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IS THE "HEDGE FUND BUSINESS MODEL" BROKEN?

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ABSTRACT

1. Although data for the final few weeks of the year are not yet available, it is clear that 2008 will be the worst-ever year in the hedge fund industry—by a very wide margin. Through the end of November, the Hedge Fund Research (HFRI) Fund Weighted Composite Index, which we believe to be a reasonable proxy for the performance of marketable alternative strategies, was down 18.18%. (To place this return in historical context, the second-worst return for the index—which dates back to 1990—was -1.45%.) Additionally, many core substrategy indices have underperformed the composite index: through the end of November, the HFRI Equity Hedge (Total) Index was down 26.03%, the HFRI ED: Distressed/Restructuring Index was down 20.77%, and the HFRI RV: Fixed Income-Convertible Arbitrage Index was down 35.50%.

2. The inability of hedge fund managers to fulfill their absolute return mandate in 2008 has prompted some investors to question the role of marketable alternative strategies in institutional investment portfolios. Hedge fund managers did a better job of preserving capital than traditional asset managers, but were confronted with a host of challenges—counterparty failures, regulatory intervention, and unprecedented capital redemptions—that made it extraordinarily difficult to deliver returns.

3. While we expect hedge fund managers to perform poorly in environments characterized by rapidly declining asset prices and liquidity, we believe losses in 2008 were unexpectedly poor for three reasons. First, managers faced the worst counterparty crisis in the history of the hedge fund industry. Second, federal securities regulators intervened in the global capital markets on an unprecedented scale, introducing a series of emergency orders that temporarily restricted short selling and made it difficult for managers to execute certain marketable alternative strategies. Third, the global liquidity crisis became so acute that investor redemptions from hedge funds vastly exceeded expectations, resulting in a wave of forced selling that further depressed asset prices.

4. Net returns in the hedge fund industry are dependent on three factors: the competitive landscape, strategy-specific opportunity sets, and the total costs associated with accessing these returns. The surfeit of capital that depressed returns in recent years has washed out of the system with remarkable speed, radically changing the competitive landscape in the hedge fund industry. When one considers the sale or closure of several large U.S. investment banks (e.g., Bear Stearns, Lehman Brothers, Merrill Lynch), the curtailment of proprietary trading activity at the handful of surviving investment banks, and the dramatic reduction in leverage ratios at these banks, it is likely that 65% to 75% of the capital that was allocated to marketable alternative strategies in recent years has been eliminated—especially since most Wall Street proprietary trading businesses were rumored to be massively leveraged. Barriers to entry should rise considerably and effectively restrain competition. Those hedge fund firms that survive current events will likely be well positioned to capitalize on price inefficiencies to come, and the reduction in capital should serve to increase the return on assets. The credit crisis has also resulted in extremely attractive opportunity sets in most marketable alternative strategies. Convertible bonds are as cheap as they have ever been and many managers see pronounced security mispricings in the long/short equity market. Finally, the credit crisis should lead to a structural abatement of cost pressures. In our view, the 2% of

assets plus 20% of net profits fee schedule that was foisted on investors during the past three years should be permanently consigned to history.

5. Despite recent poor performance, we strongly believe that the current shakeout in the industry is a net positive for long-term hedge fund investors. Firms that survive the shakeout should be able to generate attractive risk-adjusted returns in coming years. Yet we are cognizant that significant near-term challenges remain. Organizational risks in the industry remain extremely high—especially with most firms below high-water marks and the global liquidity and credit crises still weighing on asset prices—and more firms will undoubtedly fail in the upcoming year. At the same time, we currently regard most credit markets as very undervalued, U.S. equities as fairly valued, and equity markets outside the United States as undervalued, suggesting that from an intermediate- to long-term perspective long-only investment return prospects are more attractive than they have been in years. In this environment, manager selection becomes paramount, as prospective returns from marketable alternative strategies will be even more dependent on manager selection than they have been in the past. Superior skill in security selection, capital allocation, and risk management will be necessary to justify the higher fees and constrained liquidity of marketable alternative investments. Firms that are most likely to survive the shakeout have strong and flexible capital bases, deep investment teams, long track records, sizable capital reserves, modified (or annual) high-water-mark provisions, and shared equity ownership.

Introduction

In light of the unexpectedly poor performance of marketable alternative strategies during 2008, many of our clients have asked us to comment on the future of the hedge fund industry. Specifically, clients have asked whether the "hedge fund business model is broken," and, further, whether it makes sense to maintain sizable allocations to marketable alternative strategies in a world awash in "cheap beta." In order to address these questions, we will provide some recent historical context, review hedge fund performance in 2008, and discuss the rapidly shifting competitive landscape in the industry.

Overcapacity

In our mid-2007 research report, *Hedge Funds: A Framework for Making Strategy Allocation Decisions*, we discussed the impact of rapid asset growth on the hedge fund industry. In that report, we lamented the fact that sustained capital flows into the industry, a marked increase in proprietary trading activity on Wall Street, and significant advances in computing power had greatly intensified competition and led to a gradual degradation of unlevered returns (return on assets [ROA]) in most marketable alternative strategies.

We also observed that the cost of establishing exposure to marketable alternative strategies had risen dramatically over time, as managers aggressively capitalized on surging institutional demand for hedge funds by raising management fees and imposing a rash of restrictive liquidity provisions on their limited partners. With competition intensifying and cost pressures continuing to rise, margins in the industry were compressing, and investors were being asked to pay higher fees for lower prospective returns.

Perhaps most importantly, we emphasized the importance of focusing on ROA (rather than return on equity [ROE]) when evaluating hedge fund manager performance, especially in an environment where balance sheet leverage *and* off–balance sheet leverage were rising dramatically. Our view was that hedge fund managers—which are explicitly compensated on ROE rather than ROA—were obscuring the degradation of ROA in marketable alternative strategies by increasing leverage ratios and migrating capital into private and illiquid strategies.

Year in Review

The rise in hedge fund leverage ratios was paralleled by an unprecedented expansion of credit in all corners of the global capital markets, most notably in the U.S. and European residential real estate markets. When residential real estate prices in these markets started to decline and global economic growth slackened, a credit crisis ensued that sparked a flight to quality, systemic deleveraging, and a precipitous sell-off in global securities markets.

The root cause of the credit crisis was lax monetary policy, coupled with a dramatic erosion of lending standards across all credit categories, facilitated by an explosion in structured credit issuance that effectively severed the link between credit origination and credit underwriting. Regional banks were eager to originate mortgage loans at extremely high loan-to-value ratios with weak income verification because they could sell loans to large investment and commercial banks, which packaged loans into structured products (e.g., residential mortgage-backed securities [RMBS], collateralized debt obligations) and sold these products to investors.

This explosion in structured product issuance was abetted by rating agencies that collected enormous fees in exchange for giving AAA ratings to broad swaths of securities collateralized by extremely low-quality loans, and by the investment and commercial banks that warehoused these loans, engineered mortgage securitizations, and sold structured products to their clients.

When house prices began to decline, demand for structured products fell sharply and many large financial institutions were saddled with huge portfolios of work-in-process inventory—both mortgage loans that had yet to be packaged into structured products and structured products that had yet to be sold to investors. As liquidity in the mortgage-backed security market evaporated, these banks were forced to write down these assets, which damaged balance sheets, impaired capital ratios, and limited their ability to originate new loans. This situation resulted in a vicious feedback loop whereby credit losses damaged the ability of banks to lend capital, and credit contraction pressured asset prices.

Losses on mortgage-related assets quickly cascaded across other asset classes. Explosive growth in the structured product market (or "shadow banking system") had helped keep corporate credit spreads artificially tight in recent years by creating an unsustainable demand for bonds and loans, and so the dislocation in the structured product market resulted in a dramatic widening of corporate credit spreads. This widening of corporate credit spreads made leveraged buyouts extremely difficult to finance, especially at prevailing leverage multiples, leading to a pronounced slowdown in merger activity.

The removal of the private equity floor on public equity valuations contributed to a sharp decline in global equity prices, spurring a flight to quality. The prime brokerage arms of embattled investment and commercial banks—which in previous years had been engaged in a pitched battle for market share and had tendered capital to hedge fund managers on extremely attractive terms—responded to cascading losses by dramatically reining in their lending standards, which, in turn, forced managers to rapidly deleverage their balance sheets. This forced unwind of leverage placed additional pressure on asset prices.

Returns

While data for the final few weeks of the year are not yet available, it is clear that 2008 will be the worst-ever year in the hedge fund industry—by a very wide margin. Through the end of November, the Hedge Fund Research (HFRI) Fund Weighted Composite Index, which we believe to be a reasonable proxy for the performance of marketable alternative strategies, was down 18.18%. (To place this return in historical

context, the second-worst return for the index—which dates back to 1990—was -1.45%.) Additionally, many core substrategy indices have underperformed the composite index: through the end of November, the HFRI Equity Hedge (Total) Index was down 26.03%, the HFRI ED: Distressed/Restructuring Index was down 20.77%, and the HFRI RV: Fixed Income-Convertible Arbitrage Index was down 35.50%.

Historically, the most challenging periods for marketable alternative strategies have been those characterized by systemic deleveraging and acute liquidity crises. For example, hedge fund managers struggled mightily during third quarter 1998, when the collapse of a massively leveraged fixed income arbitrage fund (Long-Term Capital Management) led to an evaporation of liquidity and rapid deleveraging of the hedge fund industry.

As market liquidity is the one return driver shared by all marketable alternative strategies, correlations between marketable alternative strategies tend to rise dramatically when markets become less liquid. For example, through the end of November, every HFRI substrategy index save four (Macro Trading, Market Defensive, Short Bias, and Systemic Diversified) has incurred losses. The rising correlation between strategies was perhaps best epitomized by the implosion of one of the largest dedicated short-selling firms in the world during the middle of September. The failure of a notable short-selling firm with a long and enviable track record in the midst of a steep market sell-off provided investors with a painful reminder that historical correlations tend to break down during periods of severe market stress.

What Went Wrong?

While we expect hedge fund managers to perform poorly in environments characterized by rapidly declining asset prices and liquidity, we believe losses in 2008 were unexpectedly poor for three reasons. First, managers were confronted with the worst counterparty crisis in the history of the hedge fund industry. Second, federal securities regulators intervened in the global capital markets on an unprecedented scale, introducing a series of emergency orders that temporarily restricted short selling and made it difficult for managers to execute certain marketable alternative strategies. Third, the global liquidity crisis became so acute that investor redemptions from hedge funds vastly exceeded expectations, resulting in a wave of forced selling that further depressed asset prices. As we shall see, all of these factors compounded losses during an already difficult year.

Counterparty Failures

While the global credit crisis first erupted in June 2007 (when two structured credit hedge funds sponsored by Bear Stearns imploded and ratings agencies downgraded billions of dollars worth of mortgage-backed securities) and intensified in March 2008 when J.P. Morgan Chase rescued Bear Stearns with the benefit of a $29 billion finance agreement provided by the Federal Reserve Bank of New York, the crisis reached a critical inflection point during the second week of September. On September 8, the U.S. Treasury Department placed mortgage giants Fannie Mae and Freddie Mac into conservatorship with the Federal Housing Finance Agency. One week later, during the weekend of September 13 and 14, Merrill Lynch was

forced to sell itself to Bank of America. Lehman Brothers tried unsuccessfully to raise equity capital or effect a similar transaction, and petitioned for bankruptcy protection on the morning of September 15.

The bankruptcy of Lehman Brothers sent shockwaves rippling across global credit markets, igniting fears that a daisy chain of counterparty failures would lead to a collapse of the global financial system. The day after Lehman Brothers petitioned for bankruptcy protection, insurance giant AIG was given an $85 billion loan from the Federal Reserve Bank in order to fund a $14.5 billion margin call on a massive credit default swap portfolio (in conjunction with a ratings downgrade). During the ensuing days, Goldman Sachs and Morgan Stanley raced to raise capital as panicked hedge fund clients transferred prime brokerage assets out of the firms, and then applied to become bank holding companies. Soon thereafter, several large commercial banks failed (or were forced to sell themselves), including National City, Wachovia Bank, and Washington Mutual.

Many prominent hedge fund managers have suggested that the chaos resulting from this counterparty crisis was the single biggest factor depressing marketable alternative returns in 2008, noting that approximately 70% of year-to-date losses occurred in the six weeks following the bankruptcy of Lehman Brothers. (To illustrate this point, the HFRI Fund Weighted Composite Index lost 6.12% in September and an additional 6.44% in October.)

While the demise of Lehman Brothers created first-order losses for hedge fund managers due to prime brokerage exposure (i.e., assets custodied in non-U.S. Lehman affiliates with weak customer protection rules), unsettled counterparty transactions, and direct investments in Lehman's publicly traded securities, it was the second-order effect of the bankruptcy that proved particularly problematic. In the wake of the bankruptcy, managers were forced to focus almost exclusively on counterparty risk rather than investment risk.

Since Goldman Sachs and Morgan Stanley—the two dominant global prime brokerage firms—were under a tremendous amount of pressure following Lehman's collapse, most managers scrambled furiously to negotiate prime brokerage agreements with a handful of large commercial banks that were perceived as safe havens. (While the extent of these transfers is a matter of speculation, some managers believe that asset transfer levels were 100 times greater than normal during the two weeks following the bankruptcy.)

In order to mitigate counterparty risk, managers were forced to cover existing short positions at disadvantageous prices, reborrow stock through new prime brokers, and attempt to re-establish those shorts in a chaotic market, which became extremely challenging due to government intervention that temporarily placed meaningful restrictions on short selling. As major U.S. investment banks were hit with asset transfers, they desperately tried to improve their capital positions by increasing margin requirements and liquidating assets, both of which placed additional pressure on asset prices. They also ceased making markets in various securities, further impairing liquidity.

Regulation

As managers scrambled to deal with escalating fears about counterparty exposures, they were also confronted with an incredibly dynamic regulatory backdrop. On September 19, the Securities and Exchange Commission (SEC) issued an emergency order to strengthen an existing rule preventing "naked" short selling by temporarily banning the short selling of select financial service sector stocks (defined *extremely* broadly), and also introduced a rule mandating that institutional investment managers temporarily disclose short positions on a biweekly basis.

Similar restrictions and bans on short selling were enacted in 26 overseas markets, severely limiting the ability of hedge fund managers to establish new short positions or hedge existing long positions in thousands of stocks globally. The restrictions and bans were extremely problematic for managers pursuing strategies that depend on dynamic hedging, such as convertible arbitrage (where managers buy convertible bonds and delta hedge those bonds with equities) and capital structure arbitrage.

While the short-selling restrictions in the United States ultimately proved ineffectual (an index tracking the performance of the 950 stocks on the short-selling restricted list between September 19 and October 8 declined by 26.36%, punctuating the fact that short sellers were not maliciously driving down the prices of these stocks), the chaos created by the emergency order and pervasive fear about the possibility of subsequent orders created a tremendous amount of confusion in the market. Managers decried the fact that the SEC "changed the rules of investing in the middle of the game," and most aggressively deleveraged as a result.

Finally, the government's decision to bail out some financial institutions while letting others fail perplexed and angered investors, many of whom lost money on investments in the financial sector (e.g., Bear Stearns, Countrywide, National City, Wachovia Bank, Washington Mutual) when regulators intervened and forced consolidation that impaired their claims.

Redemptions

The third extraordinary factor that negatively impacted hedge fund returns during September and October was a pervasive (and ultimately self-reinforcing) fear about the magnitude of year-end investor redemptions. With fears about counterparty failures spreading, losses mounting, and year-end notification periods rapidly approaching, poorly performing managers felt compelled to sell down portfolios to insure that they would be able to fund redemptions. Simultaneously, well-positioned managers recognized this dynamic and raced to unwind positions before forced liquidations could generate sizable marked-to-market losses. The rush to sell (or cover) crowded hedge fund positions placed a tremendous amount of pressure on asset prices, resulting in additional losses, which precipitated a flurry of redemptions as the negative feedback loop intensified.

The extraordinarily wide performance spread between various domestic equity indices constructed by Goldman Sachs to track the performance of widely held hedge fund positions shows the extent of the

deleveraging effect caused by pervasive fear of hedge fund redemptions. During the third quarter, the Goldman Sachs VIP Index (which consists of 50 long stock positions that "matter most" to hedge funds) *lost* 19.07%—more than twice the decline of the S&P 500—while the Goldman Sachs Low Concentration Index (which consists of 50 long stock positions that are not widely held by hedge funds, i.e., positions hedge fund managers are likely to be short) *gained* 2.37%.

We do not yet have a holistic picture of year-end redemptions, but based on current information we believe that 20% to 25% of global hedge fund capital will be redeemed at the end of this year. Our findings dovetail with redemption statistics published in a Morgan Stanley research report, which estimates that 15% to 20% of U.S. hedge fund assets and 25% to 30% of European and Asian hedge fund assets will be redeemed at year-end.[1] (Morgan Stanley contends that European and Asian redemptions will be materially higher than U.S. redemptions due to shorter liquidity terms, a heavy dependence on high-net-worth and hedge fund-of-fund investors, and exposure to structured notes.)

Based on extensive conversations with investors, it appears that redemptions have been driven by a number of factors, including: (1) asset/liability mismatches in the hedge fund-of-fund industry (i.e., many hedge funds-of-funds have been hit with sizable redemptions, forcing them to redeem capital from underlying managers); (2) capital calls in the institutional investment community (i.e., investors have been forced to redeem from marketable alternative strategies to fund pre-existing commitments to real estate and non-marketable alternative managers); (3) asset class rebalancing, as many hedge fund managers did a better job preserving capital than long-only equity and fixed income managers; (4) transfers of capital to high-quality managers that had been closed for an extended period of time, but have reopened in order to capitalize on increasingly attractive opportunity sets; and (5) generalized anger and discontent with recent performance.

Looking Ahead

As we discussed in our mid-2007 research report, net returns in the hedge fund industry are dependent on three factors: the competitive landscape in the industry, strategy-specific opportunity sets (i.e., asset price levels and spread relationships), and the total costs associated with accessing marketable alternative returns. In order to assess the prospects for hedge fund returns in coming years, it is instructive to examine each of these variables.

Competitive Landscape

The overcapitalization of the industry from a flood of capital in the past two years resulted in a depression of ROA in most marketable alternative strategies (especially those characterized by narrow opportunity sets), allowed managers to liberally exercise pricing power by increasing fees and introducing a

[1] Morgan Stanley Research, "Update on Hedge Fund and Mutual Fund Redemptions," November 28, 2008.

rash of restrictive liquidity provisions, and compelled managers to dramatically increase leverage ratios in order to obscure the cyclical degradation of ROA.

The surfeit of capital that depressed returns in recent years has washed out of the system with remarkable speed, radically changing the competitive landscape in the hedge fund industry. To illustrate this point, assume that equity capital in the industry stood at $2 trillion at the beginning of 2008. Using a mean leverage ratio of 1.75, industry assets (or "buying power") registered $3.5 trillion at the start of the year. If we apply a 20% haircut to our $2 trillion equity estimate to account for investment losses and an additional 25% haircut to account for year-end redemptions, our estimate of outstanding equity capital falls to $1.2 trillion. If we then assume that the mean leverage ratio in the hedge fund industry falls to 1.25—a conservative assumption given tighter margin lending standards—then industry "buying power" has declined to $1.5 trillion from $3.5 trillion.

While this analysis suggests that a tremendous amount of capacity has effectively been shuttered—more than 55% of the industry's "buying power"—it fails to incorporate a second, massive source of capital destruction. During the past five years, the increase in proprietary trading activity paralleled the growth in traditional hedge fund assets. Global investment banks made massive investments in personnel and technology, resulting in a dramatic rise in both trading revenues and value-at-risk. (While it is nearly impossible to estimate the full scope and size of these proprietary trading operations with any precision, we do know that Goldman Sachs garnered an astounding $7.7 billion in trading revenues during the first *quarter* of 2007.[2]) Indeed, many prominent hedge fund managers have conveyed that Wall Street proprietary desks were their biggest competitors.

When one considers the sale or closure of several large U.S. investment banks (e.g., Bear Stearns, Lehman Brothers, Merrill Lynch), the curtailment of proprietary trading activity at the handful of surviving investment banks, and the dramatic reduction in leverage ratios at these banks, it is likely that 65% to 75% of the capital that was allocated to marketable alternative strategies in recent years has been eliminated—especially since most Wall Street proprietary trading businesses were rumored to be massively leveraged.

In sum, the competitive landscape in the hedge fund industry has been radically transformed by this shakeout, which means that surviving hedge fund firms (i.e., those with strong capital bases, deep investment teams, long track records, sizable capital reserves, modified high-water-mark structures, and shared ownership) should be in an excellent position to capitalize on pricing inefficiencies in coming years—especially since barriers to entry in the industry should rise considerably and effectively restrain competition. Managers recognize that the market dislocation and attendant deleveraging have yielded a bumper crop of mispriced securities, especially in the global credit markets, and are desperately trying to position themselves to capitalize on these opportunities.

[2] Shanny Basar, "Behind Wall Street's Trading Profits," Dow Jones Financial News Online US, March 27, 2007.

Opportunity Set

As we mentioned earlier in this report, hedge fund managers and other asset managers were able to borrow money on extremely attractive terms at the top of the credit cycle, and many leveraged portfolios used derivatives, swaps, and asset securitizations in a manner that was opaque to their investors. Specifically, many managers applied excessive amounts of leverage to historically low volatility credit investments (e.g., bank loans, mortgage-backed securities, convertible bonds) trading at extremely tight spreads.

When the credit crisis erupted and spreads began to widen, leveraged credit investors were forced to liquidate portfolios of loans and bonds in order to meet margin calls—which, as one might expect, amplified losses and placed tremendous pressure on debt prices. As one might also expect, the prime brokerage firms that raced to provide leverage at the top of the credit cycle began to increase the haircuts they assessed on highly rated collateral, and stopped accepting illiquid collateral altogether. These aggressive adjustments to financing terms (in concert with steadily falling debt prices) precipitated a crescendo of forced selling, which created substantial marked-to-market losses for all credit investors.

The impact of forced selling on debt prices is perhaps best illustrated by recent losses in the secondary bank loan market. At the top of the credit cycle, leveraged credit hedge funds aggressively purchased portfolios of bank loans trading at or near par and applied several turns of leverage to these portfolios (in many cases, five to ten turns of leverage) in order to generate attractive ROE. When the credit cycle turned, these leveraged credit hedge funds imploded extremely quickly. As loan prices fell to what looked like attractive levels in conjunction with forced liquidations, a second wave of investors stepped into the loan market and began to aggressively buy loans. Some of these investors employed modest amounts of leverage, while others bought loans on an unleveraged basis.

When the global credit crisis intensified, placing additional pressure on all corporate debt obligations, a second wave of forced liquidations buffeted the loan market. Those that bought loans at discounted prices using modest amounts of leverage started to receive margin calls, and the cycle repeated. Many investors that bought loans at what they perceived to be *extremely* cheap prices on an unleveraged basis have incurred sizable marked-to-market losses, despite the fact that most of the loans are both performing and senior-secured. To provide some perspective, the average bid in the S&P/LSTA U.S. Leveraged Loan 100 Index today stands at $61.05 (with par at $100), despite the fact that historical recovery rates on defaulted loans approximate $65.00.[3] Astonishingly, this means that the loan market today is pricing in 100% defaults with below-average recovery rates, 35% defaults with a 0% recovery rate, or some other combination of record-high default rates and record-low recovery rates—draconian pricing by any historical standard.

While valuations in the bank loan market may appear extreme, examples of apparent pricing inefficiencies abound in other segments of the global credit markets. By most accounts, convertible bonds—

[3] Edward I. Altman, "The Investment Performance and Market Size of Defaulted Bonds and Bank Loans: 2007 Review and 2008 Outlook," February 21, 2008.

which lost a record 5.58% in November and 37.05% year-to-date—are as cheap as they have ever been, trading at double-digit discounts to theoretical value. Managers with expertise analyzing securitized products claim that they can buy the super-senior tranches of RMBS with huge margins of safety, with yields as high as 12% to 15% even in the event of an extremely severe economic contraction. The yield to maturity on the Merrill Lynch High Yield Master II Index recently exceeded 22%, the widest level in the 22-year history of the index. Capital structure arbitrageurs note that many spread relationships (e.g., bank loans versus bonds, credit default swaps versus bonds) are also extremely attractive at current levels.

Credit quality continues to deteriorate across all credit categories, yet it appears that many credit instruments are selling at distressed prices primarily because the holders of the instruments are distressed (i.e., overleveraged). While marked-to-market losses may persist for some time—no one knows when the deleveraging process will completely run its course—managers that remain well capitalized *and* have the expertise to invest across the credit spectrum should be in an excellent position to capitalize on these opportunities.

Similarly, long/short equity managers are becoming increasingly excited about the potential for outsized returns in coming years. With technical factors dominating fundamental factors in recent months, most claim that security mispricings are as pronounced as they have been in recent memory—prompting managers to dramatically increase their hurdle rates on new equity investments. Several managers noted that valuations in many sectors are so depressed that they are discounting horrifically bad operating performance well into the future, providing managers with enduring businesses with a once-in-a-lifetime opportunity to engage in time-horizon arbitrage—that is, to buy radically mispriced securities from forced sellers today because they can afford to wait one to three years for those securities to be re-rated. On a recent conference call, one experienced equity manager conveyed this enthusiasm by stressing that he would "much rather be sitting at his desk today with low double-digit losses and the current opportunity set" before him than sitting at his desk a year ago "with a vastly inferior opportunity set."

Cost Pressures

When quantifying the *total costs* of accessing marketable alternative strategy returns, investors must consider both fees and liquidity provisions. In previous research reports, we suggested that fees charged by the hedge fund industry were egregious and cautioned that only a select group of managers would be able to generate sufficient alpha to justify those fees.

Despite investor protestations, the "standard" hedge fund fee schedule escalated from 1% of assets plus 20% of net profits to 2% of assets plus 20% of net profits during the past five years, even as the quality of the average manager declined due to falling barriers to entry. This escalation in fees was perpetuated by the prime brokerage firms that provided start-up advice to hedge funds—and that reaped millions of dollars in commissions from each new crop of managers they helped sow.

Recognizing that they had an enormous amount of leverage over limited partners, established managers amended the liquidity provisions in their partnership agreements by imposing longer lock-up

provisions on investors and by introducing a handful of provisions (e.g., quarterly gates, catastrophic gates, holdover provisions, side-pocket allowances) that limited the amount of money investors could redeem over discrete periods of time.

Similarly, start-up managers began to impose rolling lock-up provisions rather than determinate one-year lock-up provisions, demanded lock-up provisions of two to four years, or coupled initial hard lock-up provisions with soft lock-up provisions. Managers veiled these changes in ambiguous verbiage (with an assist from legal counsel) and buried them in their offering documents. On several occasions during the past few years, managers reported that they were updating their liquidity provisions "to reflect market conventions"—which, loosely translated, meant "to charge whatever the market would bear."

During the current market crisis, hedge fund managers have liberally exercised the restrictive liquidity provisions they imposed on limited partners during the past few years, primarily by gating or suspending redemptions. While many investors are understandably irate that their ability to withdraw capital from hedge fund partnerships has been restricted when they need it most—in the middle of a severe and protracted liquidity crisis[4]—we believe that *most* managers are exercising these provisions in good faith for the benefit of ongoing limited partners. With liquidity in segments of the global credit markets evaporating in recent months, managers have restricted redemptions to cure asset/liability mismatches that would have otherwise resulted in more forced selling.

As investors openly question the viability of the "hedge fund business model" and managers are desperate to shore up their capital bases, many clients have asked whether the total costs of accessing marketable alternative strategies will be elastic (as one would hope) or inelastic (as was the case in the venture capital and leveraged buyout industries following the bursting of the stock market bubble in 2000). Although we cannot be certain of the direction costs will take, we strongly suspect that cost pressures will begin to abate during the upcoming year.

Indeed, we have started to see the balance of power shift from general partners to limited partners. In what may be a precursor to longer-term structural changes in the cost structure of the industry, several prominent managers have recently offered to discount their fees in exchange for liquidity extensions. While most managers are introducing fee discounts in a desperate attempt to survive the crisis so they will be able to capitalize on near-term pricing inefficiencies created by the dislocation, we believe this sort of quid pro quo (i.e., longer lockups, lower fees) makes a great deal of sense in the long-term as well.

It is clear that managers with monthly or quarterly withdrawal rights have asset/liability mismatches that make it extremely challenging for them to manage through liquidity crises, and equally clear that investors have a difficult time managing their own liquidity needs when confronted with a litany of "contingent" liquidity provisions (e.g., gating provisions, distributions-in-kind, catastrophic gates). We believe most long-term hedge fund investors would support a structure that permanently addresses

[4] Please see our October 2008 research report *Liquidity Challenges in Today's Environment* for a discussion of investor liquidity needs and a framework for assessing them.

asset/liability mismatches (e.g., longer lock-ups, staggered liquidity), as long as such a structure was accompanied by *meaningfully* discounted fees.

Finally, we believe that "standard" hedge fund fees will decline over the next few years as the industry recalibrates. While a very select group of managers may continue to enjoy pricing power—especially if returns rebound—that pricing power should not extend to new entrants and second-tier managers. In our view, the 2% of assets plus 20% of net profits fee schedule that was foisted on investors during the past three years should be permanently consigned to history.

Outlook

The industry outlook we provided in our mid-2007 research report was informed by our view that the industry was significantly overcapitalized, that opportunity sets were contracting, and that rising cost pressures were leading to margin compression in the industry.

Today, our views have changed dramatically. As we discussed earlier, there has been tremendous capital destruction in the industry, resulting in a massive reduction in excess capacity (and rising barriers to entry). Most strategy-specific opportunity sets are as attractive as they have been in recent memory—especially in credit-based strategies. Cost pressures are likely to abate, resulting in margin expansion and incrementally higher returns.

The confluence of these factors leads us to conclude that healthy firms that survive this shakeout will be well positioned to capitalize on pricing inefficiencies in the capital markets—a conclusion supported by historical precedent. Heretofore, the three worst years in the 18-year history of the HFRI Fund Weighted Composite Index were 1994 (4.10%), 1998 (2.62%), and 2002 (-1.45%). In the years immediately following these periods, the return of the HFRI Fund Weighted Composite Index averaged 24.11%.

Despite obvious differences, we believe the liquidity crisis following the collapse of Long-Term Capital Management in 1998 is probably the best proxy for the current crisis, as it was accompanied by a rapid deleveraging of the hedge fund industry as well as a marked increase in redemptions and closures. The following year, the HFRI Fund Weighted Composite Index gained 31.29%. Furthermore, the HFRI Fund Weighted Composite Index outpaced returns on global equities, U.S. investment-grade bonds, and U.S. high-yield bonds in both 1995 and 1999, and U.S. investment-grade bonds in 2003.

We recognize that history tends to rhyme rather than repeat, that the current crisis is likely to be far more painful and protracted than the crises that buffeted security markets in 1994, 1998, and 2002, and that global policymakers face the incredibly daunting task of deleveraging the global economy without sowing the seeds of virulent inflation. Additionally, we caution that the breadth and severity this crisis make the timing of a recovery extremely difficult to predict, vitiating our comparison with earlier crises.

We are also cognizant that stock and bond valuations are significantly more attractive than they were following earlier crises, prompting many investors to question whether they should establish exposure to these asset classes through traditional asset managers that tend to remain fully invested and do not charge incentive fees. While we strongly encourage investors to minimize the cost of accessing market beta by carefully comparing hedge fund products with long-only or indexed products that have similar mandates, we continue to believe that *select managers* generate sufficient alpha—through superior security selection, capital allocation, and risk management—to justify higher fees.

Concerns

Despite our belief that the long-term opportunity in marketable alternative strategies is compelling, we recognize that investors harbor significant concerns about the future of the industry. Based on our discussions with investors, it appears as if these concerns generally fall into four broad categories: redemptions, regulation, high-water marks, and financing mechanisms (i.e., securities lending and access to margin leverage).

Redemptions

While we expect that hedge fund redemptions will continue to present a problem in the first half of 2009, we believe that the pace of redemptions will decelerate throughout the year—especially if returns begin to improve. Most institutional investors are obsessively focused on managing their liquidity profiles, and many aggressively raised capital at the end of the year. We believe that investors that were in the *weakest* liquidity positions have already withdrawn substantial amounts of capital from their marketable alternative portfolios, resulting in a much more stable capital base for the industry. Redemptions stemming from the desire to rebalance away from marketable alternative strategies are also likely to subside in coming months, as rebalancing activity tends to crest at year-end.

Regulation

While the global economic and liquidity crises will assuredly lead to increased regulation of the hedge fund industry—especially since the most extensive fraud in the history of the industry, the "Madoff scandal," was unearthed during the middle of December—we believe that the most problematic regulatory headwinds impacting hedge fund managers have already abated. The most worrisome regulatory threat the hedge fund industry faced in 2008 was the widespread implementation of short-selling bans and restrictions in global security markets, and there appears to be almost universal consensus that (1) these bans and restrictions were ineffectual, as global security prices continued to fall while they were in force; and (2) short sellers play a critical role in properly functioning capital markets because they provide liquidity, check asset price bubbles, and use forensic accounting analysis to detect corporate frauds that might otherwise go undetected. Additionally, we believe that increased regulation *may* be beneficial because it will force hedge fund managers to provide investors with incremental information about their businesses, and because regulation will further increase barriers to entry in the industry.

High-Water Marks

The fact that most hedge fund managers incurred losses during 2008 is problematic because draw-downs trigger high-water-mark provisions that prohibit managers from charging incentive fees (or force them to reduce incentive fees) until investment losses are recouped. The inability to charge incentive fees can destabilize hedge fund organizations, especially firms with small capital bases that cannot afford to cover overhead costs and analyst compensation exclusively with their management fee. Additionally, the triggering of high-water-mark provisions tends to spur analyst flight from weak firms with high-water-mark issues to firms that are above their high-water marks.

While the universality of the high-water-mark issue mitigates the latter concern (i.e., analyst flight should be less prevalent than one would expect in most market environments), we do believe many small hedge fund firms will be forced to close because they will not be able to cover overhead and compensation expenses. Organizations that can cover overhead costs and pay research with their management fee—primarily larger firms with stable capital bases or modified high-water-mark provisions that allow them to charge reduced incentive fees despite draw-downs—are much more likely to survive the shakeout than smaller competitors.

While we are concerned that high-water-mark issues may compel some larger firms to close in coming years (especially if these firms are unable to recoup losses or lose key investment professionals), the triggering of high-water-mark provisions will dramatically reduce the fee burden on hedge fund investors over the near term by temporarily eliminating incentive fees. As investors debate whether to rotate capital into other asset classes (e.g., long-only equity, fixed income), they must incorporate this incentive fee reduction into return estimates. Investors looking to upgrade portfolios should also recognize that high-water-mark issues create meaningful barriers to switching, as investors lose the benefit of high-water marks when they make new capital commitments.

Financing Mechanisms

Concerns about counterparty failures and the health of the commercial banking industry have prompted some investors to ask whether the mechanisms that hedge funds have historically used to finance their investment activities will function properly in the future.

First, investors have expressed concerns that equity lenders (many of whom incurred losses in associated cash collateral pools) will withdraw from the lending market, making it more difficult and expensive for managers to borrow stock. In response to this concern, we note that equity lending costs have always been a function of supply and demand, and suspect the demand for borrowed stock will fall in concert with the contraction of the hedge fund and investment banking industries. While stock borrowing costs may be volatile as supply and demand move back into balance, we believe the long-term impact will be negligible.

Second, many investors are concerned that hedge funds will have minimal access to margin leverage, impairing the attractiveness of strategies that depend on balance sheet leverage. In response to this concern, we reiterate our bias against strategies that depend on margin leverage. As we mentioned in our mid-2007 research report, a core tenet of our approach to strategy allocation has always been to evaluate the ROA in various marketable alternative strategies without any consideration for the "leverage-ability" of those strategies. For example, we have historically avoided strategies (such as fixed income arbitrage) where managers typically gear low ROA into high ROE in order to satisfy investor expectations. Similarly, a core tenet of our approach to manager evaluation has always been to focus on the *quality of earnings* being generated by hedge fund managers, which includes a careful analysis of the leverage being used to generate returns.

Conclusion

The year 2008 was an extremely disappointing one for investors in marketable alternative strategies. While hedge fund managers did a better job of preserving capital than traditional asset managers, they were confronted with a host of challenges—counterparty failures, regulatory intervention, and unprecedented capital redemptions—that made it extraordinarily difficult to deliver absolute returns to investors. The inability of hedge fund managers to fulfill their absolute return mandate has prompted some investors to question the role of marketable alternative strategies in institutional investment portfolios.

Nevertheless, we strongly believe that the shakeout in the industry is a net positive for long-term hedge fund investors because it has dramatically altered the competitive landscape in the industry, resulted in extremely attractive opportunity sets in most marketable alternative strategies, and should lead to a structural abatement of cost pressures. Firms that survive the shakeout should be extremely well positioned to capitalize on extensive pricing inefficiencies that have resulted from the current market dislocation, and should be able to generate attractive risk-adjusted returns in coming years.

Despite this positive outlook, we are cognizant that significant near-term challenges remain. Organizational risks in the industry remain extremely high—especially with most firms below high-water marks and the global liquidity and credit crises still weighing on asset prices—and more firms will undoubtedly fail in the upcoming year. At the same time, we currently regard most credit markets as very undervalued, U.S. equities as fairly valued, and equity markets outside the United States as undervalued, suggesting that from an intermediate- to long-term perspective long-only investment return prospects are more attractive than they have been in years. In this environment, manager selection becomes paramount, as prospective returns from marketable alternative strategies will be even more dependent on manager selection than they have been in the past. Superior skill in security selection, capital allocation, and risk management will be necessary to justify the higher fees and constrained liquidity of marketable alternative investments. Firms that are most likely to survive the shakeout have strong and flexible capital bases, deep investment teams, long track records, sizable capital reserves, modified (or annual) high-water-mark provisions, and shared equity ownership.