Articles

The Deregulation of Private Capital and the Decline of the Public Company

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From its inception, the federal securities law regime created and enforced a major divide between public and private capital raising. Firms that chose to "go public" took on substantial disclosure burdens, but in exchange were given the exclusive right to raise capital from the general public. Over time, however, the disclosure quid pro quo has been subverted: Public companies are still asked to disclose, yet capital is flooding into private companies with regulators' blessing.

This Article provides a critique of the new public-private divide centered on its information effects. While regulators may have hoped for both the private and public equity markets to thrive, they may instead be hastening the latter's decline. Public companies benefit significantly less from mandatory disclosure than they did just three decades ago, because raising large amounts of capital no longer requires going and remaining public. Meanwhile, private companies are thriving in part by freeriding on the information contained in public company stock prices and disclosure. This pattern is unlikely to be sustainable. Public companies have little incentive to subsidize their private company competitors in the race for capital—and we are already witnessing a sharp decline in initial public offerings and stock exchange listings. With fewer and fewer public companies left to produce the information on which private companies depend, the outlook is uncertain for both sides of the securities-law divide.

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INTRODUCTION

Alarms are sounding over the decline in U.S. public companies.[1] The extraordinary volume of trading in public equities masks an uncomfortable fact: Firms no longer need to go public to raise large amounts of capital. Despite relatively robust economic growth over the last few decades, the rate of initial public offerings ("IPOs") and the proportion of companies listed on the national stock exchanges have both plummeted, with small and medium-sized companies disproportionately likely to eschew the public markets.[2] If the trend continues, the typical U.S. public company will be a corporate behemoth that is no longer growing meaningfully. Meanwhile, private company "unicorns" such as Uber, Airbnb, Dropbox, and Lyft are raising astonishing amounts of equity capital entirely off the public markets.[3] Rather than rushing toward an IPO, these companies are delaying going public for as long as they can possibly avoid the securities laws' net. No longer the promised land for companies poised to grow, the public stock market is quickly becoming a holding pen for massive, sleepy corporations.

Why is this happening? Those who are paying attention tend to fault the rising regulatory costs of becoming and remaining a public company.[4] There is no question that federal securities law requirements for public companies—particularly disclosure requirements—have generally increased over the last few decades, both at a slow creep and, following major corporate scandals or market upheavals, by giant leaps. This regulatory cost hypothesis receives decidedly mixed support from the evidence, however. Most troubling is that the sharp downturn in the rate of U.S. IPOs and stock exchange listings began well before Sarbanes-Oxley, which has long been the focal point of disclosure skeptics' ire.[5]

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1. *See* Andrew Ross Sorkin, *C.E.O.s Meet in Secret over the Sorry State of Public Companies*, N.Y. TIMES (July 21, 2016), http://www.nytimes.com/2016/07/21/business/dealbook/ceos-meet-in-secret-over-sorry-state-of-public-companies.html?emc=edit_dlbkam_20160721&nl=dealbook&nlid=60675390&_r=0 ("Much of the smart money in the United States is going—and staying—private . . . . Publicly listed companies in the United States have become something of a dying breed.").

2. *See infra* Part I.B.

3. The term "unicorn" refers to startup companies that have achieved a valuation of at least one billion dollars while remaining entirely privately funded. *See* Aileen Lee, *Welcome to the Unicorn Club: Learning from Billion-Dollar Startups*, TECHCRUNCH (Nov. 2, 2013), http://techcrunch.com/2013/11/02/welcome-to-the-unicorn-club (providing the first reported use of the "unicorn" nomenclature, which suggests that such companies were so rare as to be mythical).

4. *See infra* Part II.A.

5. *See infra* Part II.A. In addition, other developed countries have experienced declines in IPOs over the last few decades, despite imposing lighter securities regulations than the United States. *See* Xiaohui Gao et al., *Where Have All the IPOs Gone?* 48 J. FIN. & QUANTITATIVE ANALYSIS 1663, 1677–79 (2013).

Critics of mandatory disclosure are correct that the stock market's woes turn at least in part on the information that it generates—they may simply have gotten the story backwards. The culprit need not be rising *costs* of disclosure, but declining *benefits*. From their inception, the federal securities laws proposed a simple bargain to U.S. companies: disclosure in exchange for investors. Companies that went public took on the obligation of publicly disclosing substantial amounts of information and, in return, were permitted to solicit the largest (and therefore cheapest) source of capital: the general public. Conversely, private companies were restricted to raising capital primarily from insiders and financial institutions, without publicity and subject to severe limitations on subsequent transfers of their securities—effectively precluding any sort of market for private company equity.

This paradigm divided the world of corporate finance into two: a public side, tending toward larger companies with dispersed, passive investors and exchange-traded stock, and a private side, characterized mostly by small, owner-managed companies with illiquid equity. Companies seeking to raise large amounts of capital gladly took up the public side bargain precisely because there was a plausible, direct connection between the cost (information disclosure) and the benefit (the broad investor base).

Over the last three decades, the disclosure bargain has largely been revoked. By repeatedly loosening the restrictions on capital raising and trading on the private side, securities regulators have given birth to a contradiction in terms: private securities markets.[6] Today, private companies can raise ample, cheap capital with relative ease.[7] Public company issuers therefore benefit significantly less from their disclosure obligations and can justifiably complain of a regulatory bait-and-switch. Thus, while critics blame the increase in regulation for the decline of public equity, the ongoing deregulation of private capital raising arguably played the greater role.[8] That is, even if public company disclosure requirements had remained constant over the last three decades, there would likely

6. *See infra* Part II.B. Within the vast realm of private capital, this Article focuses on private companies—that is, businesses that are not subject to periodic reporting requirements under the securities laws and whose stock is not publicly traded.

7. Of course, the opportunities to raise capital have not been equally distributed across firms. *See* James D. Cox, *Who Can't Raise Capital?: The Scylla and Charybdis of Capital Formation*, 102 KY. L.J. 849 (2013) (arguing that certain small firms are unlikely to be able to take advantage of any of the exemptions from the federal securities registration requirements). Moreover, the current glut of private capital is not due solely to deregulation—historically low interest rates have been a key driver in prompting investors to seek out higher yielding assets. *See Desperately Seeking Yield: The Striking Appeal of Corporate Bonds*, THE ECONOMIST (Mar. 9, 2013), http://www.economist.com/news/finance-and-economics/21573112-striking-appeal-corporate-bonds-desperately-seeking-yield.

8. *See infra* Part II.B.

still be a dearth of public companies today, due to the increasing ease of raising capital privately.[9]

But why are investors so willing to pour capital into companies that are not subject to disclosure requirements, particularly when the private markets still cannot compete with the liquidity of public equity? If one accepts that investors generally reward corporate disclosure,[10] then the answer is far from obvious. Given that the regulatory costs of mandatory disclosure cannot alone explain why firms are increasingly reluctant to go or remain public, we still need an account of the rise of private capital and the decline of the public company.

One explanation—among several other candidates[11]—may lie in the information effects of our new securities-law paradigm. Together, public companies' mandatory disclosure and stock trading prices provide a major information subsidy to private companies, to the detriment of the public company issuers and investors that generate it.[12] The economic argument in favor of a mandatory disclosure regime is that in the absence of regulation companies will fail to disclose the socially optimal amount of information to the public.[13] One reason is that disclosure has material *third-party effects* or *externalities*—information disclosed by one company may help its competitor, for example, which discourages voluntary disclosure. In this view, a well designed mandatory disclosure regime should benefit disclosing companies *as a group* and reduce their collective cost of capital by compelling them to disclose the optimal amount of information to the market.

This conclusion assumes that firms have no meaningful choice as to whether to be subject to the disclosure regime, however. Under the old regulatory bargain, broadly speaking, this was a valid assumption. Because of the restrictions on private capital raising, for the most part issuers needing to raise significant equity capital had no choice but to go public and take on the disclosure burden. Public companies and private companies thus tended to differ significantly in both size and investor

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9. Several scholars have noted that deregulating private capital could reduce firms' incentives to go public. *See e.g.*, Michael D. Guttentag, *Patching a Hole in the JOBS Act: How and Why to Rewrite the Rules That Require Firms to Make Periodic Disclosures*, 88 IND. L.J. 151, 173–74 (2013); Michael D. Guttentag, *Protection from What? Investor Protection and the JOBS Act*, 13 U.C. DAVIS BUS. L.J. 207, 234 (2013) [hereinafter Guttentag, *Protection from What?*]; Elizabeth Pollman, *Information Issues on Wall Street 2.0*, 161 U. PA. L. REV. 179, 235–36 (2012) (noting that increased liquidity in the private secondary markets decreases firms' incentives to go public); Usha R. Rodrigues, *The Once and Future Irrelevancy of Section 12(G)*, 2015 U. ILL. L. REV. 1529, 1554–55 (predicting the "[c]oming [p]roliferation of the [l]arge [p]rivate [f]irm").

10. *See* Richard Lambert et al., *Accounting Information, Disclosure, and the Cost of Capital*, 45 J. ACCT. RES. 385 (2007) (showing that an increase in a firm's information quality should lower its cost of capital, even when investors are diversified).

11. *See infra* note 105.

12. *See infra* Part IV.C.2.

13. *See infra* Part IV.A.1.

base. The third-party effects of mandatory disclosure were therefore unlikely to be materially harmful to public companies as a group. To the extent that a public company's disclosure proved helpful to a particular *private* company, the two were unlikely to be in direct competition in either the product or the capital markets.

The ongoing deregulation of private capital has made the mandatory disclosure regime largely elective. With issuers and investors increasingly free to cross the public-private divide, public and private companies now compete more directly for both investors and customers. The result is that the mandatory disclosure regime is no longer a closed system for the benefit of public companies: The third-party effects of disclosure amount to a penalty on public companies and a subsidy to private companies.

This is not the happy outcome envisioned by proponents of mandatory disclosure. Private companies today can raise large amounts of capital while disclosing less than their public company counterparts in part by freeriding on the enormous volume of public side information, which makes private company valuation vastly easier and more accurate. The cloud storage company Dropbox, which remains a private company despite a ten billion dollar valuation,[14] surely benefits to some degree from the financial and material contract disclosures of its public company competitor, Box.[15] Perhaps more importantly, investors and potential investors in Dropbox are better able to value the firm and benchmark their expected investment return by using Box as a ready comparison.[16]

The third-party effects of disclosure are not easily measured,[17] making it difficult to gauge just how large a role they play in the decline of IPOs and stock exchange listings. If regulators deem such third-party effects to be large enough to justify a federal mandatory disclosure regime, however, it is ironic that they should pay so little attention to them in redrawing the public-private divide. It should come as no surprise that continuing to impose (or increasing) disclosure requirements on public companies while providing ever more avenues for non-public companies to escape disclosure obligations altogether might undermine firms' incentives to go or to remain public.

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14. *See* Farhad Manjoo, *Crazy Like a Box: Going Public Can Give Start-Ups Outsize Power*, N.Y. TIMES (Dec. 2, 2015), http://www.nytimes.com/2015/12/03/technology/crazy-like-a-box-going-public-can-give-start-ups-outsize-power.html.

15. Meanwhile, Box has not fared well as a public company: Its stock price fell by nearly sixty percent in the year following its January 2015 IPO. *Box, Inc. (BOX)*, YAHOO! FINANCE, https://finance.yahoo.com/quote/BOX/history?period1=1422000000&period2=1453708800&interval=1d&filter=history&frequency=1d (last visited Mar. 11, 2017) (providing calculation based on price of common stock between listed dates).

16. *See infra* Part IV.C.2.b (discussing how public information about other firms within the same industry increases the precision of a firm's valuation).

17. *See infra* Part IV.A.

But, if the public side's loss is simply the private side's gain, why worry? Indeed, there is much to like about private firms and private capital.[18] The difficulty is that the status quo is inherently unstable. The thriving market for private company equity currently receives a material benefit from the vast amounts of public company information available. For precisely that reason, public companies have little reason to continue to provide this information subsidy.[19] The decline of public equity thus seems likely to persist for some time to come. As the set of public companies shrinks and skews toward ever larger corporations, however, public company information should prove less useful to private companies. The current flood of public market information available to the private markets may eventually slow to a trickle. If so, private firms will face information problems of their own. At a minimum, they will either have to significantly increase their spending on disclosure or face a higher cost of capital. Thus, the golden age of cheap and abundant private capital need not survive the decline of public capital.

To be clear, this Article seeks neither to defend nor to critique the current depth and breadth of mandatory disclosure for public companies and public offerings.[20] Rather, the goal is to show that the current regulatory arc is potentially self-defeating *on its own terms*. That is, if we take the Securities and Exchange Commission ("SEC") at its word that investment information is socially valuable and would be inadequately produced through private ordering alone, then our regulatory choices over the last three decades are puzzling, as they threaten the quality and usefulness of that information. We have for the most part increased disclosure obligations for public companies while simultaneously unleashing investors in the "disclosure-lite" private markets. The predictable result is extensive freeriding on information from the public markets and a rapidly shrinking set of public companies.[21] By exploiting public companies for the

18. For the seminal defense of private ownership of firms based on agency-cost principles, see Michael C. Jensen, *Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers*, 76 AM. ECON. REV. 323, 324 (1986) (arguing that concentrated ownership in private firms leads to efficiency gains by better aligning the incentives of management and shareholders).

19. *See infra* Part V.

20. At the direction of Congress, the SEC's Division of Corporate Finance is currently engaged in a large-scale review of public company disclosure requirements. *See* Jumpstart Our Business Startups Act ("JOBS Act"), Pub. L. No. 112-106, § 108, 126 Stat. 3606, 3606–08 (2012) (directing the SEC to review and report on Regulation S-K (17 C.F.R. 229.10 *et seq.*); Fixing America's Surface Transportation Act ("FAST Act"), Pub. L. No. 114-94, §§ 72002–72003, 129 Stat. 1312, 1784–85 (2015) (directing the SEC to implement improvements to Regulation S-K and to continue its review).

21. We are accustomed by now to thinking of private firms as being dependent on the public equity markets as one crucial means of exit for their equity holders (particularly for venture capital and private equity funds, but also for founders and employees), the other being acquisition by another firm. This *liquidity*-based dependence on the public stock market may well be less important today, given the professionalization of the mergers and acquisitions market for private firms and, to a lesser

benefit of the private markets, the SEC ultimately undercuts its own goal of ensuring the production and public dissemination of socially valuable investment information.

This Article proceeds as follows. Part I describes the public-private divide in U.S. securities regulation and documents the ongoing decline of equity capital raising on the public side. Part II argues that deregulation of private capital raising over the last few decades likely played a role in this decline. Part III explains the connection between these two developments discussed in Parts I and II in terms of information effects. Revisiting the debate over mandatory disclosure, Part III argues that the current disclosure regime provides too few benefits to public companies as a group in light of the deregulation of private capital. Part IV shows that the new crop of private companies is freeriding on pricing and other information from public companies. Finally, Part V identifies the difficulties posed for both sides of the securities-law divide by this freeriding and concludes with some possible directions for reform.

Our current federal securities regime is widely viewed as a compromise between disclosure enthusiasts and proponents of private ordering. Yet in this case, the compromise has not produced a stable equilibrium. Deregulating private capital while maintaining or increasing substantial disclosure burdens on public companies may thus, in the end, prove to decrease social welfare. The goal of fostering dynamic and efficient capital markets would likely be better served by either significantly scaling back public company disclosure or, in contrast, by redrawing the public-private divide so as to confine substantially more issuers and investors to the public side. If we take the third-party effects of disclosure seriously our middle ground approach may well be inferior to more one-sided policies from either end of the disclosure debate.

I. THE DECLINE OF PUBLIC EQUITY

A. THE PUBLIC-PRIVATE DIVIDE IN SECURITIES REGULATION

The U.S. market for publicly traded stock remains the best known financial market in the world. With enormous trade volumes and listings from corporations with global name recognition, the national stock exchanges such as the New York Stock Exchange ("NYSE") and NASDAQ epitomize contemporary finance.[22] Yet our collective fascination with the stock market owes much to the legal framework that

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extent, the rise of secondary trading of private-firm stock. This Article emphasizes a very different phenomenon: private firms' *information*-based dependence on publicly traded stock.

22. Ironically, a considerable share of the trading in public equities has moved off the national stock exchanges to alternative trading venues and networks, including so-called "dark pools." *See* Yesha Yadav, *Fixing Private Regulation in Public Markets* 4–5 (Vand. Univ. Law Sch., Working Paper No. 16-5, 2016), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2754786.

governs it. As the emblematic institution of American capitalism, it is easy to forget the extent to which the stock market is constructed by law. The overwhelming majority of federal securities regulation is directed to publicly traded equities and their corporate issuers.[23] And, by a wide margin, the law's most consequential intervention in this area is the sharp divide it creates between "public" and "private" securities transactions and—relatedly—between "public" and "private" companies. In each case, the public side bears substantial regulatory burdens (primarily involving disclosure), but in exchange, it benefits from privileged rights of access to investors.[24]

The public-private divide is a creature of the major federal securities statutes enacted following the Great Depression.[25] Focusing on operating businesses, as a rough approximation these laws currently require extensive public disclosure from companies (1) that offer to sell their securities to the general public,[26] (2) that grow sufficiently large (measured by their assets and the number of their record shareholders),[27] or (3) whose securities are traded on a national securities exchange.[28] Such issuers are referred to as "reporting companies" herein. This Article further refers loosely to reporting companies whose stock is publicly traded as "public companies" and to firms that are non-reporting companies and do not have publicly traded stock as "private companies."[29] Such disclosure is

23. Within the Venn diagram of securities regulation, the area of greatest overlap is undoubtedly the securities exchanges, where multiple layers of regulation affect issuers, underwriters, brokers, dealers, advisers, investors, and the exchanges themselves, including through the "soft law" of various self-regulatory organizations.

24. This Article will also refer somewhat loosely to the "public side" of the securities-law divide as covering firms subject to the reporting obligations under the Securities Exchange Act of 1934 ("Exchange Act") and to securities offerings registered under the Securities Act of 1933. *See* Securities Exchange Act of 1934, Pub. L. No. 112-158, 48 Stat. 881 (1934) (codified as amended at 15 U.S.C. §§ 78a *et seq.*); Securities Act of 1933 ("Securities Act"), Pub. L. No. 112-106, 48 Stat. 74 (codified as amended at 15 U.S.C. §§ 77a *et seq.*). The "private side" will refer to firms that are not reporting companies and to offerings that are not registered under the Securities Act.

25. Donald Langevoort and Robert Thompson provided the first comprehensive theorized account of the public-private divide in securities regulation in a 2013 article. Donald C. Langevoort & Robert B. Thompson, *"Publicness" in Contemporary Securities Regulation After the JOBS Act*, 101 GEO. L.J. 337, 339–40 (2013). *See* Onnig H. Dombalagian, *Principles for Publicness*, 67 FLA. L. REV. 649 (2015) (advocating for a more precisely theorized public-private divide).

26. *See* Securities Act § 77e(c) (prohibiting the sale of any security unless a registration statement is effective); *id.* § 77d(2) (declaring that the prohibition does not apply to "transactions by an issuer not involving any public offering").

27. Section 12(g) of the Exchange Act, as amended by the JOBS Act, requires a company to register its securities under the Exchange Act if it has ten million dollars or more in total assets and a class of equity securities "held of record" by 2000 or more persons (or 500 or more persons who are not "accredited investors"). *See* Exchange Act § 78l(g)(1)(A) (2012).

28. *See id.* § 78l(d).

29. While there is a sharp divide between reporting companies and non-reporting companies in terms of disclosure requirements, this divide does not correspond perfectly with restrictions on how the firms' securities are traded. The trading regime includes more gradations than the largely binary disclosure regime: Stock may be publicly traded on a national securities exchange, it may be publicly

required both in connection with specified events and on an ongoing, periodic basis.[30]

The public-private divide has been largely responsible for the U.S. stock market's disproportionate importance for two reasons. First, it results in the issuance and trading of securities deemed "private" being deliberately hidden from the view of the general public. Conversely, public companies trading on the major securities exchanges are made significantly more visible than they otherwise would be through mandatory disclosure and direct regulatory scrutiny. Second, the public-private divide includes various rules that, until recently, confined retail investors to the public markets.[31] Thus, the "public" and "private" labels in securities regulation have always been self-reinforcing, with both descriptive and prescriptive aspects. The public stock market's continued power to command our attention conceals an arresting development, however: the market's traditional role of helping companies to raise large amounts of equity capital is in decline.

B. The Decline in Equity Capital Raising on the Public Side

1. Declining IPOs

The U.S. market for IPOs of corporate stock is in the throes of what appears to be a long-term decline.[32] IPOs are a key measure of the state of public equity, because they are typically companies' only bite at the apple when it comes to raising equity capital from the general public. Subsequent attempts to raise new equity capital from the public are relatively rare, as most corporations prefer to fund their operations with retained profits or by issuing debt.[33]

Measured over the last two decades, fewer and fewer operating companies are choosing to "go public" in the United States by issuing

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traded over-the-counter on the "Pink Sheets," or it may be subject to various legal restrictions on transfers, such as the requirement that a resale occur only to accredited investors. Further, even stocks that are publicly tradable vary considerably in their liquidity, with some lacking any regular trading whatsoever. Thus, the notion of a "public-private divide" applies only loosely to trading. This Article therefore focuses primarily on two points on opposite ends of the spectrum: "public companies" that are both reporting companies and publicly traded and "private companies" that are neither reporting companies nor publicly traded. *See infra* Part IV.C.

30. These disclosure requirements are found in section 13 of the Exchange Act and the SEC rules that implement it. *See* 15 U.S.C. §§ 78l, 78m (2012); 17 C.F.R. § 229.301 (2009).

31. *C.f.* Donald C. Langevoort, *The SEC, Retail Investors, and the Institutionalization of the Securities Markets*, 95 VA. L. REV. 1025, 1072 (2009) ("The United States is the only country in the world with a truly broad and active retail investor base for direct equity investment.").

32. Other developed countries appear to be facing a similar decline. *See* Gao et al., *supra* note 5.

33. This "pecking order" explanation for firms' preferences for financing sources originated in an article by Stewart Myers and Nicholas Majluf. *See generally* Stewart C. Myers & Nicholas S. Majluf, *Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have*, 13 J. FIN. ECON. 187 (1984) (developing the pecking-order theory of corporate financing behavior).

shares in a registered offering.[34] From 2001 through 2012, there were an average of only 99 IPOs per year, compared to 310 IPOs per year between 1980 and 2000.[35] Given that the total number of U.S. startups grew overall during the same period, the *proportion* of U.S. firms undergoing an IPO fell even more dramatically.[36] While it has affected firms of all types and sizes, the downshift in IPOs is most pronounced among small firms, as shown in TABLE 1. The overwhelming majority of companies choosing to go public today are already large businesses, whether measured by sales or enterprise value.[37]

TABLE 1. THE DECLINE IN U.S. IPOS SINCE 2000[38]

		Percentage of IPOs		
	Average No. IPOs per Year	Small Firms	Large Firms	Total Proceeds ($ billions)
1980–2000	310	53%	47%	$28.3
2001–2012	99	28%	72%	$28.0

As of the date of this Article, many commentators were expecting a relative drought in IPOs to continue for the foreseeable future.[39] This cannot be dismissed as a global phenomenon: The decline in U.S. IPOs is particularly salient in comparison to the rest of the world.[40] Globally, the U.S. share of IPOs fell from thirty-one percent in the 1990s to ten percent in the 2000s, even though the U.S. share of global GDP remained nearly constant across both periods.[41]

IPOs are the most visible proxy for the health of public capital raising. A high rate of IPOs signals that companies (and their underwriters) are confident that they can raise significant amounts of capital at a favorable price—it is thus an indication not only of companies' optimism about the health of the U.S. economy, but also (for our purposes) of their judgment that a balancing of the costs and benefits weighs in favor of going public. Although major IPOs tend to attract significant public attention, the decline in IPOs is not merely of symbolic or cultural interest. If IPOs are indeed companies' stepping stone to achieving scale—a question to which

34. *See* Gao et al., *supra* note 5, at 1663.

35. *Id.*

36. *See id.*

37. *See id.*

38. All data for TABLE 1 is taken from Gao et al., *supra* note 5. *Id.* at 1668. The IPO data excludes all nonoperating companies, such as closed-end investment funds and REITs. *Id.* at 1667.

39. *See* Maureen Farrell, *US IPO Window Could Stay Closed for Months*, WALL ST. J. (Feb. 10, 2016, 4:38 PM), http://blogs.wsj.com/moneybeat/2016/02/10/us-ipo-window-could-stay-closed-for-months.

40. Craig Doidge et al., *The U.S. Left Behind? Financial Globalization and the Rise of IPOs Outside the U.S.*, 110 J. FIN. ECON. 546, 547 (2013).

41. *Id.*

we turn in the next Part—then the dearth of companies making the leap may bode poorly for future employment and growth in the United States.[42] Indeed, Congress was so troubled by the decline in IPOs that portions of the Jumpstart Our Business Startups Act ("JOBS Act")[43] were expressly aimed at reversing the downward trend.[44] As we shall see, however, the fact that the JOBS Act simultaneously liberalized private capital raising in turn rendered nugatory the Act's efforts to encourage IPOs.[45]

2. *Declining Exchange Listings*

Provided that they can satisfy the applicable listing standards, most U.S. public companies choose to list their stock on a major securities exchange such as the NYSE or NASDAQ, as this provides their shareholders and management with liquidity—that is, the ability to buy and sell quickly and with minimal transaction costs.[46] Yet the number and relative share of exchange-listed companies has plummeted over the last four decades, suggesting a stark decline in public equity.[47] According to data compiled by Craig Doidge, G. Andrew Karolyi, and René M. Stulz, between 1977 and 2012 the number of U.S. exchange-listed firms fell in absolute terms from 4710 to 4102 firms, representing a decline of almost thirteen percent.[48] However, both the U.S. population and the total number of U.S. firms grew significantly during this time.[49] Thus, the relative decline in U.S. listed firms is even more striking: Over the same period, both the ratio of U.S. listed firms to all U.S. firms and the number of U.S. listed firms per capita plunged by roughly forty percent each.[50]

The near-term trends are even more remarkable.[51] FIGURES 1 and 2 depict the decline in U.S. listings since 1990 (as a percentage of all U.S.

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42. *See generally* Bernard S. Black & Ronald J. Gilson, *Venture Capital and the Structure of Capital Markets: Banks Versus Stock Markets*, 47 J. FIN. ECON. 243 (1998) (explaining the link between the stock market and venture capital market via the contractual relationship between entrepreneurs and venture capital providers).

43. *See* JOBS Act, Pub. L. No. 112-106, 126 Stat. 313 (2012).

44. *See* IPO TASK FORCE, REBUILDING THE IPO ON-RAMP: PUTTING EMERGING COMPANIES AND THE JOB MARKET BACK ON THE ROAD TO GROWTH 6–8 (2011), https://www.sec.gov/info/smallbus/acsec/rebuilding_the_ipo_on-ramp.pdf.

45. *See, e.g.*, Carlos Berdejó, *Going Public After the JOBS Act*, 76 OHIO ST. L.J. 1, 59–61 (2015) (finding that JOBS Act provisions aimed at easing small issuers toward IPOs failed to increase their rate of IPOs).

46. The set of public companies whose stock is not traded on a national securities exchange thus largely consists of small or financially distressed companies or privately owned companies that have publicly registered debt outstanding.

47. Craig Doidge et al., The U.S. Listing Gap 5 (Sept. 2016) (unpublished manuscript) (on file with the Journal of Financial Economics).

48. *Id.*

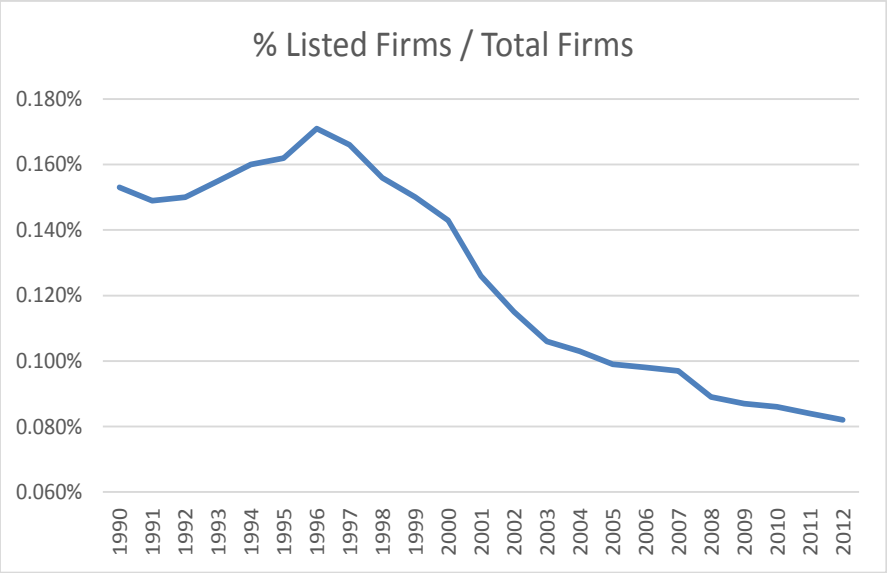
49. *See id.* at 37.

50. *See id.*

51. *See* SCOTT BAUGUESS ET AL., CAPITAL RAISING IN THE U.S.: AN ANALYSIS OF THE MARKET FOR UNREGISTERED SECURITIES OFFERINGS, 2009–2014 3 (2015), https://www.sec.gov/dera/staff-papers/white-

firms and on a per capita basis, respectively), when, with the enactment of Rule 144A, the SEC embarked in earnest on its mission of facilitating private capital markets.[52] Of course, the newfound appeal of the private markets competed with the record-breaking bull market in the public markets in the 1990s, which ended abruptly in the early 2000s with the bursting of the "dot-com" bubble and a wave of corporate fraud.[53] Thus, from its peak in 1996, the share of U.S. listed companies relative to all U.S. companies fell by more than half, while the number of U.S. listed companies per capita fell by almost sixty percent.[54] Even in absolute numbers the decline is arresting: Over approximately the last twenty years, the number of publicly listed companies plummeted from 8025 to 4101.[55]

FIGURE 1. U.S. EXCHANGE-LISTED FIRMS AS A PERCENTAGE OF ALL U.S. FIRMS (1990–2012)



papers/unregistered-offering10-2015.pdf ("[T]here has been a steady and significant decrease in the number of public reporting companies in the U.S., particularly since the dot com crash and implementation of the Sarbanes-Oxley Act.").

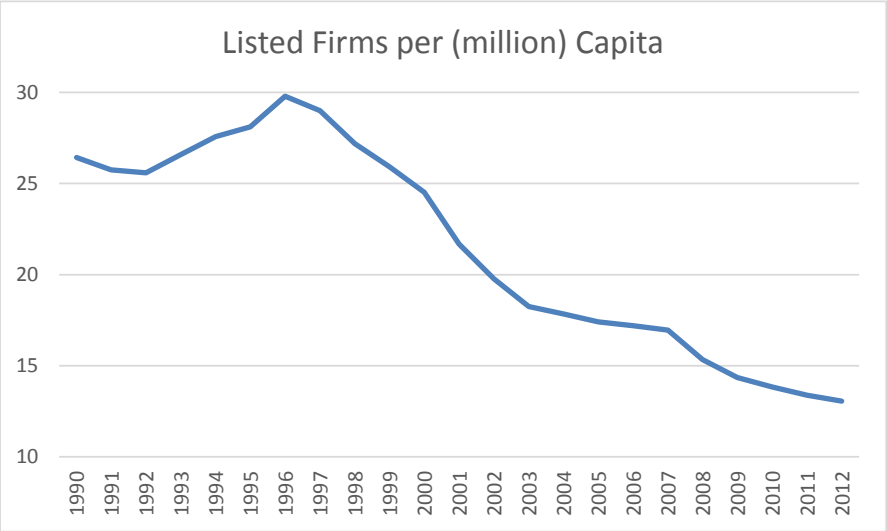
52. *See* 17 C.F.R. § 230.144A.

53. *See* John C. Coffee, Jr., *Gatekeeper Failure and Reform: The Challenge of Fashioning Relevant Reforms*, 84 B.U. L. REV. 301, 323–25 (2004).

54. *See* Doidge et al., *supra* note 47, at 6–7, 37.

55. *See* Sorkin, *supra* note 1 (reporting the findings of the National Bureau of Research).

FIGURE 2. U.S. EXCHANGE-LISTED FIRMS PER CAPITA (1990–2012)



Unlike IPOs, this phenomenon is truly unique to the United States. Peer countries with developed national stock exchanges did not experience a similar decline in listings, leading Doidge, Karolyi, and Stulz to conclude that the United States is experiencing a sizable and growing "listing gap."[56] The implication of the decline in listings is that the number of firms exiting the exchanges—whether because they are taken private,[57] are merged into another exchange-listed firm, or simply choose to delist[58]—is not being offset by an equal or larger number of firms joining the exchanges. In the end, the decline in listings generally suggests that fewer companies see value in going or remaining public. More particularly, it signals that, in a dramatic shift in mission, the major securities exchanges are shedding their traditional role of helping companies to raise capital.[59]

56. *See* Doidge et al., *supra* note 47, at 31–32.

57. "Going private" transactions involve one investor (or a group of investors), such as a private equity fund, acquiring the publicly held stock of a company, whether through a merger or tender offer. *See* Elisabeth de Fontenay, *Private Equity Firms as Gatekeepers*, 33 REV. BANKING & FIN. L. 115, 123 n.33 (2013).

58. *See* Jesse M. Fried, *Firms Gone Dark*, 76 U. CHI. L. REV. 135, 140–43 (2009) (describing the delisting process).

59. As a technical matter, firms do not generally raise capital on the stock exchanges. Stock exchanges are markets (organized as auction or dealer markets) where companies' already issued stock is traded *among* investors—though companies may participate in buying and selling their own stock on the exchange (such as in a stock buy-back), this is relatively rare. Rather, companies generally raise capital only when they first issue that stock (most often, to an underwriter) in an IPO or a secondary offering, after which the stock will begin trading on the exchange. Nonetheless, exchange listings are intimately tied to public capital raising because they represent a promise of liquidity to investors, which is a crucial inducement for them to invest in the first place. For example, Google could not have raised 1.9 billion dollars in its 2004 IPO without pledging

3. *Secondary Offerings*

After a firm has undergone an IPO it may subsequently raise additional equity capital in what is referred to as a secondary offering. If the rate of IPOs in the United States is dwindling, secondary offerings by public companies are becoming increasingly rare.[60] In recent years, net secondary issuances on the national exchanges have been negative, with firms in the aggregate buying back more stock (by value) than they have issued.[61] Among the plausible benefits conferred to businesses by going public, equity capital raising is plummeting in the rankings.[62]

C. Enter the Unicorns

Symptomatic of the diminished role of public capital raising is the recent phenomenon of companies going public long after they have achieved scale and primarily as a means for insiders to cash out, rather than to raise new capital for growth.[63] "Unicorns" are companies that achieve valuations of one billion dollars or more while remaining private companies.[64] The spotting of the very first unicorns in the mid-2000s rapidly gave way to a stampede. As recently as November 2015, 103 private startup companies had valuations exceeding one billion dollars.[65] While such valuations should not always be taken at face value—particularly given the disproportionate number clustered at just over the highly desirable one billion dollar mark[66]—there is no disputing the astonishing amount of equity capital that such firms are raising through purely private offerings.

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to list its shares on NASDAQ immediately thereafter, because most investors do not expect to hold specific stocks indefinitely. *See* Jay Ritter, *Google's IPO, 10 Years Later*, Forbes (Aug. 7, 2014, 4:56 PM), http://www.forbes.com/sites/jayritter/2014/08/07/googles-ipo-10-years-later/#1178ec2a70f9.

60. *Cf.* Bd. of Governors of the Fed. Reserve Sys., Financial Accounts of the United States: Flow of Funds, Balance Sheets, and Integrated Macroeconomic Accounts 68 tbl.F.223 (2016), http://www.federalreserve.gov/releases/z1/current/z1.pdf (showing that in 2015, net issuances—both primary and secondary—of equity securities across *all* nonfinancial corporate entities amount to approximately negative 128 billion dollars).

61. *Id.*

62. Of course, the decline in secondary stock offerings could simply mean that public companies are choosing to substitute debt for equity. This is unlikely to be the case, however, given that leverage ratios among S&P 500 companies are currently substantially lower than in 1990. *See* Nir Kaissar, *The Great Corporate Debt Scare*, Bloomberg (Feb. 8, 2016, 11:18 AM), https://www.bloomberg.com/gadfly/articles/2016-02-08/about-that-29-trillion-in-corporate-debt.

63. *See* Manjoo, *supra* note 14 ("Companies are waiting longer to go public, and thanks to a surge of money from hedge funds and mutual funds . . . young companies have been given resources to stay private for years on end.").

64. *See* Sorkin, *supra* note 1.

65. *See* Leslie Picker, *Risking Your Neck to Run With the Unicorns*, N.Y. Times (Nov. 4, 2015), http://www.nytimes.com/2015/11/05/business/dealbook/risking-your-neck-to-run-with-the-unicorns.html.

66. *See* Robert P. Bartlett III, *A Founder's Guide to Unicorn Creation: How Liquidation Preferences in M&A Transactions Affect Start-up Valuation*, *in* Research Handbook on Mergers and Acquisitions (forthcoming 2016) (manuscript at 17–18), http://ssrn.com/abstract=2664236.

And these firms are in no hurry to go public.[67] The unavoidable Facebook best illustrates the tale of unicorns and their resistance to becoming public companies.[68] Launched as a website in 2004, the social media company rapidly attracted a significant user network and private funding from venture capital funds soon followed. With a demonstrated source of advertising revenue and the largest user base of any social media company, Facebook seemed primed for an IPO. But, the company dragged its feet precisely because an IPO was no longer needed for it to raise capital.[69] The founder and CEO Mark Zuckerberg candidly acknowledged that there would be little benefit from going public: Facebook had all the capital that it needed, and then some.[70]

Indeed, in addition to multiple rounds of financing from venture capital firms, Facebook had accepted several other private equity investments, including from other businesses (notably, Microsoft).[71] Combined with shares originally issued to management and employees, the company's shareholder base grew so large that it risked being forced to become a public company against its will by virtue of the then-applicable threshold of 500 record shareholders for triggering reporting company status.[72] Facebook's vocal displeasure over being forced to cross the public-private divide in this fashion was directly responsible for Congress's eventual decision to increase the record shareholder trigger from 500 to 2000 in the JOBS Act.[73] In the meantime, Facebook proceeded with an IPO on May 18, 2012.[74] However, over 100 unicorns are still resolutely avoiding going public,[75] and Congress has made it even easier for them to hold their ground.

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67. *See* Picker, *supra* note 65 ("Start-ups [in 2015] are waiting 7.7 years to go public after their first round of funding, up from 5.8 years in 2011 . . . .").

68. For the full account of Facebook's pre-IPO efforts to circumvent the 500 record shareholder threshold for Exchange Act reporting, see Langevoort & Thompson, *supra* note 25, at 338–39; *see also* Steven Davidoff Solomon, *Facebook and the 500-Person Threshold*, N.Y. TIMES (last updated Jan. 3, 2011, 4:03 PM), http://dealbook.nytimes.com/2011/01/03/facebook-and-the-500-person-threshold/.

69. Zachary M. Seward, *Judge Expresses Skepticism About Facebook Lawsuit*, WALL ST. J. (last updated July 25, 2007, 6:38 PM), https://www.wsj.com/articles/SB118539991204578084.

70. *See* THOMSON REUTERS, *Zuckerberg: 'No Rush' to Facebook IPO*, P.C. MAG. (Mar. 4, 2010, 9:45 AM), http://www.pcmag.com/article2/0,2817,2360939,00.asp ("If you don't need that capital, then all the pressures are different, and the motivations (to go public) are not there in the same way[.]" (quoting Mark Zuckerberg)).

71. *See* Brad Stone, *Microsoft Buys Stake in Facebook*, N.Y. TIMES (Oct. 25, 2007), http://www.nytimes.com/2007/10/25/technology/25facebook.html.

72. *See* 15 U.S.C. § 781(g)(1) (2016).

73. *See* Letter from Darrell Issa, Chairman, House Comm. on Oversight & Gov't Reform, to the Hon. Mary L. Schapiro, Chairman, U.S. Sec. & Exch. Comm'n (Mar. 22, 2011), http://www.knowledgemosaic.com/resourcecenter/Issa.041211.pdf.

74. *See* Erin Griffith, *How Facebook Overcame Its Disastrous IPO*, FORTUNE (last updated May 18, 2015, 12:35 PM), http://fortune.com/2015/05/18/facebook-ipo-3-year/.

75. *See* Picker, *supra* note 65 (identifying 103 private firms valued at over one billion dollars each).

Today, then, "going public" is no longer the unavoidable stepping stone to raising large amounts of capital—far from it. Weighing the costs and benefits, firms are increasingly declining whatever it is that the public side still has to offer them. Those that do go public appear to be motivated primarily by the need to allow insiders to cash out some of their investment in the business or by the fear of running afoul of the securities law provisions based on size or trading in their securities. Retrenchments of the securities laws are increasingly helpful in alleviating those fears and thus delay firms' entry into the public side even further.

II. WHO IS TO BLAME?

Evidence from the IPO market, stock exchange listings, secondary offerings, and private company "unicorns" all suggest that the public stock market is undergoing a radical shift in its role—away from capital raising and, as discussed in Part IV, toward the production of information as an end in itself. This Part discusses the plausible causes for the decline of public equity.

A. WHO GOES PUBLIC AND WHY?

Companies may decide to go public for several reasons, and these reasons have changed over time. First, the key driver has historically been access to capital: Reaching the broadest possible investor group affords companies more capital and at lower cost. Second, the public markets offer more liquidity which independently contributes to the lower cost of capital for public companies, but also provides distinct benefits. Given the widespread use of equity compensation, for instance, a liquid secondary stock market makes hiring and retaining management less costly, as managers can better assess the true value of their stock options and have assurances that they can readily convert those options to cash once they become exercisable.[76] Indeed, going public is now viewed primarily as a mechanism for founders, employees, and early investors to cash out their relatively illiquid stakes in the firm.[77] Other potential benefits of going public include greater publicity and reputational benefits, a simpler capital structure (typically), and more uniform shareholder rights—as compared to, for example, multiple rounds of venture capital financing, each associated with potentially differing cash flow and other rights.[78]

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76. *See* Jay R. Ritter & Ivo Welch, *A Review of IPO Activity, Pricing, and Allocations*, 57 J. FIN. 1795, 1796–98 (2002).

77. *See* EUGENE F. BRIGHAM & JOEL F. HOUSTON, FUNDAMENTALS OF FINANCIAL MANAGEMENT 42 (13th ed. 2012).

78. Although it receives no explicit mention in the literature, going public also frees management from the burden of monitoring and approving trades in the company's stock in order to ensure

Yet there are undeniable costs to being a public company that must be balanced against these benefits. The direct and indirect costs of mandatory disclosure and other requirements of securities law (such as the federal proxy rules) represent one of the most significant costs to becoming and remaining a public company.[79] There may also be efficiency losses from the increased separation of ownership and control associated with having a diverse shareholder base.[80] Other commonly noted costs include increased shareholder litigation, the costs of dealing with shareholder activists and short sellers, and the perhaps related but vaguely defined costs imposed by investor "short-termism."

One should bear in mind, however, that there may be considerable differences in the relative weight of these costs and benefits from the perspectives of shareholders, managers, and society. While managers are strongly averse to shareholder litigation and shareholder activists, for example, their ultimate effect on shareholder value remains hotly debated.[81] Most relevant for our purposes, public company managers may be highly reluctant to disclose conflicts of interest (as they are required to do by securities laws), but such disclosures are generally thought to benefit shareholders.[82] This disparity in incentives matters, because the parties responsible in practice for deciding whether a firm goes or remains public will determine which particular mix of these costs and benefits is taken into account.

Where do things stand today? As we have seen, more and more companies are deliberately avoiding the public markets by simply choosing to remain private longer. Indeed, the median age of venture-capital-backed firms at the time of their IPO has increased from eight years between 1980 and 1989 to ten years between 2001 and 2015.[83] Further, the set of firms that have already gone public is shrinking through acquisitions or going private transactions, and less frequently, through delistings.[84] Small and medium-sized firms are especially likely to

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compliance with the securities laws. As we shall see, however, deregulation has made the latter task significantly less onerous.

79. *See generally* PRICEWATERHOUSECOOPERS LLP, CONSIDERING AN IPO? THE COSTS OF GOING AND BEING PUBLIC MAY SURPRISE YOU 1 (Sept. 2012), https://www.pwc.com/us/en/deals/publications/assets/pwc-cost-of-ipo.pdf.

80. *See infra* note 266.

81. *See, e.g.*, Alon Brav et al., *Hedge Fund Activism, Corporate Governance, and Firm Performance*, 63 J. FIN. 1729, 1730 (2008) (finding that the announcement of hedge fund activist campaigns triggers positive abnormal stock returns, suggesting that they increase shareholder welfare).

82. *See* Robert M. Bushman & Abbie J. Smith, *Financial Accounting Information and Corporate Governance*, 32 J. ACCT. & ECON. 237, 304–05 (2001) (discussing how disclosure limits managerial rent-seeking behavior).

83. *See* JAY R. RITTER, INITIAL PUBLIC OFFERINGS: UPDATED STATISTICS 11 tbl.4, (2016) (providing statistics on the "median age and fraction of IPOs with VC- and Buyout-backing, 1980-2015").

84. *See* Fried, *supra* note 58, at 136 (documenting an increase in delistings from the major stock exchanges).

remain or go private.[85] The combined effect is that U.S. public companies are simply "fewer and bigger."[86] Conversely, while there has always been a smattering of very large private companies in the United States such as Koch Industries, Cargill, Bechtel, and Mars, such companies were, until recently, notable exceptions. Today the list of private company behemoths is expanding at a rapid clip, including in particular relatively young, tech-based companies that in the past would have been obvious IPO candidates, such as Uber, Airbnb, and their ilk, as well as formerly public companies that have been taken private by private equity firms or by management.[87]

To be sure, it continues to be the case that once a company exceeds a certain size the calculus will typically weigh in favor of becoming and remaining a public company. The largest companies can best bear the overhead costs and administrative burden of disclosure and other regulatory compliance.[88] Further, if their shareholder base has grown along with their size, having a liquid secondary market for the company's stock—and one that management is not responsible for refereeing—will hold considerable appeal. Yet it appears that the threshold size at which public company status becomes desirable continues to increase, resulting in fewer and larger public companies.

B. Regulatory Excess?

Averaged over the last thirty years, the U.S. economy has grown at a relatively healthy rate.[89] Why, then, is the public side of corporate finance ailing? An obvious culprit presents itself. Over the last fifteen years, public companies have overall experienced a marked increase in federal securities regulation,[90] largely in the form of a single paradigm-shifting federal statute, the Sarbanes-Oxley Act.[91] Enacted following the epidemic of fraud scandals among public companies in the early 2000s, the Sarbanes-Oxley Act significantly increased public companies' disclosure obligations, among others.[92] Most notoriously, the Act requires periodic certifications by the CEO, CFO, and auditors of public companies as to the

85. *See* Gao et al., *supra* note 5, at 1690–91.

86. *See* Geoff Colvin, *Take This Market and Shove It*, Fortune (May 17, 2016, 6:30 AM), fortune.com/going-private/.

87. *See* Picker, *supra* note 65.

88. *See* Dhammika Dharmapala & Vikramaditya S. Khanna, *The Costs and Benefits of Mandatory Securities Regulation: Evidence from Market Reactions to the JOBS Act of* 2012 (Univ. of Chi. Law Sch., Coase-Sandor Inst. for Law & Econ., Working Paper No. 701, 2014).

89. *See* Gao et al., *supra* note 5.

90. One notable exception is the reduced disclosure burden for well-known, seasoned issuers ("WKSIs") under the 2005 amendments to the Securities Act. *See* 17 C.F.R. § 230.415.

91. *See* Sarbanes-Oxley Act of 2002, Pub. L. No. 107-204, 116 Stat. 745 (2002) (codified in scattered sections of 11, 15, 18, 28, 29 U.S.C.).

92. *See* Sarbanes-Oxley Act of 2002.

firm's internal financial controls,[93] which predictably and significantly increased the resources devoted to public company disclosures.[94] To a lesser extent, the Dodd-Frank Act,[95] enacted by Congress following the financial crisis occurring between 2007 and 2009, also included certain changes to public company disclosure and governance within its larger reforms to financial regulation.[96]

Taken as a whole, the federal securities statutes and regulations impose a formidable disclosure burden on U.S. public companies. This heavier burden could plausibly explain issuers' recent reluctance to raise equity capital publicly. Much of the post-Sarbanes-Oxley commentary takes precisely that approach.[97] In particular, many have interpreted both the rise of going private transactions and the decline in foreign issuers cross listing on U.S. exchanges as evidence of the excessive burden of mandatory disclosure and other securities law requirements for public companies.[98] In this view, the decline of the public markets is a tragic yet predictable story of regulatory overreach.

However, empirical tests of the regulatory cost hypothesis have proved inconclusive overall.[99] Recent studies suggest that increasing

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93. *See id.* §§ 302, 404.

94. *See* Julia Hanna, *The Costs and Benefits of Sarbanes-Oxley*, FORBES (Mar. 10, 2014, 11:15 AM), http://www.forbes.com/sites/hbsworkingknowledge/2014/03/10/the-costs-and-benefits-of-sarbanes-oxley/#4a51b2532776.

95. *See* Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank"), Pub. L. No. 111-203, §§ 401–416, 124 Stat. 1376, 1571 (2010).

96. Focusing solely on disclosure, the changes introduced by the Dodd-Frank Act were modest compared to the Sarbanes-Oxley Act. *See* MICHAEL J. BARRY & JOHN C. KAIRIS, SHAREHOLDER RIGHTS AND CORPORATE GOVERNANCE IN THE DODD-FRANK ACT (2011), http://www.gelaw.com/wp-content/uploads/2015/02/Shareholder-Rights-Dodd-Frank.pdf (reporting on the effect of the Dodd-Frank Act and when certain provisions will come into effect as well as providing a description of the changes introduced).

97. *See, e.g.*, William J. Carney, *The Costs of Being Public After Sarbanes-Oxley: The Irony of "Going Private,"* 55 EMORY L.J. 141, 159–60 (2006); Larry E. Ribstein, *Market vs. Regulatory Responses to Corporate Fraud: A Critique of the Sarbanes-Oxley Act of 2002*, 28 J. CORP. L. 1, 16–17 (2002); Jeff Schwartz, *The Twilight of Equity Liquidity*, 34 CARDOZO L. REV. 531, 545 (2012) (concluding that the increased cost of securities regulation "likely shoulders a portion of the blame" for the decline in U.S. IPOs). For a detailed review of the critiques of Sarbanes-Oxley, see John C. Coates IV & Suraj Srinivasan, *SOX After Ten Years: A Multidisciplinary Review*, 28 ACCT. HORIZONS 627 (2014) (summarizing the critiques of Sarbanes-Oxley, but concluding based on a broad review of research that the Act's social welfare effects were inconclusive).

98. *See, e.g.*, Carney, *supra* note 97, at 159–60; Ribstein, *supra* note 97, at 16–17.

99. In addition, influential investor groups have expressed support for the disclosure and certification requirements in Sarbanes-Oxley. *See* Letter from Cindy Fornelli, Exec. Dir., Ctr. for Audit Quality, and Jeff Mahoney, Gen. Counsel, Council of Institutional Inv'rs, to the Hon. Spencer Bachus, Chairman, House Fin. Servs. Comm., and the Hon. Barney Frank, Ranking Member, House Fin. Servs. Comm. (Nov. 29, 2011), http://www.aicpa.org/Advocacy/Issues/DownloadableDocuments/404b/CAQ-CII_404_letter_11-29-11.pdf. It should be noted, however, that the charge of excessive regulation for public companies is not confined to disclosure rules. Other plausible scapegoats for the decline in IPOs and exchange listings include the passage of Regulation Fair Disclosure in 2000, the launch of decimalization in 2001, the decline in analyst reports following the 2003 Global Settlement ruling (which restricted conflicts of interest between equity research and investment banks), and the rise of shareholder litigation. *See* DAVID WEILD & EDWARD KIM, CAPITAL MARKETS SERIES: MARKET STRUCTURE IS CAUSING THE IPO CRISIS (2009), http://www.rcgt.com/wp-

regulatory costs are, at most, a contributing factor in the decline of public equity.[100] To be sure, several studies have found that the burdens of complying with mandatory disclosure are pushing companies below a certain size threshold to avoid public company status.[101] Yet the decline in companies listing on the U.S. exchanges began well before Sarbanes-Oxley and Dodd-Frank and, as we have seen that decline affects even very large issuers[102] for whom the costs of securities regulation are relatively less significant.[103] In addition, other developed countries have experienced declining IPOs, even in the absence of increased regulation.[104]

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content/blogs.dir/2/files/2011/04/Market_structure_is_causing_the_IPO_crisis.pdf (reviewing the literature discussed in this Article). Such explanations for the decline in public equity have also failed to find unqualified support in the empirical literature. *See, e.g.*, Doidge et al., *supra* note 40, at 548–49 (rejecting the various regulatory explanations for the decline in U.S. IPOs).

100. *See* Robert P. Bartlett III et al., *What Happened in 1998? The Demise of the Small IPO and the Investing Preferences of Mutual Funds* (U.C. Berkeley Pub. Law Research Paper No. 2718862, Ohio State Pub. Law Working Paper No. 328, 2016), http://ssrn.com/abstract=2718862 (providing evidence that the sharp decline in small company IPOs was triggered by a demand-side factor, namely, a sudden increase in mutual funds' preference for liquidity); Doidge et al., *supra* note 40, at 549, 571 (concluding that the relative decline in U.S. IPOs was not caused by the increase in regulation in the early 2000s); *see also* Gao et al., *supra* note 5; Robert P. Bartlett III, *Going Private but Staying Public: Reexamining the Effect of Sarbanes-Oxley on Firms' Going-Private Decisions*, 76 U. CHI. L. REV. 7, 10–11 (2009) [hereinafter Bartlett III, *Going Private*] (rejecting the hypothesis that the going private phenomenon is attributable to increased public company disclosure requirements). Similarly, the popular claim that U.S. issuers are increasingly listing abroad to avoid regulation has also been rejected. *See* Gao et al., *supra* note 5, at 1665.

101. *See, e.g.*, Christian Leuz et al., *Why Do Firms Go Dark? Causes and Economic Consequences of Voluntary SEC Deregistrations*, 45 J. ACCT. & ECON. 181, 183 (2008); *see also* Dharmapala & Khanna, *supra* note 88; Peter Iliev, *The Effect of SOX Section 404: Costs, Earnings Quality, and Stock Prices*, 65 J. FIN. 1163, 1163–67 (2010); András Marosi & Nadia Massoud, *Why Do Firms Go Dark?*, 42 J. FIN. & QUANTITATIVE ANALYSIS 421, 436–38 (2007).

102. *See supra* Part I.B.2.

103. The conflicting conclusions reached by the numerous empirical studies of mandatory disclosure are unsurprising given the serious conceptual and practical difficulties such studies present, which scholars are increasingly forthright in acknowledging. *See* Christian Leuz & Peter D. Wysocki, *The Economics of Disclosure and Financial Reporting Regulation: Evidence and Suggestions for Future Research*, 54 J. ACCT. RES. 525, 526–31, 602–03 (2016) (reviewing a large sample of empirical studies of disclosure regulation and summarizing the considerable obstacles they face). For additional discussions of the difficulty of engaging in cost-benefit analyses of the securities laws (including mandatory disclosure), see John C. Coates IV, *Cost-Benefit Analysis of Financial Regulation: Case Studies and Implications*, 124 YALE L.J. 882, 997–1002 (2015) (questioning the feasibility of engaging in cost-benefit analyses of the securities laws); James D. Cox & Benjamin J.C. Baucom, *The Emperor Has No Clothes: Confronting the DC Circuit's Usurpation of SEC Rulemaking Authority*, 90 TEX. L. REV. 1811, 1840–42 (2012). Among the most intractable is the problem of identifying and measuring the full societal costs and benefits of disclosure. Empirical studies of changes in public company disclosure requirements pose an additional problem that is not discussed in the literature: Even if one were able to measure all of the social welfare costs and benefits associated with the disclosure change, one could not extrapolate from that a particular policy prescription, because both the costs and benefits of disclosure change depending on the degree to which the law confines issuers and investors to the public side of the divide. If the goal is to determine the optimal disclosure regime for public companies, such studies can lead to precisely the wrong conclusion. How so? Somewhat counter intuitively, the very same increase in public company disclosure requirements may be *harmful* to public companies when most companies are private, but may be *beneficial* to public companies when

C. The Private Market Is Unbridled

If rising regulatory costs are not the answer, what, then, is to blame? Recent work identifies a number of possible culprits, suggesting both supply-side and demand-side factors.[105] Contrary to the critique of public company regulation, this Article argues that an additional culprit may be the deregulation of private capital raising over this same period, which resulted in a major shift of the public-private divide. The hypothesis is that the public markets would be in relative decline today *even if public company disclosure rules had remained constant.* The liberalization of the rules for selling and trading private securities is arguably the most significant development in securities regulation over the last thirty years, but the empirical literature on the decline of public equity has largely overlooked it. This is a critical and surprising omission, because the changes to the private side of securities regulation bear directly on a company's decision to go public.

The slow demise of equity capital raising in the public markets need not be due to rising *costs* for public companies, but instead to declining *benefits.* As we have seen, the carrot for companies to go public had always been access to cheaper capital because the securities law regime gave public companies the exclusive right to raise money from the general public. Nevertheless, the regulatory thrust in recent decades has been to markedly loosen the restrictions on capital raising and trading on the private side. The deregulatory push prompted a surge in investment in private companies and privately offered securities. Because the aggregate supply of capital for investment is limited, much of this growth has been at the expense of the public markets. The Subparts that follow describe the liberalization of private capital over the last few decades.

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most companies are public, due to information effects discussed in Part IV. An event study performed in the former case might lead one to advocate for an easing of the disclosure burden, while the latter case suggests (but certainly does not require) that the optimal policy could in fact be both to increase disclosure and to confine more investors and firms to the public sphere. The failure of such studies to take into account the interaction between mandatory disclosure and the public-private divide—an unavoidable feature of the study design—entails that they have limited use in designing optimal disclosure policy. Unfortunately, the same problem is replicated in much of the theoretical debate over mandatory disclosure, as discussed in Part IV.

104. *See* Gao et al., *supra* note 5, at 1677.

105. *See, e.g.*, *id.* at 1675 (attributing the decline in IPOs to technological changes requiring small companies to achieve scale faster); Bartlett III et al., *supra* note 100 (attributing the decline in small company IPOs to a change in mutual fund preferences).

1. *Deregulation on the Private Side*

The deregulatory wave that swept over the United States beginning in the 1970s did not leave the securities laws untouched.[106] Many of the most significant restrictions on raising private capital and trading private securities have been lifted or defanged since the 1980s, and the exemptions from securities registration continue to multiply.[107] The first hole in the dyke came in the form of Regulation D, the 1982 rulemaking that created a series of safe harbors from registration for securities offerings.[108] Most notably, offerings limited to "accredited investors"[109] can generally escape registration entirely.[110] The concept of an accredited investor was designed to be a proxy for investor sophistication, but in practice it captures investors (such as institutional investors or high-net-worth individuals) with financial means deemed sufficient to absorb a certain amount of losses.[111]

Over time, Regulation D has proven to be the exception that swallows the rule, largely for two reasons. First, the number and types of institutional investors able to qualify for the exemption have expanded dramatically since Regulation D was introduced (as discussed later in this Part), through financial innovation, regulatory arbitrage, and the major shift in the retail investment landscape from direct investing to investment management.[112] Second, the income and net worth thresholds in the "accredited investor" definition have not been adjusted for inflation for decades.[113] All told, Regulation D has allowed a far wider array of investors to participate in the private markets than its architects could have anticipated.[114]

Changes to the securities laws governing investment funds have similarly paved the way for a surge in private capital. A 1996 change to section 3(c)(7) of the Investment Company Act, for example, effectively

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106. *See generally* EDWARD J. BALLEISEN, FRAUD: AN AMERICAN HISTORY FROM BARNUM TO MADOFF (2017) (describing the origins of the deregulatory movement in the United States); Alan R. Palmiter, *Toward Disclosure Choice in Securities Offerings*, 1999 COLUM. BUS. L. REV. 1, 3 (describing the "newly emerging deregulatory philosophy" transforming the Securities Act).

107. *See* Palmiter, *supra* note 106, at 29 (describing the Securities Act as being "in its twilight" following the last few decades of deregulation by the SEC, the judiciary, and Congress).

108. *See* SEC. EXCH. COMM'N, Revision of Certain Exemptions from Registration for Transactions Involving Limited Offers and Sales, S.E.C. RELEASE NO. 33-6389 (Securities Act of 1933), 24 S.E.C. 1166, 47 Fed. Reg. 11,251 (Mar. 8, 1982) (codified at 17 C.F.R. §§ 230, 239).

109. *See* 17 C.F.R. § 230.501(a) (defining the term "accredited investor").

110. *Id.* § 230.506.

111. *See* William K. Sjostrom, Jr., *Rebalancing Private Placement Regulation*, 36 SEATTLE U. L. REV. 1143, 1158 (2013) (critiquing the "accredited investor" concept).

112. *See generally* WILLIAM A. BIRDTHISTLE, EMPIRE OF THE FUND: THE WAY WE SAVE NOW (2016) (describing the rise of investment management).

113. *See* U.S. SEC. & EXCH. COMM'N, REPORT ON THE REVIEW OF THE DEFINITION OF "ACCREDITED INVESTOR" 2–5 (2015).

114. Private companies have also been able to avoid going public longer thanks to a 1988 SEC rule (Rule 701) exempting from registration securities issued to employees and other persons (such as consultants and advisers) pursuant to an employee compensation plan. *See* 17 C.F.R. § 230.701 (2016).

removed the 100 investor cap in private investment funds, prompting the rise of the mega private equity funds—vast pools of private capital used to invest in private companies or to take public companies private.[115] The explosive growth of leveraged buyout and venture capital funds over the last four decades has created an entirely new and seemingly bottomless source of capital for private companies, allowing them to substantially delay going public or to forego doing so entirely. More surprising still, securities regulators are implicitly blessing the ongoing "retailization" of private investment funds, whereby retail investors are increasingly able to participate in private side investments either directly or through mutual funds.[116]

In order to avoid securities registration entirely over the life of a particular investment, not only must the original offering be exempt (as under Regulation D, for example), subsequent trading in the company's securities must also be exempt.[117] A decisive turning point in developing private markets was the SEC's 1990 adoption of Rule 144A, which facilitates the syndication of private capital[118] by permitting securities to be resold without restriction to large institutional investors (referred to as "qualified institutional buyers" or "QIBs").[119] Primarily used for debt securities of all types, Rule 144A is a key avenue for firms to raise vast amounts of capital privately. Finally, following several amendments, Rule 144 now effectively permits unlimited and unfettered resale of restricted securities—that is, securities that could not otherwise be resold without an exemption—after a six-month or one-year period.[120] This has facilitated the rise of secondary trading platforms for private company stock.[121] Notwithstanding, the exemptions for secondary trading do not appear to be keeping pace with the exemptions for securities offerings, potentially hindering truly liquid markets for private company equity.[122]

Yet the exemptions keep coming. Concerned in part by the decline of IPOs and exchange listings, Congress enacted the previously introduced JOBS Act in 2012.[123] In notable irony, while professing a desire to encourage U.S. companies to go public, the statute created a

115. *See* 15 U.S.C. § 80a-3(c)(7) (2016).

116. *See* Wulf A. Kaal, *Confluence of Mutual and Hedge Funds*, *in* ELGAR HANDBOOK ON MUTUAL FUNDS 3 (forthcoming 2016).

117. *See* 15 U.S.C. § 77e(a) (prohibiting the sale of unregistered securities).

118. *See* JAMES D. COX ET AL., SECURITIES REGULATION: CASES AND MATERIALS 382 (7th ed. 2013) (describing NASDAQ's PORTAL platform for Rule 144A securities).

119. *See* 17 C.F.R. § 230.144A (2016).

120. *Id.*

121. *See infra* Part II.B.2; *see also* Schwartz, *supra* note 97, at 554–56 (offering a critique of Rule 144 in the context of the new markets for private company stock).

122. For example, the new exemption in section 4(a)(7) of the Exchange Act for resale of private securities appears unlikely to get much use given that it requires reselling only to accredited investors, it prohibits general solicitation, and it imposes information requirements. *See* Exchange Act § 4(a)(7).

123. Jumpstart Our Business Startups Act, Pub. L. No. 112-106, 126 Stat. 306 (2012).

slew of new exemptions from securities registration for issuers and offerings, further easing firms' ability to raise money on the private side.[124] Reversing its eighty-year policy of confining non-high-net-worth individual investors to the public side, the securities laws are now beginning to welcome them across the divide through the new crowd funding exemptions[125] and the so-called "Regulation A+" exemption allowing issuers to raise up to fifty million dollars in a single offering.[126] "Private" capital is fast becoming a misnomer—the JOBS Act repealed even the prohibition on general solicitations under Regulation D, thus allowing private placements to be advertised publicly.[127] As a final blow to the public side, the JOBS Act rendered toothless the Securities Exchange Act of 1934 ("Exchange Act") provision requiring companies to become public companies—that is, to take on the Exchange Act's disclosure and other requirements for "reporting" companies—once they reached a threshold number of assets and shareholders.[128] By increasing the shareholder cap from 500 to 2000,[129] Congress enables extraordinarily large private companies whose stock is widely held by passive investors to avoid becoming public companies.[130]

The deregulatory push on the private side is by no means limited to new exemptions in the securities statutes and regulations. Commentators routinely overlook a key way in which securities regulation can become more permissive—which is simply by not treating certain instruments as "securities" at all. Instruments not deemed to be "securities" under the securities statutes avoid the entire panoply of federal securities regulations. The original statutory concept of a "security" was intended to comprise—among other things—all passive investments (such as a

124. *See* Usha Rodrigues, *The JOBS Act at Work*, THE CONGLOMERATE (Sept. 11, 2015), http://www.theconglomerate.org/jobs-act/ (parodying the JOBS Act's quixotic attempts to encourage more companies to go public).

125. *See* JOBS Act § 302; Exchange Act § 4(a)(6). For a discussion of crowd funding within the larger framework of federal securities regulation, see Joan MacLeod Heminway, *Crowdfunding and the Public/Private Divide in U.S. Securities Regulation*, 83 U. CIN. L. REV. 477 (2014).

126. *See* JOBS Act § 401; Securities Act § 3(b)(2).

127. *See* JOBS Act § 201(a).

128. *See id.* § 501; Exchange Act § 12(g)(1).

129. *See* Exchange Act § 12(g)(1). Section 12(g) now also excludes from the cap all employees holding unregistered stock pursuant to a compensation plan. *Id.*

130. *See* John Coates & Robert Pozen, *Bill to Help Businesses Raise Capital Goes Too Far*, WASH. POST (Mar. 14, 2012), https://www.washingtonpost.com/opinions/bill-to-help-businesses-raise-capital-goes-too-far/2012/03/13/gIQAVWgFCS_story.html (estimating that more than two-thirds of all public companies at the time of the JOBS Act's enactment could thereafter be exempt from compliance with the Exchange Act's periodic disclosure requirements); Sjostrom, Jr., *supra* note 111, at 1153 ("The end result is that private companies will be able to take on more investors than before without having to go public . . . ."). For additional assessments of the JOBS Act provisions, see Robert B. Thompson & Donald C. Langevoort, *Redrawing the Public-Private Boundaries in Entrepreneurial Capital Raising*, 98 CORNELL L. REV. (SPECIAL SYMPOSIUM ISSUE) 1573 (2013) (discussing the effects of the JOBS Act on general solicitations); Guttentag, *Protection from What?*, *supra* note 9, at 243–44.

corporation's stock and bonds), while nonsecurities were to be limited to instruments embodying, for example, a purely commercial relationship (such as a bank loan to a corporation).[131] Today, however, the securities regime treats as nonsecurities several instruments that are manifestly widely held, passive investments, and treats them as such even when they are functionally identical to instruments that are still treated as securities.[132]

2. Does Liquidity Matter?

The fundamental characteristic of publicly traded stock, that it seemed could never be replicated with private company stock, is liquidity—the ability for investors to buy and sell shares quickly and at low transaction costs. On the major exchanges, shares can be purchased and sold in nanoseconds with razor-thin bid-ask spreads. Traditionally, however, private company stock has always been highly illiquid. A stockholder in even a large private company could not be assured of finding a buyer when the time came to sell, as a result of affirmative restrictions on resale imposed both by statute (such as the requirement to limit sales to accredited investors under the securities laws) and by contract (such as those found in restricted stock), and, perhaps as importantly, the lack of publicity that was largely imposed by law as part of the prohibition on general solicitations.[133] Even assuming an interested and legally qualified buyer and seller, there had to be a mechanism for the two parties to find one another and, further, to negotiate, consummate, and clear the trade.

Over time technology and new institutions may provide a partial remedy for both the lack of publicity and the legal restrictions imposed on private company stock. New electronic trading platforms such as NASDAQ Private Market (formerly SecondMarket) and SharesPost provide a centralized marketplace for sales of a wide range of private securities, including private company stock, by clearing trades and confirming accredited-investor status.[134] An individual investor meeting the increasingly generous accredited-investor thresholds can directly purchase shares in a private company with which it had no prior relationship, for example, by buying the stock from a company employee

131. *See* SEC v. W. J. Howey Co., 328 U.S. 293, 297–300 (1946).

132. *See* Elisabeth de Fontenay, *Do the Securities Laws Matter? The Rise of the Leveraged Loan Market*, 39 J. CORP. L. 725, 797–29 (2014) (noting that leveraged loans continue to be treated as nonsecurities, despite their functional convergence with high-yield bonds).

133. *See* Schwartz, *supra* note 97, at 548–50 (describing the factors that render private company equity illiquid).

134. For descriptions and assessments of the new secondary markets for private company stock, see Darian M. Ibrahim, *The New Exit in Venture Capital*, 65 VAND. L. REV. 1 (2012); Pollman, *supra* note 9, at 202; Schwartz, *supra* note 97, at 556–60.

or former employee who received it as compensation.[135] Non-accredited investors can simply purchase shares in a mutual fund specifically formed to invest in private companies.[136] The development of a full-fledged secondary market for private company stock is significant, given that the decline of IPOs has left private company investors such as founders, venture capital and private equity funds, and employees with only mergers and acquisitions as a ready means of exit.[137] Greater liquidity at the back end ensures private companies cheaper capital at the front end.[138] While these fledgling secondary markets do not (and are unlikely to) offer anything like the liquidity afforded by the public markets,[139] they reflect just how fundamentally the "private" side of the securities-law divide has changed.

Separately, the deregulation of private capital has directly increased the liquidity of private company securities, by easing the restrictions on publicity and trading for private securities, as well as by increasing the number of potential buyers.[140] The private company securities market has become increasingly professionalized, with investment funds and operating businesses all vying for opportunities to invest in private companies or to acquire them outright, and eventually to sell to the next in line.[141] It remains to be seen just how much liquidity the private securities markets can achieve in the absence of mandatory disclosure and established marketplaces, as well as uniform procedures for secondary transfers.[142] Not only is liquidity increasing in the private markets, it may be that investors will have less need for the liquidity of the public markets going forward given the rapidly declining participation of direct retail investors. The fact that all of the major mutual fund groups now have funds invested in private companies[143] raises the possibility that illiquidity can simply be better managed than in prior eras, which should reduce the illiquidity discount imposed by investors on private securities.[144]

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135. *See* Pollman, *supra* note 9, at 202.

136. *See, e.g.*, SHARESPOST 100 FUND, ANNUAL REPORT (2016).

137. *See* D. Gordon Smith, *The Exit Structure of Venture Capital*, 53 UCLA L. REV. 315 (2005).

138. *See* Sjostrom, Jr., *supra* note 111, at 1151 (arguing that increasing liquidity for privately placed securities should facilitate capital raising for their issuers).

139. *See* Schwartz, *supra* note 97, at 557 ("[D]espite appearances to the contrary, these markets are quite illiquid.").

140. *See supra* Part II.C.1.

141. *Id.*

142. *See* Schwartz, *supra* note 97, at 555 (warning of the potential for equity liquidity to deteriorate as a result of the shift toward private securities).

143. *See* Andrew Ross Sorkin, *Main Street Portfolios Are Investing in Unicorns*, N.Y. TIMES (May 11, 2015), http://www.nytimes.com/2015/05/12/business/dealbook/main-street-portfolios-are-investing-in-unicorns.html.

144. Among the shareholders of large private firms, employees undoubtedly have the greatest need for liquidity. In the absence of an IPO, private firms such as Airbnb have partially addressed this concern by arranging for new financing rounds to include large buyouts of employee stakes.

In sum, deregulation, technology, and a global glut in investment capital have combined to provide U.S. private companies with many of the traditional benefits of going public (such as access to capital and *some* liquidity for insiders and investors) without their having to bear any of the burdens (compliance with mandatory disclosure and other regulatory requirements, securities litigation, hedge fund activism, and so forth). It should come as no surprise, then, that increasing numbers are choosing to avoid going public entirely.

3. Taking Stock

Publicly registered stock offerings now represent only a minor share of the capital raised in the United States. The vast majority of U.S. corporate capital is raised instead as debt or as privately placed equity.[145] In particular, private placements of corporate capital (both equity and debt) have rapidly overtaken public offerings, and the gap is only increasing. In 2014 alone, the amount of private placements of securities ($2.1 trillion) such as under Regulation D was almost 1.5 times larger than registered (that is, public) offerings of debt and equity securities combined ($1.35 trillion).[146] Such data on securities offerings significantly understates the size of the private markets for corporate capital, however, given that, as discussed, much private capital is not treated as "securities" at all for purposes of the U.S. securities laws—including the vast commercial paper market[147] and the nearly nine hundred billion dollar leveraged loan market.[148] Congress and the SEC have thus repeatedly acted to facilitate large, private, capital raising and trading, even where such transactions very closely resemble public offerings and trading as a functional matter. In the end, the growth and professionalization of private capital raising dispel the myth that going public is the key to accessing cheap capital.

Of course, there are many reasons why one might wish to foster private capital. Yet regulators have failed to notice a flaw in the new regulatory design. Part III makes the case that the deregulation of private capital undermines a key premise of the mandatory disclosure regime. Parts IV and V then explain why this may be problematic for both the private and the public equity markets.

See David Z. Morris, *Airbnb Valued at $30 Billion in $850 Million Capital Raise*, FORTUNE (Aug. 6, 2016, 10:10 AM), http://fortune.com/2016/08/06/airbnb-valued-at-30-billion/.

145. *See* COX ET AL., *supra* note 118, at 851.

146. *See* BAUGUESS ET AL., *supra* note 51, at 6.

147. *See* Securities Act § 3(a)(3).

148. *See* de Fontenay, *supra* note 132, at 728–29 n.13.

III. Mandatory Disclosure and the Shifting Role of Information in Corporate Finance

While the decline of public capital raising may sound ominous, the mantle has clearly been taken up by private firms—all with the blessing of Congress and the SEC.[149] If that is so, what is the harm? While regulators may have hoped for both public and private firms to thrive, it was at the very least foreseeable that in the competition for capital one group might prove to be the loser. Proponents of deregulation might even argue that fewer public companies were the desired result.

Admittedly, the decline of the public company may have a wide range of consequences that extend beyond first-order economic effects. Others have argued, for example, that the bulk of corporate America should be kept under the spotlight of disclosure rules in order to improve corporate governance, to minimize systemic risk or widespread fraud, to keep regulators informed as to market innovations, or to impress upon large corporations that they are creatures of law and thus bound in some sense to fulfill the public interest.[150] These considerations, debated elsewhere,[151] are not addressed in this Article.

Even putting such concerns aside, however, the dismal state of public equity may be cause for concern. The explanation turns on the changing use of information generated by the public markets as a result of the deregulation of the private markets. Understanding the importance of this shift requires revisiting the longstanding debate over mandatory disclosure. For several decades now the majority view has been that, in theory, the cost-benefit analysis of mandatory disclosure in federal securities regulation is a favorable one—assuming, among other things, an optimally designed disclosure regime, mandatory disclosure should make investors and firms collectively better off.[152] As we shall see, however, the prediction that mandatory disclosure leads to a welfare-increasing equilibrium need not hold when firms are given a meaningful option to remain private.

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149. Note, however, that the SEC was reportedly opposed to many of the JOBS Act provisions. *See* David S. Hilzenrath, *Jobs Act Could Remove Investor Protections, SEC Chair Schapiro Warns*, Wash. Post (Mar. 14, 2012), http://www.washingtonpost.com/business/economy/jobs-act-could-open-a-door-to-investment-fraud-sec-chief-says/2012/03/14/gIQA1vx1BS_story.html.

150. The recent literature on "publicness" in securities regulation is very much in this vein, noting that much of the recent regulatory requirements imposed on public companies are not aimed at protecting shareholder interests, but rather at having large corporations conform to public norms. *See infra* Part IV.C.3.

151. *See, e.g.*, Cynthia A. Williams, *The Securities and Exchange Commission and Corporate Social Transparency*, 112 Harv. L. Rev. 1197 (1999) (arguing that the SEC should use its authority to require expanded disclosure about corporate management's policies regarding social and environmental issues).

152. *See* Merritt B. Fox, *Retaining Mandatory Securities Disclosure: Why Issuer Choice Is Not Investor Empowerment*, 85 Va. L. Rev. 1335, 1339 (1999) (describing the "rough consensus" achieved in the mandatory disclosure debate during the 1980s).

A. THE DEBATE OVER MANDATORY DISCLOSURE

1. The Path Toward Consensus

Many options exist for regulating the offering and trading of securities. The federal securities laws introduced in the New Deal overwhelmingly favor one approach: mandatory disclosure, primarily by securities issuers themselves—that is, by the companies that seek capital from investors in exchange for claims on the cash flows of their businesses.[153] As we have seen, the set of securities issuers, offerings, and other transactions subject to mandatory disclosure sets the dividing line between the "public" and "private" realms in corporate finance.[154]

While the precise locus of the original dividing line lacked a clear foundation in theory,[155] at a minimum the public side reflected a rough determination of which parties would benefit most from disclosed information but would be least capable of obtaining it for themselves. Thus, the dividing line has historically been set such that passive, non-insider investors would be confined to the public realm, while the private side would be limited primarily to insiders and to financial institutions such as commercial banks with the incentives and ability to monitor issuers directly.

A moment's thought makes it clear that passive, dispersed investors require substantial amounts of information from issuers in order to have any hope of valuing their investment, while insiders and financial institutions arguably require little or no such assistance.[156] By definition, insiders—the managers and controlling equity holders of a business—are the parties privy to (and in control of) the issuer's information. Financial institutions such as commercial banks have traditionally had two means of acquiring information about the companies to which they extend credit: direct monitoring[157] and contractual protections.[158] Initially, then,

153. *See* Frank H. Easterbrook & Daniel R. Fischel, *Mandatory Disclosure and the Protection of Investors*, 70 VA. L. REV. 669, 669–70 (1984) (contrasting mandatory disclosure with other regulatory approaches); Kevin S. Haeberle & M. Todd Henderson, *Information-Dissemination Law: The Regulation of How Market-Moving Information Is Revealed*, 101 CORNELL L. REV. 1373, 1384 (2016) (describing modern securities regulation as being "mostly about information (namely, material corporate information)").

154. *See infra* Part I.A.

155. *See* Langevoort & Thompson, *supra* note 25, at 339 (describing the public-private divide as "entirely under theorized").

156. *See* SEC v. Ralston Purina Co., 346 U.S. 119, 125 (1953) (recognizing that securities exemptions should exist where investors can "fend for themselves"); *see also* Securities Act § 4(2).

157. *See* Douglas W. Diamond, *Financial Intermediation and Delegated Monitoring*, 51 REV. ECON. STUD. 393, 393 (1984) (arguing that financial intermediaries minimize the cost of monitoring borrowers).

158. *See* Douglas G. Baird & Robert K. Rasmussen, Essay, *Private Debt and the Missing Lever of Corporate Governance*, 154 U. PA. L. REV. 1209, 1227–28 (2006) (discussing the use of loan covenants); Joel Houston & Christopher James, *Bank Information Monopolies and the Mix of Private and Public Debt Claims*, 51 J. FIN. 1863, 1866 (1996). Such contractual protections include rights to receive

the public-private scheme rested loosely on a rationale of investor protection.[159] Investors with little ability to access corporate information would receive the protection of the federal securities laws, while insiders and financial intermediaries would be permitted to fend for themselves and avoid the costs of regulation.[160]

After several decades of widespread support for the disclosure regime, however, the investor protection rationale came under uncomfortable scrutiny. First, early empirical work sought to challenge the accepted view that mandatory disclosure benefitted investors and issuers.[161] Second, in the 1970s and 1980s, scholars in the nascent law-and-economics field launched a theory based critique of the federal securities law disclosure requirements, by identifying a puzzle in the longstanding regulatory scheme: If disclosure is beneficial to investors, why would it need to be imposed by fiat?[162] The argument runs as follows: If investors prefer companies to disclose information then they will only invest in companies that do so or they will demand a higher rate of return on their investment from companies that do not, thereby giving disclosing companies the benefit of a lower cost of capital. In this view, issuers therefore face powerful market incentives to disclose precisely the amount and type of information that potential investors desire.[163] In the language of contract theory, companies have strong incentives to signal their quality through disclosure. High-quality issuers will voluntarily choose to disclose information to investors, while investors will infer that nondisclosing companies are of bad quality.[164] The optimal level of disclosure could thus occur in the market without affirmative government

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information (such as audited financial statements) from the borrower, to prohibit the borrower from taking certain actions that increase credit risk, to require the borrower to take actions to preserve the value of the credit, and to intervene in governance or accelerate the loan upon the occurrence of certain adverse conditions, all of which are embodied in the extensive covenants, representations and warranties, events of default, security, and guarantees in the financing contract.

159. *See* H.R. REP. NO. 73-1383, at 5 (1934) ("[I]t becomes a condition of the very stability of [ ] society that its rules of law . . . protect [the] ordinary citizen's dependent position."); H.R. REP. NO. 73-85, at 2 (1933) ("The purpose of [the Securities Act of 1933] . . . is to protect the public with the least possible interference to honest business.").

160. *See Ralston Purina Co.*, 346 U.S. at 124 ("The design of the [Securities Act] is to protect investors by promoting full disclosure of information thought necessary to [make] informed investment decisions.").

161. *See, e.g.*, George J. Stigler, *Public Regulation of the Securities Markets*, 19 BUS. LAW. 721, 725 (1964) (examining the effects on new-issue stock returns before and after the SEC imposed mandatory disclosure); *see* George J. Benston, *Required Disclosure and the Stock Market: An Evaluation of the Securities Exchange Act of 1934*, 63 AM. ECON. REV. 132 (1973) (examining the effects of the Exchange Act's financial disclosure requirements). For a critique of this early empirical work, see generally Fox, *supra* note 152.

162. *See* Easterbrook & Fischel, *supra* note 153, at 672–73.

163. *See id.*

164. *See* Stephen Ross, *Disclosure Regulation in Financial Markets: Implications of Modem Finance Theory and Signaling Theory*, *in* ISSUES IN FINANCIAL REGULATION 177, 183–93 (Franklin R. Edwards ed., 1979).

intervention, the argument goes, other than perhaps a prohibition on fraud (to counteract companies' incentives to disclose false information to attract investors). In this view, mandating disclosure either leads to a surfeit of information that investors do not actually want—with heavy costs on the companies that generate it—or stifles innovation and improvements in disclosure.

This critique of mandatory disclosure spurred a rebuttal from scholars of varying stripes, grounded primarily in information economics. For our purposes, one defense of mandatory disclosure points to a serious collective action problem among companies that should result in under-disclosure in an unregulated market.[165] The problem is that, while disclosure might benefit companies collectively (by lowering their aggregate cost of capital), it is not the case that every company will benefit at all times. For example, information disclosed by one company about its business plans might be used for the benefit of its competitors and potential competitors. This problem is referred to as the *third-party effects* or *externalities* of disclosure.[166] For diversified investors, such effects can be ignored as they should offset one another,[167] but they may be significant for individual companies and drive them to disclose less information than is socially optimal.

A second rationale for mandatory disclosure points to the agency costs associated with corporate managers. The claim is that the law-and-economics critique of disclosure was too quick to equate the interests of an issuer with the interests of its insiders (including managers), with whom the bulk of corporate information rests, and who decide what, if anything, to disclose.[168] Disclosure that would benefit the firm's shareholders might well conflict with managers' private interests.[169] For instance, investors generally wish to know of any conflicts of interest involving management. If the company were contemplating a large purchase of real estate, for example, the fact that the company's CEO was

165. *See, e.g.*, Easterbrook & Fischel, *supra* note 153, at 686 (acknowledging that firms might under-disclose in the absence of regulation because disclosure by one firm benefits investors in other firms, as well as non-shareholder constituencies); Zohar Goshen & Gideon Parchomovsky, *The Essential Role of Securities Regulation*, 55 DUKE L.J. 711, 755–66 (2006) (arguing in favor of mandatory disclosure as reducing information traders' search costs, and therefore increasing market efficiency).

166. Easterbrook & Fischel, *supra* note 153, at 690.

167. This effectively assumes that Company A and Company B are in the same market. *See infra* Part IV.A. for a discussion of the difficulties that arise because this assumption is no longer satisfied.

168. *See* Fox, *supra* note 152, at 1355–56 (arguing that the agency costs of corporate management explain why they will choose to have companies disclose less than would be optimal for their own shareholders); Paul G. Mahoney, *Mandatory Disclosure as a Solution to Agency Problems*, 62 U. CHI. L. REV. 1047, 1048 (1995) ("[T]he principal purpose of mandatory disclosure is to address certain agency problems that arise between corporate promoters and investors, and between corporate managers and shareholders."); *see also* Manuel A. Utset, *Towards a Bargaining Theory of the Firm*, 80 CORNELL L. REV. 540, 598–99 (1995) (describing managerial disclosure requirements).

169. *See* Bushman & Smith, *supra* note 81, at 305.

the owner of the property would clearly be viewed as material by investors. For obvious reasons, however, management may be highly reluctant to provide such disclosure, creating an agency cost for shareholders.[170]

Thus, the contemporary case for imposing disclosure requirements on firms rests primarily on collective action problems and agency costs that disincentivize voluntary corporate disclosure.[171] Rather than investor protection, the goal of mandatory disclosure in this view is efficient capital allocation. With scarce capital to go around, an ideal disclosure regime would enable us to collectively value projects more accurately and thus to identify and invest in the ones producing the highest risk-adjusted returns.[172]

2. *The Consensus Upended*

Unfortunately, the prediction that a federal securities regime of mandatory disclosure should, if optimally designed, benefit disclosing companies as a group need not hold in light of the deregulation of private capital. Indeed, the prediction depends on a crucial unstated assumption—namely, that all comparable companies are bound by the disclosure regime. In such a world, *every* issuer seeking to raise large amounts of capital would have to "go public" and therefore comply with the disclosure rules: investors in exchange for disclosure.

That is no longer our world. As we have seen, while the securities laws have maintained a tight (and tightening) grip on disclosure by public company issuers, they have made it significantly easier for even large issuers with dispersed shareholders to avoid triggering reporting obligations.[173] With the *legal* impediments to remaining private lifted for all but the very largest corporations, most issuers can now truly choose whether to subject themselves to mandatory disclosure. And they have spoken with their feet: The flight to the disclosure-free (or "disclosure-lite") private markets is now impossible to ignore.

In one sense, this should not have come as a surprise. As discussed, individual companies have incentives to defect from a mandatory disclosure regime, due to either (1) the third-party effects of disclosure (for example, the fact that Company A's disclosed information may help its competitor, Company B); or (2) management agency costs (for example,

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170. *See generally* Fried, *supra* note 58 (documenting a significant increase in the number of firms choosing to cease disclosure under the Exchange Act, and interpreting this phenomenon of firms "going dark" as evidence of significant management agency costs).

171. In contrast to arguments based on the *underproduction* of investment information in unregulated markets, a separate justification for mandatory disclosure rests on the *overproduction* investment information in the absence of regulation. *See generally* John C. Coffee, Jr., *Market Failure and the Economic Case for a Mandatory Disclosure System*, 70 VA. L. REV. 717 (1984) (arguing that mandatory disclosure avoids the duplication of investment in corporate information by stock analysts).

172. *See* Fox, *supra* note 152, at 1359.

173. *See supra* Part II.B.

the fact that managers resist disclosure of information about their conflicts of interest or poor performance, even though it would be in the best interests of shareholders).[174] That certain issuers might wish to flee the public side and avoid mandated disclosure was therefore wholly predictable.

But what of investors? Why have they been willing to follow issuers to the private side and forego the benefits of mandated disclosure, thereby removing issuers' *economic* impediment to remaining private? It is not enough to say that the legal impediments to private investing have been removed; we need an account of why even passive investors would be so willing to colonize the private firm terrain formerly dominated by insiders.

Indeed, if mandatory disclosure is so helpful to non-insider investors, why, then, would they invest on nearly the same terms in an issuer not bound by it? In theory, a company's decision not to disclose (or worse, to cease disclosing) should be a negative signal of quality.[175] Thus, given the public-private choice now available to firms, issuers on the private side should be penalized with a significantly higher cost of capital.[176] The lack of mandated disclosure on the private side represents a non-diversifiable source of risk for investors, and should therefore depress such companies' valuations (and stock prices). Indeed, with the public and private markets now existing side-by-side, it could conceivably be the case that the private markets are simply the product of adverse selection of firms, as low-quality issuers are more likely to avoid disclosure obligations than high-quality ones.[177] Yet the explosion of private capital raising strongly suggests otherwise. Many private companies are raising cheap capital so readily that they have no desire to go public—hardly the markings of adverse selection.[178] The glut of capital on the private side suggests that, contrary to the standard prediction, companies choosing to remain private—but otherwise qualified to go public—are not being penalized with lower valuations.[179] How, then, do we account for the success of the private markets in the absence of mandated disclosure?

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174. *See supra* Part III.A.1.

175. *See supra* notes 162–164 and accompanying text.

176. *See* Fox, *supra* note 152, at 1380.

177. *See* George A. Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 84 Q.J. ECON. 488, 495 (1970) (describing the problem of adverse selection as a function of information failures in a market).

178. *See supra* Part I.C. As discussed, however, the availability of capital is not spread evenly across all private firms. *supra* note 7.

179. *See generally* Douglas W. Diamond & Robert E. Verrecchia, *Disclosure, Liquidity, and the Cost of Capital*, 46 J. FIN. 1325 (1991) (offering the classic account of why a firm's commitment to disclose should lower its cost of capital).

3. *The Potential for Private Ordering*

One solution requires acknowledging that our understanding of information flows in these markets may be mistaken. If investors are not penalizing companies for moving to or remaining in the private sphere, then two main alternatives would explain this. First, investors might be obtaining all of the information that they need about private companies on their own—that is, entirely without disclosure requirements—for example, through contractual rights negotiated directly with management. There are good reasons to believe that this is the case for investors in private corporate *debt*, for example.[180] Creditors of large firms routinely negotiate for extensive information rights in loan agreements or indentures, covering not only disclosure at issuance, but also ongoing reporting.[181] They may also glean information through direct monitoring of their borrowers.

For many reasons, however, this is less likely to be the case with passive investments in corporate *equity*, which is our focus here.[182] First, unlike debt, which has a fixed (and generally short) maturity, equity remains outstanding indefinitely. The transaction costs involved in trying to specify far into the future what ongoing disclosure obligations the company should bear vis-à-vis equity holders are thus significant.[183] Business plans, applicable laws and regulations, accounting conventions, management practices, and technological developments all change over time, and in turn alter the amount and type of information that investors need and the costs of producing it. In fact, this is precisely why the SEC periodically updates the specific accounting and other disclosures that it mandates for public companies. The SEC's task is comparatively simple because, unlike an investor contracting for information rights, the SEC requires no permission from the issuer and therefore does not need to anticipate such changes ex ante.

Second, dispersed shareholders face a severe collective action problem in negotiating with management over information rights, particularly with respect to trading transactions post-issuance when there is no privity between the investor and the issuer.[184] Potential purchasers of private company stock on the new secondary markets may thus face

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180. *See generally* de Fontenay, *supra* note 132 (arguing that investors in the private debt markets have been able to obtain sufficient information to assess credit risk).

181. *See generally* Michael Bradley & Michael R. Roberts, *The Structure and Pricing of Corporate Debt Covenants*, 5 Q.J. FIN. 1550001-1 (2015) (discussing the common types of covenants in corporate debt agreements, including for information reporting).

182. Also note that debt financing is most suitable for mature companies; startups are likely to be financed entirely with equity capital. *See* RICHARD A. BREALEY ET AL., PRINCIPLES OF CORPORATE FINANCE 448 (11th ed. 2014).

183. *See* de Fontenay, *supra* note 132, at 142.

184. *See* Palmiter, *supra* note 106, at 97.

considerable difficulties in obtaining information from issuers.[185] Debtholders, on the other hand, typically resolve the collective action problem by designating an agent or arranger who negotiates information rights on their behalf at issuance, including for ongoing reporting, which is relatively easy to specify when the debt will not be outstanding for more than a few years.[186]

Third, debtholders who purchase on the secondary market are typically aided in their task of assessing issuers' risk by the credit rating agencies. The market practice of obtaining and maintaining a credit rating for a particular debt instrument that is likely to be traded acts as a partial substitute for information about the issuer and the debt instrument itself.[187]

Finally, and perhaps most importantly, equity is fundamentally a more information sensitive instrument than debt. New material information about a firm will affect the value of its outstanding equity far more than the value of its debt.[188] Put differently, less information is required to value debt than to value equity. This explains in part why no true private-ordering equivalent to credit ratings has arisen on the equity side.[189] The end result is that debtholders require less information to assess their investment and have better means to obtain it. Taken together, these differences explain why *dispersed, passive* shareholders are less likely than debtholders to have meaningful contractual rights to ongoing disclosure from their firms.

None of this should be taken to suggest that private companies do not disclose information to their equity holders.[190] Larger private

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185. The new exchanges for private company securities could certainly perform a coordinating role with respect to information disclosure through their listing standards, but thus far they have proved inconsistent in their information requirements.

186. Accounting conventions are unlikely to change significantly during the life of a five-year term loan, for instance. *See* Bartlett, *Going Private*, *supra* note 100, at 9 (noting that the creditors of large private firms often require such firms to commit to voluntarily filing continuing disclosure reports with the SEC).

187. *See generally* Claire A. Hill, *Regulating the Rating Agencies*, 82 WASH. U. L.Q. 43 (2004) (discussing the role of rating agencies and how they are regulated).

188. Traditional debt represents a fixed claim on the assets of the firm, and thus does not share in any increase in firm value. Conversely, because debt receives priority in bankruptcy and liquidation, debt is less affected than equity by any decrease in firm value. *See* BREALEY ET AL., *supra* note 182, at 428. Creditors therefore require considerably less information than equity holders about firms' growth opportunities and risky projects.

189. Analyst reports are an example of private ordering that can help stockholders value their shares, but they are not given the same weight by investors as credit ratings. Whatever their faults in the area of structured finance leading up to the financial crisis that occurred in 2008 and 2009, credit ratings are considered relatively reliable as a measure of credit risk for corporate loans and bonds.

190. In addition, various regulatory provisions indirectly prompt private firms to disclose information, even in the absence of mandatory disclosure. For example, the rules governing securities recommendations by brokers present a hurdle for companies seeking to raise capital privately. *See* Hill, *supra* note 187, at 13–15. Before recommending an investment, the Financial Industry Regulatory Authority ("FINRA") requires via rule 2111 that brokers investigate whether the investment is suitable for the client, which requires in part that the broker seek out information about the investment. *See* FINRA Rule 2111 (2011). For brokers

companies often choose to be audited regularly and disclose their financial statements to at least some subset of their investors.[191] In connection with large private issuances, investors may receive private placement memoranda from issuers similar in many respects to public company prospectuses. Major *active* investors such as venture capital firms routinely negotiate for information rights with respect to their equity investments.[192] Yet the transaction costs associated with obtaining adequate disclosure increase significantly the more dispersed the investor base becomes (through multiple rounds of venture capital and other private financing, for example, or through the award of equity compensation to employees), the more trading that occurs, and the more time has passed since the relevant security was issued and the information rights were originally negotiated. Particularly when an IPO or merger and acquisition exit is slow in coming, private companies may end up with a costly patchwork of conflicting information rights, with some investors owed no information whatsoever.

Consider the car sharing service Uber, currently the largest, and best-known of the private company unicorns. During its January 2016 fundraising efforts, the company raised additional equity capital at a valuation of 62.5 billion dollars.[193] As part of this effort, Morgan Stanley marketed the shares to various high-net-worth individuals *who were not given any financial statements whatsoever for the company*.[194] Notwithstanding, Uber has been able to attract as investors even major mutual fund groups that cater to retail investors.[195] The paucity of information disclosed by Uber has clearly not

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advising on investments for retirement plans and accounts, this suitability requirement has been elevated by the Department of Labor to a full fiduciary standard, and the SEC is currently considering extending this fiduciary standard to all broker recommendations to retail investors. *See* 29 C.F.R. §§ 2509, 2510, 2550 (2016); Dave Michaels, *SEC Joins Battle on Broker Bias That Could Remake Industry*, BLOOMBERG (last updated Mar. 17, 2015, 2:01 PM), http://www.bloomberg.com/news/articles/2015-03-17/sec-will-develop-fiduciary-duty-rule-for-brokers-white-says. Finally, SEC Rule 15c2-11 mandates that, prior to publishing quotations for a security not listed on a national securities exchange, brokers must have access to specified information about the security, including basic financial statements. 17 C.F.R. § 240.15c2-11. It remains to be seen, however, whether the increasing regulation of brokers will limit investment in private firms, prompt private firms to disclose more information, or, as I suspect, accelerate the decline of the traditional brokerage business.

191. *See generally* Petro Lisowsky & Michael Minnis, *Accounting Choices and Capital Allocation: Evidence from Large Private U.S. Firms* (Chi. Booth Research Paper No. 14-01, 2016), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2373498.

192. *See* NAT'L VENTURE CAPITAL ASS'N, Investor Rights Agreement 20–23 ("Information and Observer Rights"), http://nvca.org/resources/model-legal-documents/ (last visited Mar. 11, 2017).

193. *See* Julie Verhage, *Here's What Morgan Stanley Is Telling Its Wealthiest Clients About Uber*, BLOOMBERG (Jan. 14, 2016, 6:42 AM), http://www.bloomberg.com/news/articles/2016-01-14/here-s-what-morgan-stanley-is-telling-its-wealthiest-clients-about-uber.

194. *Id.*

195. *See* Matt Levine, *Uber Is Raising More Money from Rich People*, BLOOMBERG (Jan. 15, 2016, 8:03 AM), http://www.bloombergview.com/articles/2016-01-15/uber-is-raising-more-money-from-rich-people (noting that mutual funds managed by Fidelity and T. Rowe Price hold Uber stock). It is unclear what information Uber agreed to disclose to Fidelity and T. Rowe Price at issuance and on an ongoing basis.

impeded its ability to raise capital cheaply. How, then, should we explain the puzzle of information in the market for private-company stock? A second explanation—defended later in this Article in Part IV—is that information generated by the public markets is often used to fill the gap between the information disclosed by private firms and the information that their equity holders expect.

IV. Public Market Information Beyond the Market

A. Third-Party Effects of Disclosure: An Introduction

As previously discussed, one of the justifications for *mandatory* disclosure is the existence of third-party effects from corporate disclosure—material information about one company can help other companies, for example.[196] Because companies are not compensated for these third-party benefits, they have incentives to withhold such information and thus to disclose less than is socially optimal. The solution is to mandate disclosure, the argument goes, in order to solve the collective action problem. With more disclosure, issuers will be better off as a group, because investors will reward them with a lower aggregate cost of capital.[197] Proponents of mandatory disclosure thus claim that while the regime will not benefit every individual public company at all times, it should benefit public companies *collectively*.[198]

This "rough consensus" view that mandatory disclosure benefits public companies as a group may no longer hold, however. The problem is that it relies on an unstated (and now flawed) assumption, namely that the bulk of passive investors' capital is confined to the public side of the securities-law divide. In such a world—akin to the federal securities law regime until deregulation began in the 1980s—private companies and public companies did not typically compete either for capital or for customers.[199] Given this lack of overlap, to the extent that a public company's disclosures happened to prove useful to a private company, this spillover would not likely be harmful to the public company. In other words, when the characteristics of both issuers and investors differ significantly across the public-private divide, public companies as a group need not worry about the third-party effects of disclosure. Today, however, deregulation of the private markets has allowed both the types of issuers and the types of investors on both sides to converge. While the

196. *See supra* Part III.A.1.

197. *See* Diamond & Verrecchia, *supra* note 179, at 1332.

198. *See* Easterbrook & Fischel, *supra* note 153, at 707.

199. As a pastiche, in such a regime typical private businesses would include restaurants, drycleaners, and dental practices, while typical public companies would include oil companies, computer manufacturers, pharmaceutical companies, and so forth.

public side was once the nearly exclusive domain of very large issuers with dispersed, passive investors, this is simply no longer the case.[200]

Today's regime is thus best described not merely as "*issuer* choice,"[201] in which companies decide whether to shoulder federal disclosure obligations or to avoid them entirely by remaining private, but more importantly as "*investor* choice," in which investors of all types, levels of sophistication, and net worth are increasingly able to invest on either the public or the private side.[202] In fact, "investor choice" is precisely what makes "issuer choice" meaningful today. The policy of allowing increasing numbers and types of investors to cross the divide has in turn given issuers a true economic choice as to whether to submit to the federal disclosure regime.

With issuers and investors converging on both sides of the divide, the third-party effects of disclosure can now collectively harm public companies while providing a significant benefit to private companies. To see this, we first require a better understanding of the types of information required to be disclosed by public-side issuers under the federal securities laws.

B. A Brief Taxonomy of Stock Market Information

Broadly speaking, the public equity market generates two main categories of information available to the general public: mandatory disclosure by issuers and trading prices.[203]

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200. *See* Picker, *supra* note 65 ("[I]nvestors that traditionally focused on public companies have moved to private ones as well.").

201. *See, e.g.*, Stephen J. Choi & Andrew T. Guzman, *Portable Reciprocity: Rethinking the International Reach of Securities Regulation*, 71 S. Calif. L. Rev. 903, 921 (1998); Palmiter, *supra* note 106, at 4 (advocating a regime in which issuers are permitted to choose the disclosure level appropriate for their securities offerings, but not for ongoing disclosure by public companies to trading markets); Roberta Romano, *Empowering Investors: A Market Approach to Securities Regulation*, 107 Yale L.J. 2359, 2418 (1998); *see also* Paul G. Mahoney, *The Exchange as Regulator*, 83 Va. L. Rev. (special symposium issue) 1453, 1471 (1997) (arguing that securities exchanges have historically performed a disciplinary role in trading markets now taken over by regulators).

202. *See supra* Part II.C.1. Of course, the public-private divide has existed since the Securities Act of 1933 first became effective. Thus, to some degree, there has always been an element of issuer choice in the U.S. mandatory disclosure regime. *See* John C. Coates IV, *Private vs. Political Choice of Securities Regulation: A Political Cost/Benefit Analysis*, 41 Va. J. Int'l L. 531 (2001). Yet until recently, the choice involved was severely limited because the restrictions on capital raising and trading on the private side resulted in the two sides generally accommodating different types of investors and therefore different types of entities: small, insider-owned businesses on the private side, and large, passive-investor-owned corporations on the public side. One remaining difference is that non-high-net-worth individuals must generally access the private side indirectly through investment funds or other institutional investors, albeit with increasing exceptions.

203. For an account of the categories and purposes of Exchange Act disclosure, see Henry T. C. Hu, *Disclosure Universes and Modes of Information: Banks, Innovation, and Divergent Regulatory Quests*, 31 Yale J. on Reg. 565, 568 (2014).

1. Mandatory Disclosure by Issuers

As previously discussed, issuers become subject to the continuous reporting requirements of the Exchange Act of 1934 in one of three ways: (1) by making a registered offering of securities under the Securities Act of 1933 (with registration required for all sales or offers of securities, absent a specific exemption); (2) by having securities that trade on a national securities exchange; or (3) by exceeding a certain threshold size (measured by assets and number of record shareholders).[204] Such reporting companies are required to make significant public disclosures on both a periodic basis (annually and quarterly) and on an episodic basis (for example, when the firm experiences a material event, a shareholder vote is required, or insiders buy or sell the firm's securities).[205]

Periodic reporting under the federal regime covers a remarkably broad set of information regarding the company's: (1) business, assets, and future plans; (2) business and legal risks; (3) capital structure, major shareholders, payout policy and history; (4) consolidated financial statements (which are subject to an annual audit requirement); (5) internal (management) analysis of financial performance and projections for future periods; (6) internal controls; and (7) governance (notably including information about executive compensation and conflicts of interest).[206]

The financial statements provide a wealth of information beyond the mere balance sheet and statements of income, cash flows, and changes in stockholders' equity.[207] Specific discussion is required for liens on the company's assets, defaults under material agreements, contractual restrictions on the company's operations and payout, warrants, related party transactions, tax policy, and derivatives, among others.[208]

Finally, the issuer is required to publicly file with the SEC corporate documents deemed material to investors under the disclosure rules, including all organizational documents, agreements related to the companies' securities and voting, material contracts (whether related to the company's financing arrangements, such as indentures and loan agreements, or its operations, such as agreements with customers and suppliers), and information related to the company's subsidiaries and corporate structure.[209] Such disclosures are subject to various attestations by auditors and senior officers of the company.[210]

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204. *See supra* notes 26–28 and accompanying text.

205. *See id.*

206. *See* Regulation S-K, 17 C.F.R. § 229 (2016).

207. *See id.*

208. *Id.*

209. *See id.* Item 601, at 368.

210. Specific transactional contexts (securities offerings, mergers, roll-up transactions) require additional, highly detailed disclosure, not only about the transaction at issue, but also about the interested parties. Companies operating in specific industries (such as oil and gas, insurance, and banking) or as

2. *Trading-Related Information*

While the debate over the regulation of public companies centers on mandatory disclosure, trading prices arguably represent the largest source of information generated by the public equity markets. The volume of trading on the national stock exchanges in particular is breathtaking: On most days in January 2016, the trade volume on the NYSE alone exceeded one billion shares, representing at least thirty billion dollars in transactions per day.[211] Each of the national securities exchanges publicizes its trade prices nearly instantaneously, and with the 1975 promulgation of Regulation NMS ("National Market System"), the SEC requires that quotations for all exchange-listed securities be published as well.[212]

Why are stock prices so important? If the stock market is functioning well a company's stock price synthesizes in a single metric the market's assessment of *all available information* that bears on the value of the company.[213] To be sure, there continues to be deep disagreement over the precise degree to which the stock market is informationally efficient in this sense.[214] At a minimum, there is overwhelming evidence that stock prices on the major exchanges change virtually instantaneously in response to salient new investment information.[215] Stock prices, which are the market's collective judgment as to the value of a given listed stock, therefore represent a crucial source of information in and of themselves. While public company issuers generate the information required to be disclosed under the Exchange Act, we can think of trading prices as information generated by public company investors (the "wisdom of the crowds"), which in turn incorporates not only issuer disclosure, but all other relevant, available information, such as information about world events and economic forecasts. Thus, we can assume that the trading price of Wal-Mart Stores stock (NYSE ticker "WMT") incorporates not only company-specific information such as its reported financial results, but also the market's collective predictions of future interest rates, U.S. GDP growth, the effect of competition from rivals such as Amazon.com, Inc. (NASDAQ ticker "AMZN"), and so on.

As discussed in Subpart C, the combination of mandatory disclosure by public companies and secondary trading prices for publicly traded

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nonoperating investment pools (such as mutual funds and REITS, issuers of asset-backed securities, etc.) are subject to numerous additional requirements. *See id.*

211. Data taken from *NYSE Volume Summary*, NYSE MARKET DATA, http://www.nyxdata.com/Data-Products/NYSE-Volume-Summary#summaries (last visited Mar. 11, 2017).

212. *See* 15 U.S.C. § 78k–1(a)(1)(C)(iii) (2016) (stating Congress's policy of ensuring price transparency for securities transactions).

213. *See* Ronald J. Gilson & Reinier Kraakman, *The Mechanisms of Market Efficiency Twenty Years Later: The Hindsight Bias*, 28 J. CORP. L. 715, 716–17 (2003) (defining market efficiency).

214. *See id.* (summarizing the competing scholarly views on market efficiency and the associated empirical studies).

215. *See id.*

stocks represents a material subsidy to private company investors, helping them to price their equity even in the absence of mandated disclosure.[216]

C. Market Information Beyond the Market: Third-Party Uses

As a result of third-party effects, public company information increasingly benefits constituencies other than the issuers and investors that generate it and who were its original intended beneficiaries. This manifests through two distinct forms of third-party effects, each having very different implications for public company issuers. The first, which I will call the "*public subsidy*," involves third parties using public company information in ways that are not detrimental to public companies. The second type of third-party effect, which I refer to as the "*private subsidy*," involves the use of public company information by firms that are directly competing with existing public companies in either the capital or the product markets. Unlike the public subsidy, the private subsidy is problematic for the current mandatory disclosure regime, and can explain in part both the decline of the public company and the success of private firms in the absence of mandated disclosure.

1. *The "Public Subsidy": Social Benefits of Public Company Information*

Many uses of public company information benefit the general public, and such uses pose no detriment to the issuers and investors that generate the information. The major stock indices provide the clearest examples. In theory, a stock's trading price amounts to investors' collective estimate of the present value of all future free cash flows of the issuer payable to shareholders.[217] As such, trading prices aggregated in a broad index of stocks such as the S&P 500 can be an enormously useful bellwether of the U.S. economy.[218] Stock market indices thus commonly inform major decisions not only by firms, but also by government agencies and

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216. It is worth emphasizing here that the set of companies subject to ongoing disclosure under the Exchange Act ("reporting companies") and the set of companies with publicly traded stock are not identical. Indeed, if a firm becomes subject to Exchange Act reporting obligations by making a registered offering of securities, its Exchange Act reporting obligations will be automatically suspended after one fiscal year at any time when its registered securities are held by fewer than three hundred record holders, so long as the firm is not otherwise required to file reports under the Exchange Act. *See* 15 U.S.C. § 78o(d). In practice, this means that so long as a firm is not listed on a national securities exchange, it can avoid the federal mandatory disclosure regime entirely even though it has publicly traded securities—for example by trading over the counter on the "Pink Sheets." This set of non-reporting publicly traded companies is surprisingly large: Currently, there are 10,000 securities traded over the counter on the OTCQX, OTCQB, and Pink markets. *See FAQs for Companies and Investors*, OTCMarkets, http://www.otcmarkets.com/learn/otc101-faq (last visited Mar. 11, 2017).

217. *See* Brealey et al., *supra* note 182, at 75.

218. *See generally* Andrew Verstein, *Benchmark Manipulation*, 56 B.C. L. Rev. 215 (2015) (describing the importance and uses of stock market indices).

individuals. In effect, anyone contemplating a significant investment or other financial decision benefits from the wealth of information impounded into a stock index: a corporation—whether public or private—deciding whether to build another plant; a college graduate deciding whether to press on to graduate school; a family deciding whether to buy a house; Congress and state legislatures deciding whether and when to engage in economic stimulus; the Federal Reserve deciding whether to raise or lower interest rates; and so on. Stock indices are thus appropriately considered a fundamental economic indicator.

In addition, because stock indices so usefully capture the outlook for U.S. companies and the availability of capital, they also form the basis for a host of other financial instruments and financial markets. As recently reported, over one trillion dollars of investments are tied to the S&P 500 alone.[219] Index-tracking mutual funds, index futures, and total return swaps are all examples of investments and instruments with cash flows directly tied to the major stock indices. Forecasting and investment design are but two examples of the public good aspect of investment information.

In fact, the public subsidy is part of the justification for mandatory disclosure in the first place: As a public good,[220] mandatory disclosure not only solves collective action problems within the market itself, but also benefits the general public through a positive externality. So long as the information required to be disclosed by public companies is also useful to (and cost effective for) their own investors, public companies suffer no ill effects from the public subsidy.

2. *The "Private Subsidy": Private vs. Public Firms*

Public company stock prices and mandatory disclosure are also used by issuers and investors on the *private* side of the securities-law divide for an array of purposes. Today such uses affirmatively harm public companies precisely because they are now competing with private companies for capital and customers. Among other uses, private firms may use public company disclosure and/or trading prices to estimate their own value and cost of capital, to devise a business plan, and to identify or negotiate with customers, suppliers, licensors, and licensees.

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219. *See* Gabriel Rauterberg & Andrew Verstein, *Index Theory: The Law, Promise and Failure of Financial Indices*, 30 YALE J. ON REG. 1, 5 (2013).

220. *See* Dale Arthur Oesterle, *The Inexorable March Toward a Continuous Disclosure Requirement for Publicly Traded Corporations: "Are We There yet?,"* 20 CARDOZO L. REV. 135, 198–201 (1998).

a. Spillover to Competitors

Undoubtedly, the type of freeriding that first comes to mind in this context is a private firm's use of its public competitor's disclosed information in order to gain a commercial advantage.[221] The securities filings of reporting companies provide a wealth of information about business models, financing terms, management compensation, and material contracts with customers and suppliers, all of which would advantage a private company operating in the same industry, even if only by providing it with a blueprint for how to structure and manage a large firm. While impossible to observe directly, this competitor subsidy (or threat thereof) significantly affects firms' behavior. As recently reported, close to forty percent of firms undergoing an IPO obtained permission from the SEC to redact information in their securities registration filings.[222] Redaction requests are common for ongoing disclosure as well: More than fifteen percent of firms in a random sample of small reporting companies redacted information from their material contract disclosures in a single year, and over twenty-five percent disclosed that they had redacted such information in the past, suggesting that firms are indeed concerned about the potential for their Exchange Act disclosures to benefit competitors.[223] Further, public companies in more competitive industries are significantly more likely to redact information in their securities filings.[224]

Crucially, it should be the case that a public company suffers more from having to disclose information that is potentially useful to its competitor if that competitor is a private firm, because the private firm is not required to share useful information in return. In another influential study, Brian Bushee and Christian Leuz studied the impact of a 1999 rule change that subjected all firms with securities trading on the OTC Bulletin Board ("OTCBB") to the Exchange Act's periodic disclosure requirements.[225] At the time, a portion of the firms trading on the OTCBB were already voluntarily complying with these requirements.[226]

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221. *See* Palmiter, *supra* note 106, at 12 ("[P]ublic disclosure, ostensibly meant for investors, can harm the issuer's business when used by competitors, particularly privately-held competitors that do not make reciprocal public disclosures."); Urska Velikonja, *The Cost of Securities Fraud*, 54 WM. & MARY L. REV. 1887, 1929–30 (2013) (noting that firms learn useful business information from competitors' disclosures).

222. *See* Audra L. Boone et al., *Redacting Proprietary Information at the Initial Public Offering*, 120 J. FIN. ECON. 102, 103 (2016).

223. *See* Robert E. Verrecchia & Joseph Weber, *Redacted Disclosure*, 44 J. ACCT. RES. 791, 794 (2006).

224. *Id.* What we do not know, however, is how responsive the SEC is to such redaction requests, as Verrecchia and Weber do not report the total number of firms that sought redaction. Firms' perception of how likely the SEC is to grant redaction requests should be material to their calculation of the costs and benefits of disclosure.

225. *See, e.g.*, Brian J. Bushee & Christian Leuz, *Economic Consequences of SEC Disclosure Regulation: Evidence from the OTC Bulletin Board*, 39 J. ACCT. & ECON. 233, 234 (2005).

226. *See id.*

Bushee and Leuz found that such voluntarily disclosing firms experienced a *positive* impact on stock returns and liquidity as a result of the rule change, even though it did not alter their own disclosure practices in any way.[227] The authors interpreted this as evidence for the third-party effects of disclosure: These firms would now benefit from their competitors' information rather than having the information spillovers be a one way street.[228]

Ironically, the behavior of private firms themselves suggests that spillovers of information to competitors are significant. While private firms generally disclose some information to their investors and potential investors voluntarily,[229] very rarely do they make such information publicly available.[230] Yet doing so would be effectively costless today: If a private company has already gone to the trouble of obtaining audited financial statements, for example, they can be made available to the public simply by posting them to the firm's website. In fact, many private companies resist sharing their financial statements even with some of their own investors (as we saw with Uber).[231] Such efforts at secrecy strongly suggest a concern about spillovers to competitors.

Regulators may have paid too little attention to such information spillovers in shaping our current, bifurcated disclosure regime.[232] While the effects of public company disclosure on competitors are difficult to measure, issuers themselves clearly believe them to be significant.[233] This in turn should make them less willing to take on disclosure obligations if given the choice. The deregulation of private capital thus exacerbates the problem of spillovers to competitors: More companies will choose to remain private in order to avoid sensitive disclosures, but as the number of private companies grows, public companies are increasingly harmed

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227. *See id.*

228. *See id.* at 237. The fact that many firms on the OTCBB were voluntarily choosing to abide by the public company disclosure rules does not negate the point that disclosure can be harmful to individual firms due to spillovers to competitors. Rather, for some firms the calculus will weigh in favor of voluntary disclosure, while for others it will not, such that overall there will be less disclosure than under a mandatory regime for all firms.

229. *But see* Fried, *supra* note 58, at 136 (finding that publicly traded U.S. firms that opt out of the mandatory disclosure regime subsequently "refuse to provide any information to public investors").

230. While stock exchanges have historically served to compel public disclosure in order to facilitate liquidity, neither Sharespost nor NASDAQ Private Market currently states on their websites what, if anything, listed firms must provide in the way of disclosure.

231. *See* Levine, *supra* note 195 and accompanying text.

232. Regulators likely believe that such spillovers are avoidable (given firms' ability to request redaction in their disclosure filings) or minimal (given that Exchange Act reporting requires little or no financial reporting by line of business, which would have the greatest potential to benefit competitors). *See* 17 C.F.R. § 210.3-01 (2011); *id.* § 210.3-02 (2011) (requiring only consolidated financial statements for continuing disclosure under the Exchange Act). Information spillovers need not be limited to specific line items of disclosure. However, it may be that competitors benefit from public company disclosures taken as a whole.

233. *See* Easterbrook & Fischel, *supra* note 153, at 671 and accompanying text.

by their own disclosures, as they will not get the benefit of disclosures by their private-company competitors in return.

b. Valuation

It is intuitive that public companies suffer when their disclosures benefit their private company competitors. Yet a different third-party effect of disclosure should be even more valuable to private firms—that is the use of public company information in private company valuation. A potential investor in a private company faces significant uncertainty as to the company's value, even when the company voluntarily provides high-quality, audited financial statements.[234] Due to limited trading in the company's equity, there is normally no continuous market price to signal the equity's value at a given time and on average there should be less information about the firm available to the market than for a comparable public firm. This uncertainty over valuation should lead private firms to face significantly higher costs of capital than public firms.[235]

Conversely, a firm's cost of capital should generally decrease when investors have more and better information with which to value it.[236] The key point is that the set of information useful for valuing one firm includes *the disclosures of other comparable firms.*[237] Firm values tend to be correlated, particularly for firms of the same size or industry.[238] The greater the degree of correlation, the more one firm's disclosures will be helpful in valuing another firm.[239] Information about similar firms is thus a crucial component of valuation. It follows that the existence of public company information significantly improves the valuation of comparable private firms. Without such information, private firms would face higher costs of capital, all else equal. As with spillovers to competitors, however, the third-party effects of disclosure are not symmetrical between public and private firms: Public company information benefits private firms, but the reverse effect, if any, should be considerably weaker.

The use of public company information in valuing private companies is best illustrated by discussing how such valuation is performed in practice. In the absence of a current market price, the two most common approaches to valuing equity are the "market comparables" and "discounted cash flow"

234. *See* Rolfe Winkler, *Fidelity Marks Down Startups Including Dropbox, Zenefits*, WALL ST. J. (Mar. 30, 2016, 1:34 PM), http://www.wsj.com/articles/fidelity-marks-down-startups-including-dropbox-zenefits-1459346847.

235. *See* Lambert et al., *supra* note 10, at 386 (demonstrating that under plausible conditions an increase in a firm's information quality will lower its cost of capital, even when investors are diversified).

236. *See id.*

237. *See* Anat R. Admati & Paul Pfleiderer, *Forcing Firms to Talk: Financial Disclosure Regulation and Externalities*, 13 REV. FIN. STUD. 479, 513 (2000) ("[T]he information disclosed by one firm can be used in valuing other firms, ...").

238. *See id.* at 480–81.

239. *See id.* at 499.

("DCF") methods.[240] Importantly, both methods typically require public company information at one or more stages.[241]

The "market comparables" approach, for example, enables investors to derive a private company valuation relying solely on public company information and a single financial metric for the company to be valued, such as forecasted earnings before interest, tax, depreciation, and amortization ("EBITDA") for the coming year.[242] This assumes, of course, that one has access to the private firm's EBITDA forecast—other financial metrics such as sales, assets, or earnings can be used instead if more readily obtainable. Routinely performed by investment banks and other valuation experts, the comparables method begins by identifying public companies that are comparable to the private company to be valued, based on the latter's basic characteristics such as industry, geography, and a measure of size such as sales or EBITDA.[243] Next, for each comparable company one calculates the ratio of that company's stock price to the selected financial metric—information that can be looked up in seconds for public companies. Finally, one extrapolates from this an estimate of the private company's stock price. Imagine, for example, that the shares of comparable public companies in the same industry tend to trade at eight times their projected EBITDA for the year. So long as one is given the private company's EBITDA forecast, one can derive an estimate of its stock price simply by multiplying it by eight.[244] Thus, the combination of detailed disclosure and trading prices for public companies allows a private company investor to both identify comparable public companies for valuation purposes and derive from a single financial metric the private company's expected value.[245]

Of course, the comparables method can theoretically be employed using private companies as the comparable firms, if the required information is available. If the valuation is in connection with a proposed sale of the company, for example, one might look to the prices at which recent, similar private companies were sold. Yet, because financial information for private companies is generally not made public, it may be

240. *See* BREALEY ET AL., *supra* note 182, at 83.

241. *See* JOSHUA LERNER ET AL., VENTURE CAPITAL AND PRIVATE EQUITY: A CASEBOOK 182–85 (5th ed. 2012).

242. *See* BREALEY ET AL., *supra* note 182, at 78–80.

243. *See id.* at 78.

244. *See id.* In practice, one would typically discount the valuation by a certain percentage in order to account for the relative illiquidity of equity in private firms.

245. Even discounted cash flow valuations typically borrow information derived from the public markets at various stages. For example, the discount rate to be applied to the company's projected cash flows (which is the company's weighted average cost of capital) is typically estimated starting from a public company benchmark. *See* LERNER ET AL., *supra* note 241, at 185 (listing as a key disadvantage of the "net present value" method—another name for the discounted cash flow method—the need to identify a comparable public company's beta for purposes of calculating the applicable discount rate).

significantly more difficult both to identify appropriate comparable private companies and to obtain the financial metric for each of them that would allow one to derive the valuation. For the same reason, any comparable private company's valuation on which one relies may itself have been determined at one time using public company information. Thus, in practice, the valuation chain for private firms above a certain size most often begins with public companies, whether this is made explicit or not.[246]

How significant is this described dependence on public company information? Valuation is purely and simply the lifeblood of investment. Firms cannot attract third-party equity holders if the latter are not reasonably confident that the equity they are receiving is at least equivalent in value to the money they are committing. In that sense, being able to derive principled valuations of private firms based on public company information is a critical driver of investment in private firms. It explains at least in part how very large, private companies can now attract scores of passive investors and build a true market for their equity without having to bear the full costs of the public market disclosure regime.

Recent work has empirically identified this form of information freeriding among firms for valuation purposes. Stephen Baginski and Lisa Hinson find that when a firm ceases to provide quarterly management forecasts, this can prompt another firm within the same industry to begin providing such disclosures.[247] The interpretation proposed by Baginski and Hinson is that firms freeride on one another's disclosures for valuation purposes: When the firm can no longer freeride it may be forced to begin disclosing information itself or face a higher cost of capital.[248] In sum, public company information allows private companies to freeride in ways that are essential to their viability. This amounts to a considerable subsidy to their investors, allowing more capital to shift to private companies and away from public companies.[249]

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246. *See* Winkler, *supra* note 234 (reporting that startup valuations rely on the market values of publicly traded rivals).

247. *See* Stephen P. Baginski & Lisa A. Hinson, *Cost of Capital Free-Riders*, 91 ACCT. REV. 1291, 1292 (2016).

248. *See id.*

249. To be sure, many other markets give rise to similar freeriding on their trading-price information. One of the largest financial markets in the world—the market for debt issued by the U.S. government—is a prime exemplar. The prices of Treasury bills and bonds are set at issuance through public auctions, and their trading prices thereafter are also publicly available. *See* 31 C.F.R. §356 (2009) (setting forth the procedures for auctions of securities issued by the U.S. Treasury). These prices in turn serve as the baseline for pricing all other debt instruments and obligations in the U.S. economy. Corporate bonds, for example, are priced at some "risk premium" or "spread" above the corresponding Treasury yield. *See* Edwin J. Elton et al., *Explaining the Rate Spread on Corporate Bonds*, 56 J. FIN. 247, 252 (2001) (defining the "spread" on corporate debt securities). Thus, the information generated by the trading in Treasury-issued instruments sustains the corporate bond markets. Yet the implications of this

Recall, however, that there exists a large set of non-reporting companies with publicly traded stock (which this Article refers to as "intermediate companies").[250] In practice, therefore, the freeriding dynamics between firms are somewhat more complex than the "public versus private" relationship described herein. First, like private companies, intermediate companies have the opportunity to freeride on both the disclosure and trading prices of public companies. Second, private companies can freeride on the trading prices of intermediate companies for valuation purposes. Indeed, one might assume that they would be better served by looking to intermediate companies for valuation purposes rather than to reporting companies given that neither private firms nor intermediate firms are subject to mandatory disclosure, and this characteristic necessarily affects their cost of capital.

Together, these two dynamics might be viewed as creating a challenge for this Article's claims that (1) reporting companies are harmed by the freeriding of firms not subject to mandatory disclosure; and (2) reporting companies' disclosure and trading prices provide a material subsidy to private firms. Indeed, as to the first, intermediate firms' ability to freeride on reporting companies predates the deregulation of private capital over the last three decades,[251] yet both reporting companies and intermediate companies have successfully coexisted during that time. As to the second, if private companies are more comparable to intermediate firms than to reporting companies, then perhaps reporting company information is not as valuable to private firms as described herein.

This challenge can be rebutted in two ways. First, intermediate firms do not pose the same threat to reporting companies as the new breed of private firms for the simple reason that intermediate firms, overall, are unlikely to be successful.[252] Recall that these are firms that are not listed on a national securities exchange, either because they cannot satisfy the listing requirements or due to insider agency costs, yet they remain publicly traded on the considerably less liquid over-the-counter

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informational dependence are quite different from the public company context. First, supplying a public good such as information is a traditional, welfare-increasing task for government, if well executed. *See* HAL R. VARIAN, MICROECONOMIC ANALYSIS 415 (3d ed. 1992). Treasury officials have explicitly stated that they seek to issue bills and bonds along the entire yield curve even when they have no other interest in doing so precisely because they are aware of how crucial Treasury rates are as benchmarks for other financial instruments and transactions. Second, unlike public companies, the U.S. government likely benefits from large-scale freeriding on the U.S. Treasury markets even in simple accounting terms. If, as one would expect, enabling transparent, liquid credit markets fosters economic growth (and accompanying tax revenues), the Treasury gains from its information spillovers.

250. *See supra* note 30; *see also* Fried, *supra* note 58 (describing firms with stock that is publicly traded over the counter, but which are not subject to ongoing reporting obligations under the federal securities statutes).

251. *See* 15 U.S.C. § 78o(d) (2010).

252. *See* Leuz et al., *supra* note 101, at 182 (finding that many firms "go dark" due to poor performance or insiders seeking to capitalize on the private benefits of control).

platforms because they have failed to spark the interest of private equity firms or other acquirers. Such firms thus carry a stigma from choosing to cease reporting under the Exchange Act that private firms do not necessarily share.[253] For the same reason, they are unlikely to be good points of comparison for valuation purposes for promising private firms. Second, it is risky to draw conclusions today from bygone periods in which reporting companies and non-reporting companies comfortably coexisted, mostly because disclosure requirements have increased significantly in recent decades.[254] The heavier the disclosure requirements on reporting companies, the greater the third-party effects of disclosure, and thus the greater the harm to reporting companies from the freeriding of other firms.

3. The Private Subsidy Illustrated

A simple numerical example is useful to illustrate the combination of the two third-party effects of public company information on private firms: (1) information spillovers to competitors; and (2) valuation freeriding. Take two firms, A and B, which are close competitors in the same industry. Let us further posit that both types of third-party effects of disclosure are very strong in this industry, and that there are no management agency costs. We begin with a regime in which both firms are subject to mandatory disclosure, and assume that both firms happen to have identical valuations of 100.

Regime: Mandatory Disclosure for Both A and B	Firm A	Firm B
Valuation	100	100

Now we introduce a legal change that permits Firm B, but not Firm A, to opt out of the mandatory disclosure regime.[255] One possibility is that, after weighing the costs and benefits, Firm B decides to entirely voluntarily continue disclosing precisely the same information as it was previously. In that case, nothing has changed in the information environment, so the values of both Firm A and Firm B should remain the same, at 100 each.[256]

253. *See* Fried, *supra* note 58, at 204 (finding that a firm's decision to "go dark" tends to trigger a significant decline in its stock price).

254. *See supra* Part II.B.

255. An example would be an increase in the number of record shareholders that triggers reporting-company status, assuming that Firm B has slightly fewer record shareholders than Firm A and that the new cap falls between the two firms' shareholders.

256. In fact, Firm A's value may even increase slightly given the positive signaling effects of committing to disclosure voluntarily. *See* Edward Rock, *Securities Regulation as Lobster Trap: A Credible Commitment Theory of Mandatory Disclosure*, 23 CARDOZO L. REV. 675, 694–96 (2002).

Regime: Mandatory Disclosure for A; B Voluntarily Continues Public Disclosure	Firm A	Firm B
Valuation	100	100

A second possibility is that, after weighing the costs and benefits, Firm B decides to cease public disclosure. Because we have assumed that management agency costs play no role in this decision, it must be the case that Firm B's value increases somewhat as a result, or there would be no purpose in changing its disclosure practices:[257]

Regime: Mandatory Disclosure for A; B Ceases Public Disclosure	Firm A	Firm B
Valuation	100	105

Where does the increase in valuation come from? The change in disclosure regime has several effects on Firm B's value. First, B's projected cash flows should increase because it is bearing fewer disclosure costs. Second, B's cash flows should also increase due to competitive information spillovers: B continues to benefit from A's disclosures, but no longer has to disclose information to A, which can provide B with a competitive advantage over A. On the other hand, B's cost of capital should increase somewhat, because investors are now less able to value the firm due to the reduced disclosure. However, this effect is dampened by the fact that B's investors can freeride to some degree on A's disclosures and trading prices to value B. Assume that the net effect is an increase in B's value, from 100 to 105.

In fact, the effects of B's decision to cease disclosing do not stop there, as we have forgotten to take into account the effects on A. A is now unambiguously worse off as a result of B's decision, once again due to the third-party effects of information. First, A's valuation becomes more uncertain, because A's investors have suddenly lost all information about B. Second, as described above, while B continues to disclose competitive information to A, it no longer receives reciprocal information from B. Thus, we can expect both a decline in A's cash flows and an increase in A's cost of capital:

Regime: Mandatory Disclosure for A; B Ceases Public Disclosure	Firm A	Firm B
Valuation	90	105

257. If instead we allow for management agency costs, managers might choose to cease disclosure even when doing so was expected to result in a lower valuation. *See* Fried, *supra* note 58, at 153.

In sum, the rule change has decreased investors' aggregate welfare: The combined value of the two firms is lower following the rule change (combined value of 195) compared to when both firms were subject to mandatory disclosure (combined value of 200).

Now imagine a further rule change that permits *both* firms to go private. A may decide that the competitive disadvantage it now faces vis-à-vis B and the costs of disclosure together weigh in favor of it going private as well. While A's valuation increases somewhat, B's valuation declines due to the loss of competitive and valuation information from A.

Regime: A and B Both Cease Public Disclosure	Firm A	Firm B
Valuation	95	95

This outcome is the least desirable for investors, whose aggregate welfare has now fallen to 190. Nonetheless, individual firms act rationally in arriving here, such that the outcome may be inevitable absent a binding commitment device preventing them from going private.

There are three lessons to draw from this stylized example. First, when many firms choose to avoid or cease public disclosure in response to regulatory changes that permit them to do so—as appears to be the case today—we cannot necessarily interpret this as evidence that the costs of mandatory disclosure are too high. It may instead be—or it may also be—that the third-party effects of disclosure among firms are very strong. When that is the case, firms have a powerful incentive to cease public disclosure, thereby shielding their own information while freeriding on others' competitive and valuation information.

Second, if the third-party effects of disclosure are strong, then a bifurcated regime of onerous mandatory disclosure requirements combined with the ability to opt out entirely may be worse from a social welfare standpoint than, for instance either (1) a regime that imposes much lighter disclosure requirements while still allowing opt-out; or (2) a regime that imposes strict disclosure requirements on all firms.

Third, as we have seen, in the presence of strong third-party effects the combination of heavy disclosure requirements and the ability to opt out of disclosure can prompt firms to serially exit the disclosure regime. As the number of defections from the public side climbs, however, the information environment on the private side deteriorates and valuation becomes more difficult. This suggests that, absent any coordinated and binding commitment to increase their voluntary disclosures, private firms' cost of capital will increase over time. Thus, the surprisingly low cost of capital for many private firms that we now seem to be enjoying may only be a temporary result of freeriding, and may dissipate with the decline of public equity. As with our example, however, the answer turns on the

validity of several assumptions, including in particular the strength of the third-party effects of disclosure, which are still being empirically tested.

4. *Targeting Public Ends Through Disclosure: "Publicness," Positive Externalities, and the Insider-Outsider Conflict*

At this stage, a brief word is in order as to how the discussion of third-party effects of disclosure fits with another recent strand in the disclosure literature. Several scholars view Sarbanes-Oxley and Dodd-Frank as departures from traditional mandatory disclosure principles in securities regulation, for good or ill, in that certain disclosure requirements for reporting companies introduced by these statutes seem to bear little or no relation to *shareholder interests*—rather, they are unabashedly oriented to the *public interest*.[258] Such disclosures can even be antithetical to shareholder interests by inviting greater regulatory scrutiny or negative publicity for the firm. Notorious examples include the required disclosures as to mine safety,[259] conflict minerals,[260] and the ratio of CEO pay to median employee pay[261] introduced by Dodd-Frank.[262] This "publicness" literature debates what it should mean as a normative matter for a company to be "public," and in particular whether such a corporation's duties to the general public entail greater burdens of conduct. Donald Langevoort and Robert Thompson in particular identify an increasing trend in securities regulation toward just such a public-oriented view of the largest U.S. corporations.[263]

The publicness literature focuses by design on disclosure requirements that are expressly public-interested—the (potential) objection simply being that such disclosure is often in conflict with shareholder interests.[264] This Article suggests that even disclosure that is manifestly designed to benefit a company's own shareholders (such as financial information and stock price information) has become problematic under the deregulation of private

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258. *See, e.g.*, Jill E. Fisch, *The Mess at Morgan: Risk, Incentives and Shareholder Empowerment*, 83 U. CIN. L. REV. 651, 654 (2015); Donald C. Langevoort, *The Social Construction of Sarbanes-Oxley*, 105 MICH. L. REV. 1817, 1831 (2007); *see also* Hillary A. Sale, *The New "Public" Corporation*, 74 LAW & CONTEMP. PROBS. 137, 138–41 (2011).

259. *See* 17 C.F.R. § 229.104 (2012).

260. Dodd–Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank"), Pub. L. No. 111-203, §§ 1502–1503, 124 Stat. 2213 (2010). The SEC has implemented these provisions in Exchange Act Release, Pub. L. No. 111-203, § 953(b), 124 Stat. 1376, 1904, 17 C.F.R. §§ 240–249(b) (2012).

261. *See* Dodd-Frank § 953(b).

262. *See* Hans B. Christensen et al., *The Real Effects of Mandatory Non-Financial Disclosures in Financial Statements* (U. Chi. Booth Sch. Bus., Working Paper, 2015) (finding that the mine-safety disclosure requirements have resulted in fewer mine-related citations and injuries but have been accompanied by a decline in productivity for affected companies).

263. *See* Langevoort & Thompson, *supra* note 25, at 371–75. For a discussion of the broader question of whether corporations should be subjected to a shareholder profit-maximizing rule, see generally Einer Elhauge, *Sacrificing Corporate Profits in the Public Interest*, 80 N.Y.U. L. REV. 733 (2005).

264. *See* Fisch, *supra* note 258, at 654.

capital, because it increasingly benefits non-shareholder constituencies who are freeriding and drawing away capital from the public side. The claim is that, under the current locus of the public-private divide, the mandatory disclosure regime *as a whole* is benefitting public companies less and less, even putting aside the trend of purely public-interested disclosures identified in the publicness literature.

This raises difficult questions for our regulatory design. Why create a regime in which public companies bear the expense of disclosure when it increasingly benefits outsiders? Worse still, the Part that follows argues that our current regime is not simply a zero-sum game between public and private firms—rather, it may be welfare-decreasing in the aggregate.

V. Public Market Information in Peril?

As previously discussed, the deregulation of private capital has likely contributed to the flight of capital from the public equity markets.[265] One explanation, this Article has argued, turns on the third-party effects of corporate disclosure: Private companies rationally freeride in part on public company information—namely, public companies' stock prices and mandatory disclosures under the federal securities laws. Public companies are thus made to subsidize private companies with whom they now compete for customers and capital. Not surprisingly, fewer and fewer are willing to provide this benefit without compensation.

Why should we worry? If the effect is simply to substitute private companies for public companies until a new equilibrium arises, perhaps there is even reason to cheer. Because private firms avoid many of the agency costs associated with public companies, some have argued that they are the superior form of equity ownership.[266] There are several

265. *See supra* Part I.B.

266. From the standpoint of economic efficiency, the classic downside of public companies is the inevitable agency costs that result from the separation of ownership (by dispersed shareholders) and management (by professional directors and officers). *See* Adolph A. Berle, Jr. & Gardiner C. Means, The Modern Corporation and Private Property 277–79 (1933) (providing the original exposition of this problem). Such agency costs were thought to be the inevitable tradeoff for achieving scale. More recently, Michael Jensen argued that, with the onset of institutionalized private capital (and private equity firms in particular), firms can now raise significant capital without going public and without dispersed share ownership, and thus, without incurring the agency costs of delegated management. *See generally* Michael C. Jensen, *Eclipse of the Public Corporation*, Harv. Bus. Rev. (1989), https://hbr.org/1989/09/eclipse-of-the-public-corporation. Thus, private firms may be preferable to public firms in terms of controlling agency costs even in the case of very large firms. Of course, as private firms move toward increasingly dispersed share ownership, we should expect them to replicate at least some of the public company agency costs. Private firms are no longer necessarily closely held (including by private equity firms): Many massive private firms have increasingly dispersed shareholder bases. At the same time, U.S. public companies face increasingly concentrated, institutional ownership, such that the difference in agency costs between large private and public firms may well be overstated. *See* Jason Zweig, *Shareholders Are Disappearing Before Our Eyes*, Wall St. J. (June 10, 2016, 10:24 AM), http://blogs.wsj.com/moneybeat/2016/06/10/shareholders-are-disappearing-before-our-eyes/ (describing the steep decline in the number of record holders of U.S. public companies).

reasons why celebration may be premature. First, if a key social benefit of public company information is its usefulness as an indicator or forecast of economic activity (the public subsidy),[267] then the shrinking circle of U.S. public issuers should give us pause. With exchange-listed issuers reflecting a declining share of companies, and one that is skewed toward increasingly large firms, public company information may prove less useful as a guide for private and government decisionmaking. The threat of losing some of this public- good aspect of mandatory disclosure and stock prices is thus potentially welfare-decreasing in itself.

Second, the decline of public equity has implications for private firms. Private companies and their investors rationally freeride on public company information. If this information subsidy declines in size and scope, as one would expect from a shrinking and aging population of public companies,[268] the quality of the information environment for private firm investors will deteriorate absent significant changes in disclosure practices on the private side. At a minimum, information costs will increase, resulting in lower valuations for private firms. If the information lost from the public markets cannot be replicated at reasonable cost through private ordering, the risks include large-scale misallocation of capital among private companies.

How likely is the latter to occur? Recent examples of severe information problems and even fraud among the private company unicorns are not difficult to find: Investors and employees of both Zenefits and Theranos learned the hard way that billion dollar valuations can be illusory. Anecdotes do not predict the fortunes of private firms as a group, however, and public companies themselves are no strangers to fraud (as the pre-Sarbanes-Oxley debacles of Enron and WorldCom can attest). Whether we should expect a waning public equity market to trigger information problems for private firms depends on the answers to a long list of theoretical and empirical questions that remain unresolved in the literature. In particular, one would want to know whether (and where) the decline of public equity will come to rest, the precise degree to which private firms are currently freeriding on public company information, and the extent to which private ordering on the private side can replace some of the loss in public company information. Though each of these deserves comprehensive treatment, brief thoughts are offered in the remainder of this Part.

First, there is considerable uncertainty as to when the long-term decline in IPOs and stock exchange listings will end. On the one hand, the information effects described in this Article might suggest that, rather than

267. *See supra* Part IV.C.1.

268. As discussed in Part I, the population of reporting companies is shrinking and aging, due to the fact that the rate of reporting companies going private, being acquired by another reporting company, or less commonly, delisting, is greater than the rate of IPOs being undertaken by young firms.

slowing down, the decline in the share of U.S. public companies should if anything accelerate over time. Indeed, as the ratio of public to private companies falls, it becomes increasingly likely that the competitors of any given public company will include a private firm. In that case, the uneven playing field of disclosure will be relatively costlier for public companies—whose information benefits their private competitors with no reciprocity—thus incentivizing still more companies to remain or go private. In this view, as the share of public companies *decreases*, the relative costs of being a public company should *increase*, resulting in an acceleration of the flight from the public market, all else equal.

All else is not equal in this case, however, and we are very unlikely to see public equity disappear altogether. Because the costs (benefits) of being a public company decrease (increase) with the company's size, the remaining set of public companies is likely to consist of ever larger companies. This in turn gives reason to hope that the declining share of public companies will eventually level off. Once a firm exceeds a certain size or number of shareholders, the considerable liquidity benefits of being a public corporation should continue to outweigh the associated regulatory burdens and other costs, including the costs of freeriding by private firms. Of course, that threshold size continues to increase, given ongoing deregulation of private capital raising. The final set of holdout public companies may thus consist primarily of corporate behemoths.

Will the information produced by this smaller set of mega-cap public companies be enough, on its own, to sustain the market for private company equity at its current lofty valuations? If not, will private ordering fill the void? Given that institutional investors dominate the private side of the securities-law divide, there is reason to be cautiously optimistic that private firms and their investors can resolve some of their information problems on their own. Surely as the model of private firms with dispersed share ownership gains traction, private ordering will succeed in eliciting and institutionalizing more private company disclosure—even with respect to the crucial category of ongoing disclosure. Some of this is already underway. Historically, the major global and national stock exchanges served an essential role in eliciting disclosure, through private ordering alone, and the new crop of exchanges for private company stock may yet do the same.[269] New proprietary databases compile various pieces of information about private firms gleaned from credit rating agencies, accounting firms, the press, and publicized transactions.[270]

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269. Thus far, the new exchanges for private company stock have proved inconsistent in their information requirements.

270. For example, Sageworks boasts of having "created the largest real-time database of private-company financial information in the United States . . . ." *See About Us*, SAGEWORKS, https://www.sageworks.com/aboutus.aspx (last visited Mar. 11, 2017).

As discussed, however, there are limits on how much information equity investors—especially passive equity investors—can be expected to obtain on their own, especially as compared to debt investors and with respect to ongoing disclosure.[271] The ceiling on private ordering for disclosure remains a key unknown in the new private markets. Perhaps it will be enough to compensate for the declining share of information on the public side. If so, then our regulatory gamble will have paid off. In the meantime, however, there is little evidence that the risks this gamble poses to both the public and private sides of the securities-law divide were taken into account in the regulatory calculus.

CONCLUSION

The rise of private capital is the most notable development in corporate finance in the past three decades. Against the benefits of private capital must be weighed the costs of the ongoing decline of public equity. The information effects of this decline, in particular, have been largely overlooked. While private firms hold considerable promise, it is possible that we have conjured up too much of a good thing: It is unclear to what extent these benefits will persist as private companies' shareholder bases grow and the public markets shrink.

Is there a better alternative? The regulatory status quo could be described as a middle ground between disclosure enthusiasts and proponents of private ordering: Public companies remain subject to very substantial disclosure requirements, while issuers and investors are increasingly able to eschew the public markets. Because it cannot ensure a stable equilibrium, however, this regime may well be inferior to more one-sided proposals from either end of the disclosure debate, such as proposals to materially reduce public company disclosure obligations or to reverse course to some extent on the deregulation of private capital.[272]

It may seem inevitable in our "information age" that information itself should become public companies' most valuable output. This development is far from organic, however. It is the result of a deliberate federal policy to prioritize the production and dissemination of public

271. *See supra* Part III.A.3.

272. An alternative approach recently advocated by scholars is to impose mandatory disclosure on all widely traded firms (and only on such firms) based on the size of their public float. *See, e.g.*, *Spurring Job Growth Through Capital Formation While Protecting Investors–Part I: Hearing on H.R. 112-444 Before the S. Comm. on Banking, Hous., & Urban Affairs*, 112th Cong. 15 (2011) (statements of John C. Coffee, Jr. and Adolf A. Berle, Professor of Law, Columbia University Law School); *Spurring Job Growth Through Capital Formation While Protecting Investors–Part I: Hearing on H.R. 112-444 Before the S. Comm. on Banking, Hous., & Urban Affairs*, 112th Cong. 10 (2012) (statement of Jay R. Ritter, Cordell Professor of Finance, Warrington College of Business Administration, University of Florida); Rodrigues, *supra* note 9, at 1561. The disadvantage with this approach is that it fails to resolve the third-party externalities problem for disclosing companies in that private firms of comparable size would continue to benefit from their information without reciprocation.

company information, while simultaneously setting investors loose in the largely disclosure-free private markets. The information generated on the stock exchanges and through mandatory disclosure is now so valuable for so many purposes and to so many constituencies that regulators have a significant stake in ensuring its continued expansion.

Yet the current regulatory path may be self-defeating. The outlook for U.S. public companies is indeed cloudy. Mesmerized by the stock ticker, we have somehow failed to notice that our capital is moving elsewhere. While the gap between the regulatory burdens on the public side and the private side of corporate finance grows larger, the rules confining investors to the public side have been loosened dramatically. Investor capital is freely and eagerly crossing the divide. This paradigm shift undermines the key bargain struck with public company issuers: disclosure in exchange for investors. While public companies are being compelled to disclose ever more information, they are losing their very reason for doing so.

Meanwhile, large private firms are thriving in part by freeriding on public company information and stock prices. Such firms' astonishing ability to attract cheap capital may last only so long as public companies continue to yield vast, high-quality information covering a broad range of companies. That is not likely to be the case, however. The continuing flight from the public side suggests that the benefits of disclosure for many public companies are now insufficient to offset the cost of subsidizing their private company competitors. The new public-private divide has left Congress and the SEC at the crossroads of two markets with uncertain futures.