

MISALIGNED MEASURES OF CONTROL: PRIVATE EQUITY'S ANTITRUST LOOPHOLE

Aslihan Asil
John M. Barrios
Thomas G. Wollmann†

ABSTRACT

Agencies and legislators have raised concerns that acquisitions backed by private equity (PE) threaten competition, but few, if any, have offered explanations as to why they pose a unique threat. In this article, we argue that many PE-backed acquisitions may avoid antitrust enforcement because they escape detection. Under the Hart-Scott-Rodino Antitrust Improvements Act, parties intending to merge must notify federal authorities and wait for clearance. However, various exemptions exist based on the size of the transaction, parties involved, and proportion of control conferred by the merger. Recent work demonstrates that to police mergers effectively, agencies must be informed about transactions in their incipiency, meaning that in many economically important industries, the contours of the premerger notification program under the Act are, in practice, the same as the contours of the substantive legal standard. We show that when the Act's exemptions are applied to PE's standard investment structure, which use an array of intermediate special purpose vehicles to minimize taxes, share risks, and distribute fees, PE-backed acquisitions that would otherwise be reportable may be exempt. We support our argument with merger and filing data.

† J.D. 2021, Yale Law School and PhD Candidate, Yale University; Assistant Professor, Olin Business School at Washington University in St. Louis and Faculty Research Fellow at the National Bureau of Economic Research; Associate Professor of Economics, University of Chicago Booth School of Business and Faculty Research Fellow at National Bureau of Economic Research. Conversations with John Asker, Ian Ayres, Dave Balan, Florian Ederer, Daniel Francis, Austan Goolsbee, Al Klevorick, Fiona Scott Morton, Paulo Ramos, Nancy Rose, Bilal Sayyed, and Katja Seim inspired and improved this article. All errors are the authors' own.

Copyright © 2023 Virginia Law & Business Review Association

INTRODUCTION	52
I. PRIVATE EQUITY	56
A. Overview	56
B. Evolution of Investment Strategies	58
C. Representative Investment Structure	60
D. Other Structures.....	63
II. THE U.S. PREMERGER NOTIFICATION PROGRAM	65
A. Overview of the HSR Act.....	65
B. Jurisdictional Tests	67
C. Identification of Transacting Entities	68
D. Treatment of Non-Corporate Entities	69
E. Other Exemptions	70
III. ENFORCEMENT AND DETERRENCE UNDER THE HSR ACT.....	71
IV. PROBLEMS ASSOCIATED WITH NON-REPORTABILITY.....	74
A. Misalignment of Control.....	74
B. Failure to Recognize Change in Control	76
C. Mismeasuring Jurisdictional Test Thresholds.....	78
D. Mischaracterizing Existing Entities as New Ones.....	79
V. EMPIRICAL FINDINGS	80
VI. PROBLEMS ASSOCIATED WITH INSUFFICIENT INFORMATION.....	83
VII. CONSEQUENCES OF THE LOOPHOLE.....	87
VIII. RECENT REGULATORY AND LEGISLATIVE DEVELOPMENTS	89
CONCLUSION.....	92

INTRODUCTION

PRIVATE equity (PE) has recently been the subject of considerable scrutiny by antitrust authorities. In 2022, FTC Chair Lina Khan warned that “[a]ntitrust enforcers must be attentive to how private equity firms’ business models may in some instances distort incentives in ways that strip productive

capacity, degrade the quality of goods and services, and hinder competition.”¹ The same year, Deputy Assistant Attorney General Andrew Forman remarked that the Division is considering whether “in particular circumstances a series of often smaller transactions [by PE firms] can cumulatively or otherwise lead to a substantial lessening of competition or tendency to create a monopoly.”² To the extent that PE deals pose a unique threat to competition, few explanations have been put forth as to how and why.

In this article, we argue that PE acquisitions are more likely to be anticompetitive because idiosyncratic features of U.S. antitrust law allow many of them to effectively escape enforcement. Our argument does not require PE fund managers to differ from public ones in any way, such as in their abilities to allocate capital or in the incentives they face. Nor does it require any explicit distinction between public and private equity in the antitrust laws, as none exists. Instead, disparate treatment of private and public equity acquisitions arises due to deficiencies in the Hart-Scott-Rodino Act. The Act facilitates merger control by mandating that the federal government is informed about certain mergers in their incipiency, but the way it measures control is misaligned with economic reality. When this misalignment meets the investment structures commonly employed by PE funds, acquisitions that would otherwise be reported are exempted. As a result, many PE acquisitions may avoid detection, and those that are anticompetitive may avoid prosecution.

In Section I, we describe the rise of PE as a major source of capital, particularly in the United States, and the significant role it has played in a large number of transactions. Specifically, the increased frequency of “add-on” acquisitions, acquisitions of companies that operate in the same industry, has the potential to lead to heightened levels of concentration within various industries. The use of multiple investment vehicles managed by PE firms has facilitated a substantial number of transactions that fall within the purview of less stringent notification criteria.

¹ Public Statement from Lina M. Khan, Chair, Rebecca Kelly Slaughter, Comm’r, and Alvaro M. Bedoya, Comm’r, Fed. Trade. Comm’n, In the Matter of JAB Consumer Fund/SAGE Veterinary Partners (June 13, 2022), https://www.ftc.gov/system/files/ftc_gov/pdf/2022.06.13%20-%20Statement%20of%20Chair%20Lina%20M.%20Khan%20Regarding%20NVA-Sage%20-%20new.pdf.

² Andrew J. Forman, Deputy Assistant Att’y Gen., U.S. Dept. of Just., Keynote Address at the American Bar Association’s Antitrust in Healthcare Conference in Washington D.C.: The Importance of Vigorous Antitrust Enforcement in Health Care (June 3, 2022), <https://www.justice.gov/opa/speech/deputy-assistant-attorney-general-andrew-forman-delivers-keynote-abas-antitrust>.

In Section II, we describe the contours of the U.S. Premerger Notification Program, established by the Hart-Scott-Rodino (HSR) Act. The Program imposes reporting requirements on transactions that meet certain jurisdictional thresholds. The parties to the deal notify the Federal Trade Commission (FTC) and the Antitrust Division of the Department of Justice (DOJ) and wait for their approval. The Act exempts transactions based on the size of deal and the size of the transacting parties. Moreover, it treats acquisitions of non-corporate entities more leniently than other transactions. Size-of-deal and size-of-transaction thresholds, as well as the treatment of non-corporate target acquisitions fundamentally depend on the aggregation of control, which the Act defines using ownership interests. This approach has significant implications for PE deals, as PE investment structures typically involve multiple co-managed entities, and investments in NCEs are a common feature of PE. Consequently, many PE deals are exempt from reporting under the Act.

Section III summarizes recent evidence that shows how essential the HSR Act is to effective antitrust enforcement. Recent studies have demonstrated that enforcement drops by 90% in deals that are exempt from reporting.³ This finding underscores the importance of the procedural deficiencies identified in the Article, as they have a substantive impact on competition. PE's antitrust loophole allows many PE acquisitions to evade detection, and raises serious concerns about the investigation of potentially anticompetitive transactions.

Section IV shows precisely why the premerger notification program's measure of control is misaligned with economic reality. *In the Act, control hinges on who owns the entity, but in reality, control depends on who manages the economically productive assets.* This misalignment leads the Act to treat each co-managed investment vehicle as a separate entity, despite the fact that the general partner (GP) exerts control over portfolio companies, while other investors who hold ownership interests are passive. Hence, the Act fails to reach the PE firm that ultimately manages portfolio companies through numerous investment vehicles, even when those portfolio companies are competitors in a concentrated industry.

Specifically, the Act's failure to properly aggregate control yields two primary avenues through which PE deals can become exempt from reporting requirements. First, when the ownership interests of a non-corporate portfolio company are dispersed among co-managed PE investment vehicles, no single

³ Thomas G. Wollmann, *Stealth Consolidation: Evidence from an Amendment to the Hart-Scott-Rodino Act*, 1 AM. ECON. REV.: INSIGHTS 77, 79 (2019) [hereinafter Wollmann, *Stealth Consolidation*]; 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, 2020) [hereinafter Wollmann, *How to Get Away with Merger*].

entity is deemed to acquire control over the portfolio company. The Act subjects acquisitions of non-corporate interests to notification requirements only if control is conferred. As a result, the use of multiple co-managed entities exempts many PE deals involving non-corporate targets, which are prevalent in the industry.

Second, when the Act views each co-managed investment vehicle in isolation, the jurisdictional tests that determine reportability are applied to each entity separately. The division of ownership interests among multiple co-managed investment vehicles creates the impression that each entity's acquisition confers insignificant control over the portfolio company, while ignoring the fact that the aggregate value of interests over which the PE firm acquires managerial power usually exceeds the jurisdictional thresholds. By not aggregating control in an economically meaningful way, the Act misses the fact that the aggregate value of interests over which the PE firm acquires managerial power is above the jurisdictional thresholds. As a result, acquisitions that would otherwise require reporting become exempt from the Act.

In Section V, we estimate the extent to which PE-backed acquisitions escape notification using transaction-level merger data. To identify the deals that were reported to the agencies, we rely on information disclosed through the Early Termination Program, which covers the vast majority of reportable transactions. Since reportability depends critically on transaction value, and since publicly and privately backed mergers may systematically differ from one another in their size, our research design compares notification rates conditional on transaction value. Consistent with the contours of the legislation, we find that premerger notification rates are exactly zero until transaction value reaches the threshold at which mergers must be reported to the agencies, at which point rates rise sharply. Consistent with disparate treatment, PE-backed acquisitions are reported at significantly lower rates—over twenty-five percentage points lower for mergers between about \$100 million and \$500 million. To ensure the robustness of these findings, we replicate these results using an entirely separate approach to infer reportability, which yields similar results. To the best of our knowledge, this is the first time either approach has been implemented as well as the first time this research design has been employed to study public-private equity differences.

Section VI shows that the agencies might not receive sufficient information to assess the transaction's anticompetitive effect even when a transaction is reportable. The crux of the issue remains the misaligned definitions of control. Despite several revisions to the Act and rules, a fund's premerger notification might not reveal competitively significant holdings of other co-managed entities. Consequently, the HSR filings may not disclose significant competitive

links, even if the PE firm manages competitors through several funds or investment vehicles.

In Section VII, we describe the potential competitive consequences of the loophole, and in Section VIII, we discuss recent regulatory and legislative developments in federal and state premerger notification programs. Finally, Section IX concludes.

I. PRIVATE EQUITY

A. Overview

The fundamentals of and developments in PE are important for antitrust law scholars, as PE started to play a more prominent role in product markets. Although private and public equity purportedly provide alternative funding sources for business projects in exchange for a return on invested capital, they differ in ways that can affect competition.

As the name implies, public equity is raised by selling shares to the public. After issuance, shares typically trade on a secondary market such as the New York Stock Exchange. To protect investors, securities regulators (e.g., the Securities and Exchange Commission) require publicly traded companies to register the securities they issue and provide timely, detailed information about their operations. Although more complicated arrangements may arise, most public companies raise the vast majority of their equity financing by issuing a single class of common stock, which comprise voting shares in a single corporate entity. In practice, many investors store their shares in brokerages or hold them indirectly by investing in mutual or exchange traded funds. Investments in most public equities require a small minimum investment and are liquid.

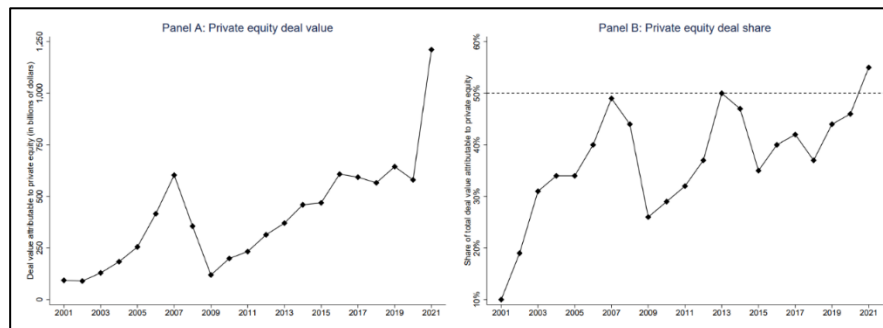
PE provides a sharp contrast, as it is raised by selling interests in investment funds, primarily to institutional investors. These funds are managed by PE firms and typically buy controlling stakes in companies. The focus of PE firms is on acquiring and managing companies' operations, with the goal of exiting the investment through a sale or public offering. Most investors are high net worth individuals and institutional investors such as pension funds, sovereign wealth funds, and university endowments. Unlike public offerings, companies that issue equity privately enter into transactions directly with investors and these private offerings are exempt from some of the laws and regulations that govern securities. Investments in PE tend to be long-term and illiquid.

PE is a large and growing source of funding. We plot the value of PE deals over time to demonstrate this. Panel A of Figure 1 reports the result, showing

that the PE deal activity increased by more than 1,000% in the past two decades. PE deals reached historical levels during the pandemic. The PE deal value, which was around \$100 billion in 2001, rose from around \$600 billion in 2018 to \$1.250 trillion in 2021. We also plot share of deal value attributable to PE over time. Panel B reports that, whereas PE deals constituted 10% of all deals in 2001, this share rose to approximately 60% in 2021. In other words, PE currently constitutes more than half of acquisitions.

In less than a decade, the number of PE funds in the United States approximately tripled, whereas net asset value of these funds approximately quadrupled. Whereas in 2013, there existed approximately 6,000 funds with around \$1.5 billion net asset value, by the end of 2021, there were around 19,000 PE funds in the United States whose net asset value amounted to approximately \$6 billion. During the pandemic, the number of PE deals jumped up from 5,710 in 2018 to an estimated 8,624 in 2021.⁴

Figure 1.
Private Equity Deal Value and Share



Notes: In Panel A, calendar year is on the horizontal axis, and the total value of transactions involving private equity firms is on the vertical axis. Value is measured in billions of 2022 U.S. dollars. In Panel B, calendar year is on the horizontal axis, and the share of all transactions that involve private equity firms is on the vertical axis. Source: Refinitiv Mergers & Acquisitions Database and authors' calculations.

PE became an important source of capital not just for small companies but also for large firms that are comparable in size to U.S. public corporations. Today, among the largest companies held by PE firms are some prominent consumer staples, such as Dunkin Donuts, the second largest donut and coffee

⁴ PitchBook, *US PE Breakdown* (2021), https://files.pitchbook.com/website/files/pdf/2021_Annual_US_PE_Breakdown.pdf.

shop in the world, PetSmart, one of the leading pet store chains, Athenahealth, a top healthcare software company, Medline Industries, one of the leading manufacturer and distributor of medical supplies, McAfee, a global leader in security software, Univision, the largest Spanish-language television network in the US, Veritas, a leader in data management, and Proofpoint, one of the top data security companies.

The increasing magnitude of capital raised by PE firms is not the only reason for which antitrust regulators should at least be informed about PE acquisitions. Modern PE firms have been focusing their investments on industries that are of uttermost importance for consumers, such as healthcare and software.

B. Evolution of Investment Strategies

Although the practice of using pools of privately raised capital to acquire businesses that could be restructured and resold dates back to the 1940s, PE gained popularity during the 1980s.⁵ Though acquirers employed a host of strategies to generate returns, the leveraged buyout, or LBO, became the preferred approach for prominent funds such as Kohlberg Kravis Roberts (KKR). For instance, in 1989, KKR proposed to acquire RJR Nabisco, which was publicly traded at the time, which sparked an intense bidding war, resulting in a \$31.1 billion acquisition, and was chronicled in the best-selling book *Barbarians at the Gates*. As the name implies, LBOs involved acquisitions funded primarily by loans and bonds offering high yields, which were commonly referred to as “junk” due to their inherent riskiness. Much of the leverage was raised by Drexel Burnham Lambert, which built a reputation for raising extraordinary amounts of capital quickly and efficiently.

LBO-oriented acquirers were typically “generalists” in the sense that they acquired targets from a diverse set of industries.⁶ Moreover, portfolio companies rarely made subsequent acquisitions, as the high debt load required free cash flow from operations to be used to meet interest payments and pay down debt. In fact, the opposite often occurred—portfolio companies carved out and divested products, brands, divisions, and subsidiaries in an effort to

⁵ John Steele Gordon, *A Short (Sometimes Profitable) History of Private Equity*, WALL ST. J. (Jan. 17, 2012), <https://www.wsj.com/articles/SB10001424052970204468004577166850222785654>

(“The first private-equity firms, so-called, are generally thought to be American Research and Development Corporation (ARDC) and J.H. Whitney & Co., both founded in 1946.”).

⁶ For historical holdings of KKR, see KKR, *Historical List of Portfolio Companies* (Aug. 17, 2023), <https://www.kkr.com/historical-list-portfolio-companies>.

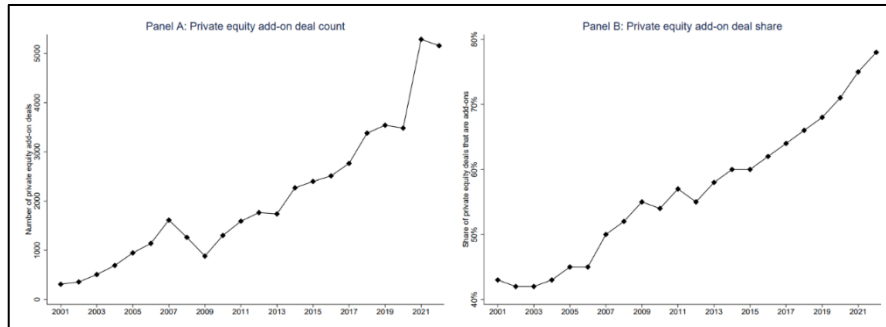
raise cash. The size and frequency of LBOs have ebbed and flowed with the indictment of Drexel on securities fraud, the availability of low interest loans throughout the 2000s, and macroeconomic cycles, but large, leveraged acquisitions maintain popularity among established PE firms.

In the 1980s, a small number of firms started to successfully employ an alternative strategy, “buy and build.” Often attributed to Stanley Golder and Carl Thoma, the strategy involves making an initial “platform acquisition” and “adding on” complementary or competing firms by way of subsequent acquisitions. As a result, the strategy typically employs less leverage, targets smaller firms, and involves a greater degree of industry specialization.

Add-on deals can take two forms, depending on whether the target company maintains its initial structure post-acquisition. A “tuck-in” acquisition refers to the purchase of a company that lacks the necessary infrastructure, followed by its merger with the platform company. Once the tuck-in acquisition is completed, the target ceases to exist as a separate entity. In contrast, in a “bolt-on” acquisition, the acquired target maintains its initial structure to a certain degree post-acquisition. For instance, the bolted-on company can continue to operate as a division of the platform company after the merger. The complete absorption of the target in tuck-in acquisitions as opposed to the preservation of the target’s identity in bolt-on acquisitions is what differentiates these two strategies. Despite the final structure of the companies, all of these strategies are marked by merging targets and acquirers in the same or similar industries.

Add-on deals have been playing a substantial role in PE transactions. In Figure 2, Panel A, we plot the number of add-on deals over time. Whereas there were fewer than 500 add-ons in 2001, that number has risen to 5,000 in 2022. In Panel B, we show the share of PE deals that are add-ons over time. Whereas around 40% of deals were add-ons in the early 2000s, add-ons constituted nearly 80% of PE deals by 2022.

Figure 2.
Private Equity Add-On Deal Count and Share



Notes: In Panel A, the calendar year is on the horizontal axis, and the number of add-on deals involving private equity firms is on the vertical axis. In Panel B, the calendar year is on the horizontal axis, and the share of private equity deals that are add-ons is on the vertical axis. Source: Pitchbook and authors' calculations.

To further illustrate the importance of the buy-and-build strategy, consider Vista Equity Partners and Thoma Bravo, both of which came into existence in 2000s and have been investing exclusively in software and technology companies.⁷ Today, Thoma Bravo and Vista Equity Partners have \$114 billion and \$96 billion, respectively, in assets under management. For comparison, in 2020, the direct contribution of the software industry to the U.S. economy was \$933 billion, and software industry supported more than 15.8 million jobs.⁸

C. Representative Investment Structure

To see how PE acquisitions escape detection by antitrust authorities, it is essential to understand the types of investment structures typically employed by PE firms. Although countless arrangements are used to allocate fees, align incentives, minimize tax liabilities, maintain confidentiality of investors, and achieve other business purposes, most funds share a basic structure.

A PE “fund,” as it is often referred to, generally comprises a main fund that is organized as a limited partnership. Unlike with corporations, which are taxed on their profits, profits earned by partnerships pass through the entities

⁷ See Vista Equity Partners Management, LLC, <https://www.vistaequitypartners.com/about/> (last visited Jan. 20, 2023); Thoma Bravo, <https://www.thomabravo.com> (last visited Jan. 20, 2023).

⁸ BSA Foundation, *Software: Supporting US Through COVID*, SOFTWARE.ORG (May 4, 2021), <https://software.org/reports/software-supporting-us-through-covid-2021/>.

to their owners without being taxed under U.S. law. For domestic investors without tax-exempt status, being a limited partner (LP) in the main fund avoids double taxation (i.e., taxes on the corporation it owns and on capital gains or dividends generated from the ownership). Hence, they prefer this type of investment vehicle.

Other investors may prefer to invest through “blockers,” which are organized as corporations. Domestic tax-exempt investors are only exempt from taxes on profit related to their primary mission. For instance, if a university generates profit from instructing its students, then no tax liability is incurred, but the same is not true were it to generate profit from, e.g., selling soft drinks or software—unrelated to higher education. The latter is classified as “unrelated business taxable income” (UBTI), “income from a trade or business, regularly carried on, that is not substantially related to the charitable, educational, or other purpose that is the basis of the organization’s exemption.”⁹ Thus, if the university invests through the main fund into one or more portfolio companies, which are also usually organized as pass-through entities for tax purposes, and if any of these portfolio companies earns profit unrelated to instruction, then its investments will generate UBTI for the school. As a result, the university must file a tax return and pay income tax on the unrelated income. In certain circumstances, it may even risk its tax-exempt status. Alternatively, dividends and capital gains do not generate a tax liability. Thus, if the university invests through a corporation, the corporation will pay corporate income tax, but any distributions from it or gains from its sale will be tax free. If structured correctly, then it will “block” any tax liability from the domestic tax-exempt investor, which is then free from even filing a return.

Similar to domestic tax-exempt investors, non-US taxable entities, such as foreign entities, may also prefer to invest through blockers. Non-US taxable entities need to pay taxes on “effectively connected income” (ECI), income that is realized from a trade or business in the United States. If a foreign entity is a member of the main fund that is a partnership, any income generated from the partnership will be ECI, and the foreign entity must file a U.S. tax return and pay taxes. A foreign entity can invest through a corporation to avoid the generation of ECI. When a foreign entity invests using a blocker, the blocker becomes the corporate taxpayer, so that any income that the underlying

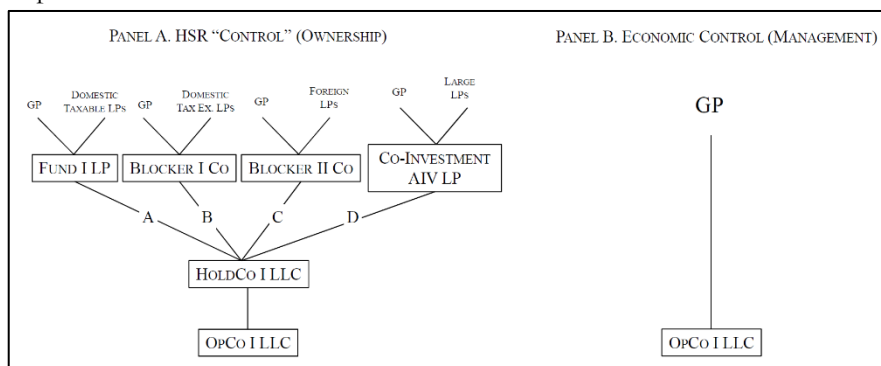
⁹ I.R.S., *Unrelated Business Income Tax*, <https://www.irs.gov/charities-non-profits/unrelated-business-income-tax#:~:text=For%20most%20organizations%2C%20unrelated%20business,basis%20of%20the%20organization%27s%20exemption.>

portfolio company generates does not constitute a direct allocation or distribution for the foreign entity.

In PE, fund managers are commonly compensated on a “two-and-twenty” schedule. Each year, they receive 2% of the assets under management. Also, when the fund is formed, they form a general partnership, which receives 20% ownership in each of the investment vehicles at no cost. Conceptually, the goal of the schedule is to provide enough money to reliably cover the operating expenses of the firm while also providing sharp incentives to generate large returns. Naturally, however, some very large, established investors may use their bargaining power and negotiate lower fees. This is commonly achieved by allocating a portion of one’s investment through an alternative investment vehicle (AIV), which “co-invests” alongside the main fund and blockers but does not pay the fees incurred by those entities.

To fix ideas, we construct a “representative investment structure” based on data measuring the composition of investors and the vehicles through which they invest. Panel A of Figure 3 depicts the result. At the top of the diagram are investors. This group comprises the GP, which is owned by the fund managers, and a collection of domestic taxable, domestic tax-exempt, and foreign individuals and organizations. In the middle are the vehicles through which they invest—the main fund limited partnership, blocker corporations, and an alternative investment vehicle. (In reality, each of the objects we depict may represent a host of similarly structured entities. We return to this point later in the paper.) At the bottom is the operating company, i.e., portfolio company, which holds economically productive assets that may generate profit. In recent years, the vast majority of operating companies are pass-through entities, which avoid double taxation, so we have appropriately named this one “OpCo I LLC.” For comparison, Panel B of Figure 3 depicts management. As all of the LPs are passive, at least to a first-order approximation, the GP has complete control over the operations of OpCo I LLC.

Figure 3.
Representative PE Investment Structure



A, B, C, and D represent the percentage of the operating entity owned by the main fund, blockers, and co-investment vehicle, respectively. We obtain information on the composition of LP investment from Preqin, a leading source of data on PE fundraising.¹⁰ They estimate that domestic taxable organizations (e.g., insurance companies and banks), domestic tax-exempt organizations (e.g., pension funds and endowments), and foreign organizations (e.g., sovereign wealth funds) account for 22%, 63%, and 15% of LP investment.

We then obtain information on co-investment from Triago Capital, a placement agent and advisory firm that gathers data on the share of PE investment accounted for by co-, direct, and separately managed investment vehicles.¹¹ They estimate that D equals 28%. For simplicity, we assume that the composition of co-investors mirrors the composition of LPs overall and that the GP owns 20% of each vehicle. Under this assumption, A, B, and C equal 16%, 45%, and 11%, respectively.¹²

D. Other Structures

In addition to the representative investment structure, which contains multiple co-managed entities within a fund, PE firms can invest through

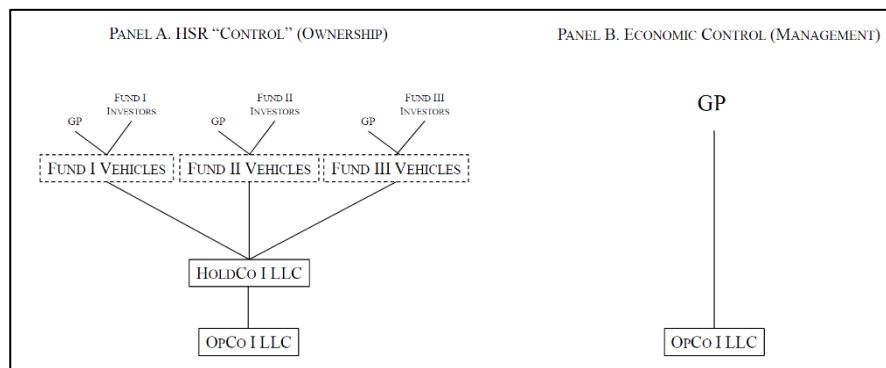
¹⁰ StepStone, *A Comprehensive Guide to Private Equity Investing* (2017), <https://www.stepstonepw.com/wp-content/uploads/2020/10/201705-A-Comprehensive-Guide-to-Private-Equity-StepStone-Group.pdf>.

¹¹ Antoine Drean, *Ten Predictions for Private Equity in 2017*, FORBES (Jan. 25, 2017), <https://www.forbes.com/sites/antoinedrean/2017/01/25/ten-predictions-for-private-equity-in-2017/?sh=51a716a57db9>.

¹² The 16%, 45%, and 11% figures are obtained by multiplying 100%-28% by 22%, 63%, and 15%, respectively.

multiple funds, to which we refer as a “fund family.” Funds in the same fund family can have the same or different investors, but they are managed by the same PE firm. Panel A of Figure 4 illustrates the ownership structure in a fund family, whereas Panel B shows the management structure. Each fund has the aforementioned within-fund structure, and these funds can invest in the same or competing portfolio companies.

Figure 4.
Fund Family Investment Structure



If the use of multiple vehicles or funds within a PE firm is a widespread industry practice, conflicts of interest regarding the investments of various entities must frequently arise, particularly in those PE firms that engage in add-ons. This hypothesis proves to be true. For evidence, we turn to the prospectus of Vista Equity Partners, a leading PE firm in the software space that employs a host of funds. First, Vista has developed the “One Vista” ecosystem “to identify and help facilitate synergies between and among its Equity Fund and Perennial Fund portfolio companies (including those held by different Vista entities) with the aim of accelerating growth through . . . strategic partnerships and collaborations between and among such portfolio companies.”¹³ Second, Vista acknowledges potential conflicts of interest that it might have when working with different portfolio companies within the Vista One ecosystem. In its brochure, the PE firm says,

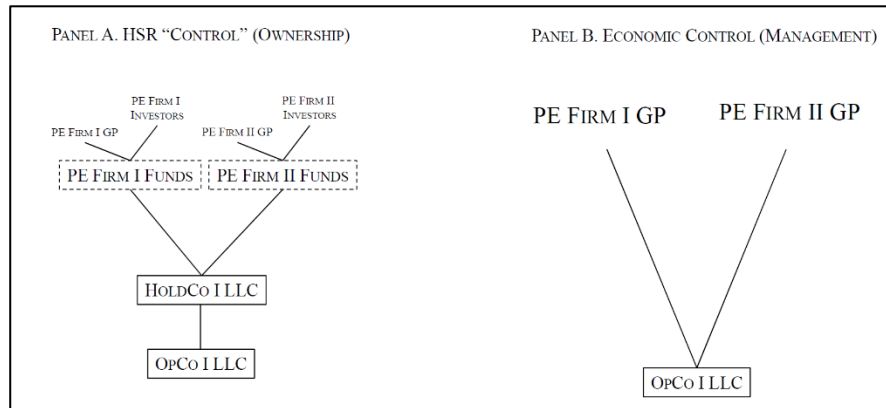
In facilitating One Vista activities, Vista and its affiliates face potential conflicts of interest because although Vista and its

¹³ VISTA EQUITY PARTNERS MANAGEMENT, LLC, FORM ADV PART 2A BROCHURE 31-32 (Dec. 23, 2021).

affiliates intend to make recommendations that they believe are aligned with a portfolio company's financial and operational strategies . . . , Vista and its affiliates have a potential incentive to make such a recommendation because of its, or its affiliates', financial or business interests.¹⁴

When a transaction is beyond the capital raising capabilities of a single PE firm, it can partner with other PE firms to pool assets. Figure 5 shows a representative investment structure with multiple PE firms. In these cases, the PE firm may yield some managerial control to the other firms, but as long as the management strategy aligns with the interests of all parties involved, this does not necessarily result in a significant cost. This alignment of interests is likely because a coordinated management strategy that maximizes profits for portfolio companies in a single industry will benefit all participating PE firms.

Figure 5.
Investment Structure With Multiple PE Firms



II. THE U.S. PREMERGER NOTIFICATION PROGRAM

A. Overview of the HSR Act

Acquisitions that affect U.S. commerce are subject to U.S. antitrust law. Most specifically, they are governed by Section 7 of the Clayton Act, which prohibits any transaction with effects that “may be substantially to lessen

¹⁴ *Id.* at 32.

competition, or to tend to create a monopoly.”¹⁵ However, even after the Clayton Act was enacted in 1914 and strengthened in 1950 under the Celler-Kefauver amendments, many direct competitors still managed to merge.¹⁶ To do so, they joined their operations quickly and quietly so that when the federal government eventually discovered and challenged the merger, it was too late—the “eggs were already scrambled.”¹⁷ By that point, information was shared and assets were commingled to the point that unwinding the transaction would be a slow and costly if not impossible process.

United States v. El Paso Natural Gas Company illustrates the severity of the problem.¹⁸ In 1957, El Paso acquired an imminent competitor, Pacific Northwest Pipeline Corporation, subsequent to which the DOJ challenged the transaction. Following seven years of litigation, the Supreme Court found in favor of the agency. Although El Paso was ordered to divest “without delay,” the divestiture process took another ten years, during which time it earned several million in profit each year.¹⁹

For nearly three decades, “midnight mergers” undermined enforcement under Section 7. To enable the agencies to arrest mergers in their incipiency, Congress passed the HSR Act in 1976, which established the U.S. Premerger Notification Program. The Act requires firms that are interested in merging to notify the FTC and DOJ in advance, giving agency staff critical time to evaluate the competitive aspects of transactions prior to their completion. As we describe below, recent empirical work shows that premerger notification is absolutely essential to effective enforcement in many economically important industries. However, as we describe below, the Act includes important exemptions.

When a transaction falls within the scope of the Act, each of the involved parties must submit a detailed filing that identifies the assets or ownership interests being acquired, describes their business operations, discloses the consideration paid from the buyer to the seller, and includes any relevant

¹⁵ 15 U.S.C. § 18 (2018).

¹⁶ Antimerger Act of December 29, 1950, 64 Stat. 1125 (current version at 15 U.S.C. § 18).

¹⁷ See H.R. REP. NO. 94-1373, at 8 (1976) (“‘Unscrambling’ the merger, and restoring the acquired firm to its former status as an independent competitor is difficult at best, and frequently impossible.”).

¹⁸ United States v. El Paso Nat. Gas Co., 376 U.S. 651 (1964).

¹⁹ William J. Baer, *Reflections on 20 Years of Merger Enforcement Under the Hart-Scott-Rodino Act*, FTC (Oct. 31, 1996), <https://www.ftc.gov/news-events/news/speeches/reflections-20-years-merger-enforcement-under-hart-scott-rodino-act>.

reports prepared in conjunction with the transaction. After filing, the parties must wait to close. During this time, the Premerger Notification Office (PNO) provides an initial assessment of the deal, after which point the FTC or DOJ may investigate further. If agency staff decide the merger is potentially anticompetitive, then they will request more information from the parties (i.e., issue a “Second Request”), which extends the waiting period.²⁰ If not, then the waiting period terminates.

Though the ordinary waiting period is thirty days (or ten days in the case of a tender offer), the merging parties can request early termination. In this case, if the agencies complete their review and determine no action will be taken, then the PNO typically grants the request. Since it is free of charge, the vast majority of filers request early termination. Notably, the PNO publishes all early termination grants on its website. Thus, while the mere existence of an HSR filing is typically highly confidential, the index of granted requests provides significant information on the program.

The HSR Act’s only objective was to create a process for notifying agencies about mergers in their incipiency—the Act does not affect which mergers are legal, and it does not signal to the agencies which mergers to prosecute. The co-sponsors of the bill were clear on this point. For instance, Congressman Rodino, one of the cosponsors of the Act, stated, “Let me emphasize that this bill makes no changes in the substantive law of mergers.”²¹

B. Jurisdictional Tests

The HSR Act applies to acquisitions of assets, voting securities in a corporation, or control of an NCE, such as a limited liability company or partnership. To fall within its jurisdiction, at least one of the involved parties must be in engaged in or affect U.S. commerce. In addition, size-based criteria of “size-of-transactions” (SOT) and “size-of-persons” (SOP) tests must be satisfied. In short, if the target has at least \$10 million in assets (subject to an adjustment, as described below) and the acquirer has at least \$100 million (as adjusted) in assets, then the transaction is reportable if and only if the acquirer’s interest in the target at the end of the transaction is worth at least \$50 million

²⁰ For an empirical analysis of the HSR Act Second Requests, see Logan Billman & Steven C. Salop, *Merger Enforcement Statistics: 2001-2020*, 85 ANTITRUST L. J. 1 (2023).

²¹ 122 CONG. REC. 25,052 (1976) (statement of Rep. Rodino).

(as adjusted).²² If the target has less than \$10 million in assets or the acquirer has less than \$100 million (as adjusted) in assets, the transaction is reportable if and only if the acquirer's interest in the target at the end of the deal is worth at least \$200 million (as adjusted).

In most cases, the jurisdictional tests can be simplified even further. Since acquirers are typically much larger than targets, and since few firms sell for more than five times the book value of their assets, reportability typically depends on whether the transaction value is at least \$50 million (as adjusted). The one important exception involves targets whose assets consist almost entirely of intellectual property (IP), such as patents and trademarks. U.S. Financial Accounting Standards Code ASC 730-10-25 stipulates that all research and development expenditures must be expensed, not capitalized, meaning that internally generated IP will not appear as an asset on the firm's balance sheet.²³ As a result, it is not uncommon to see, for example, a biotechnology company with a promising new treatment for a disease be acquired for several hundred million dollars but have assets of only, say, a few million dollars. Thus, when startup firms in high-tech industries are acquired, reportability typically turns on whether the transaction value is at least \$200 million (as adjusted), not \$50 million (as adjusted).

The adjustments to the thresholds reflect an amendment, which became effective in early 2001. The amendment stipulated that all thresholds will grow with gross national product starting in 2005. At the time of writing of this paper, the thresholds have more than doubled compared to their initial values. As of February 2022, the \$50 million and \$200 million value-related thresholds are adjusted to \$101 million and \$404 million, respectively, while the \$10 million and \$100 million asset-related thresholds are adjusted to \$20 million and \$202 million, respectively.²⁴

C. Identification of Transacting Entities

²² For ease of exposition, we assume that the target is smaller than the acquirer, which is almost always true in practice. Note that if the target is engaged in manufacturing, then the first criterion is satisfied if the target has at least \$10 million in assets *or* \$10 million in net sales. *See* 15 U.S.C. § 18a (2018).

²³ ACCOUNTING STANDARDS CODIFICATION, 730-10-25 (FIN. ACCT. STANDARDS BD. 2023).

²⁴ Revised Jurisdictional Thresholds for Section 7A of the Clayton Act, 87 Fed. Reg. 3541 (Jan. 24, 2022).

The application of the jurisdictional tests requires the identification of the acquirer and target. Under the HSR Act, the acquirer and the target may not be the entities that are directly involved in the transaction. Instead, the Act first determines the entities that are directly involved in the transaction and moves up the “control” chain until it reaches an entity that is not controlled by any other.²⁵ These entities are called “Ultimate Parent Entities” (UPEs). It is to these entities that the thresholds apply.

Simply stated, interests are aggregated to the parent entities using “control,” and the Act defines control based on ownership of interests. Specifically, for a corporation, the UPE is the entity that holds 50% or more of the corporation’s outstanding securities, or that has the current contractual power to designate 50% or more of the board of directors.²⁶ For an NCE, the UPE is the one that has the right to 50% or more of the entity’s profits or assets in the event of dissolution.²⁷

D. Treatment of Non-Corporate Entities

When the Premerger Notification Program was established in 1976, few businesses were organized as NCEs. At that time, partnerships were rarely used outside a small number of professions such as medicine, law and accounting. The LLC, meanwhile, only came into existence in 1977, when a business need arose for a hybrid entity that had features of both a corporation and a partnership.²⁸ Two decades needed to pass before the LLC form would be adopted in all fifty states.²⁹

As NCEs were not a prevalent form of business at the time, the Act originally applied only to acquisitions of voting securities and assets, and the PNO took the position that interests in NCEs were neither.³⁰ As a result, acquisition of NCE interests did not trigger the notification requirements, unless 100% of interests were acquired, giving rise to a transfer of all assets of an entity and making the deal an asset acquisition. This exemption of NCE

²⁵ 16 C.F.R. § 801.1(a)(3) (2023).

²⁶ 16 C.F.R. § 801.1(b)(1)(i) (2023); 16 C.F.R. § 801.1(b)(2) (2023).

²⁷ 16 C.F.R. § 801.1(b)(1)(ii) (2023).

²⁸ The Editors of Encyclopaedia Britannica, *Partnership*, BRITANNICA MONEY, <https://www.britannica.com/topic/partnership> (last visited Aug. 27, 2023).

²⁹ *Id.*

³⁰ *Id.*

acquisitions from the Act was pejoratively referred to as the “partnership loophole.”

There have been two major developments since the enactment of the Act: first, NCEs, and especially LLCs, became a prominent form of business organization. Whereas pass-through entities filed around 10.9 million returns in 1980, this figure was approximately 31.1 million in 2012.³¹ In contrast, tax filings by entities subject to corporate tax was around 2.2 million in 1980 and approximately 1.6 million in 2012.³² Second, PE gained significance as a source of capital, leading to the employment of numerous NCEs.³³

The rise of NCEs posed a challenge to the Premerger Notification Program and prompted the agencies to revise its position multiple times. In 1987, the agencies issued rules changing the definition of control with respect to NCEs, creating the possibility of reporting requirements.³⁴ In 1999, it made certain LLC formations reportable, but did not address the formation of other NCEs.³⁵ The subsequent change came in 2005, when the agencies made acquisitions of control in NCEs reportable if the SOT and when necessary, the SOP tests were met.³⁶ Despite the 2005 amendment, the HSR Act continued to treat corporations and NCEs differently. Today, acquisitions of non-corporate interests are reportable only when they confer control, whereas, all acquisitions of interest in corporate entities are reportable, as long as they meet the jurisdictional tests.³⁷ Similar to acquisitions of non-corporate interests, the formation of an NCE is non-reportable if no party gains control over the new entity.

³¹ Scott Greenberg, *Pass-Through Businesses: Data and Policy*, TAX FOUND. (Jan. 17, 2017), <https://taxfoundation.org/data/all/federal/pass-through-businesses-data-and-policy/#:~:text=Instead%20of%20paying%20taxes%20on,under%20the%20individual%20income%20tax.>

³² *Id.*

³³ *See supra* Section 0.

³⁴ The 1987 rules created the currently used control test for NCEs, and with the possibility of control over these entities, they were no longer automatically deemed their own UPEs. Under these new rules, the right to 50% or more of profits or, in the event of dissolution, the right to 50% or more of assets endowed a person with control over the NCE. 16 C.F.R. § 801.1(b)(1)(ii) (2022).

³⁵ Premerger Notification: Reporting and Waiting Period Requirements, 64 Fed. Reg. 5808, 5809 (Feb. 5, 1999).

³⁶ Premerger Notification; Reporting and Waiting Period Requirements, 70 Fed. Reg. 11502, 11504 (Mar. 8, 2005).

³⁷ 16 C.F.R. §§ 801.10(d), 801.2(f)(1)(i) (2022).

E. Other Exemptions

Two commonly relied upon sets of exemptions are the investment-only exemptions and industry specific exemptions. Acquisitions of voting securities done solely for investment purposes are exempt from the HSR Act if the acquirer holds, after the transaction, 10% or less of the voting securities of the target company.³⁸ Similarly, acquisitions of 15% or less of the voting securities of an entity made by certain institutional investors are exempt if made solely for the purpose of investment.³⁹ These “investment-only” exemptions are construed very narrowly, and they are rarely relevant to PE firms and investors.

Acquisitions in some industries will either never or always require notification. The most common examples of the former are those that pertain to acquisitions of real property and hotels without casinos, which are almost never reportable.⁴⁰ As an example of the latter, acquisitions of banks and bank holding companies need to be reported to the federal government under the Federal Deposit Insurance Act and the Bank Holding Company Act, respectively.⁴¹ As such, they are not subject to the HSR Act.⁴² We abstract away from these industries for the remainder of our analysis.

III. ENFORCEMENT AND DETERRENCE UNDER THE HSR ACT

Conditional on the degree to which a merger is likely to reduce competition or create a monopoly in the US, the substantive legal standard applied under Section 7 does not depend directly on the size of the transaction, assets or sales affected, consideration conferred, or any other factors that determine reportability. In other words, the agencies are free to investigate and challenge any transactions, regardless of whether it is subject to premerger notification. Moreover, the agencies can find out about transactions by several other means—press releases, trade publications, financial reports, complaints by consumers or suppliers or even competitors, et cetera. Thus, at least until very

³⁸ *Id.* at § 802.9.

³⁹ *Id.* at §802.64(b).

⁴⁰ *Id.* at §§ 802.2(e), 802.3(a), (c), 802.5.

⁴¹ Federal Deposit Insurance Act, 12 U.S.C. § 1828(c); Bank Holding Company Act, 12 U.S.C. §§ 1842(a)-(b), 1843(a).

⁴² For exemptions on bank and bank holding company acquisitions, see 15 U.S.C. § 18a(c)(6)-(8).

recently, the effect of premerger notifications on enforcement was an empirical question.

Starting with Wollmann (2019, 2022), a recent, growing literature finds that the HSR Act is essential to effectively enforcing Section 7.⁴³ The first piece of evidence derives from the 2001 amendment to the HSR Act, which abruptly raised the transaction value threshold from about \$10 million to \$50 million.⁴⁴ The change represented an aggregate “shock” to the program, as the total number of notifications received by the FTC and DOJ immediately fell by 70%.⁴⁵ To study its effect, the author gathered economy-wide data on mergers from 1994 to 2011.⁴⁶ He then compared never-exempt mergers, which are large enough to require notification throughout the sample, to newly-exempt mergers, whose transaction values make them reportable before the merger but not after it.⁴⁷ He found that investigations into newly-exempt mergers fell by over 90% following the amendment, implying that mergers falling outside the scope of the HSR Act receive little if any antitrust scrutiny.⁴⁸ The author calls the resulting market structure changes “stealth consolidation.” He stresses, however, that the change in investigations is not necessarily any fault of either agency tasked with enforcing Section 7, as it is entirely unclear how the DOJ and FTC could learn about most of the transactions in their incipency.⁴⁹ He also finds that the horizontal market share of newly-exempt mergers increases significantly after the amendment.⁵⁰ The finding is consistent with a large deterrent effect of the HSR Act. That is, many direct competitors, recognizing that their mergers would fall under the amendment threshold and receive little scrutiny, became more likely to merge.

The second piece of evidence comes from mergers among U.S. dialysis providers.⁵¹ Narrowing the focus to a single industry allows the author to link

⁴³ Wollmann, *Stealth Consolidation*, *supra* note 3; Wollmann, *How to Get Away with Merger*, *supra* note 3; 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). See also John D. Kepler et al., *Stealth Acquisitions and Product Market Competition*, 78 J. FIN. 2837 (2023).

⁴⁴ Wollmann, *Stealth Consolidation*, *supra* note 3, at 78, 81; Wollmann, *How to Get Away with Merger*, *supra* note 3, at 8.

⁴⁵ Wollmann, *Stealth Consolidations*, *supra* note 3, at 78.

⁴⁶ *Id.*

⁴⁷ *Id.* at 83.

⁴⁸ *Id.* at 84-85.

⁴⁹ *Id.* at 79.

⁵⁰ *Id.* at 87-89.

⁵¹ Wollmann, *How to Get Away with Merger*, *supra* note 3.

ownership, enforcement actions, and market outcomes at the establishment level.⁵² Dialysis provides an almost ideal setting, as markets are geographically separated and easy to identify, widespread consolidation has occurred, the FTC has negotiated divestitures that effectively blocked hundreds of establishment acquisitions, and many individuals are affected.⁵³ Using granular data from 1996 to 2017, the author shows that escaping notification by failing a jurisdictional test sharply reduces the probability of enforcement, that ensuing mergers produce long-run changes in market structure, and that resulting consolidation leads to lower quality, measured as increased hospitalization and death.⁵⁴

Further studies indicate that the impact of consolidation in the U.S. economy has been underestimated due to the lack of consideration of mergers with undisclosed values. These mergers make up the majority of deals but are often omitted in empirical analyses of U.S. merger activity. Wollmann (2023) found strong evidence that parties strategically omit publicizing merger values.⁵⁵ Using a technique developed in Barrios and Wollmann (2022), the paper found that mergers with unpublicized values increased by nearly 50% relative to deals with publicized values after the 2001 change in thresholds.⁵⁶ Furthermore, transactions that do not have a disclosed value show a higher increase in horizontal mergers after the 2001 amendment.⁵⁷ The amount of output affected by horizontal exempt mergers completed after the HSR Act amendment is estimated to be \$282 billion.⁵⁸

In their work that introduces the term “killer acquisitions” to the literature, Cunningham, Ederer and Ma (2021) observe that these acquisitions are much more likely to involve deals that fall just below HSR Premerger Notification thresholds.⁵⁹ “Killer acquisitions” refer to acquisitions of innovative firms that incumbent firms undertake to halt the development of targets’ innovations,

⁵² *Id.* at 3.

⁵³ *Id.*

⁵⁴ *Id.* at 17-20.

⁵⁵ Thomas G. Wollmann, *Terms of the Deal Were Not Announced: Accounting for Mergers with Unpublicized Values*, 113 AEA PAPERS & PROC. 284, 284 (2023) [hereinafter Wollmann, *Terms of the Deal Were Not Announced*].

⁵⁶ Barrios & Wollmann, *A New Era of Midnight Mergers: Antitrust Risk and Investor Disclosures*, *supra* note 43; Wollmann, *Terms of the Deal Were Not Announced*, *supra* note 55, at 286.

⁵⁷ Wollmann, *Terms of the Deal Were Not Announced*, *supra* note 55, at 285-86.

⁵⁸ *Id.* at 286-87.

⁵⁹ Barrios & Wollmann, *A New Era of Midnight Mergers: Antitrust Risk and Investor Disclosures*, *supra* note 43.

eliminating future competition in its incipiency.⁶⁰ In their empirical study of the pharmaceutical industry, the authors find that acquisitions involving overlapping acquirer and target products concentrate at values just below the HSR Act jurisdictional thresholds and for those deals, termination of newly acquired projects are much higher.⁶¹ As a consequence, the paper shows that “killer acquisitions,” which by definition pose a threat to competition, tend to evade agency scrutiny.⁶²

Disclosure is critical in order for antitrust agencies to detect and prevent competitively harmful transactions. Typically, the agencies rely on the Premerger Notification Program as a primary source of information about most transactions. However, in theory, agencies could obtain information about exempt deals from other sources, such as public company disclosures.

A recent study by Barrios and Wollmann (2022) highlights the regulatory deterrence of public disclosure requirements and their limitations.⁶³ The authors contend that the reliance of regulatory staff on public data sources to uncover such deals creates incentives for management of publicly traded firms to withhold the news of mergers, especially if they involve the acquisition of a rival.⁶⁴ The authors exploit the mandatory disclosure requirements for acquisitions that exceed the 10% transaction-value-to-acquire-assets ratio threshold, as required by securities law, to examine firms’ acquisition behavior.⁶⁵ They find a sharp decrease in mergers between competitors as the firms is required to disclose, indicating the deterrent effect of mandatory investor disclosures.⁶⁶ This behavior is present in non-HSR reported transactions, but it is absent in HSR reportable deals. As a result, they conclude that public disclosure requirements have similar deterrence effects as compared to the Act.⁶⁷

Due to the deterrent effect of public disclosure, to avoid the risk of detection by antitrust authorities, managers are still incentivized to withhold news of transactions, especially when they do not meet the public disclosure

⁶⁰ Colleen Cunningham et al., *Killer Acquisitions*, 129 J. POL. ECON. 649, 650 (2021).

⁶¹ *Id.* at 685.

⁶² *Id.*

⁶³ Barrios & Wollmann, *A New Era of Midnight Mergers: Antitrust Risk and Investor Disclosures*, *supra* note 43.

⁶⁴ *Id.* at 3.

⁶⁵ *Id.* at 19.

⁶⁶ *Id.* at 23.

⁶⁷ *Id.* at 31.

threshold and involve acquiring a rival. Furthermore, the declining share of public market acquisitions and discretion in public disclosures allow firms to conceal acquisitions through aggregation, leading to significant underreporting of merger activity.⁶⁸ Therefore, while public disclosures have the potential to deter anticompetitive transactions, the HSR Act Premerger Notification Program remains essential for detecting and preventing harmful transactions because it is a primary source of information for antitrust agencies.

IV. PROBLEMS ASSOCIATED WITH NON-REPORTABILITY

A. Divergence between Ownership and Control

Recall from earlier that PE acquisitions typically involve an array of intermediate entities. Alongside their main funds, PE firms often employ various blockers and alternative investment vehicles to allocate fees, distribute risks, and minimize tax liabilities. Rarely is ownership in any of these entities concentrated, as LPs are typically highly diversified. Putting aside small, tailored, direct investment vehicles, even the largest public pension plans, such as CalPERS, do not hold more than 5% of the shares or units in any single fund.

Also recall that the goal of the HSR Act is to facilitate enforcement under Section 7, which prohibits transactions that reduce competition—deals that harm consumer welfare by creating incentives to increase price, reduce quality, and cut investment in innovation. In practice, these decisions are typically delegated by passive business owners to active business operators. Hence, the relevant concept of control for the purposes of the Act is based on management. However, under the current rules, the Act defines control as ownership.⁶⁹ If ownership is sufficiently fragmented, the entity is treated as an independent economic unit.

By juxtaposing these facts, it is easy to see how PE-backed acquisitions that would otherwise be reportable are exempt. These deals involve multiple entities, which are each viewed as distinct persons under the Act because their shares or units are dispersed over many individuals and organizations. However, the entities are commonly managed and therefore should be aggregated. Without aggregation economically meaningful stakes might appear so small that they fall below the thresholds set forth in the Act.

⁶⁸ *Id.* at 25 (estimating that there is more than \$2.3 trillion in unreported merger activity in the US).

⁶⁹ 16 C.F.R. § 801.1(b).

It is equally easy to see how these facts concern antitrust enforcement, given how important premerger notifications are to U.S. competition authorities. Of course, these concerns are heightened further as PE firms increasingly concentrate their investments in single sectors, bolting and tucking new investments on or into existing ones.

In contrast, publicly traded firms have straightforward organizational structures in those aspects that are relevant to the HSR Act. A public company is managed by a unique executive board elected by the board of directors, and the directors are elected by shareholders. Public companies can have wholly or partially owned subsidiaries, but these are usually traced back to the public company through ownership. In public equity, the presence of distinct managers results in a convergence of management and ownership interests, meaning that control can be measured using either management or ownership, and the same entity will be identified.⁷⁰

We have identified three ways that PE-backed acquisitions that would otherwise be reportable become exempt. We explore each of them in detail below.

B. Failure to Recognize Change in Control

The first case involves an acquisition that escapes reporting requirements because, under the current rules, no change in control has occurred. The starting point for our analysis is the representative investment structure depicted in Figure 3. General and limited partners hold shares and units in a main fund, two blocker corporations, and a co-investment vehicle. Together they acquire 100% of an operating company, which is organized as an LLC to avoid double taxing a subset of the LPs. Blocker I Corp acquires the highest share, 45%.⁷¹

⁷⁰ It is uncommon for an individual to serve on the executive boards of multiple companies simultaneously due to the demands of the role and the responsibilities it entails. Among the exceptions are Steve Jobs, who ran both Apple and Pixar, Elon Musk, who is the CEO of SpaceX, Twitter and Tesla, and Jack Dorsey, who served as the CEO of Twitter and Square simultaneously.

⁷¹ We do not mean to imply that this is true in all cases. Some sponsors or their counsel may employ structures that aggregate most if not all LP stakes in a single holding company or a stack of holding companies. As a result, those structures will mitigate or eliminate the problem mentioned in this section; however, they create an entirely different problem for the Premerger Notification Program, which is addressed in Section 0.

Regardless of the size of the transaction or assets of the acquirer, this merger is not reportable. Recall that under the HSR Act, acquisitions of interests in an NCE are reportable only when control is conferred, where control of an NCE is defined as having the rights to 50% or more of entity profits or assets in the event of dissolution.⁷² The Act does not recognize a change in control in a representative investment structure because no single vehicle obtains the majority of interests. Hence, despite the PE firm's acquisition of complete managerial power over the operations of the portfolio company, the transaction is exempt.

The problem is not limited to the instances where the PE firm uses multiple vehicle within a fund. When a PE firm employs different funds within the same fund family, or when multiple PE firms pool their capital to invest in the same portfolio company, the same exempt transaction arises. The multitude of investment structures that hide economically meaningful change in control exacerbates the problem.

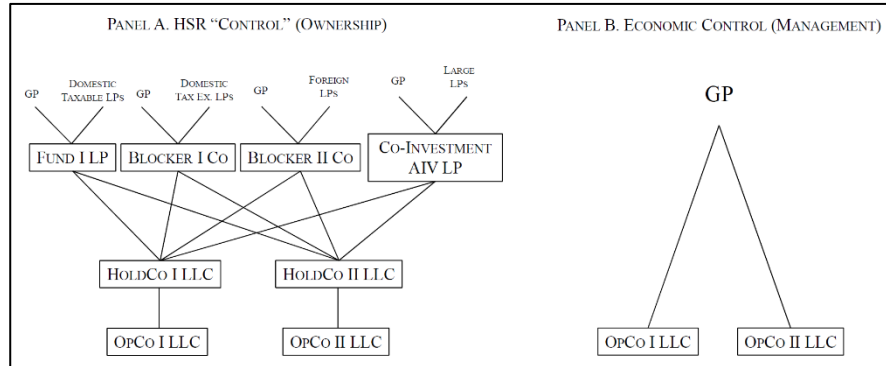
In our discussion thus far, a threat to competition has not arisen since the acquisition of a single portfolio company by co-managed entities is not anticompetitive. To see how an anticompetitive acquisition arises, suppose that the same entities that acquired OpCo I subsequently acquire OpCo II, OpCo I's direct competitor in a concentrated market.⁷³ Figure 6 depicts the resulting ownership and management at the end of OpCo II's acquisition. If Fund I LP, Blocker Corp I, Blocker Corp II, and Co-Investment AIV buy equal shares of OpCo II, then the acquisition of OpCo II is non-reportable for the same reasons that the acquisition of OpCo I was not reportable—no single vehicle obtains control over it. It is important to note that both acquisitions are exempt irrespective of deal size. Through two non-reportable acquisitions, the PE firm obtains the power to manage two competitors in a concentrated industry.⁷⁴

⁷² 16 C.F.R. §§ 801.10(d), 801.2(f)(1)(i), 801.1(b)(1)(i) (2022).

⁷³ Whether the two portfolio companies that are de facto co-controlled by a single private equity firm can conspire among themselves is an open question. In *Copperweld*, the Supreme Court held that a parent and a wholly owned subsidiary cannot conspire. Lower courts extended this reasoning to majority owned subsidiaries with legal control. However, how *Copperweld* applies to the PE investment structure is unsettled. *See Copperweld v. Indep. Tube*, 467 U.S. 752 (1984).

⁷⁴ Although the portfolio companies were assumed to be NCEs, this assumption is not necessary. The same deal would not be reported even when the underlying portfolio companies were initially organized as corporations, because these corporations can be converted to NCEs via two different methods prior to the PE firm's involvement. First, the corporate portfolio company can convert itself to an LLC or partnership using statutory

Figure 6.
PE Backed Acquisition of Two Portfolio Companies



If there is no change in control as assessed by ownership, then any transaction that involves a non-corporate target is exempt from the HSR Act, irrespective of the transaction value or entities' significance. Also notice that if acquisitions of interests in NCEs were treated the same way as those in corporations, then this discrepancy would be eliminated, and all deals that meet the jurisdictional criteria would be reportable, regardless of whether they confer control.

C. Mismeasuring Jurisdictional Test Thresholds

The second case involves an acquisition that escapes reporting requirements because, under the current rules, the transaction value test is

conversion. Statutory conversion is the conversion of an entity from one business form to another by filing a certificate of conversion with the state, and is available in certain states, including Delaware. *See, e.g.*, 2 DE Code §§17-219; 18-214. Alternatively, the corporate portfolio company can form a new NCE and become its subsidiary. After the NCE is formed, whether it's Holdco or the portfolio company with non-corporate form, the PE firm's acquisition of the portfolio company will not be subject to the HSR Act's reporting requirements, leaving it outside the purview of regulatory scrutiny.

The HSR Act prohibits reorganizations for the purpose of avoiding or delaying their premerger notification obligation. 16 CFR §801.90. However, parties can engage in reorganizations for business purposes, and the definition of a business purpose appears to be broad. Seemingly any tax, financing or any other business purpose appears to be sufficient for a valid reorganization.

misapplied. The starting point for our analysis again is the representative investment structure depicted in Figure 3, where the structure has a main fund, two blocker corporations, and a co-investment vehicle.⁷⁵ Although these entities together acquire 100% of an operating company, each entity acquires only a fraction of it. To determine reportability, each entity's investment is separately compared to the transaction value threshold.

To illustrate, consider a \$200 million acquisition made under the representative investment structure. Further, suppose the transaction was proposed in January 2023, when the transaction value threshold stood at a \$101 million. Ordinarily, this merger would be reportable, as it far exceeds the threshold. However, suppose the acquisition was backed by a PE firm employing the representative investment structure. In this case, the largest vehicle obtains 45% of the \$200 million transaction value.⁷⁶ As a result, the transaction value attributed to each investment vehicle is below the threshold, making the acquisition exempt.

The critical issue with a PE investment structure is that reportability is not solely based on the nominal threshold. Instead, it depends on an effective threshold, which is equal to the nominal threshold divided by the largest vehicle's investment share.⁷⁷ Hence, there exists a range of values in which reportable deals become exempt because they are conducted through a PE investment structure.

As discussed in the preceding subsection, a single acquisition does not pose a competitive threat. Following Figure 6, now assume that the PE firm uses the same structure to invest in a second portfolio company that is a competitor of the first one in a concentrated industry. The transaction value thresholds will again be effectively higher than the nominal thresholds of Act. At the conclusion of this deal, the PE firm can obtain economically meaningful control over two competitors in a concentrated industry, without reporting either of the acquisitions to the agencies.

D. Mischaracterizing Existing Entities as New Ones

The third case involves the first acquisition of a newly formed PE investment vehicle, which is often exempt from the HSR notification

⁷⁵ See *supra*, Section IV.B.

⁷⁶ See Wollmann, *Terms of the Deal Were Not Announced*, *supra* note 56.

⁷⁷ $(1/0.45) * \$101 \text{ million} = \224 million . For any investment structure, the effective threshold can be calculated by dividing the nominal threshold by the largest vehicle's share. For instance, if the largest vehicle in the investment structure has $x\%$, the \$101 million threshold becomes $(1/x\%) * \$101 \text{ million}$.

requirements. As Figure 3 shows, it is common practice for PE investment structures to have multiple co-managed vehicles. The Act treats each of these investment vehicles as separate entities and applies the jurisdictional test to them individually. Under the jurisdictional tests, if an investment vehicle's share of the transaction is worth between \$50 million and \$200 million (as adjusted), the Act looks at the size of the vehicle's assets to determine reportability.

When a newly formed investment vehicle is making its first acquisition, it often has as assets only cash that will be spent on the transaction and does not have a regularly prepared balance sheet. For those entities that do not have a regularly prepared balance sheet, the HSR Act rules exclude from the acquiring person's total assets cash that will be used by the acquiring person as consideration in an acquisition and cash that will be used for expenses incidental to the acquisition.⁷⁸ When this cash is excluded from a new vehicle's total assets, the vehicle does not meet the SOP test threshold, making the acquisition exempt. The same analysis applies to each of the vehicles in a PE investment structure. Hence, through different vehicles, each of which has their first transaction exempted from the HSR Act, the PE firm can obtain managerial power over different portfolio companies. If these companies are competitors in a concentrated industry, the PE firm will gain control over the productive assets of competitors without notifying the agencies about any of the acquisitions. Had the Act's aggregation of control aligned with economic reality, it would have acknowledged that the investment structure has an SOP that is greater than that of a constituent investment vehicle.

V. EMPIRICAL FINDINGS

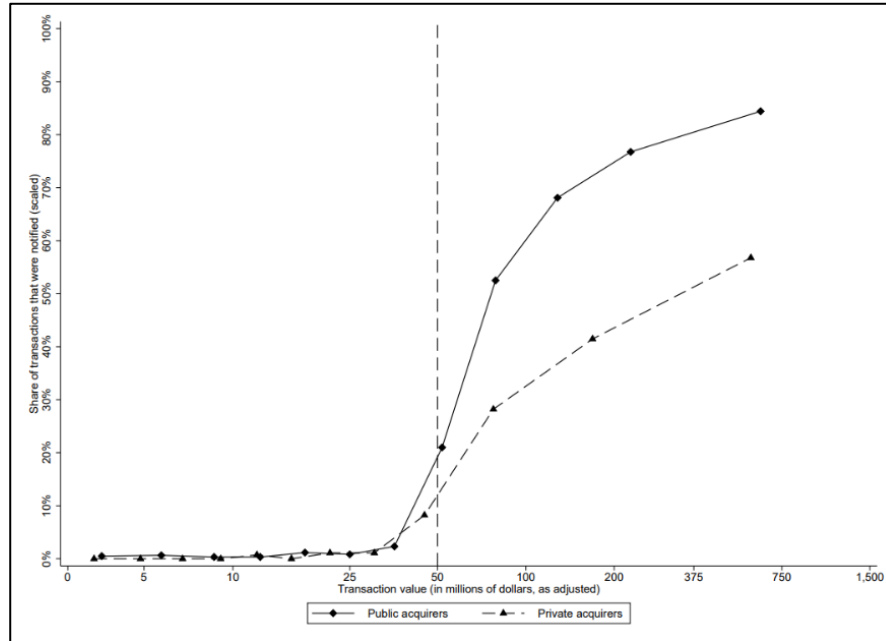
The Act's disparate treatment of public and private equity can also be observed in the data. Figure 7 presents the share of public and private equity transactions about which agencies were notified, where the vertical axis is the frequency with which there is an HSR Act filing. Deals with values less than \$50 million (as adjusted) have approximately zero frequency of disclosure to agencies whether they involve public or private equity, because these deals are exempt from the Act under the transaction value threshold. For both equity types, the filing frequency jumps once the \$50 million (as adjusted) threshold is crossed. However, the probability of reporting is higher for deals that involve public equity acquirers compared to transactions with PE acquirers at all deal values above the threshold. This discrepancy corroborates the main assertion

⁷⁸ 16 C.F.R. § 801.11(e)(1) (2022).

of this paper, according to which the HSR Act disparately treats public and private equity.

Figure 7.

Share of Transactions that were Notified (Scaled)



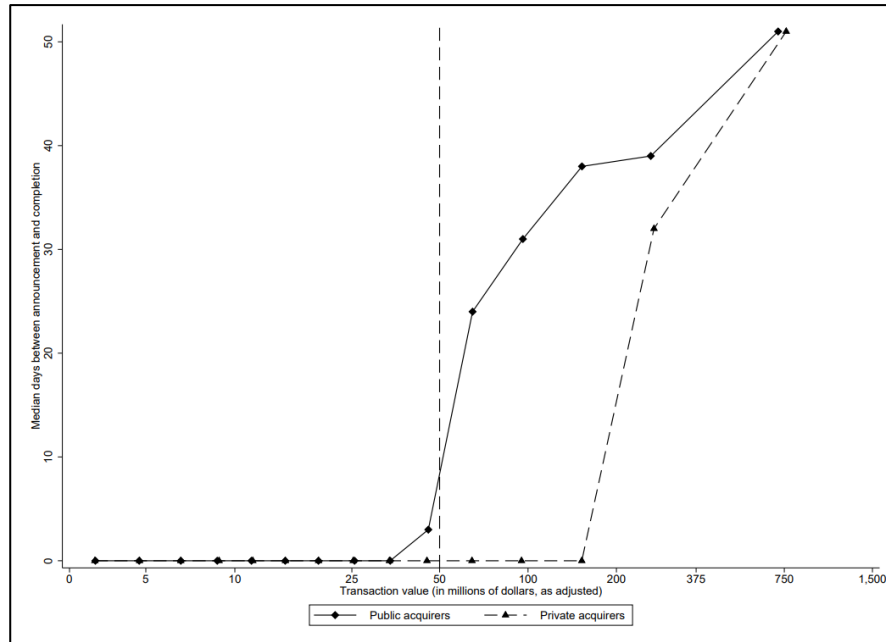
Notes: To construct this figure, transactions are grouped into equal-sized bins according to their transaction value. The average transaction value within each bin is on the horizontal axis, and the share of transactions within each bin that were notified is on the vertical axis. A vertical line at \$50 million marks the size of transaction threshold (assuming the asset-based test is passed). Value is measured in millions of 2005 U.S. dollars. To improve legibility, the horizontal axis has a logarithmic scale. To facilitate comparisons, all vertical axis values are scaled up by $1/(0.81 \cdot 0.77)$.⁷⁹ Period: 2003-2019. Source: Refinitiv Mergers & Acquisitions Database and authors' calculations.

⁷⁹ We proxy for the share of transactions that were notified using the share of transactions that were granted Early Termination. Over the relevant period, 81% of merging parties request Early Termination, and 77% of those who request Early Termination are granted it. Since the proportions are high, and there are no obvious reasons why the proportions would differ based on whether the transaction involves a public or private equity acquirer,

To further substantiate the HSR Act's disparate treatment of public and private equity, we look at the differential delay in closure these deals experience due to the Premerger Notification Program. Because of the waiting period, deals that are reported as part of the Premerger Notification Program have a lag between the deal's announcement date, which takes place before parties submit the deal for agency approval, and the deal's completion date, which is realized only when the agency review process is completed. In contrast, deals that are non-reportable under the Act are announced and completed almost simultaneously. We use delay in deal closure caused by the Program to identify the types of deals that go through agency review and present the results in Figure 8. The horizontal axis provides the transaction value and vertical axis shows the median delay for the deal's closure after its initial announcement. Any deal that has a transaction value below \$50 million (as adjusted) will be exempt from the HSR Act's disclosure requirements, and we do not observe any lags in deals that fall in this range irrespective of the acquirer type.

Early Termination grants are a suitable proxy. However, due to the fact that both proportions are less than one, we must scale the shares reported in Figure 7 by $1/(71\%*81\%)$.

Figure 8.
Median delays between announcement and completion



Notes: To construct this figure, transactions are grouped into equal-sized bins according to their transaction value. The average transaction value within each bin is on the horizontal axis, and the median time between merger announcement and completion is on the vertical axis. A vertical line at \$50 million marks the size of transaction threshold (assuming the SOP threshold is crossed). Value is measured in millions of 2005 U.S. dollars, and time is measured in days. To improve legibility, the horizontal axis has a logarithmic scale. Period: 2003-2019. Source: Refinitiv Mergers & Acquisitions Database and authors' calculations.

Once the \$50 million (as adjusted) transaction value threshold is passed, the median delay for deals that involve public equity acquirers immediately increases. This signifies that the threshold is binding on these deals. In contrast, in deals with PE acquirers, the median delay continues to be zero even after the \$50 million (as adjusted) threshold, and starts rising only once \$200 million (as adjusted) mark is reached. The absence of delays PE deals with transaction values between \$50 million and \$200 million (as adjusted) indicates that many

are exempt from the HSR Act. As the figure shows, public equity deals are not subject to such lenient reporting criteria.⁸⁰

VI. PROBLEMS ASSOCIATED WITH INSUFFICIENT INFORMATION

In the preceding section, we studied problems related to unreported transactions. In this section, we argue that even when PE-backed acquisitions are reported, the agencies may not receive enough information to spot anticompetitive effects. To illustrate, suppose a PE firm acquires two operating companies, OpCo I and II, through two separate funds, Fund I and Fund II. Further, suppose both transactions are reportable, and, for simplicity, assume that the acquisition of OpCo I is completed before the acquisition of OpCo II is proposed. Since each fund has a diverse set of investors, no individual investor has a majority stake, so each fund is its own UPE. As a result, when the PE firm acquires OpCo II, it typically does not need to disclose that it currently owns OpCo I. Should OpCo I and II be direct competitors in a concentrated market, the transaction could gravely affect consumers but nonetheless appear benign to the agencies when they evaluate it.

Once again, the essence of the problem lies with the definition of control under the HSR Act, which is based on ownership rather than management. Premerger notifications filed by one fund typically do not “look across” the PE firm at the holdings of other funds. Consequently, even when a PE firm manages competitors through different funds or investment vehicles, the Act fails to reveal these competitively important connections.

Recognizing the severity of the issue, the agencies in 2011 introduced the “associates rule” to give the agencies more visibility into firm’s cross-holdings. However, as described below, because the amendment did not affect the Act’s definition of control, the rule did not change the set of exempt transactions. Furthermore, disclosure solicited about co-managed entities proved to be limited.

⁸⁰ Mergers are held up for many reasons that are not discussed here. If the length of delays unrelated to antitrust enforcement systematically differ between mergers involving public and private acquirers, then our interpretation of Figure 8 might change. Were this to occur, it would likely reflect one of two differences. First, mergers involving private acquirers may involve a different mix of industries. Second, mergers involving private acquirers are more prevalent in later years of our sample than earlier ones. To address the issue, we control for these differences and report the results in Figure A.1 of our online appendix. It eliminates these concerns.

The associates rule requires the acquirer to make certain disclosures about its “associates,” entities to which the acquirer is directly or indirectly linked through management.⁸¹ In a typical PE investment structure, when a transaction is reportable, the associates rule reaches both the PE firm that manages the acquirer investment vehicle, as well as all investment vehicles that are co-managed by the PE firm. The associates rule reaches the PE firm because after identifying the general partner of the fund, the rule requires climbing up the GP’s control chain until one reaches the entity that is neither controlled nor managed by another.⁸² This entity usually is the PE firm. The rule then declares as associates of the acquirer other investment vehicles controlled or managed by the PE firm, because any entity that is controlled or managed by a manager also becomes an associate of the acquirer.⁸³

Under the associates rule, the acquirer needs to disclose any six-digit North American Industry Classification System (NAICS) overlap between the industries in which the acquired business and the acquirer’s associates operate, assuming that the associates meet the U.S. nexus test.⁸⁴ Specifically, the acquirer

⁸¹ 16 C.F.R. § 803 App. A, Item 6(c)(ii), Item 7 (2023). An associate of an acquiring entity is defined as:

an entity that is not controlled by the acquiring person . . . but (A) has the right to manage the operations or investment decision of an acquiring entity (a managing entity), or (B) has its operations or investment decisions managed by the acquiring person, or (C) controls, is controlled by, or is under common control with a managing entity, or (D) manages, is managed by, or is under common operational or investment decision management with a managing entity.

16 C.F.R. § 801.1(d)(2) (2022). Management refers to the management of investment decisions or operations. *See id.* *See also* Fed. Trade Comm’n, PNO Informal Staff Interpretation No. 1709007 (Sept. 20, 2017). Management of investment decisions is the right to make or veto decisions about the entity’s equity investments that is conferred on the manager via a contract. Fed. Trade Comm’n, PNO Informal Staff Interpretation No. 1107007 (July 28, 2011). *See also* AM. BAR ASS’N, *PREMERGER NOTIFICATION PRACTICE MANUAL* §§ 205, 207 (5th ed. 2015). Operational management mainly concerns oil and gas master limited partnerships, and refers to entity-level management rights of general and managing members. Fed. Trade Comm’n, PNO Informal Staff Interpretation No. 1202011 (Feb. 23, 2012).

⁸² 16 C.F.R. § 801.1(d)(2)(a) (2022). *See also* AM. BAR ASS’N, *supra* note 81, at § 204; PRACTICAL LAW ANTI-TRUST, *HSR ACT ASSOCIATES RULES PRACTICE NOTE* 6-518-9423, Westlaw (2023).

⁸³ 16 C.F.R. § 801.1(d)(2)(C)-(D) (2022).

⁸⁴ An associate or its majority holding meets the U.S. nexus test if it had operations in the U.S. in the previous year, or if it manufactures products only outside of the US, had revenues in

needs to report six-Digit NAICS code overlap between the target and either an associate, an associate's controlled holdings (holdings of 50% or more), or, under certain circumstances, an associate's minority holdings (holdings of 5% or more but less than 50%).⁸⁵

The associates rule significantly affects PE transactions, and practically does not change the disclosure requirements for public equity acquisitions. This is because public equity tends not to have associates, unless the public company has an investment arm.⁸⁶ Conventional corporations, such as those found in public equity, are usually not managed by an entity, and the definition of an associate does not include officers and directors of a corporation.⁸⁷

Despite operationally enhancing disclosures made in reportable PE transactions, the associates rule still has its shortcomings. First, these disclosures are required only in reportable transactions, and reportability depends on aggregation of interests using ownership. As a result, the associates rule does not align the Act's aggregation of control with economic reality.

Second, required disclosure on associates' holdings is limited and agencies continue to receive information insufficient to assess the competitive effects of PE deals.⁸⁸ Associates need to report their businesses to agencies only when their businesses have the same six-digit NAICS code(s) as the target.⁸⁹ However, six-Digit NAICS codes have proven to be deficient measures of the definition of industry for antitrust purposes. Even the FTC has stated that "parties can still be 'competitors' even if they report in different NAICS codes,"

the US. An associate and its minority holding meets the U.S. nexus test if they had revenues in the U.S. in the previous year.

⁸⁵ See 16 C.F.R. § 803 App. A, Item 7 (2023). The acquiring UPE needs to make such a disclosure about an associate's minority holdings if the acquiring UPE is buying equity in the transaction and the associate has minority holdings in an entity with at least \$10 million in total assets. See *id.* Item 6(c)(ii). U.S. nexus test is met if: (i) the associate or its majority holding had either operations in the U.S., or revenues in the U.S.; or (ii) the associate and its minority holding had revenues in the U.S. in the previous year. See Fed. Trade Comm'n, Informal Staff Interpretation No. 1107006 (July 27, 2011); Fed. Trade Comm'n, PNO Informal Staff Interpretation No. 1109007 (Sept. 14, 2011); Fed. Trade Comm'n, PNO Informal Interpretation No. 17120001 (Dec. 1, 2017). See also PRACTICAL LAW ANITRUST, HSR ACT ASSOCIATES RULES PRACTICE NOTE 6-518-9423, Westlaw (2023).

⁸⁶ See AM. BAR ASS'N, *supra* note 81, § 205. See also Fed. Trade Comm'n, PNO Informal Staff Interpretation No. 16110001 (Nov. 4, 2016).

⁸⁷ 16 C.F.R. § 801.1(d)(2), ex. 7 (2023).

⁸⁸ The "associates rule" effectively does not apply to traditional corporations, unless such corporations have an investment arm. See AM. BAR ASS'N, *supra* note 81; see also PNO Informal Staff Interpretation, *supra* note 85.

⁸⁹ 16 C.F.R. § 803 App. A, Item 5 (2023).

as, “[i]n the Agencies’ experience, competitors sometimes use different NAICS codes to describe the same line of business, particularly in the case of companies engaged in technology-based businesses.”⁹⁰

To illustrate, consider the merger between Thycotic and Centrify, both of which are privileged identity management (PIM) vendors, completed by the PE firm TPG Capital in 2021.⁹¹ CRN, a technology news source, reported the deal with the title, “TPG Capital to buy Thycotic for \$1.4B, merge it with *rival* Centrify.”⁹² Forrester Research, a leading global market research company, identified Thycotic and Centrify as competitors and remarked that “CyberArt, BeyondTrust, *Centrify, and Thycotic* lead the pack” in the PIM industry.⁹³ The report placed the two right next to each other in a graph that ranked PIM companies based on the strength of their current offerings and strategies.⁹⁴ To evaluate Centrify and Thycotic’s NAICS codes, we turn to the System for Award Management (SAM), which is the official U.S. Government system for federal grants, loans or bids on government contracts.⁹⁵ The SAM database provides historical data on registered companies, and historical company profiles include each company’s self-reported NAICS codes. Data from September 2018, two and a half years before the merger, show that Centrify reported “511210” as its primary NAICS code, and “423430” and “541512” as secondary codes.⁹⁶ These codes correspond to “software publishers,” “computer and computer peripheral equipment and software merchant wholesalers,” and “computer systems design services,” respectively.⁹⁷ On the

⁹⁰ Premerger Notification; Reporting and Waiting Period Requirements, 85 Fed. Reg. 77053, 77056, 77062 (Dec. 1, 2020).

⁹¹ Privileged Identity Management (PIM) is a security service that enables users to manage, control, and monitor access to important resources within an organization, such as accounts, databases, passwords, and files.

⁹² Michael Novinson, *TPG Capital to Buy Thycotic for \$1.4B, Merge It with Rival Centrify: Report*, CRN (Mar. 02, 2021) (emphasis added), <https://www.crn.com/news/security/tpg-capital-to-buy-thycotic-for-1-4b-merge-it-with-rival-centrify-report>.

⁹³ Andras Cser, *The Forrester Wave™: Privileged Identity Management, Q4 2018*, FORRESTER (Nov. 14, 2018) (emphasis added), <https://www.forrester.com/report/the-forrester-wave-privileged-identity-management-q4-2018/RES141474>.

⁹⁴ *Id.* at 5.

⁹⁵ THE SYSTEM FOR AWARD MANAGEMENT, <https://sam.gov/content/home> (last visited Feb.1, 2023).

⁹⁶ *Centrify Corporation*, THE SYSTEM FOR AWARD MANAGEMENT, <https://sam.gov/entity/MDXRAPTTVPF5/coreData?status=Inactive&emrKeyValue=1717281~1536696895106#entity-name> (last visited Feb.1, 2023).

⁹⁷ NAICS ASSOCIATION, [HTTPS://WWW.NAICS.COM/SEARCH/?V=2017](https://www.naics.com/search/?v=2017) (last visited Feb.1, 2023).

other hand, data from October 2019 show that Thycotic reported “334614” as its primary NAICS code, which corresponds to “software and other prerecorded compact disc, tape and record reproducing,” and the company did not report any secondary codes.⁹⁸ Since HSR filings are confidential, it is impossible to know whether TPG Capital’s acquisition of Thycotic or Centrifry, or the merger between the two entities, was reportable. However, were the two companies to use the NAICS codes reported in SAM filings, TPG Capital would not need to disclose, under the associates rule, that it manages investment vehicles that own Thycotic and Centrifry, two companies which were competitors in a concentrated industry according to market reports.

VII. CONSEQUENCES OF THE LOOPHOLE

Exemption from the Premerger Notification Program creates the possibility of reduced deterrence and insufficient enforcement. Previous academic work in the economics literature has shown that the HSR Act’s Premerger Notification Program de facto determines both the incentives to undertake competitively harmful deals and the agency investigation of these deals.⁹⁹ The Program provides budget constrained agencies with the most robust disclosure channel, relative to other methods via which these disclosures can be made.¹⁰⁰ As a result, if PE deals include transactions that pose a threat to competition and consumer welfare, the absence of an HSR Act notification will facilitate the completion of these deals without detection or enforcement, to the detriment of consumers and competition.¹⁰¹

Because HSR filings are confidential, it is impossible to know the universe of reported deals, despite having information on Early Termination Requests.

⁹⁸ *Thycotic Software, LLC, THE SYSTEM FOR AWARD MANAGEMENT*, <https://sam.gov/entity/DLWKF3FZ8N13/assertions?status=expired&cmrKeyValue=3727382~1598259130803479> (last visited Feb. 1, 2023).

⁹⁹ Wollmann, *Stealth Consolidation*, *supra* note 3; Wollmann, *Terms of the Deal Were Not Announced*, *supra* note 55.

¹⁰⁰ Barrios & Wollmann, *A New Era of Midnight Mergers: Antitrust Risk and Investor Disclosures*, *supra* note 43.

¹⁰¹ Prior research in the economics literature has examined the effects of private equity acquisitions in the healthcare industry on consumer welfare. See Atul Gupta et al., *Does Private Equity Investment in Healthcare Benefit Patients? Evidence from Nursing Homes* (Nat’l Bureau of Econ. Rsch., Working Paper No. 28474, 2021); Tong Liu, *Bargaining with Private Equity: Implications for Hospital Prices and Patient Welfare* (Nov. 30, 2022) (unpublished manuscript) (available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3896410).

However, PE acquisitions of competitors have been ongoing and widely covered in the news. In 2022, IBM sold its Watson Health assets to the PE firm Francisco Partners.¹⁰² The undisclosed deal value was estimated to be in the \$1 billion range. Transferred assets included Health Insights, a healthcare information system, MarketScan, one of the longest-running and largest collections of proprietary healthcare claims data, Clinical Development, a clinical data management system provider, Social Program Management, a health and social program platform, Micromedex, a search engine for drugs and diseases, and imaging software offerings.¹⁰³ Francisco had already invested in over 400 technology companies, including those in healthcare technology, prior to this acquisition. For example, the PE firm had invested in Availity, a software company for medical provider transactions, eSolutions, a revenue cycle technology company with Medicare-specific services, Capsule, a digital pharmacy startup, GoodRx, a telemedicine platform with digital pharmacy features, QGenda, a scheduling platform for healthcare organizations, and Zocdoc, a medical provider search portal and online medical appointment booking app.

In another aforementioned instance, TPG Capital, a PE firm, acquired Thycotic, a privileged access management (PAM) provider in a deal worth \$1.4 billion. TPG Capital subsequently merged Thycotic with Centrifify, another PAM provider. A news website reported the deal as, “TPG Capital today announced it is purchasing privileged access management provider Thycotic and merging it with *competitor* Centrifify, which the firm recently acquired.”¹⁰⁴ As

¹⁰² Heather Landi, *IBM sells Watson Health assets to investment firm Francisco Partners*, FIERCE HEALTHCARE (Jan. 21, 2022), <https://www.fiercehealthcare.com/tech/ibm-sells-watson-health-assets-to-investment-firm-francisco-partners>; David Raths, *After Purchase From IBM, Watson Health Becomes Merative*, HEALTHCARE INNOVATION (July 7, 2022), <https://www.hcinnovationgroup.com/finance-revenue-cycle/mergers-acquisitions/news/21273431/after-purchase-from-ibm-watson-health-becomes-merative>.

¹⁰³ *Id.*

¹⁰⁴ *Thycotic and Centrifify To Merge in \$1.4B Deal*, DARKREADING (Mar. 03, 2021) (emphasis added), <https://www.darkreading.com/perimeter/thycotic-and-centrifify-to-merge-in-1-4b-deal>. A news outlet announced the acquisition of Endurance by Clearlake Capital Group, a PE firm that already invested in Web.com, in an article titled: “After the *merger with competitor*, Web.com CEO will lead new mega company.” Both Endurance and Web.com were providers of web hosting services. The deal had a transaction value of \$3 billion. Timothy Gibbons, *After Merger with Competitor, Web.com CEO Will Lead New Mega Company*, BIZWOMEN (Feb. 14, 2021) (emphasis added), <https://www.bizjournals.com/bizwomen/news/latest-news/2021/02/web-com-ceo-merger.html>. Similarly, the acquisition by Beacon Orthopaedics & Sports Medicine, one of

these examples illustrate, add-on deals tend to involve firms located in the same or similar horizontal markets, and healthcare and technology markets have prominently feature in add-on PE deals.

The co-management of PE vehicles investing in competitors has features and implications similar to the “common ownership” phenomenon observed in the economy.¹⁰⁵ Common ownership refers to the aggregation of a firm’s ownership rights at the hands of the same individuals or entities. Similarly, a PE structure can aggregate a firm’s management rights at the hands of the same entities. Even though a PE structure’s investment in firms does not necessarily mean that ownership rights are concentrated, both common ownership and the representative PE investment structures pose similar competitive threats if these structures are employed to direct the operations of competing firms.

The competitive threat posed by PE firms’ co-management of competing portfolio companies depends on the information exchange and cooperation between different investment vehicles within the PE firm. The presence of numerous acquisitions in the same product market by prominent PE firms appears to warrant a robust reporting program that will notify agencies about these deals, so that the agencies can decide whether these deals warrant investigation or enforcement.¹⁰⁶

the largest independent physician groups in Greater Cincinnati, of Reconstructive Orthopaedics & Sports Medicine was announced with the title: “Beacon Orthopaedics & Sports Medicine *acquires rival* practice.” The deal was “made possible by an infusion of capital from [the healthcare] private equity firm [Revelstoke Capital Partners].” Barrett J. Brunson, *Beacon Orthopaedics & Sports Medicine Acquires Rival Practice*, CINCINNATI BUSINESS COURIER (Aug. 3, 2020) (emphasis added), <https://www.bizjournals.com/cincinnati/news/2020/08/03/beacon-makes-acquisition.html>. When Payscale, a compensation software company, bought Agora, another compensation software company, a news outlet announced the deal with the title “Payscale *acquires competitor* Agora as states push for pay transparency.” This was the third merger that Payscale had completed in the previous year and a half. The company previously had acquired Payfactors and CURO Compensation Ltd., both of which were also compensation software companies. Payscale is majority owned by the private equity firm Francisco Partners. Nate Bek, *Payscale Acquires Competitor Agora as States Push for Pay Transparency*, GEEKWIRE (Nov. 15, 2022) (emphasis added), <https://www.geekwire.com/2022/payscale-acquires-a-competitor-as-states-push-for-pay-transparency/>.

¹⁰⁵ Miguel Anton et al., *Common Ownership, Competition, and Top Management Incentives*, 131 J. POL. ECON 1294 (2023).

¹⁰⁶ Recently, the Department of Justice has launched a series of investigations under Section 8 of the Clayton Act to investigate the interlocking directorates on the boards of competing portfolio companies managed by the same PE firm. Section 8 prohibits a person who is an officer or director of one company from serving as the officer or a director of a direct

VIII. RECENT REGULATORY AND LEGISLATIVE DEVELOPMENTS

Legislatures and antitrust agencies have proposed changes to state and federal statutes and rules to address the shortcomings of the HSR Act. Each of these proposals attend to potentially serious deficiencies in the premerger reporting requirements, but they may not completely remove the loophole that we identify in this Article.

State legislatures are closely monitoring acquisitions in the healthcare sector and have proposed or enacted state premerger notification programs that complement existing federal reporting requirements.¹⁰⁷ For instance, Washington has implemented its own premerger notification program for acquisitions in the healthcare industry.¹⁰⁸ It has broadened the scope of reporting requirements to cover deals of any size, including smaller transactions that may fall below the federal transaction value thresholds.¹⁰⁹ However, the Washington program cannot reach other important industries where PE is especially active, such as software and technology. Similarly focusing on the healthcare industry, California proposed a bill to implement a premerger notification program for healthcare acquisitions. The 2022 bill, which was not enacted, would have made reportable any deal worth \$15 million or more.¹¹⁰

The Illinois legislature recently mandated advance notification to the state attorney general of mergers, acquisitions, and certain contracting affiliations between health care facilities or providers based in Illinois.¹¹¹ This law does not set a minimum transaction value, which means all such transactions, regardless of their size, need to be reported—even if they are not covered under the Hart-Scott-Rodino Act. Furthermore, the legislation also covers transactions

competitor, with some exceptions. 15 U.S.C. §19. (2018). The DOJ is reported to be investigating sponsor's structure, holdings, and board representations. *See* Latham & Watkins, DOJ INVESTIGATING "INTERLOCKING DIRECTORATES" IN PE INDUSTRY (Oct. 5, 2022), <https://www.lw.com/admin/upload/SiteAttachments/Alert-3018.pdf>.

¹⁰⁷ *See* Barbara Sicalides et al., *State Enforcers Expanding Premerger and Antitrust Jurisdiction over Healthcare Transactions: Guidance for this Growing Trend*, AM. BAR ASS'N (Dec. 15, 2020), https://www.americanbar.org/groups/health_law/publications/aba_health_esource/2020-2021/december-2020/sta-enf/.

¹⁰⁸ For information on the Washington program, see WASH. REV. CODE § 19.390.010 (2019), <https://app.leg.wa.gov/RCW/default.aspx?cite=19.390&full=true>.

¹⁰⁹ *Id.*

¹¹⁰ Health Care Consolidation and Contracting Fairness Act of 2022, Assemb. B. 2080 (Ca. 2022) (not enacted).

¹¹¹ H.B. 2222, 103rd Gen. Assemb., Reg. Sess. (Ill. 2023-2024).

between an Illinois health care entity and an out-of-state counterpart if the latter earns \$10 million or more annually from Illinois patients.¹¹²

The federal agencies also have proposed rules to address the shortcoming of the Premerger Notification Program. In 2020, the FTC published an Advance Notice of Public Rule making (ANPRM) to gather information about potential reforms to HSR rules.¹¹³ Among the topics included in the ANPR were acquisitions of interests in non-corporate entities. However, so far, no rule has been promulgated to address the Act's preferential treatment of NCEs.

In 2020, the agencies also proposed rules to change the definition of "person" to include "associates," and to create a new exemption for voting security acquisitions that are below 10% of the target.¹¹⁴ Both proposals expired without any rulemaking. Although the former proposed rule would have brought the HSR Act's aggregation of control closer to economic reality, it still would not have directly addressed the preferential treatment of NCE acquisitions. It also might not have reached co-investment vehicles, as the agency interpretation suggests that a management contract might be necessary for an entity to be deemed a manager under the Act.¹¹⁵ It is not clear whether co-investment vehicles, which constitute 28% of the typical PE investment structure, are contractually managed by a PE firm despite following the PE firm's managerial lead. The latter rule would have made non-reportable acquisitions that result in the acquiring person holding 10% or less of the issuer's voting securities when there does not exist a competitively significant relationship between the parties.¹¹⁶ Thus, had it been promulgated, the latter rule could have created further exemptions.

The FTC has also used its powers under Section 6(b) of the FTC Act to issue special orders that compelled the five largest U.S. firms to disclose all

¹¹² *Id.*

¹¹³ Premerger Notification; Reporting and Waiting Period Requirements, 85 Fed. Reg. 77042 (Dec. 1, 2020).

¹¹⁴ Fed. Trade Comm'n, Notice of Proposed Rulemaking: Amendments to H.S.R. Rule 5 (2020), https://www.ftc.gov/system/files/attachments/premerger-notification-program/p110014_notice_of_proposed_rulemaking_proposed_amendments_to_hsr_rules_09182020.pdf.

¹¹⁵ The examples provided in 16 C.F.R. § 801.1 and PNO Informal Interpretation suggest that a management contract might be necessary for a legal or natural person to be considered a manager of an entity. *See* 16 C.F.R. § 801.1(d)(2), ex. 11 (2023). *See also* Fed. Trade Comm'n, PNO Informal Staff Interpretation No. 1107007 (July 28, 2011); AM. BAR ASS'N, *supra* note 81, § 205.

¹¹⁶ Premerger Notification; Reporting and Waiting Period Requirements, 85 Fed. Reg. 77042, 77061 (Dec. 1, 2020).

acquisitions over the past decade, including those that were not reported to the agencies under the HSR Act.¹¹⁷ The resulting report, which was published 18 months later, revealed over 1,000 previously unreported mergers. The effectiveness of Section 6(b) powers depends on the strength of alternative channels through which the FTC becomes informed about acquisitions. For most acquisitions, these alternative disclosure channels might not be sufficient.

In July 2021, the Commission rescinded a 1995 policy statement, which had prevented it from restricting future acquisitions of firms that pursue anticompetitive mergers.¹¹⁸ As a result, for a minimum of ten years, such acquisitive firms will have to obtain prior approval from the agency before closing any future transaction affecting each relevant market for which a violation was alleged, for a minimum of ten years. Similar to the aforementioned agency action, the strength of this practice depends on the robustness of channels through which the Agency obtains information about acquisitions.

CONCLUSION

In this article, we contend that there is a discrepancy between the definition of control in the HSR Act and economically meaningful control in PE. This discrepancy leads to many PE deals to become exempt from reporting requirements under the Act. The HSR Act's singular focus on ownership interest overlooks the managerial influence PE firms may have over multiple co-managed investment vehicles and their respective portfolio companies. This managerial influence can pose a threat to competition if the PE firm has the ability to direct business decisions of competing portfolio companies in a concentrated industry. Public equity, on the other hand, is not subject to the same lenient treatment because multiple co-managed entities are not common in this sphere. Previous research has shown that exemption from the HSR Act results in a lack of regulatory scrutiny and increased incentives for market participants to engage in anticompetitive deals. This "loophole" carries the risk of increased concentration in markets where PE deals are prevalent, which

¹¹⁷ 15 U.S.C. § 46 (2018); Press Release, Fed. Trade Comm'n, FTC to Examine Past Acquisitions by Large Technology Companies (Feb. 11, 2020), <https://www.ftc.gov/news-events/news/press-releases/2020/02/ftc-examine-past-acquisitions-large-technology-companies>.

¹¹⁸ Press Release, Fed. Trade Comm'n, FTC to Restrict Future Acquisitions for Firms that Pursue Anticompetitive Mergers (Oct. 25, 2021), <https://www.ftc.gov/news-events/news/press-releases/2021/10/ftc-restrict-future-acquisitions-firms-pursue-anticompetitive-mergers>.

could have negative impacts on consumer welfare. Given the growing significance of PE in the modern economy, addressing this discrepancy in the HSR Act is crucial for maintaining fair competition in relevant markets.