



You Get What You Pay For, And Sometimes More:
A Cautionary Note for Investors
By Brian D. Singer, CFA

The prominent economist Steven Landsburg said, "Most of economics can be summarized in four words: 'People respond to incentives.' The rest is commentary."

The last three years were harsh for investors. Markets were ruthless to those who did not do their homework on the mortgage market - these investors experienced the debacle in its full force and paid a heavy price for investments they did not adequately understand before making. Markets were merciless even to those who, generally speaking, avoided the mortgage market but were beset by the amplified impact of a secondary credit contraction.

The general decline of risky asset prices and the unwinding of crowded and illiquid investment strategies revealed many ills in the investment industry, economy, and regulatory structure. Sadly, these market developments were not the worst of the ravages to befall many investors; non-market developments (e.g., insider trading and Ponzi schemes) often extracted even greater monetary and emotional tolls.

Investors generally thought they were paying for performance; less appreciated were the incorrectly aligned incentives that accompanied widely accepted fee structures. Investors got what they paid for, but sustainable performance was *not* the only thing they *were* paying for. Fee structures created powerful incentives to enter inappropriate investments and breach ethical mores.

Perverse Incentives

In launching [Singer Partners](#), we have again analyzed in detail the perverse incentives that may have led to manager behaviors contrary to investors' interests. We see the incentives clearly and believe that they are still in place. We suspect that the future will hold more dismay for unwitting investors. Investor caution is in order as extant fee structures introduce potentially adverse incentives.

The typical hedge fund fee structure comprises a 2% management fee - the base fee is sometimes higher - and a 20% performance fee assessed annually on gains net of previous losses. Hedge fund fund-of-funds (FOF) assess an additional 1% asset management fee and an additional 10% incentive fee. The additional layer of asset management fees brings the total annual management fee before performance fees to 3% for many investors. Moreover, a hidden levy on investors is the expenses charged to the fund. Recently, the *Wall Street Journal* reported that Ken Griffen's Citadel charged fees that "commonly have ranged from 4% to 8% of an investor's fund assets."¹ The total burden on hedge fund managers seems to range from at least 2% to as much as 11%, before any performance fee is assessed.

The management fee creates an incentive to grow assets up to a level at which the manager's participation in the performance fee is compromised by an amount equal to the management fee, accounting for the opportunity cost of anticipated future AuM sacrifices. Despite the incentive to grow AuM, high management fees would be acceptable if hedge funds generated gross returns that surpass just the 2% or 3% asset management fee, but that is barely the case,

¹*Wall Street Journal*, "A Hedge-Fund King Comes Under Siege", Jenny Strasburg and Scott Patterson, November 20, 2009.

according to the research of [Burton Malkiel and Atanu Saha](#).² Malkiel and Saha used the hedge fund database provided by TASS, a unit of Tremont Capital Management, to study the characteristics of hedge fund returns. The TASS database covered between one-third and one-half of hedge funds in the 1990s and became one of the most comprehensive in the subsequent decade. The following table compares the returns of hedge funds, the S&P 500 and T-Bills over the period from 1995 to 2003.

	Annual Return	Annual Standard Deviation	Sharpe Ratio
Hedge Fund Universe	8.82%	9.21%	0.50
S&P 500	12.38%	21.68%	0.38
U.S. T-Bill	4.20%	1.78%	0.00

The returns reported by Malkiel and Saha may seem somewhat low to the seasoned observer. Malkiel and Saha removed backfill and defunct fund data from the data set. As the name suggests, backfill data is data covering prior periods that is provided to the database. While mutual funds report audited returns to regulators, hedge funds provide data at their discretion. According to Malkiel and Saha, “Managers often establish a hedge fund with seed capital and begin reporting their results at some later date and only if the initial results are favorable. Moreover, the most favorable of the early results are then ‘filled back’ into the database together with reports of contemporaneous results.”³ Malkiel and Saha found a backfill bias of 574 bps, but it likely has declined to something more like 300 bps as the backfilled percentage of the database declined. (Posthumay and van der Sluis estimate the backfill bias to be over 400 bps and as high as 1,000 bps over a similar period. Even hedge fund FOFs evidence a backfill bias of over 200 bps.⁴)

Also removed from the performance in the Malkiel and Saha data set is the impact of survivorship bias. Hedge fund databases generally report the returns of existing hedge funds. They exclude the performance of hedge funds that shut down due to poor performance or discontinued reporting of returns as they close to new investors. As a result, only successful hedge funds are included in databases. Malkiel and Saha estimate a survivorship bias-based overstatement of 442 bps, but it may have fallen to 200 bps. The bottom line is that hedge-fund database returns provide estimates of hedge fund performance that range from 500 bps to over 1,000 bps above the performance that hedge fund investors actually receive.

Malkiel and Saha do not provide statistics regarding the correlations between hedge funds and other asset classes, equities in particular. The correlation between hedge funds and equities may be low, but it is not zero. Brian Singer and Denis Karnosky (Singer and Karnosky), using HFRI data from January 1990 to March 2007, demonstrate that that fund weighted composite average correlation ranged 0.10 on either side of 0.30 for many years and rose to 0.50 at the end of the dataset.⁵ Singer and Karnosky find that, on average, hedge fund investors paid nearly 40% of their performance fees for passive exposure to the S&P 500.⁶

² *Financial Analysts Journal*, “Hedge Fund Risk and Return,” Burton G. Malkiel and Atanu Saha, Vol. 61: No. 6, 2005.

<http://www.cfapubs.org/doi/ref/10.2469/faj.v61.n6.2775>

³ Malkiel and Saha, *ibid*, p. 81.

⁴ White Paper, “A Reality Check on Hedge Fund Returns,” Nolke Posthumay (ABP Investments) and Pieter Jelle van der Sluis (Free University Amsterdam & ABP Investments), July 8, 2003.

⁵ CFA Institute Presentation and Webcast, “The Future of Attribution: Looking Ahead with Two of the Pioneers,” Brian Singer and Denis Karnosky, September 27, 2007.

www.cfawebcasts.org

⁶ Malkiel and Saha report negative skewness (-0.25) in hedge fund returns, meaning that the mean is greater than the median return consistent with a degree of downside protection.

If the hedge fund universe, consistent with Singer and Karnosky's research, evidenced a correlation of 0.30 with equities and, assuming volatilities are unchanged, then the hedge fund universe had a beta of about 0.12. Simply incurring a 0.12 beta exposure to the S&P 500 would have generated a return of 5.24%. The beta-adjusted return of the hedge fund universe over cash would have been 3.58%, a beta-adjusted Sharpe ratio of 0.39. Hedge funds provided a lower-than-equity return and risk and a Sharpe ratio similar to equities. The Citi Broad Investment Grade bond index provided a return of about 8% and a Sharpe ratio near 0.75 over the same period. Yes, hedge funds did provide diversification, but according to Singer and Karnosky, that diversification was being removed and beta was increasing, just as the equity market was about to decline. Passive bonds would have been an easier and a superior investment over this period.

The market encompasses all investors and, therefore, assuming zero fees, investors get the market return in aggregate. The market is split between those who invest passively, trying to match the market's performance, and those who invest actively, trying to beat the market. Since passive investors get the market return, active investors in aggregate get the market return, too. Active investors can be further segmented into traditional and alternative investors. Many traditional investors tend to be severely constrained, but this simply suggests that their performance will be close to that of passive investors. Some would argue that all skill has exited the traditional arena for the flexible and lucrative hedge fund world. But this is unlikely, given that it would require the existence of a class of professional and retail investors who would continually allow their performance to be milked for the benefit of hedge fund performance.

Fama and French show that the net return to investors of equity mutual funds from 1984 to 2006 is poor, approximately -1.0% and statistically significant. Gross performance, a purer measure of skill, is about 0.4%, but is not statistically different from zero.⁷ While preliminary, this research suggests that professional and retail investors are not sufficiently poor to be a continual source of hedge fund gains.

The capital market is aggregate, including all claims on future cash flows generated by the underlying global economic engine. *People hold differing amounts of assets in the global capital market, but no amount of slicing and dicing, exotic betas, or anything else will make the returns higher than the economic engine can support.* More efficient allocation of monetary resources by hedge funds can increase societal returns, but the increase likely is de minimis.

Now, consider a newly established hedge fund. Setting aside the typical hubris of professional investors, the fund manager's expected ability to generate performance would be stretched to meet the 2% to 3% management fee. What should the newly minted hedge fund manager do? The investor knows that she must generate at least 2% to 3% over T-bills each year, with few if any down months and with a relatively low market correlation, because alternative investment firms typically promise those returns to their investors. Since most hedge fund investment buyers do not consider funds without a three-year track record, these objectives dominate the fund's starting strategies. But these standards, which don't account for random poor performance, would trip even Warren Buffett. It would be inadvisable for this new fund manager to subject her career, her wealth, and her employees' careers and wealth to the random variation that always dominates short-term performance.

Respond to the Incentives

⁷ White Paper, Fama, Eugene F. and Kenneth R. French, "Luck versus Skill in the Cross Section of Mutual Fund α Estimates," June 2009. <http://ssrn.com/abstract=1356021>

There are easy, if unethical, solutions to help our new fund manager meet the objectives promised to investors. Potential investors need to be cognizant of these solutions. First, the hedge fund manager can sell tail risk, or in non-technical language, sell catastrophe insurance. Selling catastrophe insurance is profitable the overwhelming majority of the time. The seller collects insurance premiums on a very consistent basis month in and month out, year in and year out, without having to pay out any claims. Everything progresses quite nicely until a catastrophe occurs, then the insurance seller must make a massive payment. The key to successfully selling catastrophe insurance is maintaining a highly diversified portfolio of insured risks. Premiums are collected on a regular basis, and catastrophes are idiosyncratic and small relative to the size of the portfolio.

Even though a wide variety of investment strategies incurs tail risk, *these are not sufficiently diversified to be idiosyncratic*. Straightforward option writing (selling) strategies are simple and expose investors to tail risk. Credit spread transactions, carry trade investments and credit default swaps are more complex means of exposing a portfolio to catastrophic events. Some tail risk strategies are extremely simple, but not at all obvious. The stocks of Fannie Mae and Freddie Mac present devastating examples.

Executing their missions to provide liquidity, stability and affordability to the residential mortgage market, Fannie and Freddie guaranteed mortgage-backed securities (MBS) with quasi-government funding. They also bought mortgages from loan originators and held these in their portfolios. Fannie and Freddie financed their mortgage purchases by selling bonds to investors. Since the market perceived these corporations to have the moral obligation of the government, which proved to be *de facto* government backing, the interest on this debt was lower than that of private sector borrowers.

In essence, Fannie and Freddie operated as hedge funds that used massively leveraged credit spread strategies. They borrowed at advantageous rates based on their perceived strong credit and purchased lower-rated mortgages and their own MBS. According to Robert Pozen, this activity grew their combined liabilities to \$5 trillion dollars in 2007, giving these two institutions control of 47% of the mortgage market in 2003.⁸ The private sector was unable to compete against this government-backed option. While Fannie's and Freddie's primary business of buying mortgages and guaranteeing and selling MBS earned \$4 billion in 2004, they earned \$23 billion on their leveraged credit spread strategy. This means that the hedge fund operation was nearly six times the size of the stated business.⁹

By entering into this huge credit spread portfolio, Fannie and Freddie incurred exposure to the risk of default on the underlying mortgages. As housing prices began to decline in 2007, homeowners began to default, and these two corporations began to suffer credit losses. The Department of Housing and Development's (HUD) 1995 mandate for higher quotas of low-income housing mortgages compounded these adverse circumstances. Further, HUD ruled that year "that purchases of subprime mortgages would count toward meeting their quotas of low-income housing."¹⁰

Just like hedge funds, Fannie and Freddie operated in a manner that generated relatively steady and growing income, with an expanding risk of catastrophic loss. They leveraged their balance sheets to take advantage of a 1% borrowing advantage and invested in their own MBS. But all was not copacetic. The percentage of Fannie Mae mortgages in serious delinquency

⁸ Too Big to Save? How to Fix the U.S. Financial System, Robert Pozen, John Wiley & Sons, Inc. 2009. p. 29.

⁹ Pozen, *ibid*, p. 34.

¹⁰ Pozen, *ibid*, p. 45.

increased from a long-term norm of about 0.5% in 2007 to a August 2009 high of nearly 5%.¹¹ In September 2008, the U.S. government put Fannie and Freddie into conservatorship, wiping out the investments of common and preferred equity holders. After shareholders of these institutions had experienced a period of stable returns, they now lost nearly all their capital.

This payoff pattern is highly convex - a high probability of small gains over time with a low probability of catastrophe. It is similar to the credit spread, carry, short option or other insurance-like strategies followed by many hedge fund managers, but is incurred with the purchase of a single stock. Apparently diversified, Fannie, Freddie and other hedge fund funds were playing the same tail-risk game with exposure to the same risk. On September 7, 2008, the Federal Housing Finance Agency placed Fannie and Freddie in conservatorship. Again, *the incentive is for hedge funds to enter strategies with similar return characteristics, failing to provide the diversity investors desire.*

Second, hedge fund managers can increase their holdings of illiquid securities. Illiquid securities afford a premium to compensate for their illiquidity. Imagine equity shares for two identical companies, one that is liquid and one that is not. The liquid security is more attractive, as it allows rebalancing and the capturing of alternative opportunities that arise after acquisition. In order to attract buyers, the illiquid security must sell at a discount and provide a return premium. Moreover, illiquid securities are not priced on a regular basis and can be carried at estimated prices, smoothing returns over time. A rapid increase in illiquid assets held by hedge funds smoothed returns, consistent with the promises made by hedge fund managers to their clients. In his 2008 [testimony](#) before the U.S. House of Representatives Committee on Oversight and Government Reform, Andrew Lo confirmed the increase in illiquid asset holdings and states:

The recurring themes from their [Chan, N., Getmansky, M., Haas, S., and A. Lo¹²] analysis were increasing assets flowing into all parts of the hedge-fund industry, correspondingly lower returns presumably as a result of these increased asset levels, greater illiquidity risk and leverage as hedge funds undertook more exotic investments using greater leverage to boost their returns, and finally, greater correlation among different hedge-fund strategies, particularly with respect to losses.¹³

Third, as recent market developments suggest, hedge fund managers sometimes address the need to surpass a 2% management fee and the powerful desire for extremely high compensation via a 20% performance fee by testing the edge of acceptable ethics and even violating the law. These breaches of trust have ranged from Ponzi schemes to the recent allegations and media postulation of insider trading against Galleon Group LLC, SAC Capital Advisors, Pequot Capital, and others. Hedge fund investors seemed happy to be complicit, remaining a bit further than an arm's length from the untoward muck and hoping the game would continue until their coffers were full.

¹¹ Fannie Mae: Delinquencies Increase Sharply in August, CalculatedRisk on October 30, 2009. <http://www.calculatedriskblog.com/2009/10/fannie-mae-delinquencies-increase.html>

¹² Federal Reserve Bank of Atlanta Economic Review, "Do Hedge Funds Increase Systemic Risk?" N. Chan, M. Getmansky, S. Haas, and A. Lo., Q4 2006, pp. 49-80. http://www.frbatlanta.org/filelegacydocs/erq406_lo.pdf

¹³ Lo, Andrew, "Hedge Funds, Systematic Risk, and the Financial Crisis of 2007-2008." U.S. House of Representatives Committee on Oversight and Government Reform. November 13, 2008. http://oversight.house.gov/index.php?option=com_content&task=view&id=2880&Itemid=2

The alleged Ponzi schemes of Bernie Madoff (astonishingly, a former Chairman of the NASDAQ Stock Exchange), R. Allen Stanford¹⁴ (knighted by the Commonwealth of Antigua and Barbuda), and others spectacularly unraveled. One wonders how these schemes were able to slip past the eyes of watchful regulators and sophisticated investors, but these seemingly ultra-successful investors dazzled the star-struck eyes of regulators and investors alike, allowing hope and status to trump reason.

A plethora of insider trading scandals is currently emerging, taking down investment titans and revered corporate executives, and, for hedge fund investors, tainting the presumption of the skill that purportedly led to their returns. According to a recent [Bloomberg News article](#), “Insider trading has become ‘systemic’ behavior in the hedge-fund industry and the SEC is working with criminal authorities to ferret out misconduct, Khuzami [Securities and Exchange Commission Enforcement Director Robert Khuzami] said this month.”¹⁵ Allegedly, an eat-what-you-kill mindset -- on steroids -- encourages these firms’ employees to violate the law to generate positive performance. The alternative to lucrative compensation is termination.

Poorly crafted regulations, oversight and policies of the SEC and CFTC, implicit government guarantees of Fannie Mae and Freddie Mac, and central bank as lender-of-last-resort (to name just a few sources of apparent comfort) created a host of bad incentives and moral hazards that ultimately resulted in a flawed financial-system foundation. Over 2007-2009, this foundation became wobbly.¹⁶

Fourth, if the newly minted hedge fund manager’s performance eventually collapses, she should simply walk away from the fund and launch a new fund. The ruse of high water marks is believable and powerfully seductive. High water marks are trumpeted as looking after client interest, but is this truly the case? To some degree, they do protect investors, but they also provide another option to hedge fund managers that often yields perverse incentives - incentives that lead to excessive risk. It can’t be any more straightforward: the high water mark protects past compensation but precludes future compensation.

Ethics is What You Do When You Think Nobody is Looking

Precluded from marketing, Pozen observes that “to stand out in a crowded room, hedge funds took more risk and became more image oriented. As Seth Klarman, one of the best and longest-serving hedge fund managers, explained: “There was a ‘change in the very nature of hedge funds - from nimble vehicles focused almost exclusively on investing to marketing organizations with well-staffed investor relations teams.’”¹⁷

The subtle public relations push and carefully crafted hedge fund image, combined with the triumph of hope over reason, convinced many that opacity would facilitate superior performance. This was and is incorrect. Transparency is beneficial to investors and society. It increases the skill hurdle that is required to be a superior investor - something good for all

¹⁴ R. Allen Stanford’s Stanford International Bank allegedly sold \$7 billion worth of certificates of misappropriated deposit. According to Forbes.com, Stanford received \$1.6 billion in undisclosed loans from the bank. Forbes.com, “The Biggest CEO Outrages of 2009,” Helen Coster, November 25, 2009.

<http://www.forbes.com/2009/11/25/ceo-outrages-shame-leadership-ceonetwork-governance.html?partner=yahootix>

¹⁵ “SEC to Focus on Derivatives as Insider Probes Expand (Update2),” Bloomberg News, David Scheer and Joshua Gallu, November 23, 2009.

<http://www.bloomberg.com/apps/news?pid=20601103&sid=aNPUak7MMqgY>

¹⁶ There were clearly inappropriate behaviors, but it was not the free-market system that failed society. There was no free market to speak of. It was a failure of hapless and incompetent regulation and oversight that failed society.

¹⁷ Pozen, *ibid*, p. 114. (Barron’s, The Seth Klarman quote in Pozen is from Alan Abelson, “Up and Down Wall Street,” September 26, 2005, p. 5.

involved. A lack of transparency, especially one supported by regulators, is detrimental and corrupts the entire investment system.

Opacity allows hedge fund managers to hide their responses to adverse incentives. Too often, these responses are to leverage the heck out of small and consistent returns and to incur tail-risk in crowded investment strategies, and to push the boundaries of ethics and perhaps even the law. Most hedge fund managers do not succumb to these incentives, but many are marginally and perhaps unconsciously influenced. All of these behaviors can survive behind the lack of hedge fund transparency.

But, additional layers of regulation, as well as compliance bureaucracy designed to protect investors, drives honest and competent hedge fund managers offshore. Current regulation is not well crafted and needs to be revised before additional regulation is proposed. The regulatory incentives need to change and absent legally compelled disclosure, the onus is on the investors. Current fee structures are determined in a competitive market and equilibrate supply and demand. By definition, these fee structures are correct. They have been forced on no one.

Yet, demand for superior investment performance does not create a supply of better performance. It is clear that the overwhelming majority of alternative investment managers believe that they are skilled - in Lake Wobegon all the kids are above average - and have no intention to bilk their clients. Investors seek ways to identify these skilled managers, creating a chain of consultants, hedge fund FOFs, financial advisors, etc., that purport to separate the hedge fund wheat from the chaff. However, the current environment is one that limits information through opacity, creating a tremendous “lemons” problem. According to [George Akerlof’s famous 1970 article](#), which helped him win the Nobel Memorial Prize in Economic Sciences, a lemons market exists when an information asymmetry occurs whereby the sellers know more about a good or service than the buyers.¹⁸ In a lemons market, there is an incentive and opportunity for poor goods and services to hide among the superior goods and services without the buyer being able to discern one from the other.

Although the flexibility of hedge fund investment structures is fantastic, the incentives embedded in their compensation schemes are nearly heads I win, tails you lose. A two-by-two matrix of feasible outcomes demonstrates the bias.

		Manager	
		Win	Lose
Investor	Win	Feasible	Not feasible
	Lose	Feasible	Feasible

The incentives are clear, and they lead to unconscious and sometimes insidious behaviors. The future is likely to witness an increase in hedge fund transparency and fee structures that better align manager and investor interests. Transparency and incentives will slowly evolve in response to investor demand. Until then, only integrity and ethics preclude a hedge fund’s manager from crossing the line between right and wrong. Integrity and ethics arise from leadership and an unbending culture of providing superior investor outcomes over time. Most hedge fund managers have high integrity, but the existence of “lemons” requires investor vigilance. Investors must be cautious and have an open eye for good leadership and strong cultures of high integrity.

¹⁸ The Quarterly Journal of Economics, “The Market for ‘Lemons’: Quality Uncertainty and the Market Mechanism,” George A. Akerlof, Vol. 84, No. 3, August 1970, pp. 488-500. <http://www.eco.uc3m.es/microii-phd/G%20Akerlof.pdf>