CHAPTER 7

Understanding Risk and the Need for Due Diligence

The term *systemic risk* is generally used to describe a series of interactions between financial institutions and the capital markets, and the risk of the failure of one market participant among other financial institutions. The demise of Long-Term Capital Management (LTCM) in 1998 in the aftermath of the Russian default of debt has come to be recognized as the first large-scale event that created major market dislocations as a direct result of systemic risks.

LTCM ISSUES

While many books have been written about ‘‘genius’’ failing, LTCM, started in 1994 and led by Salomon Brothers alumni, achieved unprecedented 40 percent plus returns for investors after fees. LTCM’s managers simply thought they could master the investment universe. With a team of academics, traders, and former Federal Reserve officials, John Meriwether and his team used leverage to increase LTCM’s asset base from $1.25 billion under management to more than $100 billion of investments in the markets. After thousands of arbitrage trades across the global markets and among various investment classes were made, the bottom fell out for the firm in the summer of 1998. The investment managers had significant exposure to many different markets. They were investing in developed markets and emerging markets, along with fixed-income and equity markets, and they used many varied and complex investment models. Coupled with the leverage, this was a recipe for disaster. When the Russian government defaulted on its debt and the Asian flu spread like wildfire, the fund’s positions fell in price, margin was due, and wholesale selling of the portfolio began. The margin calls could not be met, and ultimately the fund was bailed out by a Federal Reserve–brokered deal. The genius, in short, failed.

At the end of September 1998, the Federal Reserve Bank of New York, having no choice, summoned the executives of the Wall Street investment banks and commercial banks to its headquarters to come up with a solution to the LTCM mess. LTCM was deemed too big to fail by the powers that be; as a result, a solution had to be put in place to ensure that the firm did not default on its loans. The Federal Reserve ''encouraged'' 14 banks to provide a $3.6 billion lifeline to the firm that would enable LTCM to unwind positions and provide an orderly liquidation of fund assets. The belief was that this lifeline would reduce both the shock to the financial system and the risk of a chain reaction of a failure of the banking system.

It was believed by LTCM's management that their financial models would be able to generate noncorrelated returns and that the leveraged portfolio would enhance returns. In the aftermath of the Russian default and the subsequent flight to quality, liquidity and credit became the top concerns to investors. Suddenly, all of LTCM's trades and positions were correlated; selling pressure exacerbated the situation, and the fund could not weather the storm. The systemic risk was the failure of LTCM along with the subsequent downward price spiral of global capital markets, which put pressure on financial institutions globally. Had the 14 banks not stepped in, the decline might have been much more dramatic and might have had a far greater impact globally, causing significant stress on the markets worldwide.

The bailout of LTCM was followed by the corporate governance issues of WorldCom, Adelphia, Enron, and Global Crossing in 2001–2002, once again putting stress on the financial system's circuit breakers.

LTCM's downfall was the first to highlight the link between the capital markets, the banking industry, and the financial services industry. Many banks and investment banks actually operated as hedge funds with their proprietary trading desks.

As we witnessed once again in 2007 with the beginning of the subprime meltdown and moving into 2008, we were reminded of the linkage between hedge funds, the banking industry, the capital markets, investment banks, and the man in the street. In a period of less than six months, Bear Stearns, Lehman Brothers, and AIG ceased to exist as independent entities and were joined by the ''conservatorships'' of Fannie Mae and Freddie Mac.

WHAT HAPPENED?

Lessons learned in 1998 and again in 2002 were once again thrust into the marketplace by the villain of subprime debt in 2007. Subprime debt is a term made popular by Wall Street during a period of providing mortgages to borrowers who could not afford the debt. Lenders, including commercial banks, savings banks, and Wall Street investment banks, with the encouragement of elected officials, have traditionally provided mortgage financing to borrowers in search of the American dream—home ownership. However, in the period immediately following the tech bubble, investors realized that the only place that they could make money was in real estate, because ''it always goes up,'' or was ''the safest place to put money since real estate never goes down.'' Seizing the opportunity, and with the creativity and distribution of Wall Street, lenders determined that they could provide the dream to current and prospective borrowers, many of whom could ill afford the debt of home ownership. Many firms created products to make housing more affordable, many of them appropriately called ''teasers.''

What Really Is Systemic Risk?

Fannie Mae and Freddie Mac had strict underwriting standards for residential mortgages for many years, and this included a loan-to-value requirement of a maximum loan amount of 80 percent. In other words, a borrower was required to place a 20 percent down payment for a home and would be required to complete a rigorous underwriting and financial review process administered by the lender. However, subprime borrowing changed the face of residential lending; loans were offered that included 100 percent loan-to-value underwriting, and incomplete (or no documents, or limited documents) underwriting. In addition, loans were offered at a below-market introductory rate (teaser loans) that reset to higher rates on future adjustment dates, making it more difficult for borrowers to meet future debt service requirements.

Even though lenders were being called predatory for inducing borrowers with inadequate information, loan origination moved to record levels. With nothing down (or little, in many cases), borrowers went on a spending spree, and residential builders complied with projects all over the country. Banks were happy to make loans to developers, Congress was happy because of the growth in their home districts, and borrowers were happy with cheap and readily available credit terms. Fannie and Freddie were happy because of the new loan volume for conforming loans (meeting their strict guidelines), but they also wanted to get into the new subprime game of originating loans that were easier to underwrite. In an effort to improve margins and earnings, Fannie and Freddie readily bought these loans into their portfolios as well.

Who were the happiest among the participants? You guessed it—Wall Street and the hedge fund community. First, Wall Street loved subprime loans because they would be able to use the specialized skills of the ''financial engineers'' that they had hired from the top universities in the world to create mathematical assumptions to reengineer cash flows and payoffs and expected default models to determine a value for the loans. The ability to assemble and aggregate pools of mortgage loans into different tranches of securities, with cash flows coming from various geographic areas of the country that would create different investment requirements of different classes of investors, became an exciting model for profit.

What could be better? Wide margins for the lender, wide margins for the structuring investment bank, and big commissions for the underwriter and distributor—a true match made in heaven. The major ratings services, Moody's and Standard & Poor's, loved it as well. The increase in product meant an increase in volume of debt that would be financed, and each deal needed an assigned rating before it could be sold to investors. The financial engineers ran models that made a series of assumptions and sold deals based on the assumptions.

In the far outposts of the hedge fund community, many hedge fund managers had their financial engineers as well and knew that the Wall Street assumptions were wrong. The lenders' underwriting was worse than it was thought to be. Borrowers would suffer extreme pain as the teaser loans or ''liar loans'' with incomplete documentation came home to roost and reset to higher interest rates, while the Street was starting to suffer from indigestion and was having difficulties selling some of this paper. The paper, which has since become known as ''toxic waste,'' seems to be living up to its name.

The SIV

Much of this paper made it into structure investment vehicles (SIVs), a term not known to many until the summer of 2007. SIVs were offshore funds created by banks to sell short-term debt and were used to buy various mortgage products. The product was designed for yield enhancement for short-term investors. The SIV sold short-term debt, usually through the commercial paper market, and bought longer-term debt, providing higher yields to short-term investors. Most SIV investors probably did not know how the product was financed or why the yield was higher than traditional money market rates, but who really cared? Citibank and a host of other well-known banks were marketing the products that were rated AAA—therefore, it must be okay. Okay, that is, until investors stopped buying SIV commercial paper.

The event that triggered the SIV crisis was the debacle several months earlier at a Bear Stearns mortgage hedge fund. The fund invested in a wide range of mortgage products and collateralized debt obligations (CDOs). As mortgage delinquencies started to creep up in early 2007, cash flows of the underlying securities became even more unpredictable. Since the Bear Stearns fund used leverage to enhance returns, the fund's performance returns came under pressure. Suddenly, investors became uncomfortable and wanted to redeem. Unfortunately, the manager faced two of the biggest problems that a hedge fund fears—pricing and liquidity. Given that Bear Stearns, the investment bank, was a major factor in the mortgage market, the fact that it could not price and then sell these assets created a problem.

Wall Street prime brokerage firms that had lent money to the hedge fund decided that they too were concerned and needed protection for their assets; consequently, they seized some of the collateral that they had lent to the fund. Other banks decided to pull credit lines that previously had been used for financing facilities when all the while the fund was desperately seeking liquidity for positions. The fund suddenly faced a massive liquidity crisis because of systematic risk from many segments of the financial market.

Thus, the first two chapters of understanding systemic risk have been written. While LTCM seems like a generation ago, we will try to shed light on what happened in 2007 and 2008 and project what to look for in the future, even as history is being written.

LEVERAGE AND LIQUIDITY

The major themes that emerge from these well-known events are the relationship of leverage and liquidity and the correlation of all of the instruments that are supposed to be uncorrelated. As we are reminded by the wise old fixed-income bond geek who said in the wake of the most recent 2007 liquidity blowup, "Using leverage is like never having to say you're sorry." Systemic risk shows the inner relationship of hedge fund strategies and underlying risk exposure.

Many hedge fund strategies rely on leverage to produce higher levels of return. In addition to Wall Street proprietary trading desks, Fannie Mae and Freddie Mac used high levels of leverage to generate returns. Surprisingly, hedge fund leverage of 5 to 10 times of assets under management at many fixed-income firms was less than that used by Wall Street firms and government-backed entities such as Fannie and Freddie.

The hedge fund positions are generally larger than the amount of collateral that is posted to support the underlying positions. Therefore, leverage turns small profits into larger profits, or small losses into larger losses. When credit spreads widen, defaults increase, or rates rises the market value of the collateral is reduced, and margin calls for additional collateral are required.

In many cases, credit requirements are raised by the lender, and forced liquidation may occur over a short period of time thereafter. For portfolios that contain less liquid positions or positions that the lending counterparty—a bank, a Wall Street firm, or a prime broker—reprices, and selling pressure to meet margin calls increases. Suddenly, the non-correlated assets are correlated—hence, systemic risk.

The Credit Crisis

The spring and summer of 2007, leading into 2008, was a case of déjà vu all over again in the capital markets, reminiscent of the summer of 1998. The unwinding of hedge fund leverage to meet margin calls with ABS and MBS collateral that could not be priced, led providers of credit—prime brokers and banks—to reprice collateral lower. Unfortunately, market professionals suddenly did not know what the value of the positions was. In a span of a few weeks, bond prices plummeted from par to 70, 60, and 50 or less. As a result of this selling pressure, investors began selling plain vanilla securities that were readily priceable and marketable to raise capital to meet margin calls of the less liquid positions. At the same time, credit spreads of corporate bonds widened, and additional selling pressure kicked in. Many funds faced the inevitable death spiral. The rest is history; the major issue is that the more illiquid the investment position, the larger the price impact will be of forced liquidations or sales. And leverage just adds another kicker.

As market participants unknowingly learned very quickly, pockets of subprime paper that had been distributed globally for many years were marked down dramatically, and the U.S. financial contagion swiftly spread around the globe. As we discovered quickly, it was not restricted to the fixed-income markets. And so, as we review the list of well-publicized casualties, their downfall began with the thirst for the yield of subprime securities that included over 100 global mortgage companies and well-respected financial firms. Among them were

- New Century
- Bear Stearns
- Northern Rock
- Lehman Brothers
- Countrywide
- Merrill Lynch
- Fannie Mae
- Freddie Mac
- AIG

- Wachovia
- Washington Mutual
- Bradford & Bingley
- Indie Mac
- Hypo Real Estate
- Fortis

As we have witnessed, systemic risk can be defined as the domino effect of the failure or near failure of the financial system because of the confusion, the lack of liquidity, and the selling of assets by institutions that hold similar securities. It is then exacerbated by the selling pressure of nonrelated assets as other investors seek liquidity in their portfolios. Academics and economists will debate the subprime contagion for years, but it was lack of liquidity for securities that were highly leveraged and impossible to price that led to the downfall. As the risk moved from Wall Street to the banking community to Main Street, the credit markets approached a state of near freezing in 2008.

UNDERSTANDING DUE DILIGENCE

Understanding systemic risk is a very important piece of the puzzle; second is understanding due diligence. It is critical to establish due diligence controls that are in place before a specific manager is chosen and investments are made. Both investment and operational procedures of top-down and bottom-up analysis must be integrated into the evaluation to determine whether a potential submanager meets the portfolio's risk/reward profile.

Due diligence involves a two-part process of quantitative and qualitative analysis of the fund and the investment style of the investment manager. For the investor, it includes an evaluation of the investment process of the fund. Both reviews are accomplished by multiple on-site visits to manager's front and back offices as well as reviews of the key tax, regulatory, and legal issues.

One of the most often used and misused terms in hedge fund land is *due diligence*. Among the white shoe, investment banking brethren, due diligence describes the process of investigating a potential investment or merger of companies in which the bankers review all aspects of a company's business, including operations, management, and financial information. In hedge funds, it has taken on a broader meaning, one that includes identifying managers, meeting with the management team, and completing a laundry list of questions, all of which leads to the ultimate decision whether to buy, hold, sell, or avoid a hedge fund manager or fund of funds manager. In short, due diligence can best be described as everything involved in the search for stellar managers.

Due Diligence Around Risk

Here are some guidelines to follow:

- Successful investors seek opportunities across multiple strategies and asset classes but should recognize that since it is often better to avoid a strategy rather than invest, some opportunities should be avoided.
- It is essential to understand and review the character and background of a manager.
- Investors should avoid strategies that they do not understand.

All investors use a variety of approaches and procedures before making the investment decision. Many investors have established policies and procedures that are continually evolving over a period of years to select managers and alternative investment managers. Generally, the process for hedge fund selection is different from traditional long-only investing with much more deep diving. Most sophisticated investors have developed robust proprietary quantitative and qualitative analysis that includes due diligence questionnaires and a strict approval process by the fund of funds manager and institutional investor.

Why Fund of Funds

The process of selecting, monitoring, and then valuing and reporting the returns of a portfolio of hedge funds requires extensive knowledge and experience. Fund of funds are paid to be in this business and to continually upgrade the quality of the research and follow-up monitoring. The firm should maintain a group of professionals in all aspects of the fund's management business who possess the knowledge and background commensurate with the complexity of the strategy.

Portfolio construction should focus on researching various investment ideas and ultimately the selection of superior investment managers. Each underlying hedge fund manager and strategy should be evaluated in the context of the overall portfolio well before final portfolio selection. Each manager should be evaluated against peer benchmark indexes as well as in the context of the broader portfolio objective to minimize downside risks with low correlation to other managers and the peer industry benchmarks.

Some investors, including foundations, endowments, and family offices often rely on outside third-party firms and consultants to perform or to validate due diligence, but even so, they should have similar procedures in place. On the other hand, fund of funds have built extensive research staffs with many analysts who specialize in specific parts of the due diligence cycle. In many of the larger fund of funds firms, analysts specialize in fixed-income, derivatives, and long/short equity. While investors may be willing to accept market risk with regard to position risk, they should have little tolerance for operational risk.

In either approach, the investor is required to perform sufficient due diligence to make an informed investment decision that has been effectively documented and approved by a stringent review process of related investment decision makers. Many investors use customized questionnaires to gather preliminary data about a potential investment. (Readers are invited to review the sample form in the Appendix.)

Getting Dirty

Who is doing the research at a firm is a question that needs to be asked and answered constantly. Unfortunately, the story for many investors seems to be that young, well-educated professionals are meeting hedge fund managers, but they don't really understand the assets in this asset class from a hands-on perspective. Most have no experience in managing money, nor do they have experience in actually investing in hedge funds, much less equities or bonds. Still, they are making buy and sell recommendations for the constituent investor groups. We often hear from investors that the old people should go out and do all of the leg work, including the first meeting, and let the young people work in the office, transcribe notes from meetings, and answer the phone. Unfortunately, some investors often believe that more is better, and experience is overlooked.

In some industries, that is not the case. In the fund of funds industry, investors should favor organizations with older, more seasoned investment professionals. Gray hair is a plus. The better performing organizations, in fact, have fewer research and due diligence people but more seasoned veterans who understand how money is made. The prospective fund of funds investor should ask whether an organization with 60 young analysts is preferred to a more concentrated staff of 12 seasoned professionals

In the volatile period of hedge fund returns of 2007–2008 in which we witnessed many hedge fund closures and countless more with unexpected extreme return fluctuations, there were a number of fund of funds managers who were able to limit risk simply by sticking to strategies that they understood.

Subprime-related strategies were marketed to a wide range of sophisticated foundations and endowments as well as fund of funds; in the end, either the strategy was not fully understood or the assumptions were not correct. Losses were heavy and continued to mount. Similarly with Madoff, nobody seemed to really understand a split strike conversion strategy, but they believed that it worked, regardless of market swings. Still, thousands gave him money. In the end, everyone knows what happened.

UNDERSTANDING HOW MONEY IS MADE

When it comes to trying to understand obscure strategies, avoidance may be the best approach. Many strategies such as distressed investing and small-cap equities are idiosyncratic in nature; a review of the returns should demonstrate the correlation to the broad market indexes. While most strategies adopted in the period 2007–2008 exhibited correlation to the markets and correlation to other supposed ''noncorrelated'' strategies, on-site due diligence and a random review of files with individual positions might have revealed what the manager was actually doing, rather than what he said he was doing. It is a good idea to gain a complete understanding of the manager's analytical process.

Hedge fund returns should capitalize on market inefficiencies, and an analysis of position holdings and holdings of other hedge funds may show crowding in both longs and shorts on the part of equity managers. Stress testing by the manager should also show that he or she has evaluated the potential for loss in volatile markets.

The second phase of the due diligence process continues long after the initial investment has been made, with follow-up analysis and review. While several hundred man-hours may be involved in the initial research process, due diligence, and investment, it is routine to spend 75 man-hours in continuing review. Ongoing analysis of the investment returns and risk/return objective that continues long after the initial investment goes hand in hand with monitoring the manager and the changes that take place within the organizational structure. Peer group comparisons should be done to evaluate the invested manager against the performance of other managers in the same sector.

Ongoing due diligence should also address growth in the hedge fund organization as asset size increases to ensure that the manager continues to make a strong financial commitment to build out the firm. Monthly or periodic investment letters and marketing material must be reviewed to determine whether changes have taken place in the organization since the initial investment. In addition, annual financial statements and K-1s should be reviewed to see whether auditors were changed (and why), review changes in valuation policies, and determine whether there are a large number of illiquid investments or side-pocket investments. Also key is to review general partner flow and transfer of capital to ensure that ''LP's interests are aligned with the GP.''

In other words, if the General Partner withdrew significant amounts of money from the partnership, it would be appropriate to ask why he withdrew funds from the strategy. Was it to pay for his children's college tuition, to buy a new G-4, or to pay bonuses to his staff? It's always good to determine how dedicated the manager is to the continuation of the growth of the firm.

Transparency Issues

Hedge fund investors always seek a high level of transparency despite the fact that managers want to provide as little information regarding the portfolio as possible. Hedge funds may not be subject to the Freedom of Information Act, but investors must feel comfortable with the level of data being provided concerning strategy and position-level transparency that is necessary to make an informed investment decision.

There are several factors that contribute to shoddy due diligence during the overall research process. In most cases, seasoned professionals were born into the investment industry before most of these gadgets were used and understand the value of time spent with the manager. Fund of funds should be encouraged to make a few due diligence calls with the fund in order to gain greater insight into the manager's *actual* process, not just the manager's *reported* process.

Clocks When meeting a manager, forget about the time for the next meeting. If the investor or research guru is looking at the clock to make the next meeting, then delay or cancel it. Hedge fund managers are much like athletes, and when the manager gets into a groove and starts to talk in greater detail, revealing facts and details that were not discussed earlier in the meeting, don't leave. Just listen. The next meeting can always be rescheduled. An initial meeting should take about one hour. The purpose of the first meeting is to gather as much information as required and determine whether a second meeting is needed. In the initial contact with the manager, the fund of funds team should have determined that a follow-up on-site visit is required. Don't ask who the portfolio manager is or who the CFO is. That should have been stated in the marketing material that should have been reviewed before the meeting. Ask how the CFO interacts with the staff, request some of the risk reports, or ask the PM why he uses ETFs to hedge and does not short stocks.

BlackBerrys Put your BlackBerry in your pocket and turn it off. Even though this may be the era of multitasking, due diligence and research involves listening and writing above all. Unless the home office is e-mailing questions to the research team, there is no need for the BlackBerry to be on. If the manager uses a BlackBerry during a meeting, that's another issue. Ask why. Is he in the middle of a big trade, or just bored meeting with investors? If the manager does not provide 100 percent to prospective investors, how accessible do you think the manager will be once he or she has your money?

Turn Off the Internet It may sound irreverent or sacrilegious, but too much time is wasted on the Internet and looking at skateboarders' or politicians' missteps on YouTube. Productivity declines. Back in the office, look at databases, do peer group comps, or find out why investing in emerging markets is growing or could be career threatening. Turn off the iPods. Turn off ESPN. There are enough distractions today, so try to reduce them during interviews or during the work day. On the other hand, a tour of the hedge fund manager's trading floor or a visit to research analysts reveals a lot. If the Internet is on the screen, what is the person viewing? Edgar, Bloomberg, or a company position is great, and asking a few questions about the page viewed can provide additional insight.

The Key Components

There are many questions that must always be asked relating to the overall due diligence of the fund of funds manager. Many are similar to information obtained by the fund of funds in researching the underlying fund managers. Relevant topics include

- Organizational structure and recent changes
- Quality of research and due diligence personnel
- Quality of financial and operational personnel
- Complexity of structure
- Fund of funds key terms
- Investment decision process
- Liquidity analysis, including redemption periods, gates, and side pockets of underlying funds
- Use of leverage
- Quality of risk management
- Investor base
- Nature and complexity of each strategy
- Review of recent financial statements

- Review of professional integrity of the fund of funds management team
- Internal controls, policies, and procedures
- Risk management
- Off-site disaster recovery
- NAV reporting and timeliness
- Transparency
- Management's objective

Most of the listed points are obvious, but we shall discuss the final two in greater detail.

Transparency Transparency is the term in hedge fund land that always strikes a nerve with hedge funds and investors. Many hedge funds have been reluctant to provide a high level of position transparency, with some actually requiring the signing of a nondisclosure document. Transparency may be defined as the secret sauce that managers use to make astute investment decisions. Although the concern of some investors may be to take this position information and act on it, the prime issue for investors is to request and obtain some degree of position transparency to ensure that the manager is actually investing in the types of securities that he has specified within the investment strategy. It may also be a warning sign if a manager states that he has a diversified portfolio, but in reality has four positions that each represent 15 percent holdings.

For fund of funds investors, position transparency is much the same. Fund of funds managers are reluctant to divulge the names of the managers that they allocate to for fear that investors may now have suddenly identified either hedge funds that are well known or other funds that have been subjected to the fund of funds manager's painstaking due diligence and vetting. Just as an equity hedge fund manager may not want to inform prospective investors of new, large positions, many fund of funds also restrict information about large positions of undiscovered managers. However, an investment decision by a prospective investor should be thwarted by the lack of candor on the part of a fund of funds manager who is unwilling to provide this level of position due diligence.

Financial Objective of the Manager The next issue is to determine the financial objective of the manager. Is the fund of funds manager in the business of managing a portfolio or in the business of managing a business? The answer is critical. While the economics of managing a hedge fund with a 2 & 20 fee structure are rewarding to those who achieve consistent, above-market returns, the reward can be great as long as the manager remains active in the money management process.

For a fund of funds, the economics are different; they call for using a smaller asset-based management fee that may also be underpricing pressure from larger pools of assets of the large, institutional investors. As a result and with consolidation within the fund of funds industry by larger, traditional asset management firms looking for an entry point into hedge funds, some managers are more concerned with distribution than with portfolio management. While this may be more difficult to detect in the due diligence process, firms that are expensing more on marketing than research may have fallen into the distribution trap. With fund expenses that may approach 50 basis points to manage and operate a business enterprise, the level of critical mass of the fund of funds manager grows as the infrastructure grows.

MANAGED ACCOUNTS

The events of 2008, including but not limited to the Lehman bankruptcy, the precipitous equity and credit market decline, the Madoff Fraud, the imposition of gates and outright suspensions of redemptions at a number of well known hedge funds called into question the typical hedge fund structure. Many investors believe that it was time to rewrite the rules of hedge fund investing. (In other words, how do I enhance the protection of my hedge fund investments through an alternative structure because there is too much risk to simply invest in a fund. One alternative comes in the form of a managed account. The term ‘‘managed account‘‘ is often misused with the term ‘‘separate account,’’ which refers to a portfolio of hedge funds created for a single investor. Separate accounts are typically for a large investor who is seeking a customized mandate or the perceived safety of having their own fund without the risk of being lumped in with other investors. While the managed account structure has been around for quite some time, dating back to the 1980s, the rise in interest in this structure picked up considerably following the events of the second half of 2008.

Typically, most hedge fund investors, including fund of funds, have invested through the traditional structure, known as a commingled fund, where all investors own shares or limited partnership interests in a particular fund. These investors receive the same investment terms, including fees, liquidity, and lockups and will have limited levels of position transparency, if at all—basically they are beholden to what the managers tell them. In this structure, the hedge fund manager manages the investment portfolio and the operational side of the business while selecting counterparties for specific transactions, and the hedge fund owns each of the underlying portfolio positions. Managed accounts are very different.

Managed accounts address several shortcomings of the traditional hedge fund structure. One key difference is the degree of transparency that each structure provides the end investor (whether it is a fund of funds or institutional investor). Unlike a traditional hedge fund investment, the managed account investor has full position level data, which provides better information for risk management and portfolio monitoring purposes. For example, the investor can examine the actual position overlap among several long/short equity managers when deciding to add or remove an investment. The high level of transparency also provides the investor with the tools to detect style drift. If a long/short equity manager says they are a financial stock focused, the managed account investor can see if they are buying stocks like Wal-Mart Stores Inc., which is not part of their mandate. In the traditional structure, the investor would only know about the investment in Wal-Mart Stores Inc. if the manager inadvertently told them.

Beyond the transparency benefits, there is complete asset protection and control whereby the investor, not the fund, owns the underlying assets in the managed account thus being able to reduce the risk of fraud. While market risk losses certainly remain, operational risks can be reduced dramatically. For example, the investor, not the hedge fund manager, selects service providers such as administrator and auditor. In examining recent hedge fund frauds over the past decade, one or both service providers played some role in the fraud on several occasions. Furthermore, the managed account assets are segregated from those of the hedge fund manager, which are held in their commingled fund. While the investor exercises control over the assets, they still allow the hedge fund manager to focus on managing the individual portfolio positions. This is made possible by a legal contract that allows the investor to revoke the hedge fund managers' trading authority and also provided customized guidelines under which the manager is required to operate. Unlike a hedge fund offering memorandum that is very broad, the contract between the investor and the hedge fund manager in a managed account structure is much more specific.

Gating and suspensions was also a hot topic at the end of 2008 and into early 2009—with a managed account, these tools do not exist. The investor can have the positions sold at any time, and if the manager does not want to do so, they can be removed from the account; the investor can appoint a new manager and do as they wish with the positions in the account. In light of the losses of 2008, investor calls for greater transparency and the need to reduce the uncertainty of liquidity, managed accounts have gained traction with certain hedge fund investors.

Another benefit is that an investor can allocate to a manager without dealing with their business-related risk. Frank Napolitani of Concept Capital, a division of SMH Capital, Inc., a mini-prime broker, said that managed accounts provide investors with more comfort in allocating to early stage managers or smaller managers by reducing the operational and administrative risks. "After all, anything that can allow investors to sleep well at night is a positive," he said.

In fact, managed accounts are the preferred method to invest with new and emerging managers or seasoned hedge funds with smaller asset bases so that the investor does not need to be exposed to operational risks associated with smaller businesses. While investors may be reluctant to invest with a small hedge fund in a traditional fund structure with managed accounts, they do not have to.

Lighthouse Partners is a well-respected global fund of hedge funds in operation since 1996. Lighthouse has made use of the managed account structure since 1999 and has made the growth of this structure a key strategic initiative for the past five years. With over $5 billion in assets under management, the firm has developed a comprehensive infrastructure to manage many of their hedge fund investments through a proprietary managed account they built. According to Kelly Perkins, co-Chief Investment Officer of Lighthouse Partners, "Each managed account is a separate and distinct entity owned and controlled by Lighthouse. The assets are not comingled with the assets of other investors of funds, and therefore not subject to the behavior or turnover of other investors. In addition, administration, valuation, NAV calculation, and audit services are provided to the managed account by independent service providers selected by Lighthouse. This structure allows each underlying manager to focus exclusively on their portfolio management expertise."

The Lighthouse managed account structure creates several advantages that do not exist in the typical comingled fun investment, including: daily position transparency available for investment analysts to oversee, unencumbered impediments such as gates, suspensions, delays or side pockets, stronger investor protection against fraud via better asset control and ownership, and the authority to terminate a manager "at will" if necessary. With an experienced investment and operations team capable of handling a higher level of oversight, Lighthouse has positioned the firm to provide investors fund of hedge fund products that they view as a superior way to invest in hedge funds.

Managed accounts, however, are not for everyone. When an investor considers transitioning traditional hedge fund assets to this structure, there are three challenges they must overcome. First, it is imperative that the investor have the experience and infrastructure to establish, monitor, and execute the managed account structure. As is the case with Lighthouse, their process has been built over several years; they did not just decide to start offering this structure in the wake of the 2008 financial crisis. Those who consider such a structure now must take this into account—do I have the right people and infrastructure to operate this structure?

The second challenge is economic. What is the minimum size account that a hedge fund manager will accept? Generally, larger hedge fund managers dictate minimum asset sizes of $25 million to $50 million or more for managed accounts, reducing the number of allocators that may actually qualify.

The third challenge is that not all managers are receptive to the managed account. Strategies that use illiquid securities with complex pricing issues and hedge fund managers that are large and can raise adequate money through their commingled funds may not be interested. In the end, as hedge fund allocators look to align the interests of investors with their hedge fund managers, the managed account model represents a newer and better approach to hedge fund investing.

Managed accounts do not replace the need for ongoing due diligence. Rob Swan, Lighthouse's Chief Operating Officer gives a resounding "no." "Both investment and operational due diligence remain the fundamental backbone of our process. The managed account structure enhances this process by providing full position-level transparency and asset ownership, but ultimately these tools are dependent on the ability of our people to conduct the work and make better decisions."

With hedge fund performance rebounding in 2009, there are now fewer calls from investors for managed accounts than there were earlier in the year. While some may call the structure a "fad" or a gut reaction to the financial crisis and related aftermath, for those able to offer the structure in a scalable and efficient manner, it can offer a superior way to invest in hedge funds for those investors.

WHAT TO LOOK FOR FIRST

One of the first common sense determinants of hedge fund (or fund of funds) credibility is the auditor. While it is always comforting to see one of the large global accounting firms perform the annual audit, there are many other nationally recognized accounting firms with dedicated hedge fund practices that perform this function as well. The first rule is to invest only with an investment manager who uses an accounting firm with a nationally recognized accounting practice; no deviations are permitted! In nearly every hedge fraud that occurred during the past 10 years, the auditor (and we use the term loosely) did not have a dedicated practice and was, in fact, a small or even a two-person firm. In fact, there was not a dedicated accounting practice as well.

The second common sense determinant is the background check. How can investors allocate capital before completing a check of the individual manager of firm? As recent history has shown, there are many shady characters that misrepresent their backgrounds, hide past legal infractions, and may even lie about the college or university that they attended. They may even state that they are CFAs when, in fact, they never even took the first part of the exam.

Randy Shain of First Advantage Investigative Services performs background checks for investors completing the final (or first) stages of the due diligence. As Randy said, ''Background due diligence, a critical component of a broad due diligence program, is often performed so poorly it is amazing that the institutional investment community has any idea what they need when seeking effective background reports. As I explained in great detail in my book, *Hedge Fund Due Diligence: Professional Tools to Investigate Hedge Fund Managers*, on investigative hedge fund due diligence, knowing what to ask of your due diligence providers affords you great power. No longer must you feel vaguely or even totally dissatisfied with the results of background searches, without any means of addressing this feeling.''

With a new fraud seemingly being exposed more frequently, now more than ever it is imperative for any institution investing in hedge funds—or advising others to do so—to understand the risks involved. Proper background due diligence, in conjunction with proper operational due diligence, is all about cutting risks. Cheap, data-dump, commodity-type background reports, however, are more about cutting corners than cutting risk. Smart institutions have long recognized that the question is not whether they can afford comprehensive due diligence, but whether they can afford not to do it.

It is interesting to note how many investors do not use this service before investing. But, then again, who would think that a prospective investor would not contact the prospective fund's auditor to get an overview as well. We recently spoke anonymously with an auditor for a new hedge fund to get some background on the prospective manager. While there were no surprises, a surprise did come when we asked how many other prospective investors call him concerning all of the other hedge fund clients that he serves. The answer was shocking: 15 percent.

FEE CHANGES

For a fund of funds in the post-2008 era, the economics have changed with the introduction of a smaller asset-based management fee that may also be underpricing pressure from larger pools of assets of the large, institutional investors, putting pressure on margins. As a result and with consolidation within the fund industry by larger, traditional asset management firms looking for an entry point into hedge funds, some fund managers are more concerned with distribution than with portfolio management. Although this may be more difficult to detect in the due diligence process, firms that are expensing more on marketing than on research may have fallen into the distribution trap. With fund expenses that may approach 50 basis points to manage and operate a business enterprise, the level of critical mass of the fund of funds manager grows as the infrastructure grows.

Many investors take different approaches to fund of funds investing. Gregoire Capital LLC is a New Jersey–based investment manager that has been investing in fund of funds for institutional clients for more than 10 years. Gregoire typically allocates to 8 to 10 individual fund of funds and has created a fund termed F3—fund of funds of funds. Although the extra layer of fees may appear to be counterintuitive, Scott Wolfel, co-manager of the F3 portfolio, states that the overall fee is less than that charged by the majority of other fund of funds. By receiving a fee discount from the underlying fund of funds in which they invest, Wolfel says that the F3 fee of 0.25 percent brings total fees to approximately 1.21 percent. Many large institutional investors are able to capitalize on large flows to fund of funds and receive terms that are different from the posted terms in the legal documents of the fund.

Gregoire scrutinizes the diversification process and believes that the F3 provides additional diversification. More importantly, through their due diligence process, they are able to evaluate and reduce redundancy in holdings among the different fund of funds, something that most investors and consultants are unable to accomplish. Wolfel said, "avoiding an undesirable level of overlap is important to us. We don't want too much concentration in sectors. We track exposures to make sure that the exposure level is not too great."

Tactical Asset Allocation

Hedge fund managers may produce positive results—even outstanding results—due to two factors: luck or tactical allocation. Within a narrow context of understanding the level of risk for underlying funds, Gregoire screens over 3,000 fund of funds to identify managers that meet the investment parameters for their clients.

Jim Gregoire, founder, says that "quality is not proportionate to size of assets." While size is important, Gregoire looks for fund of funds managers that have an edge or a niche product.

Access to specialized or different strategies is key to delivering positive alpha. While some investors will say that "getting the right call" from Wall

Street is the key to success, strategy allocation is critical. At the same time, active management of strategies is helpful. For example, one of the best (or worst) strategies is investing in emerging markets. During the past 10 years, investing in emerging market strategies has consistently been either the best or the worst performing strategy. Depending on the growth of world economies, emerging markets have performed in direct correlation with global growth. There are times to invest in emerging markets strategies, and times to avoid them. For the fund of funds manager who actively manages his fund, turnover will be high in this strategy as the manager seeks to add performance and reduce risk in periods of economic slowdown.

In evaluating fund of funds managers, the process is similar to that involved in the analysis of hedge fund managers. The following questions should be asked:

- Who are the people, and do they know what they are doing? This was the principal factor several years ago before the growth spurt in hedge funds, and it is still relevant for smaller, less institutional shops today.
- Is there a systematic process? Does the investment team have the tools to identify and evaluate talented managers and understand the investment thesis and approach? Or is it just a matter of checking the box and completing due diligence questionnaires?
- Does the manager have a strong and developed infrastructure with good systems to monitor and control risk?
- Does the manager have a thorough understanding of the portfolio and the risk and liquidity imbedded in the portfolio?

One of the issues of due diligence is reporting. Fund of funds managers and investors alike both have similar needs—timely and accurate reporting of fund information, portfolio performance, and position analytics. In the early years of hedge fund growth, both hedge fund managers and fund of funds managers alike provided portfolio analytics, monthly performance results, net asset value calculations, and investor communication. However, much of that responsibility is now provided by an external administrator. While much of the data is derived from the prime brokers, the industry has been moving more to the outsourced and independent administrator model. While some funds still use an in-house platform, the technology and cost advantage available to large global administrators has caused managers to rethink the most effective means of communication.

Performance results are still sent electronically as flash numbers from the manager, but investors demand greater and more accurate service. Investors should ask when preliminary monthly performance results are sent;

followed up with final monthly or quarterly NAVs. The shortest period for dissemination of information is critical to meet investors' needs. Monthly flash results should arrive a few days after month end, with final NAVs arriving around midmonth, along with relevant portfolio analytics. Investors should also ask what the past history has been for completion and mailing of K-1s and annual statements to see whether this is satisfactory for the underlying investors in the funds.

If K-1s are historically mailed in midsummer, that may be unacceptable for investors and may preclude investing in that fund. On the other hand, if K-1s, or at least drafts, are completed before April 15 and annual statements are sent shortly thereafter, the decision to invest may come more easily.

It may be straightforward to define the profile of the perfect hedge fund or fund of funds, but the investor (e.g., institutional, high net worth, or family office) bases, the investor perspective, and the outcome will vary. While track record, volatility, and terms may vary from manager to manager, the buy or sell decision will vary according to investor type. Depending on investor type, there are trade-offs in the due diligence process. Institutional investors have more rigid investment requirements, and the due diligence period is much longer. As a result, investors will ask what the trade-offs or sacrifices will be in order to issue an investment commitment based on the following terms:

- Length of track record
- Liquidity and fees
- Risk/return profile
- Internal management team
- Level of transparency
- Internal pricing policies
- Manager history
- Headline risk
- Total assets under management

Institutional investors require a longer track record, lower fees, and a high level of transparency; they desperately want to avoid headline risk. Although high net worth and family office investors also seek the same terms, many will forego rigid standards at the expense of higher returns for a shorter time horizon. While portfolio transparency may be lessened, process transparency should not be. Investors must evaluate an intelligent evaluation process by the fund of funds and have a healthy understanding of the process and the portfolio.

Where Are All the Managers?

One frequent characterization of the weak spot of the fund of funds community is a shortage of qualified experienced analysts. As a result, it is important for investors to seek fund of funds organizations that have knowledgeable analysts and firms that are continually building out the firm infrastructure. As any college student asks about the student/faculty ratio, investors should also ask about the number of analysts as opposed to the number of managers and should compare the turnover ratio of managers in different fund of funds. Furthermore, let's not forget to compare the results of funds with different levels of manager turnover.

In the end, you get what you pay for. The fund of funds manager provides a valuable service, and to keep investors satisfied, strong performance results with defined risk parameters are required. The fund of funds must have a strong client service/investor relations department that is a unique added value of the strategy; however, some managers are willing to shortcut the process.

As a well-known institutional allocator anonymously stated, ''Make sure that you meet the genius who hired Amaranth. And the Bear Stearns mortgage fund. And Sowood! These yahoo MBAs are not quite ready to hire hedge fund managers.'' That is for the professionals.