This paper draws in large part on a paper by Leah Samuel that was written while she was a Yale Law student in 2022. We use large pieces of text from that paper with her permission.
Abstract: We argue that antitrust scholars and enforcers should be more attentive to antitrust issues in private equity, a source of corporate capital that is popular and growing in the United States. While PE can help improve productivity and the market for corporate control, we explain several ways in which PE, under current enforcement policy, enables anticompetitive conduct. Private equity’s structural opacity shields it from antitrust scrutiny, enabling PE groups to obscure both the identity and incentives of their portfolio companies. As a result, this form of financing is attractive to businesses engaging in anticompetitive conduct, both coordinated and unilateral. We propose a variety of policy changes to better scrutinize and regulate anticompetitive PE business practices.
At first glance it is not clear why scholarship on antitrust should be concerned with private versus public equity funding of a corporation. A dollar of capital is a dollar, no matter where it comes from, and therefore one might think the source has no relevance for antitrust analysis. In particular, it is not obvious why the financial contract governing capital should change the analysis of a merger or instance of monopolization.

However, we argue there are several issues concerning private equity that justify closer scrutiny by the antitrust enforcer. Given the substantial growth in the share of the economy that is funded through this channel, these issues are becoming more important market realities every year. The first is the increased ability for a corporation to hide its strategy and practices under current disclosure rules that apply to private, but not public, corporations. This opacity makes it more difficult for agencies to evaluate and regulate privately held corporations, and this in turn weakens enforcement. Weaker enforcement predictably attracts problematic business models to the private financing channel. Secondly, common ownership of various kinds, whether through partial ownership, fund stakes, or interlocking directorates is a problem. Thirdly, we raise the issue of coordinated bidding and its antitrust treatment. Lastly, we describe the known business strategies of private equity that, when applied to acquired assets, have predictable harmful effects on market outcomes and the welfare of consumers. More rigorous documentation and understanding of these common strategies could make both the enforcement analysis and the subsequent litigation of private equity acquisitions easier.

Before we turn to these problems, it is worth briefly reviewing other costs and benefits of the private equity model that are not directly antitrust concerns. This financing model can increase productivity when the economy needs assets to be redeployed away from less productive activities. Of course, in principle, any owner of assets can redeploy them to increase productivity. However, a corporation’s reputation in society and goodwill with the community are enhanced when it creates a new business, builds new facilities, and expands its workforce— but not when it runs that process in reverse. In the course of progress, every year there are products that lose demand, whether that be the proverbial buggy whip, chemical film, DVD players, vinyl records, or margarine. Today, the resources we formerly used to make chemical film are no longer needed in that market, and therefore factories closed, workers lost their jobs, and businesses wound down. Managing decline is unpopular with the community for obvious reasons and generates bad press. The harms to workers and communities that are caused by these declines require a broad social response. A well-functioning society uses the democratic process to create unemployment benefits, retraining programs, and other policies to mitigate the harm to workers and communities. Even if these are sufficient, and they usually are not, the wind down process creates negative publicity for the firm and political hurdles of various kinds.

We argue that a publicly traded firm is more exposed to these negative impacts than a private one and therefore has an incentive to engage in arbitrage with the relevant assets. The public business may want to sell the assets, or itself, into private hands to reduce its exposure to these costs. The private equity buyer does not have a consumer-facing brand name, a long-term attachment to a location, or a large portfolio of products. By contrast, a public company that manufacturers in multiple locations and sells (possibly many) products and services to end
consumers wants a good brand name. Rather than undertake the shutting down, the public company may choose to sell the declining or inefficient division or business to a company that has lower reputational cost of doing the reorganizing.

Being able to flexibly move out of declining industries and into growing ones is a great feature of a capitalist economy. Likewise, the ability to reorganize assets in light of changing prices or technologies raises productivity. We do not minimize the possible harms to workers and communities when these changes occur. These harms, in our view, should be mitigated more effectively than they are with public policy so that workers can quickly move to productive jobs in growing industries. But the alternative of no adjustment would be very costly. Imagine requiring the buggy whip factory to continue to operate for decades after consumers stopped driving buggies. And how would such a business be funded? Once it is obvious that consumers will not be buying chemical film any longer, the right thing to do is wind down the business. Private equity is associated with that activity, but not causal.

Therefore, this Article will not take the position that private equity is inherently harmful, but rather that some harmful activities occur through this financing channel and public policy must respond. Our particular concern is how this mode of financing interacts with antitrust enforcement. We identify several areas where enforcement policy has not kept up with market realities. In particular, we argue for changes to the HSR process to create greater disclosure, and for the agencies use that disclosure to be more sensitive to what are otherwise familiar anticompetitive possibilities we describe below. The agencies could consider bring new types of cases around common ownership, and club bidding given the right set of facts. These enforcement changes would lessen the concern that private equity financing is a way to avoid competition enforcement and free this mode of financing to serve the useful role of raising productivity and improving the market for corporate control.

I. Setting and Description of Private Equity

American economic history teaches that market participants will rapidly adapt institutional form in response to shifting modes of antitrust enforcement, with regulators always several steps behind.¹ As private equity-backed transactions nearly doubled from $1.1 trillion in 2020 to $2.1 trillion in 2021, antitrust enforcers have been swamped by a merger wave that they have neither the personnel nor the legal tools to effectively regulate.² These private equity groups saw significant growth during the pandemic: in the first half of 2021, PE groups had

¹ What Posner et. al call the “Red Queen” problem. See Eric A. Posner, Fiona M. Scott Morton & E. Glen Weyl, A Proposal to Limit the Anticompetitive Power of Institutional Investors, 81 ANTITRUST L. J. 669, 671 (2017). See also infra section III.B for a discussion of an emerging private investment form—the search fund—which engages in similar market behavior as PE funds, but as of right now at a smaller and more local scale.

their busiest six months in the last forty years.3 The PE industry is estimated to make up 10–15 percent of the U.S. economy4 and controls almost $10 trillion in assets.5 Therefore, it is clear that the returns to effective analysis and regulation of this sector are enormous and growing.6

The private equity model emerged alongside modern corporate law theories around reducing agency costs by aligning the interests of owners and managers. Scholars of corporate law describe the American economy of the 1950s–’70s as dominated by conglomerates made up of disparate corporate divisions and subsidiaries, so large and incongruously organized that the incentives of managers were disconnected from maximizing ownership value.7 The great “leveraged buyout” wave began in the 1980s – innovators of this method were characterized either as pirates or heroes of new corporate efficiency.8 In a leveraged buyout (“LBO”), the buyer would take out very large loans secured by the assets of the target company in order to buy the shares and then execute a dramatic restructuring. The transaction would sharpen the incentives of managers, with massive new equity stakes aligning their interests closely with the profit maximization of the firm.9 This new alignment would make managers aggressively efficient, cutting “fat”10 and selling off the components of the firm that were incongruous or under-performing.11 By funding the transaction overwhelmingly with debt rather than equity issuance, new owners sharply magnified their returns in both directions: returns would be significantly larger if the company did well, and the company would more readily go bankrupt if it didn’t do well.12

Some of the leading PE groups in the United States are Blackstone, KKR, CVC, Carlyle, Thoma Bravo, and TPG.13 Each group has hundreds of separate funds, which for some legal purposes are separate entities, but which may also exchange or consolidate holdings among

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4 Id.
9 Vandevelde, supra note 3; de Fontenay, supra note 7, at 1105.
10 Vandevelde, supra note 3 (“Earlier this year, an academic study of 30 years’ worth of private equity buyouts found that private equity-backed acquisitions of publicly listed companies were followed by a 13 per cent contraction in payrolls.”).
11 Id.
12 To illustrate the function of leverage in PE transactions, imagine investing $10 in an asset. If you sell it a year later for $12, you have earned a 20 percent return. If you invest $1, borrow $9, pay $1 in interest on the debt, then sell the asset for the same $12, your return is 100 percent (example borrowed from James B. Stewart). See Thomas Piraino Jr, The Antitrust Implications of “Going Private” and Other Changes of Corporate Control, 49 Bos. C. L. REV. 971, 981 (2008).
funds. The PE model has grown, institutionalized, and evolved, but the core transaction is still leverage, significant restructuring, and steep incentive schemes for managers.

A private equity fund, managed by a partner in the PE group, raises money from investment banks and wealthy individuals in order to invest in or acquire established companies. That fund then identifies target companies, often publicly traded mature businesses, that it bids for, sometimes against other PE groups, sometimes against strategic buyers (“strategic buyer” here meaning a company in the same or related line of business, rather than an investor). When a company is acquired, its debt-equity ratio is significantly increased by the cost of the acquisition itself. To avoid bankruptcy and generate returns for its new owners, the company engages in (what it thinks is) the needed restructuring: cutting salaries, cutting research budgets, firing staff, reorganizing activities, and selling off assets. At the end of a relatively short holding period, usually three to five years, the PE fund either takes the company public again through an initial public offering (“IPO”) or sells it to another financial or strategic buyer. This is a stylized example, but it illustrates core aspects of the PE business model: investments with short time horizons, active management, and aggressive cost cutting.

The fund makes money through both short-term cash generation and a terminal payment generated by sale of the business. Note that the buyers of the business will pay more to the extent they believe the newly restructured firm to be healthy and profitable (absent fraud or incomplete information). While short term cash generation favors closing facilities, reducing employment, and lower investments, those actions also have long-term consequences. A PE firm that fires key employees or stops developing new products will be less valuable a few years later. For this reason, well-functioning capital markets align the incentives of the PE owner with productivity.

II. How the Private Equity Model Can Harm Competition

A. Opacity

Corporations financed through the issuance and subsequent sale of shares on public exchanges are subject to comprehensive disclosure and reporting requirements. Federal law and regulations require all U.S. public companies, for example, to generate and file with the SEC an annual report on Form 10-K. That report, which is public, must discuss a laundry list of required topics, including a description of the company’s business, risk factors that could affect the business and its operations, threatened and pending legal proceedings, and the like. A principal purpose is to make available to investors and potential investors information bearing on the company’s business and fiscal health so that investors can make appropriate decisions about whether to buy, sell, or hold stock and other securities.

By bringing daylight into companies’ operations, plans, and contingencies, the detailed disclosures and narratives serve interests beyond just those of company investors. They also

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14 de Fontenay, supra note 7 at 1110.
advance the public interest in transparency and accountability for public companies, many of which wield significant power in shaping our economy, polity, and culture. We will return to this issue in Section d below.

In the broadest terms, American antitrust law aims to promote public wellbeing by protecting competition. Its objective is to prevent the accumulation of control by market participants who shut out or conspire with other participants to raise prices, lower quality, or lessen innovation, rather than competing on the merits with attractive products and low prices. Leaving aside the question of political will, the efficacy of antitrust law turns on the capacity of antitrust enforcers to understand who is competing in a given market and how market participants’ incentives are structured. Private equity has flourished in antitrust law’s blind spots.

Where there is opacity to the public and regulators, there is means and motive for anticompetitive conduct. In simple terms, “going private” means that a private equity fund, a limited liability partnership under the control of a private equity group, buys all or part of a publicly held company. The acquisition is accomplished either by partnering with the existing management (a management-led buyout) or ousting old management (a hostile takeover) to facilitate a transaction where diffuse public shareholders are bought out using money raised by the PE fund from wealthy individuals and institutional investors. Though a publicly traded company is squarely in the purview of the SEC, a company that has been taken private is more opaque and has much more limited reporting requirements for its management and conduct. The group-fund structure allows PE groups to play a shell game with their portfolio companies, obscuring both the identity and incentives of the companies’ owners.

The Hart-Scott-Rodino Act of 1976 (“HSR”) requires the parties to mergers and acquisitions above certain thresholds to report those mergers to the FTC and DOJ before they are consummated, along with documentation relating to the competitive effects of the mergers. An HSR filing is triggered when a transaction meets the “Size of Transaction” or “Size of Person” thresholds. These thresholds are adjusted annually. The HSR Act does not create a safe harbor: mergers that do not reach the filing threshold under the Act may still be found to be anticompetitive under Section 7 of the Clayton Act. However, in practice it is extremely unlikely that a merger that doesn’t go through pre-review is going to be challenged by resource-strapped agencies. Furthermore, reviewed or unreviewed mergers that turn out to be anticompetitive

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17 Perlman, supra note 15.
20 For context on total mergers challenged, see Herbert Hovenkamp, Appraising Merger Efficiencies, 24 Geo. Mason L. Rev. 703, 709 n.43 (2017), https://scholarship.law.upenn.edu/faculty_scholarship/1762 (“Fewer than 1% of
after the fact are almost never reversed. This structure presents various means by which PE groups can avoid effective merger review of problematic transactions—including by structuring their mergers to stay below the thresholds that trigger agency review, discussed in more depth in the next section.

The “solely for investment” exemption in the HSR Act allows a transaction to sidestep pre-merger review if the transaction is “solely for the purpose of investment, of voting securities, if, as a result of such acquisition, the securities acquired or held do not exceed 10 per centum of the outstanding voting securities of the issuer.” The agencies have interpreted this exemption narrowly to mean that the investor has “no intention of participating in the formulation, determination, or direction of the basic business decisions of the issuer.” Therefore, an acquisition of less than a 10 percent share that entitled a PE group to any degree of firm decision-making, particularly via board membership, might be considered reportable by the agencies.

The DOJ and FTC receive 1,000–2,000 HSR filings per year. In practice, the first round of review is generally conducted in a 24–48 hour period by a paralegal or law student intern. In the vast majority of matters, the result of that quick initial review is a “no interest memo” that signifies the agencies’ non-binding decision to allow the merger to proceed without challenge. That first stage of review involves reading the filing form, in which merging entities are required to name the Ultimate Parent Entities (“UPEs”) involved in a given transaction and to state whether there are horizontal market overlaps between the parties. Overlapping business areas are identified and labelled using the North American Industry Classification System (“NAICS Codes”), which are often extremely vague, giving reviewers a very unhelpful starting point for assessing the functional overlap between the entities. The first level reviewer must compare the overlap signaled by NAICS code, if any, with the documents required to be filed alongside the form. Those documents may be extremely limited or run to thousands of pages, and may present conflicting information. Researchers at the first stage of review are generally relying on public data sources to determine the identity and market share of industry

acquisitions were challenged during the George W. Bush administration. The Obama administration was more aggressive, challenging about 1.5% of mergers. Even this number is lower than the long-term average of 1.8% since the Reagan administration.” (Citing Melissa Maleske, How Antitrust Authorities View Mergers and Acquisitions, INSIDECOUNSEL (Mar. 26, 2013)).

24 Nicholas Walter, Antitrust and Corporate Law: Revisiting the Market for Corporate Control, 15 U. PENN. J. BUS. L. 755, 794 (noting, by contrast, that under corporate law “[a] shareholder is typically reckoned to have a controlling stake in a corporation when its shareholding reaches about thirty percent.”).
26 MOSS, supra note 6, at 12.
participants, which often don’t provide the granularity of paywalled industry reports.

Most important as it relates to private equity firms, the complexity of their transactions gives participants a way to evade antitrust scrutiny by swamping the reviewers in documentation that presents conflicting or misleading information. One gap in the HSR process that may facilitate such evasion is the difference between the definition of “Ultimate Parent Entity” used in the HSR rules and the definition of control laid out by the U.S. Supreme Court in *Copperweld Corp. v. Indep. Tube Corp.*, 467 U.S. 752 (1984). Under Copperweld, wholly owned subsidiaries are considered incapable of conspiring with their parent company under Section 1 of the Sherman Act because they are part of the same legal entity.\(^\text{28}\) Copperweld addressed an alleged vertical conspiracy between parent and subsidiary, but courts soon relied on Copperweld’s reasoning to extend the same protections to alleged horizontal conspiracies between a single company’s wholly owned subsidiaries.\(^\text{29}\) Courts also began applying Copperweld’s central thesis—the legal fiction that a corporation is a single legal entity—to conspiracies alleged to serve as the predicate for liability in non-antitrust claims (including in criminal conspiracy prosecutions and civil rights, financial fraud, and other civil claims).\(^\text{30}\) Courts also extended the protections beyond subsidiaries to natural persons whose relevant interests are indistinguishable from those of the corporation, including employees and agents.\(^\text{31}\)

The “intracorporate conspiracy doctrine,” oft maligned in its sprawling, modern form,\(^\text{32}\) derives directly from Copperweld’s reliance on the single-entity legal construct. Courts operationalize the analysis by asking if the alleged conspirators share a complete “unity of interests” with an entity (a) that sits above them in an organizational chart; (b) whose interests they serve; and (c) that serves only its own interests (which are identical to the financial interests of its shareholders or members). If so, the reasoning goes, the alleged conspirators cannot conspire because they are merely constituent parts of a different, larger entity or parent company, so to speak, whose interests they serve.

HSR implementing regulations, however, take a different approach in determining whom the merging parties must disclose as their “ultimate parent entity.” The intracorporate conspiracy doctrine focusses on unity of interests and would have us climb up the org chart until we get to the entity with whom the merging party shares a unity of interests but that serves only its own interests. HSR regulations, by contrast, rely on the notion of “control.” “Ultimate parent entity” is currently defined in the HSR implementing regulation as “an entity which is not controlled by any other entity,” 16 C.F.R. § 801.1(a)(3). Thus, the operative regulations would have us start with the merging party and climb up the org chart until we get to an entity that is not formally controlled by anyone else. When funding for a transaction comes from PE, however, that climb is often a short one. As noted, PE typically is organized into groups. Each group

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\(^{28}\) See e.g., Advanced Health-Care Servs., Inc. v. Radford Cnty. Hosp., 910 F.2d 139, 146 (4th Cir. 1990).

\(^{29}\) See, e.g., id. at 146.


\(^{31}\) See id. at 250 & n.2.

\(^{32}\) See, e.g., id. at 251 (asserting that “the strength of the doctrine has affected and warped related doctrines in the law on corporate and individual responsibility for wrongdoing”).
(Blackstone, Carlyle, etc.) houses hundreds of funds. Groups rely on these funds to effectuate the group’s overall business strategy.\footnote{Typically, for example, a fund is the entity that borrows the money needed to buy a target’s stock.}

The funds, however, typically are organized as limited partnerships that are widely held, meaning no person or entity is entitled to more than 50 percent of partnership profits or has more than a 50-percent say in its business operations. Thus, a fund typically qualifies as being its own “ultimate parent company,” in that no other entity possesses the legal right to “control” its conduct. This is the case even though it is reasonable to presume that funds within a group in fact take some direction from, and are managed in the interest of, the group of which it is a part. Thus, whereas the analytical approach that undergirds the intracorporate conspiracy doctrine would likely lead to the conclusion that the group is the ultimate parent of the funds housed in that group, the HSR regulations’ focus on control leads to the conclusion that the fund is its own ultimate parent. Filers are therefore required to describe and document overlap only between entities owned within that fund, rather than within the PE group at large.\footnote{Kara Kuritz & Matthew Wheatley, \textit{An Antitrust Roadmap for Private Equity Investment}, 34 \textsc{Antitrust Mag.} 8, 71 (2020) (“When analyzing acquisitions by a PE fund, acquisition vehicle, or portfolio company, the analysis requires following the chain of control from the entity engaging in the transaction up to the ultimate parent entity. PE funds are typically organized as limited partnerships, and because they are generally widely held, they rarely have a limited partner [or group of limited partners themselves under common control] that has the right to 50 percent or more of the profits or assets upon dissolution. In other words, PE funds are typically their own ultimate parent entities. The fact that a fund is managed by a general partner is irrelevant to the HSR control analysis.”); Siri Bulusu, \textit{Private Equity Firms Facing More Questions in FTC Merger Reviews}, \textsc{Bloomberg L.} (2022), https://www.bloomberglaw.com/product/blaw/bloomberglawnews/antitrust/BNA%200000017d-a60d-d452-abff-ecff7f20001?bwid=00000017d-a60d-d452-abff-ecff7f20001 (last visited Jan 22, 2022).}

A re-write of the regulations that made clear that the filer, if it is a private equity fund, must identify the group to which it belongs as well as the identities of all other funds in the same group (on the theory that there is a unity of interests between a private equity group and its funds) would substantially strengthen the agencies’ ability to identify PE acquisitions with potentially anticompetitive vertical or horizontal effects. The FTC, in fact, issued a notice of proposed rulemaking in 2020 along with proposed rules amened to address this specific shortcoming in the current rules. We discuss the 2020 proposed rulemaking and other related policy solutions in Section II.a, infra. Under current regulations, however, and given the vastness and opacity of PE groups’ structures, it can be difficult or impossible for agency reviewers to identify potential horizontal competitors (let alone potentially anticompetitive vertical relationships) among the thousands of privately held companies in other funds’ portfolios if they are not reported in a given HSR filing. That may present a substantial loophole for PE buyers, given that the definition of a single entity for the purposes of \textit{Copperweld} protection is not limited to the fund level but to the PE group level, which wields control over the acquisition. As Kuritz and Wheatley observed in their practitioner guide, “An Antitrust Roadmap for Private Equity Investment,” the flipside of this ambiguity is that “when reallocating investments in portfolio companies between funds or moving a portfolio company from one fund to another, those transactions are between two different ultimate parent entities and, therefore, may trigger an
HSR filing, despite the reality that the two funds are both within the PE group’s family of funds.”

In addition to the UPE problem, the HSR review process may be too myopically focused on the current transaction. The merger filing documents36 may contain evidence of long-run strategies for using a given transaction as a launching point for a series of consolidations. However, if the transaction at hand does not raise sufficient red flags on its own terms (i.e., if it’s for less than a 51 percent stake, or if it presents itself as a vertical rather than horizontal merger), then it may slip through the cracks, especially if subsequent reviewers are different people or different agency sections.

We note that the loopholes outlined above are not exclusively available to PE groups. However, PE has a strong interest in choosing acquisitions that can take advantage of these loopholes and, in that way, achieve market power and high returns. In their reactive posture, antitrust agencies do not have the data or staffing power to effectively filter for such strategies.

B. Mergers of Head-to-Head Competitors/Rollups

As mentioned above, the private equity business model runs on a cycle of mergers and acquisitions, a churn of investments with short time horizons and built-in exit strategies. One mechanism by which PE groups may maximize their investment over that short time horizon is to acquire majority or minority interests in competing firms in a concentrated market, to coordinate or consolidate firms that are product market rivals. PE groups are directly motivated to look for horizontal overlaps or vertical relationships that can be leveraged to provide market power and profits for a portfolio company without catching the eye of an antitrust enforcer.37 To magnify the gains from consolidation that generate market power, PE groups look for markets with conditions conducive to the exercise of market power: for example, inelastic demand, inelastic labor supply, market segments with favorable regulations that weaken price competition, and/or those with geographic or regulatory barriers to entry.38 Given the high size threshold for the disclosure of acquisitions, and the many local markets across the United States that have one or more of these favorable conditions, PE firms have an incentive to execute—and they frequently carry out—strategies of acquiring multiple small firms that compete in the same geography for consumers, or inclusion in insurer networks, or both. Once firms are consolidated,

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35 Kuritz and Wheatley, supra note 34, at 71.
36 Often referred to as 4(c) and 4(d) documents after the corresponding sections of the HSR form, see Kuritz and Wheatley, supra note 34.
37 Note that while the term “leverage” appears often in this paper with its meaning in finance, i.e. buying assets with borrowed funds, “leverage” has a separate meaning in antitrust, which is the use of market power in one product market to increase market power in another, often vertically related, product market. We focus in this paper on horizontal acquisitions because it is the most robust area of merger enforcement, but PE groups are also well-placed to acquire companies in vertical relationships to other portfolio companies and leverage such vertical relationships to disadvantage competitors in those markets. This phenomenon is particularly well-documented in healthcare markets, see Section e. below.
38 SCHEFFLER, ALEXANDER, AND GODWIN, supra note 18, at 40.
the new entity can legally use its market power to raise prices, lower quality, repress labor costs, or create other harm.

Another type of fund that seeks similar market conditions for buying and consolidating small competing firms are search funds. Though typically on a smaller and more local scale than PE funds, search funds have slowly been gaining traction as a scrappier type of investment fund that is more accessible to entrepreneurial individual principals and investors. Search funds are typically started by one or two “searchers” “who form an investment vehicle with a small group of aligned investors . . . to search for, acquire, and lead a privately held company for the medium to long term, typically 6 to 10 years.” As with PE funds, these private funds benefit from the opacity provided by non-public ownership. Furthermore, search fund acquisitions typically fall well below the HSR filing threshold: the median purchase price of target acquisitions was $16.5 million in 2022. Search funds are likely to look for businesses in industries with stable revenue and a track record of profitability, even during economic downturns; family-owned businesses lacking succession plans may be ideal targets, as with industries with reliable revenue streams or barriers to entry, like health and dental care. Indeed, it seems that some search funds are specifically targeting industries on a local level that are in the early phases of consolidation—similar to the arc of consolidation in the dialysis industry described below.

Using market power to engage in raising prices, lowering quality, and other such conduct may be challenged under Section 7 of the Clayton Act, which prohibits acquisitions that substantially lessen competition in a given market. Section 7 is implicated when a firm acquires either the stock or assets of another firm and requires proof only of an anticompetitive result, i.e., that the effect of the acquisition is “substantially to lessen competition.” We keep in mind that PE firms and search funds may bring beneficial efficiencies to a merger as described above, but some have a strategy of creating market power. As mentioned earlier, PE groups can avoid the pre-merger review process altogether by structuring their mergers to stay below the thresholds that trigger agency review. In the PE context, this is known as the “stealth merger” approach, which former FTC Commissioner Rohit Chopra has also described as “rollup,” “buy-and-build,” or “add-on” strategies. We refer to these mergers as rollups. Under this approach, PE groups and search funds engage in a series of acquisitions of small horizontal competitors, each of which is under the HSR filing thresholds, so as to avoid antitrust scrutiny.

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39 Stanford Graduate Sch. of Bus., 2022 Search Fund Study 2–3 (July 15, 2022).
40 Id. at 3.
41 Id. at 2.
42 Id. at 21.
This strategy has been most visible, and its consequences most devastating, in the healthcare industry, particularly in rural America. The healthcare sector has attracted significant investment from private equity, making up 18 percent of all PE funding in 2020. Healthcare markets often have low elasticity of demand (due to insurance or the nature of medical need), geographic limitations in service provision, and a specialized labor supply of licensed health professionals in a given geographic area. Furthermore, because of the complex and sometimes perverse incentives of healthcare regulation, healthcare markets may be particularly vulnerable to a sophisticated entity looking to operate in an inelastic niche.

PE groups are not unique in taking advantage of these conditions in healthcare. However, PE investors are likely to experience less impact from harms to the reputation of the firm than a publicly-traded company would. PE funds also have the capacity for large-scale nationwide rollup mergers that an existing corporation in the industry may not. As an example, PE group GTCR began its ownership of insurance brokerage AssuredPartners in 2011. From 2011 to 2015, GTCR acquired 112 other insurance brokerages, before selling the merged entity to Apex Partners, another PE group. Under Apex, AssuredPartners executed another 124 acquisitions before selling the company back to GTCR in 2019. This common tactic in PE acquisitions, the add-on buyout where average deal sizes are below the HSR filing thresholds at $60–70 million, has been increasing over time.

The most well-documented instance of the rollup strategy is in the dialysis industry, where the result has been the formation of a PE near-duopoly in dialysis provision. The two largest dialysis providers in America, DaVita and Fresenius, are both PE-backed. Over the last 20 years, these two companies formed a duopoly through stealth mergers, acquiring small and medium-sized independent dialysis providers below the pre-merger reporting threshold. As a result, the two companies have come to control 80 percent of the American dialysis market.

46 Bal lou, supra note 45, at 100–18.
48 Id. at 41.
50 Chopra, supra note 44.
52 Wollmann, supra note 16.
Research in economics demonstrates that transactions below the HSR threshold are effectively subject to no enforcement, as divestitures are not mandated regardless of the change in the local HHI. The research additionally shows that acquisitions in dialysis that would have been divested if they had been reviewed by the FTC cause harm to consumers. This harm is not a standard price harm because Medicare pays for almost all dialysis at regulated rates; rather, lack of competition has allowed dialysis providers to reduce quality of care, leading to more infections, more hospitalization, and more deaths. Because these harms are not present after mergers where the FTC would not have required a divestiture, we can conclude that the lack of enforcement of small dialysis mergers has caused ongoing harm to dialysis patients through more infections and shorter lives. This harm operates through competition-induced deterioration in quality of their dialysis services.

C. Mergers and Common Control

In addition to rollup acquisitions, another anticompetitive PE acquisition strategy involves identifying targets that can either be directly or indirectly consolidated with the PE group’s current holdings, raising the possibility of common control or coordination. Where this dynamic is present, two similar but distinct issues arise: the first is similar to concerns that arise in the context of common ownership, where large institutional investors own substantial minority shares of competing firms, and the second relates to the Copperweld exception, where ex post wholly controlled subsidiaries are shielded from the antitrust laws.

The first anticompetitive concern arises when funds within the same PE group have ownership interests in the same and/or competing companies. Currently, a single PE group may have ownership interests in multiple companies that compete in the same market but that are technically in different funds. Because of opacity surrounding a PE group’s holdings or the fact that the fund, not the group, is scrutinized at the HSR filing phase, common ownership and control of the same company, or one that competes in the same market, does not necessarily have to be disclosed. Thus, standard anticompetitive concerns relating to coordination, consolidation, and control may be hidden, incompletely disclosed, or otherwise not detected by agencies.

The central insight of the common ownership literature is highly relevant to PE groups, which own entire companies, controlling shares, minority shares, and every shade of active to

55 Wollmann, supra note 16.
passive position in firm management across many industries (and many competitors within industries). That literature primarily focuses on institutional investors, for example mutual funds, which are most often viewed “as largely benign actors that seldom exercise their substantial powers.” PE ownership, by contrast, is typically “active.” Even for a minority investment, PE funds must justify their substantial fees by demonstrating their active management. For example, rather than holding a 2 percent position in all four major airlines, a PE group might, across multiple funds, hold a majority of one firm, a substantial minority of a competitor, and a 2 percent share of a third. On the one hand, this means that the incentive and ability to affect firm strategy are more readily available for the firms with large stakes—PE groups that control several seats on a given board can enact their competitive preferences much more directly than mutual funds can. On the other hand, they own stakes in competitors which provides an incentive to reduce competition. Anticompetitive strategies are more feasible for PE groups because of their structural flexibility but also because they are both less regulated than mutual funds and less responsive to bad publicity. In their view, “[a]ctively managed funds have stronger incentives to employ these mechanisms, since they charge higher fees and can strategically allocate a greater portion of their assets to industries where pursuit of anticompetitive strategies may be profitable.”

The second anticompetitive concern emerges when a series of acquisitions leads to common ownership that within the PE group or fund, facilitating collusion beyond the reach of the antitrust laws. Under the standard laid out by the Supreme Court in Copperweld Corp. v. Indep. Tube Corp., wholly owned subsidiaries are incapable of conspiring with their parent company under Section 1 of the Sherman Act because they are part of the same legal entity and therefore share a unity of interests. Although caselaw is not as clear with respect to majority-owned subsidiaries (as opposed to wholly owned ones), the DOJ’s decision not to challenge the 2015 merger of Ainsworth Lumber Co. Ltd. and Norbord Inc. has been interpreted by some practitioners as signifying that majority control (ownership over 50 percent) confers the same protection under Copperweld as total ownership does.


60 de Fontenay, supra note 7, at 1095 (“[P]rivate equity is shifting its center of gravity away from governance reform, towards a dizzying array of new tactics and new asset classes. Large private equity firms now simultaneously run leveraged buyout funds, credit funds, real estate funds, alternative investments funds, and even hedge funds.”).
61 Hemphill and Kahan, supra note 59, at 1442.
62 467 U.S. 752 (1984). Later, lower courts held that the same applied as to coordination between wholly-owned subsidiaries. See e.g., Advanced Health–Care Servs., Inc. v. Radford Cnty. Hosp., 910 F.2d 139, 146 (4th Cir. 1990).
64 James Keyte & Kenneth Schwartz, Private Equity and Antitrust: A New Landscape, 31 ANTITRUST MAGAZINE 21, 21–22 (2016); DOJ OKs $667M Wood Merger After Blocking Earlier Deal - Law360,
Minority ownership may also lead to anticompetitive conduct. Sherman Section 1 caselaw with respect to partial control is relatively scant, giving rise to significant uncertainty in this area.\textsuperscript{65} Clayton Section 7 caselaw provides more support for the position that an acquisition can violate the law even when it does not convey complete or controlling interest, especially when it conveys above 20 percent ownership.\textsuperscript{66} A central question for merger analysis is whether partial ownership is accompanied by governance rights (particularly board membership and voting rights, including veto rights) which could enable even a minority owner to exert force in an anticompetitive direction,\textsuperscript{67} but even a transaction that does not convey formal governance rights may change a firm’s competitive incentives even without explicit coordination, or it may allow for the exchange of competitively sensitive information.\textsuperscript{68} The most notable decision in this area was \textit{United States v. Dairy Farmers of America, Inc.}, a 2005 Sixth Circuit decision blocking an acquisition by Dairy Farmers of America ("DFA") of a 50 percent stake in Southern Belle Dairy.\textsuperscript{69} This case illustrated that the incentives created by partial ownership fall in the ambit of the antitrust laws. However, DFA involved an acquisition by a non-PE buyer that ostensibly did not transfer managerial control; by contrast, in 2007, the FTC successfully negotiated a consent decree in \textit{Kinder Morgan}, a management-led PE buyout of minority shares that \textit{did} confer management rights. The FTC challenged the joint effort of Carlyle Group and Riverstone Holdings to acquire a 22.6 percent interest in Kinder Morgan, a gasoline and petroleum terminal provider, on the grounds that the jointly-owned fund already owned a 50 percent interest in Magellan, another terminal company that was a significant competitor in a highly concentrated


\textsuperscript{66}See, e.g., \textit{Denver & Rio Grande W. R.R. Co. v. United States}, 387 U.S. 485, 501 (1967) ("A company need not acquire control of another company in order to violate the Clayton Act."); \textit{United States v. E.I. du Pont de Nemours & Co.}, 353 U.S. 586, 602-07 (1957) (condemning a 23 percent interest); \textit{United States v. Dairy Farmers of Am., Inc.}, 426 F.3d 850, 862 (6th Cir. 2005); \textit{Dan River, Inc. v. Unitex, Ltd.}, 624 F.2d 1216, 1225 (4th Cir. 1980) (explaining that a 20 percent block "frequently is regarded as control"); \textit{Gulf & W.}, 476 F.2d at 695-97 (finding that 19 percent stock ownership was sufficient to influence the acquired firm’s policy); \textit{Am. Crystal Sugar Co. v. Cuban-Am. Sugar Co.}, 259 F.2d 524, 526-28 (2d Cir. 1958) (condemning a 23 percent acquisition).


\textsuperscript{68}Wilkinson and White, supra note 65, at 28–30; Scott Morton and Hovenkamp, supra note 58.

\textsuperscript{69}United States v. Dairy Farmers of Am., Inc., 426 F.3d 850 (6th Cir. 2005). A year prior to the Southern Belle acquisition, DFA had acquired a 50 percent stake in its only competitor for dairy processing in 42 Kentucky school districts, National Dairy Holding. \textit{Id.} The DOJ successfully argued that common ownership would incentivize the firms to raise prices – DOJ’s expert witness convinced the court that “to think that the nature of the interaction between the two dairies will not change is naive, because that would be contrary to the economic incentive of all parties.” \textit{Id.} at 862. Despite the district court’s factual finding that that DFA would exert no formal control over Southern Belle’s business decisions, the Sixth Circuit overturned the lower court’s granting of summary judgment to DFA on the grounds that lack of control or influence in a partial-ownership acquisition does not preclude a Section 7 violation. \textit{Id.} at 859–62. See also \textit{Analysis of Agreement Containing Consent Orders to Aid Public Comment}, In the Matter of Hikma Pharmaceuticals PLC, FTC File No. 151-0198, at 3 (Feb. 26, 2016), https://www.ftc.gov/system/files/documents/cases/160226hikmaanalysis.pdf.
market.\(^\text{70}\) Although the fund did not have a majority stake in either company, the acquisition would allow it to directly influence the firms’ decision-making by appointing board members to both firms and exercising veto power at Magellan. The FTC in its complaint appeared to allege both coordinated and unilateral harm from the merger, describing the increased threat of coordination, the transmission of competitively sensitive information, as well as reducing the competitive pressures between the two companies.\(^\text{71}\) Although the FTC allowed the transaction to occur, it required Carlyle and Riverstone to remove their board members from and cease to influence the operations of Magellan (the existing portfolio company). The consent decree also required a firewall that would prevent Magellan’s sensitive information from being transmitted to Kinder Morgan.\(^\text{72}\) The PE buyers were forced to become essentially passive investors in Magellan, but the same restrictions were not applied to Kinder Morgan, possibly because their share of Kinder Morgan would be smaller.\(^\text{73}\)

To summarize, PE groups may safely coordinate market activity between two wholly owned portfolio companies under the progeny of *Copperweld*. It is likely, though not certain, that PE groups are similarly protected from Section 1 liability when coordinating between two majority-owned companies.\(^\text{74}\) However, when coordinating between two minority-owned portfolio companies, especially when those minority stakes are *not* accompanied by significant governance rights, there may be Section 1 exposure.\(^\text{75}\) Control for the purposes of *Copperweld* protection is a question of functional control, not legal form.\(^\text{76}\) Given these potential exposures, the importance of information disclosure in the HSR returns. PE buyers may try to minimize either the appearance of control or the appearance of significant market share at the merger phase.\(^\text{77}\) Later they will want to maximize governance rights and ownership shares post-

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\(^\text{73}\) Wilkinson and White, *supra* note 65, at 31–32; Private equity antitrust, Financial Times, Feb. 15, 2007, https://www.ft.com/content/a88843b6-b871-11db-be2c-0000779e2340 (last visited Dec 18, 2021) (“The question is whether regulators will remain comfortable with ‘passive’ stakes as a solution, given the risk that big shareholders retain influence even if not on the board. On the flip side, if ‘passive’ stakes really do mean giving up all power to somebody else, how will investors in private equity feel about them? After all, they are paying huge fees on the assumption that their chosen funds will squeeze the very best out of each company, not outsource the task to somebody else.”). See also Press Release: Justice Department Requires Deutsche Börse to Divest Its Interest in Direct Edge in Order to Merge with NYSE Euronext, (2011), https://www.justice.gov/opa/pr/justice-department-requires-deutsche-b-se-divest-its-interest-direct-edge-order-merge-nyse (last visited Sep 10, 2022).

\(^\text{74}\) Kuritz & Wheatley, *supra* note 34, at 73.

\(^\text{75}\) Coordination of this kind will be shaped by the agencies’ Antitrust Guidelines for Collaborations Among Competitors, https://www.ftc.gov/sites/default/files/documents/public_events/joint-venture-hearings-antitrust-guidelines-collaboration-among-competitors/ftcodiguidelines-2.pdf


\(^\text{77}\) Kuritz and Wheatley, *supra* note 34, at 74.
consolidation to benefit from the Copperweld protection. That strategy is exactly what appears to motivate the stealth merger or rollup approach discussed above.

D. Collusive Bid-Rigging and “Club-Buying”

A PE firm’s rate of return (profits for investors) is higher when the purchase price for the buyout target is lower. PE groups thus have an incentive to explicitly or tacitly collude to rig the bidding for a given target. Such a strategy is possible when there are few enough PE groups that are large enough or have the strategic capability to make such bids. They are often repeat players with close relationships able to either directly communicate or signal their intentions with respect to bidding.

As the largest PE groups have grown larger and more dominant, evidence has accumulated that they have formed an oligopsony of bidders for the largest transactions and have engaged in coordinated bidding processes to depress the sales prices of target companies. This coordination has taken the form of explicit consortia of PE buyers, but also implicit coordination and even express agreements to allocate bids.78 Because the PE lifecycle begins at the point of purchase, followed by three to five years of aggressive cost-cutting, and finally a private sale, bankruptcy, or IPO, the profitability of a given portfolio investment may hinge on acquiring the target at bargain basement prices. This may be especially so in management-led buyouts where managers are on both sides of the transaction.79 Such collusion or coordination, if it existed, would fall under Section 1 of the Sherman Act.

In the early 2000s, PE groups began explicitly collaborating on acquisitions through “club bidding” arrangements, which allowed multiple PE groups to combine resources to make a bid on a target they might not otherwise be able to afford to purchase.80 There may be nothing anticompetitive about such an arrangement, if PE buyers that would otherwise not have enough capital to make such an investment are able to form a consortium and thereby compete against bidders with such capital.81 Finance journalists82 and antitrust authorities at the time began to take note, however, of the fact that such consortia were being formed even where one group had adequate resources to go it alone, or even being formed after bidding had already begun between two PE groups.83 As a result, the DOJ opened an investigation into club bidding in 2006,

79 Piraino Jr, supra note 12, at 984–985.
80 Elizabeth Bailey, Are Private Equity Consortia Anticompetitive? The Economics of Club Bidding, 6 THE ANTITRUST SOURCE, 1 (2007); Christopher Burke et al., Masters of the Universe: Bid Rigging by Private Equity Firms in Multibillion Dollar LBOs, 87 UNIVERSITY OF CINCINNATI LAW REVIEW 29, 34 (2018).
ruffling feathers by sending letters to four large PE groups asking about the potential anti-competitiveness of club bidding. 84 Although DOJ never followed through publicly with an enforcement action, this outreach provoked significant attention from the antitrust practitioner community, some attention from the academic community, 86 as well as a wave of shareholder class actions (In re Toys “R” Us, Inc. Shareholder Litigation, 877 A.2d 975 (Del. Ch. 2005), Pennsylvania Avenue Funds v. Borey, 569 F. Supp. 2d 1126 (D. Wash. 2008), Dahl v. Bain Capital Partners, LLC, 937 F. Supp. 2d 119 (D. Mass. 2013)). The last of these actions made it all the way past motion to dismiss and summary judgment, resulting in a settlement with every major PE group for a total of approximately $590 million and no admission of guilt. 87

The plaintiffs in Dahl alleged an “overarching conspiracy” across 13 major PE groups in many significant leveraged buyouts between 2003 and 2008, consisting of sham bidding, agreements to stand down from bidding, and the use of club bidding to pay off parties to the conspiracy. The court accepted the defendants’ argument that some club deals allowed private equity firms to “complete larger transactions, share expertise, minimize costs, and diversify risk” 88 and therefore might be procompetitive. However, the court determined that there was enough evidence of an overarching agreement between the PE groups to refrain from “jumping” each other’s deals to potentially constitute a “conspiracy in restraint of trade to allocate the market for and artificially fix, maintain, or stabilize prices of securities in club LBOs” and therefore to warrant a jury trial. 89

The court was moved by emails in which PE executives conversed directly about inviting bidders into a consortium to eliminate them from bidding 90 and described the “club etiquette” in detail. 91 For example, a TPG Capital executive wrote, “KKR has agreed not to jump our deal since no one in private equity ever jumps an announced deal,” 92 while a Blackstone executive stated that “Henry Kravis [of KKR] just called to say congratulations and that they were standing down because he had told me before they would not jump a signed deal of ours.” 93 Another Blackstone executive emailed a KKR executive regarding an anticipated quid pro quo, “I

85 James Ashe-Taylor, Antitrust Interest in Private Equity, 9 BUSINESS LAW INTERNATIONAL 159 (2008); Keyte and Schwartz, supra note 64; David A. Rines, Identifying And Minimizing Risk For Private Equity Funds And Fund Managers, 2009 WL 1614241 ASPATORE (2009); Bailey, supra note 80.
86 Brendan Reed, Private Equity Partial Acquisitions: Towards A New Antitrust Paradigm, 5 VIRGINIA LAW & BUSINESS REVIEW 303 (2010); Jackson, supra note 81; Fougner, supra note 81; Napolitano, supra note 78; Piraino Jr, supra note 12; Joseph L. Morrel, Go Shops: A Ticket to Ride Past a Target Board’s Revlon Duties?, 86 TEXAS LAW REVIEW 1123 (2008).
87 Napolitano, supra note 78, at 208.
88 Dahl, 937 F. Supp. 2d at 126.
89 Dahl, 937 F. Supp. 2d at 138.
90 Id. at 147 n. 7.
91 Id. at 128-139.
92 Id. at 128.
93 Id. at 139.
talked to Henry [Kravis] Friday night and he was good enough to call Steve [Schwarzman] Saturday. We would much rather work with you guys than against you. Together we can be unstoppable but in opposition we can cost each other a lot of money. I hope to be in a position to call you with a large exclusive PTP [public to private] in the next week to 10 days. In short, there was substantial evidence that the largest PE groups were in close communication, and their communications were sufficient to support the allegation that they were not only standing down from one another’s’ signed deals but also observing a system of bid allocation in a successful effort to depress sales prices.

Once the case was set for trial, defendants settled, with Goldman paying $67 million, Blackstone, KKR, and TPG paying a combined $325 million, and Carlyle settling for $115 million. Because the otherwise successful Dahl action resulted in no admission of guilt, it was a cautionary tale but not a legal bar to PE groups using this combination of club bidding and informal bid allocations to depress the price of target companies. No agency publicly opened a civil or criminal investigation into this conduct. For practitioners writing in the wake of Dahl, the biggest takeaway was to be more careful about such emails, which cross the line between what may be permissible tacit collusion into explicit conspiracy under Section 1 of the Sherman Act.

E. Business Model of Higher Prices

The typical business model of private equity is described above. The significant debt burden creates urgency that causes new management to make necessary changes quickly and effectively. PE firms stand to gain all the upside from the improved business because debt holders receive a fixed payment regardless of business outcomes (omitting bankruptcy issues). Furthermore, all the debt typically attaches to the acquired business—not to the PE firm or fund—meaning that if the business is pressured by debt-holders or investors to file for bankruptcy, the fund is protected from losses. These strong and focused incentives are passed on to management by the PE owner’s choice of compensation contracts. PE firms structure these top management contracts to have very steep performance-based financial incentives. Top management stands to earn very large amounts if the firm is successful and very little if it is not. Furthermore, a PE fund with many investments will have many future managerial opportunities available, and a successful manager will therefore have long run incentives to succeed so that s/he can win the next job.

To illuminate the incentives, in 2021, the annual base salary for PE operations managers ranged from $120,000 to more than $480,000 depending on the portfolio company’s assets and the manager’s level in the PE fund. Managers are also often provided bonuses, ranging from $30,000 to upwards of $340,000, based on a combination of the portfolio company’s

94 Id. at 133.
95 Napolitano, supra note 78, at 208.
96 Keyte and Schwartz, supra note 64, at 23; Napolitano, supra note 78, at 224–225.
Managers may also be eligible for carried interest—the share of a portfolio company’s profits, if any—which is where they stand to gain the most. Carried interest provides high incentives for managers, because without performing, these payouts are not realized. In 2020, carried interest ranged from the low end of $200,000 for managers at the vice president level, to nearly $5 million for operating executives. Ongoing compensation typically comes from three funding streams: fees paid by the portfolio company for an operations managers’ time, oversight fees paid by the portfolio company to the PE fund, and portfolio management fees the PE fund charges investors. Additionally, where management is the founder of the acquired business, they may be entitled to an earnout—compensation if the business meets defined financial goals.

These extremely strong performance-based incentives have predictable impacts on market outcomes. They create increased pressure on the manager for immediate revenue generation. The new manager is going to bargain harder over the price of inputs the firm buys (e.g. labor) and will likewise bargain harder to sell output at a higher price (e.g. healthcare services to an insurance company).

The financial incentives give the new PE manager more bargaining power—more backbone—than the CEO he or she replaced. For the PE CEO, any higher price the physicians can get from the insurance company is directly relevant to whether that CEO gets paid this year as well as into the future. This gives PE CEOs better ability to negotiate because their outside option is worse. In a classic bargaining model such as Ho and Lee, this effect would show up in a change in the bargaining parameter of the PE manager. The same dynamic applies to a PE firm’s negotiation with a union. The CEO is less able to be harmed by the union because their job is to lower costs, not to be the long-term friend of the union who needs trust to effectively run the firm over time. Moreover, the union’s outside option has gotten worse because they know a strike would hurt the company’s prospects—and their own—more under PE ownership than the original owners.

We see these effects in market outcomes. It has long been known that PE firms that buy standard essential patents raise prices significantly. Implementers of those patents face higher variable costs for the products they make. There is also good evidence that the PE firms that buy

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emergency department physicians pull those doctors out of insurer networks and raise prices.\textsuperscript{104} Again, this raises prices to insurers who pass on higher expenses in premiums.

The fact that the PE firm has this strategy and is public about it is an underutilized observation among antitrust enforcers. No deep analysis is needed to be able to predict prices after a PE firm obtains an asset like a hospital or physician practice group. Likewise, when a financial buyer purchases SEPs, the purpose and strategy is to raise prices. The result of an asset acquisition in the case of a typical PE firms’ structure of finances and compensation is predictable: it leads to higher prices and therefore lower output. That predictability is helpful in merger review.

The tricky question for antitrust enforcement is whether such outcomes are cognizable under the Clayton Act. In cases where the transaction changes market structure there is also a completely standard analysis of lessening competition that agencies can use. However, in cases where there is no change market structure, but only a change in managerial incentives and bargaining power, one could argue that competition has not been lessened. Without such lessening, there is the question of whether the transaction has created anticompetitive harm to consumers, even though there is an almost certain harm to consumers. This line of analysis needs further development and research to determine the role of antitrust enforcement in these asset acquisitions.

The second impact of the strong performance-based compensation is the incentive for the manager to cut expensive unobservable quality and skate closer to the edge of legality on any regulatory dimension that promises higher profits. Instances of this type of behavior abound in healthcare where quality is difficult to measure.\textsuperscript{105} For example, as discussed above, dialysis acquisitions not subject to FTC merger review were associated with increased hospitalization rates and decreased survival rates.\textsuperscript{106} So were dialysis acquisitions that involved no geographic overlap but moved from “mom and pop” ownership to large chain ownership. (cite to the non Wollmann papers) Recent empirical work has likewise shown that private equity acquisition in nursing homes leads to higher rates of emergency room visits and hospitalization, in addition to higher costs to insurers.\textsuperscript{107} Other areas of healthcare such as physicians’ practices and


\textsuperscript{106} Wollmann, supra note 16, at 18.

\textsuperscript{107} Robert Tyler Braun et al., \textit{Association of Private Equity Investment in US Nursing Homes With the Quality and Cost of Care for Long-Stay Residents}, 2 JAMA Health Forum e213817 (2021).

ambulances\textsuperscript{109} have displayed harm to consumers. The same question arises again: to the extent this change is caused by the incentives of the manager and not a change in competitive conditions or market structure, there may be a limited role for antitrust even though the impact on patient morbidity and mortality are clearly harms to consumers.\textsuperscript{110}

For example, a study on PE-owned nursing homes found that PE ownership increased the short-term mortality of Medicare patients by 10 percent, implying 20,150 lives lost due to PE ownership over the twelve-year sample period,\textsuperscript{111} in addition to declines in other measures of patient well-being, such as reduced mobility,\textsuperscript{112} at the same time as increased taxpayer spending on nursing home stays.\textsuperscript{113} These effects were driven by operational changes such as declines in nursing staff and compliance with standards.\textsuperscript{114}

These non-price harms may be viewed by some as more difficult for antitrust enforcers to pursue. We argue the opposite. The consumer welfare standard has always covered price, quality, and innovation, and it is obvious that infections and deaths represent lower quality. Indeed, this might be the type of harm that is very easy for courts and juries to understand. In response, PE owners may realize that cost-cutting creates risk of harm and try to protect themselves from the consequences. In one case a PE firm carved up what had been a single non-profit entity into multiple LLCs, insulating the owners by detaching them from operational liability even as they immersed themselves directly in cost-cutting maneuvers.\textsuperscript{115}

III. Policy Solutions

Obfuscation of private equity’s mergers and acquisitions, intra-group structure, and coordination and control create unique challenges to screening for and addressing anticompetitive mergers and conduct. Recognizing this, antitrust enforcers at the FTC and DOJ have begun to scrutinize PE-backed mergers more closely.\textsuperscript{116} The SEC has likewise proposed

\textsuperscript{109}Appelbaum and Batt, supra note 45.
\textsuperscript{110}William B. Vogt, Robert Town & Claudia H. Williams, \textit{How has hospital consolidation affected the price and quality of hospital care?}, \textit{SYNTH Proj Res SYNTH Rep} 15231 (2006); Kiran Stacey, \textit{US doctors fear patients at risk as cost cuts follow private equity deals}, \textit{FINANCIAL TIMES}, Nov. 11, 2021, https://www.ft.com/content/9eac6649-2df5-4663-aecf-632885462288 (last visited Dec 18, 2021) (“Earlier this year Envision put its doctors on a new salary plan, which doctors told the Financial Times would result in roughly 15 per cent lower pay. The new system also linked pay directly to physicians’ ability to bill patients. Doctors said this acts as an incentive to conduct examinations and treatments as quickly as possible…Envision has also trimmed doctors’ hours and is making increasing use of highly qualified nurses to do some of the work of physicians for about a quarter of the cost, doctors said.”).
\textsuperscript{112}Id. at 27.
\textsuperscript{113}Id. at 35.
\textsuperscript{114}Id.
\textsuperscript{115}Id.
rulemaking that would increase transparency requirements (such as quarterly return and fee disclosures to investors) for private equity groups, though in keeping with the SEC’s mandate these changes are focused on fairness and efficiency for investors in PE funds, not on the benefit of the public at large. Even the U.S. Department of Defense concluded in a recent report that competition among defense contractors has been dramatically reduced by PE-backed rollup mergers. Nonetheless, more will need to be done, and below we provide a number of policy approaches for enforcers prior to address PE’s anticompetitive concerns using the existing antitrust laws and administrative procedures.

To the extent that PE groups’ investment strategy is to build market power, the primary check on that strategy is federal agency review of mergers and acquisitions for anticompetitive potential. Active and effective merger review under Section 7 of the Clayton Act is critically important because once two firms are either wholly or majority-owned by a PE group following a merger or acquisition, coordination between them is perfectly legal.

### A. HSR Reporting: Lower Reporting Thresholds and Greater Disclosure

The best way to avoid the anticompetitive effects of PE groups is to stop the consolidation or coordinated conduct before it starts. As we have demonstrated above, because of the unique nature of PE groups in relation to their individual funds, as well as the opaque nature of private equity activity (in contrast to publicly traded companies), HSR filing requirements for these firms need to account for their unique features. HSR filings currently appear inadequate to screen for PE groups’ anticompetitive mergers and acquisitions. Therefore, private equity transactions should have different threshold and disclosure requirements: the threshold should be lower to shed light on patterns of mergers that may lead to industry consolidation, while PE firms should provide disclosure beyond the parent fund to shed light on similar holdings and control within the PE group at large. The lower HSR filing threshold could also be applied to acquisitions by search funds, providing insight into their potentially anticompetitive activity as well.

Agencies may be able to make significant progress in regulating private equity through procedural rules that allow for greater visibility into PE acquisitions. The FTC, in fact, published a Notice of Proposed Rulemaking in December 2020 for a change to the rules implementing the HSRA, which, if adopted, could help to close the gap between the definition of control for the purposes of Copperweld protection and the definition used for “ultimate parent entity” for the

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purposes of HSR filings. As noted above, “Ultimate parent entity” is currently defined as “an entity which is not controlled by any other entity.” Because the HSR rules currently define limited partnerships and LLCs as “non-corporate entities,” such noncorporate entities, including individual PE funds, are treated as their own UPE for the purposes of HSR filings. This proposed rule would expand the definition of “person” used in § 801.1(a)(1) to read: “... the term person means (a) an ultimate parent entity and all entities that it controls directly or indirectly; and (b) all associates of the ultimate parent entity.” This definition is meant to identify the “managing entity,” which would be the PE group rather than any Individual fund or fund manager. It would also focus the “size of person” test on the PE group rather than the given PE fund, and the “size of transaction” test on the aggregate acquisition if the same PE group is acquiring stakes in one company but through transactions across multiple funds. This is a crucial change, one that should give much greater visibility into the holdings of the PE group that might ultimately merge or coordinate their activities if the acquisition is allowed to proceed.

To screen for and prevent anticompetitive rollup mergers as well as potential for coordination, the FTC should also consider rulemaking to require an HSR filing to include 1) any past or near-future plans to acquire companies in overlapping markets, or 2) when a partial or full acquisition is designed to capitalize a target company to do the same, or acquire its competitors. Furthermore, the “size of person” and “size of transaction” tests should also be changed to require HSR filing when an acquirer meets the lower of the two “size of person” thresholds and their cumulative acquisitions in a given product or geographic market meet the size of transaction threshold during a five-year period. Any rules concerning the definitions of these product and geographic markets could be revisited as well. Such a change would allow for greater sensitivity to the type of rollup strategy employed by PE funds as well as what is emerging with search funds.

The most effective approach for implementing all of the above proposals would be to create a set of merger filing rules specific to private equity, including search funds. Specialized rules could be conceptualized as substantive, but could equally be considered procedural, and therefore sidestep the problem of substantive UMC rulemaking. As procedural rules, they would simply allow the FTC and DOJ to apply existing antitrust law more effectively to PE by requiring more granular detail and transparency regarding PE transactions.

122 Control of a non-corporate entity is defined as “having the right to 50 percent or more of the profits of the entity, or having the right in the event of dissolution to 50 percent or more of the assets of the entity.” 16 C.F.R. § 801.1(b)(1)(ii).
123 Kuritz and Wheatley, supra note 34, at 71 (“Further, a newly formed entity, such as a fund or an acquisition vehicle that is its own ultimate parent entity, typically will not meet the Size of Person threshold. Even an acquisition by a relatively newly formed fund or acquisition vehicle that is its own ultimate parent entity may not meet the Size of Person threshold if neither the acquiring nor acquired person has total assets or annual sales of $188.8 million or more.”).
124 Premerger Notification; Reporting and Waiting Period Requirements, supra note 120.
125 Thank you to Sandeep Vaheesan for this idea.
One such rule could interpret the “solely for investment” exemption to the HSR Act to presumptively exclude acquisitions by PE buyers. Because the PE business model is premised on active rather than passive investment, a firm holding itself out as a PE investor should be presumed to be an active owner. Such a presumption could be rebutted by a showing of deal documents demonstrating that the PE group will not receive any management fees for their equity share. The same insight should apply to acquisitions above the “solely for investment” safe harbor. Agencies could issue guidance emphasizing that in keeping with the Dairy Farmers of America decision, enforcers will presume an active investment approach for PE acquirers and therefore require substantial safeguards even when approving a merger that on paper does not convey governance rights.

It would also be helpful administratively to build agency personnel expertise in tracing acquisitions by PE groups by assigning the same staff to review all filings by the same PE group. Assigning staff consistently between, and not just within, industry-specific enforcement sections would not only allow for more visibility into PE groups’ horizontal consolidation strategies, but also into potentially anticompetitive vertical strategies. The latter in particular are almost impossible to police effectively given the current division of merger reviews.

The states’ Attorneys General should also be prepared to bring enforcement actions against PE groups and PE-backed companies. As the effects of PE investment in small geographic markets have come to light, it has become clear that a national enforcer can have only limited and reactive insight into these local markets. State AGs are uniquely placed to monitor and respond to consolidation and market power leveraging in local, particularly rural, product and labor markets. At the same time, the FTC and DOJ should notify state AGs when PE-driven rollup strategies visible at the national level can be more effectively policed at the local level.

B. Preventing Common Control

As others have argued before, evidence of active management in both majority- and minority-controlled portfolio companies across PE funds should motivate antitrust authorities to discourage interlocking ownership regimes by pursuing enforcement actions against those with holdings above a defined safe harbor of “no more than one firm per industry or with total value of less than 1 percent of the industry.” A bright-line rule is warranted because such common ownership of minority stakes in multiple competing firms does not have operational efficiencies that would benefit consumers, nor are PE firms designed to minimize risk in the way that a mutual fund is.

126 Thank you to Andrew Granato for this idea.
128 Posner, Scott Morton, and Weyl, supra note 1, at 678.
129 Areeda and Hovenkamp appear to agree that little to no efficiencies are created by partial acquisitions without the integration of control, such that “[a]n argument can be made for totally prohibiting partial stock acquisitions that have any potential for anticompetitive effects, even though a full acquisition involving the same parties would be allowed under § 7.” 5 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶ 1203d, at 283 (2d ed. 2003). By contrast, in the earlier treatise of Phillip E. Areeda and Donald Turner, they concluded that a
Clayton Act, which imposes a per se prohibition on interlocking directorates—where corporate officers and directors serve on the boards of competing businesses. 15 U.S.C. § 19. Given the issues of common control that are implicated by some PE group’s funds and competing portfolio companies, the private equity sector should be closely scrutinized for Section 8 issues.

C. Transparency Around Club Bidding to Avoid Bid Rigging

Although club bidding may be a reasonable method of spreading risk when looking to invest in an asset, this bidding process violates Section 1 when used systematically as part of a larger quid-pro-quo system of bid allocation across PE Groups. For example, coordinated patterns of bid allocation among bidders, beyond the current transaction, would suggest coordination. Club bidding to consolidate bidders to collectively depress the asset price would be anticompetitive coordination as well. Likewise, individual bidders within a club agreeing to withdraw or refrain from bidding in return for either priority in a future transaction or for a share of the current transaction would likely rise to the level of coordination in violation of Section 1. On the other hand, a club bid organized from the beginning as a good faith risk-spreading mechanism for the current transaction would likely not be per se illegal. Size of bidders may matter in deciding whether to bring a Section 1 claim: consortia may be allowed where there is evidence that the bidders, particularly small and medium size PE groups, do not have the capital to bid alone; on the other hand, consortia should trigger closer scrutiny by enforcers where the firms have the resources for an individual bid, even when such large cap bidders claim to be forming consortia to spread their risk.\footnote{Id. at 1012–14.} Additionally, the agencies could issue guidance for firms seeking to minimize risk through club bidding: one option, which would facilitate transparency and therefore mitigate against the potentially collusive aspect of club bidding, would be recommending that bidders execute written agreements at the outset, instead of oral agreements or agreements entered into when bidding is underway. Such agreements would specify the reasons for club formation and establish rules for handling sensitive information about the seller and the transactions to minimize competitive concerns.\footnote{Jackson, supra note 80, at 710–12.}

D. Strengthening Merger Review

If improved disclosure could be achieved so that the agencies had more information about mergers being undertaken and their characteristics, this should be used to apply the normal standards of merger review to PE transactions.

Under Section 7 of the Clayton Act, reductions in quality resulting from mergers are equivalent to increases in price and are therefore cognizable as consumer harm. When PE ownership shares approach monopoly levels, deteriorating quality can be policed under Section 2 of the Sherman Act, in addition to under Section 7 of the Clayton Act. For example, the dialysis

\footnote{“noncontrolling acquisition has no intrinsic threat to competition at all.” 5 PHILLIP AREEDA & DONALD F. TURNER, ANTITRUST LAW ¶ 1203d, at 322 (1980).}
transactions that the FTC scrutinized have been shown in the economic literature to have generated better patient outcomes.\textsuperscript{132}

A creative approach to remedying the lethal consolidation of the dialysis industry would be to bring a Section 7 challenge against all the anticompetitive mergers over the last 20 years. Such a case should require divestitures of those anticompetitive acquisitions that were designed to skirt the HSR requirements.\textsuperscript{133} Like many of the outpatient medical services that have been targeted by PE investment, the structure of the dialysis industry makes it well-suited to a forced unwinding of these mergers. Free-standing clinics may be divested without disproportionate efficiency losses because the different buildings, equipment, and location—rather than significant economies of scale—are likely the source of competitive advantage. Thomas Wollmann has already modelled which clinics would have been divested ex-ante if the mergers had been reported to the agency.\textsuperscript{134}

One aspect of PE merger review that can make merger review simpler is when the PE firm has a consistent strategy. If the PE group is acquiring entities in different geographies around the country to carry out an anticompetitive strategy, the antitrust authority can look at past transactions, or a group of transactions, to predict the outcome of any one. In review and in litigation it is effective and simple to rely on the plans and the history of the same roll-up when forecasting the impact of the merger. Unique analysis may not be required when the whole point of the entity is to carry out one particular kind of conduct.

E. Improving policy analysis

Another response to understanding and addressing anticompetitive harm caused by private equity could be an updating of enforcement analysis and theories of harm. For years, patent assertion entities that repeatedly acquired patent portfolios and asserted them against implementers in new and aggressive ways were not viewed as an antitrust problem. Over time, that business model became better understood and theories of harm were developed.\textsuperscript{135} Likewise, the research on dialysis has improved our understanding of the harms that can be created in those markets. One of the roles of enforcement agencies is to incorporate such learning into policy such as guidelines, speeches, and ultimately case work.

IV. Conclusion

Private equity is estimated to account for upwards of fifteen percent of the U.S. economy, a figure that is predicted to grow. Though PE is not inherently harmful—its business model can incentivize productive reorganization of otherwise unproductive assets or entire firms—given its substantial growth in share of the economy, issues arising from the sector’s anticompetitive

\textsuperscript{132} Wollmann, supra note 16.
\textsuperscript{133} John Kwoka & Tommaso Valletti, \textit{Unscrambling the eggs: breaking up consummated mergers and dominant firms}, 30 \textit{Industrial and Corporate Change} 1286 (2021); Wang, supra note 21.
\textsuperscript{134} Wollmann, supra note 16.
\textsuperscript{135} Scott Morton & Shapiro, supra note 103.
consolidation and coordination are becoming more important market realities every year. There are a number of features of the private equity model that incentivize and facilitate this anticompetitive consolidation and coordination, while shielding PE groups from effective antitrust scrutiny. First, PE’s structural opacity allows groups to obscure their funds’ holdings, as well as their portfolio companies’ identity and incentives. Second, because PE groups are not subject to the same transparency and disclosure requirements as public companies, their transactions and consolidation more easily go unnoticed—both by the public at large, leading the PE group to better evade reputational damage, as well as by regulators.

It is clear that effective enforcement of the PE sector will have enormous returns, but current policy is ill-equipped to handle the unique issues presented by the private equity model. Our paper presents a number of policy solutions to address these challenges. First, the HSR regulations should be amended to enforce against anticompetitive or potentially anticompetitive PE-backed mergers and acquisitions. This will require lowering the threshold to trigger scrutiny of acquisitions that are part of a PE group’s rollup strategy or that raise issues of common control. Relatedly, the HSR regulations need to account for the opacity of a PE group’s holdings, require greater and more granular disclosure of portfolio companies, and, importantly, change how the “ultimate parent entity” is determined.

In addition to the HSR regulations, enforcers can take a firmer stance against common control through a bright-line rule, and enforce against interlocking directorates. Anticompetitive bid rigging may be able to be addressed by enforcing under Section 1 of the Sherman Act. Enforcers should also strengthen merger review for PE transactions by flagging anticompetitive patterns of acquisitions, among other strategies that lead to accumulation of market power. Finally, articulating private equity theories and analysis of harm through guidelines, speeches, and case work will lead to greater public and market awareness and response.

The issues created by PE’s market consolidation and coordination are becoming more important market realities every year. But the harms caused by anticompetitive private equity activity can be mitigated through enforcement policy, as we show.