

Report to Congressional Requesters

August 2008

DEFINED BENEFIT PENSION PLANS

Guidance Needed to Better Inform Plans of the Challenges and Risks of Investing in Hedge Funds and Private Equity





Highlights of GAO-08-692, a report to congressional requesters

Why GAO Did This Study

Millions of retired Americans rely on defined benefit pension plans for their financial well-being. Recent reports have noted that some plans are investing in 'alternative' investments such as hedge funds and private equity funds. This has raised concerns, given that these two types of investments have qualified for exemptions from federal regulations, and could present more risk to retirement assets than traditional investments.

To better understand this trend and its implications, GAO was asked to examine (1) the extent to which plans invest in hedge funds and private equity; (2) the potential benefits and challenges of hedge fund investments; (3) the potential benefits and challenges of private equity investments; and (4) what mechanisms regulate and monitor pension plan investments in hedge funds and private equity.

To answer these questions GAO interviewed relevant federal agencies, public and private pension plans, industry groups and investment professionals, and analyzed available survey data.

What GAO Recommends

GAO recommends that the Secretary of Labor provide guidance on investing in hedge funds and private equity that describes steps plans should take to address the challenges and risks of these investments. Labor generally agreed with our findings and recommendation.

To view the full product, including the scope and methodology, click on GAO-08-692. For more information, contact Barbara Bovbjerg at (202) 512-7215 or bovbjergb@gao.gov, or Orice Williams at (202) 512-8678 or williamso@gao.gov.

DEFINED BENEFIT PENSION PLANS

Guidance Needed to Better Inform Plans of the Challenges and Risks of Investing in Hedge Funds and Private Equity

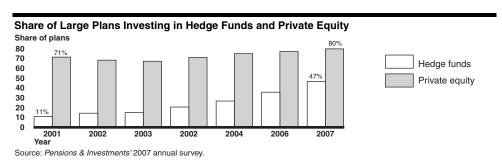
What GAO Found

According to several recent surveys of private and public sector plans, investments in hedge funds and private equity generally comprise a small share of total plan assets, but a considerable and growing number of plans have such investments. Available survey data of mid to large-size plans indicate that between 21 and 27 percent invest in hedge funds while over 40 percent invest in private equity; such investments are more prevalent among larger plans, as shown below. The extent of investment in hedge funds and private equity by plans with less than \$200 million in total assets is unknown.

Pension plans invest in hedge funds to obtain a number of potential benefits, such as returns greater than the stock market and stable returns on investment. However, hedge funds also pose challenges and risks beyond those posed by traditional investments. For example, some investors may have little information on funds' underlying assets and their values, which limits the opportunity for oversight. Plan representatives said they take steps to mitigate these and other challenges, but doing so requires resources beyond the means of some plans.

Pension plans primarily invest in private equity funds to attain returns superior to the stock market. Pension plan officials GAO spoke with generally had a long history of investing in private equity and said such investments have met expectations for returns. However, these investments present several challenges, such as wide variation in performance among funds, and the resources required to mitigate these challenges may be too substantial for some plans.

The federal government does not specifically limit or monitor private sector plan investment in hedge funds or private equity, and state approaches to public plans vary. Under federal law, fiduciaries must comply with a standard of prudence, but no explicit restrictions on hedge funds or private equity exist. Although a federal advisory council recommended that the Department of Labor (Labor) develop guidance for plans to use in investing in hedge funds, Labor has not yet done so. While most states also rely on a standard of investor prudence, some also have legislation that restricts or prohibits plan investment in hedge funds or private equity. For example, one state prohibits plans below a certain size from investing directly in hedge funds.



Contents

Letter		1
	Results in Brief	3
	Background	6
	A Growing Number of Pension Plans Are Investing in Hedge Funds or Private Equity, but Such Investments Are Generally a Small	
	Portion of Plan Assets Pension Plans Seek Various Investment Objectives through Hedge Funds, and Such Investments Pose Challenges That Require Considerable Effort and Expertise to Address Private Equity Investments May Provide Important Benefits, but Pension Plans Face Limited Access to Top-Performing Funds	
	and Other Challenges	31
	The Federal Government Does Not Specifically Limit or Monitor Private Sector Plans' Investments in Hedge Funds and Private	
	Equity, but Some States Do So for Public Sector Plans through	
	Various Approaches Conclusions	40 48
	Recommendation for Executive Action	48 49
	Agency Comments and Our Evaluation	49 49
	Agency Comments and Our Evaluation	40
Appendix I	Objectives, Scope, and Methodology	53
Appendix II	Government Agencies, Industry Organizations,	
	Investment Consulting Firms, and Other	
	Organizations Interviewed	59
Appendix III	Comments from the Department of Labor	61
Appendix IV	Comments from the Pension Benefit Guaranty	
	Corporation	63
Appendix V	GAO Contacts and Staff Acknowledgments	65

Tables		
	Table 1: Extent of DB Plan Investments in Hedge Funds and	
	Private Equity	16
	Table 2: Restrictions on Pension Investments in Hedge Funds and Private Equity Identified by Plan Officials in 11 Selected States	44
	Table 3: Massachusetts Policies on Public Plan Investments in	
	Hedge Funds	46
	Table 4: Number and Size of DB Plans Observed in Recent Surveys	54
	Table 5: List of DB Plans for In-Depth Interviews	55
	Table 6: Criteria Used in Selection of Plans for In-Depth Interviews	56
	Table 7: Ten States with the Largest Total Public DB Pension Plan	
	Assets	57
Figures		
	Figure 1: Structure of Private Equity Investing	12
	Figure 2: The Number of Plans with Investments in Hedge Funds or	
	Private Equity by Size of Investment as a Share of Total	
	Plan Assets	14
	Figure 3: Share of Large DB Plans Investing in Hedge Funds and	
	Private Equity	17
	Figure 4: Pension Plans with Investments in Hedge Funds and	
	Private Equity by Size of Total Plan Assets	19
	Figure 5: Effect of Hedge Fund Fee Structure on the Returns of an	25
	Investment of \$50 Million	25
	Figure 6: Returns from a Private Equity Fund Generally Follow a J- Curve Trend over the 10-Year Fund Cycle	36
	Ourve frend over the 10-fear rund Cycle	90

Abbreviations

DB

DC	defined contribution
EBSA	Employee Benefits Security Administration
ERISA	Employee Retirement Income Security Act of 1974
NASRA	National Association of State Retirement Administrators
PBGC	Pension Benefit Guaranty Corporation
PERAC	Public Employee Retirement Administration Commission

SEC U.S. Securities and Exchange Commission SFAS Statement of Financial Accounting Standards

S&P Standard and Poor's

TRS Teacher Retirement System of Texas

defined benefit

This is a work of the U.S. government and is not subject to copyright protection in the United States. The published product may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.



United States Government Accountability Office Washington, DC 20548

August 14, 2008

Congressional Requesters

Millions of Americans rely on defined benefit pension plans for their financial well-being after their working years. In order to pay promised retirement benefits when due at an acceptable cost, employers must make adequate contributions to these funds and plan fiduciaries must invest the fund balance in assets that yield an adequate rate of return over time. Historically, public and private sector pension plans have primarily invested in traditional investments such as stocks and bonds; however, recent press reports indicate that plans are increasingly investing in "alternative" investments such as hedge funds and private equity funds.

While there is no statutory definition of hedge funds, the phrase "hedge fund" is commonly used to refer to a pooled investment vehicle that is privately organized and administered by professional managers, and that often engages in active trading of various types of securities and commodity futures and options contracts. Similarly, private equity funds are not statutorily defined, but are generally considered privately managed investment pools administered by professional managers, who typically make long-term investments in private companies, taking a controlling interest with the aim of increasing the value of these companies through such strategies as improved operations or developing new products. Both hedge funds and private equity funds may be managed so as to be exempt from certain aspects of federal securities law and regulation that apply to other investment pools such as mutual funds.

Pension plan investments in hedge funds and private equity have been controversial for a number of reasons. While hedge funds investments are made mainly by relatively wealthy individuals and institutional investors, the recent increase in pension plan investments in hedge funds indirectly

¹A defined benefit (DB) pension plan generally provides benefits in the form of a guaranteed retirement benefit, the value of which is typically determined by a formula based on salary and years of service.

²A futures contract is an agreement to buy or sell a specific amount of a commodity or financial instrument at a particular price on a stipulated future date. An option is a securities transaction agreement tied to stocks, commodities, or stock indexes.

exposes people of modest incomes to the risks of hedge fund investing. This has been cited as a concern because a pension plan that experiences substantial losses as a result of a hedge fund investment may be unable to meet its obligations to pensioners. The perceived riskiness of hedge funds and the collapse of some of these funds in recent years have led some industry experts and union officials to express concern about plan investments in such vehicles, including the appropriate steps plan officials should take in conducting proper due diligence. A further cause for their concern is the ability of hedge funds and private equity funds to qualify for exemptions from certain aspects of federal securities law and regulations that apply to other investment pools.

In order to better understand the extent to which defined benefit pension plans invest in hedge funds and private equity and the implications of such investments for the security of pension plan assets, you asked us to examine the extent and nature of defined benefit pension plans' investments in these alternative investments. Specifically, you asked us to address the following questions:

- 1. To what extent do public and private sector pension plans invest in hedge funds and private equity funds?
- 2. What are the potential benefits, risks, and challenges pension plans face in making hedge fund investments, and how do plans address the risks and challenges?
- 3. What are the potential benefits, risks, and challenges pension plans face in making private equity fund investments, and how do plans address the risks and challenges?
- 4. What mechanisms regulate and monitor pension plan investments in hedge funds and private equity funds?

To answer these questions, we reviewed relevant literature and survey data and conducted in-depth interviews with pension plan representatives and industry experts. We obtained and analyzed data on the extent of pension plan investments in hedge funds and private equity from private organizations such as Greenwich Associates, *Pensions & Investments*, and Pyramis Global Advisors. Although these surveys had several limitations— for example, the survey data generally represent the holdings of larger pension plans—we determined they were sufficiently reliable for purposes of our study. To answer the second and third questions, we conducted in-depth interviews with representatives of 26 public and

private sector DB pension plans and, where possible, obtained and reviewed supporting documentation. These plans were selected based on several criteria, including the range of investment in hedge funds and private equity and the amount of total plan assets. We also interviewed officials of regulatory agencies, relevant industry organizations, investment consulting firms, and other national experts. To identify state and federal regulatory and monitoring policies, we interviewed officials at the Department of Labor (Labor) and representatives of relevant agencies in selected states, and reviewed relevant policy documents. We contacted regulators in 11 states, including the 10 states with the largest amount of public pension assets according to the National Association of State Retirement Administrators (NASRA) Public Funds Survey data.³

We conducted this performance audit from June 2007 to July 2008, in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Results in Brief

While hedge fund and private equity fund investments generally comprise a limited share of total plan assets, a considerable and growing number of private and public DB plans make such investments. According to available survey data, which generally reflect the holdings of larger DB plans, average allocations to hedge funds and private equity in 2007 were around 4 percent and 5 percent of total plan assets, respectively. However, according to one survey, a few pension plans had relatively large allocations of about 30 percent to hedge funds, while one public plan had an allocation of about 20 percent to private equity. Available survey data indicate that from about 21 to 27 percent of mid- to large-size pension plans invested in hedge funds in 2006, while just over 40 percent invested in private equity. Although investments in private equity remain more prevalent than hedge fund investments among both private and public pension plans surveyed, the number of plans investing in hedge funds has increased in recent years more than for private equity funds. Investments in hedge funds and private equity are more common among large pension

³We contacted the following states: California, Florida, Illinois, Massachusetts, New Jersey, New York, North Carolina, Pennsylvania, Ohio, Texas, and Wisconsin.

plans, measured by assets under management, compared to mid-size plans. For example, about 16 percent of plans with \$250 to \$500 million were invested in hedge funds, while 29 percent of plans with \$1 billion or more had such investments, according to a 2006 survey. Similarly, for private equity, 16 percent of plans with \$250 - \$500 million had such investments compared to 77 percent of plans with \$1 billion or more in 2006. Survey data on plans with less than \$200 million in assets are unavailable and, in their absence, the extent to which these plans invest in hedge funds or private equity is unknown.

Pension plans invest in hedge funds to obtain various benefits, but some characteristics of hedge funds also pose challenges that demand greater expertise and effort than more traditional investments, which some plans may not be able to fully address. Pension plans told us that they invest in hedge funds in order to achieve one or more of several goals, including steadier, less volatile returns, obtaining returns greater than those expected in the stock market, or diversification of portfolio investments. Pension plan officials we spoke with about hedge fund investments all said these investments had generally met or exceeded expectations. However, at the time of our contact in 2007, several plan officials noted that their hedge fund investments had not yet been tested under stressful economic conditions, such as a significant stock market decline. Further, some indicated mixed experiences with hedge fund investments. At the time of our discussions, however, officials of each plan interviewed indicated that they expected to maintain or increase the share of assets invested in hedge funds. Nonetheless, hedge fund investments pose investment challenges beyond those posed by traditional investments in stocks and bonds. These additional challenges include: (1) the inherent risks of relying on the skill and techniques of the hedge fund manager; (2) limited information on a hedge fund's underlying assets and valuation (limited transparency); (3) contract provisions which limit an investor's ability to redeem an investment in a hedge fund for a defined period of time (limited liquidity); and 4) the possibility that a hedge fund's active or risky trading activity will result in losses due to operational failure such as trading errors or outright fraud (operational risk). Although there are challenges of hedge fund investing, plan officials and others described steps to address these and other challenges. For example, plan officials and others told us that it is important to negotiate key investment terms and conduct a thorough "due diligence" review of prospective hedge funds, including review of a hedge fund's operational structure. Further, pension plans can invest in funds of hedge funds, which charge additional fees but provide diversification and the additional skill of the fund of funds manager. According to plan officials and others, some of these steps require

considerably greater effort and expertise from fiduciaries than is required for more traditional investments, and such steps may be beyond the capabilities of some pension plans, particularly smaller ones.

Pension plans invest in private equity primarily in expectation of higher rates of return than traditional investments, but these investments too pose challenges that require substantial effort and expertise to address. The major benefits pension plans seek from private equity investments are long-term returns in excess of stocks and, to a lesser degree, to further diversify the plan's portfolio. Pension plan officials we spoke with generally had longer experience investing in private equity than in hedge funds—in some cases over 20 years—and each plan's representatives indicated these investments have met expectations and most expressed plans to maintain or increase their allocations. Nevertheless, investments in private equity present distinct challenges and risks beyond those faced with traditional investments. These include: (1) the variation of performance among private equity funds, which is greater than for other asset classes, and the difficulty of gaining access to recognized topperforming funds; (2) longer-term commitments of 10 years or more, during which the pension plan may not be able to redeem its investment; and (3) valuation of the investment, which is difficult to assess prior to the sale of underlying holdings. As with hedge funds, taking steps to mitigate the challenges of investing in private equity funds requires greater expertise and effort than making traditional investments. Plans told us that, as a part of their due diligence and ongoing monitoring efforts, they regularly reviewed reports on the performance of the underlying investments of the private equity fund and held periodic meetings with fund managers. As with hedge funds, the extensive amount of monitoring required for private equity investments may be impractical for pension plans that have more limited resources, such as smaller plans.

The federal government does not specifically limit or monitor private sector pension investment in hedge funds or private equity and, while some states do so for public plans, their approaches vary. Under the Employee Retirement and Income Security Act (ERISA), plan fiduciaries are expected to meet general standards of prudent investing and no specific restrictions on investments in hedge funds or private equity have been established. Labor is tasked with helping to ensure plan sponsors meet their fiduciary duties; however, it does not currently provide any guidance specific to pension plan investments in hedge funds or private equity. Conversely, some states do specifically regulate and monitor public sector pension investment in hedge funds and private equity, but these approaches vary from state to state. While states generally have adopted a

"prudent man" standard similar to that in ERISA, some states also explicitly restrict or prohibit pension plan investment in hedge funds or private equity. For instance, in Massachusetts, the agency overseeing public plans will not permit plans with less than \$250 million in total assets to invest directly in hedge funds. Some states have detailed lists of authorized investments that exclude hedge funds and/or private equity. Other states may limit investment in certain investment vehicles or trading strategies employed by hedge fund or private equity fund managers. While some guidance exists for hedge fund investors, specific guidance aimed at pension plans could serve as an additional tool for plan fiduciaries when assessing whether and to what degree hedge funds would be a prudent investment.

To ensure that all plan fiduciaries can better assess their ability to invest in hedge funds and private equity, and to ensure that those that choose to make such investments are better prepared to meet these challenges, we recommend that the Secretary of Labor provide guidance on investing in hedge funds and private equity specifically designed for qualified plans under ERISA. In responding to a draft of this report, Labor generally agreed with our findings and recommendation.

Labor and other federal agencies also provided technical comments on the draft report, which we have incorporated where appropriate.

Background

Millions of current and future retirees rely on private or public DB pension plans, which promise to pay retirement benefits that are generally based on an employee's salary and years of service. The financial condition of these plans—and hence their ability to pay promised retirement benefits when such benefits are due—depends on adequate contributions from employers and, in some cases, employees, as well as prudent investments that preserve principal and yield an adequate rate of return over time. The plan sponsor must make required contributions to the plan that are intended to ensure it is adequately funded to pay promised benefits. To maintain and increase plan assets, fiduciaries of public and private sector pension plans invest in assets that are expected to grow in value or yield income. In making investments, DB plan managers consider a plan's benefit payment requirements and balance the desire to maximize return on investment and the desire to limit the overall risk to the investment portfolio to an acceptable level. In doing so, plan fiduciaries invest in various categories of assets classes, which traditionally have consisted mainly of stocks and bonds. Stocks offer relatively high expected longterm returns at the risk of considerable volatility, that is, the likelihood of

significant short-term losses or gains. On the other hand, bonds and other fixed income investments offer a steady income stream and relatively low volatility, but lower expected long-term returns. Different proportions of these two asset classes will, therefore, provide different degrees of risk and expected return on investment. Pension fiduciaries may also invest in other asset classes or trading strategies, such as hedge funds and private equity, which are generally considered to be riskier investments, so long as such investments are prudent.

Private sector pension plan investment decisions must comply with the provisions of ERISA, which stipulates fiduciary standards based on the principle of a prudent man standard. Under ERISA, plan sponsors and other fiduciaries must (1) act solely in the interest of the plan participants and beneficiaries and in accordance with plan documents; (2) invest with the care, skill, and diligence of a prudent person with knowledge of such matters; and (3) diversify plan investments to minimize the risk of large losses. Under ERISA, the prudence of any individual investment is considered in the context of the total plan portfolio, rather than in isolation. Hence, a relatively risky investment may be considered prudent, if it is part of a broader strategy to balance the risk and expected return to the portfolio. In addition to plan sponsors, under the ERISA definition of a fiduciary, any other person that has discretionary authority or control over a plan asset is subject to ERISA's fiduciary standards. The Employee Benefit Security Administration (EBSA) at Labor is responsible for enforcing these provisions of ERISA, as well as educating and assisting retired workers and plan sponsors. Another federal agency, the Pension Benefit Guaranty Corporation (PBGC), collects premiums from federally insured plans in order to insure the benefits of retirees if a plan terminates without sufficient assets to pay promised benefits.

⁴ERISA's prudent man standard is satisfied if the fiduciary has given appropriate consideration to the following factors (1) the composition of the plan portfolio with regard to diversification of risk; (2) the volatility of the plan investment portfolio with regard to general movements of investment prices; (3) the liquidity of the plan investment portfolio relative to the funding objectives of the plan; (4) the projected return of the plan investment portfolio relative to the funding objectives of the plan; and (5) the prevailing and projected economic conditions of the entities in which the plan has invested and proposes to invest. 29 C.F.R. § 2550.404a-1(b) (2007).

⁵Under ERISA, a fiduciary is a person who (1) exercises discretionary authority or control over plan management or any authority or control over plan assets; (2) renders investment advice regarding plan moneys or property for direct or indirect compensation; or (3) has discretionary authority or responsibility for plan administration. 29 U.S.C. §1002(21).

In the public sector, governments have established pension plans at state, county, and municipal levels, as well as for particular categories of employees, such as police officers, fire fighters, and teachers. The structure of public pension plan systems can differ considerably from state to state. In some states, most or all public employees are covered by a single consolidated DB retirement plan, while in other states many retirement plans exist for various units of government and employee groups. Public sector DB plans are not subject to funding, vesting and most other requirements applicable to private sector DB plans under ERISA, but must follow requirements established for them under applicable state law. While states generally have adopted standards essentially identical to the ERISA prudent man standard, specific provisions of law and regulation vary from state to state. Public plans are also not insured by the PBGC, but could call upon state or local taxpayers in the event of a funding shortfall.

Hedge Funds Use Broad Range of Investment Strategies to Achieve Desired Return

Although there is no statutory or universally accepted definition of hedge funds, the term is commonly used to describe pooled investment vehicles that are privately organized and administered by professional managers and that often engage in active trading of various types of securities, commodity futures, options contracts, and other investment vehicles. In recent years, hedge funds have grown rapidly. As we reported in January 2008, according to industry estimates, from 1998 to early 2007, the number of funds grew from more than 3,000 to more than 9,000 and assets under management from more than \$200 billion to more than \$2 trillion globally.

Hedge funds also have received considerable media attention as a result of the high-profile collapse of several hedge funds, and consequent losses suffered by investors in these funds. Although hedge funds have the reputation of being risky investment vehicles that seek exceptional returns on investment, this was not their original purpose, and is not true of all hedge funds today. Founded in the 1940s, one of the first hedge funds invested in equities and used leverage and short selling to protect or "hedge" the portfolio from its exposure to movements in the stock

⁶For additional information about hedge funds, see GAO, *Hedge Funds: Regulators and Market Participants Are Taking Steps to Strengthen Market Discipline, but Continued Attention Is Needed*, GAO-08-200 (Washington, D.C.: Jan. 24, 2008).

market.⁷ Over time, hedge funds diversified their investment portfolios and engaged in a wider variety of investment strategies. Because hedge funds are typically exempt from registration under the Investment Company Act of 1940, they are generally not subject to the same federal securities regulations as mutual funds. They may invest in a wide variety of financial instruments, including stocks and bonds, currencies, futures contracts, and other assets. Hedge funds tend to be opportunistic in seeking positive returns while avoiding loss of principal, and retaining considerable strategic flexibility. Unlike a mutual fund, which must strictly abide by the detailed investment policy and other limitations specified in its prospectus, most hedge funds specify broad objectives and authorize multiple strategies. As a result, most hedge fund trading strategies are dynamic, often changing rapidly to adjust to market conditions.

Hedge funds are typically structured and operated as limited partnerships or limited liability companies exempt from certain registration, disclosure and other requirements under the Securities Act of 1933, Securities Exchange Act of 1934, Investment Company Act of 1940, and Investment Advisers Act of 1940, that apply in connection to other investment pools, such as mutual funds. For example, to allow them to qualify for various exemptions under such laws, hedge funds usually limit the number of investors, refrain from advertising to the general public, and solicit fund participation only from large institutions and wealthy individuals. The presumption is that investors in hedge funds have the sophistication to understand the risks involved in investing in them and the resources to absorb any losses they may suffer. Although many workers may be impacted by any losses resulting from pension fund investment in hedge funds, a pension plan counts as a single investor that does not prevent a hedge fund from qualifying for the various statutory exemptions.

⁷Leverage involves the use of borrowed money or other techniques to potentially increase an investment's value or return without increasing the amount invested. A short sale is the sale of a security that the seller does not own or a sale that is consummated by the delivery of a security borrowed by, or for, the account of the seller. Short selling is used to profit by a decline in the price of the security.

⁸Ch. 38, tit. I, 48 Stat. 74 (codified at 15 U.S.C. § 77a et seg.).

⁹Ch. 404, 48 Stat. 881 (codified at 15 U.S.C. § 78a et seq.).

¹⁰Ch. 686, tit. I, 54 Stat. 797 (codified as amended at 15 U.S.C. § 80a-1 et seq.).

¹¹Ch. 686, tit. II, 54 Stat. 847 (codified as amended at 15 U.S.C. § 80b-1 et seq.).

Individuals and institutions may also invest in hedge funds through funds of hedge funds, which are investment funds that buy shares of multiple underlying hedge funds. Fund of funds managers invest in other hedge funds rather than trade directly in the financial markets, and thus offer investors broader exposure to different hedge fund managers and strategies. Like hedge funds, funds of funds may be exempt from various aspects of federal securities and investment law and regulation.

Private Equity Funds
Obtain Returns from
Manager Skill and
Investing Capital in a
Limited Number of Private
Firms

Like hedge funds, there is no legal or commonly accepted definition of private equity funds, but the term generally includes privately managed pools of capital that invest in companies, many of which are not listed on a stock exchange. Although there are some similarities in the structure of hedge funds and private equity funds, the investment strategies employed are different. Unlike many hedge funds, private equity funds typically make longer-term investments in private companies and seek to obtain financial returns not through particular trading strategies and techniques, but through long-term appreciation based on corporate stewardship, improved operating processes and financial restructuring of those companies, which may involve a merger or acquisition of companies. Private equity is generally considered to involve a substantially higher degree of risk than traditional investments, such as stocks and bonds, for a higher return.¹²

While strategies of private equity funds vary, most funds target either venture capital or buy-out opportunities. Venture capital funds invest in young companies often developing a new product or technology. Private equity fund managers may provide expertise to a fledgling company to help it advance toward a position suitable for an initial public offering. Buyout funds generally invest in larger established companies in order to add value, in part, by increasing efficiencies and, in some cases, consolidating resources by merging complementary businesses or technologies. For both venture capital and buy-out strategies, investors hope to profit when the company is eventually sold, either when offered to the public or when sold to another investor or company. Each private equity fund generally focuses on only one type of investment opportunity, usually specializing in either venture capital or buyout and often

¹²GAO is issuing a forthcoming report on leveraged buyouts by private equity funds.

specializing further in terms of industry or geographical area.¹³ Investment in private equity has grown considerably over recent decades. According to a venture capital industry organization, the amount of capital raised by private equity funds grew from just over \$2 billion in 1980 to about \$207 billion in 2007; while the number of private equity funds grew from 56 to 432 funds over the same time period.

As with hedge funds, private equity funds operate as privately managed investment pools and have generally not been subject to Securities and Exchange Commission (SEC) examinations. Pension plans typically invest in private equity through limited partnerships in which the general partner develops an investment strategy and limited partners provide the large majority of the capital. After creating a new fund and raising capital from the limited partners, the general partner begins to invest in companies that will make up the fund portfolio (see fig. 1). Limited partners have both limited control over the underlying investments and also limited liability for potential debts incurred by the general partners through the fund.

¹³Other less common types of private equity include mezzanine financing, in which investors provide a final round of financing to help carry the company through its initial public offering, and distressed debt investments, in which firms buy companies that have filed for bankruptcy or may do so and then typically liquidate the company.

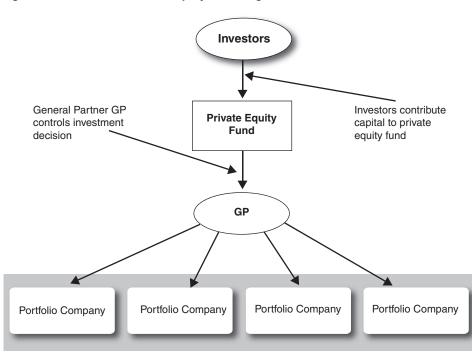


Figure 1: Structure of Private Equity Investing

 $Source: New York \ State \ Common \ Retirement \ Fund \ Division \ of \ Pension \ Investment \ and \ Case \ Management.$

Similar to hedge funds, private equity funds may be structured to qualify for exemptions from certain registration and disclosure requirements of federal securities laws; for example, by refraining from advertising to the general public. The majority of investments in private equity funds come from wealthy individuals and institutional investors, such as endowments, banks, corporations, and pension plans.

A Growing Number of Pension Plans Are Investing in Hedge Funds or Private Equity, but Such Investments Are Generally a Small Portion of Plan Assets According to several recent surveys, investments in hedge funds and private equity are typically a small portion of total plan assets—about 4 to 5 percent on average—but a considerable and growing number of plans invest in them. While investment in hedge funds is less common than private equity, the number of plans with investments in hedge funds has experienced greater growth in recent years. Furthermore, survey data show that larger plans, measured by total plan assets, are more likely to invest in hedge funds and private equity compared to mid-size plans. Survey data on plans with less than \$200 million in assets are unavailable and, thus, the extent to which small plans invest in hedge funds and private equity is unknown.

Investments in Hedge Funds and Private Equity Typically Comprise a Small Share of Total Plan Assets Individual plans' hedge fund or private equity investments typically comprise a small share of total plan assets. According to a *Pensions & Investments* survey of large plans (as measured by total plan assets), the average allocation to hedge funds among plans with such investments was about 4 percent in 2007. Similarly, among plans with investments in private equity, the average allocation was about 5 percent. An earlier survey by Pyramis Global Advisors, which included mid- to large-size plans, found an average allocation of 7 percent for hedge funds and 5 percent for private equity in 2006.

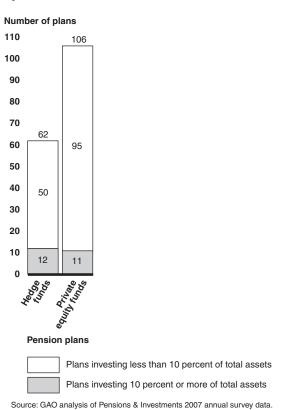
Although the majority of plans with investments in hedge funds or private equity have small allocations to these assets, a few plans have relatively large allocations, according to the *Pensions & Investments* survey (see fig. 2). Of the 62 plans that reported investments in hedge funds in 2007, 12 plans had allocations of 10 percent or more and, of those, 3 plans had

¹⁴We reviewed data from surveys of DB pension plans conducted by three organizations—Greenwich Associates (covering mid- to large-size pension plans, with \$250 million or more in total assets), Pyramis Global Advisors (covering mid- to large-size pension plans, with \$200 million or more in total assets), and *Pensions & Investments* (limited to large plans, which generally had \$1 billion or more in total assets). Greenwich Associates is an institutional financial services consulting and research firm; Pyramis Global Advisors, a division of Fidelity Investments, is an institutional asset management firm; and *Pensions & Investments* is a money management industry publication. These data cannot be generalized to all plans. See appendix I for more information on these surveys.

¹⁵Pensions & Investments was the only survey we reviewed that reported the allocations of individual plans to hedge funds and private equity. Among the top 200 pension plans, ranked by combined assets in DB and defined contribution plans, 133 were DB plans that completed the survey and provided asset allocation information in 2007.

allocations of 20 percent or more. The highest reported hedge fund allocation was 30 percent of total assets. Large allocations to private equity were even less common. A total of 106 surveyed plans reported investments in private equity in 2007, of which 11 plans had allocations of 10 percent or more and, of those, 1 plan had an allocation of about 20 percent.

Figure 2: The Number of Plans with Investments in Hedge Funds or Private Equity by Size of Investment as a Share of Total Plan Assets



While More Pension Plans Invest in Private Equity, the Number of Plans with Investments in Hedge Funds Has Experienced Greater Growth in Recent Years Two recent surveys of pension plans indicate that a considerable number of plans invest in hedge funds or private equity. As seen in table 1, from about 21 to 27 percent of all plans surveyed, which included mid- to large-size plans, held investments in hedge funds as of 2006, according to data from Greenwich Associates and Pyramis. ¹⁶ Both surveys reveal that a greater share of private sector plans invested in hedge funds compared to public sector plans. The Greenwich survey also found that hedge fund investment was most common among collectively bargained plans, although the number of these plans surveyed was substantially smaller as there are relatively few of these plans in operation. ¹⁷ Nearly half—8 out of 17—of collectively bargained plans surveyed invested in hedge funds.

¹⁶The figures reported by these surveys differ somewhat because, as described in table 1, they are based on different samples. Comprehensive data on plan investments in hedge funds and private equity are not available. The federal government collects information on investment allocations but does not require plan sponsors to report information on hedge funds or private equity as separate asset classes. Existing data may not include plans that engage in hedge fund-like activities outside of a formal hedge fund partnership structure.

¹⁷Collectively bargained plans are arrangements between a labor union and an employer. These plans may cover workers at a single employer or multiple employers and are jointly governed by management and labor representatives.

Table 1: Extent of DB Plan Investments in Hedge Funds and Private Equity					
	Greenwich Associates (2006)	Pyramis Global Advisors (2006)			
Sample	164 public sector plans;	90 public sector plans;			
	420 private sector plans, including 17 collectively bargained plans	124 private sector plans			
		(all plans had greater than \$200 million in total assets)			
	(all plans had \$250 million or more in total assets)	,			
Share of plans that invest in hedge funds:					
All plans	27%	21%			
Public sector	24%	17%			
Private sector	28%	25%			
Private sector: collectively bargained	47%	n/a			
Share of plans that invest in private equity:					
All plans	43%	41%			
Public sector	51%	44%			
Private sector	40%	38%			
Private sector: collectively bargained	71%	n/a			

Source: Greenwich Associates and Pyramis Global Advisors, 2006.

Note: The total assets of plans surveyed by Greenwich Associates was \$3.6 trillion.

Investment in private equity is much more prevalent than investment in hedge funds, among plans surveyed. The Greenwich survey found that about 43 percent of plans held investments in private equity in 2006, while the Pyramis survey found that 41 percent of plans had such investments. Both surveys also show that a larger percentage of public sector plans are invested in private equity compared to private sector plans. As with hedge funds, the Greenwich survey found that investment in private equity was most common among collectively bargained plans. More than two-thirds—12 out of 17—of collectively bargained plans surveyed invested in private equity.

While pension plan investment in hedge funds is less prevalent than investment in private equity, hedge fund investment has increased much more in recent years. According to Greenwich Associates, from 2004 to 2006, the percent of plans with investments in hedge funds grew from just under 20 percent to almost 27 percent. Meanwhile, the percent of plans with investments in private equity increased at a lesser rate, from about 39

percent in 2004 to 43 percent in 2006. A survey by *Pensions & Investments* found that this comparison was more pronounced over a 6-year period (see fig. 3). Among larger plans surveyed by *Pensions & Investments*, the percent of plans with investments in hedge funds grew from about 11 percent in 2001 to nearly 47 percent in 2007. Over the same time period, investments in private equity remained more prevalent, but grew much more slowly.

Share of plans 80% 80 71% 70 60 50 47% 40 30 20 2001 2002 2003 2002 2004 2006 2007 Year Hedge funds Private equity

Figure 3: Share of Large DB Plans Investing in Hedge Funds and Private Equity

Source: Pensions & Investments' 2007 annual survey.

While pension plan investment in hedge funds has experienced greater growth in recent years, pension plan investment in private equity increased markedly following a 1979 Labor clarification that plans may make some investments in riskier assets, such as venture capital and buyout funds. ¹⁸ Prior to 1979, such investments were generally viewed as a potential violation of ERISA. Labor clarified that ERISA's prudent man standard applies to investment decisions in the context of the entire

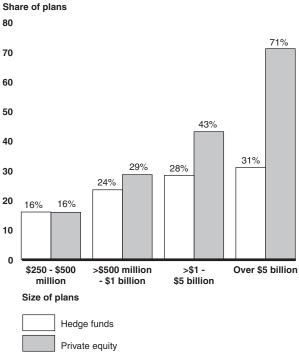
¹⁸44 Fed. Reg. 37, 221.

portfolio rather than in isolation. Following the Labor guidance, pension plan investments in venture capital and buy-out funds experienced rapid growth. One study reported that pension plans' share of venture capital investments grew from 15 percent in 1978 to 50 percent in 1986, during which time overall investment in venture capital increased more than 10-fold from \$427 million to \$4.4 billion. More recently, the National Venture Capital Association estimates that pension plans held 42 percent of the approximately \$20 billion invested in domestic venture capital funds in 2004.

Investments in Hedge Funds and Private Equity Are More Commonplace among Larger Pension Plans Survey data show that larger plans, measured by total plan assets, are more likely to invest in hedge funds and private equity compared to midsize plans. Greenwich found that only 16 percent of mid-size plans—those with \$250 to \$500 million in total assets—were invested in hedge funds, compared to about 31 percent of the largest plans—those with \$5 billion or more in assets (see fig. 4). Similarly, only about 16 percent of mid-size plans held investments in private equity, whereas slightly over 71 percent of the largest plans held such investments. *Pensions & Investments* survey of large plans corroborates this pattern—about 47 percent of plans held investments in hedge funds and nearly 80 percent held investments in private equity in 2007 (see fig. 3).

¹⁹Paul Gompers, J. Lerner. M. M. Blair, and T. Hellmann, "What Drives Venture Capital Fundraising," *Brookings Papers: Microeconomics*, pp. 149–204 (1998).

Figure 4: Pension Plans with Investments in Hedge Funds and Private Equity by Size of Total Plan Assets



Source: Greenwich Associates, 2006.

Note: The figures above include public and private sector plans (excluding collectively bargained plans). Information on the investments of collectively bargained plans by size of total assets was not available. Data reported in figures 3 and 4 differ because these data are based on different surveys.

Survey data on plans with less than \$200 million in assets are unavailable and, in the absence of this information, it is unclear to what extent these plans invest in hedge funds and private equity. Pepresentatives of investment consulting firms and industry experts told us that they suspect few small plans have such investments, but they could not provide data to confirm this. A representative of a large investment consulting firm explained that smaller plans face inherent restrictions on investing in hedge funds and private equity funds because the required minimum investments for these funds are often too high to allow small plans to make such investments while remaining sufficiently diversified.

²⁰According to the PBGC, individual DB plans with less than \$200 million in total assets comprised about 15 percent of the total assets of all DB plans in 2005.

Pension Plans Seek Various Investment Objectives through Hedge Funds, and Such Investments Pose Challenges That Require Considerable Effort and Expertise to Address

While pension plans seek important benefits through investments in hedge funds, hedge funds also pose challenges that demand greater expertise and effort than investments in more traditional assets. Pension plans told us that they invest in hedge funds to achieve one or more of several goals, including lessening the volatility of returns, obtaining returns greater than those expected in the stock market, and/or diversifying the portfolio by investing in a vehicle that will not be correlated with other asset classes in the portfolio. While all the pension plans we contacted that had invested in hedge funds expressed general satisfaction with these investments, hedge fund investments nonetheless pose significant challenges to pension plan fiduciaries, beyond the inherent challenges of investing in more familiar asset classes such as stocks and bonds. Plan officials and others outlined steps to limit these and other challenges, such as conducting in-depth due diligence reviews or investing through funds of funds, which can mitigate some of the main difficulties of hedge funds. Such steps entail greater expense, effort, or expertise than is required for more traditional investments, and some pension plans may not be equipped to meet these demands.

Broad Market Events and a Desire for Specific Benefits Have Driven Pension Plans' Allocations to Hedge Funds

Pension plans' investments in hedge funds resulted in part from stock market declines and disenchantment with traditional investment management in recent years. Most pension plan officials we contacted cited the steep declines in the public equity market early in this decade as a reason for initiating or expanding hedge fund investments. From August 2000 to February 2003, the stock market, as measured by the Standard and Poor's 500 index, declined in value by about 45 percent, and according to plan sponsors and others, this massive market decline severely affected pension plans that were deeply invested in the U.S. stock market. For example, representatives of one public pension plan told us that this market decline led to largest annual loss in its history and resulted in the plan's first hedge fund investments 2003. A representative of another large public pension plan told us that the main motive for initially investing in hedge funds was the weak equity markets early in this decade, and the perceived need for greater exposure to alternative assets that relied less on the stock market for returns. At the same time, some plan officials also cited disenchantment with traditional "long-only" investment managers,

and questioned whether such managers delivered returns that justified the fees the managers' charge. 21

Officials with most of the plans we contacted indicated that they invested in hedge funds, at least in part, to reduce the volatility of returns. According to a representative of an investment consulting firm, this is a common objective of pension plans that invest in hedge funds. One plan official explained the importance of reducing volatility by noting that even in periods of relatively good stock returns, volatility can eat away at the compounding effect of returns over time, and substantially reduce long-term growth. Another plan official said that in trying to reduce volatility through hedge funds, the plan expected that certain hedge fund returns may lag behind stock market indices during bull (rising) markets, but also expected that it would not suffer nearly the same declines during bear (falling) markets.

Officials of several pension plans told us that they sought to obtain returns greater than the returns of the overall stock market through at least some of their hedge fund investments. For example, officials of one pension plan explained that one of the overall goals of its hedge fund portfolio strategy was to obtain an annual return of 2.5 percentage points greater than returns in the stock market, as measured by the S&P 500 stock index.

Officials of pension plans that we contacted also stated that hedge funds are used to help diversify their overall portfolio and provide a vehicle that will, to some degree, be uncorrelated with the other investments in their portfolio. This reduced correlation has a number of benefits, including reduction in overall portfolio volatility and risk. For example, officials of one pension plan told us that hedge funds are attractive because they are not solely dependent on equity and fixed income markets for their returns, thus reduce the overall risk of the investment portfolio.

At the time of our contacts with pension plans in 2007, the 15 pension plans with hedge fund investments indicated mixed but generally positive

²¹"Long only" investment managers can generally be defined as those whose strategies are limited to buying assets whose value is expected to increase. That is, they cannot "short" or sell borrowed securities.

²²Volatility refers to the propensity of a security to move up or down over time; if a security moves up or down rapidly over a short period of time, it is considered to have high volatility.

results.²³ Among officials of these plans, all said that their hedge fund investments had generally met or exceeded expectations, although some noted mixed experiences. For example, one plan explained that it had dropped some hedge fund investments because they had not performed at or above the S&P 500 benchmark. Also, this plan redeemed its investment from other funds because they began to deviate from their initial trading strategy. Further, officials of several plans noted that their venture into hedge funds was only a few years old, and, at the time of our contact, their investment had not yet been tested by trying economic conditions or financial events, such as a significant stock market decline. Nonetheless, representatives of all of the plans with hedge fund investments indicated that they planned to maintain or increase their portfolio allocation to hedge funds in the foreseeable future.

Hedge Funds Pose Significant Challenges and Risks, Beyond Those Posed by Traditional Investments

Pension plans face a number of challenges in hedge fund investing beyond those of more traditional investing, including specific investment risks, limited transparency and liquidity, and risks related to the operations of the hedge fund.

Investment Risks

While any plan investment may fail to deliver expected returns over time, hedge fund investments pose investment challenges beyond those posed by traditional investments. These include (1) reliance on the skill of hedge fund managers, who often have broad latitude to engage in complex investment techniques that can involve various financial instruments in various financial markets; (2) use of leverage, which amplifies both potential gains and losses; and (3) higher fees, which require a plan to earn a higher gross return to achieve a higher net return.

Hedge funds are among the most actively managed investments, and thus returns are often dependent not on broad market movements, but on smaller moves in the markets they invest in and the skills and abilities of the hedge fund manager. ²⁴ For example, hedge fund managers may seek to

²³Our discussions with pension plan officials about their hedge fund investments occurred in 2007. Consequently, we have no information about how their investments might have been affected by the financial market turbulence that occurred since that time.

²⁴In contrast, mutual fund managers must comply with various aspects of federal securities law, and operate in a much more constrained manner.

profit through complex and simultaneous positions in stocks, bonds, options contracts, futures contracts, currencies, and other vehicles, and can abruptly change their positions and trading tactics in order to achieve desired return as changing market conditions warrant. Representatives of some pension plans that had not invested in hedge funds, cited concerns about the ability of hedge fund managers to accomplish this over the longterm. One plan official said the plan had avoided hedge funds in part because of doubt that the managers' skills could generate an acceptable return over time. Instead, this plan seeks to capture the increase in the overall stock market. Regulatory officials and plan sponsors also said that, given the growth of the hedge fund industry in recent years, the market inefficiencies from which hedge funds profit may diminish. For example, SEC noted in a 2004 regulatory proposal that the capacity of hedge fund advisers to generate large returns is limited because the use of similar financial strategies by other hedge funds narrows spreads and decreases profitability.²⁵

Hedge fund managers may use leverage—that is, use borrowed money or other techniques—to potentially increase an investments value or return without increasing the amount invested. While registered investment companies are subject to leverage limits, hedge funds can make relatively unrestricted use of leverage to magnify the expected returns of an investment. At the same time that leverage can magnify profits, it can also magnify losses to the hedge fund if the market goes against the fund's expectations. Concerns about leverage were cited by several pension

²⁵69 Fed. Reg. 45,172, 45,178.

²⁶Historically, leverage is the use of various financial instruments or borrowed capital to increase the potential return of an investment. As we reported in January 2008 (GAO-08-200), since the near collapse of the Long Term Capital Management fund in 1998, investors, creditors, and counterparties have increased efforts to impose market discipline on hedge funds, including tightening credit standards for hedge funds. However, we also noted that no one entity may have all the necessary data to assess the total leverage used by a hedge fund.

²⁷According to the SEC, a hedge fund's use of leverage is limited by margin or collateral requirements imposed by lenders and others. In contrast, registered investment companies are subject to specific statutory limitations.

²⁸For example, a 15 percent decline in an investment of \$50 with no leverage is exactly a 15 percent loss—a loss of \$7.50—and the investor still has \$42.50 and can hope for a rebound. On the other hand, an investment of \$50 leveraged 10 times exposes the investor to an investment of \$500, and a 15 percent decline in value will result in a loss of \$75. The added risk of leverage can be seen in the fact that this 15 percent decline in such a leveraged position leads to not only a total loss of the original \$50 investment, but a remaining debt of \$25—half of the initial investment.

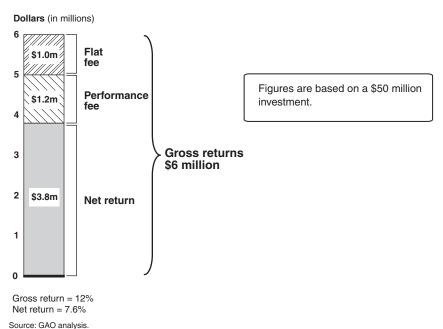
plans either as an important consideration in selecting a hedge fund, or as a reason for avoiding them altogether. For example, one public pension plan told us that it has avoided hedge funds because when hedge funds hit "potholes," the potholes are deep because of high amounts of leverage used.

The challenge of relying on manager skill for a desired rate of return is compounded by the costly fee structure that is typical of the hedge fund industry. Whereas mutual fund managers reportedly charge a fee of about 1 percent of assets under management, hedge fund managers often charge a flat fee of 2 percent of total assets under management, plus a performance fee, of about 20 percent of the fund's annual profits.²⁹

The impact of such fees can be considerable. As figure 5 illustrates, an annual return of 12 percent falls to about 7.6 percent after fees are deducted. Several pension plans cited the costly fee structure fees as a major drawback to hedge fund investing. For example, representatives of one plan that had not invested in hedge funds said that they are focused on minimizing transaction costs of their investment program, and the hedge fund fee structure would likely not be worth the expense. On the other hand, an official of another plan noted that, as long as hedge funds add value net of fees, they found the higher fees acceptable.

²⁹Fees can vary somewhat among hedge funds.

Figure 5: Effect of Hedge Fund Fee Structure on the Returns of an Investment of \$50 Million



Note: This example assumes a fee structure of 2 percent of assets under management and 20 percent of profits.

Lack of Transparency

Because many hedge funds may own thinly traded securities and derivatives whose valuation can be complex, and in some cases subjective, a plan may not be able to obtain timely information on the value of assets owned by a hedge fund. Further, hedge fund managers may decline to disclose information on asset holdings and the net value of individual assets largely because release of such information could compromise their trading advantage. In addition, even if hedge fund managers were to provide detailed positions, plan sponsors might be unable to fully analyze and assess the prospective return and risk of a hedge fund. As a consequence, a plan may not be able to independently ascertain the value of its hedge fund investment or fully assess the degree of investment risk posed by its hedge fund investment. Although we noted in January 2008 that hedge funds have improved disclosure and transparency about their operations due to the demands of institutional investors, several pension plans cited limited transparency as a prime reason they had chosen not to

 $^{^{30}\}mathrm{A}$ security is described as thinly traded when traded infrequently and/or in low volumes.

invest in hedge funds.³¹ For example, representatives of one plan told us that they had considered investing in hedge funds several years ago, but that most of the hedge funds it contacted would not provide position-level information, and that they were reluctant to make such an investment without this information.

Liquidity Limitations

Hedge funds offer investors relatively limited liquidity, that is, investors may not be able to redeem a hedge fund investment on demand because of a hedge fund's redemption policy. Hedge funds often require an initial "lockup" of a year or more, during which an investor cannot cash out of the hedge fund. After the initial lockup period, hedge funds offer only occasional liquidity, sometimes with a pre-notification requirement.³²

While some pension plans told us that liquidity limitations are not a significant concern because the plan has other liquid assets to pay benefits, they nonetheless can pose certain disadvantages. For example, liquidity limitations can inhibit a plan's ability to minimize a hedge fund investment loss. As one state official noted after a state fund had suffered losses in the wake of the 2006 collapse of Amaranth, even when a plan learns that a hedge fund is losing value, various lockup provisions often make it difficult to promptly withdraw from the investment.33 Further, an investor's rights with regard to cashing out may not be entirely clear from the written contract. According to an investigative study by a Grand Jury of one pension plan's experience with a failed hedge fund, the contracts can be dense with legal language, which may make understanding of basic terms and conditions difficult, especially with regard to withdrawal provisions.³⁴ Further, the study noted that contracts can delegate immense discretionary authority to the hedge fund manager to change conditions and rules.

³¹See GAO-08-200.

³²Lock-ups can be important to hedge funds because sudden liquidations could disrupt a carefully calibrated investment strategy and because some of the hedge fund's underlying assets may themselves be illiquid.

³³The \$9 billion fund operated by Amaranth Advisors, LLC, collapsed in the fall of 2006 as a result of natural gas derivatives trading.

³⁴"San Diego County Employees Retirement Association - The Quest for 'Alpha,'" San Diego County Grand Jury 2006-2007, Online: http://www.co.san-diego.ca.us/grandjury/report06_07.html, accessed June 18, 2008.

Operational Risk

Pension plans investing in hedge funds are also exposed to operational risk—that is, the risk of investment loss due not to a faulty investment strategy, but from inadequate or failed internal processes, people, and systems, or problems with external service providers. Operational problems can arise from a number of sources, including inexperienced operations personnel, inadequate internal controls, lack of compliance standards and enforcement, errors in analyzing, trading, or recording positions, or outright fraud. According to a report by an investment consulting firm, because many hedge funds engage in active, complex, and sometimes heavily leveraged trading, a failure of operational functions such as processing or clearing one or more trades may have grave consequences for the overall position of the hedge fund. Concerns about some operational issues were noted by SEC in a 2003 report on the implications of the growth of hedge funds. For example, the 2003 report noted that SEC had instituted a significant and growing number of enforcement actions involving hedge fund fraud in the preceding 5 years.³⁵ Further, SEC noted that while some hedge funds had adopted sound internal controls and compliance practices, in many other cases, controls may be very informal, and may not be adequate for the amount of assets under management. Similarly, a recent Bank of New York paper noted that the type and quality of operational environments can vary widely among hedge funds, and investors cannot simply assume that a hedge fund has an operational infrastructure sufficient to protect shareholder assets. 36

Several pension plans we contacted also expressed concerns about operational risk. For example, one plan official noted that the consequences of operational failure are larger in hedge fund investing than in conventional investing. For example, the official said a failed long trade in conventional investing has relatively limited consequences, but a failed trade that is leveraged five times is much more consequential. Representatives of another plan noted that back office and operational issues became deal breakers in some cases. For example, they said one fund of funds looked like a very good investment, but concerns were raised during the due diligence process. These officials noted, for example,

³⁵Implication of the Growth of Hedge Funds, Staff Report to the United States Securities and Exchange Commission, September 2003. Although hedge funds are substantially unregulated, they are nonetheless subject to anti-fraud, and some other provisions of federal securities law.

³⁶Hedge Fund Operational Risk: Meeting the Demand for Higher Transparency and Best Practice, Bank of New York/Amber Partners White Paper, June 2006.

the importance of a clear separation of the investment functions and the operations and compliance functions of the fund. One official added that some hedge funds and funds of funds are focused on investment ideas at the expense of important operations components of the fund.

Addressing the Challenges and Risks of Hedge Fund Investing Requires Considerable Effort and Expertise Pension plans that invest in hedge funds take various steps to mitigate the risks and challenges posed by hedge fund investing, including developing a specific investment purpose and strategy, negotiating important investment terms, conducting due diligence, and investing through funds of funds. Such steps require greater effort, expertise and expense than required for more traditional investments. As a result, some plans, especially smaller plans, may not have the resources to take the steps necessary to address these challenges.

Clear Investment Purpose and Strategy

Discussions with pension plan officials revealed the importance of defining a clear purpose and strategy for their hedge fund investments. As one pension fiduciary noted, plan managers should define exactly why they want to invest in hedge funds. He added that there are many different possible hedge fund strategies, and wanting to invest in hedge funds to obtain the large returns that other investors have reportedly obtained is not a sufficient reason. Most of the 15 pension plans with hedge fund investments that we contacted described one or more strategies for their hedge funds investments. For example, an official of one state plan told us that the plan invested only in long-short hedge fund strategies while other plans use multiple strategies.³⁷

Our contacts with plan officials and others also highlighted the importance of diversification. All of the plans having hedge fund investments that we contacted invested in either multiple individual hedge funds, or through funds of funds, which are designed to provide diversification across many underlying funds. Some plans described specific diversification requirements, and spread their hedge fund investment across many funds to limit exposure to one or a small number of hedge funds. For example, one plan determined that no more than 15 percent of its hedge fund portfolio would be with a single hedge fund manager and that no more than 40 percent in a particular hedge fund investment strategy.

³⁷A long-short strategy exploits perceived anomalies in the price of securities. For example, a hedge fund may buy bonds that it believes to be under-priced, and sell short bonds that it believes to be overpriced.

Identification and Negotiation of Important Investment Terms

Our contacts with plan officials and others also highlighted the importance of identifying specific investment terms to guide hedge fund investing and ensuring that the hedge fund investment contract complies with these criteria. These can include fee structure and conditions, degree of transparency, valuation procedures, redemption provisions, and degree of leverage employed. For example, pension plans may want to ensure that they will not pay a performance fee unless the value of the investment passes a previous peak value of the fund shares—known as a high water mark. Some plans we contacted also specified leverage limits for their hedge funds. For example, one public plan that we contacted has established specific leverage limits for each of 10 hedge fund strategies employed by its funds of funds—ranging from an upper limit of 2 times invested capital for one strategy, to 20 times invested capital for another. Once decided upon, these and other terms of the investment can be used as criteria in the hedge fund search, and if necessary, negotiated with the hedge fund or fund of funds manager.

Due Diligence and Monitoring

Pension plans take steps to mitigate the challenges of hedge fund investing through an in-depth due diligence and ongoing monitoring process. While plans conduct due diligence reviews of other investments as well, such reviews are especially important when making hedge fund investments, because of hedge funds' complex investment strategies, the often small size of hedge funds, and their more lightly regulated nature, among other reasons. Due diligence can be a wide-ranging process that includes a review and study of the hedge fund's investment process, valuation, and risk management. The due diligence process can also include a review of back office operations, including a review of key staff roles and responsibilities, the background of operations staff, the adequacy of computer and telecommunications systems, and a review of compliance policies and procedures.

Investing Via Funds of Hedge Funds

Representatives of several plans told us they mitigate several of the major hedge fund challenges by investing through funds of funds, which are investment funds that buy shares of multiple underlying hedge funds. Funds of hedge funds provide plan investors diversification across multiple hedge funds, thereby having the potential to mitigate investment risk. For example, one plan fiduciary told us the plan reduces investment risk by investing in a fund of funds that diversifies their hedge fund investments into at least 40 underlying hedge funds. Further, by investing in a fund of funds, a pension plan relies on the fund of funds' manager to conduct negotiations, due diligence, and monitoring of the underlying hedge funds. According to pension plan officials, funds of funds can be appropriate if a plan does not have the necessary skills to manage its own

portfolio of hedge funds. According to a hedge fund industry organization, investing through a fund of funds may provide a plan better access to hedge funds than a plan would be able to obtain directly. Nonetheless, investing through funds of funds has some drawbacks. Funds of funds' managers also charge fees—for example, they may charge a 1 percent flat fee and a performance fee of between 5 and 10 percent of profits—on top of the substantial fees that the fund of funds manager pays to the underlying hedge funds. Funds of funds also pose some of the same challenges as hedge funds, such as limited transparency and liquidity, and the need for a due diligence review of the fund of funds firm.

Some Pension Plans May Not Be Able to Meet the Demands of Hedge Fund Investing

According to plan officials, state and federal regulators, and others, some pension plans, especially smaller plans, may not be equipped to address the various demands of hedge fund investing. For example, an official of a national organization representing state securities regulators told us that medium- and small-size plans are probably not equipped with the expertise to oversee the trading and investment practices of hedge funds. This official said that smaller plans may have only one or two person staff, or may lack the resources to hire outside consulting expertise. A labor union official made similar comments, noting that smaller pension plans lack the internal capacity to assess hedge fund investments, and noted that such plans may be locked out of top-performing hedge funds.

Some plans may also lack the ability to conduct the necessary due diligence and monitoring of hedge fund investments. One hedge fund consultant told us that certain types of plans, such as plans that are not actively overseen by an investment committee and plans that do not have a sufficient in-house dedicated staff, should not invest in hedge funds. Similarly, a representative of a firm specializing in fiduciary education and support noted the special relationship of trust and legal responsibility that plan fiduciaries carry and concluded that the challenges of hedge fund investing are too high for most pension plans. While such plans might often be smaller plans, larger plans may also lack sufficient expertise. A representative of one pension plan with more than \$32 billion in total assets noted that before investing in hedge funds, the plan would have to build up its staff in order to conduct the necessary due diligence during the fund selection process.

 $^{^{38}\!\}text{``Funds}$ of Hedge Funds FAQs: MFA's Concise Guide to Hedge Funds," Managed Funds Association.

Private Equity
Investments May
Provide Important
Benefits, but Pension
Plans Face Limited
Access to TopPerforming Funds and
Other Challenges

According to plan representatives, investment consultants, and other experts we interviewed, pension plans invest in private equity primarily to attain returns superior to those attained in the stock market in exchange for greater risk, but such investments pose several distinct challenges. Generally, these plan representatives based their comments on significant experience investing in private equity—in some cases over 20 years—and said they had experienced returns in excess of the stock market. Nonetheless, private equity funds can require longer-term commitments of 10 years or more, and during that time, a plan may not be able to redeem its investments. In addition, plan representatives described extensive and ongoing management of private equity investments beyond that required for traditional investments and that, like hedge fund investments, may be difficult for plans with relatively limited resources.

Plans Have Long Investment History in Private Equity and Primarily Seek Returns Superior to Those Attained in the Stock Market

Unlike hedge funds, pension plan investment in private equity is not a recent phenomenon. The majority of plans included in our review began investing in private equity more than 5 years before the economic downturn of 2000 to 2001, and some of these plans have been investing in private equity for 20 years or more.³⁹ According to a pension investment consultant we interviewed, due to the longer history of pensions' investment in private equity, it is generally regarded as a more well-established and proven asset class compared to other alternative investments, such as hedge funds.

Pension plans invest in private equity primarily to attain returns in excess of returns from the stock market over time in exchange for the greater risk associated with these investments. Officials of each plan we interviewed said these investments had provided the expected returns. Plan representatives and investment consultants said that attaining returns superior to stocks was a primary reason for investing in private equity. 40

³⁹As described in the first section, pension investment in private equity increased markedly following publication of guidance by Labor in 1979 clarifying that private sector plans may make some investments in riskier assets, such as venture capital and buy-out funds.

⁴⁰Several plans cited research which shows that the average performance of top-quartile private equity funds exceeds the stock market. See, for example: Steven Kaplan and Antoinette Schoar, "PE Performance: Returns, Persistence, and Capital Flows," *Journal of Finance*, VOL. LX, No.4, (August 2005); Alexander Ljungquist and Matthew Richardson, "The Cash Flow, Return and Risk Characteristics of Private Equity." *National Bureau Economic Research*, *Working Paper*, #9454, (January 2003); and David Swensen, *Pioneering Portfolio Management: An Unconventional Approach to Institutional Investment*. The Free Press: New York (2000).

Among the plan representatives we interviewed the most commonly reported benchmark for private equity funds ranged from 3 to 5 percentage points above the S&P 500 stock index, net of fees. At the time of our interviews with plans about private equity investments, between October 2007 and January 2008, plan representatives indicated their private equity investments had met their expectations for relatively high returns and many said they planned to maintain or increase their allocation in the future. Further, representatives of some plans told us that private equity has been their best performing asset class over time despite some individual investments that resulted in considerable losses. For example, according to documentation provided by one private sector plan, the plan had earned a net return of slightly more than 16 percent on its private equity investments over the 10-year period ending September 30, 2007, which was their highest return for any asset class over that time period. Experience of the section of the period of the section of the plan had earned a net return for any asset class over that time period.

To a lesser degree, pension plans also invest in private equity to further diversify their portfolios. To the extent that private equity is not closely correlated with the stock market, these investments can reduce the volatility of the overall portfolio. However, some plan representatives cautioned that the diversification benefits are limited because the performance of private equity funds is still strongly, although not perfectly, linked to the stock market.⁴³

⁴¹We conducted our interviews on plans' private equity investments from October 2007 to January 2008; therefore, their comments may not reflect more recent changes to market conditions.

⁴²Some public plans also invest in private equity, in part, to promote local economic development in accordance with state policy. According to plan representatives and an industry organization, venture capital investments have, in some cases, been viewed as a way to promote local economic growth, while at the same time, providing returns that bolster retirement income for plan beneficiaries. Most public plan officials we interviewed, however, did not cite promoting local economic development as an explicit goal for their private equity investments.

⁴³Several studies show a range of correlation between private equity and the stock market. Correlations cited range from the low, 30 percent, to the very high, 95 percent.

Pension Plans Face Several Challenges and Risks When Investing in Private Equity

Pension plans investing in private equity face several challenges and risks, which include the concentration of underlying holdings, use of leverage, and wide variation in performance among funds. In addition, the value of the underlying holdings is difficult to estimate prior to their sale and private equity investments entail long-term commitments, often of 10 years or more.

Investment Risk

Pension plans that invest in private equity funds face a number of investment risks, beyond the risks of traditional investments. Unlike a traditional fund manager who diversifies by investing in many stocks or bonds, a private equity fund manager's strategy typically involves holding a limited number of underlying companies in their portfolio. A single private equity fund generally invests in only about 10 to 15 companies, often in the same sector. 44 The risks associated with such concentrated, undiversified funds may be compounded by particular aspects of the buyout and venture capital sectors. Fund managers in the buyout sector generally invest using leverage to seek greater returns but such investments also increase investment risks. In the venture capital sector, fund managers typically make smaller investments in companies that may have a limited track record and rely on technological development and growing the company's commercial capacity for success. In light of this, some plan officials noted that some of these companies will fail, but the success of one or more of the portfolio firms is often large enough to more than compensate for the losses of other investments.

Like other investments, the returns to private equity funds are susceptible to market conditions when investments are bought or sold. When competition among private equity fund managers is intense, research has shown that a fund manager may pay more for an investment opportunity that leads to lower net returns. ⁴⁵ In addition, the returns of a private equity fund are also affected by the condition of the market when the underlying

⁴⁴One study shows that, on average, funds in the study invested close to 40 percent of capital in a single industry. Alexander Ljungquist and Matthew Richardson, "The Cash Flow, Return and Risk Characteristics of Private Equity," *National Bureau Economic Research*, Working Paper, No. 9454 (January 2003).

⁴⁵See, for example: Paul Gompers and Josh Lerner, "Money chasing deals? The impact of fund inflows on private equity valuations," *Journal of Financial Economics*, vol 55. (2000); and Alexander Ljungquist and Matthew Richardson, "The Cash Flow, Return and Risk Characteristics of Private Equity." *National Bureau Economic Research, Working Paper*, #9454, Jan. 2003; and David Swensen, *Pioneering Portfolio Management: An Unconventional Approach to Institutional Investment*, The Free Press: New York (2000).

investments are sold. For example, a private equity fund may have lower returns if its underlying holdings are sold through an initial public offering made during a period of low stock values. An official from one plan told us that private equity funds that sold investments around 2000 had lower returns because of the overall decline in the stock market. However, a representative of another plan noted that, while market conditions have some effect on the performance of a private equity fund, the effect may be mitigated by the ability of the fund managers to enact sound business plans and thereby add value to the underlying companies.

Further, the challenge of meeting the high performance goals for private equity investments is compounded by the relatively high fees that private equity funds charge. Similar to hedge funds, private equity funds typically charge an annual fee of 2 percent of invested capital and 20 percent of returns, whereas mutual fund managers typically charge a fee of about 1 percent or less of assets under management. If the gross returns from a private equity fund are not sufficiently high, net returns to investors will not meet the commonly cited goal of exceeding the return of the stock market.

Variation of Performance among Private Equity Funds Another risk from investing in private equity is the variation of performance among private equity funds. Officials of an investment consulting firm, a state regulatory agency, and several pension plans noted that, compared to other asset classes, private equity has greater variation in performance among funds and cited research to support this view. For example, one study found that the difference in returns between the median and top quartile funds is much greater for private equity, particularly among venture capital investments, than it is for domestic stocks. Another study found that returns of private equity funds at the 75th percentile were more than seven times greater than the returns of funds at the 25th percentile. The percentile of the variation of

Long-Term Commitment of Private Equity Funds

A further challenge of investing with private equity funds—regardless of how they perform—is that they often require commitments of 10 years or more during which a plan may not be able to redeem its investment. The longer-term commitment of private equity funds contrasts with stock and

⁴⁶David Swensen, *Pioneering Portfolio Management: An Unconventional Approach to Institutional Investment*, The Free Press: New York (2000).

⁴⁷Steven Kaplan and Antoinette Schoar, "Private Equity Performance: Returns, Persistence, and Capital Flows." *Journal of Finance*, vol. LX, No. 4 (August 2005).

bond investments, which can be bought and sold daily, and hedge fund investments, which can be redeemed episodically. Plans must provide committed capital when called upon by the fund manager, and may not redeem invested capital or typically see any return on the investment, for at least several years. However, several plan representatives and other experts we interviewed stated that the nature of private equity funds necessitates long commitments as returns are generated through longer-term growth strategies, rather than short-term gains. A private equity fund cycle typically follows a pattern known as the "J-curve," which reflects an initial period of negative returns during which investors provide the fund with capital and then obtain returns over time as investments mature (see fig. 6). Representatives of several plans noted that they expect higher returns from private equity in exchange for the long-term commitment.

⁴⁸Officials with some plans explained that an investor might sell its stake in a private equity fund on a secondary market; however, interests in a private equity fund are typically sold at a discount. One plan also noted that selling a stake on the secondary market would also jeopardize their reputation as an investor with private equity funds since the fund managers look unfavorably on such transactions.

Investment returns 0 2 3 5 6 7 8 9 10 4 Years invested

Figure 6: Returns from a Private Equity Fund Generally Follow a J-Curve Trend over the 10-Year Fund Cycle

Valuation of Private Equity **Fund Investments**

An additional challenge of private equity investments is the uncertain valuation during the fund cycle. Unlike stocks and bonds, which are traded and priced in public markets, plans have limited information on the value of private equity investments until the underlying holdings are sold. Some plan representatives we interviewed explained that fund managers often value underlying holdings at their initial cost until they are sold through an initial public offering or other type of sale. 49 In some cases private equity funds estimate the value of the fund by comparing companies in their

Source: CalPERS

 $^{^{49}}$ Plan officials we interviewed also noted that they expect private equity valuation to become more frequent and market-based following recent changes to accounting standards. In September 2006, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards (SFAS) No.157, "Fair Value Measurements." This standard defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. As discussed in SFAS No. 157, the changes to current practice resulting from the application of this standard relate to the definition of fair value, the methods used to measure fair value, and the expanded disclosures about fair value measurements. The new definition of fair value may change the manner in which some entities, such as private equity funds, determine fair value.

portfolio to the value of comparable publicly-traded assets. However, an investment consultant explained that such periodic valuations have limited utility. Prior to the sale of underlying investments, it is difficult to assess the value a private equity fund manager has generated. While plan officials we interviewed acknowledged the difficulty of valuing private equity investments, they generally accepted it as a trade-off for the potential benefits of the investment.

Taking Steps to Address the Challenges and Risks of Investing in Private Equity May Be Too Costly and Complex for Some Plans Plan representatives said that they take several key steps to address the challenges of investing in private equity funds. Plan representatives and industry experts emphasized the importance of investing with top-performing funds to mitigate the wide variation in fund performance; however, they noted that access to these top-performing funds is very limited, particularly for new investors. Furthermore, due diligence and ongoing monitoring of private equity investments requires substantial effort and expertise, which may be too complex or costly for plans with more limited resources.

Selection of Private Equity Fund Investments

The majority of plan representatives we interviewed told us that, because of the wide variation in performance among private equity funds, they must invest with top-performing funds in order to achieve long-term returns in excess of the stock market. In addition to identifying the topperforming fund managers, plan officials explained that the selection process involves a thorough assessment of the fund manager's investment strategy. For example, an official from one state plan told us that their assessment includes a review of a fund manager's strategy for improving the operations and efficiency of its proposed investments and they invest with managers that have a persuasive business model. Plan officials stressed the importance of these steps, and some noted that investing in private equity is only worthwhile if they can invest with funds in the top quartile of performance. For example, one plan official said that if a plan does not invest with a top quartile fund, it may not obtain returns in excess of stock market returns and, thus, will not have earned a premium for assuming the risks and fees inherent in private equity fund investments.

⁵⁰Plan officials noted that top-performing private equity fund managers tend to consistently perform well over time and some plans cited research in support of this view. See, for example, Steven Kaplan and Antoinette Schoar, "Private Equity Performance: Returns, Persistence, and Capital Flows." Journal of Finance, vol. LX, No. 4 (August 2005).

While many plans we interviewed noted the importance of investing with top-performing funds, the competition to gain access to these funds may make it difficult or impossible for some plans, especially smaller plans, to do so. Several of the plan representatives we interviewed noted that investment opportunities with top-performing funds are limited, and the demand for such opportunities is high. According to representatives of a venture capital trade association, there is greater demand to invest in venture capital funds than can be absorbed, because the venture capital sector is relatively small in size.⁵¹ Plan officials also noted that access to private equity funds can be limited, because fund managers prefer to deal with larger, more sophisticated investors or investors who have invested in the fund manager's previous private equity funds. For example, one state official told us that the largest public plan in the state has the clout to gain access to top-performing funds, but smaller public funds in the state do not. He added that top-performing funds are very selective, and generally will not respond to solicitation by smaller public funds.

Diversification

Plan representatives told us they further mitigate the challenges of investing in private equity funds by diversifying their investments. Plan representatives we interviewed said they invest with multiple fund managers to mitigate the risk that some managers may have mediocre or poor performance. For example, a representative of one plan said they would be comfortable investing about 5 percent of their private equity allocation with one carefully vetted fund manager, but investing 20 percent with one manager would be overly risky. The director of another plan told us the plan aims to ensure diversification by investing with over 130 different private equity funds, encompassing more than 80 fund managers. Plans also stagger investments over several years to ensure their private equity fund investments are ready to sell their underlying investments at different times. Staggering investments over time helps mitigate the risk of fund managers selling funds' underlying holdings during a time of poor market conditions, which may reduce the funds' returns to investors. For example, one plan official noted they have investments in funds that were established in many different years, dating back to 1994. In addition, some plan officials told us they further diversify their private equity investments among funds concentrated in different industries and regions.

 $^{^{51}\!}$ According to the National Venture Capital Association, more than half of venture capital funds manage \$100 million or less in capital.

Planning for Liquidity Needs

Plan representatives said that they mitigate the long-term commitments of private equity investments by limiting the size their allocation. Officials we interviewed at several plans noted that their allocation to private equity is only about 5 percent of the portfolio and benefit obligations can be paid from more liquid assets. They said it is important to estimate a plan's benefit obligations and determine the need for liquid investments to ensure the plan can pay benefits when they are due. They also noted that once liquidity needs are determined, a plan can more safely invest in an illiquid asset that cannot be used to pay benefits in the near term.

Negotiation of Key Terms of the Investment Contract

Plans attempt to negotiate key terms of the investment contract to further manage the risks of investing in private equity, but, as one large public plan noted, their ability to negotiate favorable contract provisions is limited when investing with top-performing funds because investing in these funds is highly competitive. Like hedge fund investments, these contract terms may include the fee structure and valuation procedures of the fund. In addition, many plan representatives we interviewed said they can redeem their investments before the end of the originally agreed investment period if staff that are considered key to the success of the fund leave prematurely.

Due Diligence and Ongoing Monitoring

Similar to hedge fund investments, plans take additional steps to mitigate challenges of investing in private equity through extensive and ongoing management, beyond those required for traditional investments. Plan representatives we interviewed said these steps include regularly reviewing reports on the performance of the underlying investments of the private equity fund and having periodic meetings with fund managers. In some cases, plans participate on the advisory board of a private equity fund, which provides a greater opportunity for oversight of the fund's operations and new investments; however this involves a significant time commitment and may not be feasible for every private equity fund investment. Plan representatives and investment consultants noted that, as with hedge funds, private equity investments entail considerably greater due diligence and ongoing monitoring than traditional investments and some plan representatives said they needed to hire an external investment consultant because the plan lacked sufficient internal resources.

⁵²While the advisory board of a private equity fund may allow investors some degree of oversight, it does not provide investors with an active role in the management of the fund.

Funds of Private Equity Funds

Funds of private equity funds, like funds of hedge funds, enable plans to address several challenges of investing in private equity, for an additional cost. Benefits of investing in funds of funds can include diversification across fund managers, industry, geographic region, and year of initial investment. Through funds of funds, plans can also gain access to topperforming fund managers that may otherwise be unavailable to them. One plan representative stated that, due to the competition among investors, funds of funds are their best option for accessing top-performing funds. In addition, several plan representatives said that they invest in funds of funds to benefit from the expertise of the fund manager. For example, officials of two large plans said they generally limit their use of funds of funds to private equity investments in emerging markets and small funds because the plan prefers not to devote resources to maintaining expertise in these areas. Nonetheless, fund of funds' managers charge their own fees in addition to the fees the fund of funds pays the underlying private equity fund managers. According to a plan official and an investment consulting firm, a fund of funds manager typically charges a fee of 1 percent of invested capital over the fees it pays to the underlying funds.

The Federal
Government Does Not
Specifically Limit or
Monitor Private
Sector Plans'
Investments in Hedge
Funds and Private
Equity, but Some
States Do So for
Public Sector Plans
through Various
Approaches

The federal government does not specifically limit or monitor private sector pension investments in hedge funds or private equity, and state approaches for public plans vary. ERISA requires that plan fiduciaries meet general standards of prudent investing but does not impose specific limits on investments in hedge funds or private equity. Further, while Labor has conducted enforcement actions that have involved hedge fund or private equity funds, it does not specifically monitor these investments. While states generally impose a prudent man standard, similar to ERISA's, on plan fiduciaries, some states still have policies that restrict or prohibit pension plan investment in hedge funds or private equity.

The Federal Government Does Not Specifically Limit or Monitor Pension Plans' Investments in Hedge Funds or Private Equity nor Has It Provided Recommended Guidance

Although ERISA governs the investment practices of private sector pension plans, neither federal law nor regulation specifically limit pension investment in hedge funds or private equity. Instead, ERISA requires that plan fiduciaries apply a prudent man standard, including diversifying assets and minimizing the risk of large losses. The prudent man standard does not explicitly prohibit investment in any specific category of investment. Further, an unsuccessful individual investment is not considered a per se violation of the prudent man standard, as it is the plan fiduciary's overall management of the plan's portfolio that is evaluated under the standard. In addition, the standard focuses on the process for making investment decisions, requiring documentation of the investment decisions, due diligence, and ongoing monitoring of any managers hired to invest plan assets.

Although there are no specific federal limitations on pension plan investments in hedge funds, two federal advisory committees have, in recent years, highlighted the importance of developing best practices in hedge fund investing. In November 2006, the ERISA Advisory Council

⁵³However, ERISA may indirectly limit a pension plan's ability to invest in specific hedge funds or private equity funds. Under Labor's plan asset regulation, if the aggregate investment by benefit plan investors in the equity interest of a particular entity is "significant," and that equity interest is not (i) a publicly-offered security, (ii) issued by a registered investment company, such as a mutual fund, nor (iii) issued by an operating company, then the assets of that entity are deemed assets of each benefit plan investor (i.e., plan assets). See 29 C.F.R. § 2510.3-101 (2007). As a result, any person who exercises management authority over the entity now deemed to hold plan assets will become subject to ERISA's fiduciary standards. The equity investments by benefit plan investors are considered "significant" if at any time the aggregate investment of the benefit plan investors represents 25 percent or more of the value of any class of equity in the entity. According to one industry expert, in order to avoid being deemed a plan fiduciary (and assuming all of the liabilities that accompany that status), many managers of hedge funds, which generally are not publicly-traded, not registered investment companies, nor operating companies, carefully monitor the level of investments in the hedge fund by benefit plan investors to ensure that their aggregate investment remains below the 25 percent threshold. Prior to the Pension Protection Act of 2006 (PPA), the calculation of the 25 percent threshold pertained to investments by ERISA plans and certain non-ERISA covered plans, such as public sector and foreign retirement plans. However, in accordance with section 611(f) of the PPA, investments by certain plans, including public sector and foreign retirement plans, are now excluded from the calculation. Pub. L. No.109-280, § 611(f), 120 Stat. 780, 972 (codified at 29 U.S.C. § 1002(42)). This modification may facilitate an increase in the level of investments by pension plans in hedge funds and private equity funds.

⁵⁴With some exceptions, ERISA does prohibit plans from investing more than 10 percent of plan assets in the sponsoring company's stock. See 29 U.S.C. § 1107. In addition to requiring plan fiduciaries to adhere to certain standards of conduct, ERISA also prohibits plan fiduciaries from engaging in specified transactions. See 29 U.S.C. § 1106.

recommended that Labor publish guidance describing the unique features of hedge funds, and matters for consideration in their adoption for use by qualified pension plans. 55 To date, Labor has not acted on this recommendation. According to Labor officials, an effort to address these recommendations was postponed while Labor focused on implementing various aspects of the Pension Protection Act of 2006.⁵⁶ However, in April 2008, the Investors' Committee established by the President's Working Group on Financial Markets, composed of representatives of public and private pension plans, endowments and foundations, organized labor, non-U.S. institutions, funds of hedge funds, and the consulting community, released draft best practices for investors in hedge funds. 57 These best practices discuss the major challenges of hedge fund investing, and provide an in-depth discussion of specific considerations and practices that investors in hedge funds should take. While this guidance should serve as an additional tool for pension plan fiduciaries and investors to use when assessing whether and to what degree hedge funds would be a wise investment, it may not fully address the investing challenges unique to pension plans leaving some vulnerable to inappropriate investments in hedge funds. Although many private sector plans are insured by the PBGC, which guarantees most benefits when an underfunded plan terminates, public sector plans are not insured and may call upon state or local taxpayers to overcome funding shortfalls.⁵⁸

Labor does not specifically monitor pension investment in hedge funds or private equity. Labor annually collects information on private sector pension plan investments via the Form 5500, on which plan sponsors report information such as the plan's operation, funding, assets, and investments. However, the Form 5500 includes no category for hedge

⁵⁵The ERISA Advisory Council was created by ERISA to provide advice to the Secretary of Labor. 29 U.S.C. § 1142.

⁵⁶The PPA is the most recent comprehensive reform of federal pension laws since the enactment of ERISA. It establishes new funding requirements for DB pensions and includes reforms that will affect cash balance pension plans, defined contribution plans, and deferred compensation plans for executives and highly compensated employees.

⁵⁷Principles and Best Practices for Hedge Fund Investors: Report of the Investors' Committee to the President's Working Group on Financial Markets, April 15, 2008. The President's Working Group on Financial Markets includes the heads of the U.S. Treasury Department, the Federal Reserve, the SEC, and the Commodity Futures Trading Commission.

⁵⁸Plan underfunding can occur for several reasons, including poor investment performance and insufficient contributions.

funds or private equity funds, and plan sponsors may record these investments in various categories on the form's Schedule H. In addition, because there is no universal definition of hedge funds or private equity and their strategies vary, their holdings can fall within many asset classes. While EBSA officials analyze Form 5500 data for reporting compliance issues—including looking for assets that are "hard to value"—they have not focused on hedge fund or private equity investments specifically. ⁵⁹ According to EBSA officials, there have been several investigations and enforcement actions in recent years that involved investments in hedge funds and private equity, but these investments have not raised significant concerns.

Some Selected States Regulate and Monitor Investments of Public Sector Plans Using Varying Approaches Our state pension plan contacts indicated that, in recent years, state regulation of public pension plan investments has become generally more flexible. According to a NASRA official, state regulation of public pension plan investments has gradually become less restrictive and more reliant on fiduciary prudence standards. This official noted that, for example, blanket prohibitions on investments such as international stocks or real estate have given way to permission for a wider range of investments. Some of our state contacts described this shift over time from a prescriptive list of authorized investments ("legal lists") and asset allocation limits to a more flexible approach, such as adoption of the prudent man standard.

Of the state pension plan officials we contacted in 11 states, officials in 7 states indicated that applicable state law imposes restrictions on the ability of public pension plans to invest in hedge funds and/or private equity, as seen in table 2.⁶¹ Among these seven states, the restriction may be in the form of (i) a provision applicable to investments in hedge funds

⁵⁹"Hard to value" assets are those that are not traded on an exchange. "Hard to value" assets may include hedge funds, private equity funds, and real estate. It is difficult to distinguish the type of investment with the information provided. Federal agency officials use the Form 5500 report data to enforce ERISA pension requirements, monitor plan compliance, develop aggregate pension statistics, and conduct policy and economic research.

 $^{^{60}}$ NASRA is a non-profit association whose members are the directors of the nation's state and territorial public retirement systems.

⁶¹We contacted the 10 states with the largest amount of public pension assets under management, as well as Massachusetts, because that state provided valuable information during our initial work. Our methodology is discussed in greater detail in appendix I.

or private equity funds specifically, (ii) an exclusive list of permissible of investments that is not likely to capture hedge funds or private equity investments, or (iii) a provision that restricts investments in certain categories of assets that, because of the typical structure or investment strategy of hedge funds or private equity funds, are likely to apply to investments in such funds. ⁶²

Table 2: Restrictions on Pension Investments in Hedge Funds and Private Equity Identified by Plan Officials in 11 Selected States

State	Hedge funds	Private equity
California		
Florida	X	Х
Illinois	X	Х
Massachusetts ^a	Х	Х
New Jersey	X	Х
New York	Х	Х
North Carolina	X	X
Ohio		
Pennsylvania		
Texas	X	
Wisconsin		

Source: GAO analysis based on information provided by state officials.

^aRestrictions identified in Massachusetts are based on administrative policy adopted by its Public Employees Retirement Administration Commission, which is generally responsible for oversight of public pension systems in the state, rather than on statute or regulation.

Some of the selected states have, through statute or regulation, established explicit limitations on the amount that pension plans can invest in hedge funds or private equity. For example, under Texas law, the Teacher Retirement System of Texas (TRS)—the largest public pension plan in Texas—is statutorily limited to investing no more than 5 percent of the

⁶²Restrictions applicable across various plans were identified through conversations with relevant officials in each state, except North Carolina. In addition, individual plans may have their own restrictions adopted by plan boards or staff. In some states, state restrictions apply quite broadly, and in others, the restrictions apply to a more narrow range of plans or public plan assets, therefore the existence of a restriction in a state does not necessarily indicate that the restriction exists for every public plan in the state.

plan's total assets in hedge funds. ⁶³ According to a Texas Pension Review Board official, the statute codified TRS's ability to invest in hedge funds while at the same time limiting the amount TRS can invest in hedge funds. According to a TRS official, this law was a compromise between TRS's desire to invest more broadly in hedge funds and some state legislators who were concerned about the possible risks of hedge funds. ⁶⁴ Other states we reviewed have comparable limitations for public plans.

The Commonwealth of Massachusetts' Public Employee Retirement Administration Commission (PERAC) has established a detailed set of limitations and guidance, with particular limitations on smaller public plans. In Massachusetts, public plans with less than \$250 million in assets may not invest in hedge funds directly, but they may invest through a statemanaged hedge fund investment pool (see table 3). According to a PERAC official, this limitation exists because hedge funds are relatively new investments for pension plans and because they require high levels of due diligence and expertise that may be excessive for smaller plans. PERAC also limits and offers guidance to larger public plans, emphasizing diversification, to help limit a plan's exposure to potential losses from hedge fund failures. According to a PERAC official, the group is less strict about private equity investments because private equity is a more familiar asset class among the state's public plans. Public plans with less than \$25 million in assets may invest up to three percent of assets in private equity and plans with more than \$25 million may invest up to 5 percent of assets in private equity. PERAC requires plans of either size to obtain PERAC permission before investing in private equity above those levels.

⁶³See Tex. Gov. Code Ann. § 825.3012. For purposes of this Texas state law restriction, "hedge fund" is defined as a private investment vehicle that (i) is not registered under an investment company act, (ii) issues securities only to accredited investors or qualified purchasers under an exemption from registration, and (iii) engages primarily in the strategic trading of securities and other financial instruments.

⁶⁴According to TRS officials, no other public funds in Texas are, by state law, under explicit restrictions regarding hedge fund or private equity investments.

Table 3: Massachusetts Policies on Public Plan Investments in Hedge Funds

Plans with less than \$250 million Plans with greater than \$250 million

- May invest in hedge funds only through the state's common hedge fund vehicle
- May not invest more than 10 percent of assets in hedge funds
- May not invest more than 10 percent of assets in hedge funds
- May only invest in hedge funds through funds of funds
- May only invest in hedge fund products whose performance is not influenced by market movements
- No single fund of funds may account for more than 2 percent of assets
- Hedge fund investments should be invested through a minimum of 75 separate underlying hedge funds
- The market value of any single underlying hedge fund investment should not exceed 2.5 percent of the total hedge fund investment
- A fund of hedge funds' volatility should not be greater than 7.5 percent
- Funds of hedge funds must provide reasonable transparency and disclosure
- Funds registered with SEC are to be preferred

Source: Commonwealth of Massachusetts Public Employee Retirement Administration Commission Guidelines for Hedge Fund Investment.

Some of the selected states have instituted "legal lists" of authorized investments for pension plans that do not specifically include investments in hedge funds or private equity funds as authorized assets. According to a NASRA official, this was the dominant regulatory approach of state pension investment 40 years ago, and while some states have moved away from this approach, others have continued to maintain legal lists. Illinois has established a legal list of assets that does not include interests in hedge funds or private equity funds, in which certain smaller plans that cover police officers and fire fighters are authorized to invest. 65 Large statewide plans, such those managed by the Illinois State Board of Investment, are governed by a prudent man standard, which does not explicitly restrict investment of pension assets in any particular investment. In some instances, states allow a certain percentage of plan assets to be invested in assets that do not qualify under one of the authorized categories on the legal list. For example, the New York State Common Retirement Fund is governed by a legal list, but the state allows

⁶⁵See Ill. Comp. Stat. Ann. 5/1-113.1.

the plan to invest up to 25 percent of its assets in investments not otherwise permitted by the legal list.⁶⁶

Finally, public pension plan investments in hedge funds are prohibited or limited in some states by laws restricting pension plan investment in certain investment vehicles or trading strategies. For example, the North Carolina Retirement system can not invest more than 10 percent of plan assets in limited partnerships or limited liability corporations. Similarly, before new legislation broadening investment authority went into effect in April 2008, the Wisconsin Retirement System could not invest assets in vehicles that trade options or engage in short selling, two techniques commonly used by hedge funds. ⁶⁷ However, with the new statutory authority, the Wisconsin Retirement System may use any investment strategy that meets its prudent investor standard. ⁶⁸

States we contacted take a variety of approaches to overseeing and monitoring public pension plan investment. In Massachusetts, before conducting a hedge fund manager search, public plans must first obtain PERAC approval and provide the agency with a summary of the plan's objectives, strategies, and goals in hedge fund investing. PERAC requires pension plans to document the major due diligence steps taken in the hedge fund manager selection process. In addition, prospective hedge fund managers must submit detailed information to PERAC regarding their key personnel, assets under management, investment strategy and process, risk controls, past performance, and organizational structure. Finally, hedge fund managers must also submit quarterly performance and strategy review reports directly to PERAC. Officials in other states we contacted may review hedge fund and private equity investments as part of a broader oversight approach. For example, the Ohio Retirement Study Council reviews the five large statewide public retirement funds semiannually to evaluate a plan's investment policies and objectives, asset allocations

 $^{^{66} \}rm Assets$ invested under the basket provision are still subject to the prudent investor standard.

⁶⁷The Wisconsin Retirement System is a consolidated system that covers all state, local, and school district employees, with the exception of the city and county of Milwaukee. Short selling is the selling of a security that the seller does not own, or any sale that is completed by the delivery of a security borrowed by the seller. Short sellers assume that they will be able to buy the stock at a lower amount than the price at which they sold short. Selling short is the opposite of going long. That is, short sellers make money if the stock goes down in price.

⁶⁸2008 Wis. Sess. Laws. 212.

decisions, and risk and return assumptions. In California, individual pension boards have sole and exclusive authority over investment decisions; however, they ensure public information on investment decisions and fund performance, including detailed reports of alternative investments, are publicly available.

Conclusions

Available data indicate that pension plans have increasingly invested in hedge funds and have continued to invest in private equity to complement their traditional investments in stocks and bonds. Further, these data indicate that individual plans' hedge fund or private equity investments typically comprise a small share of total plan assets. However, data are generally not available on the extent to which smaller pension plans have made such investments. Because such investments require a degree of fiduciary effort well beyond that required by more traditional investments, this can be a difficult challenge for plans, especially smaller plans. Smaller plans may not have the expertise or financial resources to be fully aware of these challenges, or have the ability to address them through negotiations, due diligence, and monitoring. In light of this, such investments may not be appropriate for some pension plans.

Although plans are responsible for making prudent choices when investing in any asset, EBSA also has a role in helping to ensure that pension plan sponsors fulfill their fiduciary duties in managing pension plans that are subject to ERISA. This can include educating employers and service providers about their fiduciary responsibilities under ERISA. Many private sector plans are insured by the PBGC, which guarantees most benefits when an underfunded plan terminates; however, public sector plans are not insured and may call upon state or local taxpayers to overcome funding shortfalls.

The importance of educating investors about the special challenges presented by hedge funds has been recognized by a number of organizations. For example, in 2006, the ERISA Advisory Council recommended that Labor publish guidance about the unique features of hedge funds and matters for consideration in their use by qualified plans. To date, EBSA has not acted on this recommendation. More recently, in April 2008, the Investors' Committee formed by the President's Working Group on Financial Markets published draft best practices for investors in hedge funds. This guidance will be applicable to a broad range of investors, such as public and private pension plans, endowments, foundations, and wealthy individuals. EBSA can further enhance the usefulness of this document by ensuring that the guidance is interpreted in

light of the fiduciary responsibilities that ERISA places on private sector plans. For example, EBSA could outline the implications of a hedge fund's or fund of funds' limited transparency on the fiduciary duty of prudent oversight. EBSA can also reflect on the implications of these best practices for some plans—especially smaller plans—that might not have the resources to take actions consistent with the best practices, and thus would be at risk of making imprudent investments in hedge funds. While EBSA is not tasked with offering guidance to public sector plans, such plans may nonetheless benefit from such guidance.

Recommendation for Executive Action

To ensure that all plan fiduciaries can better assess their ability to invest in hedge funds and private equity, and to ensure that those that choose to make such investments are better prepared to meet these challenges, we recommend that the Secretary of Labor provide guidance specifically designed for qualified plans under ERISA. This guidance should include such things as (1) an outline of the unique challenges of investing in hedge funds and private equity; (2) a description of steps that plans should take to address these challenges and help meet ERISA requirements; and (3) an explanation of the implications of these challenges and steps for smaller plans. In doing so, the Secretary may be able to draw extensively from existing sources, such as the finalized best practices document that will be published in 2008 by the Investors' Committee formed by the President's Working Group on Financial Markets.⁶⁹

Agency Comments and Our Evaluation

We provided a draft copy of this report to the Department of Labor, PBGC, the Department of the Treasury, the SEC, and the Federal Reserve Bank for their review and comment. Labor generally agreed with our findings and recommendation. With regard to our recommendation, Labor stated that providing more specific guidance on investments in hedge funds and private equity may present challenges. Specifically, Labor noted that given the lack of uniformity among hedge funds, private equity funds, and their underlying investments, it may prove difficult to develop comprehensive and useful guidance for plan fiduciaries. Nonetheless, Labor agreed to consider the feasibility of developing such guidance. Labor's formal comments are reproduced in appendix III.

⁶⁹A draft version of this report, *Principles and Best Practices for Hedge Fund Investors:* Report of the Investors' Committee to the President's Working Group on Financial Markets, was published on April 15, 2008.

We agree that the lack of uniformity among hedge funds or private equity funds may pose challenges to Labor. However, we do not believe it will be an insurmountable obstacle to developing guidance for plan sponsors. Indeed, the lack of uniformity among hedge funds and private equity funds is itself an important issue to convey to fiduciaries, and highlights the need for an extensive due diligence process preceding any investment. Additionally, as we state in the recommendation, Labor's efforts can be facilitated through use of existing best practices documents, such as the best practices for investors in hedge funds document that will be published in the summer of 2008 by the Investors' Committee formed by the President's Working Group on Financial Markets.

The PBGC also provided formal comments, which are reproduced in appendix IV. PBGC generally concurred with our findings. Labor, PBGC, the Department of the Treasury, and the Federal Reserve Bank also provided technical comments and corrections, which we have incorporated where appropriate.

As arranged with your offices, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of this letter. At that time, we will send copies of this report to interested congressional committees and members, federal agencies, and other interested parties. We will also make copies available to others upon request.

If you or your staff has any questions concerning this report, please contact Barbara Bovbjerg on (202) 512-7215 or Orice Williams on (202) 512-8678. Contact points for our Office of Congressional Relations and Office of Public Affairs can be found on the last page of this report. Key contributors are listed in appendix V.

Barbara D. Bovbjerg

Director, Education, Workforce and

Income Security

Orice M. Williams

Director, Financial Markets and

Community Investment

List of Congressional Requesters

The Honorable Max Baucus Chairman The Honorable Charles E. Grassley Ranking Member Committee on Finance United States Senate

The Honorable Charles B. Rangel Chairman The Honorable Jim McCrery Ranking Member Committee on Ways and Means House of Representatives

The Honorable Barney Frank Chairman Committee on Financial Services House of Representatives

The Honorable Michael E. Capuano House of Representatives

The Honorable Paul E. Kanjorski House of Representatives

Appendix I: Objectives, Scope, and Methodology

Our objectives were to address the following questions:

- 1. To what extent do public and private sector pension plans invest in hedge funds and private equity funds?
- 2. What are the potential benefits, risks, and challenges pension plans face in making hedge fund investments, and how do plans address the risks and challenges?
- 3. What are the potential benefits, risks, and challenges pension plans face in making private equity fund investments, and how do plans address the risks and challenges?
- 4. What mechanisms regulate and monitor pension plan investments in hedge funds and private equity funds?

To answer the first question, we obtained and analyzed survey data of private and public sector defined benefit (DB) plans on the extent of plan investments in hedge funds and private equity from three private organizations: Greenwich Associates, Pensions & Investments, and Pyramis Global Advisors. We identified the three surveys through our literature review and interviews with plan representatives and industry experts. As seen in table 4, the surveys varied in the number and size of plans surveyed. Using the available survey data, we determined the percentage of plans surveyed that reported investments in hedge funds or private equity. Using data from Greenwich Associates, we also determined the percentage of plans surveyed that invested in hedge funds or private equity by category of plan size, measured by total plan assets. We further examined data from each survey on the size of allocations to hedge funds or private equity as a share of total plan assets. Using the Pensions & *Investments* data, we analyzed allocations to these investments for individual plans and calculated the average allocation for hedge funds and private equity, separately, among all plans surveyed that reported these investments. The Greenwich Associates and Pyramis data reported the size of allocations to hedge funds or private equity as an average for all plans surveyed. Through our research and interviews, we were not able to

¹Greenwich Associates is an institutional financial services consulting and research firm; Pyramis Global Advisors, a division of Fidelity Investments, is an institutional asset management firm; and *Pensions & Investments* is a money management industry publication.

identify any relevant surveys that included plans with less than \$200 million in total assets.

While the information collected by each of the surveys is limited in some ways, we conducted a data reliability assessment of each survey and determined that the data were sufficiently reliable for purposes of this study. These surveys did not specifically define the terms hedge fund and private equity; rather, respondents reported allocations based on their own classifications. *Pensions & Investments* reported private equity in three mutually-exclusive categories—buyout, venture capital, and an "other" private equity category, which includes investments such as mezzanine financing and private equity investments traded on the secondary market. Data from all three surveys are reflective only of the plans surveyed and cannot be generalized to all plans.

Table 4: Number and Size of DB Plans Observed in Recent Surveys

	Greenwich Associates (2006)	Pensions & Investments (2007)	Pyramis Global Advisors (2006)
Sample size	584 DB plans	133 DB plans	214 DB plans
Total assets of plans in survey	\$3.649 trillion	\$4.4 trillion	n/a
Range of total plan assets	\$250 million or more	>\$1 billion or more	>\$200 million

Source: GAO analysis.

Note: Pensions & Investments surveyed the largest 200 plans, ranked by combined DB and defined contribution (DC) plan assets. With one exception, all DB plans ranked in the top 200 plans had more than \$1 billion in total assets. Of the top 200 plans, 133 were DB plans that completed the survey and provided asset allocation information.

To answer the second and third questions, we conducted in-depth interviews with representatives of 26 private and public sector DB plans, listed in table 5, from June 2007 to January 2008 and, where possible, obtained and reviewed supporting documentation. Interviews related to hedge fund investments were conducted from June 2007 to December 2007. Interviews related to private equity investments were conducted from October 2007 to January 2008. The interviews with plan representatives were conducted using a semi-structured interview format, which included open-ended questions on the following topics, asked separately about hedge funds or private equity: the plan's history of investment in hedge funds or private equity; the plan's experiences with these investments to date; the plan's expected benefits from these investments; challenges the plan has faced with these investments; and

steps the plan has taken to mitigate these challenges, including due diligence and ongoing monitoring. We interviewed five plans that did not invest in hedge funds to discuss the reasons the plan decided not have such investments. We also interviewed officials of government agencies, relevant industry organizations, investment consulting firms, and other national experts listed in appendix II. In addition, we interviewed officials from the Arizona State Retirement System and Missouri Local Government Employees' Retirement System to discuss the recent decision of these plans to invest in private equity.

	Hedge fund interview	Private equity interview
Private sector plans:		
American Airlines	V	
Boeing	$\sqrt{}$	
Exxon Mobil	V	
GE Asset Management	$\sqrt{}$	
International Association of Machinists National Pension Fund	V	
John Deere		$\sqrt{}$
Macy's	$\sqrt{}$	
Northrop Grumman		$\sqrt{}$
Prudential	V	
Target		V
United Mine Workers of America Health and Retirement Funds	V	V
United Technologies	V	
Walt Disney	$\sqrt{}$	$\sqrt{}$
Public sector plans:		
California Public Employees' Retirement System	V	V
California State Teachers' Retirement System	V	V
Illinois State Board of Investments	$\sqrt{}$	
Los Angeles County Employee Retirement Administration	V	
Massachusetts Pension Reserves Investment Management Board	V	
Missouri State Employees' Retirement System	V	

	Hedge fund interview	Private equity interview
National Railroad Retirement Trust Fund		$\sqrt{}$
New York State Common Retirement Fund	$\sqrt{}$	V
Pennsylvania Public School Employees' Retirement System	V	V
Pennsylvania State Employees' Retirement System	V	V
San Diego County Employees' Retirement System	$\sqrt{}$	
South Dakota Retirement System		$\sqrt{}$
Washington State Investment Board		$\sqrt{}$

Source: GAO.

Note: Five of the plans interviewed about hedge funds did not invest in hedge funds.

The plans we interviewed were selected based on several criteria. We attempted to select plans that varied in the size of allocations to hedge funds and private equity as a share of total plan assets. We also attempted to select plans with a range of total plan assets, as outlined in table 6. We identified these plans using data from the *Pensions & Investments* 2006 survey and through our interviews with industry experts.

Table 6: Criteria Used in Selection of Plans for In-Depth Interviews

	Number of plans interviewed – hedge funds	Number of plans interviewed – private equity	
Size of allocation to hedge funds or private equity:			
None	5		
5% or less	10	5	
>5 to 10%	3	6	
>10%	2	2	
Total plan assets:			
\$10 billion or less	8	5	
>\$10 to \$100 billion	9	5	
>\$100 billion	3	3	

Source: GAO analysis of Pension & Investments 2006 survey.

To identify and analyze the regulation of public DB pension investments by states we consulted officials at the Department of Labor and representatives of relevant agencies in selected states, and reviewed relevant policy documents. The states we selected included the 10 states with the largest public pension assets according to our review of the National Association of State Retirement Administrators (NASRA) Public Funds Survey data listed in table 7. We also included Massachusetts because our previous contact with that state produced valuable information for this objective. Those states chosen based on the size of plan assets were: California, New York, Texas, Ohio, Florida, Illinois, Pennsylvania, New Jersey, Wisconsin, and North Carolina. In 9 of 10 states we spoke with the offices of the State Auditor, the State Treasurer, and the State Comptroller or equivalent offices. North Carolina's Chief Investment Officer of the State Treasurer's Office affirmed our analysis through email. Finally we informed each of these states of our analysis and gave them the opportunity to comment on our description of regulations in their state.

Table 7: Ten States with the Largest Total Public DB Pension Plan Assets (Dollars in billions)

		Sum of market value for state's public
Rank	State	plan assets
1	California	\$417.4
2	New York	301.9
3	Texas	156.3
4	Ohio	147.3
5	Florida	116.3
6	Illinois	96.0
7	Pennsylvania	90.1
8	New Jersey	79.3
9	Wisconsin	67.9
10	North Carolina	66.7

Source: GAO analysis of NASRA Public Funds Survey 2007 data.

We conducted this performance audit from June 2007 to July 2008, in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence

 $^{^2\}mathrm{Massachusetts}$ ranks 20th with \$32.4 billion in public pension plan assets, according to the 2007 Public Funds Survey.



Appendix II: Government Agencies, Industry Organizations, Investment Consulting Firms, and Other Organizations Interviewed

Government agencies

Department of Treasury
Department of Labor, Employee Benefit Security Administration
Board of Governors of the Federal Reserve System
Pension Benefit Guaranty Corporation
Securities and Exchange Commission

Hedge fund and private equity industry organizations

Managed Funds Association National Venture Capital Association (NVCA) Private Equity Council (PEC)

Investment consulting firms

Cambridge Associates Cliffwater, LLC Fiduciary Counselors McCarter & English, LLP Mercer Associates Offices of Wilkie, Farr, and Gallagher, LLP Pension Governance, LLC

Other industry organizations

American Benefits Council (ABC)

American Federation of Labor and Congress of Industrial Organizations (AFL-CIO)

American Federation of State, County, and Municipal Employees (AFSCME)

Committee on the Investment of Employee Benefit Assets (CIEBA) Financial Policy Forum

National Association of State Retirement Administrators (NASRA)

North American Securities Administrators Association (NASAA)

National Conference of State Legislatures (NCSL) roundtable:

National Association of Police Organizations (NAPO)

National Conference on Public Employee Retirement Systems (NCPERS)

National Association of State Treasurers

National Association of Counties (NACo)

Grand Lodge Fraternal Order of Police

Appendix II: Government Agencies, Industry Organizations, Investment Consulting Firms, and Other Organizations Interviewed

National Association of State Auditors, Comptrollers, and Treasurers (NASACT)

National Education Association (NEA)

National Council on Teacher Retirement (NCTR) and California Public Employees' Retirement System

National Conference of State Legislatures (NCSL)

National Association of State Retirement Administrators (NASRA)

Appendix III: Comments from the Department of Labor

U.S. Department of Labor

Assistant Secretary for Employee Benefits Security Administration Washington, D.C. 20210



July 16, 2008

Ms. Barbara D. Bovbjerg
Director, Education, Workforce, and
Income Security Issues
United States Government Accountability Office
Washington, DC 20548

Dear Ms. Bovbjerg:

We have reviewed the Government Accountability Office's (GAO) draft report entitled "DEFINED BENEFIT PENSION PLANS: Guidance Needed to Better Inform Plans of the Challenges and Risks of Investing in Hedge Funds and Private Equity" (GAO-08-692). Based upon our review of the report, below are the comments and observations.

As recognized in the draft report, ERISA requires, among other things, that in making plan investment decisions, an ERISA fiduciary must act prudently, solely in the interest of the plan and its participants and beneficiaries, and to diversify plan investments so as to minimize the risk of large losses. Under the framework set out in the Department of Labor's regulations,¹ a fiduciary's investment decision is considered prudent, if the fiduciary gives appropriate consideration to all those facts and circumstances that the fiduciary knows or should know are relevant to the particular investment decision involved, including the role the investment plays in the plan's investment portfolio and acts accordingly. With respect to any plan investment, including an investment in a hedge fund or private equity fund, a plan fiduciary must gather sufficient information to understand the nature of the investment, make a determination as to its prudence, and periodically monitor the investment to evaluate whether it remains a prudent plan investment.

We appreciate GAO's interest in helping plan fiduciaries understand the challenges of investing in hedge funds and private equity and their attendant obligations under ERISA. The Department shares this interest and carries out an extensive outreach program to assist plan fiduciaries, service providers, and others in understanding their responsibilities under ERISA. The program addresses investment decisions and the importance of selecting and monitoring plan service providers. However, providing more specific guidance on investments in hedge funds and private equity funds, as recommended by the draft report, may present challenges. In this regard, we note that

^{1 29} CFR § 2550.404a-1.

the draft report indicates there is no statutory definition of hedge fund or private equity fund, and investment objectives and strategies may vary greatly among these funds. Given this apparent lack of uniformity in describing hedge funds, private equity funds, and their investments and operations, it may prove difficult to develop comprehensive and useful guidance for plan fiduciaries. Nonetheless, we will consider the feasibility of developing the type of specific guidance regarding investments in hedge funds and private equity funds as recommended in the draft report.

EBSA is committed to protecting the employer-sponsored benefits of American workers, retirees, and their families. We appreciate having had the opportunity to review and comment on the draft report. Please do not hesitate to contact us if you have questions concerning this response or if we can be of further assistance.

Sincerely,

Bradford P. Campbell Assistant Secretary

Appendix IV: Comments from the Pension Benefit Guaranty Corporation



Office of the Director

July 11, 2008

Ms. Barbara Bovbjerg, Director Education, Workforce, and Income Security Issues Mr. Orice M. Williams, Director, Financial Markets and Community Investment Government Accountability Office 441 G Street, N.W. Washington, D.C. 20548

Dear Ms. Bovbjerg and Mr. Williams:

Thank you for the opportunity to comment on the draft report entitled, "DEFINED BENEFIT PENSION PLANS: Guidance Needed to Better Inform Plans of the Challenges and Risks of Investing in Hedge Funds and Private Equity" (GAO-08-692).

In our role as an insurer, PBGC has an interest in the transparency of the investments made by plans it insures. Existing disclosure requirements provide only a limited window on hedge funds and private equity investments. However, to date, defined benefit pension plans that have been terminated and trusteed by PBGC have not had significant amounts invested in either hedge funds or private equity investments.

The draft report notably acknowledges that, within the wide and growing array of hedge funds, despite having a reputation of being "risky" investment vehicles, "this was not their original purpose, and is not true of all hedge funds today." In addition, the draft report underscores ERISA's notion of the prudence of an individual investment being considered within the context of the total plan portfolio.

As there are risks involved with all investments, we certainly agree with the principle enunciated in ERISA, that plan trustees should exercise due diligence in making prudent investment decisions solely for the benefit of the plan and its participants and beneficiaries, and closely monitor investment performance on an on-going basis. In seeking to fully meet the obligations of the plan under ERISA, plan trustees must fully understand the potential benefits and risks and the relative performance of all of its investments, including hedge funds and private equity investments.

With nearly 44 million workers an appreciate GAO's work in highlig raised in this report and look forw for the opportunity to comment.	bting issues that relate t	o pensions, including the	ose	
Sincerely, Charles E.F. Millard				
	2			

Appendix V: GAO Contacts and Staff Acknowledgments

GAO Contacts

Barbara D. Bovbjerg (202) 512-7215 or bovbjergb@gao.gov Orice M. Williams (202) 512-8678 or williamso@gao.gov

Staff Acknowledgments

David Lehrer, Assistant Director, and Michael Hartnett managed this report. Sharon Hermes, Angela Jacobs, and Ryan Siegel made important contributions throughout this assignment.

Joseph A. Applebaum, Joe Hunter, Ashley McCall, Jay Smale Jr., Jena Sinkfield, Frank S. Synowiec, Karen Tremba, Rich Tsuhara, Charlie Willson, and Craig Winslow also provided key support.

GAO's Mission	The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.		
Obtaining Copies of GAO Reports and Testimony	The fastest and easiest way to obtain copies of GAO documents at no cost is through GAO's Web site (www.gao.gov). Each weekday, GAO posts newly released reports, testimony, and correspondence on its Web site. To have GAO e-mail you a list of newly posted products every afternoon, go to www.gao.gov and select "E-mail Updates."		
Order by Mail or Phone	The first copy of each printed report is free. Additional copies are \$2 each A check or money order should be made out to the Superintendent of Documents. GAO also accepts VISA and Mastercard. Orders for 100 or more copies mailed to a single address are discounted 25 percent. Orders should be sent to:		
	U.S. Government Accountability Office 441 G Street NW, Room LM Washington, DC 20548		
	To order by Phone: Voice: (202) 512-6000 TDD: (202) 512-2537 Fax: (202) 512-6061		
To Report Fraud,	Contact:		
Waste, and Abuse in Federal Programs	buse in Web site: www.gao.gov/fraudnet/fraudnet.htm E-mail: fraudnet@gao.gov		
Congressional Relations	Ralph Dawn, Managing Director, dawnr@gao.gov, (202) 512-4400 U.S. Government Accountability Office, 441 G Street NW, Room 7125 Washington, DC 20548		
Public Affairs	Chuck Young, Managing Director, youngc1@gao.gov , (202) 512-4800 U.S. Government Accountability Office, 441 G Street NW, Room 7149 Washington, DC 20548		