a central objective of all antitrust statutes is to prevent the internalization of business stealing externalities—that is, the anticompetitive acquisition and exercise of market power, whether individually or collaboratively, to raise prices without a significant loss in sales. As the Supreme Court stated in *Brown Shoe Co. v. United States*, “antitrust laws [...] are intended primarily to preserve and stimulate competition.”¹⁴⁰ While Section 1 prohibits this outcome when achieved through concerted action, Section 2 of the Sherman Act addresses it when pursued unilaterally, and Section 7 of the Clayton Act targets it in the context of mergers. In particular, the Supreme Court stated that “[t]he Sherman Act was designed to be a comprehensive charter of economic liberty aimed at preserving free and unfettered competition as the rule of trade.”¹⁴¹ The Court further underscored the common policy objectives underlying the Sherman and Clayton Acts in *Fashion Originators’ Guild of America v. FTC*, explaining that, “[i]f the purpose and practice of the combination ... runs counter to the public policy declared in the Sherman and Clayton Acts, the Federal Trade Commission has the power to suppress it as an unfair method of competition.”¹⁴²

In a 2017 *Medtronic* decision, the Tenth Circuit extended *Copperweld*, holding that entities considered a single enterprise under Section 1 should be treated the same under Section 2. The Court then evaluated the conduct of the unified entity as a whole—rather than isolating the actions of its individual components—to determine whether monopolization or attempted monopolization had occurred. As the Court explained:

[T]he related entities’ coordinated conduct must be treated as the unitary conduct of the single enterprise which together they form, and it is that aggregated conduct which must be scrutinized under § 2. To hold otherwise—to require that each affiliated defendant independently satisfy every element in order to be held liable—would be difficult to justify.¹⁴³

In other words, the court applied the doctrine offensively to each constituent of the unified entity under Section 2. However, it also clarified that liability cannot be imposed on a member without evidence of its involvement. As the court stated: “*Copperweld* Court held only that the ‘coordinated activity’ of a parent and subsidiary must be viewed as that of a single enterprise.”¹⁴⁴

Applying *Copperweld* to the majority-owned portfolio company and the fund

139. *Id.* at 632.

140. *Brown Shoe Co. v. United States*, 370 U.S. 294, 330 (1962).

141. *Northern Pacific Railway Co. v. United States*, 356 U.S. 1, 4 (1958).

142. *Fashion Originators’ Guild of America, Inc. v. FTC*, 312 U.S. 457, 463 (1941).

143. *Lenox MacLaren Surgical Corp.*, 847 F.3d at 1236.

144. *Id.* at 1234. (citing *Mitchael v. Intracorp, Inc.*, 179 F.3d 847 (10th Cir. 1999)); see also, *Directory Sales Mgmt. Corp. v. Ohio Bell Tel. Co.*, 833 F.2d 606, 611–14 (1987).

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treats them as the same entity. As a result, the anticompetitive effects of the company's acquisition of its competitors are attributed to the fund. A rollup that violates Section 7 would therefore expose the fund to liability under this theory.

Indeed, the District Court for the Southern District of Texas held that the PE fund and its portfolio company should be treated as a single entity under *Copperweld*.¹⁴⁵ Applied defensively, this holding shielded the PE fund from liability on the theory that it could not conspire with the portfolio company.¹⁴⁶ The court declined, however, to apply *Copperweld* offensively. It reasoned that the plaintiffs had not adequately alleged Welsh Carson's independent participation during the limitations period per *Medtronic*, as Welsh Carson held only a minority ownership stake in USAP at that time and was not sufficiently alleged to have been involved in the subsequent acquisitions. As a result, the court held that the claims against Welsh Carson were time-barred.¹⁴⁷

Our application of *Copperweld* under Section 7 depends on two factors. First, consistent with the Tenth Circuit's *Medtronic* decision, there must be evidence that the fund participated in the anticompetitive conduct—that is, the rollup. Substantial involvement in the planning and financing acquisitions would satisfy this criterion.¹⁴⁸ Second, the fund must hold a majority interest in the company, with the relevant threshold defined by the jurisdiction, or must not be deemed a separate economic entity under the commercial realities. Otherwise, *Copperweld* alone does not support Section 7 liability. However, the absence of majority ownership does not shield the fund from antitrust liability, as discussed in the preceding and following subsections.

D. Section 1 Liability

The fund can also incur liability under Section 1 of the Sherman Act which prohibits cartels and, more broadly, "contracts, combinations, or conspiracies in restraint of trade." For a rollup to trigger Section 1 liability, three criteria must be met.

First, there must be an agreement among the entities involved—i.e., "a contract, combination, or conspiracy." In a rollup, this requirement is met through merger agreements between the platform company and its competitors via add-ons. Notably, courts have applied Section 1 to mergers and acquisitions.

For example, in *United States v. First National Bank & Trust Co. of Lexington* (1964), the Supreme Court decided that the bank merger violated Section 1, stating:

145. Elec. Med. Tr. v. U.S. Anesthesia Partners, Inc., No. 4:23-CV-04398, 2024 LX 23997 (S.D. Tex. Sep. 27, 2024).

146. *Id.* at 17.

147. *Id.* at 19-20.

148. For example, as previously discussed, Welsh Carson established USAP "to pursue an aggressive strategy to consolidate practices with high market share in a few key markets." See Complaint at 2, Fed. Trade Comm'n v. U.S. Anesthesia Partners, Inc., No. 4:23-CV-03560, 2024 (S.D. Tex. May 13, 2024), *appeal dismissed*, (No. 24-20270). According to the FTC's complaint, "Welsh Carson—in its own words—maintained control over USAP 'in all practical respects' because it held the voting rights of almost all of the company's other shareholders." *Id.* at 16. Other PE firms also publicly share their active role in managing their portfolio companies; See Section V Subsection A.

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[I]t [is] clear that the elimination of significant competition between [merging parties] constitutes an unreasonable restraint of trade in violation of § 1 of the Sherman Act It [can be] enough that the two ... compete, that their competition [is] not insubstantial and that the combination [would] put an end to it.¹⁴⁹

Similarly, Judge Posner, writing for the Seventh Circuit, found that a proposed merger between two nonprofit hospitals violated Section 1:

[T]he current understanding of section 7 is that it forbids mergers that are likely to "hurt consumers, as by making it easier for the firms in the market to collude, expressly or tacitly, and thereby force price above or farther above the competitive level." A merger with such effects would also violate section 1.¹⁵⁰

In practice, Section 7 of the Clayton Act is more commonly used to challenge mergers, primarily because it allows for preemptive intervention. However, this preference does not reflect any limitation on Section 1's applicability, and even the distinction in statutory scope is not universally accepted. As Judge Posner states,

We doubt whether there is a substantive difference today between the standard for judging the lawfulness of a merger challenged under section 1 of the Sherman Act and the standard for judging the same merger challenged under section 7 of the Clayton Act. It is true that the operative language of the two provisions is different and that some of the old decisions (old by antitrust standards anyway) speak as if that should make a difference [...] A transaction violates section 1 of the Sherman Act if it restrains trade; it violates the Clayton Act if its effect may be substantially to lessen competition. But both statutory formulas require, and have received, judicial interpretation; and the interpretations have, after three quarters of a century converged... The defendants' argument that section 7 prevents *probable* restraints and section 1 *actual* ones is word play. Both statutes as currently understood prevent transactions likely to reduce competition substantially.¹⁵¹

As a result, Section 1 of the Sherman Act provides a robust legal framework for addressing anticompetitive acquisitions, and the merger agreements in a rollup would satisfy its first criterion.

Second, the court must determine whether the rollup unreasonably restrains

149. *United States v. First Nat'l Bank & Trust Co. of Lexington*, 376 U.S. 665, 669-70 (1964) (per curiam).

150. *U.S. v. Rockford Memorial Corp.*, 898 F.2d 1278, 1282-83 (7th Cir. 1990).

151. *Id.*

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trade.¹⁵² Both economic theory and empirical evidence suggest that rollups tend to reduce competition, raise prices, and harm consumers. For example, Asil et al. (2024) found that rollups in the anesthesia industry significantly increase market concentration and result in price increases of approximately 30%.¹⁵³ Similarly, rollups identified in this paper—in radiology, gastroenterology, and urology—led to substantial consolidation of ownership.¹⁵⁴

Third, the court must assess whether the fund participated in the rollup for the purposes of Section 1. This inquiry turns on the application of the *Copperweld* doctrine, which is central to evaluating the fund's liability. As noted earlier, broadly speaking, if the fund holds a majority ownership in the company, then the two are treated as a single economic unit under *Copperweld*. In its traditional, defensive use, the doctrine shields the fund from liability for bilateral interactions with its portfolio company.

However, consistent application of *Copperweld* again involves offensive implications. Specifically, the unified entity comprising fund and the company can itself participate in an anticompetitive rollup. Under this framework, the fund would incur liability under Section 1 by virtue of its role within the single economic unit responsible for the rollup. If a court adopts the Tenth Circuit's approach in *Medtronic*—which requires evidence of a fund's participation in the rollup—that requirement would likely be met by the fund's active role in planning and financing these transactions.

On the other hand, if the fund holds a minority stake in the platform, *Copperweld* treats the two as separate entities. In that case, the fund's management and financing of the rollup can constitute an agreement in restraint of trade or participation in a conspiracy to restraint trade, both of which violate Section 1. Notably, the same evidence used to satisfy the *Medtronic*'s participation requirement can also support a finding that the fund acted as a co-conspirator in a rollup.

Finally, this legal framework applies regardless of the specific nature of anticompetitive conduct. While this discussion has focused on acquisitions of the platform's competitors, the same theory extends to conduct such as price fixing, market allocation, exclusive dealing, or other restraints of trade—so long as the fund participated in these actions in its capacity as a manager and financier of the platform. For instance, in *USAP*, the FTC alleged that the portfolio company entered into “a market allocation

152. The canonical formulation of the “rule of reason analysis,” which is used to determine the reasonableness of a particular course of conduct, is stated in *Chicago Board of Trade v. United States*, 246 U.S. 231, 238 (1918) (“The true test of legality is whether the restraint imposed is such as merely regulates and perhaps thereby promotes competition or whether it is such as may suppress or even destroy competition. To determine that question the court must ordinarily consider the facts peculiar to the business to which the restraint is applied; its condition before and after the restraint was imposed; the nature of the restraint and its effect, actual or probable.”). The modern rule of reason standard is specified in *Nat'l Soc'y of Prof'l Eng'rs v. United States*, 435 U.S. 679, 679 (1978) (“[U]nder [the Rule of Reason,] the proper inquiry is whether the challenged agreement is one that promotes, or one that suppresses, competition.”).

153. Aslihan Asil, Paulo Ramos, Amanda Starc & Thomas G. Wollmann, *Painful Bargaining: Evidence from Anesthesia Rollups* (Nat'l Bureau of Econ. Rsch., Working Paper No. 33217, 2024).

154. See *supra* Section II Subsection C.

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agreement to avoid a head-to-head rivalry with another large anesthesia provider.”¹⁵⁵ Such agreements constitute a per se violation of Section 1, and if the fund’s involvement is adequately shown, it would likewise face antitrust liability.¹⁵⁶

V. RELATIONAL LIABILITY

The second type of liability, what we call “relational liability,” arises not from the PE fund’s direct involvement in anticompetitive conduct, but from its relationship with the portfolio company. It hinges on piercing the corporate veil under business organization law.

Piercing the corporate veil is an exception to the general principle that a business entity is a separate legal person, distinct from its owners. This separation—commonly called the corporate veil—ordinarily shields owners from liability for the entity’s actions and limits a plaintiff’s recovery to the entity’s assets. However, when the corporate form is abused, courts may pierce the veil to hold the owners liable. The doctrine prevents misuse of limited liability and offers redress to parties harmed by misconduct carried out through entities under the owner’s control—granting access to assets that would otherwise remain protected.

In a rollout, portfolio companies are legally distinct from the PE fund. However, the fund typically owns, finances, and directs the platform that acquires competitors. In return, it receives dividend payments drawn from the company’s profits. A court may therefore pierce the veil and allow antitrust plaintiffs to recover from the fund’s assets. Because veil piercing is a fact-intensive inquiry, it may also grant plaintiffs access to parent-level discovery—such as internal documents, board records, and depositions of fund officers—which can help establish the underlying antitrust violation. To succeed, plaintiffs must meet the stringent requirements of the veil-piercing doctrine, which remains a high bar in most jurisdictions.

Courts generally apply one or both of two theories when considering whether to pierce the veil. The first—known as the “alter ego” or “identity” theory—applies where there is such a “unity of interest” between the parent and subsidiary that the

155. Complaint at 51, Fed. Trade Comm’n v. U.S. Anesthesia Partners, Inc., No. 4:23-CV-03560, 2024 (S.D. Tex. May 13, 2024), *appeal dismissed*, No. 24-20270, 2024 (5th Cir. Aug. 15, 2024).

156. Conduct that is per se illegal under Section 1 of the Sherman Act are (1) horizontal agreements to fix prices, (b) horizontal market allocation agreements, (3) bid rigging among competitors, (d) certain horizontal group boycotts, and (e) some tying arrangements, which has limited scope. For price fixing agreements, *see* United States v. Socony-Vacuum Oil Co., 310 U.S. 150, 221 (1940) (“Any combination which tampers with price structures is engaged in an unlawful activity under the Sherman Act.”). For market allocation agreements, *see* United States v. Topco Assocs., 405 U.S. 596, 608 (1972) (“One of the classic examples of a per se violation of § 1 is an agreement between competitors at the same level of the market structure to allocate territories in order to minimize competition.”). Bid rigging is treated the same as price-fixing. For group boycotts, *see* Klor’s v. Broadway-Hale Stores, 359 U.S. 207, 212 (1959) (“Group boycotts, or concerted refusals by traders to deal with other traders, have long been held to be in the forbidden category.”). For per se illegal tying arrangements, *see also* Jefferson Parish Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2, 9 (1984) (“It is far too late in the history of our antitrust jurisprudence to question the proposition that certain tying arrangements pose an unacceptable risk of stifling competition and therefore are unreasonable “per se.”).

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latter no longer functions independently, and upholding the corporate separation would sanction injustice or inequity. To show unity of interest, plaintiffs must demonstrate that the subsidiary operated primarily for the parent's benefit and served as its extension. Courts assess this by examining factors such as undercapitalization, disregard of corporate formalities, shared officers and directors, transactions not conducted at arm's length, the parent's role in financing or forming the subsidiary, regular dividends to the parent, personnel decisions made by the parent, and asset transfers from the subsidiary to parent that shifts liabilities downward and concentrate assets above.¹⁵⁷

In a rollup, unity of interest between the PE fund and the portfolio company may arise from the fund's active role in the company's acquisitions. For example, the FTC's complaint in *USAP* alleged that,

Welsh Carson directors on USAP's board [...] retained duties to and interests in Welsh Carson. At least one Welsh Carson director on USAP's board [...] acted in his Welsh Carson capacity when formulating, directing, and participating in USAP's [...] conduct [...] [H]e facilitated USAP's roll-up scheme by [...] signing deal documents for several challenged acquisitions—and *doing so expressly on behalf of Welsh Carson*. He also helped strike deals integral to USAP's consolidation strategy, such as by leading negotiations for its market allocation agreement [...] with the help of a confidentiality agreement he signed *on Welsh Carson's behalf*.¹⁵⁸

To satisfy the second prong of the alter ego theory—injustice or unfairness—plaintiffs must show misuse of the corporate form that would cause harm if the veil remained intact. Some jurisdictions, such as Delaware and Maryland, set a higher bar, requiring proof that the corporate structure was used to commit fraud.¹⁵⁹ Although

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157. *Iceland Telecom, Ltd. v. Information Systems and Networks Corp.*, 268 F. Supp. 2d 585, 590-91 (2003); *Agai v. Diontech Consulting Inc.*, 975 N.Y.S.2d 707, 2-3 (N.Y. Supp. Ct. 2013); *Sonora Diamond Corp. v. Super. Ct. of Tuolumne Cty.*, 83 Cal. App. 4th 523, 538-39 (Cal. Ct. App. 5th Dist. 2000); *Associated Vendors, Inc. v. Oakland Meat Co.*, 210 Cal. App. 2d 825, 838-40 (1962); *Zoran Corp. v. Chen*, 185 Cal. App. 4th 799, 811-12 (Cal. Dist. Ct. App. 2010); *DER Travel Servs. v. Dream Tours & Adventures, Inc.*, 2005 U.S. Dist. LEXIS 25861, 8 (S.D.N.Y. 2005); *Millenium Constr., LLC v. Loupolover*, 44 A.D.3d 1016, 1016-17 (N.Y. App. Div. 2007); *Alpha Bytes Computer Corp. v. Slaton*, 307 A.D.2d 725, 726 (N.Y. App. Div. 2003); *Eitzen Chem. (Sing.) PTE, Ltd. v. Carib. Petroleum*, 749 Fed. Appx. 765, 771 (11th Cir. 2018); *Pearson v. Component Tech. Corp.*, 247 F.3d 471, 484-485 (3d Cir. 2001); *Mobil Oil Corp. v. Linear Films, Inc.* 718 F. Supp. 260, 266 (D. Del. 1989); *U.S. v. Toyota Motor Corp.*, 561 F. Supp. 354, 359 (C.D. Cal. 1983).
158. Complaint at 16, *Fed. Trade Comm'n v. U.S. Anesthesia Partners, Inc.*, No. 4:23-CV-03560, 2024 (S.D. Tex. May 13, 2024), *appeal dismissed*, No. 24-20270, 2024 (5th Cir. Aug. 15, 2024) (emphasis added).
159. *Outokumpu Eng'g Enters., Inc. v. Kvaerner EnviroPower, Inc.*, 685 A.2d 724, 729 & n.2 (Del. Super. Ct. 1996); *In re Sunstates Corp. S'holder Litig.*, 788 A.2d 530, 534 (Del. Ch. 2001); *Antonio v. Sec. Servs. Of Am., LLC*, 701 F.Supp.2d 749, 759-60 (D. Md. 2010); *Iceland Telecom* 268 F. Supp. 2d at 589.

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courts have not clearly defined what constitutes injustice, a parent's direction of the subsidiary to engage in the conduct that caused the plaintiff's loss—such as an anti-competitive acquisition—may be sufficient.¹⁶⁰

The second theory, known as the “agency” or “instrumentality” theory, allows veil piercing when the subsidiary acts as an agent of the parent. To meet this standard, the plaintiff must show that the parent authorized the subsidiary to act on its behalf and that the subsidiary accepted this role. Such authority may be express or implied, and can be inferred from the parent's conduct, statements, or a pattern of control indicating an intent to delegate authority.¹⁶¹

Plaintiffs must also demonstrate that the parent exercised substantial control over the subsidiary. This may include direct involvement in the subsidiary's operations or significant influence over key decisions related to the challenged conduct.¹⁶² In some circumstances, plaintiffs may further need to show a sufficiently close connection between the asserted claims and the alleged agency relationship.¹⁶³ In the rollup context, the fund's role in shaping the acquisition strategy and directing the portfolio company's management may satisfy this requirement.

An emerging doctrine increasingly recognized by courts—the “single entity” theory—may also be available to antitrust plaintiffs, depending on the jurisdiction. This theory permits veil piercing between affiliated entities, including horizontal piercing, which allows plaintiffs to reach the assets of commonly owned or jointly managed companies.¹⁶⁴ Broadly, courts applying the single entity theory disregard corporate separateness when affiliated entities operate as a unified economic enterprise or represent a single economic interest.

Jurisdictions that have recognized this theory include California, New York, Texas, New Jersey, Louisiana, Massachusetts, North Carolina, Virginia, and Washington.¹⁶⁵ While the theory's precise contours remain unsettled, courts generally consider factors similar to those used in alter ego analysis, such as common management and interlocking directorates.¹⁶⁶ Some jurisdictions—such as the Fifth Circuit in *Gardemal*

160. Sandra Feldman, *How to Avoid Piercing the Corporate Veil Between Parent Corporations and Their Subsidiaries*, WOLTERS KLUWER (Mar. 25, 2022), <https://perma.cc/9FLT-VMDU>.

161. *In re Parmalat Sec. Litig.*, 594 F. Supp. 2d 444, 451-52 (S.D.N.Y. 2009).

162. *Id.*

163. Philip D. Robben & Kelley Drye, *Piercing the Corporate Veil: Practical Law Practice Note 5-516-9543*, THOMPSON REUTERS.

164. *Mortimer v. McCool*, Nos. 37 MAP 2020, 38 MAP 2020 (Pa. July 21, 2021). *See also* Stephen B. Presser, *The Bogalusa Explosion, Single Business Enterprise, Alter Ego, and Other Errors: Academics, Economics, Democracy, and Shareholder Limited Liability: Back towards a Unitary Abuse Theory of Piercing the Corporate Veil*, 100 NW. U. L. REV. 405, 405 (2006).

165. *See, e.g.*, *Las Palmas Assocs. v. Las Palmas Ctr. Assocs.*, 1 Cal. Rptr. 2d 301, 318 (Ct. App. 1991); *Dorfman v. Marriott Int'l Hotels, Inc.*, 99 Civ. 10496 (CSH), 2002 U.S. Dist. LEXIS 72 (S.D.N.Y. Jan. 3, 2002); *Jack LaLanne Fitness Centers, Inc. v. Jimlar, Inc.*, 884 F. Supp. 162 (D.N.J. 1995); *My Bread Baking Co. v. Cumberland Farms, Inc.*, 233 N.E.2d 748, 752 (Mass. 1968); *Regal Ware, Inc. v. Fidelity Corp.*, 550 F.2d 934 (4th Cir. 1977); *Morgan Bros., Inc. v. Haskell Corp.*, 604 P.2d 1294, 1997 (Wash. Ct. App. 1979).

166. *Grayson v. R. B. Ammon & Assocs.*, 778 So. 2d 1 (La. Ct. App. 2000) (“Courts have been unwilling to allow affiliated corporations that are not directly involved to escape liability simply because of business fragmentation. Thus, where a single corporation has been

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v. Westin Hotel Co., North Carolina in *Glenn v. Wagner*, and Texas in *Paramount Petroleum Corp. v. Taylor Rental Ctr.*—additionally require a showing of abuse of the corporate form.¹⁶⁷ Examples of abuse include siphoning of funds or instances where officials of one entity make representations on behalf of another.¹⁶⁸

In a rollup, the fund may own and control multiple platform companies, which often share directors or management teams affiliated with the PE firm. Application of the single entity doctrine would therefore allow plaintiffs to reach not only the fund's assets but also those of other portfolio companies under common ownership or control.

CONCLUSION

The rapid growth of rollups, combined with their ability to avoid premerger review, poses a significant challenge for antitrust enforcement. These transactions quietly reshape markets, creating what regulators now recognize as stealth consolidation. The FTC's landmark lawsuit in the anesthesia industry, *FTC v. USAP*, signals a growing interest to confront the threat.

Our empirical analysis shows that rollups extend well beyond anesthesia, driving substantial consolidation across a range of medical specialties and geographic markets. If the resulting price hikes match those found in prior studies, the consumer harm is substantial. Yet, our economic model shows that portfolio companies—strained by debt and drained by dividends—often lack the assets to pay damages.

To close this enforcement gap and provide sufficient deterrence, liability must extend to the PE funds that design and direct these acquisitions. This Article provides a roadmap and offers five distinct legal theories, grounded in antitrust and business organization law, that support fund accountability. As litigation over completed rollups intensifies, these theories will be central to ensuring robust deterrence.

APPENDIX: FORMAL MODEL

In this section, we present a concise economic model that captures the key features of a rollup. The model produces intuitive expressions for total antitrust damages and for the assets unencumbered by the platform's debt that are available to satisfy those damages. By extension, we derive conditions under which the platform becomes

fragmented into branches that are separately incorporated and are managed by a dominant or parent entity, or have interlocking directorates, the courts have held the dominant or parent corporation liable for the obligations of its branches whenever justice requires protection of the rights of third persons.”)

167. *Gardemal v. Westin Hotel Co.*, 186 F.3d 588, 593 (5th Cir. 1999) (“Like the alter-ego doctrine, the single business enterprise doctrine is an equitable remedy which applies when the corporate form is used as part of an unfair device to achieve inequitable result.”); *Glenn v. Wagner*, 313 S.E.2d 832, 844 (N.C. Ct. App. 184) *rev'd on other grounds*, 329 S.E.2d 326, 330 (N.C. 1984) (“Such control must have been used by the defendant to commit fraud or wrong, to perpetrate the violation of a statutory or other positive legal duty, or a dishonest and unjust act in contravention of plaintiff's legal rights.”); *Paramount Petroleum Corp. v. Taylor Rental Ctr.*, 712 S.W.2d 534, 536 (Tx. Ct. App. 1886).

168. *Paramount Petroleum Corp.*, 712 S.W.2d at 536.

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insolvent. We then calibrate the model using real-world parameters. It predicts that many platform companies are unlikely to possess sufficient unencumbered assets to cover damages. This finding underscores the importance of reaching the fund to achieve sufficient deterrence.

A. Model Description

Consider the acquisition of a platform and a single add-on. To ease exposition, we assume all firms are symmetric, i.e. they have identical costs and face identical demand from consumers.¹⁶⁹ Prior to a rollup, each firm sets a price to maximize its individual profit. Profit, denoted by π , is the product of per unit markup and quantity sold. This relationship is expressed as $\pi = (p - c)q$, where p , c , and q represent price, marginal cost, and quantity sold, respectively. Each firm's prerollup profit margin, denoted by μ , is the per unit markup divided by price. This relationship is expressed as $\mu = (p - c)/p$. We can rewrite price and profit in terms of premerger profit margins. We arrive at $p = c/(1 - \mu)$ and $\pi = cq\mu/(1 - \mu)$, respectively. We express the value of the firm, denoted by V , as the product of its profit and a multiplier, denoted by η . This relationship is expressed as $V = \pi\eta$.¹⁷⁰

In the rollup, the platform acquires the add-on. Prices will rise following the rollup, harming consumers. To see why, consider a price increase by the add-on, which causes some of its consumers to substitute towards other firms in the market, including the platform. Prior to the rollup, the platform and add-ons are separately owned, so the profit earned on those consumers is lost. After the rollup, however, that profit is recaptured, as the platform and add-on are now jointly owned. In other words, all else equal, the incentive to increase the price charged by the add-on rises following the rollup. (The same is true for a price increase contemplated by the platform.)

We denote the percentage increase in prices by λ . Post-rollup prices are equal to pre-rollup prices multiplied by the change in prices following the acquisition. Accordingly, post-rollup prices equal $c(1 + \lambda)/(1 - \mu)$. Based on the existing research described above, we abstract away from merger-related synergies—such as efficiency gains that reduce marginal costs.¹⁷¹ For simplicity, we also assume, at least for the time being, that the quantity sold does not change.

Given these assumptions, the rollup increases profit—perhaps very sharply. Specifically, the ratio of the post-rollup to pre-rollup profits is given by $(\mu + \lambda)/\mu$.¹⁷² Just

169. Entry, exit, participation, and positioning complicate the model without providing important additional insights, so we assume that market structure is fixed and that sunk costs, fixed costs, and scrap values are zero.

170. The value of a firm equals the present value of the sum of its expected future free (i.e. unencumbered) cash flow. This multiplicative form is an exact representation of firm value when the discount rate is constant, free cash flow equals profit, and when the current profit recurs forever. It is also a very commonly employed approximation to firm value. In public markets, η is akin to the price-earnings ratio, while for private equity, it is akin to the EV-EBITDA ratio.

171. Asil et al. (2024) documented 30% or more price increases. Given this price increase, it is safe to assume that synergies are extremely limited. See Asil et al., *supra* note 8.

172. Pre-rollup profit equals $\pi = cq\mu/(1 - \mu)$, while post-rollup profit equals $cq(\mu + \lambda)/(1 -$

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as sharply, the rollup reduces consumer welfare. For each year the firms operate as a merged entity, consumers pay higher prices on all of their purchases. The per year reduction in consumer welfare equals $qc\lambda/(1-\mu)$.¹⁷³

Recall that the value of the merged entity is a multiple of its profit. Since it earns $qc(1+\lambda)/(1-\mu)$ in profits after the rollup, the postrollup value of the merged entity equals $2\eta cq(\mu+\lambda)/(1-\mu)$. To finance the transaction, the sponsor arranges for the merged entity to take on debt. It employs a leverage ratio of l . Hence, the merged entity's total debt equals $2l\eta cq(\mu+\lambda)/(1-\mu)$.

B. Litigation, Remedies, and Insolvency

Following our earlier discussion, most add-ons effectively escape antitrust scrutiny in their incipiency. As a result, such transactions are often identified by antitrust authorities and private plaintiffs only after a long delay, with litigation most likely arising years after the deals have closed. In such cases, authorities initially seek a structural remedy, and the court orders unwinding—requiring the platform to divest the add-ons. The divested firms then resume independent operations. Since firms would no longer be able to internalize business-stealing externalities, prices and profit return to their pre-rollup levels. Private plaintiffs then seek damages, and the court awards them a multiple, θ , of the harm incurred over the preceding T years.

The problem now becomes apparent. Following the structural remedy, each firm's value equals $\eta cq\mu/(1-\mu)$, but its pro-rata portion of the debt outstanding equals $l\eta cq(\mu+\lambda)/(1-\mu)$. Hence, the total value left over to pay damages equals $2[\mu - l(\mu + \lambda)](\eta cq)/(1-\mu)$.¹⁷⁴ Meanwhile, damages are awarded in the sum of $2T\theta\lambda cq/(1-\mu)$. Thus, insolvency occurs if and only if damages exceed unencumbered assets. Simply put, solvency happens when:

$$T\theta\lambda > \eta[\mu - l(\mu + \lambda)].$$

In words, this equation is equivalent to the following condition:

$$\begin{aligned} & \text{Statute of Limitations} \times \text{Damages Multiple} \times \text{Price Increase} \\ & > \\ & \text{Value to Profit Ratio} \times \\ & [\text{Prerollup Margin} - \text{Leverage} \times (\text{Prerollup Margin} + \text{Price Increase})] \end{aligned}$$

This equation provides a concise characterization that aligns with our intuition. To understand how each factor affects insolvency, we examine them sequentially while holding all other factors constant. First, insolvency increases with a longer

μ). Therefore, the ratio equals $(\mu + \lambda)/\mu$.

173. The change in price after the rollup is given by $\Delta p = c(1+\lambda)/(1-\mu) - c/(1-\mu) = c\lambda/(1-\mu)$. Under the simplifying assumption that the quantity sold remains unchanged after the rollup, consumer harm is calculated by multiplying quantity sold by the change in price, yielding $qc\lambda/(1-\mu)$.

174. The value left over to pay damages is found by subtracting the pro-rata portion of the debt outstanding from each firm's value.

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statute of limitations, as damages accrue over a longer period. Second, it increases with higher damages multiples. Third, insolvency increases with larger post-rollup price increases: higher post-rollup prices raise damages and inflate firm value, which—under a fixed leverage ratio—leads to greater borrowing. After divestiture, the firm’s value returns to pre-rollup levels, but the elevated debt remains, reducing unencumbered assets available to pay damages. Fourth, insolvency decreases with a higher pre-rollup profit margin, as it raises both pre-rollup and post-divestiture value, improving the firm’s ability to pay damages. Fifth, insolvency increases with the leverage ratio, as more borrowing erodes unencumbered assets. Sixth, insolvency decreases with the value-to-profit ratio, since a higher initial value—holding profits constant—leaves a larger asset base to cover damages after divestiture.

C. Model Calibration

We calibrate the model to parameter values informed by existing research and under U.S. antitrust law. Under Section 4b of the Clayton Act, and setting aside extenuating circumstances, the statute of limitations for a private antitrust damages action is four years from the date the cause of action accrues.¹⁷⁵ Accordingly, we set T equal to 4. Under Section 4 of the Clayton Act, private plaintiffs injured by antitrust violations may sue for treble damages, i.e., three times the amount of actual damages sustained.¹⁷⁶ Hence, we set θ equal to 3. The next two parameter values are drawn from Asil et al. (2024), who find that firms have an average pre-rollup profit margin of 40%.¹⁷⁷ Thus, we set μ equal to 0.40. Likewise, the post-rollup price increase, λ , is approximately 30%.¹⁷⁸ Based on Pitchbook’s 2023 *U.S. Middle Market Private Equity Report*, we use a leverage ratio of 44% and a value-to-profit ratio of 11.¹⁷⁹

We normalize marginal cost to \$1 per unit and, for the purposes of this illustration, assume each firm sells 1 million units prior to the rollup.¹⁸⁰ At these parameter values, the value of damages amounts to \$12 million, but unencumbered assets are only \$3.41 million. The firm’s insolvency is therefore severe, falling far short of covering the

175. 15 U.S.C. §15b (2024) (“Any action to enforce any cause of action under section 15, 15a, or 15c of this title shall be forever barred unless commenced within four years after the cause of action accrued. No cause of action barred under existing law on the effective date of this Act shall be revived by this Act.”). However, the statute of limitations is tolled when a government agency brings a related antitrust enforcement action, both during the pendency of that action and for one year thereafter. 15 U.S.C. §16(i) (2024). Moreover, the plaintiff’s fraudulent concealment or continuing violations can also toll the statute of limitations. See *Holmberg v. Armbrrecht*, 327 U.S. 392, 397 (1946); *Zenith Radio Corp. v. Hazeltine Research, Inc.*, 401 U.S. 321, 338 (1971).

176. 15 U.S.C. §15(a) (2024) (“[A]ny person who shall be injured in his business or property by reason of anything forbidden in the antitrust laws may sue [. . .] and shall recover threefold the damages by him sustained [. . .]”).

177. Asil et al., *supra* note 8.

178. *Id.*

179. PitchBook, *U.S. MIDDLE MARKET PRIVATE EQUITY REPORT* (2023) (“The average debt/value ratio for new jumbo loans backing LBOs and financed in the broadly syndicated market plunged to 44.1% in 2023, down from 50.8% in 2022.”).

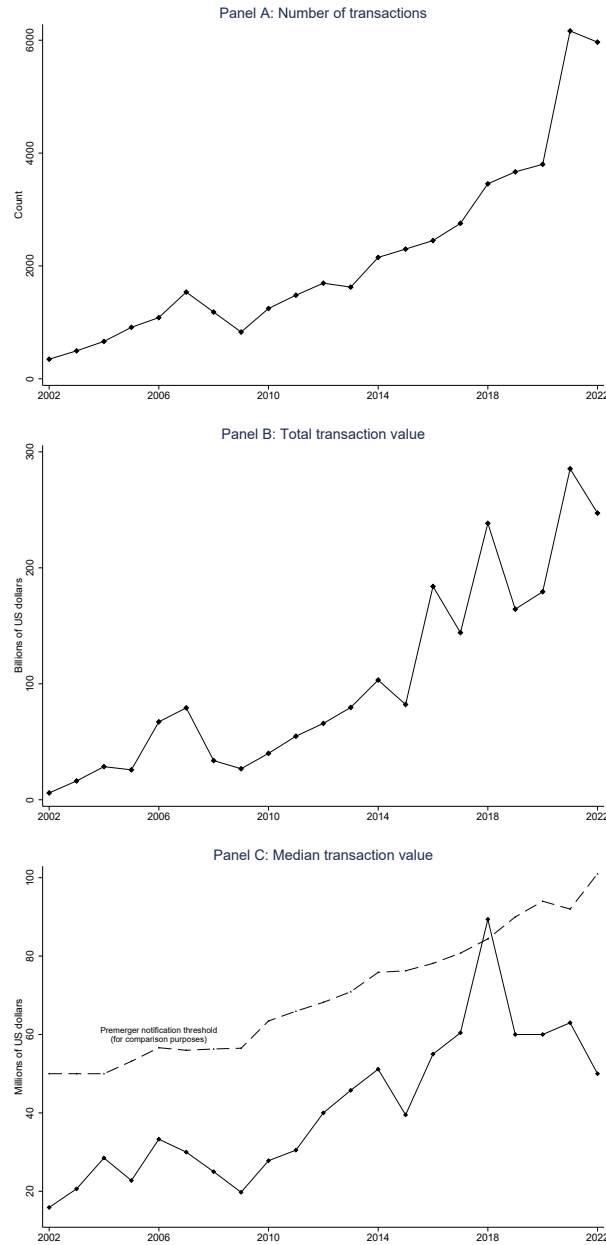
180. Readers can freely change the scale to fit the specific market under consideration.

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damages. This calibration exercise highlights the gravity of the problem: many portfolio companies may lack sufficient unencumbered assets to satisfy the judgment. In other words, whether antitrust laws exert a robust deterrent effect and whether plaintiffs can recover statutorily owed damages hinge on whether PE funds are held liable.

APPENDIX: FIGURES

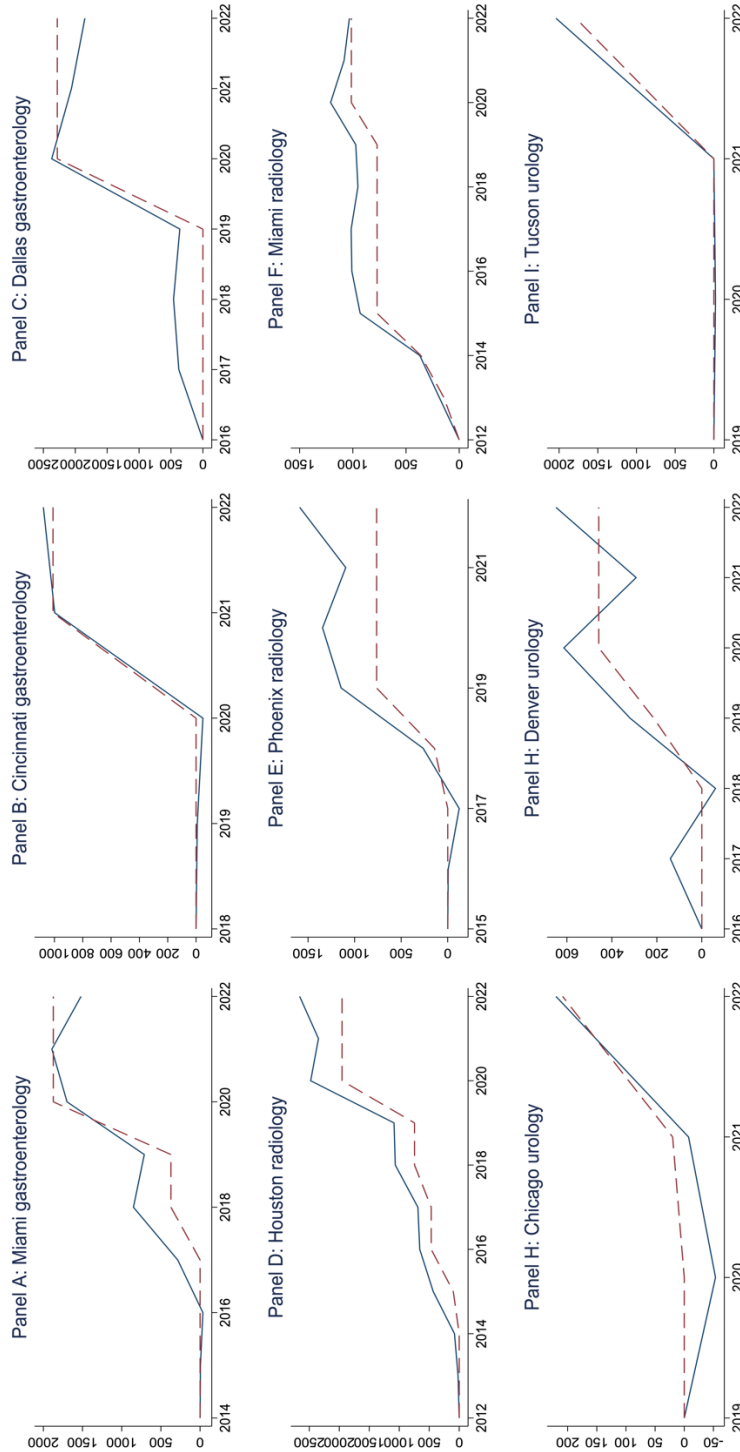
ARE PRIVATE EQUITY FUNDS LIABLE FOR ANTICOMPETITIVE ACQUISITIONS?

Figure 1: Number and Value of Add-On Acquisitions Over Time¹⁸¹

181. This figure reports how PE-backed add-on acquisitions grew between 2002 and 2022. Panels A and B plot the number and value of these transactions, respectively, which have reached \$300 billion annually. In Panel C, the solid line tracks their median value, while the dashed line tracks the threshold below which transactions are exempt from premerger notification. For reasons explained below, the vast majority of add-ons are not reported to U.S. antitrust authorities in their incipency.

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Figure 2. PE-Backed Add-On Acquisitions Consolidate Healthcare Markets¹⁸²



ARE PRIVATE EQUITY FUNDS LIABLE FOR ANTICOMPETITIVE ACQUISITIONS?

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182. Each of the nine panels in this figure corresponds to a different U.S. healthcare market. Panels A-C correspond to gastroenterology markets, while Panels D-F and H-I correspond to radiology and urology markets, respectively. Along each solid blue line, we plot how HHI evolved over time relative to a base period. Along each dashed red line, we plot how HHI would have evolved due solely to PE-backed add-on acquisitions, i.e. in the absence of all other changes in the market. To summarize the data patterns, the rising, solid blue lines indicate increasing market concentration, while the close correspondence between the solid blue and dashed red lines indicates that PE-backed add-on acquisitions were the primary determinant of these market structure changes.