

2009

## Staying Public: Institutional Investors in U.S. Capital Markets

Alan R. Palmiter

Follow this and additional works at: <https://brooklynworks.brooklaw.edu/bjcfcl>

---

### Recommended Citation

Alan R. Palmiter, *Staying Public: Institutional Investors in U.S. Capital Markets*, 3 Brook. J. Corp. Fin. & Com. L. (2009).  
Available at: <https://brooklynworks.brooklaw.edu/bjcfcl/vol3/iss2/1>

This Article is brought to you for free and open access by the Law Journals at BrooklynWorks. It has been accepted for inclusion in Brooklyn Journal of Corporate, Financial & Commercial Law by an authorized editor of BrooklynWorks.

## ARTICLES

### STAYING PUBLIC: INSTITUTIONAL INVESTORS IN U.S. CAPITAL MARKETS<sup>1</sup>

Alan R. Palmiter\*

#### Abstract

*This essay questions the ascendance of U.S. private capital markets. Data on capital formation over the past decade (before the Panic of 2008) cast doubt on the story of capital users increasing their relative reliance on private capital. Further, the investment rules (and cultures) under which institutional investors operate suggest that private capital has only a limited pool from which to draw. Institutional investors, which collectively hold more than three-fourths of U.S. capital market investments, have not moved significantly from public trading markets to private trading markets. Rather than “going private,” they have “stayed public.”*

*This study assembles data (apparently for the first time) on the investment practices of the major categories of institutional investors in the United States. It finds that institutional allocation between public and private capital has been relatively stable over the past decade. While the proportion of private investments has risen slightly for some U.S. institutional investors (private and public pension plans, endowment funds), it has fallen slightly for others (mutual funds, insurance companies). Institutional reticence toward private capital derives from the various investment restrictions on institutional investors and an institutional culture that focuses on “comparative”, not “absolute” returns.*

Much has been made lately of U.S. companies going private—ownership of their equity (and sometimes debt) passing from public to private capital markets. In both the popular financial press and the academic literature, the focus has been on the cost-benefit analysis for companies that shun the regulated public securities in favor of the less regulated private securities markets.<sup>2</sup> Specifically, the debate has turned mostly on whether

---

\* Professor of Law, Wake Forest University. I thank Allen Mauldin (JD '10) for his invaluable help on this essay. He researched the portfolio allocation rules and practices of institutional investors in the United States, a task made more interesting and challenging by the almost complete absence of any law review or business articles on the topic. In fact, this would seem to be ground-breaking work—at least in the academy—and Allen was the one who first tilled the soil.

1. This essay was originally prepared for the Journal's symposium, The “Going Private” of U.S. Capital Markets.

2. See David Wessel, *Closing the Door: Going Private Offers Rewards*, WALL ST. J., May 17, 2007, at A2; Robert Bartlett, *Going Private But Staying Public: Reexamining the Effect of Sarbanes-Oxley on Firms' Going-Private Decisions*, 76 U. CHI. L. REV. (forthcoming 2009), available at <http://ssrn.com/abstract=1088830>.

the going-private phenomenon, viewed by many as inexorable, is driven by companies seeking to avoid public market costs (particularly the regulation introduced by the Sarbanes-Oxley Act of 2002) or to find private market benefits.

Missing from the debate, focused as it is on the demand side of the U.S. capital markets, has been attention to the supply side. The prevailing assumption has been that capital suppliers will adjust the mix of public and private capital as needed to meet the demand of capital users. That is, capital will flow to its most efficient use and will move from public to private markets (and from retail regulation to wholesale regulation) to meet the regulatory and other calculus of companies seeking capital. Only individual retail investors, a dwindling class in the throes of “deretailization,” will be stuck in the public markets.

But the assumption that institutional investors—which constitute more than three-fourths of both the U.S. public equity markets and U.S. public debt markets<sup>3</sup>—can move their portfolios from publicly-traded securities to privately-traded securities is largely untested. The various institutional investors in the United States, each subject to their own panoply of regulatory restrictions and financial cultures, face a number of constraints in shifting from the public to the private capital markets. Indeed, institutional capital may be locked into the public markets far more than the going-private debate recognizes.

In this essay, I question the story that the going-private phenomenon threatens to unravel retail markets and thus retail regulation. The data, even on casual observation, suggests otherwise. With the institutionalization of the U.S. capital markets, all indications over the past couple decades are that the U.S. *public* capital markets retain their dominance: stock listings and capital formation in public markets remain robust, the proportion of public market financing remains constant (if not slightly higher than private market financing), and retail investors still constitute a sizeable proportion of the U.S. equity markets.

The staying power of public capital markets is not surprising given their (oft-repeated) advantages and attendant regulation. Public securities markets in the United States are open to all—including to individual retail investors, all stripes of institutional investors, and even foreign investors (private and governmental). All benefit from public market liquidity, transparency, and accountability—each a public good not fully available in private markets. Companies that engage in regulatory arbitrage by moving to private markets for their financing needs must overcome these public market advantages.

---

3. FEDERAL RESERVE BOARD, FLOW OF FUNDS ACCOUNTS OF THE UNITED STATES 89, 90, Sept. 18, 2008, available at <http://www.federalreserve.gov/releases/z1/20080918/>.

Beyond the financial advantages of public market investment, many institutional investors are “captive” to public securities markets. For some, the regulatory regime under which they operate compels that they concentrate their portfolios in publicly-traded securities. For example, registered mutual funds must price their portfolio securities on a daily basis; they may not hold more than 10% of any one company’s equity securities; and open-end funds must be prepared to redeem their shares on demand.<sup>4</sup> These regulatory requirements effectively compel mutual funds to hold diversified portfolios of publicly-traded securities—which they do.

For other institutional investors, an investment culture (as opposed to a set of regulatory mandates) has come to presuppose public market investments. For example, private pension funds, subject to a prudent investor standard under the Employee Retirement Income Security Act (ERISA), continue to place the bulk of their investments in public securities markets. Given the absence of mandated disclosure, price transparency and ready liquidity in private markets, managers of private pension funds find it easier to follow the crowd. Even if diversification into private markets may offer better long-term returns, the strategy of “blazing new investment trails” would raise questions about the manager’s prudence.

For some institutional investors, a combination of portfolio allocation rules and a conservative investment culture leads to portfolios that are dominated by public market investments. For example, public pension funds and insurance companies—both subject primarily to state portfolio regulation—are often compelled to have certain percentages of their portfolios (both equity and debt) in publicly-traded securities and to limit their investment in illiquid private investments. In addition, both answer to oversight bodies for which peer comparability (relative returns) may be more important than investment maximization (absolute returns).

Not surprisingly, those institutional investors that are least regulated (foreign sovereign wealth funds) and those that are more willing to embrace investment experimentation (endowment funds) have shown a willingness to increase their allocation to private securities markets. But even then, the investment levels reflect not an exodus, but rather a shift in emphasis. Even for institutional investors with the legal and cultural flexibility to leave public markets, the allure of the protections inherent in public market investment has been notable. Private markets may have carved a niche, but have not created a movement.

**Note on timeframe of data:** Most of the data used in this essay come from before 2008, thus missing the wrenching changes in financial markets wrought by the Panic of 2008. But the basic conclusions that I reach—namely, that over the past several years public capital markets have

---

4. 26 U.S.C. § 851 (2009).

maintained their comparative advantage over private capital markets and that institutional investors are committed by law and custom to public capital markets—are only reinforced by the recent capital market turmoil. In fact, my main thesis that U.S. institutional capital shows a marked preference for public capital markets seems to have been tested (and proved) by the Panic of 2008.

During the current Panic, many investors (individual and institutional) have sought to abandon the private capital markets. Among the reasons has been the lack of transparency and liquidity, along with the perception that private capital markets have done no better, and perhaps worse, than the public capital markets in anticipating the effects of non-performing subprime mortgage investments on the U.S. and global financial systems. The Madoff scandal<sup>5</sup> has only reinforced the growing realization that private investments may be (sorely) under-regulated, their benefits outweighed by their costs. In the end, this essay confirms an emerging consensus that the public capital markets offer advantages that the private capital markets cannot duplicate. The old-fashioned investment allocation rules under which many institutional investors have long operated may reflect a time-worn wisdom.

\* \* \*

I begin this essay in Part I with a look at the “going private” phenomenon, summarizing the extent of and the reasons for U.S. companies turning to the private capital markets—that is, the demand side of the market. Next, Part II turns to an overview of the U.S. capital markets, considering the ongoing deretailization of the public equity markets, the flows of new capital into the U.S. public equity markets, and the trends in the allocation between public and private financing. Finally, Part III looks at the supply side of the institutional capital markets in the United States, considering the portfolio allocation rules and practices (and investment cultures) of the various institutional investor categories—with a particular focus on the public/private investment mix for each.

## I. “GOING PRIVATE”—THE DEMAND SIDE

Before exploring the staying power of the U.S. public securities markets—both generally and for institutional investors—it is useful to consider the siren call of the “going-private” phenomenon. For those who have looked at the phenomenon, mostly in only the last couple years, views differ on its scope and future. Although there is data pointing to a surge in companies turning (wholly or partially) to private capital markets, the

---

5. See Tom Lauricella, Aaron Lucchetti & Amir Efrati, *Madoff Ran Vast Options Game*, WALL ST. J., Dec. 16, 2008, at A1; see also Brett Arends, *Madoff An Unwitting Poster Boy for Mutual Funds*, WALL ST. J., Dec. 16, 2008, available at <http://online.wsj.com/article/SB122946065748411579.html> (describing how the Madoff scandal has reinforced superiority and safety of public mutual funds for investors).

phenomenon showed signs as early as 2006 of having reached an apex.<sup>6</sup> That is, even as some have argued that conditions in the public capital markets (particularly the compliance with Sarbanes-Oxley) have led many U.S. companies to engage in regulatory arbitrage by shifting to private capital markets, the more considered evidence is that private capital constitutes an important niche, but does not constitute a tidal shift in U.S. corporate capitalism.<sup>7</sup>

“Going private” has come in three flavors: (1) public companies that remove their publicly-traded securities from the public markets and thus avoid further public company reporting and regulation; (2) public companies that satisfy new capital needs on private markets, but remain subject to public company reporting (and sometimes regulation); and (3) private companies that remain private, relying on private financing for their capital needs.<sup>8</sup>

Over the past ten years, both private equity (funding of operating companies with non-public equity) and venture capital (funding of start-up companies with non-public equity) have been extremely volatile as funding sources. Between 1998 and 2005, the compound growth rate for private equity investment in North America was only 2.6%, peaking in 2000 at \$128 billion and reaching its lowest point in 2002 at \$42.5 billion.<sup>9</sup> Similarly, venture capital investment has swung from a high in 2000 of over \$100 billion, to a modest upward trend from about \$20 billion in 2003 to \$30 billion in 2007—an annual growth rate of about 6.9%.<sup>10</sup>

---

6. See Emily Thornton, *Going Private*, BUSINESS WEEK, Feb. 27, 2006, available at [http://www.businessweek.com/magazine/content/06\\_09/b3973001.htm](http://www.businessweek.com/magazine/content/06_09/b3973001.htm).

7. See generally Brian Cheffins & John Armour, *The Eclipse of Private Equity* (ECGI, Law Working Paper Series No. 82, 2007), available at <http://ssrn.com/abstract=982114>.

8. A public company can avoid Securities and Exchange Commission (SEC) registration and reporting requirements in a couple ways. First, it can de-register (known as “going dark”) when the number of record shareholders falls below 300 (or sometimes 500)—typically accomplished through a stock split or stock buyback/tender offer. A public company that “goes dark” does not change its ownership structure, but exposes itself to shareholder fiduciary claims for the illiquidity and non-transparency resulting from de-registration. Second, and far more common, the public company can “go private” by replacing public investors with private investors—accomplished typically through a squeeze-out merger or buyback/tender offer followed by a back-end merger. A public company that “goes private” must structure the transaction to be fair to existing shareholders and then must answer to a new group of outside investors, often including debt investors. See Michael J. McGuinness & Timo Rehbock, *Going-Private Transactions: A Practitioner’s Guide*, 30 DEL. J. CORP. L. 437 (2005) (discussing legal standards applicable to a going-private transaction, including the business judgment rule, fairness doctrine and judicial review); see generally FOLEY & LARDNER, LLP, DISCUSSION AT THE NATIONAL DIRECTORS INSTITUTE: GOING PRIVATE / GOING DARK TRANSACTIONS, Mar. 10, 2005, available at [www.foley.com/files/tbl\\_s31Publications/FileUpload137/2691/NDI\\_GoingPrivate\\_FINAL.pdf](http://www.foley.com/files/tbl_s31Publications/FileUpload137/2691/NDI_GoingPrivate_FINAL.pdf).

9. PRICEWATERHOUSECOOPERS, PRIVATE EQUITY GOING PUBLIC: GLOBAL PRIVATE EQUITY REPORT 2006, at 12 (2007), available at [https://www.pwcmoneytree.com/MTPublic/ns/moneytree/files/source/exhibits/Global\\_PE\\_2006.pdf](https://www.pwcmoneytree.com/MTPublic/ns/moneytree/files/source/exhibits/Global_PE_2006.pdf) [hereinafter PRICEWATERHOUSECOOPERS].

10. A 2008 PricewaterhouseCoopers report shows new investment in venture capital firms (in billions of dollars) for the past ten years:

Although private equity and venture capital dominated business conversations during the early 2000s, industry observers noted the “glass ceiling” both seemed to face. A 2007 report on private equity by PricewaterhouseCoopers began by pointing out the growing trend of private equity firms seeking access to public market equity.<sup>11</sup>

#### A. REASONS FOR COMPANIES TO GO PRIVATE

The prevailing justifications for companies to go private are to avoid the heavy compliance costs of being public (particularly after Sarbanes-Oxley) and to avoid the myopic and shifting expectations of public markets.<sup>12</sup> Once private, companies can raise capital less expensively, without the regulatory burden and competitive side effects of public disclosure, and can focus their business plans on the long-term, without the short-term financial demands of the financial media and public investors.<sup>13</sup> The protections for investors in public companies are replicated for investors in private companies through *ex ante* contractual disclosure and participation rights, as well as the *ex post* antifraud rules of the federal securities laws.

Compliance costs (that private firms avoid) arise from the retail regulation that applies to raising capital (mostly under the Securities Act of 1933) and to ongoing status as a public company (mostly under the Securities Exchange Act of 1934, as amended by the Sarbanes-Oxley Act of 2002). For a typical \$100 million initial public offering, out-of-pocket expenses run at about \$3 million, and the usual underwriting spread (7%) reduces the offering proceeds by another \$7 million.<sup>14</sup> Add to this the present value of ongoing disclosure requirements, as well as the auditing and internal control costs borne by public companies, less the reduced costs of subsequent offerings, and going public becomes quite costly.<sup>15</sup>

---

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008 (Q1/Q2)
21.1	54.1	105.0	40.6	22.0	19.8	22.4	23.1	26.7	30.7	14.9

PRICEWATERHOUSECOOPERS AND NATIONAL VENTURE CAPITAL ASSOCIATION, MONEYTREE REPORT: TOTAL U.S. INVESTMENTS BY YEAR Q1 1998 – Q2 2008 (2008), *available at* <https://www.pwcmoneytree.com/MTPublic/ns/moneytree/filesource/exhibits/MoneyTree%20-%20Q2%202008%20final.pdf> (showing total investments in venture-backed companies).

11. PRICEWATERHOUSECOOPERS, *supra* note 9, at 5 (asserting that the potential desire to access public markets by private equity is a driver of the trend to better conform with the norms of public markets).

12. See Thornton, *supra* note 6 (discussing that companies chose to go public to avoid both the costs of regulation and gain the ability to concentrate on the long term repairing of the company).

13. See *id.*

14. See Steven M. Davidoff, *Black Market Capital*, 1 COL. BUS. L. REV. 172 (2008), *available at* <http://ssrn.com/abstract=1012042>.

15. See *id.*

Private equity, it has been claimed, reaped large rewards in recent years.<sup>16</sup> Ronald Masulis and Randall Thomas identify a major reason for this success to be the corporate governance advantages of private equity over the public corporation.<sup>17</sup> They argue that the recent development of substantial derivative contracts and trading has significantly weakened the governance of public corporations, compelling a need for much closer supervision of management by financially sophisticated directors.<sup>18</sup> The private equity model delivers these benefits and allows corporations to be better governed, creating wealth gains for investors.<sup>19</sup>

Dale Oesterle identifies the ability of companies financed by private equity to engage in longer-term, higher-risk, positive net value business strategies and to create financial incentives for managers without being subject to public disclosure and short-term market demands.<sup>20</sup> Private companies (often financed primarily through debt rather than equity) have a different management style, compared to public companies.<sup>21</sup> Their boards are smaller and more knowledgeable, with uniform goals and more monitoring functions.<sup>22</sup> Managers (who need not answer to public shareholders, analysts or the media) have more freedom to take risks, particularly given the board's emphasis on long-term results.<sup>23</sup> Management compensation is more performance-based, with less protection from failure.<sup>24</sup>

In addition, there are indications that companies that rely on private markets no longer suffer the heavy liquidity and non-transparency discounts that once characterized private markets. For example, some private markets, open to a wide array of institutional investors and wealthy individuals, have come to resemble public markets. In 2007, Goldman Sachs created an institutions-only trading market, GSTrue, which served as the platform for

---

16. Whether private equity has produced better risk-adjusted returns than public equity has produced a lively debate. Cf. Ronald W. Masulis & Randall S. Thomas, *Does Private Equity Create Wealth?* (Vanderbilt Law and Econ. Research Paper No. 08-20, 2008), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1207858](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1207858); William W. Bratton, *Private Equity's Three Lessons for Agency Theory*, 3 BROOK. J. CORP. FIN. & COM. L. 1 (2008).

17. Masulis & Thomas, *supra* note 16.

18. *Id.*

19. *Id.*

20. See Dale A. Oesterle, *Are Leveraged Buyouts a Form of Governance Arbitrage?*, 3 BROOK. J. CORP. FIN. & COM. L. 53 (2008). Not surprisingly, going-private transactions in the United States are more prevalent among established, solid-growth, low-leveraged public companies—a phenomenon also observed in the UK and Ireland. See Hadiye Aslan & Praveen Kumar, *Going Public and Going Private: What Determines the Choice of Ownership Structure?*, (June 12, 2007), available at <http://ssrn.com/abstract=993170> (finding that “firms going private through private equity buyouts are larger, less levered, and have superior cash flows than firms that go private through other types of transactions.”).

21. Oesterle, *supra* note 20 at 53, 63–64.

22. *Id.* at 63.

23. *Id.* at 64.

24. *Id.*



an \$828 million IPO.<sup>25</sup> In cooperation with a number of securities firms, NASDAQ also has developed PORTAL, an institutions-only market for 144A debt.<sup>26</sup>

A good deal of debate has swirled around the question of whether compliance costs under Sarbanes-Oxley have catalyzed the going-private movement in the United States.<sup>27</sup> Although the initial (mostly politically-motivated) reactions were that Sarbanes-Oxley was driving companies from U.S. public markets, recent academic studies cast significant doubts on the story. Instead, the data suggest that larger public companies have actually benefited from the legislation—the various auditing and internal controls provide reassurance to investors.<sup>28</sup> For smaller companies, however, Sarbanes-Oxley compliance costs may have been a factor in their going-private decisions. In the end, however, the worldwide private equity boom (including in countries where Sarbanes-Oxley does not apply) suggests that compliance costs have not been the dominant factor influencing the U.S. going-private phenomenon.<sup>29</sup>

Evidence of the relative unimportance of Sarbanes-Oxley to the going-private decision, particularly for larger companies, comes from a number of quarters. Robert Bartlett, looking at 468 going-private transactions from 1998–2006 (excluding 2002), found that larger public companies going private after the 2002 legislation continued to use high-yield *public* debt to finance their transactions, thus remaining subject to public registration and reporting requirements.<sup>30</sup> That is, even as private capital became more available, many companies opted to continue their public reporting status. Likewise, many practitioners have commented that Sarbanes-Oxley played a minor role in large-company going-private transactions; many companies

---

25. *Apollo Raises \$828 Million*, WALL ST. J., Aug. 7, 2007, at C6.

26. See Lynn Cowan, *Banks to Share Platform for 144A Trades*, WALL ST. J., Nov. 12, 2007, at C3.

27. See Marc Morgenstern & Peter Nealis, *Going Private: A Reasoned Response to Sarbanes-Oxley?* (2004), available at <http://www.sec.gov/info/smallbus/pnealis.pdf> (asserting the diminishing benefits of remaining public and the rewards of going private, and concluding that costs of going private or going dark keep many public companies from realizing the rewards of going private).

28. See Christian Leuz, *Was the Sarbanes-Oxley Act of 2002 Really This Costly? A Discussion of Evidence from Event Returns and Going-Private Decisions* (May 2007), available at <http://ssrn.com/abstract=990016> (citing to a “growing body of evidence that SOX has increased the scrutiny on firms and has produced certain benefits.”).

29. See Ehud Kamar, Pinar Karaca-Mandic & Eric Talley, *Going-Private Decisions and the Sarbanes-Oxley Act of 2002: A Cross-Country Analysis* 56–57 (Univ. S. Cal. Law Sch., Law and Econ. Working Paper Series, Paper No. 52, 2006), available at <http://law.bepress.com/usclwps/lewp/52/>.

30. Bartlett, *supra* note 2. In fact, Bartlett found that the rates of public registration actually increased for larger companies in the post-Sarbanes-Oxley period. In purchasing notes, a bidder is often required by the lender to subject itself to Sarbanes-Oxley-like regulation. Issuers of high-yield notes are generally required to file periodic reports with the SEC as a result of an express obligation in an agreement.

turned to private equity as a means to restructure rather than avoid regulation.<sup>31</sup>

Nonetheless, there is some evidence that Sarbanes-Oxley may have been a factor (though not the only factor) in pushing *smaller companies* out of public markets. Bill Carney has cited an increase in the number of companies going private after Sarbanes-Oxley, though he acknowledges that many of these going-private transactions may have been the result of declining stock prices.<sup>32</sup> That is, Sarbanes-Oxley may have simply identified those companies for which the net benefits of public status hovered near zero. And for those smaller companies that have not exited the public markets, the calculus may well have been that the benefits that led the companies to initially go public outweigh the compliance and other costs of Sarbanes-Oxley.<sup>33</sup>

## B. EFFECT OF COMPANIES GOING PRIVATE

The going-private phenomenon, i.e., the movement of companies from public capital to private capital, has had the effect of carving out an investment niche available only to non-retail investors. It is widely assumed that the expansion of private markets has added to the growing institutionalization of the U.S. securities markets—and thus their concomitant “deretailization.”<sup>34</sup> For example, Brian Cartwright (the SEC’s general counsel) has pointed to the general exclusion of retail investors from venture capital, private equity and hedge funds—which Cartwright has assumed provide higher diversified returns than other asset classes available to retail investors.<sup>35</sup>

In the end, it remains to be seen whether private capital provided by wealthy individuals and institutional investors protected only by private systems of disclosure and oversight can be as effective as their public counterparts. The early evidence is mixed. Although there has been a

31. Symposium, *Corporate Governance: The Ins and Outs for Ds and Os: Sarbanes-Oxley: Was It Worth It?*, 5 DEPAUL BUS. & COMM. L. J. 643, 664 (2007).

32. William J. Carney, *The Costs of Being Public After Sarbanes-Oxley: The Irony of ‘Going Private’*, 55 EMORY L.J. 141, 151, 158 (2006). There is general agreement that Sarbanes-Oxley’s compliance burdens fell more heavily on smaller public companies. See Joseph A. Castelluccio III, Note, *Sarbanes-Oxley and Small Business: Section 404 and the Case for a Small Business Exemption*, 71 BROOK. L. REV. 429 (2005) (proposing a small-company exemption to section 404 of Sarbanes-Oxley).

33. See Andrew Skouvakis, Comment, *Exiting the Public Markets: A Difficult Choice for Small Public Companies Struggling with Sarbanes-Oxley*, 109 PENN. ST. L. REV. 1279, 1291 (2005) (pointing out that Sarbanes-Oxley compliance costs decline over time, with implementation costs disappearing once required internal control systems are in place).

34. See Brian G. Cartwright, General Counsel, U.S. Sec. and Exch. Comm’n, Address at the University of Pennsylvania Law School Institute for Law and Economics: The Future of Securities Regulation (Oct. 24, 2007) (transcript available at <http://www.sec.gov/news/speech/2007/spch102407bgc.htm>) (coining the phrase “deretailization” to describe the decreasing proportion of, and investment opportunities for, individual retail investors in the public equities markets).

35. *Id.*

widespread view that private equity outperforms public equity—given the lower compliance costs and higher net value business models for private companies—more recent evidence suggests that private equity may not be scaleable.<sup>36</sup>

There are reasons to doubt the broad future of private equity. Private companies suffer from two levels of opacity. First, private companies are subject to more limited observation. Rather than the many observers in a public company (shareholders, independent directors, regulators, media), private companies, for the most part, have only their capital providers (and perhaps independent directors) to watch over them. Second, the opacity within private companies is compounded by the opacity within institutional investors themselves. Without intermediating public markets, institutional investors may not be optimal owners. Many cannot sit on the board of portfolio companies, most do not disclose their voting, none have enforceable fiduciary duties as shareholders, and there exists no institutional ethos of oversight.

### C. GOING-PRIVATE PHENOMENON IN CONTEXT

The going-private phenomenon of the past decade should be kept in context. It is not the first time that U.S. capital users have turned to private capital—only to return to public capital after a short dalliance. The depth and liquidity of the public capital markets, despite their regulatory costs and homogenizing tendencies, have proven more attractive and permanent. In short, public capital may well be the worst form of capitalism, except for all the others.

Escape from public markets is a regular and cyclical phenomenon. In the 1940s, corporate America turned to the government and its cost-plus contracts for capital during the war effort. In the 1960s, many companies shunned the public capital markets and opted for private capital from conglomerate structures. In the 1980s, many companies (whether or not subject to a takeover bid) turned to private debt markets to buy out public equity owners and finance their streamlined businesses.

That is, movements away from public capital have not had staying power—eventually they fall victim to their lack of depth and effective oversight.<sup>37</sup> For example, Brian Cheffins and John Armour have concluded that private equity, despite its current momentum, is unlikely to ever displace the public stock market as the center of U.S. financial markets.<sup>38</sup>

---

36. See Wessel, *supra* note 2, at A2 (identifying as reasons for public companies to go private the avoidance of public securities regulation, the leveraging of the company to maximize equity returns, the ability to make tough restructuring decisions, and the attraction of better executives).

37. See *id.* (concluding that private equity is not permanent, citing the leveraged-buyout (LBO) boom of the 1980s that ended when targets became more expensive and credit became tighter).

38. Brian Cheffins & John Armour, *The Eclipse of Private Equity* 4 (ECGI, Law Working Paper Series No. 82, 2007), available at <http://ssrn.com/abstract=982114>.

They emphasize the results of prior merger trends, including the dominance of conglomerates in the 1960s and the rise in leveraged buyouts of the 1980s, noting that both eras ended with a return by investors to public markets.<sup>39</sup> The authors predict that, given the trend beginning in 2006 of private equity firms turning to IPOs, public markets will play a significant role in the future of private equity.<sup>40</sup>

There are already signs that the recent going-private movement may be waning, with the private-public pendulum swinging back to public capital.<sup>41</sup> Steven Davidoff, finding evidence of this in recent litigation trends, notes that, during the bear market that began in 2007, private equity firms repeatedly sought to terminate pending acquisitions.<sup>42</sup> The litigation surrounding these terminations, Davidoff concludes, has exposed the failure of parties to specify fully their investment relationship and raises doubts about the optimality of private equity.<sup>43</sup>

Not only do these terminations suggest that private contracting may be less fulsome than the gap-filling provided by public corporate law, they also undermine the story that private equity has a longer-term investment horizon and greater valuation perspicacity than public equity. Instead, public equity, with its long-standing legal and market structures, as well as its transparency and mechanisms for self-correction, may be a more optimal investment method.

So is this latest dalliance with private capital different? Ultimately, the answer depends on a combination of factors, such as whether private capital is indeed less expensive and whether the business structures it facilitates are more efficient than public capital. But even more important is whether private capital is as deep as public capital—a question that depends on whether U.S. capital (now mostly institutional) has the capability to switch from public markets to private markets.

## II. U.S. CAPITAL MARKETS—INSTITUTIONALIZATION AND CAPITAL FLOWS

U.S. capital markets have not been static. Over the past half century, ownership of public equity has shifted dramatically from individuals to institutions—perhaps reflecting (at least in part) the greater monitoring and

---

39. *Id.*

40. *Id.*

41. Predictions that this time the private equity phenomenon was here to stay may have been premature. See Thornton, *supra* note 6 (describing high-profile going-private transactions and private equity markets; concluding that companies financed by private equity will not revert to public companies).

42. Steven M. Davidoff, *The Failure of Private Equity*, 82 S. CAL. L. REV. (forthcoming 2009), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1148178](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1148178) (identifying as a “flaw” that lawyers negotiating and drafting private equity contracts failed to appreciate the extra-legal norms surrounding private equity financing).

43. *Id.*

governance efficacy of institutional shareholders, compared to their more dispersed and less effective individual counterparts.<sup>44</sup>

The mass migration from individual ownership to institutional ownership, however, has not been matched by a movement to private markets—where institutions presumably face fewer impediments (legal and financial) to invest.<sup>45</sup> Instead, public markets continue to garner the bulk of both equity and debt financing. Although twenty years ago some predicted an “eclipse of the public corporation,” the private financing of once-public corporations bought out in leveraged buyouts was short-lived.<sup>46</sup>

The following charts capture the principal stories of capital movements in the United States over the past few decades. They tell a story, in its essence, that U.S. public capital markets have come to be dominated by institutional investors. They further tell the story that this institutionalization has not led to dramatic shifts away from public equity markets, despite the shifting concentrations in institutional ownership.

#### A. DERETAILIZATION OF EQUITY MARKETS

Since 1945, the proportion of retail ownership of publicly-traded equities has declined steadily. In 1950, households owned more than 90% of publicly-traded U.S. equities; at the close of 2007, household ownership stood at just over 25%.<sup>47</sup>

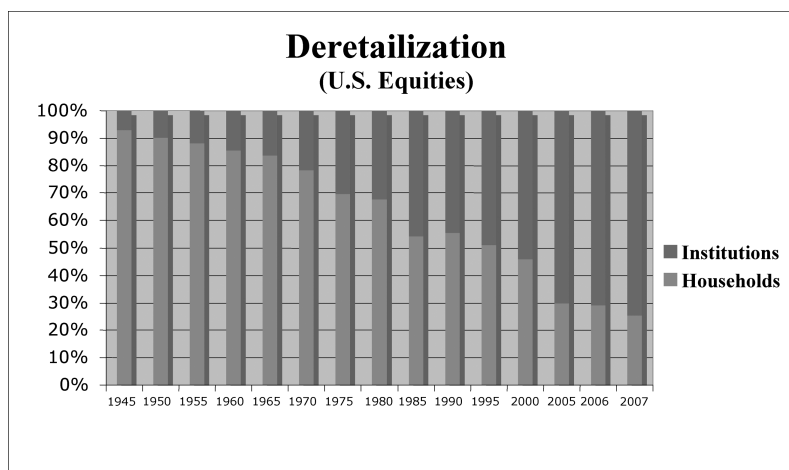
---

44. See Cartwright, *supra* note 34.

45. See Morgenstern & Nealis, *supra* note 27.

46. Michael C. Jensen, *Eclipse of the Public Corporation*, HARV. BUS. REV., Sept–Oct. 1989 (Revised 1997), at 1–4, available at <http://ssrn.com/abstract=146149>.

47. SECURITIES INDUSTRY AND FINANCIAL MARKETS ASSOCIATION [SIFMA], 2008 FACT BOOK, 71 (*electronic version*) (citing FEDERAL RESERVE BOARD, *supra* note 3) [hereinafter 2008 FACT BOOK].

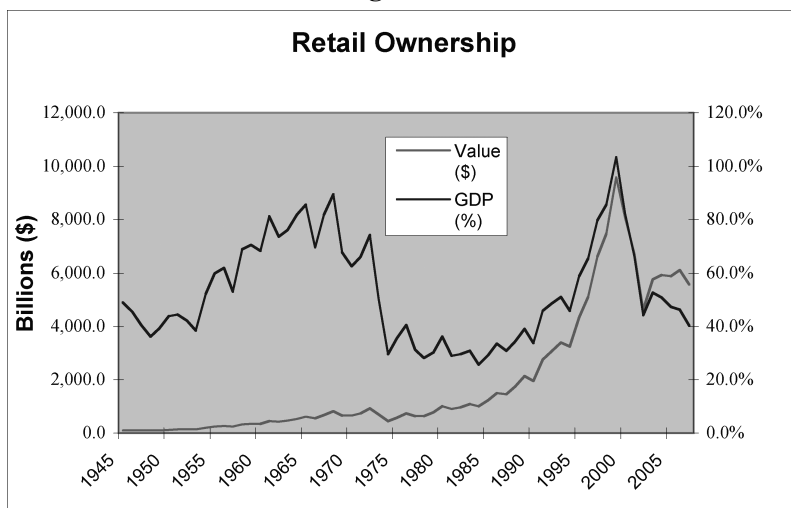
**Figure 1**<sup>48</sup>

Moreover, while retail ownership of public equity (in dollar terms and as a proportion of GDP) declined markedly after the 2000s dot.com collapse, it stabilized over the ensuing years.<sup>49</sup> In fact, retail ownership of public equity as a proportion of GDP (except for the dot.com bubble) has been relatively stable over the past three decades.<sup>50</sup>

48. *Id.* Data for 2002–2007 is taken directly from FEDERAL RESERVE BOARD, *supra* note 3.

49. *Id.* at 71; *see also* Bureau of Economic Analysis, Table 1.1.5 Gross Domestic Product, <http://www.bea.gov/national/nipaweb/TableView.asp?SelectedTable=5&FirstYear=2007&LastYear=2008&Freq=Qtr> (last visited Feb. 28, 2009) (listing total value of U.S. gross domestic product by year).

50. 2008 FACT BOOK, *supra* note 47, at 71 (*citing* FEDERAL RESERVE BOARD, *supra* note 3, at 90); Bureau of Economic Analysis, Table 1.1.5. Gross Domestic Product, *supra* note 49.

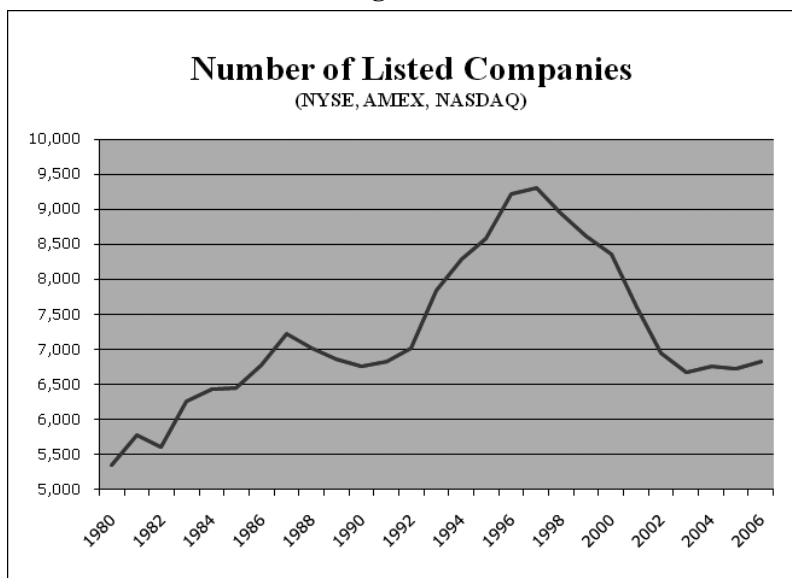
**Figure 2**<sup>51</sup>

### B. CAPITAL FLOWS

The data also reveals a (short term) return to stability in the public equity markets after the dot.com bubble, precisely during the period of the supposed ascendance of private equity. For example, the story of a withering public equity market during the early 2000s is not borne out by the number of listed companies on public stock exchanges. Although the number of public listings declined after the dot.com era, it stabilized afterward. As of 2007 there were about 7000 listed companies on the U.S. stock exchanges, about as many as there were prior to the 1994–2002 dot.com bubble.<sup>52</sup>

51. *Id.*

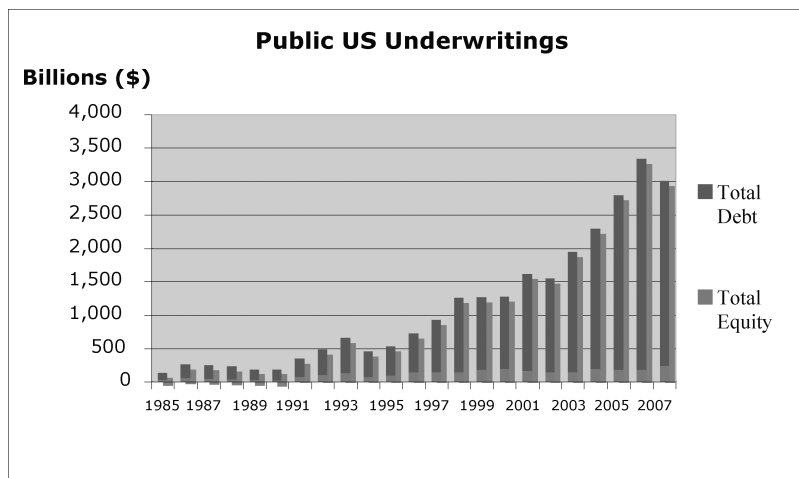
52. See Figure 3, *infra* note 53.

**Figure 3**<sup>53</sup>

Even more telling was the solid and steady increase in the value of underwritings in public markets during the period from 2002 to 2007—including both debt and equity. After a slowdown in the early 2000s, the public capital markets flourished in the next four years. In absolute terms, public underwritings increased from approximately \$1.2 trillion per year in the late 1990s to over \$3 trillion per year in 2007.

53. 2008 FACT BOOK, *supra* note 47, at 48 (*electronic version*) (*citing* FEDERAL RESERVE BOARD, *supra* note 3).

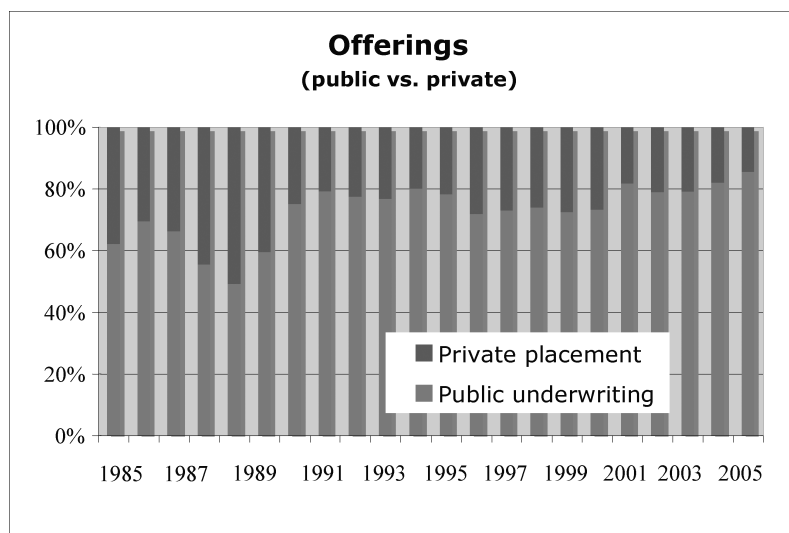


**Figure 4**<sup>54</sup>

Most telling of the continuing comparative advantage of U.S. public capital markets during the 2002–2007 period was the proportion of total U.S. offerings that were public, as compared to those that were private. In 2006, the most recent year for which there are data, public offerings represented a higher proportion of total U.S. offerings than they had in any year since 1985. Although there was a clear move toward private financing in the late 1980s (during the LBO phenomenon), there was no such movement toward private placements in the 2000s. To the contrary, public underwritings increased steadily during the 2000s *as a proportion* of the overall U.S. capital markets.

---

54. *Id.* at 10.

Figure 5<sup>55</sup>

Stepping away from the anecdotal accounts of the “going private” of U.S. capital markets, the data suggest that the phenomenon is isolated and even temporary. The public markets, from all indications, are here to stay. Why is this?

### III. “STAYING PUBLIC”—THE SUPPLY SIDE

For the going-private phenomenon to have legs, private capital users must be able to tap into private capital suppliers. The remarkable (and seemingly inexorable) decline of retail investors offers superficial support for the story (or, at least, possibility) of private capital’s ascendance. As institutional investors have come to dominate the U.S. capital markets, the supply of private capital would seem nearly inexhaustible—limited only by the breadth and depth of private capital demand.

The assumption that U.S. institutional investors have the freedom to allocate their portfolios between private and public investments, however, misconceives the specific regulatory and cultural restrictions under which each institutional category operates. For most institutional capital in the United States, the current reality is that private investment lives under a variety of *de jure* and *de facto* caps.

A snapshot of the supply side of the U.S. public capital markets as of 2007 provides some context. Institutional investors dominate both the U.S. publicly-traded equity and debt markets:

---

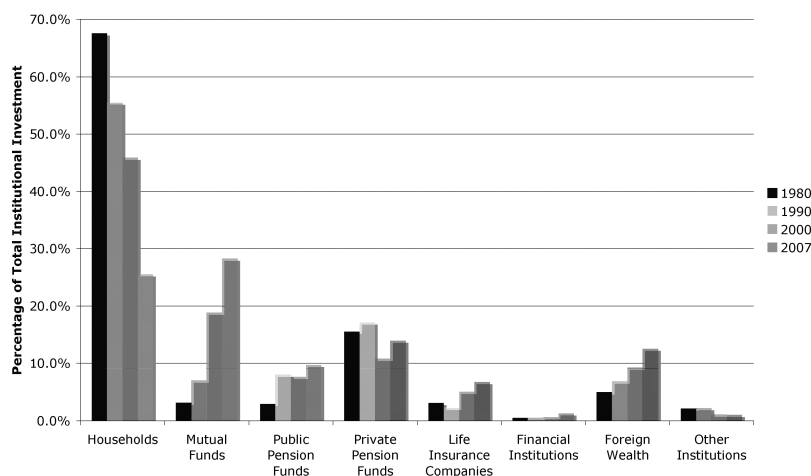
55. *Id.*

**Table 1**<sup>56</sup>  
**Proportion of Market Ownership by Institutional Investors**

	Publicly-traded equities (\$21.5 trillion)	Publicly-traded debt <sup>57</sup> (\$10.7 trillion)
Mutual funds	28.9%	13.4%
Public pension funds	10.0%	2.4%
Private pension funds	12.9%	2.9%
Life Insurance companies	8.0%	20.3%
Financial Institutions	1.4%	14.8%
Endowment funds <sup>58</sup>	-----	-----
Foreign Investment	13.0%	23.3%
Retail (individuals)	25.4%	15.2%

**Figure 6**<sup>59</sup>

**Institutional Investment by Investor Type**  
 (\$ value over time / Total value of market)



Over the past 25 years, the principal story in the institutional equity market has been the emergence (and now dominance) of mutual funds. The other story has been the relative decline of pension funds, as retirement savings has moved from defined-benefit to defined-contribution plans,<sup>60</sup>

56. FEDERAL RESERVE BOARD, *supra* note 3, at 89–90.

57. Includes holdings of foreign debt by U.S. residents. *See id.*

58. The Federal Reserve Board does not list endowments separately in its Flow of Funds report.

59. FEDERAL RESERVE BOARD, *supra* note 3, at 90.

60. In a defined-benefit plan, retirement benefits are determined by a set formula, rather than depending on investment returns. A traditional pension plan that defines benefits owed by the employer to employees upon their retirement is a defined-benefit plan. In a defined-contribution plan, contributions are paid into an individual account for each member. The contributions are

which rely extensively on mutual funds. And finally there has been the remarkable arrival in the U.S. equity markets of foreign investors, particularly foreign sovereign wealth funds.

The following sections describe the portfolio allocation requirements and strategies for the various categories of institutional investors in the United States. It is a broad-stroke picture, often generalized and thus simplistic, but useful in gauging the potential of the “privatization” of U.S. capital. By and large, the consistent story—with only a few exceptions—is that institutional investors are bound to the public capital markets either by law, by long-standing tradition, or both.

### A. MUTUAL FUNDS

As of 2007, U.S. mutual funds managed \$13 trillion dollars in assets,<sup>61</sup> with approximately \$9 trillion in long-term equity and debt funds.<sup>62</sup> Most mutual fund assets (\$6.6 trillion) were held in equity funds and, of this, most (\$5 trillion) in U.S. public equities.<sup>63</sup> Mutual funds represented the largest category of institutional investors in the U.S. public equity market, holding almost 25% of total outstanding publicly-traded equities.<sup>64</sup>

Mutual funds have grown steadily over the past 25 years. In 1970, U.S. mutual funds held a total of \$47 billion in assets.<sup>65</sup> By the end of 2007, they held nearly \$12 trillion in assets, most (nearly 93%) in open-end mutual funds that, by law, are subject to redemption on demand.<sup>66</sup> As retirement assets transition from defined-benefit plans to defined-contribution plans, mutual fund growth is likely to continue given their widespread use in IRA and 401(k) plans.<sup>67</sup>

---

then invested, and investment returns (positive or negative) are credited to the individual's account. On retirement, the member's account provides retirement benefits.

61. INVESTMENT COMPANY INSTITUTE [ICI], 2008 INVESTMENT COMPANY FACTBOOK, 9, fig. 1.1. (2008), *available at* [http://ici.org/stats/latest/2008\\_factbook.pdf](http://ici.org/stats/latest/2008_factbook.pdf) [hereinafter INVESTMENT COMPANY FACTBOOK].

62. *Id.* at 135 (approximately \$3 trillion is held in short-term money market funds). There are 8,029 registered mutual funds, of which 4,767 are equity funds, 1,967 bond funds, and 807 money market funds.

63. *See id.* at 9, fig. 1.1, Investment Company Assets; *see also* 2008 FACT BOOK, *supra* note 47, at 71 (*electronic version*) (citing FEDERAL RESERVE BOARD, *supra* note 3). Individual assets in equity funds were twelve times larger than institutional assets. As of 2007, individuals held over \$6 trillion in equity funds, while institutions had invested less than \$500 billion. Institutional investment in mutual funds was highest in money market funds.

64. Equity mutual funds have increased the proportion of their holdings in common and preferred stock. In 1994, for example, 87.1% of the average equity fund portfolio was in invested stocks. In 2007, stock investment in such funds was 94.8%. *See* INVESTMENT COMPANY FACTBOOK, *supra* note 61, at 136.

65. *Id.* at 110.

66. *Id.* at 9.

67. *See* PETER BRADY & SARAH HOLDEN, INVESTMENT COMPANY INSTITUTE, RESEARCH FUNDAMENTALS, THE U.S. RETIREMENT MARKET, 2007, at 1 (July 2008), *available at* <http://www.ici.org/stats/latest/fm-v17n3.pdf>. Defined-contribution and IRA assets, which now comprise more than half of the total retirement assets in the United States, are heavily invested in

### 1. Portfolio Allocation Rules

Mutual funds are subject to diversification rules under the Investment Company Act of 1940 (1940 Act), as well as the Internal Revenue Code. A registered mutual fund may not invest more than 5% of its assets in any one issuer (other than the U.S. government),<sup>68</sup> nor may it hold more than 10% of the securities of any one issuer.<sup>69</sup>

The 1940 Act, however, imposes no *explicit* portfolio allocation requirements on mutual funds.<sup>70</sup> Nonetheless, the portfolio valuation requirements imposed by the 1940 Act and SEC rules *implicitly* compel mutual funds (especially open-end funds) to invest primarily in publicly-traded securities. Open-end funds are required to calculate, at least daily, the net asset value of their holdings, typically after the close of the major U.S. exchanges.<sup>71</sup> Assets with readily available price information are valued at current market value, and other assets at “fair value” as determined in good faith by the fund’s board of directors.<sup>72</sup>

These pricing rules have generally led mutual funds to invest only in publicly-traded liquid securities and to avoid illiquid assets such as venture capital, private equity, or restricted shares of public companies.<sup>73</sup> Recognizing the difficulties of valuing illiquid securities,<sup>74</sup> the SEC has recommended that funds limit investment in illiquid assets to no more than 10% to 15% of fund assets.<sup>75</sup> In practice, equity funds invest less than 1% in non-publicly-traded securities.<sup>76</sup>

---

mutual funds. At the close of 2007, 47% of IRA assets were held in mutual funds, compared to 38% held in securities brokerage accounts. *See id.* at 5. Similarly, mutual funds manage 54% of total assets in 401(k) and 403(b) retirement plans. *See id.* at 10.

68. 26 U.S.C. § 851(b)(3)(A)(ii) (2009).

69. 26 U.S.C. § 851(b)(3)(A)(ii).

70. SEC rules require only that at least 80% of a fund’s assets be invested in a manner suggested by the fund’s name. 17 C.F.R. § 270.35d-1 (2008).

71. 17 C.F.R. § 270.22c-1 (2008).

72. 17 C.F.R. § 270.2a41-1 (2008) (defining “value” as (i) “market value” for securities for which market quotations are readily available, and (ii) for all others, “fair value as determined in good faith by the board of directors”); Investment Company Act, 17 C.F.R. § 270.22c-1 (requiring “current net asset value” to be computed at least daily, at such time fixed by the fund’s board of directors); 17 C.F.R. § 270.2a-4 (2008) (defining “current net asset value” for purposes of calculating value of redeemable fund shares).

73. Janet Smith, Richard Smith & Karyn Williams, *The SEC’s “Fair Value” Standard for Mutual Fund Investment in Restricted Shares and Other Illiquid Securities*, 6 FORDHAM J. CORP. & FIN. L. 421 (2001).

74. *Id.*

75. *Id.* at 445 (describing Accounting Series Releases 113 and 118); *see also* TAMAR FRANKEL & CLIFFORD E. KIRSCH, INVESTMENT MANAGEMENT REGULATION 353 (3d ed. 2005) (noting that in 1992, the SEC revised its guidelines to permit open-end funds to invest up to 15% of assets in illiquid securities).

76. Smith, Smith & Williams, *supra* note 73, at 446. By paying a premium for liquidity, it has been argued (without empirical support) that mutual funds do not attain the returns or the diversification that other investment funds do. *Id.* at 423–24. Whether mutual funds will invest in less liquid assets, given the current market slowdown, is unknown. *See id.* at 435.

## 2. Portfolio Allocation in Practice

Although no statute or regulation requires that mutual funds shun private securities, such has been the practice. Mutual funds (particularly open-end funds) have not come close to the limits on illiquid assets suggested by the SEC.<sup>77</sup>

**Table 2**<sup>78</sup>

**Portfolio Holdings of Long-Term Mutual Funds**

	1985	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007
Public equities	45.1%	38.2%	59.0%	76.4%	73.0%	65.3%	70.1%	72.5%	73.6%	74.8%	74.2%
U.S. bonds	21.2%	22.6%	12.6%	6.0%	8.1%	11.7%	9.4%	8.7%	8.9%	8.0%	8.4%
Corporate bonds	9.9%	8.0%	9.3%	6.8%	7.9%	10.1%	9.3%	8.6%	8.0%	8.3%	8.8%
Municipal bonds	15.2%	20.7%	11.9%	5.3%	6.2%	7.8%	6.2%	5.1%	4.8%	4.5%	4.1%
Liquid assets	8.2%	8.5%	6.9%	5.4%	5.1%	5.1%	4.8%	5.0%	4.4%	4.3%	4.2%
Other	0.3%	2.0%	0.3%	0.1%	0.0%	0.0%	0.1%	0.1%	0.2%	0.2%	0.2%

Why has mutual fund investment in illiquid assets been minimal? No doubt such investments present problems for both parties. Open-end funds, which must be prepared to redeem their shares, understandably seek to avoid a “run on the fund,” which would be exacerbated with sticky private assets. Further, mutual funds holding private assets may face, along with their investors, “valuation shock” if a financial shock ever forced the revaluation of private assets. The subprime re-valuations during the Panic of 2008 present a powerful case in point.

Likewise, private capital is generally (and increasingly) loath to take on investors unwilling to abide by longer-term investment horizons. In fact, the typical commitment of two or more years that many private equity firms and hedge funds demand of their investors is at odds with the liquidity expectations and the turnover practices of most equity mutual funds, many of which turn over more than half their portfolios annually.<sup>79</sup> Moreover, the disclosure rules imposed on mutual funds concerning their portfolio holdings are at odds with the secrecy sought (and demanded) by private assets, such as private equity and hedge funds. That is, the public transparency required of mutual funds may be anathema to the non-transparency of private assets.

Furthermore, mutual funds’ focus on public assets may simply be a response to customer predilections. Mutual funds are marketed (and their portfolios structured) with a view to *public market* indexes and

77. INVESTMENT COMPANY FACTBOOK, *supra* note 61, at 135.

78. *Id.*

79. *Id.* at 28–29 (Figure 2.9) (reporting asset-weighted turnover in stock funds of 51% in 2007). Others have calculated a higher average turnover rate of 91%. See also John C. Bogle, Mutual Funds and Taxes, The Bogle eBlog (Apr. 12, 2006), <http://johncbogle.com/wordpress/2006/04/12/mutual-funds-and-taxes/>.

comparisons, virtually ignoring the existence of private market alternatives. Given that mutual funds are primarily used by individual investors and not other institutions,<sup>80</sup> it is not surprising that mutual funds would conform to the liquidity and price transparency demands of their principal customers. Institutional investors interested in private assets can access them directly. Almost by definition, retail investors seek the assurances of retail regulation.

### 3. Conclusion

Without customers clamoring for private assets in their mutual fund portfolios, the industry has few incentives to risk adding an asset class that could result in redemption risks, revaluation/pricing surprises, and transparency conflicts. The industry, which until the fund timing scandals of the early 1990s was able to assert a nearly flawless record, has naturally avoided any risk of embarrassment. With retirement money flowing into the industry and without an end in sight, there is no reason for mutual funds to take on private investments and thus to put at risk the industry's reputation for *never* failing to meet a redemption demand at market—at least until the Panic of 2008.<sup>81</sup>

#### B. PUBLIC PENSION FUNDS

Public pension funds—which invest retirement assets for government (mostly state) employees—are the next largest U.S. institutional investor, with approximately 10% of U.S. public equity and 2.4% of U.S. public debt.<sup>82</sup> Public pension funds—which held, as of 2007, \$4.4 trillion in assets (about three-fourths of the amount held by private pension funds)—have modestly increased their investment in private assets, but many remain capped by state law and general industry practices at 5% of fund assets.<sup>83</sup>

The public pension fund category is somewhat concentrated, following state population patterns, with the largest funds (and states) holding a significant portion of the category's assets. Smaller states and their funds tend to follow the regulatory and investment lead of the larger states and funds. The largest of these funds, and the largest pension fund in the

---

80. See FEDERAL RESERVE BOARD, *supra* note 3, at 77, 90.

81. Primary Fund, one of the original and largest money market funds, “broke the buck” in September 2008 when it revalued its portfolio to reflect losses in its Lehman Brothers holdings. See Sam Mamudi & Jonathan Burton, *Money Market Breaks the Buck, Freezes Redemptions*, MARKETWATCH, Sept. 17, 2008, [http://www.marketwatch.com/news/story/money-market-fund-breaks-buck/story.aspx?guid={56A2CEE5-5A53-4A27-A4BA-585CFBE173A4}&dist=msr\\_1](http://www.marketwatch.com/news/story/money-market-fund-breaks-buck/story.aspx?guid={56A2CEE5-5A53-4A27-A4BA-585CFBE173A4}&dist=msr_1).

82. FEDERAL RESERVE BOARD, *supra* note 3, at 42–43.

83. See *id.* at 76; see also *Average Asset Mixes*, PENSIONS & INVESTMENTS, Jan. 21, 2008, available at <http://www.pionline.com/apps/pbcs.dll/article?AID=/20080121/CHART/401969275/-1/PENSIONFUNDDIRECTORY>.

country, is the California Public Employee Retirement System (CalPERS) fund, with over \$250 billion in assets as of 2007.<sup>84</sup>

### 1. Portfolio Allocation Rules

State and local government pension funds are regulated by state law, which varies from state to state. Traditionally, public pension funds have operated under statutory “investment guidelines” that identify categories of eligible investments, often with percentage caps on each. The guidelines reflect a preference for public assets (such as federal and state obligations, investment-grade debt, and publicly-traded stock that meets specified earnings and dividend tests), which typically are subject to large caps or none at all. The guidelines place restrictive caps on private assets (such as private equity, hedge funds and private mortgages), given their greater illiquidity and risk.<sup>85</sup>

Over the past couple decades, the shift has been away from mandatory investment guidelines toward delegating greater investment discretion to state fund boards. For example, California gives its investment board “plenary authority” under a prudent investor standard to invest funds as it sees fit.<sup>86</sup> Nonetheless, even as many state statutes have come to delegate investment and allocation discretion to state boards with respect to public assets, many continue to impose caps on specified categories of private assets.

Public pension funds, though not subject to the redemption obligations of mutual funds, are generally required to invest in liquid assets so “funds may be readily converted into cash when needed.”<sup>87</sup> Consistent with this philosophy, many states place a cap on “alternative investments”—that is, non-public assets such as private equity and hedge funds. For example, Florida and North Carolina limit investment in private firms to 5% of fund

---

84. See FEDERAL RESERVE BOARD, *supra* note 3, at 76. The federal government also maintains a pension plan for employees. As of 2007, federal government pension plans held only \$1.2 trillion in assets. Approximately 12.5% of federal government employee pension fund assets are held in corporate equities, compared to the approximately 60% held in equities by private pension plans. See *id.* at 42, 43, 76, tbl. L 120.

85. For example, New York’s pension fund system is limited by statute to invest in conventional mortgages (up to 30%), World Bank bonds (up to 5%), Canadian government bonds (up to 5%), utility bonds (up to 30%), investment-grade federal, state and municipal bonds (no more than 2% in any one non-federal issuer), U.S. public equity (up to 70%), bank-guaranteed mortgages (up to 10%), bank notes (up to 5%), real estate (up to 5%), foreign public equity (up to 10%), and “prudent” alternative companies (up to 15%). See N.Y. RETIRE. & SOC. SEC. LAW § 177 (1999).

86. CAL. CONST. art. 16, § 17 (2008) (providing that “the retirement board of a public pension or retirement system shall have plenary authority and fiduciary responsibility for investment of moneys” and “members of the [board] shall discharge their duties with respect to the system with the care, skill, prudence, and diligence under the circumstances then prevailing [of] a prudent person.”).

87. N.C. GEN. STAT. ANN. § 147-69.3(c) (2008).



assets.<sup>88</sup> Ohio sets a target for private investments of 5%, with permissible ranges above and below the target.<sup>89</sup> Texas caps hedge fund investments at 5%.<sup>90</sup> New York places an overall 15% limit on all alternative investments, subject to a prudent investor standard.<sup>91</sup>

## 2. Portfolio Allocation in Practice

In the past ten years, there has been a noticeable (though relatively small) shift in pension fund assets from public to private assets. While the proportion of U.S. public assets (equity and debt) has fallen from about 75% to 65% and that of international public assets has risen from about 15% to 20%, the proportion of private investments (such as private equity, hedge funds, real estate and mortgages) has risen from 10% to 15%. Overall, there has been a shift over the past decade through 2007 in the proportion of public-private assets from 90–10 to 85–15.

---

88. See FLA. STAT. ANN. §§ 215-44, 215-47 (2008); see also N.C. GEN. STAT. ANN. § 147-69.2(b)(9) (2008) (5% cap on investments in private equity and hedge funds, defined as limited partner or LLC interests in firms investing in public or private equity or debt, or corporate buyouts).

89. OHIO PUBLIC EMPLOYEE RETIREMENT SYSTEM, STATEMENT OF INVESTMENT OBJECTIVES AND POLICIES, DEFINED BENEFIT FUND 3 (Nov. 2007), <https://www.opers.org/pdf/investments/policies/DB-Investment-Policy.pdf#zoom=100>.

90. TEX. GOV'T CODE § 825.3012 (2008).

91. N.Y. RETIRE. AND SOC. SEC. LAW § 177(8) (2008). The New York State Retirement Fund has 16.1% of its portfolio allocated to global equity. See *infra* Part IV, Exhibit 1.

**Table 3**<sup>92</sup>

	<b>Public Pension Fund Investment</b>									
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
U.S. Public	77.5%	74.9%	74.2%	74.0%	73.5%	73.3%	71.3%	70.0%	68.3%	64.0%
Int'l Public	13.3%	15.7%	15.7%	14.4%	14.7%	16.3%	18.0%	18.8%	19.4%	21.1%
Private	5.8%	7.0%	8.0%	9.2%	9.5%	8.4%	8.2%	8.6%	9.3%	10.6%
Cash and Other	3.4%	2.4%	2.1%	2.4%	2.3%	2.0%	2.5%	2.6%	3.0%	4.3%

Breaking down the categories, the biggest shifts have been in U.S. public equity (falling from about 45% to 40%), U.S. public debt (falling from about 30% to 25%), international equity (rising from about 13% to 20%), and private equity (rising from about 2% to 5%).<sup>93</sup> These changes, however, may reflect changing values in the different asset classes, and not necessarily a major strategic shift in portfolio allocations. For example, the increase in the proportion of private assets in the Florida Retirement System came mostly from reported investment returns, not a re-allocation from public to private assets.<sup>94</sup>

92. Data is from PENSIONS & INVESTMENTS, which each January publishes data on the largest public and private pension funds. The data for 2006–2007 is available in *P&I 1,000: The Largest Retirement Plans*, PENSIONS & INVESTMENTS, Jan. 21, 2008, <http://www.pionline.com/apps/pbcs.dll/section?category=PENSIONFUNDDIRECTORY&IssueDate=20080121>. The other statistics are from the issues for Jan. 25, 1999; Jan. 22, 2001; Jan. 20, 2003; Jan. 24, 2005; and Jan. 23, 2006. A more detailed look at the asset allocation of public pension funds is illustrative:

	<b>Public Defined Benefit Fund Asset Allocation</b>									
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
U.S. Equity	45.6%	47.0%	46.9%	43.6%	41.3%	45.9%	46.1%	45.6%	44.1%	40.7%
U.S. Fixed Income	31.9%	27.9%	27.3%	30.4%	32.2%	27.4%	25.2%	24.4%	24.2%	23.3%
Int'l Equity	11.2%	13.8%	14.2%	13.0%	13.3%	15.2%	16.4%	17.6%	18.2%	19.8%
Int'l Fixed Income	2.1%	1.9%	1.5%	1.4%	1.4%	1.1%	1.6%	1.2%	1.2%	1.3%
Cash	2.3%	1.7%	1.6%	1.9%	1.8%	1.5%	1.4%	1.4%	1.4%	1.5%
Private Equity	1.7%	2.4%	3.5%	3.9%	3.9%	3.8%	3.7%	3.7%	4.2%	5.0%
Real Estate	3.3%	3.3%	3.4%	4.4%	4.7%	4.1%	3.8%	4.0%	4.7%	5.1%
Mortgages	0.8%	1.3%	1.1%	0.9%	0.9%	0.5%	0.7%	0.9%	0.4%	0.5%
Other	1.1%	0.7%	0.5%	0.5%	0.5%	0.5%	1.1%	1.2%	1.6%	2.8%

93. Hedge funds have also seen an increase in public pension fund investment over the last few years, although the data is somewhat less reliable because reporting funds do not always break out their hedge fund investments. See also Christine Williamson, *Hedge Funds: Investors Shift to Direct Strategies*, PENSIONS AND INVESTMENTS, Jan. 1, 2008, available at <http://www.pionline.com/apps/pbcs.dll/article?AID=/20080121/PRINTSUB/823452067/-1/PENSIONFUNDDIRECTORY>.

94. The strong performance before 2008 of private assets in public pension fund portfolios apparently came from private equity buyouts. See Arleen Jacobius, *Private Equity: Investment Surge Powered by 53% Boost in Buyouts*, PENSIONS AND INVESTMENTS, Jan. 21, 2008, available at <http://www.pionline.com/apps/pbcs.dll/article?AID=/20080121/PRINTSUB/930137994/-1/PENSIONFUNDDIRECTORY>. A look at the Florida State Board fund reveals the impact of value changes as compared with new investment:

The allocation policies of several of the top funds, including CalPERS, the New York State Retirement Fund, OPERS (Ohio), the Texas Teachers Retirement System, and NJPERS (New Jersey) also reflect this noticeable shift from public to private assets.<sup>95</sup>

### 3. Conclusion

Although the trend has been to entrust discretion to state pension boards to choose investment assets and determine fund allocation policies, public pension funds appear to continue to operate with an “eligible investment” mentality—as in many states they still must. The shift away from public assets to private assets (about 5% over the past decade through 2007)<sup>96</sup> may also have reached its limit.

### C. PRIVATE PENSION FUNDS

Private pension funds—which hold the defined-benefit retirement assets for private sector employees—held \$5.8 trillion in assets as of 2007.<sup>97</sup> With the shift by many U.S. companies from defined-benefit to defined-contribution plans, private pension funds have declined in relative size over the past two decades. Once the largest institutional investor of U.S. public equities, private pension plan ownership has fallen from 23% in 1985 to 13% as of 2007.<sup>98</sup>

#### 1. Portfolio Allocation Rules

Private pension plans are regulated by ERISA, enacted in 1974 to protect employees from poorly-managed and inadequately-funded pension plans.<sup>99</sup> In response to the failure of many funds to meet mandatory funding levels, which has placed in jeopardy the insurance provided by the Pension

---

	Florida State Board Asset Allocation Values											
	Domestic Equity				Foreign Equity				Private Equity			
	Start Value	Net Contrib.	Market Gain	Ending Value	Start Value	Net Contrib.	Market Gain	Ending Value	Start Value	Net Contrib.	Market Gain	Ending Value
2004	43,578	(6,872)	16,067	52,774	9,238	1,251	5,160	15,649	2,855	145	466	3,466
2005	52,774	(1,961)	3,550	54,362	15,649	(1,555)	2,461	16,555	3,466	(225)	140	3,381
2006	54,362	(972)	7,744	61,134	16,555	(2,004)	4,141	18,693	3,381	(95)	209	3,695
2007	61,134	(1,915)	6,269	65,488	18,693	(1,508)	3,469	20,654	3,695	(125)	343	3,913
2008	65,488	(17,468)	2,249	45,771	20,654	2,921	418	23,993	3,913	270	604	4,787

State Board of Administration of Florida, *available at* [http://www.sbafla.com/fund\\_pension.aspx](http://www.sbafla.com/fund_pension.aspx).

95. See *infra* Part IV, Exhibit 1.

96. See Table 3, *supra* note 92.

97. FEDERAL RESERVE BOARD, *supra* note 3.

98. See Table 1, *supra* note 56.

99. Sarah D. Burt, *Pension Protection? A Comparative Analysis of Pension Reform in the United States and the United Kingdom*, 18 IND. INT'L & COMP. L. REV. 189, 192–93 (2008).

Benefit Guaranty Corporation (PBGC), Congress passed the Pension Protection Act of 2006 (PPA).<sup>100</sup>

In a defined-benefit plan, the employer bears the investment risk and promises the employee a defined income on retirement.<sup>101</sup> Under ERISA, the plan managers must invest with the care and skill of a prudent person acting under the same circumstances in a like position.<sup>102</sup> The statute imposes no specific portfolio allocation rules.

The funding burden imposed by ERISA, and further increased by the PPA, has led many U.S. companies to abandon their defined-benefit plans. For example, IBM announced in 2006 it would freeze its defined-benefit plan in 2008, moving to a defined-contribution plan.<sup>103</sup> IBM joined other leading companies, including Verizon (the fifth largest U.S. private pension) and Lockheed-Martin (another top-ten plan), to announce similar phase-outs.<sup>104</sup>

## 2. Portfolio Allocation in Practice

Over the past decade, private pension plans have moved some of their public assets to private assets, mirroring the practice of public pension plans. The following chart shows the trends in portfolio allocation by private pension plans over the past ten years through 2007:

**Table 5**<sup>105</sup>

**Private Pension Fund Assets**

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Public	89.7%	91.3%	89.7%	89.1%	88.3%	88.8%	88.5%	87.3%	85.6%	84.7%
Private	6.2%	5.5%	6.1%	8.0%	8.1%	7.2%	7.5%	7.4%	7.0%	6.8%
Other	4.1%	3.2%	4.2%	2.9%	3.6%	4.0%	4.0%	5.3%	7.4%	8.5%

The changes in asset allocations reflect a decline from about 70% to 60% in U.S. public assets (similar to the 10% decline for public pension plans) and a rise from about 17% to 22% in foreign public assets (similar to the 5% rise for public pension plans). In the same period, private

100. *Id.* at 207–08. Responding to the underfunding of the PBGC (currently \$14 billion), the PPA requires companies to contribute to their pension funds up to 100 percent of current liabilities. See PBGC ANNUAL MANAGEMENT REPORT: FISCAL YEAR 2007, at 8 (2008).

101. Burt, *supra* note 99, at 193–94.

102. 29 U.S.C. § 1104 (2008).

103. Mary Williams Walsh, *IBM to Freeze Pension Plans to Trim Costs*, N.Y. TIMES, Jan. 6, 2006, at A1, available at <http://www.nytimes.com/2006/01/06/business/06pension.html>.

104. *Id.*; Jerry Geisel, *Phoenix Cos. Chooses to Revamp, not Phase out, DB Plan*, PENSIONS & INVESTMENTS, Feb. 19, 2007, at 25, available at <http://www.pionline.com/apps/pbcs.dll/article?AID=/20070219/PRINTSUB/702190705/1031/TOC>.

105. See discussion, *infra* note 111; <http://www.pionline.com/apps/pbcs.dll/section?category=PENSIONFUNDDIRECTORY&IssueDate=20080121>.

investments (such as private equity, real estate, mortgages and hedge funds) rose moderately from about 10% to 14% (also similar to the 5% rise for public pension plans). Overall, the shift in the public/private allocation from 1998 to 2007 for private pension plans went from 89–11 to 86–14—at most, a mild rebalancing.

Similar patterns emerge when looking at portfolio allocations for the top 200 corporate pension funds—for which more accurate asset breakdowns are available.<sup>106</sup> For such funds, U.S. public equities declined from about 45% to 35% over the decade, while U.S. public debt remained stable at about 25%.<sup>107</sup> Foreign equity moved from about 15% to 20%, and foreign debt from 2% to 4%.<sup>108</sup> Meanwhile, private equity increased from about 4% to 5% over the period, though trailed off after 2001.<sup>109</sup> The most significant change was in “other investments” (including hedge funds and private equity not broken out separately), which moved from about 1% to 4%.<sup>110</sup>

The story was also similar for union-sponsored pension funds. Though holding only 2.3% of assets among the top 200 private pension plans, union funds have maintained a strong position in public markets—and, interestingly, increased their investment in foreign public markets.<sup>111</sup> For

---

106. The following chart shows the asset allocation of private defined-benefit plans for the top 200 funds by size. It was developed from statistics produced by PENSIONS AND INVESTMENTS. See *Average Asset Mixes*, *supra* note 83; see also discussion, *infra* note 111.

**Private Pension Fund Assets (top 200 funds)**

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Domestic Equity	45.1%	48.4%	49.1%	42.2%	40.2%	43.5%	43.3%	41.3%	38.5%	35.8%
Domestic Fixed										
Income	26.5%	25.1%	24.4%	27.3%	28.5%	25.4%	25.0%	23.6%	26.5%	25.7%
Foreign Equity	15.5%	15.4%	14.2%	15.6%	16.0%	17.6%	17.5%	19.3%	19.2%	20.5%
Foreign Fixed										
Income	1.8%	1.4%	1.1%	1.8%	2.0%	1.4%	1.7%	1.6%	0.9%	3.7%
Cash	1.8%	1.8%	1.9%	1.5%	1.3%	1.4%	1.0%	0.9%	1.1%	1.2%
Private Equity	4.1%	3.9%	5.0%	5.8%	5.8%	5.0%	4.7%	5.1%	5.1%	5.3%
Real Estate	3.9%	2.7%	2.5%	3.9%	4.8%	3.7%	3.9%	4.1%	4.4%	3.6%
Mortgages	0.0%	0.1%	0.0%	0.9%	0.2%	0.2%	0.3%	0.4%	0.2%	0.2%
Other	1.3%	1.2%	1.8%	1.0%	1.2%	1.8%	2.6%	3.7%	4.1%	4.0%

107. See *Average Asset Mixes*, *supra* note 83.

108. *Id.*

109. Larger funds tend to allocate a greater proportion to private equity—but not that much more. A 2007 study of the twenty largest corporate pension funds found private equity investment to be 5.9%, compared to 5.3% for the 200 largest funds. TOM IDZOREK, IBBOTSON, PRIVATE EQUITY AND STRATEGIC ASSET ALLOCATION 8 (Oct. 31, 2007), available at <http://corporate.morningstar.com/ib/html/pdf.htm?../documents/MethodologyDocuments/IBBAssociates/IbbotsonPrivateEquity.pdf>.

110. *Id.*

111. Data, like that for other pension funds, is from PENSIONS & INVESTMENTS, which each January publishes data on the largest public and private pension funds. The data for 2006–2007 is from *P&I 1,000: The Largest Retirement Plans*, *supra* note 92. The other statistics are from the

the top union funds, U.S. equity investment stood at 49.1% in 2007—compared to 35.8% for all top 200 funds.<sup>112</sup> Union funds have cut their bond allocations to 25.9%, while steadily increasing allocations to foreign equity from 4.4% in 1998 to 11.9% in 2007.<sup>113</sup> Likewise, their position in private equity has risen from 0.7% in 2004 to 1.8% in 2007.<sup>114</sup>

### 3. Conclusion

Private pension funds, following general institutional investment trends, have moved decidedly into foreign assets, but only slightly more into private assets. Under a regulatory regime that demands only that fund allocations be consistent with “prudent” institutional norms, it is not surprising that private pension plans have mimicked the investment strategies chosen by their public brethren. And for both, the move to private assets has been at best modest—and may be tapering off.

That private pension plans have not moved aggressively into private asset classes is not surprising. Private pension managers, faced with the pressure to preserve assets and not take risks that could bankrupt the company, are pursuing a policy of greater (though generally cautious) diversification. The story of GM’s pension plan, which in 2006 increased its pension surplus by \$9.6 billion, is illustrative.<sup>115</sup> The favorable results happened not because of additional private or foreign investments, but rather by reducing the fund’s stock allocation from 49% to 29%, with most of the reallocation going to bonds.<sup>116</sup> In short, the incentives created by the PPA, which seek to have companies shore up their pension plans or bear the consequences, militate against seeking out higher-risk private assets.

### D. LIFE INSURANCE COMPANIES

As of 2007, life insurance companies held about 8% of U.S. publicly-traded equities and 20% of U.S. publicly-traded debt.<sup>117</sup> Most of the equity held by insurance companies is held in separate accounts, as distinguished from the general accounts from which life insurance companies pay claims.

---

issues for Jan. 25, 1999; Jan. 22, 2001; Jan. 20, 2003; Jan. 24, 2005; and Jan. 23, 2006. *See supra* text accompanying note 92.

112. *See P&I 1,000: The Largest Retirement Plans*, *supra* note 92.

113. *Id.*

114. *Id.*

115. Allan Sloan, *GM’s High-Performance Pension Machine*, WASH. POST, Apr. 10, 2007, at D02, *available at* <http://www.washingtonpost.com/wp-dyn/content/article/2007/04/09/AR2007040901262.html>.

116. *Id.*

117. FEDERAL RESERVE BOARD, *supra* note 3, at 42, 43, tbl. L 213.

### 1. Portfolio Allocation Rules

State insurance law specifies asset allocation guidelines for insurers' general accounts,<sup>118</sup> though not for separate accounts whose portfolio allocations are largely a matter of account-specific investment policies and customer choice. For regulation of asset allocations in general accounts, many states follow the guidelines contained in the model insurance law adopted in 1996 by the National Association of Insurance Commissioners (NAIC).<sup>119</sup> Under the Investment Company Act, which generally regulates separate accounts, insurance companies are typically free to choose any investment allocation so long as it is consistent with the name and marketing of the separate account.<sup>120</sup>

Illustrative of general account guidelines are those imposed by the states that are home to the most insurance companies.<sup>121</sup> Equity investments in general account "admitted assets" are subject to the following caps: Texas (25%), Illinois (20%) and New York (20%).<sup>122</sup> In addition, many states limit the percentage of securities in any one company that an insurer may hold. For example, New York specifies that admitted assets invested in the equity holdings of any one company cannot exceed 2% of that company's outstanding equity securities.<sup>123</sup>

The NAIC model insurance law, which proposes two versions of investment guidelines for insurers' general accounts, tracks the approach of the larger states. Under the "defined standard" version, which requires "prudent" investment, life insurers may invest up to 20% of admitted assets in equities or mutual funds.<sup>124</sup> Under the "defined limits" version, equities cannot exceed 20%, and unlisted equities are capped at 5%.<sup>125</sup>

---

118. See generally McCarran-Ferguson Act, 15 U.S.C.A. § 6701 (1945) (Congress declared that states regulate "the business of insurance"); see also NAIC, STATE INSURANCE REGULATION: HISTORY, PURPOSE AND STRUCTURE, [http://www.naic.org/documents/consumer\\_state\\_reg\\_brief.pdf](http://www.naic.org/documents/consumer_state_reg_brief.pdf).

119. See Bill Anderson, et al., *State Legislative Update*, NAIFA NEWIS 2 (Apr. 2003), [http://www.advisortoday.com/archives/2003\\_august/Images/State\\_Matrix\\_Extended.pdf](http://www.advisortoday.com/archives/2003_august/Images/State_Matrix_Extended.pdf).

120. See 15 U.S.C.A. § 80a-1 et seq. (1940).

121. The three states home to the most insurance companies are Texas (141), New York (91) and Illinois (77). See 2007 LIFE INSURERS HANDBOOK 82 tbl.10.1 (2007), [http://www.acli.com/nr/rdonlyres/a85a882f-f871-431d-976e-3316884c63eb/15016/fb\\_07\\_allchapters2\\_w\\_insert.pdf](http://www.acli.com/nr/rdonlyres/a85a882f-f871-431d-976e-3316884c63eb/15016/fb_07_allchapters2_w_insert.pdf).

122. TEX. INS. CODE ANN. § 425.114(b)(4)(B) (2008); 215 ILL. COMP. STAT. 5/126.10(B)(1)(a) (2008); N.Y. INS. LAW § 1405(a)(6) (2008).

123. N.Y. INS. LAW § 1405 (2008).

124. NAIC MODEL LAWS, REGS. AND GUIDELINES §§ 280-1, 280-13, 280-3 (2008).

125. *Id.*

## 2. Portfolio Allocation in Practice

The percentage of U.S. public equities owned by life insurance companies has grown slowly but steadily since 2002.<sup>126</sup> The increase has coincided with the increase in separate account assets, which have grown from 11% of total life insurance assets in 1988,<sup>127</sup> to 25% in 1996, to 35% in 2006.<sup>128</sup>

The following table, drawn from data collected by the American Council of Life Insurers, illustrates the public/private assets breakdown over the eleven years preceding 2007 in insurers' general accounts and separate accounts, and overall.

**Table 6**<sup>129</sup>

**Life Insurance Assets**  
(By proportion of portfolio invested)

	General Account			Separate Account			Combined		
	1996	2005	2006	1996	2005	2006	1996	2005	2006
Publicly-traded equity	5.5%	3.4%	4.7%	66.8%	80.3%	80.2%	20.6%	28.7%	31.7%
Publicly-traded debt	70.1%	74.6%	72.5%	20.8%	13.5%	12.7%	58.1%	54.5%	51.0%
Private assets	20.7%	16.9%	17.2%	11.6%	4.4%	4.5%	18.4%	12.8%	12.7%
Cash and non-invested	3.7%	5.2%	5.6%	0.8%	2.0%	2.7%	3.0%	4.2%	4.6%

The proportion of private assets (which include mortgages, real estate, policy loans, and other assets) has actually fallen in both the general accounts and the separate accounts. That is, life insurers over the past ten years have placed even more of their investment assets in public assets, whether to underwrite insurance risks (general account) or to compete with mutual funds and other equity tools (separate account). Looking only at invested assets, the overall public/private proportion has gone from 81–19 to 87–13, and in the general accounts from 79–21 to 82–18.<sup>130</sup> That is, both overall and in the regulated general accounts, life insurers have moved away from private assets by about 5%.<sup>131</sup>

A more complete breakdown of insurance company portfolio allocations reveals some growth in the allocation of general accounts to “other assets” such as private equity and hedge funds, but an actual decline

126. See 2007 LIFE INSURERS HANDBOOK *supra* note 121, at 1, 9. This does not include cash investments and non-invested assets, which have comprised between 3.0% and 4.6% of total life insurance assets.

127. Stephen E. Roth, Susan S. Krawczyk & David S. Goldstein, *Reorganizing Insurance Company Separate Accounts Under Federal Securities Laws*, 46 BUS. LAW 537, 539 (1991).

128. See 2007 LIFE INSURERS HANDBOOK, *supra* note 121, at 9.

129. *Id.* at 12–13.

130. See Table 6, *supra* note 129.

131. See *id.*



in the allocation of these alternative investments in separate accounts.<sup>132</sup> While “other assets” increased in the general accounts from 1.3% to 3.2%, they fell in the separate accounts from 8.3% to 3.0%.<sup>133</sup> Overall, life insurance companies appear to be investing no more in private equity as of 2006 than they did ten years ago.

### 3. Conclusion

Over the past ten years, life insurance companies have increased their allocation to public equity, while reducing their position in private assets. In fact, the overall public/private proportions over the past ten years have increased by about 5%—bucking somewhat the slight trend of public and private pension plans toward more private assets. With the growth in separate accounts, which compete with registered mutual funds, insurance companies will in all likelihood continue their strong presence in public markets.

The tendency of the insurance industry to stay in public markets may well reflect the cautious attitudes of the industry and its regulators. The investment limits applicable under most state insurance laws, which are reflected in the NAIC guidelines, carry forward the state regulatory tradition applicable also to state pension plans of specifying categories of “approved investments,” each subject to its own percentage cap. This form of “pigeon hole” regulation, which has been criticized for ignoring modern finance theory and the value of broad diversification, assumes that the regulated entities (whether state pension plans or insurance companies) need only match the investment performance of their counterparts, while maintaining the safety of the assets under their control.<sup>134</sup>

---

132. Portfolio allocations by life insurance companies in their general accounts and separate accounts has been the following:

	General Account			Separate Account			Combined		
	1996	2005	2006	1996	2005	2006	1996	2005	2006
Government Bonds	19.6%	17.0%	15.9%	9.2%	5.4%	5.1%	17.1%	13.2%	12.0%
Corporate Bonds	50.5%	57.6%	56.6%	11.6%	8.1%	7.6%	41.0%	41.3%	39.0%
Common Stocks	4.9%	2.5%	2.6%	66.7%	80.2%	80.0%	20.1%	28.1%	30.3%
Preferred Stocks	0.6%	0.9%	2.1%	0.1%	0.1%	0.2%	0.5%	0.6%	1.4%
Mortgages	11.6%	9.5%	9.8%	0.7%	0.6%	0.6%	8.9%	6.6%	6.5%
Real Estate	2.1%	0.6%	0.6%	2.1%	0.9%	0.8%	2.1%	0.7%	0.7%
Policy Loans	5.6%	3.6%	3.6%	0.4%	0.0%	0.0%	4.3%	2.4%	2.3%
Cash	0.2%	1.1%	1.2%	0.1%	1.1%	1.1%	0.2%	1.1%	1.2%
Other Assets	1.3%	3.1%	3.2%	8.3%	2.8%	3.0%	3.0%	3.0%	3.1%
Non-Invested Assets	3.5%	4.1%	4.4%	0.6%	0.8%	1.6%	2.8%	3.0%	3.4%

See 2007 LIFE INSURERS HANDBOOK, *supra* note 121, at 12–13.

133. See *supra* text accompanying note 132.

134. See Lawrence J. White, *The NAIC Model Investment Law: A Missed Opportunity*, in *THE STRATEGIC DYNAMICS OF THE INSURANCE INDUSTRY: ASSET/LIABILITY MANAGEMENT ISSUES* (E. Altman & I. Vanderhoof, eds., 1996).

### E. BANKS (FINANCIAL INSTITUTIONS)

Compared to other institutions, financial institutions (commercial banks, savings associations and investment banks) held, as of 2007, a small percentage of public and private equities—only 1.2% of outstanding public equities.<sup>135</sup> Insured banks, which are prohibited from investing in equities in their general portfolios, invest in equities only in their fiduciary capacity.<sup>136</sup> Investment banks, as regulated broker-dealers, face liquidity and reserve requirements that prevent them from being heavily invested in equities.

#### 1. Portfolio Allocation Rules

Insured banks (including national banks, state banks and state savings associations) are restricted from purchasing stock for their own general accounts, but may purchase stock for the accounts that they manage in trust.<sup>137</sup> As a result, trust investment is the only way insured banks can hold equities, whether public or private.

States differ as to the proper use of equities in trust investments.<sup>138</sup> However, two general rules exist. Under the New York Rule, trustees cannot invest in corporate stocks or bonds absent express authority in the trust document, state statute or court order.<sup>139</sup> Under the Massachusetts Rule, trust investments are subject to a “prudent investor” standard, which does not bar (and may sometimes require) the trustee to invest in stocks.<sup>140</sup>

Investment banks, subject to federal securities regulation as broker-dealers, must register with the SEC and adhere to net capital rules.<sup>141</sup> In 1999, the Gramm-Leach-Bliley Act repealed the Glass-Steagall separation of commercial and investment banking and allowed for the consolidation of commercial banks and investment banks.<sup>142</sup> The distinctions between investment banks and commercial banks explain why they invest differently in corporate equities.

#### 2. Portfolio Allocation in Practice

Commercial banks invest a small percentage of their overall assets in corporate equities. At the close of 2007, commercial banks had less than 0.4% of their assets in corporate equities. Savings associations invested

---

135. FEDERAL RESERVE BOARD, *supra* note 3, at 42, 43, 90.

136. 12 U.S.C.S. § 1831a(c) (2006).

137. 12 U.S.C. § 24 (national banks); 12 C.F.R. § 362.3 (insured state banks); 12 C.F.R. § 362.11 (insured state savings associations).

138. 76 AM. JUR. 2D TRUSTS § 460 (2008).

139. *Mertz v. Guaranty Trust Co. of New York*, 247 N.Y. 137, 159 N.E. 888 (1928).

140. *Chase v. Pevear*, 383 Mass. 350, 419 N.E.2d 1358 (1981).

141. 17 C.F.R. § 240.15c3-1 (2008) (net capital rules).

142. Jonathan Macey, *The Business of Banking: Before and After Gramm-Leach-Bliley*, 25 J. CORP. L. 691 (2000).

slightly more in equities, with 1.4% of their assets in equities. Meanwhile, corporate equities comprised 7.3% of broker-dealer assets.

Information on private equity assets held by banks and securities firms is not available. Nonetheless, data on holdings of corporate equity indicates increasing proportional allocations of public equity by commercial banks, savings banks and broker-dealers. That is, all three types of financial institutions have allocated more of their relatively small equity investments to public equity:

**Table 7<sup>143</sup>**  
**Portfolio Allocation by Banks (Financial Institutions)**  
**to Corporate Equity**

	2001	2002	2003	2004	2005	2006	2007
<b><u>Commercial banks</u></b>							
Corporate equity	8.9	3.5	15.0	20.3	24.1	35.3	41.5
Total assets	6829	7329	7825	8560	9320	10203	11194
Allocation to corporate equity	0.1%	0.1%	0.2%	0.2%	0.3%	0.3%	0.4%
<b><u>Savings institutions</u></b>							
Corporate equity	27.9	29.1	30.4	28.2	26.2	24.9	25.3
Total assets	1291	1350	1466	1650	1790	1715	1815
Allocation to corporate equity	2.2%	2.2%	2.1%	1.7%	1.5%	1.5%	1.4%
<b><u>Broker-dealers</u></b>							
Corporate equity	85.1	74.9	100.5	129.1	158.3	186.4	224.8
Total assets	1466	1335	1613	1845	2127	2742	3092
Allocation to corporate equity	5.8%	5.6%	6.2%	7.0%	7.4%	6.8%	7.3%

Because Federal Reserve data on institutional investments labels the assets of securities firms as “miscellaneous,” it is difficult to determine whether and how securities firms have changed their investment mix over the past ten years.

### 3. Conclusion

Commercial banks and savings institutions, because of their liquidity obligations to depositors and the U.S. tradition of limiting their investment in equity securities, are not significant participants in equity markets. In contrast, securities firms (investment banks) are not as heavily regulated or subject to the same liquidity rules, and have more investing freedom.

Although it is difficult to identify whether there has been a move to private capital by financial institutions, the effect is miniscule given the general inability of each to invest in equities. Nor is there any reason to believe, given the aftermath of the Panic of 2008 and the greater antipathy to risk-taking by U.S. financial institutions, that there will be a movement toward private equity. At least during the overhang of the subprime debt

---

143. See FEDERAL RESERVE BOARD, *supra* note 3, at tbl. T.109, 73 tbl. T.114, 81 tbl. T.129.

crisis, it seems unlikely that financial institutions will be moving strongly into another illiquid asset class.

## F. SOVEREIGN WEALTH FUNDS AND FOREIGN INVESTORS

Foreign private investors and foreign sovereign wealth funds (SWFs) represent the fastest-growing category of investors in the U.S. public equity markets. As of 2007, foreign wealth owned more than 13% of U.S. public equities, surpassing private pension funds to become the second largest institutional investor in U.S. public equities (behind only mutual funds).<sup>144</sup> From 2001 to 2007, foreign wealth (government funds, institutional investors and foreign individuals) invested in U.S. equities doubled from \$1.4 trillion to \$2.8 trillion.<sup>145</sup>

Although SWFs have received a good deal of attention, most foreign investment in the United States has been non-governmental, accounting for nearly three-fourths of investment flows into the United States.<sup>146</sup> Nonetheless, as proceeds from commodity exports and balance-of-payment surpluses continue to flow into foreign government coffers, there is a general consensus that SWFs will play an increasingly larger role.<sup>147</sup> For example, the IMF projected (before the global economic slowdown of 2008) that global SWF assets, which stood at about \$2.5 trillion as of mid-2008, could reach \$12 trillion by 2012.<sup>148</sup>

### 1. Portfolio Allocation Rules

SWFs are generally non-transparent and so too are their investment policies. Foreign institutional investors are subject to national investment rules on portfolio allocation, which typically require that non-national investments be limited to publicly-traded securities—much as for U.S. institutional investors that invest outside the United States.

Foreign companies, which have seized upon the decline in the dollar to make business investments and acquisitions in the United States, are a

---

144. *Id.*

145. *Id.*

146. See Peter S. Goodman & Lousie Story, *Overseas Investors Buying U.S. Holdings at Record Pace*, N.Y. TIMES, Jan. 20, 2008, at A1, available at <http://www.nytimes.com/2008/01/20/business/20invest.html?ex=1358571600&en=34079637cb59bb3a&ei=5124&partner=permalink&exprod=permalink>; see also Brad Setser, *Follow the Money*, COUNCIL ON FOREIGN RELATIONS, Sept. 23, 2008, <http://blogs.cfr.org/setser/category/sovereign-wealth-funds/>.

147. Robert M. Kimmitt, *Public Footprints in Private Markets: Sovereign Wealth Funds and the World Economy*, 87 FOREIGN AFFAIRS 1, 119–21 (2008). Funding for SWFs comes from two sources: (1) commodity exports, especially petroleum, either owned or taxed by the government, and (2) balance-of-payment surpluses. The first SWF, the Kuwait Investment Board created in 1953 by Kuwait to invest surplus oil revenue, stood virtually alone for many years. But since 2005, twelve new SWFs have been created.

148. See Gerard Lyons, *State Capitalism: The Rise of Sovereign Wealth Funds*, 14 L. & BUS. REV. AM. 179, 189 (2008).

significant source of capital for U.S. private companies.<sup>149</sup> Like U.S. multinationals, foreign companies (in Europe and Japan, for example) do not operate under constraints when expanding their businesses. In fact, the significant disclosure obligations under the U.S. securities laws (such as the 5% reporting threshold and the 10% short-swing profit rules under the Securities Exchange Act of 1934)<sup>150</sup> encourage foreign companies to acquire full 100% ownership rather than partial ownership.

## 2. Portfolio Allocation in Practice

Anecdotal information about SWFs is easy to find, but reliable data is much more difficult. Few funds disclose financial information or investment policies. Nonetheless, the consensus estimate is that SWF assets worldwide total about \$2.5 trillion.<sup>151</sup>

Lack of transparency makes it difficult to determine how SWFs are invested. Norway's Government Pension Fund (the second largest SWF) has been held out as a model for its transparency, but few other SWFs, especially those of the Gulf states, have followed Norway's lead. A report by the IMF summarizes SWF investment strategies:

SWFs are a heterogeneous group of investors that apply a wide range of investment strategies reflecting their different objectives. When executing their strategic asset allocation (SAA), some SWFs invest solely in publicly-listed financial assets (e.g., bonds and equities), while others invest across all major asset classes, including alternative investments. Some SWFs invest relative to market indices and sometimes put additional caps on the maximum holding of each company's shares with a view to ensuring diversification. Other SWFs that aim at maximizing absolute returns over longer time horizons may shift between different asset classes and acquire larger stakes in specific companies that they see as profitable investments. It is unclear how active a role they have in these companies. However, the evidence suggests that SWF are generally passive and long-term investors with no desire to impact company decisions by actively using their voting rights. Some apply social responsibility or ethical guidelines to rule out specific industries (e.g., tobacco, military) that may not conform with the social and ethical objectives of their governments.<sup>152</sup>

---

149. Goodman & Story, *supra* note 146, at A1.

150. 15 U.S.C. § 78p (2009).

151. Estimates of worldwide SWF assets range from \$1.9 trillion to \$3.3 trillion. *See* Lyons, *supra* note 148, at 189 (The IMF estimates between \$1.9 and \$2.9 trillion); *see also* Fed. Reserve Bd. of San Francisco Economic Letter, *Sovereign Wealth Funds: Stumbling Blocks or Stepping Stones to Financial Globalization?* (Dec. 14, 2007), available at <http://www.frbf.org/publications/economics/letter/2007/el2007-38.html> (estimating SWF assets between \$1.5 and \$2.5 trillion); Veljko Fotak, Bernardo Bortolotti & William Megginson, *The Financial Impact of Sovereign Wealth Fund Investments in Listed Companies* (2008), available at <http://ssrn.com/abstract=1108585> (estimating value at \$3.3 trillion).

152. INTERNATIONAL MONETARY FUND, SOVEREIGN WEALTH FUNDS – A WORK AGENDA (2008), available at [www.imf.org/external/np/pp/eng/2008/022908.pdf](http://www.imf.org/external/np/pp/eng/2008/022908.pdf).

Virtually absent from the scant information on foreign investment practices is any indication of a shift toward private assets. For example, estimates of portfolio holdings in SWFs of the Gulf Cooperation Council countries as of 2007 were \$300 billion in U.S. equities, \$360 billion in bonds and deposits, and \$130 billion in alternatives.<sup>153</sup> Specifically, allocations for the Abu Dhabi fund in U.S. dollar assets have been estimated at 70–85% in public equity and fixed income and 15–28% in private assets, including private equity, real estate, and alternatives.<sup>154</sup>

### 3. Conclusion

Foreign investors—both private and sovereign—may be the wild card in the public-private capital pendulum. Although private foreign institutions (banks and mutual funds) have regulatory limits that compel investment in public markets, SWFs face the curious problem of having capital that may be unsuited for private companies. With the expectation that private equity investors bring management expertise to the enterprise, SWFs have yet to prove their suitability.

### G. ENDOWMENT FUNDS

In 2005, endowment funds invested by charitable foundations and educational institutions held \$1.3 trillion in assets.<sup>155</sup> Endowments, which are typically subject to little regulation beyond their institution-specific restrictions, invest in a wide array of assets and thus offer a textbook experiment in balancing risk and return.<sup>156</sup> More than any other category of institutional investor, endowments have moved into private capital markets, though with a continuing and steady presence in public markets.<sup>157</sup>

#### 1. Portfolio Allocation Rules

Endowments are unique among institutional investors because of their unusual combination of characteristics: defined spending rules (similar to pension funds), tax exemption (similar to public pension funds), absence of a safety net (unlike private pension plans), and aim to preserve capital indefinitely (unlike any other institution). Given their relatively unrestricted ability to pursue investment strategies and allocations, endowments reveal

---

153. Brad Setser & Rachel Ziemba, *Understanding the New Financial Superpower: The Management of GCC Official Foreign Assets* 14 (Dec. 2007), available at [http://www.cfr.org/content/publications/attachments/SetserZiemba\\_GCCfinal.pdf](http://www.cfr.org/content/publications/attachments/SetserZiemba_GCCfinal.pdf).

154. *Id.*

155. Keith Brown, Lorenzo Garlappi & Cristian Tiu, *The Troves of Academe: Asset Allocation, Risk Budgeting and the Investment Performance of University Endowment Funds*, at 1, Aug. 2007, available at <http://ssrn.com/abstract=981436>.

156. *Id.* at 2.

157. See generally FRONTIER CAPITAL MANAGEMENT, *INVESTING LIKE HARVARD AND YALE ENDOWMENT FUNDS* (2007), [http://www.seasholes.com/files/Frontier\\_-\\_Investing\\_like\\_Harvard\\_and\\_Yale.pdf](http://www.seasholes.com/files/Frontier_-_Investing_like_Harvard_and_Yale.pdf).

the pressures to re-allocate portfolios to private assets, in search of higher returns.<sup>158</sup>

University endowments (for which detailed information is available) are typically managed with a combination of both passive and active strategies. University boards, for example, will often set allocation targets for outside money managers.<sup>159</sup> The money managers (such as the Harvard Management Company) then invest in various asset classes according to the allocation targets set by the university board.<sup>160</sup> Whether managed passively or actively, most endowment assets are managed by outside managers, who play an important role in asset allocation.<sup>161</sup>

## 2. Portfolio Allocation in Practice

The annual survey of university endowments, conducted by the National Association of College and University Business Officers, reveals that university endowments have moved decidedly from public to private assets.<sup>162</sup> Allocation of private assets—which includes real estate, hedge funds, venture capital, private equity and natural resources—has increased from 3.3% in 1990 to 20.2% in 2007, with the ratio of public/private investments changing from 96–4 to 79–21 over the same period:

---

158. Brown, Garlappi & Tiu, *supra* note 155, at 1–2.

159. *Id.* at 5–6.

160. *Id.* at 5.

161. Josh Lerner, Antoinette Schoar & Jialan Wang, *Secrets of the Academy: The Drivers of University Endowment Success* 4 (MIT Sloan School Working Paper 4698-08, 2007), available at <http://ssrn.com/abstract=1027450>.

162. Brown, Garlappi & Tiu, *supra* note 155, at 39.

**Table 8**<sup>163</sup>  
**Endowment Funds (by allocation of investment funds)**

	Endowment Funds (by allocation of investment funds)				
	1990	1995	2000	2005	2007
Public (equity and debt)	85.4%	84.8%	85.7%	79.8%	76.2%
Private	3.3%	8.7%	10.3%	16.8%	20.2%
Cash	10.3%	6.5%	4.0%	3.4%	3.5%

The move to private assets from 1990 to 2007 has come at the expense of cash positions, which fell in the period from 10.3% to 3.5%, and publicly-traded fixed income investments, which fell from 35.6% to 18.6%.<sup>164</sup> Of the private assets, hedge fund investments have had the largest growth, increasing from 0.3% to 10.6% of endowment assets.<sup>165</sup> Private equity increased more modestly from 0.2% to 2.3% of university endowment assets.<sup>166</sup>

Endowment size has affected portfolio allocation, with larger university endowments allocating their portfolios to a wider array of asset classes and thus earning significantly higher returns.<sup>167</sup> Investments in hedge funds and private equity, which now constitute 12.9% of endowment assets, have been

---

163. *Id.* A more complete breakdown including the specific classes of private assets, shows the rise of investments in hedge funds and private equity:

	Endowment Funds				
	1990	1995	2000	2005	2007
Public equity	49.8%	54.8%	62.3%	58.4%	57.6%
Fixed income	35.6%	30.0%	23.4%	21.4%	18.6%
Real estate	2.9%	2.1%	1.9%	3.2%	3.5%
Cash	10.3%	6.5%	4.0%	3.4%	3.5%
Hedge funds	0.3%	1.6%	0.7%	8.9%	10.6%
Venture capital	0.6%	0.7%	2.4%	0.8%	0.9%
Private equity	0.2%	0.2%	1.0%	1.6%	2.3%
Natural resources	0.2%	0.3%	0.3%	1.0%	1.6%
Other	0.0%	3.9%	4.0%	1.4%	1.4%

164. *Id.*

165. *Id.*

166. *Id.*

167. Lerner, Schoar & Wang, *supra* note 161. For example, Yale University's endowment has come to hold less of its portfolio in public equities (28% percent in 2007), while increasing its allocation to private equity. YALE UNIVERSITY INVESTMENTS OFFICE, THE YALE ENDOWMENT 11 (2007), available at [http://www.yale.edu/investments/Yale\\_Endowment\\_07.pdf](http://www.yale.edu/investments/Yale_Endowment_07.pdf). Wake Forest's endowment, much smaller than that of Yale's (though often regarded as a model for smaller endowments), held 38% of its portfolio in public equities, reflecting the phenomenon that investment in public equities is inversely proportional to endowment size. WAKE FOREST UNIVERSITY, ANNUAL REPORT 2006-7, at 22 T.6 (2007), available at <http://www.wfu.edu/fas/reports/06-07finreport.pdf>. See also Rebecca Buckman, *Venture Firms vs. Investors: Yale and the Like Quietly Cite Pressure to Back Offbeat Funds*, WALL ST. J., Aug. 28, 2007, at C1.



concentrated in larger endowments, which have the connections, the asset base and the investment time horizon to make large, longer-term commitments.<sup>168</sup> Larger endowment funds, in main part because of their higher returns, have grown dramatically over the last fifteen years.<sup>169</sup> This has been widely attributed to the use of private assets by endowments, which, as 2008 has shown, may not have been worth the risk.

Despite the move to private assets, university endowments remain firmly rooted in public equity, which actually increased proportionally in their portfolios from 49.8% in 1990 to 57.6% in 2007—reflecting in part the strong equity returns of the 1990s.<sup>170</sup> Public equity, following the trend of other institutional investors, has become more international. U.S. public equity investments have declined since 1990, while foreign public equity investments have increased significantly—from 2.3% in 1990 to 12.7% in 2005.<sup>171</sup>

### 3. Conclusion

University endowment funds, unfettered by portfolio allocation standards and more inclined to seek to balance risk and return in a diversified portfolio, have moved more aggressively toward private assets than any of the U.S. institutional investors. Nonetheless, the move has not come at the expense of public equity, as the usual “going private” story tells, but rather at the expense of cash positions and public debt. Moreover, there are indications that the strong move to private assets may have reached a natural limit.<sup>172</sup>

Overall, investment by endowments reflects a propensity to stay in the public markets, even as some endowments have increased their allocation to private markets. Small endowments need public markets because they are not ready to be players in private equity and hedge funds. And the larger endowments, after moving aggressively into private assets, seem to be tapering off—the more recent increases in private assets a result of their stronger returns and not increased allocation. The current decline in the returns on hedge fund investments portends an allocation to private assets of no more than 20% going forward—hardly an abandonment of public assets.

---

168. See Lerner, Schoar & Wang, *supra* note 161, at 4.

169. *Id.* at 3. For example, in 2005, the endowments of the Ivy Plus schools (Ivy League, Duke, Stanford, CalTech, and MIT) earned 14%, as compared to 9% for other schools.

170. See National Association of College and University Business Officers, Average Asset Class Allocation of Total Assets (2008), available at [http://www.nacubo.org/documents/research/Average%20Asset%20Allocation%20of%20Total%20Assets\\_2007%20NES.pdf](http://www.nacubo.org/documents/research/Average%20Asset%20Allocation%20of%20Total%20Assets_2007%20NES.pdf).

171. *Id.*

172. Harvard, after losing 22% in the first four months of fiscal 2008, estimated total losses for the year at 30% reflecting revaluation of real estate holdings and private assets. John Hechinger and Craig Karmin, *Harvard Hit by Loss as Crisis Spreads to Colleges*, WALL ST. J., Dec. 4, 2008, at A1.

#### IV. CONCLUSION: STAYING PUBLIC

Institutional investors, far from being a free radical capable of rebalancing their portfolios at will, are legally and culturally captives of public markets. There is little reason to believe this will change, unless public assets somehow are shown to be clearly inferior (over a significant time period) compared to private assets. At most, private capital markets have over the past several years been exploring their boundaries—as they do with some regularity. There is little reason to think they will swallow or even come close to challenging the dominance of public markets.

Certainly, the evidence of the past ten years indicates there has been no institutional tidal shift toward private assets. While some institutional investors have allocated more of their portfolios to private assets (public pension funds, endowments, and perhaps foreign institutions), others have allocated less of their portfolios (private pension funds, insurance companies, and perhaps financial institutions). And the largest institutional category (mutual funds) has not wavered in its nearly complete allocation to public assets.

On one hand, it might be argued that the failure of institutional investors to move more strongly into private assets is simply (and regrettably) a matter of regulatory constraint. Arguments have been made that some institutional investors, such as insurance companies, are stodgy captives of a “permitted investments” mentality that deprives their beneficiaries of the safer, stronger returns that diversification through private assets brings to an investment portfolio. But even as SWFs and endowments, unconstrained by regulation and adherents to modern portfolio theory, have moved into private assets, their move has been tepid. Public assets, particularly public equity, appear to remain the bulwark in their diversified portfolios.

Moreover, even if the regulatory constraints on institutional asset allocation were broadly lifted, it is unclear whether the supply side of the capital markets would rush toward private assets. Already many institutional investors have the regulatory freedom to move toward private assets, but have not. Mutual funds, perhaps because of liquidity concerns and perhaps because of customer demand, have remained bound to public assets, despite SEC policy that permits them to invest significantly more in private assets. And other institutional investors that are subject to “permitted investment” regulation have not tested the allocation caps for private assets.

In the end, given the current shakeout in the credit markets—which has dramatically exposed the risks of investing in non-transparent private assets—it is unclear that private markets offer significantly different risk-return opportunities compared to those available in public markets. In fact, many companies that have “gone private” by moving from public equity to

private equity have remained in the public debt markets because of institutional investor demand.

Institutional investors (the supply side of the U.S. capital markets) have exhibited a strong preference for investments in public companies—and the market and regulatory protections such investments imply. From appearances, public markets are here to stay.

**Exhibit 1**  
**Asset Allocations of Notable Public Pension Funds**

**CalPERS<sup>173</sup>**

Domestic Equity	40.0%
Domestic Fixed Income	22.3%
International Equity	19.5%
International Fixed Income	2.3%
Cash	1.4%
Alternative Investment/Private Equity	6.7%
Real Estate	8.0%

**New York State Retirement<sup>174</sup>**

Domestic Equity (Publicly Traded)	42.2%
Private Equity	6.5%
Absolute Return	3.0%
Real Estate	4.4%
Global Equity	16.1%
Bonds, Cash, Mortgages	20.9%
Inflation Indexed Bonds	6.9%

**Ohio Public Employee Retirement System<sup>175</sup>**

Domestic Equity	43.8%
Real Estate	4.7%
Private Equity	1.7%
International Equity	20.3%
U.S. Fixed Income	25.7%
International Fixed Income	2.0%
Cash Equivalents	1.8%

---

173. CALIFORNIA PUBLIC EMPLOYEES RET. SYS., COMPREHENSIVE ANNUAL FIN. REPORT: YEAR ENDED JUNE 30, 2007 (2007), at 16, *available at* <http://www.calpers.ca.gov/invest/investmentreport-2007/>.

174. N.Y. STATE AND LOCAL RET. SYS., COMPREHENSIVE ANNUAL FIN. REPORT: FOR FISCAL YEAR ENDED MARCH 31, 2007 (2007), at 62, *available at* [http://www.osc.state.ny.us/retire/word\\_and\\_pdf\\_documents/publications/cafr/cafr\\_07.pdf](http://www.osc.state.ny.us/retire/word_and_pdf_documents/publications/cafr/cafr_07.pdf).

175. OHIO PUB. EMPLOYEES RET. SYS., THE COMPREHENSIVE ANNUAL FIN. REPORT: FOR THE YEARS ENDED DECEMBER 31, 2006 AND 2005 (2007), at 68, *available at* <https://www.opers.org/pubs-archive/investments/cafr/2007-cafr-hires.pdf#zoom=80>.

**North Carolina Retirement System**<sup>176</sup>

Fixed Income	35.5%
Domestic Equity	40.0%
International Equity	17.0%
Real Estate	4.5%
Alternatives	2.9%

**New York City Employee Retirement System**<sup>177</sup>

Domestic Equity	46.8%
Domestic Fixed Income	30.3%
International Equity	18.6%
Alternative Investments	4.3%

**New Jersey PERS**<sup>178</sup>

Domestic Equities	41.7%
Domestic Fixed Income	26.1%
International Equities	22.8%
International Fixed Income	1.3%
Commodity Linked Notes	0.7%
Police and Fireman's Mortgages	1.6%
Private Equity	1.5%
Real Estate	1.3%
Absolute Return Strategy Funds	3.1%

---

176. N.C. DEP'T OF THE STATE TREASURER, THE STATE TREASURER'S ANNUAL REPORT TO THE PEOPLE OF N.C. (2007), at 27, *available at* <http://www.nctreasurer.com/NR/rdonlyres/BCF46334-5821-4819-B2AF9DC2E29FB3EF/0/NCREPORTweb.pdf>.

177. N.Y. CITY EMPLOYEES' RET. SYS. & N.Y. CITY PUB. EMPLOYEES' GROUP LIFE INS. PLAN, COMPREHENSIVE ANNUAL FIN. REPORT (2007), at 99, *available at* [http://www.nycers.org/Pdf/cafr/2007/NYCERS\\_Final.pdf](http://www.nycers.org/Pdf/cafr/2007/NYCERS_Final.pdf).

178. STATE OF N.J., PUB. EMPLOYEES' RET. SYS.: FIN. STATEMENTS AND SCHEDULES (2007), at 15, *available at* [http://www.state.nj.us/treasury/pensions/2007\\_cafr\\_audit\\_report.pdf](http://www.state.nj.us/treasury/pensions/2007_cafr_audit_report.pdf).