



## The Hedge Fund Industry

Hedge funds controlled \$1.6 trillion of investable assets as of year-end 2009. Because these pooled investment vehicles are largely unregulated and are not generally sold to retail investors, their visibility to the public is often through highly chronicled news events such as:

- (a) the near collapse of the hedge fund Long-Term Capital Management<sup>1</sup> in 1998 and the ensuing global financial crisis,
- (b) annual compensation levels of individual top hedge fund managers exceeding \$1 billion, and
- (c) active hedge fund involvement in (and occasional leadership of) proxy challenges, takeovers, and corporate breakups.

### Background

Early in 1949 Alfred Winslow Jones and four friends formed a general investment partnership named A. W. Jones & Co. Jones contributed \$40,000 of the initial \$100,000 capitalization of the investment partnership. Jones's idea was simple. He hoped to produce superior investment returns with less than average market risk. By borrowing money, Jones could leverage his firm's \$100,000 investment by buying \$100,000 of stock long and selling \$50,000 of stock "short."<sup>2</sup> His exposure to the risk of the market overall in this instance would be only \$50,000.

If the stock market fell by 10% after Jones had established his initial stock positions, and his stock picks were no better than average, Jones could expect to *lose* \$10,000 on his long portfolio and *gain* \$5,000 on his short portfolio. His overall loss of 5% of his firm's initial capital would be only one-half of what he would have incurred if all \$100,000 of the firm's capital had been invested in "long only" with no short positions. A comparable attenuation in volatility would have occurred if the market *rose* rather than *fell* by 10%.

The concept that less reward should accompany less risk is not particularly remarkable. A far more intriguing outcome occurs in the example above if Jones is a really great stock picker and can beat the market by 1 percentage point on both his long and short positions. In this example, with a 10% market *rise* Jones gains  $\$100,000 \times (.1+.01) - \$50,000 \times (-.1+.01) = \$6,500$  or 6.5%, yet still incurs

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<sup>1</sup> At one point the hedge fund Long-Term Capital Management had a balance sheet leverage ratio of 25 to 1.

<sup>2</sup> "Shorting" a stock requires an investor to borrow stock from a third party (usually a broker), sell the stock for cash, and finally, replace the stock by buying it back at its then market price at some later date.

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Professor William E. Fruhan, Jr. prepared this note as the basis for class discussion.

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only half the average market risk. **Figure A** shows Jones's percentage gain in his 100% long/50% short portfolio with a 10% market rise assuming Jones beats the market by 1 to 5 percentage points.

**Figure A** % Point Gain on Jones' \$100,000 Investment Assuming (1) an Average Rise of 10% in the Market and (2) Jones Beating the Market by the Percentage Points Shown Below

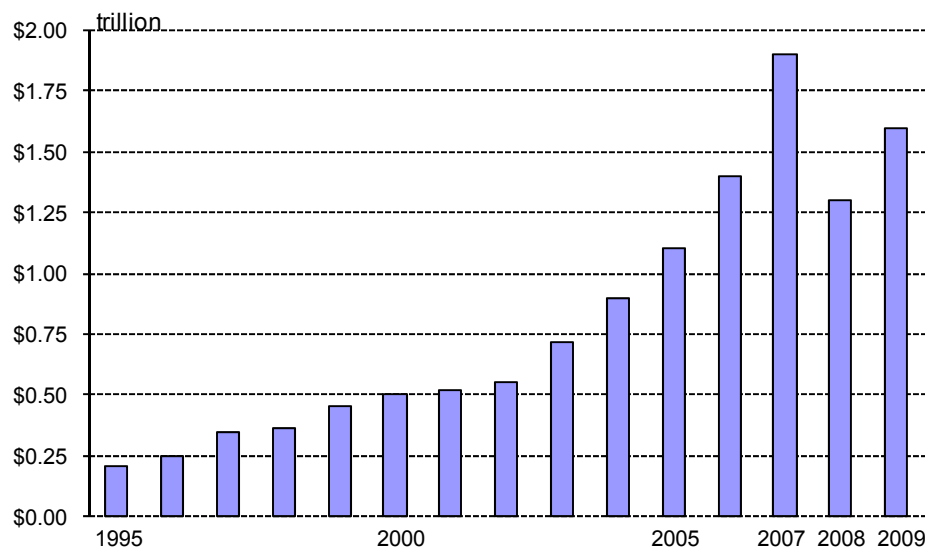
% points by which Jones beats the market rise of 10%	0	1	2	3	4	5
Jones's gain on \$100,000 of initial investment capital	5.0%	6.5%	8.0%	9.5%	11.0%	12.5%

Source: Casewriter.

The point is that by using leverage and shorting stocks, an investment manager with above-average skills can both outperform the market and incur less than average market risk. The hedge fund industry began with A. W. Jones & Co. investing \$100,000 utilizing this concept.

Between 1949 and 1995, hedge fund industry assets grew in size from \$100,000 to \$21 billion (31%/year). As shown in **Figure B**, between 1995 and 2007 assets under management grew from \$20 billion to almost \$2 trillion.

**Figure B** Hedge Fund Assets Under Management



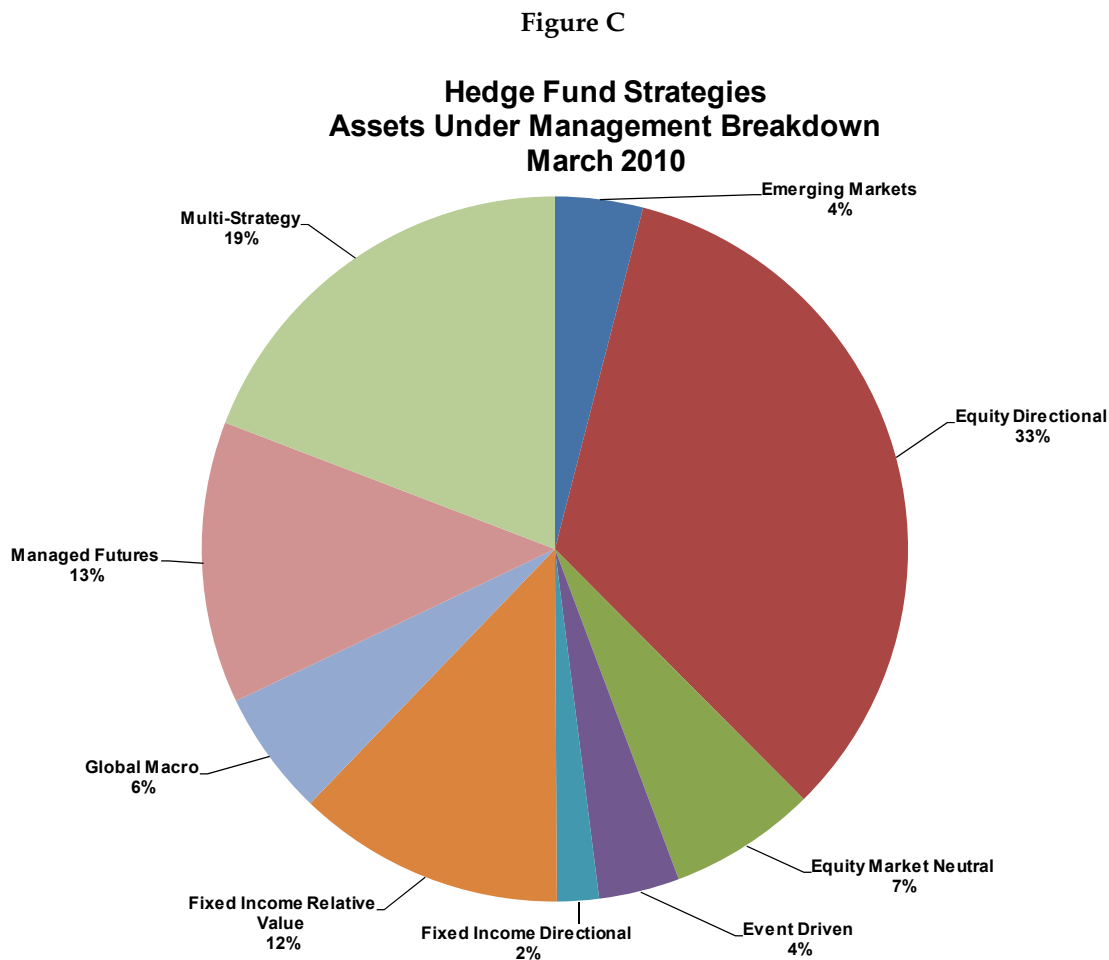
Source: Hedge Fund Research, Inc., [www.hedgefundresearch.com](http://www.hedgefundresearch.com).

The remarkable growth in hedge fund assets over the past decade is particularly notable when seen in the context of the growth in assets by other U.S. financial entities (**Exhibit 1**).

## Emergence of Alternative Hedge Fund Investment Strategies

Hedge funds have evolved significantly since their modest beginning in 1949. These investment pools no longer simply involve long/short equity portfolios, but instead include literally dozens<sup>3</sup> of distinct asset classes and portfolio strategies, a few of which are shown in **Exhibit 2**.

While the investment strategy categories are numerous, only a handful account for a significant majority of hedge fund assets (**Figure C**).



Source: Bloomberg L. P., accessed 3/24/2010.

While large, the hedge fund industry is not highly concentrated. The 19 largest firms (out of more than 5,000) account for less than 25% of the assets under management (**Figure D**).

<sup>3</sup> To review a longer list of hedge fund strategies see [www.hedgefundresearch.com](http://www.hedgefundresearch.com).

Figure D

World's Largest Hedge Fund Firms		Assets Under Management in billions <sup>a</sup>
1	<b>JP Morgan</b>	50.4
2	<b>Bridgewater Associates</b>	43.6
3	<b>Paulson &amp; Co</b>	32.0
4	<b>Soros Fund Management</b>	27.0
5	<b>D.E. Shaw Group</b>	23.6
6	<b>Och-Ziff Capital Management Group</b>	23.5
7	<b>Baupost Group</b>	21.8
8	<b>Goldman Sachs Asset Management</b>	20.8
9	<b>Angelo, Gordon &amp; Co</b>	20.8
10	<b>Farallon Capital Management</b>	20.7
11	<b>Avenue Capital Group</b>	20.0
12	<b>King Street Capital Management</b>	19.0
13	<b>BlackRock</b>	16.1
14	<b>Highfields Capital Management</b>	10.0
15	<b>TPG-Axon Capital</b>	9.6
16	<b>Golden Tree Asset Management</b>	9.6
17	<b>AQR Capital Management</b>	9.1
18	<b>Grantham, Mayo, Van Otterloo</b>	8.5
19	<b>Taconic Capital Advisors</b>	8.1
		<hr/> \$394.2

Sources: "Billion Dollar Club," AR:Absolute Return+Alpha, March 2010, pg. 57.

<sup>a</sup> Includes Highbridge funds.

Entry into and exit from the hedge fund industry is high and depends heavily on market conditions. The number of new hedge funds launched in 2007-2009 was as follows:

	2007	2008	2009	1 <sup>st</sup> qt. 2010
New Hedge Funds Launched	857	634	349	193

Source: Hedge Fund News Daily Report, February 2, 2010

The diversity of hedge fund activities makes them somewhat difficult to define. In the President's Working Group on Financial Markets, hedge funds are described as . . . "any pooled investment vehicle that is privately organized, administered by professional investment managers, and not widely available to the public. The primary investors in hedge funds are wealthy individuals and institutional investors. In addition, hedge fund managers frequently have a stake in the funds they

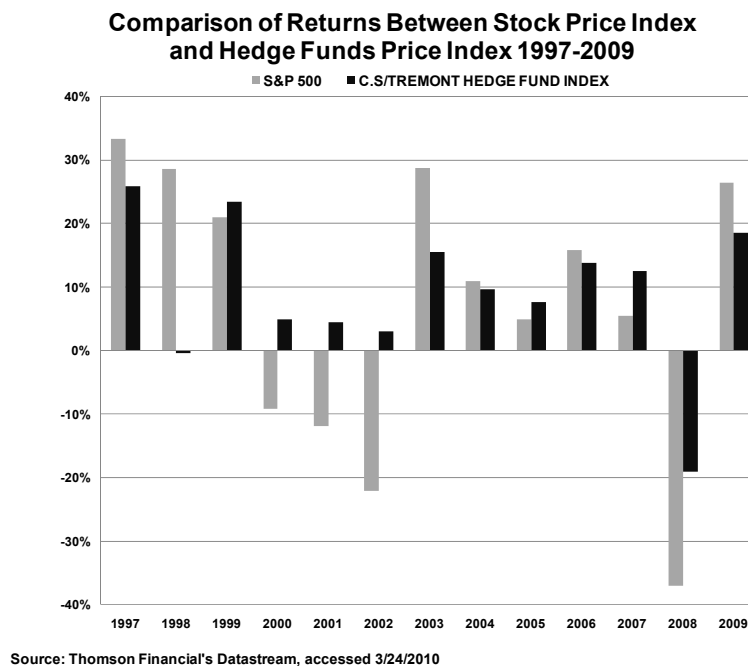
manage. Entities classified as hedge funds are commonly organized as limited partnerships or limited liability companies, and in many cases are domiciled outside the United States.”<sup>4</sup>

## Hedge Fund Portfolio Performance

Many explanations have been offered for the remarkable growth in the size of the hedge fund industry in recent years. These include claims that

- (a) hedge funds have achieved more consistent and possibly even *higher*<sup>5</sup> average returns than portfolios of common stocks (**Figure E**);
- (b) these returns have been achieved with far lower *volatility* than portfolios of common stocks (**Figure F**); and
- (c) the returns on hedge funds with some specific investment strategies are only *modestly correlated* with traditional asset classes such as stocks and bonds (**Figure G**), making these funds unusually attractive from the standpoint of portfolio diversification.

Figure E

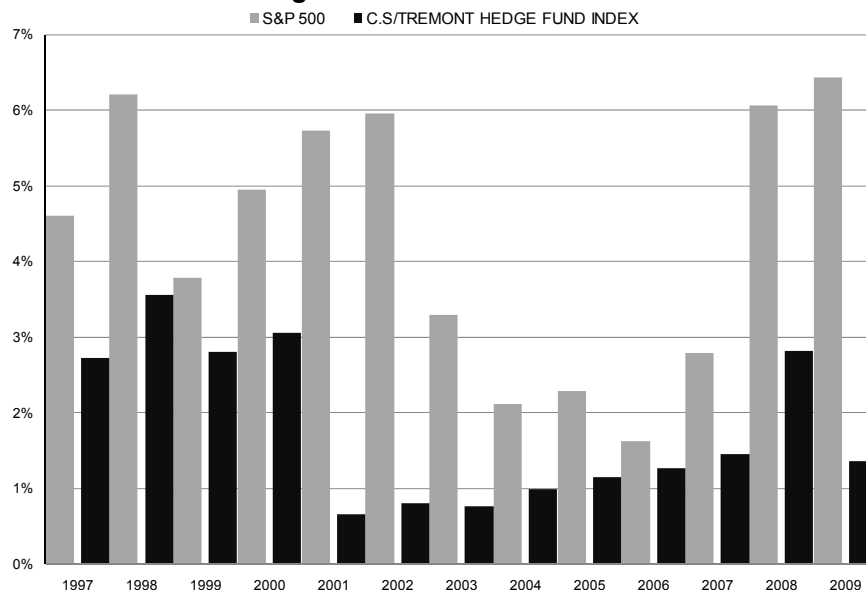


<sup>4</sup> Report of the President's Working Group on Financial Markets, "Hedge Funds, Leverage, and the Lessons of Long Term Capital Management," April 1999, p. 1.

<sup>5</sup> Mutual funds are required to report audited returns to public regulators, while privately organized hedge funds are not. Voluntarily reported hedge fund data are subject to both "backfill" and "survivorship" bias, which makes return comparisons both difficult and possibly subject to misinterpretation. See, for example, Malkiel and Saha, "Hedge Funds: Risk and Return," *Financial Analysts Journal*, November/December 2005.

In a paper analyzing the components of returns for 3,500 hedge funds from 1995–2006, Ibbotson and Cheng find that, adjusted for backfill and survivorship bias, hedge funds returned 12.7% annually pre-fees. After fees of 3.7%, the return was 9.0%, which split into 3% for alpha (returns for having superior ability to identify undervalued assets) and 6% for beta (returns for assuming systematic risk). See Roger G. Ibbotson and Peng Cheng, "The ABCs of Hedge Funds: Alphas, Betas and Costs," Yale ICF Working Paper No. 06-10, September 2006.

**Figure F**  
**Comparison of Volatility Between Stock Price Index**  
**and Hedge Funds Price Index 1997 - 2009**



Source: Thomson Financial's Datastream, accessed 3/24/2010

**Figure G**  
**Correlation Between Traditional Asset (Stock and Bond) Price Indices**  
**and Hedge Funds Price Index**

Style		U.S. Stocks (S&P 500)	U.S. Bonds (Merrill Lynch Corp. Bond Index)
Hedge Funds	Convertible Arbitrage	0.49	0.18
	Dedicated Short Bias	0.14	0.09
	Dedicated Short Bias	-0.78	-0.06
	Equity Market Neutral	0.42	0.13
	Event Driven	0.55	0.06
	Fixed Income Arbitrage	0.00	0.08
	Global Macro	0.19	0.21
	Long/Short Equity	0.58	0.15
	Managed Futures	-0.10	0.26
Funds of Hedge Funds		0.53	0.10

Sources: Thomson Datastream and Bloomberg L.P., accessed January 31, 2008.

Another distinguishing feature of hedge funds is that many hedge fund strategies produce a distribution of annual or monthly returns that have “fat tails” (high kurtosis) in relation to a statistically “normal” distribution, and in relation to the distribution of returns from traditional asset classes such as stocks and bonds. This means that extreme return events are likely to happen to hedge funds a lot more frequently than they would occur if hedge funds produced statistically “normally” distributed returns.

When the news is good for hedge funds, it can be really, really good (**Figure H**).

**Figure H**

**World's Best-Performing Hedge Funds – 2007**

Fund	Firm	Strategy	Total Return
1 Paulson Credit	Paulson & Co.	Event driven	435.9%
2 Paulson Credit II	Paulson & Co.	Event driven	242.9
3 Qinhan China	Qinhan Capital Management	Multi-strategy	218.8
4 HFH ShortPlus	Highland Financial Holdings	Asset-backed securities	132.1
5 APS China A Share	APS Asset Management	Long biased equity	131.9
6 Balestra Capital Partners	Balestra Capital	Macro	130.5
7 Golden China	Greenwoods Asset Mgmt.	Long/short equity	127.2
8 Paulson Advantage Plus	Paulson & Co.	Event driven	123.9
9 Passport I-Global Strategy	Passport Capital	Long/short equity	122.4
10 Harbinger Capital Partners Special Situations	Harbinger Capital Partners	Distressed	107.6
11 GWI Brazil	GWI Investment Management	Long biased equity	104.3
12 Paulson Partners Enhanced	Paulson & Co.	Merger arbitrage	100.0
13 Passport Materials	Passport Capital	Sector	97.7
14 Pinpoint China	Pinpoint Asset Management	Long/short equity	92.4
15 Emperor Greater China	Emperor Investment Mgmt.	Long/short equity	90.3
16 Vault Global Opportunities	Vault Partners	Long/short equity	87.4
17 Boyer Allan Greater China	Boyer Allen Investment Mgmt.	Long biased equity	76.7
18 Everyoung Growth	Guotai Junan Asset Mgmt.	Macro	69.5
19 Harbinger Capital Partners I	Harbinger Capital Partners	Distressed	64.5
20 Skopos HG	Credit Suisse Hedging-Griffo	Long/short equity	61.3

Source: Bloomberg L.P., Hedge Fund Research, Inc.

Notes: Figures are for nine months ended on September 28, 2007.

"Fund" includes funds of more than \$100 million.

But when it is bad, it can be really, really bad—resulting in fund failures and liquidations. This phenomenon may help to explain why, in the world of finance, Black Swan<sup>6</sup> events "... that are assigned probabilities of one in 1 million years make a semi-regular appearance every half-decade or so."<sup>7</sup>

In March 2008, for example, Carlyle Capital Corp. (an Amsterdam-based hedge fund managed by the Carlyle Group, a U.S. private equity firm) was heavily invested in AAA-rated residential mortgage-backed bonds issued by Fannie Mae and Freddie Mac, two giant government-sponsored<sup>8</sup> (but publicly traded) mortgage companies. Carlyle Capital owned a portfolio for \$21.7 billion of these bonds with an equity investment of only \$670 million.

Carlyle financed its bond position by utilizing short-term low-interest rate repurchase agreements with commercial banks. Carlyle could borrow \$.97 for each \$1.00 of collateral posted. Unfortunately, between February and March of 2008, yield spreads on Fannie Mae and Freddie Mac bonds versus five-year Treasury notes rose from 2.48 percentage points to a 22-year record high of 3.51 percentage points. As the value of these bonds fell, Carlyle's lending banks called for more collateral, and reduced their loans from \$.97 for each \$1.00 in value of collateral posted to \$.95. Carlyle was unable to meet a flood of margin calls, and the lending banks sold Carlyle's collateral at fire-sale prices. Carlyle's equity holders were wiped out in a matter of a few days.

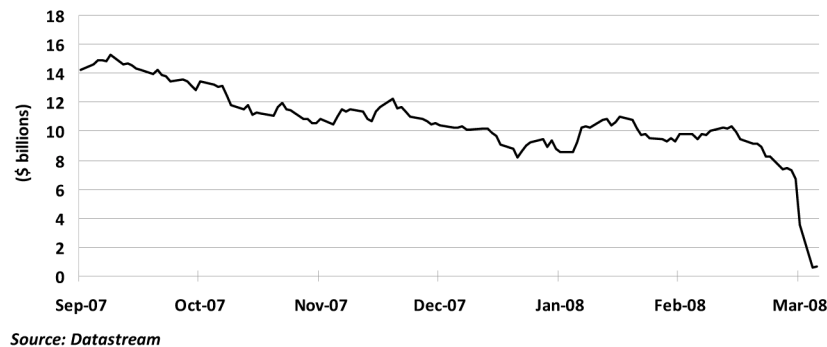
<sup>6</sup> In his book "The Black Swan: The Impact of the Highly Improbable," Nassim Taleb summarizes a "Black Swan" event as encompassing the triplet "rarity, extreme impact and retrospective (but not prospective) predictability."

<sup>7</sup> Pablo Triana, "The Black-Swan Effect—Product Salesman Beware," *Financial Times*, January 14, 2008, p. 22.

<sup>8</sup> These firms, called Government Sponsored Enterprises, are owned by shareholders but regulated by a U.S. government agency. They are able to borrow money at low interest rates due to an "implicit" government debt guarantee.

Within a week after the Carlyle Capital collapse, Bear Stearns, the fifth-largest U.S. investment bank and a major player in the mortgage-backed securities market, also collapsed (**Figure I**), and was quickly acquired by JPMorgan Chase.

**Figure I**  
**Market Value of All Outstanding Shares**  
**Bear Stearns Companies, Inc.**  
**September 2007–March 2008 (\$ billions)**



As an investment category, hedge funds belong to a larger investment universe known as “alternative investments.” Alternative investments include almost everything other than domestic stocks and bonds. Hedge funds, private equity funds, venture capital funds, real estate and timberlands all represent examples of alternative investments. These appeal to a range of investors including pension funds, endowments, and other long-term investors who are prepared to accept reduced immediate liquidity<sup>9</sup> for greater portfolio diversification. In recent years, these types of investors<sup>10</sup> have moved increasing percentages of their asset choices into “alternative investment” categories in search of higher and/or more stable returns at (hopefully) lower portfolio risk.

## Hedge Fund Management Fees

Investment management fees charged by hedge funds differ dramatically from fees charged by mutual funds. Both hedge funds and mutual funds charge fees based on the amount of assets managed. An actively managed equity mutual fund might charge an annual fee of 1% of assets under management. For many years hedge funds charged an annual percentage fee in the range of 1.5% to 2.0%, plus an incentive fee equal to 20% of annual gains.<sup>11,12,13</sup> Following the global financial crisis of

<sup>9</sup> While open-ended mutual funds permit daily withdrawals, about one-quarter of hedge funds require a lockup period of one year or more for investors. After the lockup period, capital withdrawals are permitted only monthly or quarterly by about 75% of hedge funds, and usually with some significant advance notice period (30 days to 60 days for 60% of hedge funds).

<sup>10</sup> According to *Pensions and Investments* (January 2007 annual survey), in 2006, defined benefit pension plans held about 3% of their assets in hedge funds. Endowments and foundations held about 12% of their assets in hedge funds.

<sup>11</sup> Mutual funds in the U.S. are permitted (under Section 205(b)(2) of the Investment Advisors Act of 1940 and Rules 205-1 and 205-2 thereunder) to charge performance-based fees, but any fee *additions* for superior performance must be matched by equivalent fee *reductions* for inferior performance against a reasonable benchmark. Performance-based fees (referred to as “fulcrum fees”) are levied by only about 2% of U.S. mutual funds. A typical “fulcrum fee” would add or subtract (from a base fee) .02% of assets under management for each one percentage point that a fund’s annual return diverges from a reasonable benchmark (such as the S&P 500 index). Fulcrum fees are not utilized by European mutual funds.



2007-2009, annual fees fell slightly to an average of 1.6% of assets under management plus 19.2% of annual gains.

As shown in **Figure J** below, this fee structure means that to produce equivalent “after-fee” performance in both up and down market environments, the “before-fee” performance of hedge funds must be significantly better than the “before-fee” performance of an equally risky mutual fund (+12.8% vs. +10.0% in a 10% up market, and -9.5% vs. -10.0% in a 10% down market).

**Figure J**  
Pre-fee Performance Levels Required to Equalize After-fee Performance Levels  
for Hedge Funds and Mutual Funds

	Mutual Fund		Hedge Fund	
Fund Performance Before Fees	+10.0%	-10.0%	+12.8%	-9.5%
Management Fee (% of assets)	-1.0%	-1.0%	-1.5%	-1.5%
Incentive Fee (% of gains)	0	0	2.3%	0
Fund Performance After Fees	+9.0%	-11.0%	+9.0%	-11.0%

Source: Casewriter.

“Funds of hedge funds” represent a significant component of the hedge fund industry, perhaps as much as 50% by some estimates.<sup>14</sup> These funds pool assets to invest in numerous different hedge funds, providing diversification, manager selection, and monitoring services to their investors. It is a costly service, with this second layer of fees amounting to about 1% of assets under management plus 10% of any gains. Total fees for investing in hedge funds via a “fund of hedge funds” can equal 3% of assets plus 30% of gains. This investment structure is particularly helpful to “smaller” wealthy individuals and institutions with assets of under \$100 million. If an investor with \$50 million wants to diversify 10% of his or her assets into the hedge fund industry but also wants to spread that 10% into multiple distinct hedge fund strategies (**Exhibit 2**), scale could be a problem. Many hedge funds limit the minimum investment to \$1 million. With a minimum of this size, a \$50 million investor would need to shrink the number of hedge fund strategies to 5, or select a “fund of hedge funds” that provides all of the hedge fund strategies with a single minimum investment by pooling together the funds of many “smaller” investors.

The high fee structure of hedge funds may be explained, in part, by a combination of high performance expectations of hedge fund investors and simple labor economics. High fees should be acceptable to investors if the “post-fee” returns of hedge funds are higher than can be obtained from more conventional investment alternatives such as mutual funds with equivalent levels of risk. The

<sup>12</sup> The Medallion Fund, managed by Renaissance Technologies (**Figure D** and **Exhibit 4**), has reported a compound annual rate of return to investors (after fees) of 37% since 1989. This fund charges an annual management fee of 5% plus 44% of any gains. This is one of the highest fee levels charged by any hedge fund. The fund is closed to new investors.

<sup>13</sup> Most hedge funds use “high watermark” accounting for calculating this incentive fee. Thus, if a fund declines 10% in a year, the incentive fee for the following year would not begin until the fund had made up for the 10% loss of the prior year.

<sup>14</sup> Patrick Stevenson, “Fund of Hedge Funds: Origins, Role and Future,” *Financial Stability Review*, Banque de France, April 2007.

most skilled investment managers should be drawn to organizations where their skills will be most highly rewarded. Apparently those organizations, given their performance-based fee attributes, are hedge funds. As shown in **Exhibits 3 and 4**, high-performance environments produce remarkable paychecks for top hedge fund managers.

## Hedge Fund Regulation

Hedge funds enjoy many freedoms critical to their success that are not enjoyed by more highly regulated investment advisors such as mutual funds. These include the ability to

1. use significant leverage (borrowings);
2. sell securities short;
3. charge significant and asymmetric performance based fees; and
4. keep secret their investment positions and strategies, even from their own investors.

To avoid a complex web of constraints (including severe limits in the four areas noted above), hedge funds try to avoid being regulated under

- a) The Securities Act of 1933,
- b) The Securities Exchange Act of 1934,
- c) The Investment Company Act of 1940, and
- d) The Investment Advisors Act of 1940.

They can avoid these regulatory constraints by adhering to the following guidelines:

1. Not selling interests in their hedge funds through general solicitation or general advertising (i.e., to retail investors).
2. Limiting the sale of interests in a specific hedge fund to 100 or fewer “accredited investors”<sup>15</sup> (Section 3(c)(1) Funds) or 499 or fewer “qualified purchasers”<sup>16</sup> (Section 3(c)(7) Funds).
3. Limiting the number of hedge fund “clients” of a specific hedge fund advisor to fewer than 15 (with each hedge fund managed by the advisor counting as a single “client”).
4. Keeping the size of the equity portfolio of hedge funds they manage under \$100 million to avoid having to disclose their portfolio holdings as of the end of each quarter within 45 days of the close of that quarter (SEC Form 13F).
5. Keeping the beneficial ownership of each class of public company equity securities held by all the funds they manage under 5% of the total equity ownership of that class to avoid having to disclose both the *size* of their position and their *purpose* in amassing a position of that size (SEC Schedule 13D).

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<sup>15</sup> “Accredited investors” are individuals with a net worth above \$1 million or annual income in the last two years above \$200,000 (\$300,000 including spouse), or institutional investors with over \$5 million in assets.

<sup>16</sup> “Qualified purchasers” are individuals who own not less than \$5 million in investments, or an entity acting for qualified purchasers on a discretionary basis with not less than \$25 million in investments.

Given the large size and growing importance of the hedge fund industry (\$1.6 trillion in assets and in some markets up to 50%<sup>17</sup> of the trading volume), and the propensity of hedge funds to experience “Black Swan” events, the U.S. Securities and Exchange Commission (SEC) has been attempting to find a way to better understand and perhaps gain some regulatory oversight over the industry. This was done with full understanding that too heavy a hand might cause even further movement of hedge funds offshore<sup>18</sup> (**Exhibit 5**) to avoid or reduce SEC jurisdiction. In December 2004, the SEC, by a 3 to 2 vote, finalized a rule, effective February 2006, that would require hedge fund advisors to register under the Investment Advisors Act of 1940. The rule was challenged in court, and the SEC lost the case.<sup>19</sup> The SEC did not appeal this court ruling. For the moment the hedge fund industry remains remarkably unregulated, a privilege possibly open to legislative challenge following another more dramatic “Black Swan” event.

While the specifics of hedge fund regulation differ by geography, hedge funds enjoy similar light regulation in many developed securities markets around the world.<sup>20</sup>

## Oversight versus Regulation of Hedge Funds

For the moment, primary oversight of hedge funds comes from self regulation, in part as required by *investors* and in part as required by *lenders/counterparties* in their day-to-day securities transactions with hedge funds.<sup>21</sup>

In January 2008, for example, 14 of the largest hedge funds based in London “. . . agreed to disclose more information about the risks they run, the fees they charge, and how they value their assets, after deciding upon voluntary standards to head off the threat of greater regulation.”<sup>22</sup>

The Hedge Fund Working Group (including the 14 hedge funds) developed the standards and was chaired by a former deputy governor of the Bank of England. The Hedge Fund Standards Board would oversee the standards but have no formal enforcement power. Any enforcement would come from investors in the hedge funds who would expect the funds they invested in to “comply or explain” why the agreed upon rules were not adhered to. Investors not satisfied with their hedge fund’s response would presumably withdraw their capital from the fund.

The other source of oversight of hedge funds is lenders/counterparties involved in the day-to-day hedge fund trading transactions. Hedge funds utilize the services of “prime brokers” to

1. lend them the securities they need to undertake short sales;<sup>23</sup>

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<sup>17</sup> Speech by Robert K. Steel, Undersecretary of the Treasury for Domestic Finance, February 27, 2007.

<sup>18</sup> For tax and regulatory reasons, many hedge funds with U.S.-based management companies operate an *onshore* fund for U.S. investors and a parallel *offshore* fund (usually based in a tax haven) for non-U.S. investors.

<sup>19</sup> *Phillip Goldstein, et al. vs. SEC*, U.S. Court of Appeals for the DC Circuit, #04-1434, June 23, 2006.

<sup>20</sup> See pages 58–62 in “Recent Development in Hedge Funds,” Bank of Japan, June 16, 2006, for a comparison of hedge fund regulatory policies in the U.S., U.K., and Japan.

<sup>21</sup> Unlike mutual funds, hedge funds do not have oversight from boards of directors with members independent of the investment advisor.

<sup>22</sup> James Mackintosh, “Hedge Funds Agree to Greater Disclosure,” *Financial Times*, January 23, 2008.

<sup>23</sup> Prime brokers have large portfolios of customer securities which they hold in margin accounts and lend to hedge funds, among others. Hedge funds borrow these securities and then sell them “short.” The hedge fund promises to return the

2. lend them money to leverage their investments;
3. trade and perform global custody services for the assets they acquire; and
4. provide “back office” accounting and portfolio information services.

Three firms, Morgan Stanley, Bear Stearns (now J.P. Morgan/Chase), and Goldman Sachs, together represented over 60% of the highly profitable prime broker market.<sup>24</sup>

Prime Broker	Market Share
Morgan Stanley	23%
Bear Stearns (J.P. Morgan/Chase)	21%
Goldman Sachs	18%
UBS	7%
Credit Suisse	4%

Source: 2007 Lipper HedgeWorld Prime Brokerage League Table.

Morgan Stanley and Goldman Sachs each reported over \$2 billion in prime brokerage revenues from prime broker services to hedge funds in 2006.

Since prime brokers are major lenders to hedge funds, they might be expected to be in a good position to monitor hedge-fund risk and “regulate” their hedge-fund customers via lending and margin requirements. This is true for small hedge funds. Larger hedge funds, however, use multiple prime brokers to spread out and disguise their trading strategies and securities positions. Even when the prime brokerage unit is separated from the operations of the rest of the brokerage firm, hedge funds are suspicious about the porosity of “Chinese walls” and wary that their proprietary information might get into the hands of the trading desks of their brokerage firm competitors. Such information could be used to copy their trades (thereby limiting the profit opportunity) or to trade against them (in, for example, their short positions). As a result, for the larger hedge funds, the prime brokers have a hard time monitoring the *overall* risk positions of their *individual* hedge fund customers/competitors.

The prime brokers have even less chance of understanding the vulnerability of the global finance system *broadly* to risks from the combined trading positions of hedge funds *overall*. Nonetheless, the risk management policies of the hedge funds and their lenders/counterparties are the best we have for the moment. As Chairman Bernanke of the U.S. Federal Reserve Board noted, “A focus on counterparty risk management places the responsibility for monitoring risk squarely on the private market participants with the best incentives and capacity to do so.”<sup>25</sup>

With the global financial crisis still sharply in focus, in 2009 governments reinitiated their efforts to regulate hedge funds.

On April 29, 2009 the Commission of the European Community (EU) published a proposed directive for regulating European alternative investment fund managers (including hedge funds and

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borrowed shares at a later date and secures this promise with collateral, the value of which is constantly maintained at a level (margin requirement) in excess of the securities borrowed.

<sup>24</sup> 2007 Lipper HedgeWorld Prime Brokerage League Table.

<sup>25</sup> Ben S. Bernanke, speech at the Federal Reserve Bank of Atlanta’s 2006 Financial Markets Conference, May 16, 2006.

private equity funds among others). If adopted various elements of the directive would come into play starting at the end of year 2011, while other elements (particularly those relating to marketing) would not be in force until the end of 2014. The directive would require all hedge funds domiciled in the EU (with assets under management above €150 million to be initially authorized by their member states and operated under a new regulatory framework which included (among many other requirements):

1. Limitations on the use of leverage,
2. Use of an independent valuator for the hedge funds assets,
3. Use of an independent depositary which must be a credit institution domiciled in the EU

Hedge funds not domiciled in the EU would not be permitted to solicit investors in the EU unless the EU Commission had determined that the hedge fund's country of domicile had adopted "prudential regulation and ongoing supervision" equivalent to the proposed EU regulations with regard to management, administration, custodian, leverage, valuation and liquidity management among other factors.

The EU proposal created a firestorm of protest from the hedge fund industry. Some argued that increased costs would lower returns to hedge fund investors by 1 to 2 percentage points. Concerns were raised about the protectionist impact of the proposed directive. Others predicted that 80% of European hedge funds would either move abroad or shut down. The Alternative Investment Management Association responded as follows:<sup>26</sup>

"Hastily prepared and without consultation, the directive contains many ill-considered provisions which are impractical and may prove unworkable. The unintended consequences of these measures may put thousands of jobs in several major European industries under threat and slow down any economic recovery. Additionally, many of the provisions will disadvantage European hedge fund managers against those outside of Europe, which could prove an incentive for them to move business elsewhere – negatively impacting badly-needed tax revenues for Member States,"

On October 27, 2009 the Financial Services Committee of the US House of Representatives passed a bill (HR3818) entitled "The Private Fund Investment Advisors Registration Act of 2009". If ultimately passed by both the US House and the US Senate, the bill would require all investment advisors<sup>27</sup> to private funds (except venture capital funds) with over \$150 million in assets to register with the US Securities and Exchange Commission. Once registered these firms would need to make available to the SEC

1. the amount of assets under management,
2. the use of leverage,
3. counterparty risk exposures,
4. trading and investment positions,
5. trading practices, and
6. other information deemed necessary to assess systemic risk.

<sup>26</sup> Alternative Investment Management Association, "EC Director Does Not Deliver Proportionate Response," April 29, 2009.

<sup>27</sup> Organized under U.S. laws or having 10% or more of its funds from U.S. investors.

The SEC was further authorized to make this information available the Federal Reserve Board and other regulatory entities with responsibilities for monitoring systemic risk.

The hedge fund industry evidently found the US regulatory proposal less burdensome, as the Alternative Investment Management Association responded as follows:<sup>28</sup>

“We have supported the registration of managers in the U.S. and elsewhere as well as the reporting of systemically relevant information to national authorities in the interests of financial stability. Our industry recognizes the need to constructively support efforts to improve financial stability analysis and has worked with U.S. authorities voluntarily in this regard for many years.”

As of early 2010, neither the EU nor the U.S. proposals for hedge fund regulation have become law.

## Hedge Fund Influence in the Corporate Sector

The impact of hedge funds is found primarily in the capital markets and in the world of investment management. To the extent hedge funds manage assets for retirement plans of corporations, they also have a direct impact on the financial well-being of corporations. Most hedge funds are passive investors in corporations. They move in and out of ownership positions in an individual corporation's debt and equity securities leaving few footprints. Within a quarterly reporting interval,<sup>29</sup> as one corporate investor relations executive stated, “. . . [A hedge fund investor] can build a position and liquidate it, build it and liquidate it, and you'd never know they were there.”<sup>30</sup>

Even though most hedge funds tend to be short-term investors, they can be quite demanding as investors. Hedge funds are very active traders, generating nearly 50% of the trading volume on the New York Stock Exchange. A significant share of the trading commissions generated by hedge funds is directed toward compensating brokers for arranging meetings, seminars, and conferences with senior managers of the companies they invest in. According to one observer:

[Corporate investor relations] departments should also understand that hedge fund analysts differ from analysts employed by other institutions. They do more detailed and granular research. Hedge fund analysts are the kind of people who will spend their Saturday afternoons in the mall counting how many people go into or out of a retail store.<sup>31</sup>

Hedge fund investors may be frustrating to senior corporate financial executives. They ask a lot of questions, but don't give much information in return. As one hedge fund manager recently told the CFO of an investee company, “You'll know I've sold [your stock] when I stop calling you.”<sup>32</sup>

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<sup>28</sup> Alternative Investment Management Association, “AIMA Reiterates Support for Registration of Hedge Fund Managers in the U.S.,” November 3, 2009,

<sup>29</sup> Any institutional investment manager with investment discretion over more than \$100 million in publicly traded equity securities must file a report with the SEC (Form 13F) within 45 days of the close of each quarter identifying all equity positions owned in public companies.

<sup>30</sup> Kate O'Sullivan, “Who Owns Your Stock,” *CFO Magazine*, October 2007, p. 62.

<sup>31</sup> Christopher Faille, “Corporate IR Must Adjust to Hedge Funds,” *Hedge World News*, January 18, 2008.

<sup>32</sup> Kate O'Sullivan, “Who Owns . . .,” p. 65.

Not all hedge fund investors are content to simply better understand the prospects of the firms in which they invest. Some hope to profit by arbitraging the value gap separating what a company's stock is worth when they establish their position and what it might be worth after they have forced some changes in the company's strategy and/or governance.

Activist hedge funds represent a small and quite different sector in the panoply of hedge fund investment strategies. (See "Event Driven" in **Exhibit 2**.) They are beginning to play an influential role in the corporate governance of the firms in which they choose to invest, often doing so with small ownership stakes in the range of 1% to 5%. As noted by one journalist:

In most cases, activist investors like to operate behind the scenes, working with management to encourage a change at the company. "Our goal isn't to get into a fight," says Phillip Goldstein, the managing member of activist hedge-fund firm Bulldog Investors. "It's to try and make money." Activist investors prey on underperforming companies that, in their view, aren't living up to their full potential. And when one hedge fund moves in, other funds smell blood and quickly follow.<sup>33</sup>

Activist hedge funds do, however, sometimes find it useful to get into public fights.<sup>34</sup>

The activist hedge fund manager and founder of Chapman Capital once called the 78-year-old chairman of a target a "helpless Mr. Magoo-like figure" and referred to its CEO as "the dummy" in a [SEC]13-D filing. He called former executives at Vitesse Semiconductor "the Three Stooges." And he once provoked the CFO of Embarcadero Technologies to swear at him and then recounted the incident, profanity included, in a Securities and Exchange Commission filing.<sup>35</sup>

Since they escape most SEC regulation, some hedge funds have little fear of incurring the regulator's wrath and are therefore more willing to "push the envelope" in their disclosure of stock ownership positions. One hedge fund legally acquired the equivalent of 21% "economic" ownership of a firm's stock and planned a proxy contest to take over the board. It did so without having to file a Schedule 13D with the SEC. The hedge fund's "economic ownership" was achieved through a swap agreement with an investment bank as the counterparty.<sup>36</sup>

The exact reverse of the transaction described above can be used by a hedge fund to acquire the "voting" interest in a stock without actually owning the "economic" interest. The voting interest can then be used to influence the outcome of mergers and proxy fights. . . ,<sup>37</sup> a factor of great interest to hedge funds engaged in merger arbitrage (**Exhibit 2**).

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<sup>33</sup> David M. Katz, "Hedge Fund Bullies," *CFO Magazine*, June 2007, p. 58.

<sup>34</sup> Activist hedge funds can sometimes be identified by their rather colorful names such as "Bulldog Partners" or "Firebrand Partners."

<sup>35</sup> Katz, "Hedge Fund . . .," pp. 56–57.

<sup>36</sup> The hedge fund was the "economic owner" but not the "beneficial owner" of the stock position. A "beneficial owner" (by SEC definition) has voting power or the power to sell the security. Since the hedge fund had neither of these powers, it was not legally required to file a Schedule 13D prior to June 11, 2008 when a U.S. district court judge for the Southern District of New York ruled that "Rule 13d-3(b) under the Exchange Act n1 provides in substance that one who creates an arrangement that prevents the vesting of beneficial ownership as part of a plan or scheme to avoid the disclosure that would have been required if the actor bought the stock outright is deemed to be a beneficial owner of those shares. That is exactly what the defendants did here in amassing their swap positions. In consequence, defendants are deemed to be the beneficial owners of the referenced shares." 08CIV.2764 (LAK)

<sup>37</sup> Andrew R. Sorkin, "A Loophole Lets a Foot in the Door," *New York Times*, January 15, 2008.

There is little doubt that activist hedge funds have an impact on corporate governance. As reported in one recent study (**Figure K**), in 60% of the cases activist hedge funds achieved their governance objectives (for acquiring their 5% or more ownership interest in a firm) as stated in their 2003–2005 Schedule 13D filings with the SEC.

**Figure K**

Purpose of Transaction As Stated in Schedule 13D Filing with SEC (2003–2005)	Number of Activist Hedge Fund Initiatives	Number of Successes (%)
Change Board of Directors' Composition	41	30 (73%)
Firm Should Pursue Strategic Alternatives	29	14 (48%)
Oppose a Merger	18	10 (56%)
Sell the Firm or Merge with Another Company	16	9 (56%)
Buy More Stock with Intention of Buying the Firm	12	7 (58%)
Firm Should Buyback its Own Stock	4	4 (100%)
Get List of Shareholders	4	2 (50%)
Become an Active Investor	4	4 (100%)
Expresses Concerns with Corporate Governance	3	1 (33%)
Replace CEO	3	3 (100%)
Cut CEO's Salary	2	1 (50%)
Firm Should Pay a Cash Dividend	2	2 (100%)
Other Reasons	13	4 (31%)
<b>Total Number</b>	<b>151 (100%)</b>	<b>91 60%</b>

Source: April Klein and Emanuel Zur, "Entrepreneurial Shareholder Activism: Hedge Funds and Other Private Investors," NYU Law and Economics Research Paper No. 06-41, October 2006, Table VI.

While activist hedge funds' success rate in bringing about corporate governance changes may be a bit unnerving to corporate executives, this activism has brought noticeable reward to shareholders. The mean industry-adjusted excess return realized by target company shareholders was 9.8% for the 60-day period ranging from 30 days *before* the Schedule 13D filing to 30 days *after* the filing.<sup>38</sup>

Well-managed firms probably have little to fear from activist hedge funds. As one observer noted, "Activists pick vulnerable targets. Nobody goes after the fastest, strongest buffalo."<sup>39</sup>

<sup>38</sup> April Klein and Emanuel Zur, "Entrepreneurial Shareholder . . .," Table VI.

<sup>39</sup> Kate O'Sullivan, "Who Owns...," p. 65.

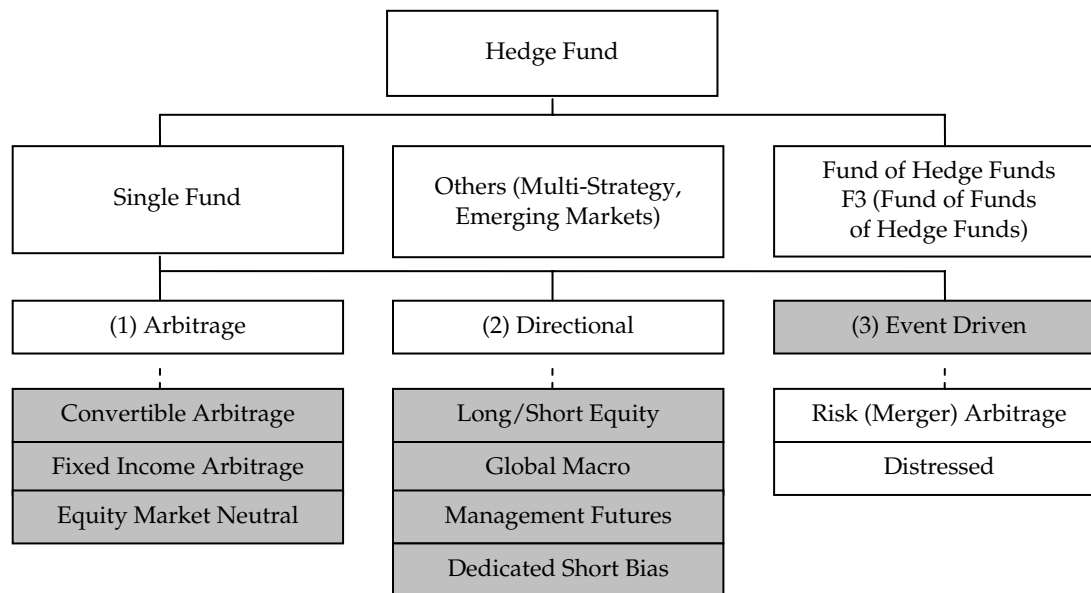


**Exhibit 1** Assets of Selected U.S. Economic Sectors and Financial Intermediaries 1995–2009 (\$ billions)

	1995	1997	1999	2001	2003	2004	2005	2006	2007	2008	2009
Households	21,395	27,176	34,363	31,421	35,307	39,236	43,348	48,134	50,759	41,707	45,115
Life Insurance Companies	2,064	2,515	3,068	3,225	3,773	4,130	4,351	4,685	4,950	4,516	4,819
Private Pension Funds	2,899	3,713	4,594	4,048	4,520	4,922	5,302	6,010	6,391	4,600	5,457
State and Local Govt. Emps. Retirement Funds	1,327	1,794	2,326	2,206	2,349	2,578	2,721	3,108	3,216	2,327	2,673
Money Market Funds	741	1,043	1,580	2,242	2,016	1,880	2,007	2,313	3,033	3,757	3,259
Mutual Funds	1,852	2,989	4,539	4,135	4,654	5,436	6,049	7,068	7,829	5,435	7,002
Asset-Backed Securities	663	905	1,313	1,731	2,210	2,651	3,388	4,189	4,530	4,096	3,394
Hedge Funds	200	370	450	550	800	980	1,100	1,450	2,000	1,330	1,600
Private Equity Funds <sup>a</sup>	44	76	143	130	63	108	206	262	360	325	111
Venture Capital Funds <sup>a</sup>	10	20	56	39	11	19	29	32	36	29	16

Sources: Board of Governors of the Federal Reserve System, Flow of Funds Accounts, various years; Hedge Fund Research, Inc.

<sup>a</sup>Net amount raised during the year, not totals outstanding.

**Exhibit 2**

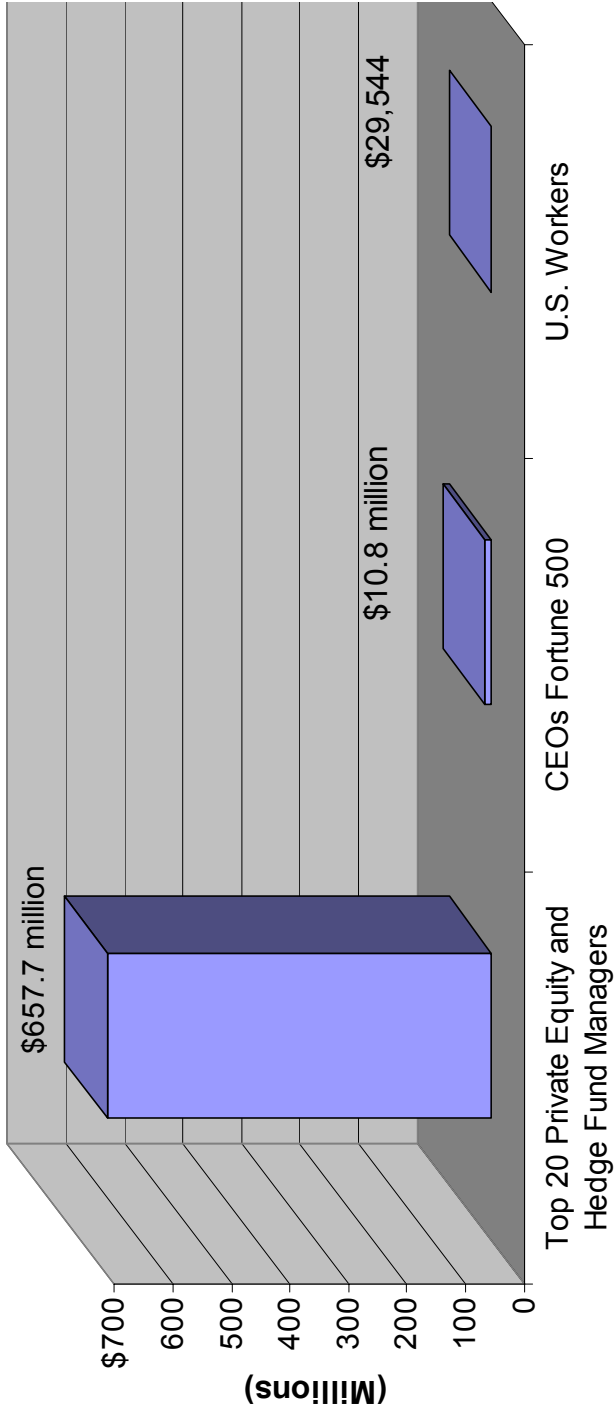
Note: Strategies described below are shown in gray boxes above.

Strategy	Description
Convertible Arbitrage	This strategy makes use of price relationships between convertible bonds and other securities. A typical investment is to be long on convertible bonds and short on common stock of a company.
Fixed-Income Arbitrage	This strategy focuses on price anomalies between related fixed-income securities and takes profits from the normalization process. Main investment targets include public and corporate bonds, asset-backed securities, and derivative products such as swaps.
Equity Market Neutral	This strategy typically involves holding long and short matched equity portfolios, and taking advantage of price anomalies. This means being beta neutral, seeking to generate steady returns regardless of market fluctuations.
Long/Short Equity	This strategy involves, for example, being long on stocks whose prices are expected to rise and short on stocks whose prices are expected to decline. The purpose is to generate returns while limiting the influences of market volatility. Positions may be net long, net short, or market neutral. Many funds in this category seem to have gained returns from their long positions, and so a greater number of funds tend to take long-biased positions.
Global Macro	This strategy seeks investment opportunities in a wide range of markets including bonds, foreign exchange, commodities, and derivatives across many economies to generate returns from price anomalies or the direction of market movements.
Managed Futures	This strategy seeks investment opportunities in a wide range of futures markets such as equities, interest rates, currencies, and commodities. Commodities Trading Advisors fall under this category. There are funds that not only trade on prices but also on technical indices.
Dedicated Short Bias	This strategy maintains net short positions, mostly in stocks and derivatives.
Event Driven	This strategy tries to capture price movements stemming from significant corporate events such as mergers and acquisitions, restructuring, insolvencies, and defaults.

Source: Bank of Japan, "Recent Development in Hedge Funds," June 13, 2006; and Credit Suisse/Tremont.

Exhibit 3

# Average Annual U.S. Pay, 2006



Source: Compiled from 2007 Institute for Policy Studies and United for a Fair Economy data.

**Exhibit 4** Total Compensation of Top 10 Hedge Fund Managers in 2009

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1	David Tepper	Appaloosa Management	\$ 4.0 billion
2	George Soros	Soros Fund Management	\$ 3.3 billion
3	James Simons	Renaissance Technologies	\$ 2.5 billion
4	John Paulson	Paulson & Co.	\$ 2.3 billion
5	Steve Cohen	SAC Capital Advisors	\$ 1.4 billion
6	Carl Icahn	Icahn Capital	\$ 1.3 billion
7	Edward Lampert	ESL Investments	\$ 1.3 billion
8	Kenneth Griffen	Citadel Investment Group	\$ .9 billion
9	John Arnold	Centaurus Advisors	\$ .9 billion
10	Philip Falcone	Harbinger Capital Partners	\$ .825 billion

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Source: AR: Absolute Return & Alpha, March 2010.

Exhibit 5

## Assets Under Management by Fund Domiciles Market Share at March 2010

