

SPRING 2005

IN THIS ISSUE

About the Greenwich Roundtable

Greenwich Roundtable Research Council

Introduction: Letter from the Executive Director

Table of Contents

BEST PRACTICES IN HEDGE FUND INVESTING:
DUE DILIGENCE FOR EQUITY STRATEGIES



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Greenwich Roundtable symposiums is to discuss and provide

current, cutting-edge education

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ABOUT THE GREENWICH ROUNDTABLE

I he Greenwich Roundtable is a not-for-profit research and educational organization located in Greenwich, Connecticut, for investors who allocate capital to alternative investments. It is operated in the spirit of an intellectual cooperative for the alternative investment community. Mostly, its 120 members are institutional and private investors.

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The Greenwich Roundtable hosts monthly, mediated symposiums at the Bruce Museum in Greenwich, Connecticut. Attendance in these forums is limited to members and their invited guests. Selected invited speakers define complex issues, analyze risks, reveal opportunities, and share their outlook on the future. For the past 10 years, the Greenwich Roundtable has hosted some of the leading managers, scientists, and policy makers of our day.

Stephen McMenamin, of Indian Harbor LLC, formed the Greenwich Roundtable in 1995 and is its Executive Director. Its Board of Trustees, whose membership reflects a cross section of the alternative investment community, sets the direction of the Greenwich Roundtable.

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GREENWICH ROUNDTABLE RESEARCH COUNCIL

Best Practices in Hedge Fund Investing: Due Diligence for Equity Strategies is the first collaboration of its kind...between investors and managers. The managers are members of our Research Council who have generously provided the resources to produce this publication. Each manager was nominated and appointed for his support of best practices or, quite simply, his interest in demystifying the hedge fund investment process. Their business activities can be held out as a standard for all to follow.

The investors are members of our Education Committee. Their backgrounds are broad and diverse. They hail from the family office, bank proprietary capital, or fund of funds communities. They are all seasoned investors in a broad range of strategies that include equity long/short, arbitrage, managed futures, relative value, distressed debt, credit, asset backed, and global macro. All are limited partners, sophisticated investors, and the quality of our discovery process was exceptional. We have essentially unlocked wisdom that has never before been made public.

Indeed, the goal of this publication is to help demystify a topic that has been shrouded in myth and, by doing so, help improve the level of education among those who wish to better understand the community of active hedge fund investors. Our hope is that *Best Practices in Hedge Fund Investing* may become an effective educational tool for the broader community of qualified private and institutional investors, especially those currently evaluating an active hedge fund investment program. We hope that it might also be a practical reference for academics and policymakers with an interest in understanding the hedge fund industry from an investor's perspective. Perhaps even experienced allocators will find this document to be a helpful review to reexamine long-standing practices and habits of mind.

Best Practices in Hedge Fund Investing: Due Diligence for Equity Strategies is a work made possible through the generosity of a few hedge fund managers. The members of the Research Council of the Greenwich Roundtable have provided the critical financial resources that were necessary to bring this valuable knowledge to the investor community. The members of the Research Council were selected for their prior good deeds in raising professional standards within their industry. Now they wish to help the buy-side raise their standards. They also share our belief that education is one of the greatest needs in the marketplace.

RESEARCH COUNCIL

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Ray Dalio Bridgewater Associates, Inc.

Charles Gruye CRG Partners

Cliff Viner III Offshore Investors

Tom McAuley North Sound Capital

Steven Bloom Sagamore Hill Capital Management

Paul R. Aaronson Standard & Poor's





INTRODUCTION:

LETTER FROM THE EXECUTIVE DIRECTOR

Inside this first issue of the planned series of Best Practices in Hedge Fund Investing you will be treated to an informed examination into the art of due diligence. The scope of this issue will be confined to examining equity-oriented strategies. Early in the process of gathering ideas on due diligence, it was clear that we needed to focus on one strategy at a time. The universe of hedge fund strategies is enormously broad and diverse. Any single method of inquiry applied to all due diligence would become generic. Future issues will approach strategies in other asset classes such as managed futures, fixed income, and asset-backed markets.

Performing due diligence on hedge fund managers is difficult because it is necessarily a dynamic process. The investor must exhibit the skills of an accountant, a trader, an investment analyst, a psychotherapist, a business manager, a human resources manager, and a headhunter. By definition, hedge funds are organized to exploit inefficient pricing and anomalies, which makes the art of asking questions one of the greatest challenges for investors. The best investors are those who have developed not only a good bedside manner, but also a wide

understanding of the mechanics of many different capital markets. They approach the due diligence process with an open mind and an attitude of respect for the hedge fund manager's skill — but also with a healthy dose of skepticism. The due diligence process is vital to establishing rapport in the relationship between investor and hedge fund manager.

It is difficult to articulate a process so dependent on judgment and experience. Most experienced investors agree on a few common areas of inquiry. These include a review of marketing material, investor correspondence, legal documents, interviews with key professionals, a review of regulatory and professional records, background checks, and an evaluation of investment performance. Beyond this, individual opinions override consensus on the issue. Despite the differences of opinion, we approach the practice of due diligence with the assumption that the degree of agreement may be somewhat disguised. There are practical reasons why this is so. First, experience and judgment figure so decisively in the process. Few investors approach this process in exactly the same way. Second, the sequence of an allocator's process



INTRODUCTION:

LETTER FROM THE EXECUTIVE DIRECTOR (CONT.)

and the emphasis applied to any area will always reflect his sophistication regarding that topic. Third, due diligence is an iterative process with the prospective investor rarely taking a linear approach but, more practically, shifting from topic to topic to uncover important details as experience directs. We have attempted to highlight the key areas of inquiry in a sensible order of importance.

As the broad flow of investment and human capital from traditional strategies into non-traditional approaches continues, the need for research into this crucial aspect of investing has never been greater. The Securities and Exchange Commission (SEC) has imposed a registration rule on the hedge fund industry. The SEC staff felt compelled to create a "culture of compliance" to "legitimize" the industry. But a culture of compliance already exists. Investors performing due diligence create a market-based compliance culture. It is not the "specter of an investigation" but the needs of sophisticated investors and the possibility of investor redemptions that keeps everyone honest.

We believe Best Practices in Hedge Fund Investing: Due Diligence for Equity Strategies may be the first qualitative treatment of the practice. For two years, our purpose has been to uncover "soft" aspects of performing hedge fund due diligence. Our emphasis is on developing an interpretative discussion whenever a flag is raised. There have been many generic investor questionnaires circulated. Most were focused on collecting quantitative data. Quantitative analysis is backward looking.

Qualitative analysis is more useful as a forward looking tool. In his initial review of the literature, Mark Pearl discovered that no one translated the answers into conclusions. We do include most of the quantitative questions in an attempt to provide the investor with a comprehensive manual. But the aim of this series is to help investors identify exceptions and interpret what they are hearing.

Stephen McMenamin

BEST PRACTICES SUBCOMMITTEE MEMBERS

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Commonfund Institute

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Valerie Witoshkin The Alkimia Group Leader, Due Diligence Working Group



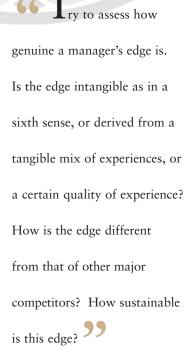




TABLE OF CONTENTS

I.	Strategy, Investment Process, and Market Opportunity.8A. Overview.8B. Portfolio Construction and Risk Management.9C. Trading.11D. Market Opportunity.12
II.	Team and Organization.13A. Key Investment Professionals.13B. Founders and Principals.14C. Staff.14
III.	Fee Structure and Terms
IV.	Risk Management.18A. Portfolio Risk.18B. Operational Risks.19C. Liquidity.20D. Leverage.20
V.	Management Company, Fund Structure, and Asset Base.22A. Management Company.22B. Fund Structure.23C. Asset Base.24
VI.	Quantitative Review
VII.	Operations and Transparency
VIII.	Third Parties .29 A. Auditor .29 B. Prime Broker .29 C. Administrator .30 D. Marketing Relationships .31 E. Other .31
IX.	Intuition, Judgment, and Experience
X.	Documents





SPRING 2005

I. STRATEGY, INVESTMENT PROCESS, AND MARKET OPPORTUNITY

A critical first step in any evaluation of a hedge fund investment is the establishment of a proper context for the evaluation. The question, to borrow Joe Dimenna's phrase, is "what ballpark are we in?" Context is everything: does the prospective evaluator have an appropriate understanding of the investment opportunity and the risks that attend to it? Does the portfolio manager understand the context in which his strategy and organization are being evaluated? Clarifying a set of shared assumptions between hedge fund manager and hedge fund investor ensures that both parties possess a common vocabulary for the successful conduct of the due diligence process. Once the context for the evaluation is properly understood, it is possible to proceed with a more nuanced investigation of the investment strategy, the portfolio manager's investment philosophy, the character of the organization, the portfolio manager's edge, and other relevant fund particulars.

A. OVERVIEW

- How is the strategy best categorized (diversified long/short equity, event-driven, long/short technology, etc.)?
- What is the manager's investment philosophy and what are the core principles that inform this strategy?

The core philosophy may require some elaboration, but the manager should be intellectually disciplined enough to articulate this in a clear, concise, and easily understandable way.

 What professional experiences were instrumental for the manager in the development of his investment philosophy or approach? How has the current strategy evolved over time?

 What factors might cause the strategy to be altered -- however subtle these changes might be? What is the fund manager's vision for how the organization can continue to improve over time?

Be careful of style drift. In particular, try to assess if the manager has fundamentally changed his strategy to accommodate an undue increase in assets or to capitalize on opportunities in which he has little expertise. Is the manager making logical adjustments to profit in a changed environment that is still fundamentally consistent with his investment philosophy?

 How unique is the strategy? Does it attempt to exploit persistent market inefficiencies or is it a less viable, shorter-term strategy? What is the hedge fund manager's edge?

Try to assess how genuine a manager's edge is. Is the edge intangible as in a sixth sense, or derived from a tangible mix of experiences, or a certain quality of experience? How is the edge different from that of other major competitors? How sustainable is this edge?

• What is the specific range of securities or markets invested in for the strategy (e.g., listed equity, ADRs, fixed income, cash, ETFs, options, OTC derivatives, swaps, forwards, PIPEs, private equity, commodities, FX, and others)?

Do the key investment professionals possess the specialized knowledge and experience to invest successfully in the identified securities?

I. STRATEGY, INVESTMENT PROCESS, AND MARKET OPPORTUNITY (CONT.)

Should their experience permit them to operate successfully in the range of markets required by the strategy?

- Does the portfolio manager have experience managing liabilities (e.g., funding, equity lockups) as opposed to simply managing assets (i.e., picking stocks)?
- Which countries or regions does the manager invest in?

Beware of the reduced liquidity and latitude for hedging in certain emerging markets. Also, beware of managers who are investing in higher risk, emerging markets if their experience and specialization may not be an appropriate match.

- What are the criteria for long- and shortsecurity selection? What is the process for generating investment ideas, or the selection and implementation of trades?
- How does the manager approach investment research? How are potential positions identified or screened? Are quantitative models or software used? To what degree does the manager use primary research or consultants, and how rigorous does this effort appear to be? What is unique about this approach to research? What capacity does the manager have to generate, consistently, a truly original investment thesis?
- Which indices or group of peer investment managers may be most appropriate to understand the market dynamics relevant to the strategy? Are there certain indices or strategies that might be ideal for benchmarking purposes?

• What are the security valuation methodologies that are important to a manager? Does the manager employ a bottom-up or top-down stock selection approach? Do the analysts create their own financial models? How does the manager develop research ideas in concert with less experienced analysts? Or, more broadly, how does the manager leverage the capabilities of all investment professionals involved in the research process?

Carefully review current and historical investment examples. Ensure that these examples represent a broad mix of investment outcomes (e.g., unfavorable as well as good).

Try to make sure that you are being presented with more than just a select number of highly polished and carefully vetted investment examples.

Do the examples tie in with your understanding of the manager's investment philosophy and investment edge?

What professional mistakes have been instructive for the portfolio manager? Are any lessons reflected in current investment practices?

It is important to understand these examples in the context of any important risk-management discipline (e.g., position sizing, industry exposure limit, sell discipline) that have been previously articulated.

- B. PORTFOLIO CONSTRUCTION AND RISK
 MANAGEMENT
- Try to understand how the manager's overall investment philosophy influences his





approach to smaller day-to-day rules and guidelines regarding portfolio construction and risk management.

 Review the range of gross and net exposure the portfolio manager has employed, or may employ, in the management of the fund. What are the current position and exposure ranges for the fund? What have been the historical limitations and minimums in terms of position sizes and exposures?

Has the manager ever exceeded these limits? If so, in what context did this occur? Are limitations noted in the offering memorandum?

Seek to understand the way in which the manager will likely deploy capital on both the long and short sides of the book in favorable or unfavorable market environments for the strategy.

• What is the typical number of positions in the portfolio?

How many of the positions are really material to the portfolio? Is the number of positions realistically manageable? In other words, can the manager and his team really know the positions well?

 What is the typical minimum and maximum long and short position size at cost and upon appreciation?

Develop a solid understanding of the way in which the manager approaches position concentration for both longs and shorts. How large has the manager let a position get (long and short) and in what context? Was this discipline always applied or was it adjusted in practice?

Try to understand the degree of risk created by position concentration, especially in less liquid markets; alternately, try to understand the weakening effect of an over-diversified portfolio — as well as the risk of not knowing the portfolio. Do you sense that the number of positions in the portfolio is a function of the fund's (possibly larger) asset size and less driven by a risk-management discipline?

 What, if any, is the fund's limit to sector concentration?

To what degree does the manager seem to appreciate the risks posed by excessive industry or market capitalization concentration? Does the manager demonstrate an appreciation for the risk posed by style, beta, or market cap mismatches potentially embedded in a given investment portfolio?

 What kind of geographic exposure does the fund's strategy have? What is the fund's exposure to emerging markets?

Pay attention to liquidity risks implicit in certain approaches or strategies.

 What is the range of market cap exposure, particularly to small and micro cap securities? What is the manager's definition of small cap (or, the market cap segments for investment)?

Be careful to scrutinize the liquidity risk implicit in smaller capitalization strategies. Try to assess the additional impact of other variables on liquidity such as position concentration, asset growth, investor concentration, redemption terms, etc.



I. STRATEGY, INVESTMENT PROCESS, AND MARKET OPPORTUNITY (CONT.)

- Is leverage used in the portfolio? To what degree will leverage be employed in the portfolio and in what context? What particular environments or circumstances would prompt a reduction in the use of leverage? An increase?
- Does the manager manage beta exposure? Gauge whether a manager is sufficiently sensitive to potential beta mismatches in strategies where it is commonly found (i.e., long small cap value will tend to be short higher beta small cap growth).

C. TRADING

- Who makes trading and execution decisions? Who informs a backup vote?
- Is there a separation between portfolio manager and trader? Who reviews and oversees trades? Does the trader only execute trades, or does he have some portfolio management authority over a prescribed carve-out of capital? How does the fund avoid the problems that can arise from having several individuals with trading authority?
- How and why are positions sold? How important are catalysts?
- Are there different types of positions such as core and trading positions?
- Are there systematic or quantitative elements to the strategy? If so, what are they and how were they developed? When is the manager's judgment sufficient to override such a systematic or quantitatively driven investment discipline?
- What is the average holding period? What is the annual average turnover of the fund?

• Is there a stop-loss policy? How is it executed?

Strict stop-loss procedures are more important for some strategies than for others. For example, in more trading- and arbitrage-oriented strategies, strict stop-loss procedures are vital due to the amount of leverage and position concentration that is sometimes employed. With many equity-oriented strategies and distressed managers, stop-loss disciplines are typically explained with a greater degree of ambiguity. The sell discipline is understood to be more art than science.

Understand the portfolio manager's tolerance for losses. What is the manager willing to lose in a position before cutting it back, or in the portfolio before reducing total leverage? Getting married to a position or a story is one of the most common reasons for incurring a substantial portfolio loss.

Understanding the risks a manager is willing to take if he is meaningfully profitable or unprofitable for the year is extremely useful. More trading-oriented managers and strategies will tend to press their bets when they are up and invest more conservatively when they are down.

What specific shorting experiences do the manager and traders have? Is shorting used to hedge or to generate alpha? If shorting is meant to generate alpha, has it actually done so in practice? Will the manager employ any other shorting or hedging strategies? What range of instruments will be used to short or hedge (e.g., derivatives, ETFs)? How costly has the use of hedging instruments been and, more pointedly, how has the employment of these instruments or strategies added value?





 How is new capital deployed? Is there a trade allocation policy among different funds and managed accounts? What is the policy for hot issues and nonparticipatory shares? Is there a process of liquidation to meet redemptions? What is it?

D. MARKET OPPORTUNITY

 What is the breadth of the investment universe that the manager's strategy will target? How diverse or liquid are the public companies, sectors, or regions that are targeted for the strategy?

As a guide for the appropriate size of the fund, consider the asset size of other successful funds that employ the same strategy. What is the range of asset bases? Does the manager propose to cap the fund's assets at a similar level?

 What conditions are favorable to the strategy? What are the current conditions for the strategy?

How much money is currently flowing into the strategy? Is the strategy congested? Is there any reason to suspect that it is poised to suffer from diminished returns going forward?

To what degree can the strategy be understood to have cycles?

Where is the cycle today? Beware of conspicuous outperformance when the strategy is concluding the most buoyant segment of an investment cycle.

 What market factors or combinations of factors may be particularly challenging for the strategy? Are there certain points in an investment or economic cycle that would pose particular challenges for a successful execution of the strategy? Does the manager have experience navigating through such environments in his current strategy incarnation?

- What kind of external shocks is the strategy most vulnerable to?
- Is the strategy long or short volatility?
- Does the fund accept leveraged equity (i.e., accept capital from leveraged fund of funds or from individuals who are employing leverage directly to their personal investment)?

Be careful if a portfolio manager seems blithe about any implied risks to the stability of his capital base.



II. TEAM AND ORGANIZATION

Allocators will often focus on investment activity to the exclusion of other aspects of a hedge fund organization. However, the quality of a firm's human capital will contain, perhaps, the strongest clues about its prospects for sustainable success. In simple terms, an investment with a hedge fund manager is a bet on a few key individuals and their team. Moreover, the success of the organization requires both investment and business management acumen, skills that rarely reside in equal proportion in any single investment professional. To properly evaluate a hedge fund organization, it is important to not only review its personnel, but also consider what depth of professional talent will be required to execute the investment strategy and make the organization succeed. The culture of a hedge fund organization reflects its founders (or a few key principals) and it is important to understand how those individuals view the organization they have started, their approach to building a business, and how they view their roles relative to other key professionals at the firm.

A. KEY INVESTMENT PROFESSIONALS

- Review the academic training and professional background of each of the key investment professionals. Carefully assess the quality of work experience of those individuals.
- Is the length and depth of work experience appropriate? What hedge fund experience do the principals have?

Does the experience of the principals suggest they will be successful in the execution of their current strategy? Be careful with managers who recast or re-invent their skill set based on market demands.

Does the manager have any prior performance record that can be shared? Is the performance or track record relevant for the strategy you are trying to evaluate?

- How are investment and business decisions made by the firm's key principals? What is the structure for investment decision-making versus operational decision-making and business management? What kind of input do other investment professionals and senior back office professionals have in their respective areas of responsibility?
- What were the circumstances that caused them to leave their previous positions? Are there any non-compete or legal issues from previous positions?

If relevant, is a former employer investing in their current fund? If not, why not? Keep in mind there are circumstances where an investment by a previous employer may not be appropriate or even desirable.

How are investment professionals compensated? To the degree possible, review compensation for all investment professionals.

Try to understand whether the proper incentive structure exists for both principals and employees to pursue investment success in a productive way that meshes with your common investment objectives.

Does one of the key principals have CFO, operational, or investor relations experience?

An experienced COO or CFO can reduce significant business distractions and allow for the fund manager's enhanced focus on profitable investments.

• Has the team worked together in the past? Do the skills of the investment team appear to complement one another? Is there a skill set or role that is obviously missing? tion of duties can enhance the long-term vitality of a hedge fund. It can also help reassure investors that multiple sets of unrelated eyes are watching over the business and the portfolio.



II. TEAM AND ORGANIZATION (CONT.)

- Assess the personality and the character of the team members with respect to their integrity, attitude, work habits, reputation, and expectations for success.
- Are the key investment professionals' incentives aligned with the investors? What are their personal capital commitments? Of the entire staff, what percentage of their net worth resides in the management company and in the fund? Will the portfolio manager communicate a reduction in the level of personal investment held in the fund? If so, how?

Alternatively, for more longstanding fund managers with very substantial sums invested in the fund, does the current fee structure create potential disincentives for appropriate risk taking? In other words, are limited partners in danger of paying for a very expensive form of cash management? Have former alpha generators turned into mere asset gatherers?

 What is the policy for personal trading accounts? What is the process to review personal account activity? Who reviews it and how often?

If trading is permitted, are there any limits placed on the amount of time spent and the kinds of instruments traded? What instruments are traded separately from fund activities? Is there a potential for any individual to front run the fund's trading or investment activity?

• Have any of the fund principals ever been involved in a lawsuit? Do any of the fund principals possess an official disciplinary record (pending or past)? Have there ever been any regulatory infractions, fines, or suspensions from any regulatory agency or professional organization? What are the details?

- What are the provisions for the absence of the key man? Who has the ability to fill in on a short-term or long-term basis?
- What happens if the portfolio manager becomes incapacitated or deceased? Is there a liquidation process for extraordinary events? How long would such a liquidation take? What would the impact of this liquidation be on the portfolio and on the markets the manager invests in? Is there key man insurance?

B. FOUNDERS AND PRINCIPALS

- Are the founders or principals the key investment professionals? What is their level of involvement in the firm or fund?
- Have there been gaps in their professional history? Have there been failed funds or other ventures?

Be wary of unexplained gaps in resumes. In addition, be wary when failed predecessor funds are involved. Discover, specifically, what happened and understand what the manager may have learned from the experience. Although failure can be instructive, multiple failures or a string of brief professional stints should be reviewed with grave concern.

C. STAFF

- How many staff members are there? What is the ratio of back office to investment professionals? Review (or sketch out) an organizational chart.
- How many investment professionals are on staff? Review their biographies. How long



II. TEAM AND ORGANIZATION (CONT.)

have they been employed by the firm? In the industry? Has there been a pattern of organizational turnover?

A significant number of new staff can require time to work effectively together and such a phenomenon can affect the effectiveness of an investment organization.

Beware of heavy turnover at either the senior or junior staff levels. Portfolio managers who seem unable to preside over a stable organization should be evaluated with greater scrutiny. The ability and commitment to keep talented professionals and employees who have been encouraged to develop their skills should be evident. An inability to do so may be a sign of a congenitally poor business or personnel manager. It also may reflect an unhealthy ego on the part of the principal. Broadly construed, these circumstances can breed employee disloyalty, turnover, and possibly elevate key man risk.

• Is the depth of the organization sufficient for the assets under management? What are the growth plans for the fund and the organization as a whole?

It is better to grow assets into infrastructure than vice versa.

Are there any branch offices?

While branch offices for a large research team may be beneficial, long distance portfolio management has shown a less compelling track record of success. Portfolio management by principals in disparate branch offices often suffers from poor communication and isolated decision-making, and can even create the conditions for rogue trading.

- Regardless of the size of an organization, who is responsible for the following functions?
 - CIO
 - **—** COO
 - CFO¹
 - Research
 - Trading/Risk Management
 - IT/Systems/Programming
 - Operations/Back Office/Audit
 - Compliance/Legal
 - Marketing/Investor Relations
- Are these functions separated?

To the degree possible, separation among key professional functions (e.g., COO, CIO, CFO, Marketing, Compliance) is better. Greater separation of duties can enhance the long-term vitality of a hedge fund organization. This knowledge can also help reassure investors that multiple sets of unrelated eyes are watching over the business and the portfolio.

Try to understand where the range of professional responsibilities naturally lies in whatever size organization you are attempting to assess. Specifically, try to understand how smaller organizations concentrate the number of professional responsibilities managed by key individuals. This can represent a potentially significant (and hidden) level of investment risk.

Under-qualified employees in key roles or nepotism in the hiring of personnel for key organizational roles should be viewed with caution.

¹ Among larger hedge fund organizations, a higher standard for this skill set should probably apply. For, example, do any key professionals possess treasury or cash management skills? Do any professionals have experience actively managing asset-liability gaps?





that give unduly accommodating liquidity terms to investors when the underlying assets are not highly liquid.

III. FEE STRUCTURE AND TERMS

I he evaluation of a fund's fee structure and terms is essentially an exercise in understanding the value proposition of a particular hedge fund investment. Much of this will depend on the circumstances and environment in which you are considering the investment opportunity. Market forces will have a large say in dictating what these terms are likely to be, but ethical considerations are important to bear in mind too. Ultimately, an investor must determine whether the terms and conditions for this investment are reasonable and fair. Unreasonable and unfair terms may suggest something about the market environment but they also may convey something important about the motives of the fund's principals as well.

 What are the management and incentive fees for the fund that is being evaluated? How are these fees calculated and accrued?

Are the fees for this fund appropriate given what other similar funds charge?

How often does the fund pay itself fees: annually or quarterly? Does the fund use a rolling claw back for its fees?

How does the portfolio manager make use of his management and performance fees? Is the management fee invested in the business?

- Who participates in the carry, and to what degree do less senior professionals have the incentive to contribute to the investment success of the fund? Is this expected to change over time?
- How many share classes are there for each fund? If there is more than one class, what are the various fees and terms for each class?

Are there different fees and terms for onshore and offshore investors?

Does the class structure allow one class to inherit risk from the other? Do cross-liabilities exist between the classes or funds? For example, does the class with lower leverage assume the risk of the higher leverage class?

Try to appreciate the character of the strategy's liquidity relative to the liquidity of the different share classes, and how much capital resides in each share class. Is the bulk of the capital principally invested in one share class? What are the implications for the stability of this fund's capital base?

 What expenses are charged to the fund, in addition to management and performance fees?

Standard fees usually include items like administration, audit, and other professional expenses. However, a manager sometimes will expense the firm's overhead, including T&E, rent, salaries, and bonuses to the fund. If this is the case, get an understanding of what the percentage charge to the fund has been in prior years. Is it in line with industry standards? Are you willing to accept this?

 Is the manager incubating new or separate strategies at the expense of current investors?

Sometimes a large fund will begin to incubate start-ups to access emerging talent (and to develop a promising substrategy that can help diversify firm capital), or have proximity to a talented individual who could not be persuaded to become a full-time employee. If this is the case, what is the fund's arrangement with the newly incubated manager



III. FEE STRUCTURE AND TERMS (CONT.)

strategy, and has the larger fund informed investors as to how they are compensated?

 Is there a high water mark or hurdle rate? How are they calculated? Is the high water mark reset?

Ask what percentage of assets are under water and how long they have been under water. If the fund has experienced a drawdown, how much performance does the fund have to accrue to earn performance fees? If this is an unreasonable amount, beware of the built-in temptation for a manager to swing for the fences and risk even more substantial capital losses.

• What is the liquidity/redemption policy? Lockup? Notice period? Is the liquidity provision for investors consistent with the liquidity of the underlying securities of the fund? Beware of funds that give unduly accommodating liquidity terms to investors when the underlying assets are not highly liquid. Ask if any investors have side letters with more forgiving liquidity terms. If so, in a liquidity crunch, these investors will have an unfair advantage. Be careful to understand the liquidity profile of your investment relative to other investors (especially a fund's largest investors).

 If there is an early redemption fee, is it payable to the fund or the management company?

The fee should be payable to the fund, not to the management company.

 Have there been any prior liquidity suspensions? Are there pending changes to the redemption policy?



IV. RISK MANAGEMENT

Many investors begin with the assumption that investment risk is the most important issue to assess in considering or monitoring a hedge fund investment. However, many studies of the hedge fund industry underscore the degree to which operational risk is the source of hedge fund failure or blowups. A firm's risk management processes will have important quantitative and qualitative aspects and this can span the arrangement of IT systems, written procedures, and certain intuitive aspects of the portfolio manager's approach to managing his business. The key is to uncover all the rocks and take great care in understanding the management philosophy that can tie this all together. Global financial markets consistently undergo rapid change and, therefore, it is important to understand the portfolio manager's commitment to investing in risk management and, more generally, to the consistent improvement of his hedge fund organization.

A. PORTFOLIO RISK

 Invite the manager to articulate his riskmanagement philosophy.

Is the process meticulously thought through or does it seem more intuitive? Be wary of portfolio managers who do not seem to have a disciplined risk management process.

 Does the manager have written policies and procedures that communicate an approach to risk management?

Obtain a copy of any relevant documentation or procedures. Make a detailed review that includes operational, liquidity, and counterparty risk.

- How does the manager gauge risk? What risk measures does the hedge fund manager use internally? Which are most important to him?
- Which portfolio, market, factor, or security-specific risks are most relevant to consider?
 Are there particular risks in specific types of investments or trades? How is that managed or hedged? The composition of different risks for a fund can vary considerably even among apparently similar equity-oriented strategies. The following list is not meant to be comprehensive but it may serve as a rudimentary point of reference:
 - Equity market risk
 - Interest rate risk
 - Credit risk
 - Liquidity risk
 - Volatility risk
 - Basis risk
 - Foreign exchange risk
 - Counterparty risk
 - Leverage
- Which sensitivity measures are employed for risk management purposes? Such measurements could include, but are not limited by, the following list:
 - Equity and interest rate delta
 - Equity and interest rate gamma
 - Equity and interest rate vega
 - Theta
 - Rho
 - Duration and convexity
- A thoughtful evaluation may uncover the possibility that particular strategies may have risks which are only, perhaps, hinted at in the more generic list of investment and market factor risks. For example, some risks





66 What condi-

tions would create the

perfect storm, where

portfolio leverage would

pose problems for the

strategy or the portfolio

manager?

IV. RISK MANAGEMENT (CONT.)

that are conspicuous for equity long/short may include, but are certainly not limited by, the following list:

- Position, sector, or industry concentration
- Market cap or geographic mismatches embedded in the portfolio
- Style mismatch or beta mismatch embedded in the portfolio
- Directional risk posed by an unusually aggressive posture (net short or net long)
- Liquidity profile of individual holdings
- Is the portfolio stress-tested?

If so, under what conditions? What assumptions are made? Who reviews the stress tests? How often are they performed? Have they ever been acted upon? Ask for examples.

- Does the fund have an individual who is responsible for risk management? What training has this individual had? What other responsibilities in the firm does this individual have?
- Has the manager ever had a significant drawdown? If so, what were the circumstances?
 What kind of risk management failure might this represent? How might the fund's investment disciplines been improved under the circumstances?

B. OPERATIONAL RISKS

- How are the distinct responsibilities for the fund's front and back office arranged and, ideally, separated?
- Are the operational, back office, and administrative professionals seasoned? What challenges have these professionals encountered since the fund's inception (or at a prior firm)? In general, how do they appear to have adapted to these challenges? With what frequency

have issues or problems been surfacing? Are there any current operational issues the firm is dealing with? To what degree do you sense that problems are being anticipated?

- Follow the money. How does the money flow into and out of the fund? Where is it kept? Who signs the checks for the company and fund in which you are investing? Is there a co-signer? Is one of these individuals a third party? Do you fully understand the path that the money takes? What is the role of independent third parties?
- Follow the trade. After an investment decision is made, how is the idea executed? Is the trade executed electronically? Is the process paperless? What is the frequency of broken trades?
- How consistently has the fund experienced operational or back office errors? Is the manager content with the service provided by the prime broker(s) and other key back office service providers?

How fluent and comfortable does the manager seem in discussing the character of the fund's back-office processes and operational discipline(s)? Does the manager seem distracted or preoccupied with trade reconciliation or broken trades?

To the degree it is relevant for specific investment and trading strategies, try to make sure you have a sufficient understanding of some of the following risks:

- Counterparty risk
- Ratings of counterparties
- Degree of equity concentrations by counterparty
- Financing liquidity risks
- Tenor of financing terms
- Sensitivity of income to changes in financing rates



IV. RISK MANAGEMENT (CONT.)

- What precautions has the portfolio manager taken in light of a possible catastrophic failure prompted by a computer, systems, software, telecommunications, fire, or terrorist attack? Is there a disaster recovery plan?
- Are there provisions if a key service provider (e.g., prime broker, administrator) is suddenly unavailable? Are there provisions for the loss of the portfolio manager or other key investment professionals?

C. LIQUIDITY

- What is the hedge fund manager's definition of liquidity? How many days would it take to liquidate the portfolio in an orderly fashion?
 What is the definition of an orderly liquidation?
- How do reduced trading volumes affect the liquidity of the relevant markets or instruments? What is the impact on the market of a typical investment for this strategy?

Who is on the other side of the trades that the strategy typically executes? Is there a dominant dealer? Is that dealer monopolizing the liquidity in that instrument?

 Do the liquidation terms of the fund make sense or match the liquidity of the fund's instruments or marketplace?

Be very wary of funds that provide generous liquidity terms relative to the liquidity of the instruments and securities trafficked in by that given strategy.

 Has the manager installed appropriate terms to prevent a run on the bank? Are there "gate provisions" installed to protect remaining investors? How do any "gate provisions" impact your specific interests as an investor? What is the percentage of average trading volume held in the largest positions?

Has the manager filed 13-D or 13-G forms with the SEC? Do the positions reflected in the filings make sense for the strategy? Can restricted or private instruments affect the portfolio's liquidity profile?

Will a significant redemption alter the portfolio by leaving the most illiquid instruments with remaining investors? Be wary of this possibility, particularly if there are side letters and preferred redemption terms for some investors.

- What is the maximum position size, long and short, with respect to average daily trading volume? Has the manager ever exceeded these parameters?
- To what degree can the manager be understood to traffic in heavily shorted securities?
 How sensitive is the strategy to short squeezes?
- Does a manager intend to hold any private issues? Will private issues be side pocketed? How are they marked and what is the procedure for marking them?

D. LEVERAGE

- Invite the portfolio manager to discuss his rationale for employing leverage in the application of the strategy.
- How does the hedge fund manager define leverage? How does the manager define excessive leverage?
- What is the typical amount of leverage used?
 What is the maximum leverage that would be employed at any time? What is the maximum



IV. RISK MANAGEMENT (CONT.

(and minimum) amount of leverage that has been used at any particular time in the operating history of the fund? Is the fund ever managed without leverage? What factors might prompt the manager to reduce leverage?

- What conditions would create the perfect storm, where portfolio leverage would pose problems for the strategy or the portfolio manager?
- How many brokers or banks extend leverage to the fund?

How much of the borrowing terms are overnight terms?

How much are less than 90 days? How much are greater than 90 days? How has that changed over the past 12 months? Do the terms of their assets match their liabilities? Can counterparties change the financing haircut with less than 90 days notice?

• Has leverage ever been revoked? If so, obtain an explanation.





V. MANAGEMENT COMPANY, FUND STRUCTURE, AND ASSET BASE

An evaluation of the hedge fund's management company should be focused on what kind of business it is. A number of basic questions should come to the fore: Who owns it and what individuals have the biggest interest in its long-term success? Are the principals committed to building a real money management business or is it simply a one-off investment partnership? Are there any conflicts of interest? In the final analysis, an investor needs to understand if there is a true alignment of incentives between the prospective investor and the portfolio manager in regards to their investment objectives.

A. MANAGEMENT COMPANY

 What is the legal entity? What are the details of its state or country formation? Where is it domiciled?

Is the country of domicile a well-known or an unknown jurisdiction? Is it a wellrespected jurisdiction?

• Are they registered as an Investment Advisor, Commodity Trading Advisor (CTA) or Bank Holding Company? Are they regulated under the U.S. Securities and Exchange Commission (SEC), National Association of Securities Dealers (NASD), the National Futures Association (NFA), the Financial Services Authority (FSA), Bank of England, or the Federal Reserve Bank?

Do you fully understand the kind of information implied by the various mix of registrations that may apply to a portfolio manager or investment advisor? Use an in-depth review of these information sources to deepen your understanding of the investment professionals and the organization as a whole. Anticipate your plan for consistently reviewing these affiliations and registrations

for your eventual monitoring regimen as you consider a prospective investment. Caution: Registration with regulators does not always provide a seal of approval.

• What is the ownership structure?

Simple is better!

Who are the owners? Certain employee(s) or an institution(s)? Bear in mind that a cultural difference may be reflected in the ownership structure. For example, institutions commonly own U.K. funds, whereas U.S. funds tend to be employee-owned.

- Does the manager own a significant percentage of the fund or management company?
 What percentage of his net worth is invested in the fund or the management company?
 Does the manager have an upfront policy for highlighting any material changes to his personal investment in the fund?
- Are there any joint ventures or partnerships through which business is conducted that may cause a conflict?

Do they offer a crossover (public and private securities) fund that may either add value to research or may create a liquidity problem?

- Do they operate a mutual fund? Do they have a long-only separate account business? Take care to understand what conflicts of interest may be present and which ones the manager has anticipated.
- In what other partnerships and businesses do the principals operate or maintain a significant interest?

Does the management company own a broker dealer? Is it disclosed? Are trades recaptured by the hedge fund? Does it present any conflicts or does it add value? Why or why not?



V. MANAGEMENT COMPANY, FUND STRUCTURE, AND ASSET BASE (CONT.)

Do the principals sit on any boards or have time-consuming obligations such as private equity investments?

 Are there any direct relationships with other hedge funds? For example, does another hedge fund provide seed capital? Is that seed money from the hedge fund manager's personal capital or is it provided by his investors?

Seed capital from larger hedge funds can mitigate start-up risk when they act as a mentor to the new fund. This stands in contrast to broker-sponsored funds whose mentoring ability is limited.

 If the hedge fund has a sponsor relationship, seek to understand the agreement. Does the sponsor have capacity or other special arrangements?

Does a sponsor dominate a new fund's capacity?

 Does the sponsor share its infrastructure with the hedge fund? If so, can the sponsor see the trades?

Can the sponsor piggyback on these trades? Do they share ideas that can negatively impact capacity or trading nimbleness?

 Does a sponsor use its equity in the new fund to drain off profits, thus reducing the incentives or the motivation of the entrepreneur? Can the sponsor continue to add value beyond the initial investment?

Are there any special arrangements with the sponsor that can create a burden on the new manager? Is there a sunset provision for this relationship? In other words, is the economic relationship designed to diminish over time? Does the portfolio manager retain the right to buy back the sponsor's interest?

 What is the history of the hedge fund's management company and what are the company's development plans?

Aggressive asset gathering in one or many funds may reveal business priorities that are not aligned with the interests of most investors. Is the management company more focused on gathering assets than on generating performance? Again, explore the details of the principal's and the institution's level of co-investment and business ownership. Are the more obvious incentives for obtaining management or incentive fees?

Has the management company recently reorganized itself out of a mutual fund structure? Why? If yes, how is its investment strategy different?

• Who is on the Board of Directors? What authority does the board have, if any?

Do not overestimate the influence of a Board of Directors. Currently, they are hired by the hedge fund manager and have little independence. Many boards are transparently established for marketing and public relations during an initial capital-raising phase.

B. FUND STRUCTURE

• What funds are offered by the management company? How are they structured? For example, is it a master-feeder structure?

Does the offshore fund run *pari passu* with the domestic fund? If not, why?

Understand the allocation process between funds if they are not organized as a masterfeeder structure.



V. MANAGEMENT COMPANY, FUND STRUCTURE AND ASSET BASE (CONT.)

 Is there more than one strategy? If so, is there synergy in the application of the various strategies?

Ideally, you should want the key professionals' investment and business success to be focused on the fund in which you are invested. You want them to have a substantial personal investment in the same fund in which your capital is invested.

C. ASSET BASE

- What are the total assets under management of each fund and of the management company?
 What is the historical growth in assets under management for each vehicle and in aggregate?
- Are the assets under management appropriate for the strategy? What is the anticipated growth in assets and does this appear to be measured/disciplined? Are the strategy and investment processes scalable as assets under management grow?

Are there capacity constraints?

Is the manager realistic in determining the capacity? Is the manager creating a false sense of urgency? Is the manager manufacturing hype to raise money by setting a soft close? Will growing the assets beyond a certain point result in style drift?

This may be a good time for you to understand the composition and stability of the manager's investor base. It may also be an opportune time to discuss your potential future capacity needs to determine if the manager will be able to meet them.

 Have there been periods of substantial redemptions? If so, is there a reasonable explanation? Were redemptions met without delay, a gate, or interruptions? Was performance negatively affected by the redemptions?

• What has been the rate of asset inflows?

Does the fund have a disciplined policy for taking money in? Have the principals established any limits on inflows? Does the portfolio manager have control over inflows?

 Are there separately managed accounts? Are these accounts subject to special arrangements like structured notes? What percentage of assets is managed separately from the fund? How are the separate accounts structured? Are the liquidity terms of the fund different from the separate accounts?

Undue administrative and business complications are always the enemy. Less complicated business and decision-making structures generally allow for better professional focus and tighter alignment of incentives between the manager and the investors' interests.

• What is the composition of the investor base?

Is it diversified or is there concentration among a few outsized investors? Is it concentrated in one category of investor? For example, how big is each of the three largest investors?

Try to understand the relative stability and sophistication of the marginal fund investor. Also, pay attention to the mix of offshore and onshore investors, and the manager's (or organization's) level of direct familiarity with those investors.

 Is there a "Most Favored Nation" clause?
 If not, get an explanation of any different terms offered to other investors such as better liquidity, fees, transparency, etc.



VI. QUANTITATIVE REVIEW

Allocators who are less familiar with hedge fund strategies but skilled in various aspects of quantitative analysis often court problems when they emphasize quantitative analysis over important qualitative dimensions of the process. As Pensions & Investments noted, "Most [allocators] do not know how to evaluate hedge fund strategies and, thus, tend to rely upon statistical tools that give a totally inaccurate picture of the riskiness of a given manager." (P&I 4/30/01). Many experienced hedge fund investors appear to view quantitative analysis as a valuable complement, rather than a substitute, for more qualitatively drawn judgments. Deployed intelligently, certain quantitative disciplines can help confirm the wisdom of more qualitatively drawn judgments and assist in highlighting aspects of the investment strategy that warrant further investigation.

- Review monthly performance of the hedge fund since its inception and confirm the ownership of the record. Consider prior track records for key principals if the degree of ownership is material and can be accounted for.
- What are the return goals for the fund? Has the performance objective been consistently achieved?
- Is performance consistent with your, the prospective investor's, expectations?
- Compare monthly, quarterly, and annual track records to appropriate peer groups and market indices. How does performance compare with that of similar funds and strategies?
- What are the volatility parameters for the fund? Does the fund's recorded standard deviation fall in line with what the portfolio manager has suggested in interviews and in marketing documents, or the prospectus?

Is the fund's volatility outside of its expected parameters or beyond the volatility you would reasonably expect of other similar strategies?

- Is the track record audited?
- Is the track record pro forma?

Be wary of *pro forma* track record. Most investors do not consider the evaluation of *pro forma* track records to carry much analytical value. It is important to understand the methodologies used to construct the *proforma* track record and the limitations of those methodologies.

 Consider how assets under management may have changed over the life of the track record. Gather data on the assets by fund, strategy, and for the firm in aggregate.

Has an increase in assets appeared to affect performance?

Has the track record been achieved with a tiny amount of assets? If so, was the manager able to use smaller capitalization instruments that the fund may be too large to take advantage of now? In general, is the process that generated the present track record repeatable?

Are separate accounts included in the track record? If not, are they attempting to disguise the true amount of assets under management in the strategy? Be aware that separate accounts can hide a fund's true measure of capacity and continued growth.

What percentage of the track record is attributable to the current team managing the hedge fund? Are the individuals who created the track record still there and are they still as actively involved in the investment process?

analysis can help shed new light on the character of a strategy but should be evaluated in the context of all other research, including qualitatively drawn judgments.



VI. QUANTITATIVE REVIEW (CONT.)

 Determine who is the owner of the fund's track record. Understand who was responsible in precise terms. Understand who had authority for investment decision-making.

Seek to understand the nature of a new hedge fund manager's set of responsibilities at his previous employer. Does the manager have actual portfolio management experience? Portfolio management requires a very different skill set than that of picking stocks.

 Have there been any changes to the strategy over the life of the track record that should cause the record to be reviewed in segments?
 Examples of this may include a new hedging discipline or a marked increase or decrease in gross exposure.

New funds often require time to ramp up exposure.

If some key investment disciplines are being applied differently due to adjustments or lessons learned, be certain to segment the performance history accordingly.

 Review the correlation of the hedge fund's track record to relevant market indices and, to the degree it is appropriate, the portfolio for which inclusion is being considered. Review correlations over different and revealing intervals of time such as periods of market dislocation. Understand the fund's correlations in the context of its strategy, its chosen exposures, and its performance during notably difficult market environments.

Use correlation analysis as a tool to enhance your understanding of the fund strategy but beware of its obvious limitations. In particular, correlations can be relatively unstable and may change dramatically in different market environments. Quantitative analysis can help shed new light on the character of a strategy but should be evaluated in the context of all other research, including qualitatively drawn judgments. Correlation analysis is most helpful as a complement to rigorous qualitative assessments.

 Review all drawdowns from peak to trough. How quickly did the fund recover? What are the longest monthly positive streak and the longest monthly negative streak?

What kinds of drawdowns are acceptable to the manager? Ask the manager what kind of drawdown should prompt a call from the investor.

As an investor, what is the maximum draw-down you would expect from this manager?

• What is the biggest positive and negative month?

Do these outlier months make sense in the context of your expectations for the fund's performance and its supposed risk management disciplines?

Understand drawdowns and large upswings in the context of the market environment in which the fund has operated. Is the fund's performance too dependent on a lucky call or two? Is good performance the result of a single outsized bet that worked and is unlikely to be repeatable? Has the basic portfolio posture (and the returns the strategy has generated) simply been the beneficiary of a market environment for which it is perfectly suited?



VI. QUANTITATIVE REVIEW (CONT.)

 Gather returns data on a detailed attribution basis by longs and shorts, sectors, different instruments, substrategy, or market capitalization. Review your understanding of the fund's return drivers and contrast this with your study of the fund's actual sources of return in practice.

Does the attribution analysis confirm your understanding of where the manager made money? Is there a surprisingly strong or weak performance in certain segments of the portfolio?

What does the attribution analysis suggest about the manager's true level of stock picking or portfolio management skill?

Is the manager a proven talent in selling short or in deploying portfolio hedging strategies and how can you tell?

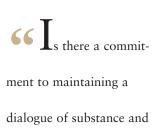
 Obtain, if it is permitted, a few historical portfolios, using dates chosen by the evaluator for review prior to an investment.

These portfolios should be obtained directly from the prime broker rather than the hedge fund manager to ensure data integrity and independence. This test should demonstrate the manager's consistency in the application of the strategy over time, as well as the portfolio manager's adherence to stated risk disciplines.

Is the fund managed with a degree of tax sensitivity in mind? What percentage of returns is realized and unrealized?

Bearing in mind that the offshore investor is indifferent to tax consequences, are the onshore and offshore funds being managed in a substantially different way? Are differences in the application of the onshore and offshore strategies a source of distraction?





quality?

VII. OPERATIONS AND TRANSPARENCY

An earlier section emphasizes the importance of understanding the operational sources of hedge fund investment risk. However, the issue of information disclosure and transparency are of critical relevance in understanding and monitoring these types of risks. That said, there is a big difference between portfolio transparency and translucency. The former implies a more substantially active role on the part of the manager in identifying and clarifying key risks for his investors. The latter implies a simple commitment to provide a clear view of portfolio holdings and may not be very helpful in informing the investor. Ultimately, the key issue is the degree of trust and comfort you have in your relationship with the portfolio manager(s) and whether you believe you have the latitude to stay on top of the risks that matter. The best insurance policy for this is an investor's conviction about the integrity of the person with whom he is investing.

- What are the backup procedures for the hedge fund's operations? Is offsite trading readily available? Are there frequent backups of trade, client accounts, and research data?
- What transparency is provided to the investor? Does anyone have special transparency agreements or side letters?
- Would the manager allow the prime broker to provide a monthly or quarterly portfolio for the investor's review?

This procedure can significantly reduce the potential for manager fraud, as well as give the investor insight as to how the manager invests, and whether the manager adheres to his disciplines.

How does the manager communicate to investors? How often? Does the manager's *Letter to Investors* reveal what is really going on in the portfolio? Is there a commitment to maintaining a dialogue of substance and quality?

- Are manager's meetings with investors discouraged? Why?
- Are those responsible for investor relations sufficiently experienced and informed enough to provide an in-depth and useful dialogue?
- Has the hedge fund manager ever delayed his estimates of the fund's net asset value? Why? Is the delay out of the manager's control?
- How frequently are performance estimates available to investors? Are mid-month or weekly estimates available?
- What information is available to investors on a monthly, quarterly, and annual basis?
 The following list represents ongoing information that should be considered fundamental for educated investors:
 - Size of fund and growth of assets under management
 - Net and gross performance by share class
 - Top 10 holdings and position weightings (Many funds will not reveal current short positions, but should agree to characterize the positions.)
 - Participation by sector, market cap, geographic region, or asset class
 - Net and gross exposure information
 - Factor and risk exposure information
 - Information regarding any changes in the firm, fund strategy, and personnel
- Is there appropriate disclosure of the character of the fund's overall balance sheet or the degree to which certain asset/liability gaps may be present? Is the notional value of derivatives disclosed?



VIII. THIRD PARTIES

 ${
m M}$ ost hedge fund managers depend on a range of third-party service providers to help manage their business and investment activities. Evaluating the quality of the third-party vendors, as well as understanding the intersection of in-house and third-party business management, is critical to understanding how disciplined the hedge fund business and investment processes truly are. The perspective of the thirdparty providers can also provide important illumination on the hedge fund manager's skill as a manager of a business. Generally, third-party vendors can bring additional efficiencies to the management of a hedge fund business, but the engagement of these services also involves ceding control of certain business and investment activities. How a manager chooses to balance the cost and benefits of such arrangements is an important area of focus for a prospective hedge fund investor.

A. AUDITOR

Contact the auditor. Cultivate a relationship and speak with the account leader.

• When was the last audit? How often are the books audited?

Has the auditor ever been changed? Why? Carefully scrutinize turnover in key vendor relationships but especially with the prime broker and auditor. If fraud is occurring, these vendors will likely know before you do, and many firms have shown a willingness to shun business they think will eventually bring them trouble.

- Where did the audits take place? How was information collected?
- Is there also an outside accountant?

 Have there ever been any valuation issues that have arisen during an audit? Are there any other issues?

Ever since the episode of fraud at Manhattan Capital where the auditor failed to identify the fraud, auditors are reluctant to release any details to investors. They usually refer the investor to the annual audited financial statements. This is why it is essential that an investor read through the audited financial statements as far back as they are available.

 Ask for the financial statements to come directly from the auditor. Review them in detail, paying particular attention to the Auditor's Notes, the Financial Statement, and the Auditor's Report or Statement. Go back to the auditor directly to clarify anything in these sections or for the statements in general.

Compare year-end assets, subscriptions, redemptions, (i.e. cash flows), and NAV to your notes with the manager.

Review expenses. Do they seem in line with those of the fund's peers? In percentage terms, have the expenses changed materially from year to year?

B. PRIME BROKER

Contact the prime broker. Cultivate a relationship with the prime broker and speak with the account leader.

• Does the fund use multiple prime brokers? Who are they?

Has the fund manager ever changed prime brokers? Why?

Understand that the prime broker stands ahead of the investor in the fund's capital

an investor read through
the audited financial statements as far back as they
are available.



VIII. THIRD PARTIES (CONT.

structure. Understand that the prime broker can liquidate the fund to take its capital first, leaving what is left for the investor. However, they also have an incentive to shun relationships that might create liability, and many firms have demonstrated a record of doing so.

Who are the counterparties? Who is the custodian?

For many strategies, it is very important that there be a prudently diversified group of counterparties to the fund. This helps to insulate the fund's operations from market dislocations that could affect a counterparty's ability to serve its contractual responsibilities.

What are the credit ratings of any counterparties to the fund?

Ideally, the disposition of the fund's assets should reflect proportionally the different ratings of its counterparties.

- Does the fund get contractual settlements from their prime brokers?
- Has the fund been assessed fees by their prime brokers for operational errors?
- Obtain permission from the portfolio manager so that you are able to contact the prime broker directly to confirm the fund's assets under management before formally investing in the fund.

C. ADMINISTRATOR

Contact the administrator. Establish a relationship and speak with the account leader.

- Are they a respected, well-known administrator?
- Do they have a full-service agreement or just a record-keeping agreement?
- How often is NAV calculated? When can investors expect to receive estimates and final NAVs?
- By what means and how often does the administrator receive the trades? Do they get trades from the manager or from a direct feed provided by the prime broker?

Position and trading information must come from an independent source, and not the manager.

 How do they receive pricing? Do they receive it directly from a market data vendor, from a third-party pricing agency, or from the manager?

The administrator should price a portfolio independently from the manager.

Some illiquid securities may be difficult to independently price. In those situations, the administrator should have written policies on valuation.

If the manager does not price the entire portfolio, what percentage does he price? Be very diligent in understanding a manager's influence on the portfolio valuation.

- In the case of less liquid securities, do they set the price with quotes from more than one source?
- Has there been any restatement of month-



VIII. THIRD PARTIES (CONT.)

end NAV? When? How often has this occurred?

- Through the administrator, develop an understanding of the pattern of recent redemptions and subscriptions. Compare this information to what has been discussed with the hedge fund manager.
- Ask the administrator for NAVs since inception. Compare this to performance numbers given by the hedge fund manager.

D. MARKETING RELATIONSHIPS

Is there an external or outsourced marketing relationship?

What kind of an agreement exists between the fund and the marketing agent? Is it an exclusive agreement? Are there multiple marketing agents?

Where do the fees payable to the marketer come from?

Investors who come in to a fund through a marketer or placement agent should not be disadvantaged in any way, and should not pay higher fees or expenses.

- Does the agent add value or communicate with the investor after the initial introduction? Is there a sunset provision for its involvement?
- What is the reputation of the marketing agent?

Good agents are concerned with fund due diligence, determining investor suitability, and managing appropriate expectations. Some agents are more focused on rapid asset gathering rather than creating a stable base of longterm investors. Agents can often have a crude incentive to encourage a manager to raise more capital and raise it more abruptly than might be prudent.

Does the agent clear trades for the fund? This may create a conflict of interest.

Remember that introductions by reputable brokers do not constitute an endorsement. Moreover, prospective investors must understand that prime broker-sponsored marketing introductions, for example, do not include due diligence.

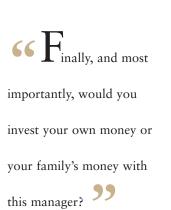
 Is the agent registered with the National Association of Securities Dealers (NASD) (http://www.nasd.com), or the Financial Services Authority (FSA) (http://www.fsa.gov.uk/) in London?

E. OTHER

Try to understand the marginal benefit of additional third-party providers versus the added complication of additional vendor relationships. Also, attempt to understand what services may be better handled in-house.

- What other functions are outsourced by the management company?
 - Trading
 - Front/Back office
 - Accounting
 - Research consultants
 - Risk management
 - Operational consultants





IX. INTUITION, JUDGMENT, AND EXPERIENCE

No amount of due diligence can completely replace the importance of experience and intuition when investing with a hedge fund manager. Some of the following questions are suggested as a simple means of checking your gut before formulating a final investment decision.

- Do you feel comfortable with your level of understanding of the strategy and risks that attend to the investment? Can you explain it well to others? Investors and allocators should stick to the rule that they only invest in what they understand and where they can properly assess the risks.
- Can you trust this manager? Does he have any personal or emotional issues? Are there hints of issues with integrity, ego, arrogance, pride, "affluenza," complacency, carelessness, excessive optimism, or any personal difficulties?
- Do you feel pressured to make an investment? Is this a "hot" manager? Is the fund closing quickly? Have you been given

enough time to properly perform your due diligence? Does the manager appreciate your fiduciary obligation to do complete and proper due diligence? Were you expecting to fill in the blanks later?

- Do you believe the manager is truly committed to the fund and the interests of the limited partners?
- Fundamentally, is the manager staying true to his core investment philosophy and doing what he said he would be doing?
- Finally, and most importantly, would you invest your own money or your family's money with this manager? If you cannot confidently answer yes, you should not invest with this manager personally, or on behalf of your client.



X. DOCUMENTS

A critical first step before undertaking timeintensive due diligence is to obtain and evaluate the full range of available marketing materials, legal documentation, and audit information.

 Offering Memorandum and Subscription Agreement

Take note of the quality of the prospectus. Does it include the appropriate biographies of the management team? Is it written in clear understandable language? Is there a clear statement of the fund's strategy and investment process? Are the risks disclosed and clearly explained?

Audited Financial Statements

If possible, try to evaluate statements going back three years. Audited financial statements should be closely investigated in the context of manager interviews regarding expenses, transparency, and legitimate administrative expenses.

Pay particularly close attention to a change in auditor because here such changes may very well entail a vendor seeking to avoid liability associated with fraudulent practices.

Marketing Materials

Qualitative review of the marketing materials and the manager's own correspondence should help delineate particular nuances of the strategy that is being executed, as well as the philosophy that animates the approach.

- Marketing materials
- Annual Reports to investors (three years)
- Monthly/Quarterly Reports to investors

Due Diligence Questionnaire

RFPs — might be seen as akin to Wall Street research. A due diligence questionnaire can be a nice way to fill in any gaps in the story but it is not a substitute for doing your own homework on the fund, strategy, principals, and the organization as a whole.

- Investment and key personnel biographies
- Organizational chart of the hedge fund's management company and the hedge fund's investment team

Review the biographies of each of the key investment and back office professionals to understand the strengths and weaknesses of the organization. Try to conceptually link the precise skill sets the key professionals possess and the ideal requirements for an organization trying to execute that strategy.

 List of references that should be contacted by the evaluator

To the degree possible, the evaluator should seek to complement formally offered references with supplemental industry references generated through their own network of investment industry contacts.

Careful interviewing of current (and especially past) vendors, and third-party service providers should also help.

A background check on the manager, key employees, and the firm is desirable. This can be outsourced to an investigative firm. The added expense of a full background check can help add a level of fiduciary comfort but is unlikely to convey much color on key intangible areas such as motivation, work habits, and managerial/operational expertise.

ake note of the quality of the prospectus.

Does it include the appropriate biographies of the management team? Is it written in clear understandable language? Is there a clear statement of the fund's strategy and investment process? Are the risks disclosed and clearly explained?



X. DOCUMENTS (CONT.)

• Historical portfolios: the dates chosen by the evaluator

Try to understand if past portfolio holdings mesh with your understanding of the investment strategy and risk management disciplines you have read about in the prospectus and have come to understand in the interview process.

• Prime brokerage agreements and other financing agreements

Independent confirmation of the fund or firm's assets via the prime broker is often considered an important final step before a formal investment is made.



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CONTACT US

The Greenwich Roundtable P.O. Box 4019 Greenwich, CT 06831

Tel.: 203-625-2600 Fax: 203-625-4528

www.greenwichroundtable.org

