Alternative Investment Due Diligence:

A Survey on Key Drivers for Manager Selection

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MOTIVATION

Manager due diligence and selection are complex tasks that require both quantitative analysis and qualitative judgment to assess investment management skill and business risk. These tasks are all the more difficult with alternative investments where the strategies employed and the asset class exposures are more complex than traditional equity and fixed-income investments. Significant research has been developed for measuring risk and assessing manager skill over luck through the use of quantitative tools. Unfortunately, the assessment of skill is still difficult, and the analysis of performance shows that the majority of return is still unexplained. Any prediction of future performance is limited. Investors still have to select managers in this environment, so "non-quantitative" or qualitative factors are often employed to support selection. However, limited analysis has been undertaken to measure the value of qualitative factors for assessing alternative manager skills. There has also been limited study of how quantitative and qualitative decision-making are integrated for manager selection.

Due diligence and manager selection are among the key functions of alternative investment analysts; consequently, CAIA Association has undertaken an in-depth survey of the due diligence process to help understand the complexities associated with manager selection and provide some insight on factors used in the decision-making process. These results and insights may support the ongoing education of CAIA Charterholders.

While investor surveys have been conducted by accounting firms, banks, and consultants to assess the choices for a specific alternative investment style, the general focus of these surveys has not been on the process of manager selection. What is missing from these surveys is what factors are important and how decisions are made. The objective of this research is to survey investors and managers to gain insight on key variables employed to support manager selection and to better understand how due diligence is conducted across alternative investments.

EXECUTIVE SUMMARY

- Alternative investment manager selection is a complex process that relies on both quantitative and qualitative analysis that cannot be captured through specific empirical measures of skill.
- Manager skill assessment for alternative investment is considered more difficult than selecting traditional investment managers and requires greater analysis of the philosophy, culture, and processes of the manager.
- Qualitative factors for alternative manager skill assessment are as important or more important than the quantitative assessment of alternative manager.
- Operational due diligence can dominate or override the assessment of investment skill and is critical to the manager selection process.
- The manager selection process is tailored to the strategy being reviewed. Thus, the specific issues or factors involved with choosing a private equity manager are very different from factors associated with a systematic hedge fund manager, for example.

I. INTRODUCTION

Much has been written about the quantitative tools that can be used for assessing manager skills and how these tools can support selection, but little work has been done to measure other criteria for manager assessment. Additionally, the overall due diligence process conducted by investors has not been given significant systematic attention. An extensive survey of alternative investment investors and managers who are Members of the Chartered Alternative Investment Analyst Association (CAIA) was employed to focus on the alternative investment manager selection process.

The rationale for conducting this survey is to assess the decision to allocate capital to a specific manager beyond the measurement of risk and return drawn from performance track records. To address the selection decision beyond the use of quantitative analysis, an extensive survey of investors and managers was conducted to ask questions on both quantitative and qualitative drivers for alternative investment manager due diligence. While numerous surveys, many on an annual basis, have been conducted about investor allocation choices, the focus has been on the demand of investors and not how the selection process is conducted. This survey is unique because it focuses on the factors that may impact the decision to invest in specific funds and not what will be the higher-level strategy and asset class decisions of investors.

The survey was directed at investors and managers who are closely associated with the actual selection of managers. The survey consists of a set of approximately 40 questions focused on the rank ordering and relative assessment of key variables thought to be important in the selection process. The key variables were developed through interviews and conversations with professionals involved in the selection process. The survey allowed for some open-ended answers but was mainly focused on maximizing the response rate by limiting the time commitment necessary to complete the survey to 20-30 minutes.

Any general survey will have difficulty measuring all of the relevant factors for manager assessment when there are so many differences in the style and asset classes within alternative investments. Investor due diligence within alternative investments can span high-frequency systematic trading to long-term investments in venture capital and private equity and debt; however, this survey attempts to both generalize firm-level assessments and differentiate across strategies.

Along with surveying alternative investors, a similar manager survey was conducted to measure manager perceptions of the selection and due diligence process. While the investor and manager answers are similar, what investors find critical to the selection process is not always what managers believe to be most important. We will highlight the differences between investor and manager perceptions when there is a significant difference in survey results. We will also highlight any difference between title, experience, and firm types within the investment group.
Our interpretations of the results will be generally focused on the answers provided in the survey; however, at times, we will add observations gained from discussions with managers and investors involved with the selection process or with our judgments from experiences associated with alternative investment selection from both the investor and manager perspective in order to provide better context.
Every effort has been made to be unbiased with any conclusions drawn from the survey; however, the nature of a survey that has participants pick from a predetermined list will have limitations relative to direct interviews of managers.

II. AN OVERVIEW OF THE DUE DILIGENCE PROCESS

A majority of alternative investment allocations are accomplished through delegation to specialized managers and not undertaken directly by investors. For example, exposure to event-driven merger arbitrage strategies is gained through investing with a specialized manager in exchange for a management and incentive fee. An investment in private equities is most likely made through hiring specialized managers who will source and manage a private investment portfolio. Hence, alternative investing focuses on the selection of managers who assert they have the skill to generate returns in a specific alternative investment area or strategy. While alternative investments may generate excess returns or lower risk relative to a traditional investment, by definition, all managers cannot be better than average as measured by a set of peers with the same strategy. Since investors will be allocating capital to outside managers, significant time and effort are expended to find those managers who have predictable investment skill that can extend beyond past performance and have limited business risk as the fiduciary holding investor funds. A poor selection may swamp the average return for the strategy and expose the investor to extensive principal and business risk from potential fraud, mismanagement, and regulatory issues.

Choosing alternative investment managers adds further complexity given the wide set of alternative investment strategies and the large dispersion of returns across managers within each strategy or asset class. The strategy range extends from high-frequency systematic managers to long-term specialized private equity managers and those not as easily categorized. Along with different styles, there are selection problems with limited history of performance, issues of transparency, benchmarking, or just understanding the complex investment behavior for some very sophisticated managers. These problems are not the same as those encountered when analyzing passive index funds or investing with traditional active managers where data transparency and benchmarking can provide all of the information necessary for reaching a selection decision.

On top of the problem of just understanding manager strategies, behavior, and the drivers of past performance, investors are also expected to make predictions on future absolute performance and relative performance versus peer competitors. Investors have to determine whether an alternative investment will do well under both current and future market regimes as well as handicapping the specific manager against the universe of peers who are engaging in similar activities.

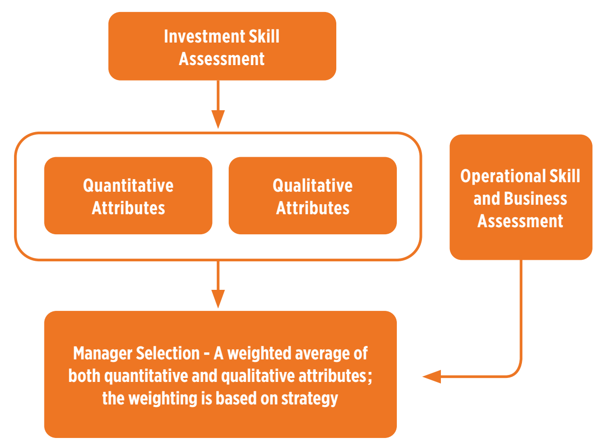
Overall, the due diligence process can be divided between two key risks: the investment risk and firm-level business risk. As an investment, does the manager have demonstrated performance and repeatable skill or expertise in a specific strategy? As a firm, does the manager have the business skill to continue as an ongoing entity, be scalable, and meet responsibilities as a fiduciary? While the first question is often the primary issue with manager selection, the second question is often the deciding factor or binding constraint on an investment allocation. The second question is often assumed away when measuring manager risk through a quantitative framework.

A visibly skilled manager who has excessive business risk will not be a good portfolio selection. Hence, the selection process is not just about picking investment skill but meeting fiduciary responsibilities when delegating management to outsiders for an extended period. While it is a given assumption that taking more risk in financial markets earns more expected reward, that only applies to investment risk in a diversified portfolio. Taking more operational risk has exactly the opposite effect, where taking greater risk increases the probability and size of losses. Investment risk is usually compensated, while increased operational risk has a negative expected return.

While these risks are perhaps simple to articulate, they are hard to measure or forecast. There may be a general desire to quantify these issues and create a checklist for acceptance. Yet, in reality, the selection process is dependent on the expertise of analysts who often rely on qualitative factors for assessment such as philosophy, culture, and the integrity of the managers. These qualitative criteria are often hard to measure or define yet will often be the deciding factors for an investment choice. For example, the components of a good investment philosophy are difficult to define and put on a scale but may hold more weight with a selection than a three-year track record during a unique market environment. During any period, a manager's track record could be driven by luck over skill; in the long run, an effective investment process should show skill over luck.

This issue of assessing skill only through quantitative tools is especially problematic when reviewing new managers, managers that have highly dynamic strategies, or managers whose strategies make data collection and analysis challenging. The purpose of this survey is to measure and analyze factors beyond performance data to better frame how the due diligence process is conducted and place some weighting on the relative importance of different factors used to make the selection process.

An Overview of the Manager Selection Process



After reviewing a description of the survey participant, the main body of this work focuses on the quantitative and qualitative factors that are employed to select a manager. We will review survey results through answering a set of questions concerning the general due diligence process for investors and managers focused on alternative investing.

A review of past research on alternative investment due diligence

A good review of the hedge fund industry can be found with Getmansky, Lee, and Lo (2015). Their work focuses on a number of key relevant issues concerning the selection of managers that are touched on in the survey. Their broad conclusion is that the alternative investment industry is highly dynamic, and the criteria necessary to choose superior managers both through performance data and due diligence review shows a range of answers that at times can be conflicting and requires further study. Our survey work, while not intending to address all the gaps in this research, should provide insight on some of the key issues of what is most relevant for investor choices.

An example of an interesting area of research is performance persistence and the sustainability of skill. The research evidence for performance persistence is mixed. While it may exist for short periods, persistence may disappear by an annual horizon. Persistence will also vary by the type of strategy and the manager. While there may be persistent alpha production for some managers, the results are highly variable and dependent on strategy, time period, or market environment. Cross-sectional analysis suggests that there may exist consistent factors which explain differences, but it may be difficult to extrapolate skill over long horizons. Hence, investors will rely on other criteria or methods for assessing skill persistence not seen in quantitative measures.

The search for skilled managers is closely tied to the issue of uniqueness in the return stream. Investors want alpha and returns that cannot easily be replicated by some combination of market and factor risks which means they will be harder to assess. Titman and Tiu (2011) find that many hedge funds will have common-factor risk; however, those firms that have less factor exposures as measured by a regression R2 will likely have a higher Sharpe ratio. Sun, Wang, and Zheng (2012) also find that strategy distinctiveness is linked to higher relative performance. The funds that have lower defined-factor exposures can also charge more management and incentive fees. This research suggests that non-quantitative factors are needed to understand the information edge that may exist with these managers and fees should not be a key decision driver when choosing these managers when they show uniqueness.

The search for skill and uniqueness comes at a price given that good managers may have a limit on what they can manage. Goetzmann, Ingersoll, and Ross (2003) suggest that incentive fees are tied to the limited capacity of hedge funds. Hedge funds cannot linearly increase fees through an increase in capacity. Incentive fees as a call option on performance leads to greater risk-taking which requires investors to focus on the proper alignment of interests. Again, the trade-off between incentives, performance, and capacity create a complex mix of investor decisions.

Simple quantitative measures of performance will not address fund features that will affect the potential investment in a manager. For example, liquidity issues will affect entry and exit from an investment and what will be the actual performance received. The liquidity terms of any hedge fund investment may be relevant for investors because according to Aragon (2007), there is a positive link between share restriction, liquidity, and performance. Any lock-up which restricts liquidity will mean that investors have to be more careful on their choice of managers. A selection mistake cannot be easily undone when there are lock-ups, notice periods for redemptions, or the potential for gates during periods of stress. An investor's decision to withdraw capital is a real option, as noted by Ang and Bollen (2010).

The choice of managers is tied with dynamics of flow, size, and longevity. Conversations with investors usually suggest that their fund flows are not tied to performance. These comments are at odds with research on alternative investments and mutual funds. Additionally, emerging managers have been found by Aggarwal and Jorion (2010) to outperform peers during the first two to three years of existence, yet there seems to be a reluctance on the part of investors to fund these managers.

Research has focused on issues of operational risk as well as performance. Predictive drivers for this risk may exist, but it does require investors to analyze and track information that is not available in a performance record. The assessment operational risk is a critical part of due diligence yet hard to measure. Feffer and Kundro (2003) note that half of all hedge fund failure is associated with operational risk such as misrepresentation of investments, misappropriation of funds, unauthorized trading, and inadequate resources. Brown (2012), Brown, Goetzman, Liang, and Schwarz (2009), (2012) shows that operational risk is related to inadequate or failed internal processes, lack or reliable auditors, and misrepresentation of past problems or fund characteristics. Compliance and integrity are also important for measuring operational risk. Brown, Fraser, and Liang (2008) find that there is a due diligence alpha derived from avoiding firms that have high operational risk. Hence, operational due diligence is an important part of the selection process.

A conclusion from existing research is that conducting thorough manager due diligence and avoiding problematic managers can reduce operational risk and can serve as source of alpha; however, the process can only be conducted through direct interaction of review of all business processes of managers. Alternative asset managers add value through their uniqueness, which means that they cannot be easily assessed through quantitative analysis. While there is some persistence with performance, empirical analysis alone may not have enough power in discerning superior managers. These findings all suggest that more information is necessary to understand the selection process used by investors.

III. SURVEY PARTICIPANTS

Due diligence and manager selection are among the key functions of alternative investment analysts who have received the CAIA designation; consequently, we have undertaken an in-depth survey of the due diligence process for these selected professionals. It is notable that the CAIA designation extensively reviews the assessment of alternative investment strategies through their education and examination process. The entire global CAIA membership was contacted as the base for survey participants. CAIA Members were told of the survey objectives but asked to participate only if they were directly involved with the due diligence and manager selection process. The survey was broken into two groups: investors and managers. The questions for each group were generally similar, but the wording was different for the manager survey to capture their perception of what is important to investors. The survey was open for a one-month period in October 2020, and there were two follow-up requests for responses.

Members were asked to complete the survey if they had direct responsibility in the manager selection process or if they were managers who were involved with the selection process. A total survey response (N=344) is divided between 233 investors and 111 managers across a broad range of geographies, job descriptions, titles, firm types, and sizes. The large sample provides insights from a diverse set of alternative investment players involved in manager selection which will translate to a broad set of responses across asset and strategy types as well as regions and organizations. (Ask the authors for further details on the characteristics of the survey respondents.)

The investor survey participants comprised analysts as a well as chief investment officers across major investment firms including banks, RIA, family offices, pensions, endowments, and consultants. The large majority of participants were involved with investment management; however, there was also representation from operational due diligence groups. Just over 50% of investor participants were located in the US with approximately 20% in Europe. The majority of these participants (70%) stated they are very or extremely involved with due diligence and manager selection.

The survey represented a wide range of firm sizes. Half of the investor respondents were associated with firms managing over $10 billion in assets, and one third represent firms managing over $100 billion in assets. Small firms with under $500 million in AUM represent about 25% of the investors surveyed. In general, the investor participants represented firms that were large enough to both make large allocations to alternative investments across all major categories and employ focused manager selection processes.

Most of these investor participants had significant exposure in alternative investments. The majority (70%) had 10% or more of their total AUM in alternatives, and more than 15% were holding 50% or more in alternatives. These investors allocated and monitored billions of dollars in alternatives and may be representative of the alternative investment market as a whole.

The manager participants (N=111) were from three main groups: traditional asset managers (50%), private equity firms (20%), and hedge funds (17%). The majority of manager participants were involved with investment management (55%) and marketing or distribution (39%). The jobs titles held include analyst, portfolio manager, and chief investment officer. Just under 70% of the respondents were in the US and Europe. In the manager group, 40% represented firms that had more than $5 billion in AUM, while 26% represented firms that had less than $100 million in AUM. One third of the firms had exposure exclusively in alternative investments and about 30% had 10% or less in alternative investments.

All the investor respondents had a high level of experience and demonstrated professionalism. Nearly 45% of the respondents had more than 10 years of experience in manager selection and due diligence and over 40% had earned both CAIA and CFA designations. The survey results are skewed to more senior investment professionals, with approximately 10% having less than two years of experience. The manager participants had a similar profile for experience and professional designations with well over a decade of experience for most manager respondents.

About 31% of the respondents estimated that they review more than 25 managers each year while close to 25% of investors said they review more than 40 managers per year. Among the managers who responded, close to 64% had more than 40 clients. Investors spend a significant amount of time on the selection of each manager and see a wide sample of managers each year. Their selection experience is based on a continual analysis and review of new and existing managers. Given investors may review all alternative investment types, we have broken down the alternative strategy universe into a set of categories or styles to gain more focused insights. We report general conclusions, but more detailed and disaggregated data are also available on upon request.

IV. AN OVERVIEW ON THE MANAGER SELECTION PROCESS

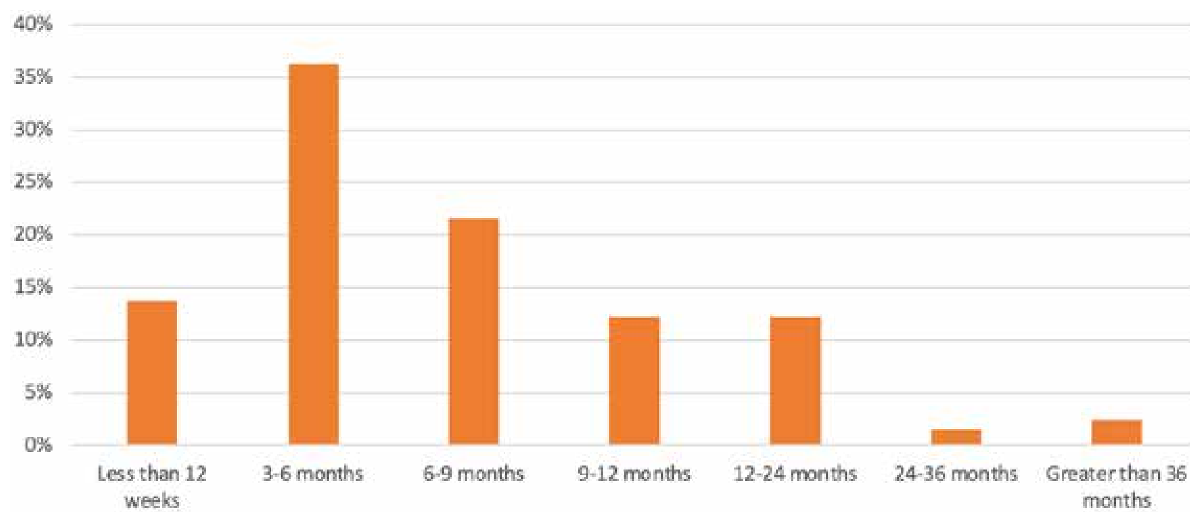
1. How long does the manager selection process take?

Just under 50% of investors say manager selection decisions are made within six months of first meeting a manager; however, 15% say that the reviews may take over a year. The median time for due diligence process is approximately 3-6 months. Nearly half of the respondents (45%) believe that the time required for due diligence is normal and is not affected by unexpected drivers. The manager survey shows a similar pattern. If a full due diligence is conducted, 50% of managers estimate it will be done in less than 9 months.

Given a committee-driven approach to selection, which includes both investment and operational components, the time in number of man-hours required can be meaningful. Typically, investors will use a threshold for performance while others will use a set of questions on philosophy or process to determine whether further review is appropriate. Additionally, on-site meetings and review will require travel. Anecdotally, we've heard that managers based in out-of-the-way locations have to be very good to warrant on-site due diligence visits given the costs involved. There is a still a bias towards allocating to managers who are in large financial centers.

In any manager selection process, most managers are rejected, and a manager who is selected may not be funded immediately. A full due diligence is not the same as being monitored or watched by a potential investor. We did not account for manager rejections based on the investor not wanting to engage in a thorough due diligence process, either due to a manager's failure to meet a set threshold or due to separate allocation-related decisions.

Figure 1: Average time required for due diligence of a manager



Manager complexity was ranked by investors as the top reason for any delays in due diligence. If there is a complex story concerning the skill of the manager, the process of selection may be delayed as deeper analyses of processes are undertaken with multiple calls and visits. Manager strategies that cannot be easily explained by common factors, more unexplained return and alpha, are by definition more complex or unique. These strategies will have greater potential diversification and Sharpe ratios but will also require a deeper analysis to assess skill.

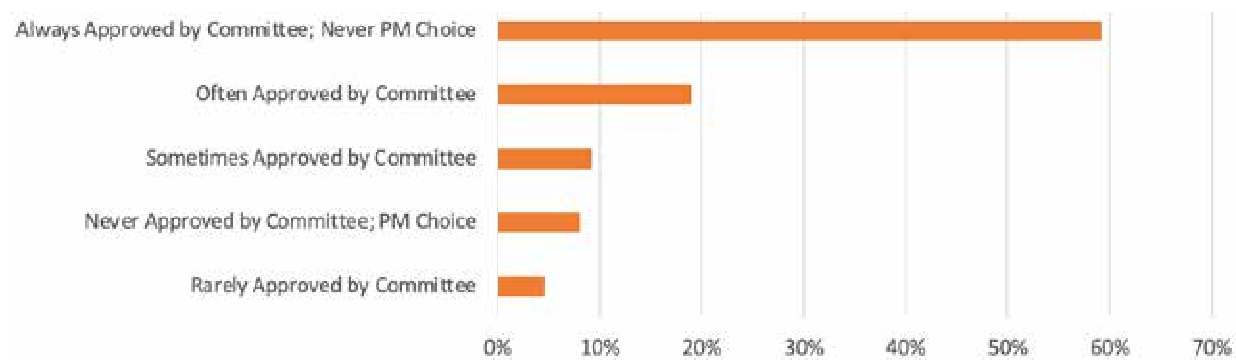
The two other reasons suggested for longer due diligence processes are the need for clarification of information and the monitoring or tracking of performance. The gathering of more quantitative performance information through real-time tracking, while important, does not seem to be an impediment for completing due diligence. Investors may often be monitoring managers well before the process of a formal due diligence begins.

According to respondents, the average number of direct meetings between an investor and manager is between two and four. Investors often require direct contact with managers to make a meaningful assessment of the alternative investment firm. Nevertheless, the assessment of managers has continued through other forums instead of in person meetings, albeit at a slower pace. The value of continued dialogue seems to be limited once that assessment is made. Unlike a review of a company for an equity or bond investment, there is usually not a continual review of manager skill if a selection is not made.

2. Who decides manager selection?

The selection of a manager is usually a group decision determined by an investment committee rather than an individual analyst or portfolio manager. Close to 60% of respondents say that approval is always determined by an investment committee. Any manager presenting to an investor should realize that there will be multiple stakeholders, including investment, operations, legal, and compliance representatives, who will influence the process. The survey suggests that managers do not seem to fully appreciate the internal decision-making process of investors. Only 35% say the approval for their strategies is "always" by committee. Managers may have a single point of contact concerning due diligence decisions and may never talk directly with the investment committee. While the majority (78%) of investors said that managers are generally always or often approved by committee, the manager's single point of contact at the investor's firm typically has the ability to recommend a manager for approval or unilaterally discontinue the due diligence process. That is, the rejection of a manager may come from the decision of a single analyst, while approval typically requires a committee decision.

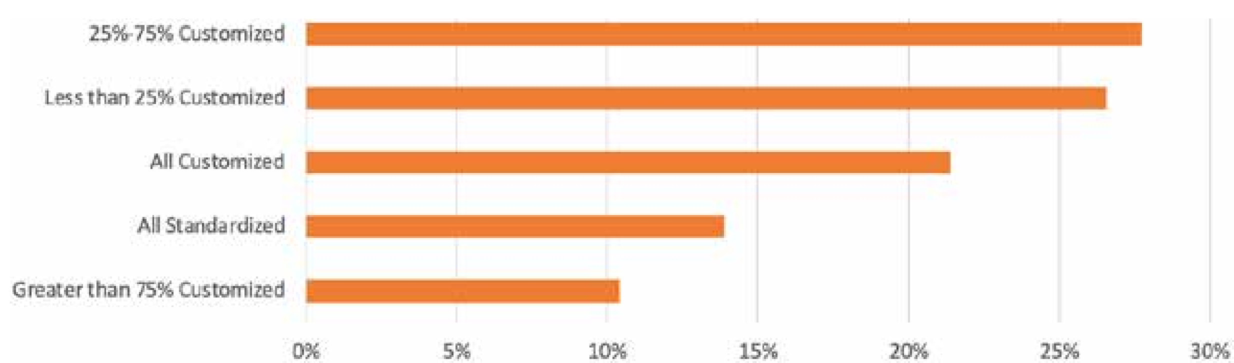
Figure 2: Approval of new managers most frequently decided by an investment committee



3. How standardized is the due diligence questionnaire process?

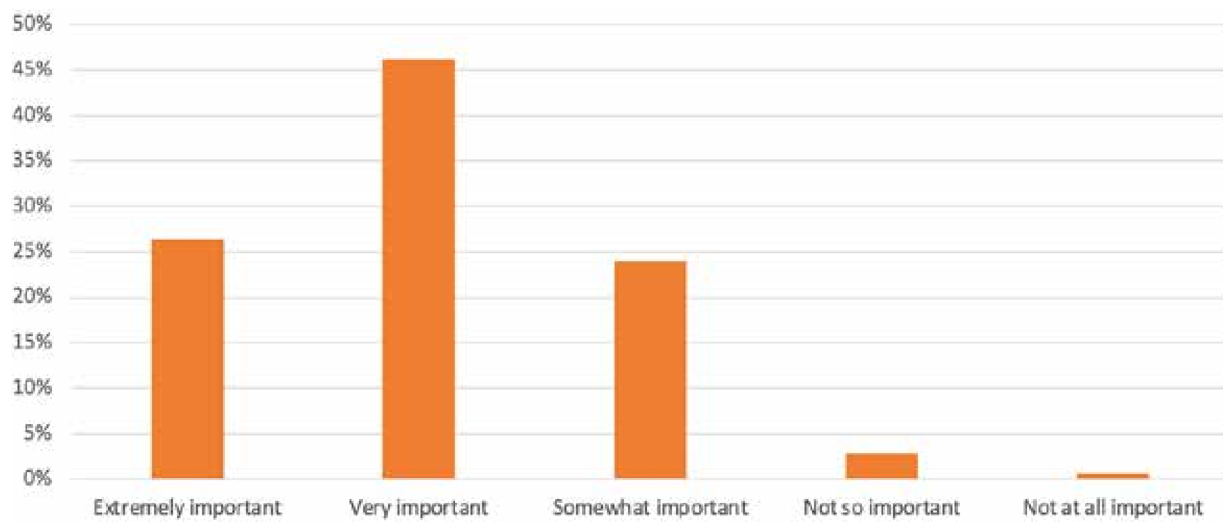
The survey suggests that due diligence processes are highly customized. Less than 15% of investors say they employ due diligence questionnaires that follow some standardized framework, like the AIMA due diligence questionnaire. Just over 20% of questionnaires requested by investors are completely customized, and the median investor said that between 25% and 75% of the DDQs that they ask managers to complete are customized. While the topic areas for due diligence may be standardized, the majority of questions used for due diligence are often tailored to the strategy being reviewed and the specific needs of the investor. Investors may believe that they can create a comparative advantage or generate selection skill or investor alpha through their due diligence process. The specialized skills required for conducting due diligence, often through unique questioning, allows the investor the opportunity to find above average managers relative to a peer group. Smaller firms with fewer resources may be more likely to use a standardized approach for DDQ. Larger firms will more likely follow a structured approach to questioning that is customized to their organization.

Figure 3.1: Due diligence questionnaires are largely customized



Accordingly, the answers provided to due diligence questions are important to the selection process. The survey suggests that DDQ and RFP responses are used extensively for determining differences in managers. Nearly 73% of investors stated that the quality of answers to due diligence questions are very to extremely important to the selection process. Answers serve as a basis for further questioning during face-to-face meetings.

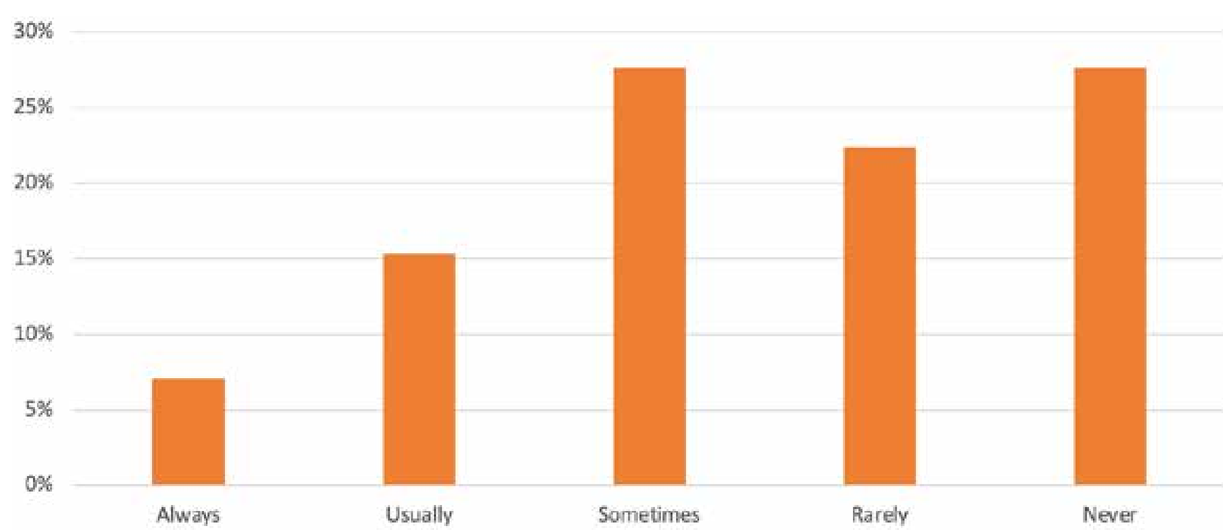
Figure 3.2: The quality of the answers to a due diligence questionnaire is important



4. How important are external consultants for the manager selection process?

The impact of external investment consultants on the due diligence and manager selection process is relatively low. About 50% of the investor respondents stated that external consultants rarely or never impact the process, while over 20% say that consultants usually or always bear influence. The use of consultants is slightly weighted by investors who have limited staff, are medium-sized or have public oversight. Smaller investors will undertake due diligence internally and not pay extra fees for advice while large managers have larger staff who may be specialized as alternative experts. The cost of the larger staff is paid for through the larger investment allocations to alternatives.

Figure 4: The impact of external consultants is relatively low



V. THE SELECTION OF ALTERNATIVE INVESTMENT MANAGERS

5.Are certain alternative investment strategies more difficult to assess than others?

The levels of difficulty associated with assessment of managers across asset classes and styles are highly disperse. The survey finds that there are clear differences in the difficulty associated with selecting managers. For example, traditional long-only stock and bond managers were rated among the easiest to assess, while venture capital and systematic hedge funds were among the two most difficult to assess.

Venture capital may be the most difficult because there is poor transparency due to the private nature of the investment transactions and the lack of data produced by the underlying businesses. Likewise, these strategies may be difficult to benchmark given the wide differences in portfolio exposures and the more general challenge of obtaining clear valuations.

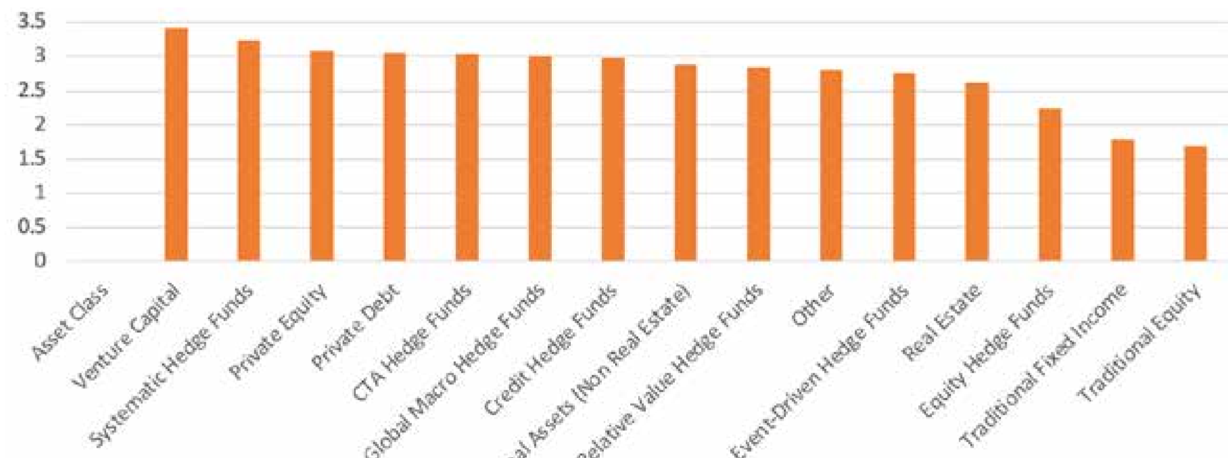
Systematic hedge fund managers have a wealth of data, with information available on a daily basis through investments in liquid futures markets, yet in this case, the problem may not be a shortage of data but a potential excess of information. Here the difficulty rests in determining whether the complexity of the strategy can be understood and has repeatable returns. The investor may require deep specialized knowledge of the statistics and math behind the return generation.

Equity-based liquid alternative strategies are considered less difficult to assess given the ability of investors to compare these strategies with traditional equity investments, benchmarks, and factors. The equity strategy can be benchmarked against the market portfolio or well-known factor benchmarks such as value, growth, momentum, and size. For example, a small cap manager can be assessed versus a peer group and a small cap benchmark index to provide a quick assessment of skill. Any style drift can be measured quickly through variation against a benchmark. The advancements and use of quantitative tools for risk and skill assessment for traditional managers have made due diligence of investment skill easier versus a similar analysis for alternative investments. There are not well-defined benchmarks within alternative investments, and those that have been developed are often an equal weighted or capital-weighted group of categorized managers. Accepted benchmarks for alternative investments have not been developed. Hence, investors will often rely on customized peer groups. Factor analysis is more difficult for managers that actively switch positions and dynamically adjust factor exposures.

Real estate is also considered to be less difficult given that investment decisions are focused on a specific asset class where there exists more standardized assessment of collateral as well as cap rates. After systematic and private illiquid alternatives, global macro investing was considered a more difficult-to-assess strategy given the wide dispersion in returns across this alternative category. Global macro investing may include both systematic and discretionary managers as well as managers who specialize in specific strategies and hold very broad exposure across different asset classes. The manager responses follow a similar pattern as those from investors; however, for each category, managers view alternative investment strategies as less difficult to assess. The managers are much more focused in their responses given they may represent a single strategy and will have greater direct strategy knowledge relative to investors who are more likely to be generalists. The managers will be specialists while the majority of investors may be generalists who have to access a number of different alternative asset classes.

In many cases, over 70% of the participants answered they were unable to provide a response for a particular strategy, as they likely don't have experience reviewing managers in that investment strategy. Hence, an investor's ability to judge difficulty across strategies may be limited.

Figure 5: Certain asset classes are rated more difficult than others to assess *Weighted average of responses based on a scale of 1 (not at all difficult) to 5 (extremely difficult)*

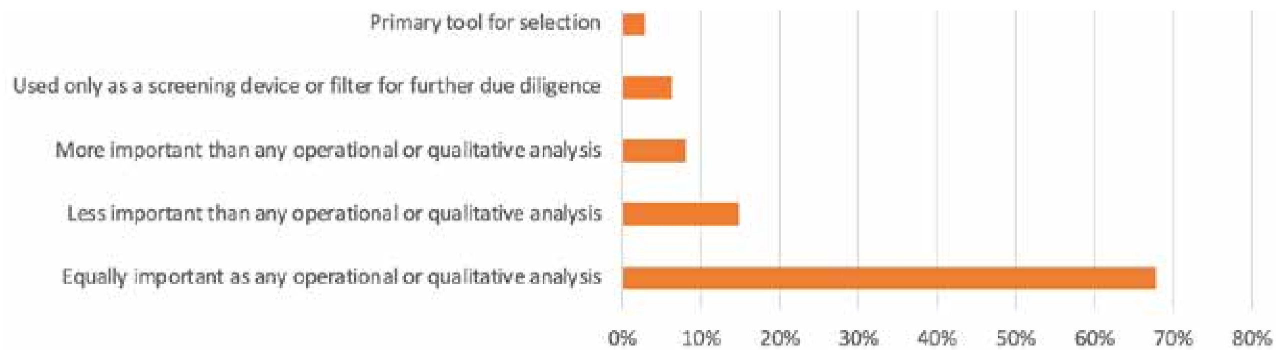


6. How important is quantitative or qualitative analysis for manager selection?

While the due diligence process can be divided between an investment risk assessment and a business risk assessment, we focus on three factors that impact the selection process: quantitative analysis of performance which can be supported through empirical analysis, qualitative analysis, or assessment of investment risks through non-empirical questioning, and operational analysis that can take the form of a checklist or have minimum acceptable thresholds, but may not be quantitatively measured. Note that survey respondents did not have these definitions presented to them, so their responses may have been based instead on their personal understanding of each type of analysis.

Quantitative analysis was not the dominant method for manager selection. Slightly more 10% of investors answered that quantitative analysis is more important than operational or qualitative analysis or is the primary tool for selection. Surprisingly, over 20% say quantitative investment analysis is used only as a screening device for sorting managers and is less important than qualitative analysis or the operational assessment. On the other hand, manager respondents were more likely to say that quantitative analysis is the primary tool or more important than other factors in the selection process. This response may suggest that performance thresholds are used as a stopping mechanism before any further analysis is conducted.

Figure 6.1: Quantitative analysis does not dominate the manager selection process



Rephrasing the question by asking whether qualitative analysis is more important than quantitative or operational assessments finds that one quarter of investor respondents say qualitative is the primary method of selection and more important than quantitative analysis or operational due diligence. Qualitative analysis is used as a screening device or is less important than quantitative or operational analysis for less than 10% of the investors.

Figure 6.2: Qualitative analysis is as important as quantitative and operational analysis

Meanwhile, 60% of investors believe that operational due diligence is as important as other factors such as quantitative and qualitative analysis. Well over half of investors believed that quantitative, qualitative, and operational assessments are of equal importance regardless of how the question is posed. This is one of the more important results of our survey. This balance between quantitative, qualitative, and operational assessment is under-represented in many discussions of risk assessment and skill in research analysis. The survey results highlight the strong emphasis on a three-part assessment of managers.

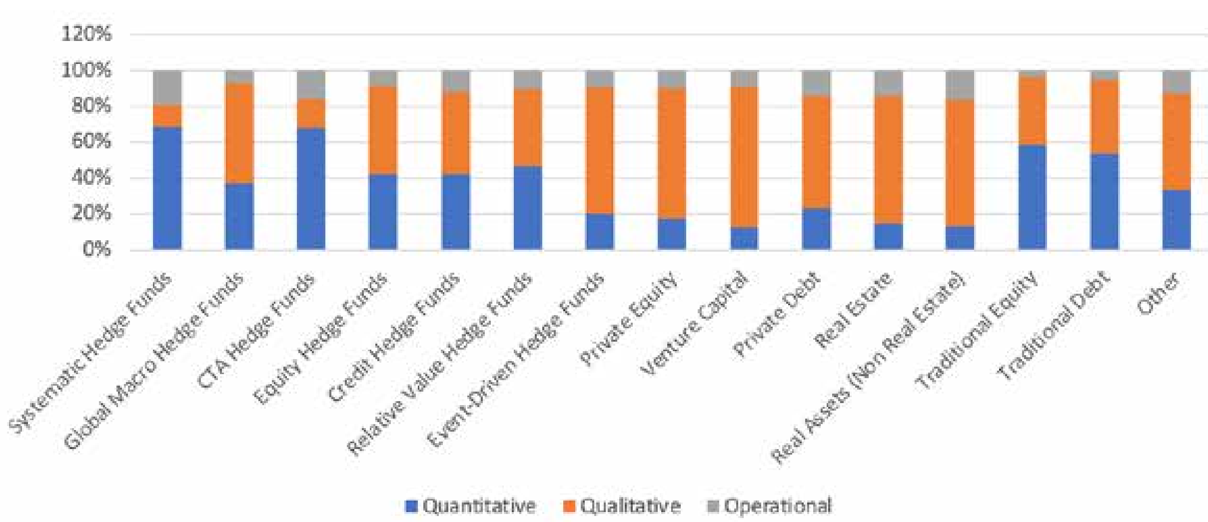
Figure 6.3: Operational due diligence is as important as quantitative and qualitative analysis

Overall, the general survey conclusion is that manager selection is based on three major factors: a quantitative assessment of past performance based on well-defined empirical measures of risk and return, a qualitative assessment of manager skill through extensive questioning on the investment process, and a thorough review of the operational processes associated with the business including compliance, legal, trade processing, and the investment structure. Superior past performance will generally not be enough to lead to a manager's selection for an allocation if there are deficiencies in their ability to articulate or explain their investment process or there are poor grades with respect to operational competency. One co-author of this report, a former investor with active due diligence experience, remembers the mantra that investors want to know whether a manager is "smart, different, and careful." If a manager is not smart as assessed by his explanation of edge, performance is perceived as luck. If a manager is not different as defined by their philosophy or narrative description of their style, performance is not viewed as unique. If a manager is not deemed to be careful as demonstrated by deficiencies in operations, many investors will employ an operational veto.

7. Is there a difference in quantitative and qualitative assessment by alternative strategy?

The factors that are most important for manager selection will vary significantly by type. For example, analyses of systematic and CTA hedge funds are dominated by quantitative factors, while examinations of alternative investments that are more difficult to monitor with daily or even monthly information tend to be driven by qualitative analysis. Our control, traditional equity and bond investments, has a strong bias to quantitative analysis as the driver for due diligence. Operational factors are a distant third in rankings for importance across types. Notice that quantitative factors are considered by respondents to be much less important for assessing strategies such as private equity and real assets, perhaps due to the appraisal-based nature of returns and the fact that long holding periods often exceeding five to ten years give monthly returns less informational value.

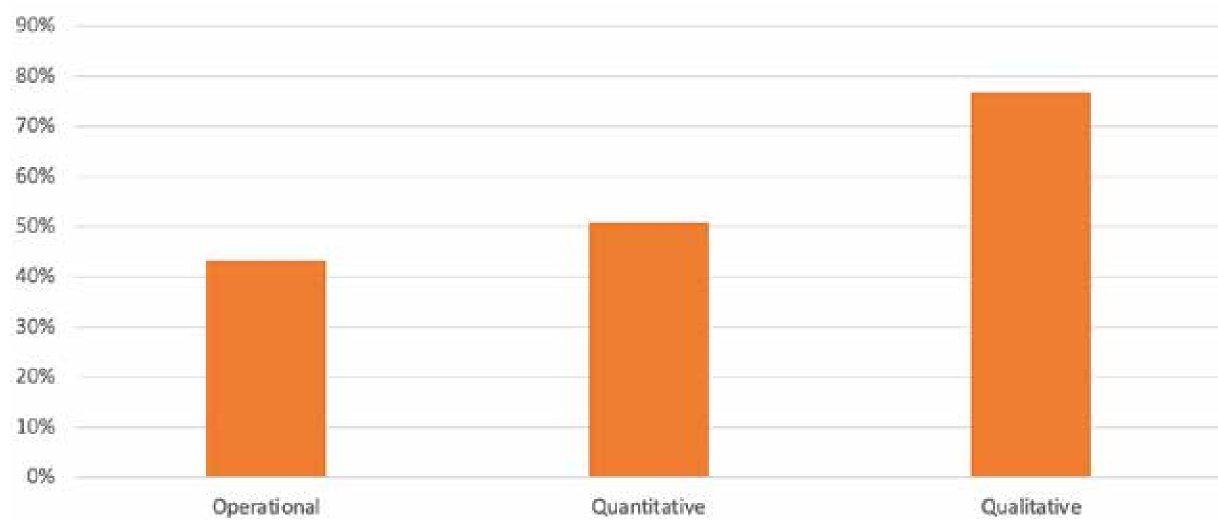
Figure 7: What type of due diligence factors are most important by strategy types? *Respondents ranked the importance of each factor type by asset class*



8. What determines predictability of future returns?

While investors seem to believe that quantitative, qualitative, and operational assessments are all important in the selection process, investors believe that qualitative analysis has the most strength in predicting of future success. Indeed, approximately 75% of the investors surveyed rate qualitative analysis as having moderate to high predictability. In other words, a manager's description of investment edge and process is considered more relevant for judging future returns than past performance. This response is close to 50% higher than the view that quantitative factors have higher predictive value. Regardless of past performance, investors focus on the process for generating returns as the driver for assessing future returns. Operational factors are surprisingly only slightly less important in predictability relative to quantitative analysis. Managers that have good business processes are also expected to have a greater opportunity for potentially higher return, have the ability top manager larger sums, and will be able to better address any unique situations that have not been seen in the past.

Figure 8: Qualitative factors have most power in predicting manager performance *Percentage of respondents who stated the factor was very or extremely important*

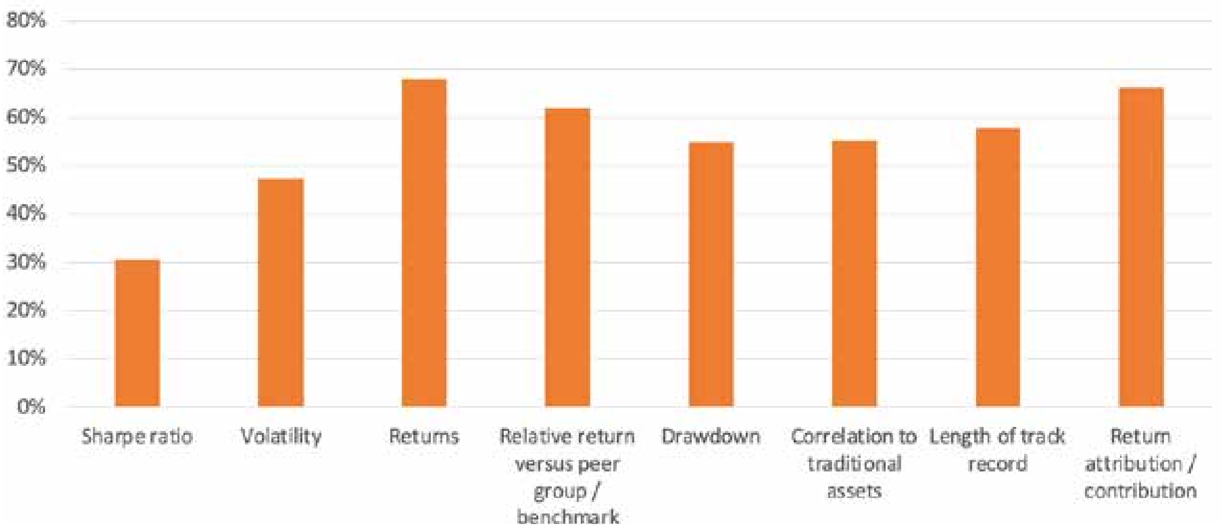


9. What are the quantitative factors that drive due diligence decisions?

Investors were asked to rank a number of quantitative measures based on a five-point scale between not important to extremely important. Surprisingly, the classic Sharpe ratio is the least important measure to investors, followed by volatility. Perhaps the investors in our survey have been fully educated on the drawbacks associated with Sharpe ratios; however, managers place a higher degree of importance on their Sharpe ratios. Downside risk, as measured by the drawdowns, seems to be more important to investors than a classic risk measure like standard deviation. While most risk measures included in the survey were ranked similarly by investors, drawdown or the actual loss of principal was viewed as a more critical determining factor.

Investors were very interested in the absolute returns generated by the manager and the manner that these returns are generated through some form of return attribution or contribution analysis. Investors ranked relative performance versus a peer group as the third most important quantitative factor. The length of the track record is important given it allows for empirical analysis to be conducted in the first place. Meanwhile, the investor survey suggested that correlation to traditional assets plays a less important role in manager selection.

Figure 9: Quantitative factors rated very to extremely important for manager selection

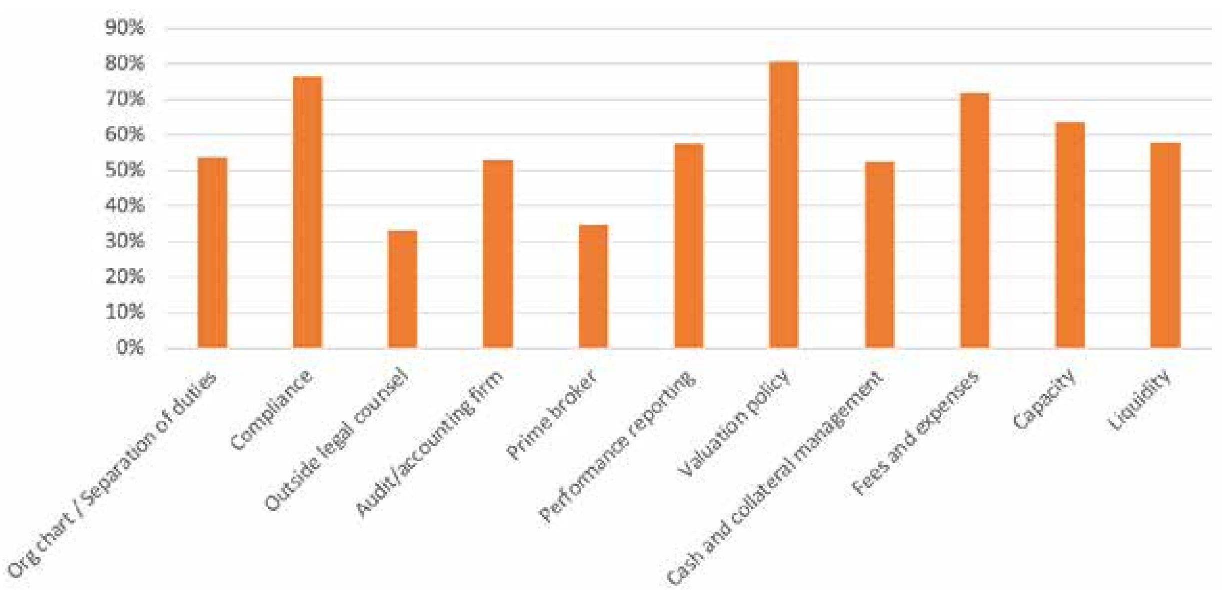


10. What are the operational factors that impact manager selection?

Operational factors had a varied level of importance among the investors we surveyed. Using the scaled ranking, we combined the very and extremely important answers to focus on relative importance. The top three operational factors included valuation policy, compliance, and fees and expenses. The valuation policy is a factor of stronger prominence with private equity and debt as well as venture capital, while compliance is strongly relevant across all alternative manager types.

The least important factors were outside vendors such as auditors, accountants, legal counsel, and prime brokers. While there could be some negative signaling effects from using vendors who are not well-known, investors did not indicate that there is added value from using top-tier firms. Managers, on the other hand, placed more weight on the importance of these vendors in the selection process. Capacity and liquidity were also more relevant for selection, while a firm's organizational structure was rated lower in importance.

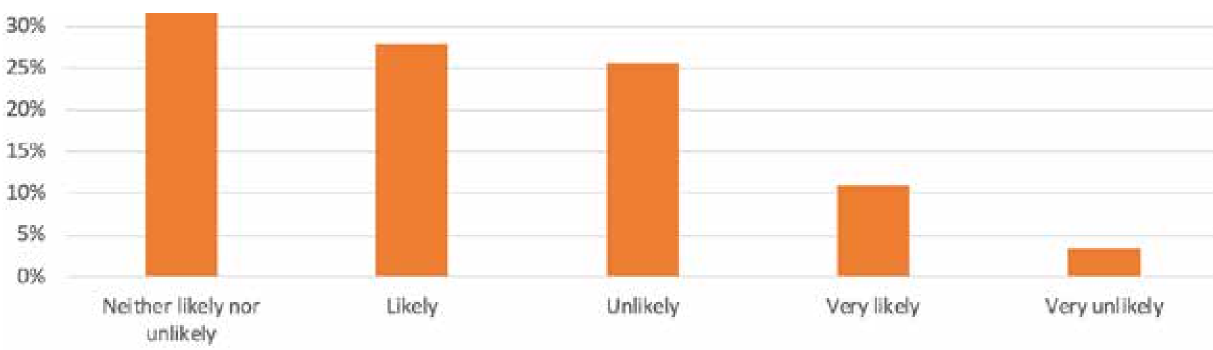
Figure 10: Operational factors rated very or extremely important to manager selection



11. What is the likelihood that the operational due diligence will override investment considerations?

While most believe that investment considerations drive all manager selection, the survey shows that 40% of investors believe that it is likely or very likely that the operational due diligence will override the investment due diligence decision. In other words, good investment performance and processes will not drive a selection decision if there is high business risk. This result suggests that operational due diligence is conducted later in the overall selection process and by a group that may be independent of the investment reviewers. This is a critical finding with the survey. Strong performance is necessary but not sufficient for manager selection. Good managers who have under-invested in infrastructure will be disadvantaged in the selection process.

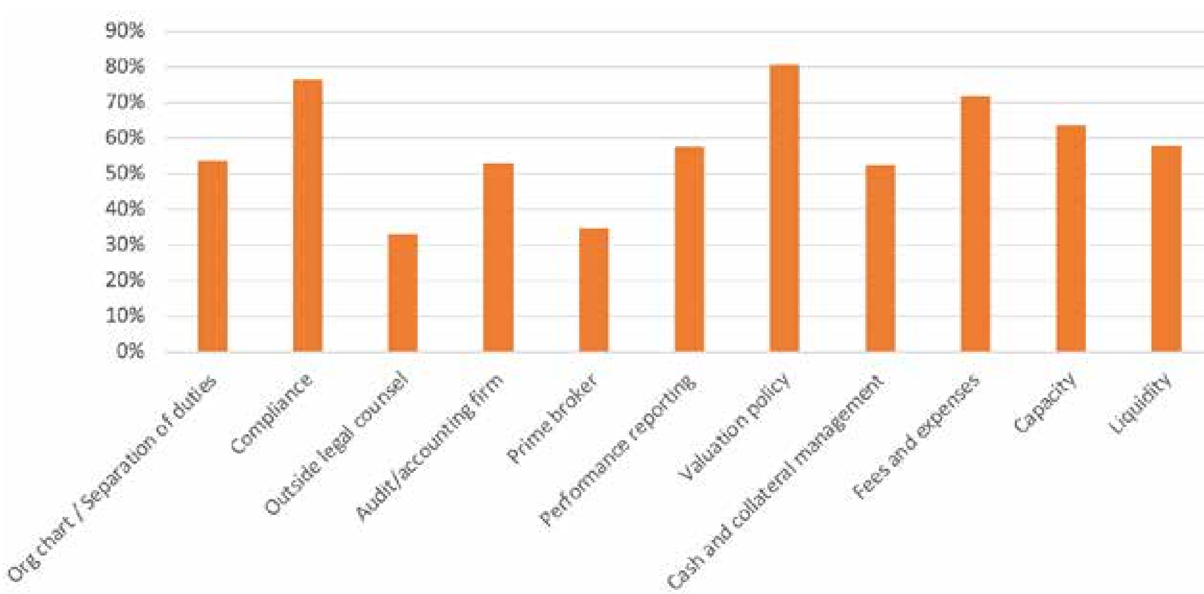
Figure 11: Likelihood of operational due diligence overriding the investment decision



12. What are the factors that will disqualify an alternative manager?

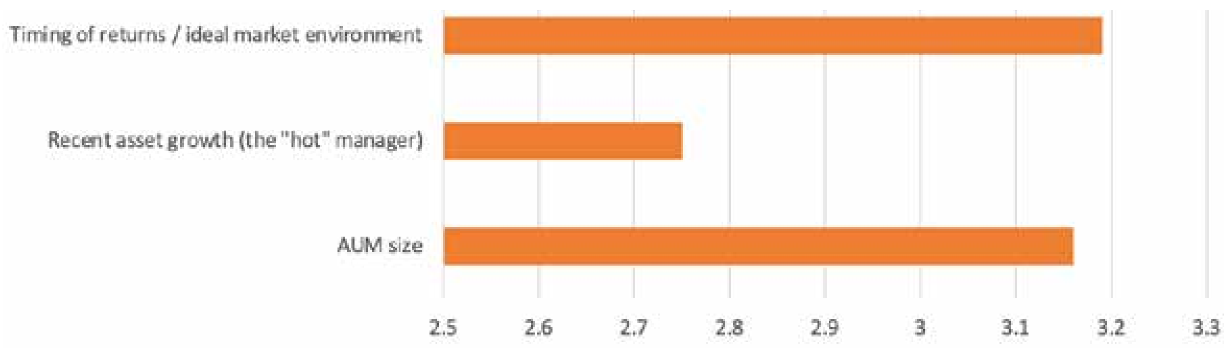
The factors that are most likely to disqualify managers are still quantitative: returns and risk. However, looking at more detailed information by sorting on CIO responses only, we find that philosophy is much more important. In general, returns are much less important for senior investors than the responses of all other investors by job title. CIOs place much greater emphasis on qualitative factors while analysts who are preparing analysis are more likely to focus on factors like return. Behind performance factors, compliance issues and the experience of the managers are factors associated with disqualification. Fund terms and fees are also less important for disqualification decisions. Regardless of the competitive fee environment, investors will pay higher fees for managers who are perceived to be alpha producers.

Figure 12.1: Factors that tend to disqualify managers *Respondents ranked the eleven choices below from high to low; Higher values mean more likely to disqualify*



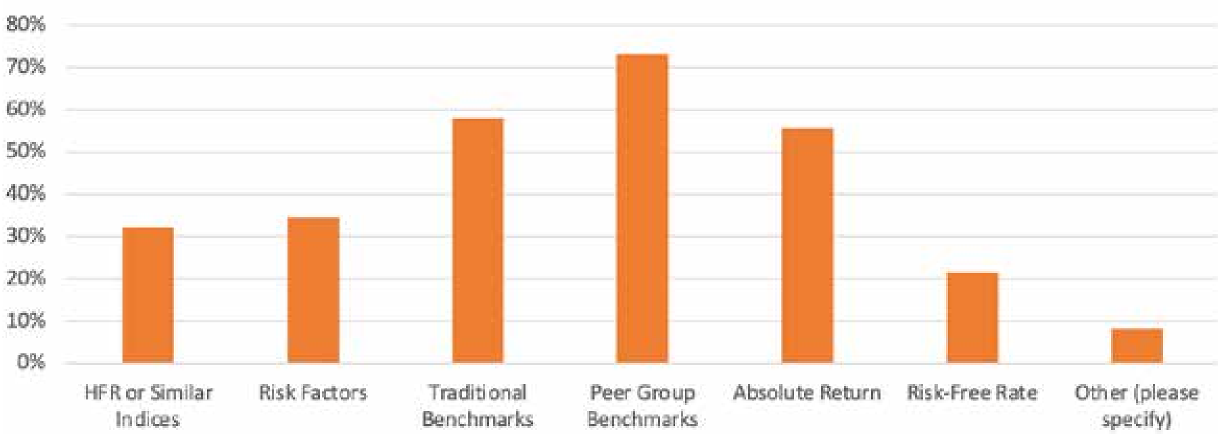
Notably, the size of a manager is not very or extremely important to the selection process nor is a manager's recent growth in AUM (i.e., reputation as a "hot" manager). There does not seem to be a bandwagon or signaling effect from managers who are growing assets quickly. Instead, the market environment or the timing of returns seems to a bigger role in investors' decisions. Selection or disqualification choices will be made based on portfolio needs of investors, and therefore, even good manager in an out-of-favor alternative strategy risks disqualification.

Figure 12.2: Size and timing effects for manager selection



According to the survey, investors consider customized peer groups to be the most important benchmark for evaluating manager returns. Investors are usually in a competitive environment against a shortlist of similar managers. These peers are not always disclosed to managers. For example, a manager who asks the question, "Who do you like in this space?" may not receive a direct answer. Investors stated that generalized industry fund peer-based indices, such as the HFR for hedge funds, are not as important for supporting manager analysis. Traditional benchmarks were the second most important comparative tools, whereas specific risk factors that may capture sensitivity or other risk premia were not an important form of benchmarking for investors.

Figure 12.3: The benchmark used for comparison analysis



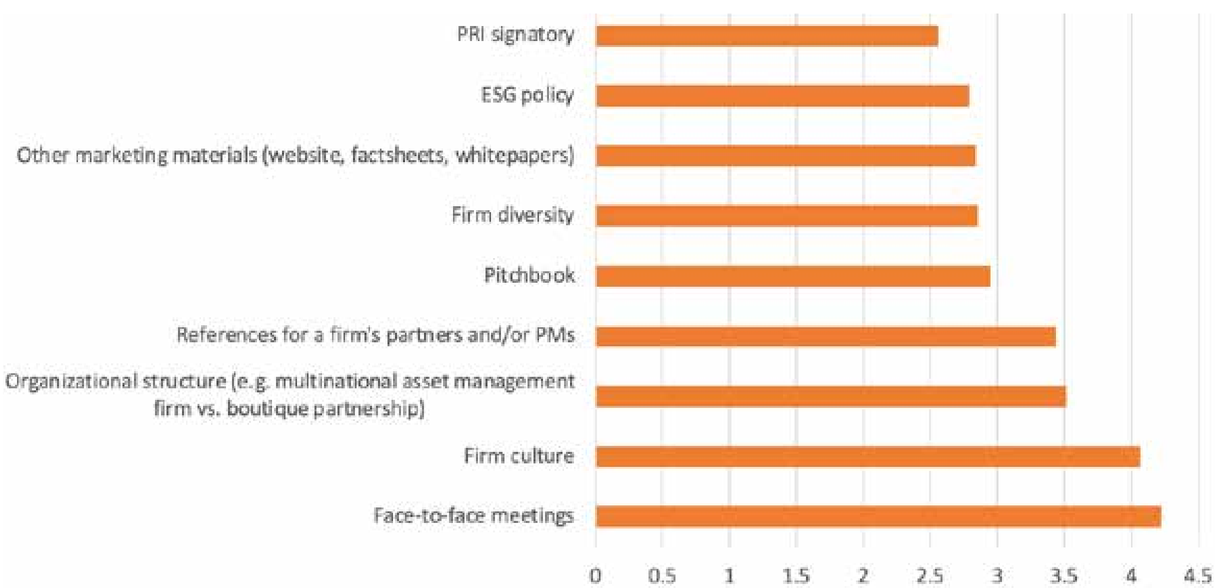
13. What are important qualitative factors for manager selection?

Among qualitative measures noted in our survey, face-to-face meetings with the manager were rated most critical. Though our survey was conducted more than six months into the onset of the pandemic in the United States, where the bulk of the respondents are located, it remains unclear how these perceptions have changed in a world deeply affected by COVID-19, given the restrictions on travel and the limited access to offices. While video conferences are being extensively used, these survey results suggest that these tools are not considered a good substitute for in-person or on-site visits.

Firm culture was rated the second most important qualitative factor for manager selection. However, the definition of what constitutes culture is highly variable with no consensus among investors. Given this high variability on the meaning of culture, we developed a separate question (see below) for deconstructing cultural factors at asset management firms Organizational structure, as defined by whether a firm is a corporation or boutique, was also highly relevant.

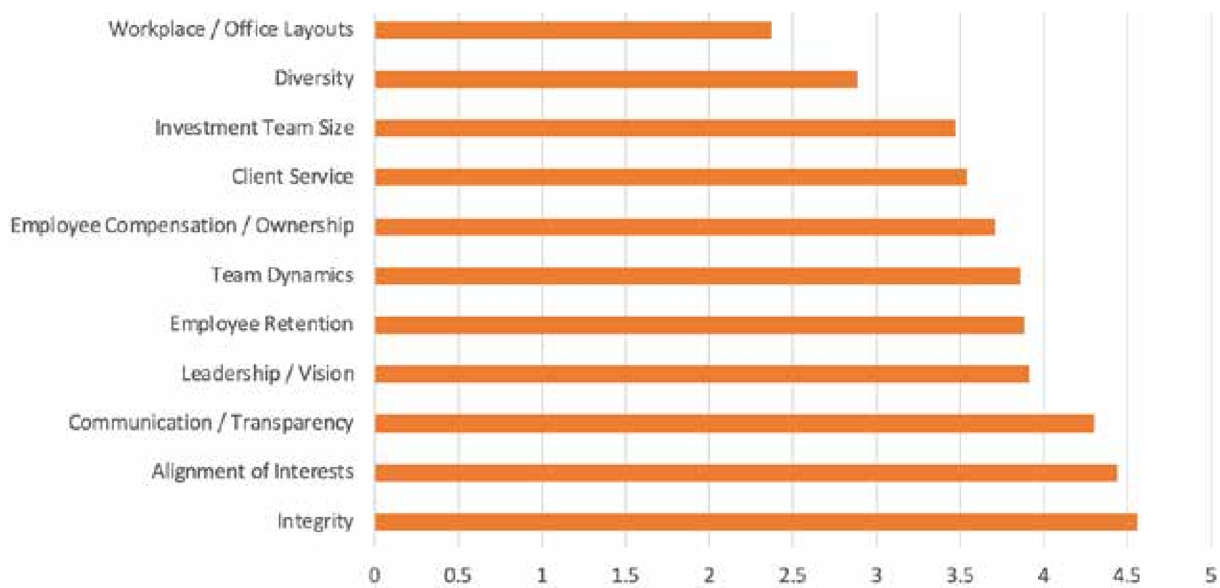
Significant time is often spent by managers on developing websites and pitchbooks for investors to deliver the firm's philosophy narrative, yet these marketing tools were not given a high level of importance by investors. Also, while diversity and ESG policies have captured the attention of many investors, neither were yet considered a primary factor for alternative investment manager selection. Similarly, investor responses indicate that there is limited value for a manager being a PRI signatory.

Figure 13.1: Qualitative factors important for manager selection process *High value means more important based on a weighted average of responses between not important and extremely important*



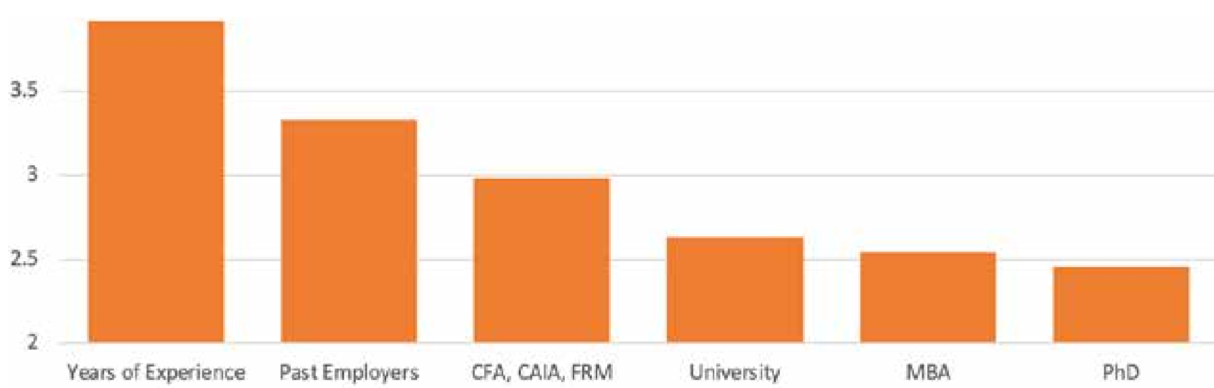
The three most important qualitative factors that respondents associated with culture were integrity, communication and transparency, and an alignment of interests. The next most important cultural factor was the leadership and vision of the firm. The two cultural factors that have the least impact on manager selection were the workplace or office layouts and diversity. In the middle range of the cultural factors were team dynamics and employee retention, which were still rated as important to the selection process. Investors look for high-performance teams that work well together and have history of success as a team.

Figure 13.2: Culture factors that impact manager selection *High value means more important based on a weighted average of responses between not important and extremely important*



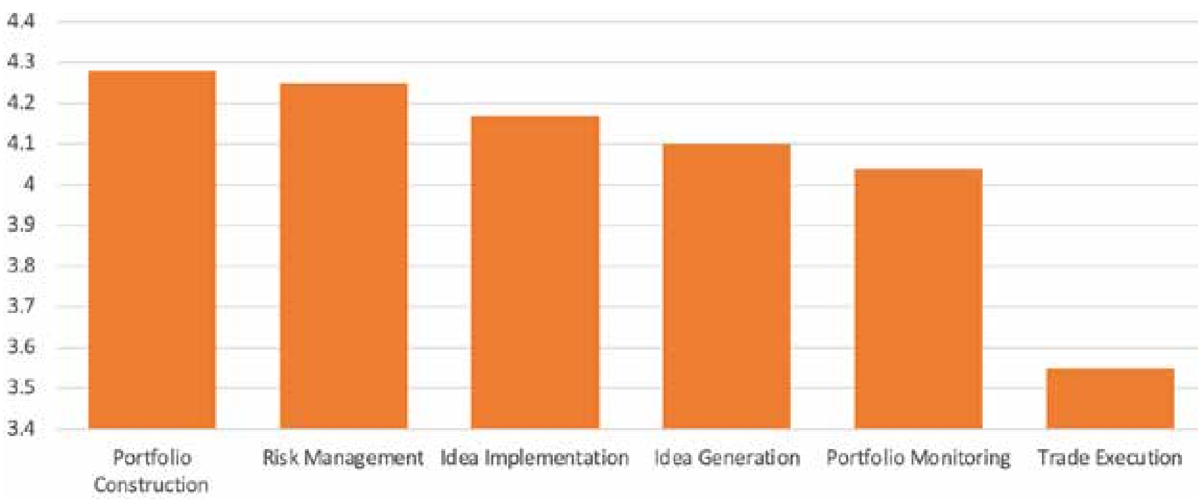
Another more qualitative factor used to differentiate managers is the pedigree of the manager. The dominant factor investors say they used for judging the quality of investment talent was the managers' years of experience. Past employers of the portfolio manager are rated second most important. These two factors dominate any educational or professional credentials, although CFA or CAIA designations are more important than the university attended or whether the lead manager has an MBA or PhD. It is not their education but what managers do with it that matters most to investors.

Figure 13.3: The importance of experience and pedigree to manager selection *High value means more important based on a weighted average of responses between not important and extremely important*



The dominant qualitative factors for the investment process were portfolio construction and risk management. These two factors were more important than idea generation or implementation, but the differences between these factors were not significant. Trade execution was the least important factor associated with the investment process.

Figure 13.4: Importance of different components in the investment process to manager selection *High value means more important based on a weighted average of responses between not important and extremely important*

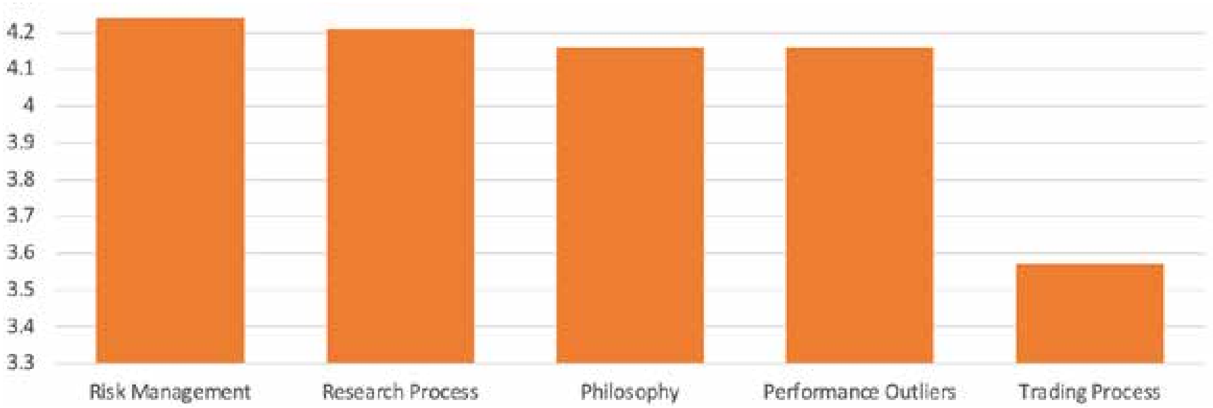


Investors ranked research and experience as the two factors that tend to give a manager an investment edge or competitive advantage over peers. While the idea that managers can exploit market inefficiencies is important, the best way to generate an edge is through the ability to generate ideas from deep research driven by experience. Trading, operations, or scale were not considered key drivers that support an investment edge.

Figure 13.5: Ranking of what may provide managers with an investment "edge" *Respondent ranked the seven choices below from low to high (1 to 7)*

An important component of any qualitative assessment by investors was their ability to understand the narrative or story of the manager to explain his process. Investors find that four factors are all equally important to explain their investment process: philosophy, research, risk management, and explaining performance outliers. An explanation of the trading process was not as important as that of these other factors.

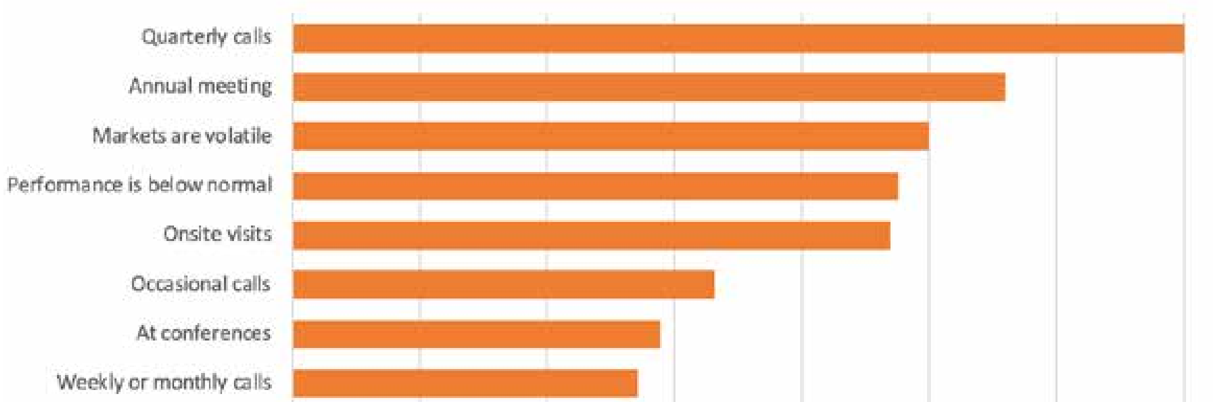
Figure 13.6: Importance of the manager's ability to explain components of the investment process *High value means more important based on a weighted average of responses between not important and extremely important*



14. How much communication occurs with managers after the selection process?

The standard frequency for communication between manager and investor as measured by investor respondents was quarterly calls followed by an annual meeting. In general, the investor-manager communication seems to follow a structured format especially for a larger portfolio that may have a significant number of managers in the alternative investment allocation. Additional calls may be expected when markets are volatile or when performance is below normal. Little time is reportedly spent on entertainment with managers, and calls more frequent than quarterly are less likely.

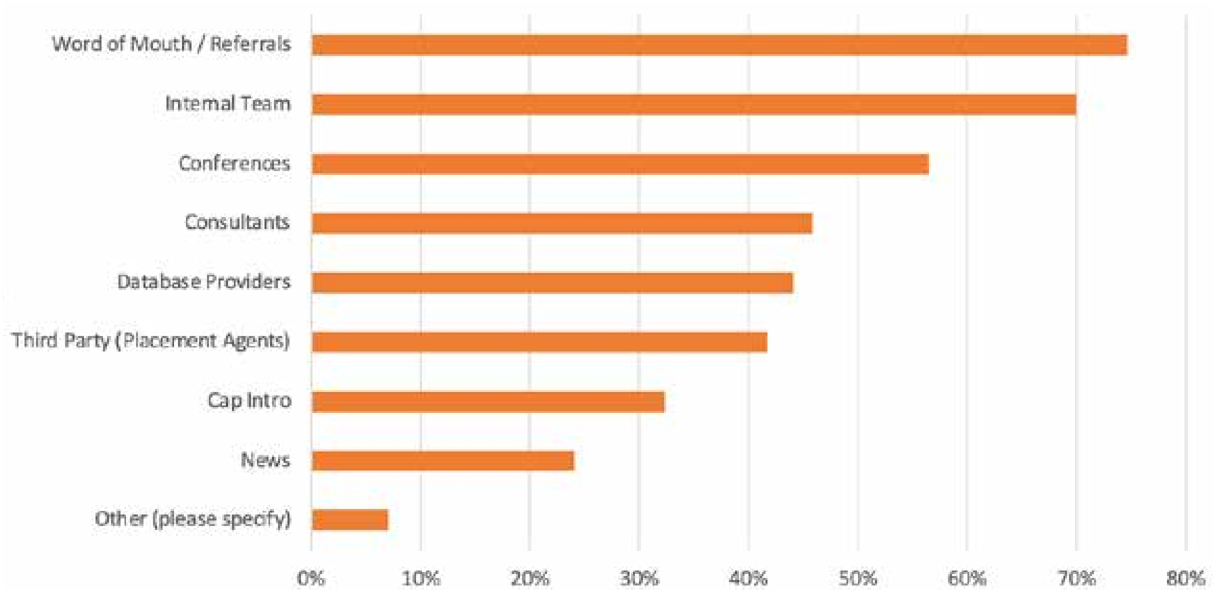
Figure 14: Amount of communication after manager selection process



15. Where are alternative investment managers found?

Given the restrictions on advertising and the various sizes of firms, the search process can be difficult especially for specialty boutique managers who may not have dedicated marketing professionals. Surprisingly, among investors, word of mouth and referrals were the most popular method for finding new managers, followed by internal teams and conferences. Cap introduction from prime brokers was not considered an important source for finding managers. It is notable that managers find cap introduction an even less reliable source for connecting with investors.

Figure 15: Sources for finding new managers *Respondents were allowed to select as many categories applicable*



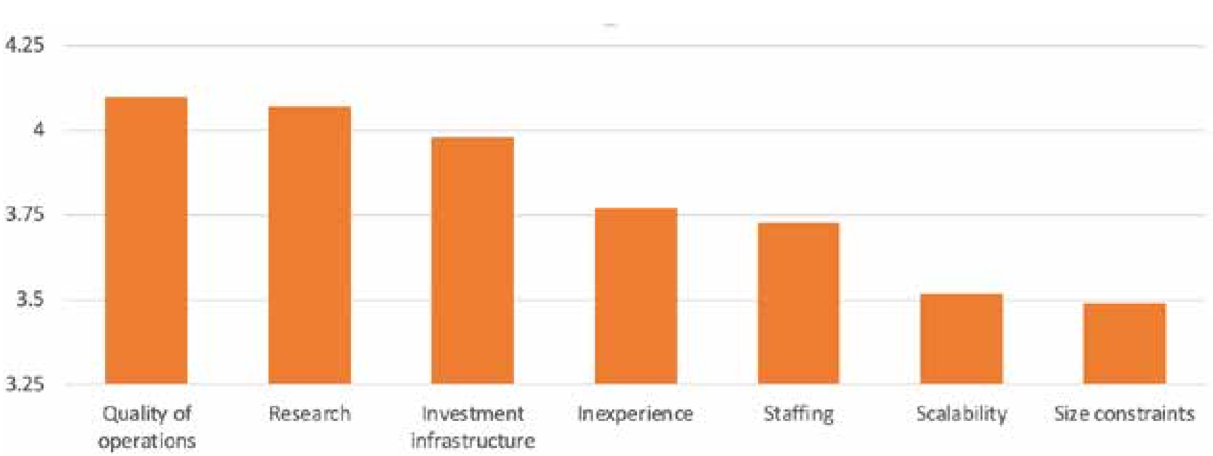
16. Are emerging managers treated differently?

Our survey shows that just under 90% of investors believed that emerging managers require a more intense review and due diligence process. This increased scrutiny occurs even with adequate research that demonstrates smaller and new managers generally outperform larger and more established managers. It is not surprising that small managers have such a difficult time raising money in the institutional marketplace given the standards for operational due diligence are higher. Nevertheless, by contrast, investors in our survey did not view size as a disqualifier for manager selection.

The key factor for emerging manager due diligence is not the size constraints of the investor but the quality of operations for the manager. There is a clear focus on business risk over investment risk with respect to new or small managers. The research-driven investment decisions and investment infrastructure follow closely behind operational quality as key drivers with the emerging manager decisions. That is, if a small manager can somehow afford to build an institutional-quality operational infrastructure, investors will not hold the size of their AUM against them.

The advice for emerging managers is perhaps that they should spend more money to ensure that operations are scalable and pass a more stringent due diligence process. The idea of focusing on cost controls early and then increasing management of operations after assets are gained is not productive.

Figure 16: Quality of operations is critical for emerging managers *Weighted average of responses between not at all important*



17. Are there differences in perceptions between investors and managers?

One survey objective was to measure differences in perception between investors and managers. We generally found that there is consistency in responses between these two groups; however, we can highlight a few differences that would suggest that there are differences in importance for a number of factors. These differences may require further study given the sampling between the two groups.

- Managers view that the level of difficulty associated with selection is lower across all alternative strategies. Indeed, managers may not appreciate that many investors are generalists who do not have the same level of expertise as the managers.

  More managers (26% versus 11% for investors) believed that quantitative analysis is the primary tool or more important than qualitative analysis and operational due diligence. A greater portion of managers (17% versus 3% for investors) also believed that qualitative analysis is less important or only a screening device versus quantitative or operational analysis.
- There was a significant difference in the quantitative factors that were important to managers versus investors. More managers(41% versus 31% for investors) responded that the Sharpe ratio as very to extremely important to selection. For absolute return, 82% of managers said it was very to extremely important versus 68% of investors who said the same.
- There was a difference in perception about who makes ultimate investment decisions. Investor responses suggest that most approval decisions are made by committee while managers perceive that decisions are more concentrated with portfolio managers and analysts. Investors state that 59% of decisions were always made by a committee versus 34% of managers who believed decisions are always committee driven. Our view is that rejection is more likely done at the analyst level and not at the committee level. Hence, managers may not know that final acceptance is done with an investment committee.
- When asked to rank order factors as disqualifiers for selection, more managers (23% versus 10% of investors) overvalue the important of fees and returns (42.5% versus 31.5%) and undervalue the importance of operational issues (10% versus 25%) as measured by the percentage ranked either 1 or 2 out of a list of 11 potential disqualifying factors.
- For qualitative and cultural issues, there was a large disconnect between investors and managers on the importance of team dynamics as being very or extremely important; 73% investors place team dynamics in the top two categories for importance versus 33.5% of managers. While managers and investors agree that integrity, alignment of interests, and transparency and communications are the three top cultural issues, investors in all cases are more likely to answer these factors are extremely important.

VI. CONCLUSION

This survey focused on learning which factors drive manager selection in the due diligence process. Instead of just emphasizing quantitative analysis, the survey investigated the relative importance of other factors like qualitative assessment and operational factors. We find that due diligence is a much more complex process that cannot be encapsulated in just quantitative analysis of past performance. While quantitative tools are helpful, returns and manager skill are more nuanced and unique than can be explained through even sophisticated empirical analysis.

Experienced professionals, both investors and managers, clearly demonstrate in their survey responses that due diligence is a complex process that uses quantitative analysis of performance track records and trading data, extensive review of qualitative information on investment process and firm culture, and focus on operational issues to uncover business risks that will impact the return of principal. We conclude that further research of the manager selection process is warranted because those factors that are hard to measure are often key disqualifiers or inputs in reaching a decision to allocate capital.

REFERENCES

Aggarawal, R, and P. Jorian. 2010. "The performance of emerging hedge fund managers" Journal of Financial Economics 96:238-56.

Ang, A., and N. Bollen. 2010. "Locked up by a lockup: valuing liquidity as a real option" Financial Management 39(3): 1069-95.

Aragon, G. 2007. "Share restrictions and asset pricing: evidence from the hedge fund industry" Journal of Financial Economics 83:33-58.

Brown, S. 2012. "Quantitative measures of operational risk: an application to fund management" Accounting & Finance 52(4):1001-1011.

Brown, S., T. Fraser, and B. Liang. 2008. "Hedge fund due diligence: a source of alpha in a hedge fund portfolio strategy" Journal of Investment Management 6(4):23-33.

Brown, S., W. Goetzman, B. Liang, and C. Schwarz. 2009. "Estimating operational risk for hedge funds; the omega score" Financial Analyst Journal 65:43-53.

Brown, S., W. Goetzman, B. Liang, and C. Schwarz. 2012. "Trust and delegation" Journal of Financial Economics 103(2):221-34.

Feffer S, Kundro C. 2003 "Understanding and mitigating operational risk in hedge fund investments" Working paper: The Capital Markets Company Ltd, United Kingdom.

Germansky, Mila, P. Lee, and A. Lo. 2015. "Hedge Funds: a dynamic industry in transition" Annual Review of Financial Economics 7:483-577.

Goetzman, W., J. Ingersoll, and S. Ross. 2003. "High-water marks and hedge fund management contracts" Journal of Finance 58:1685-1717.

Sun, Z., A. Wang, and L. Zheng. 2012. "The road less traveled: strategy distinctiveness and hedge fund performance" Review of Financial Studies 25(1):96-143.

Titman, S., and C. Tiu. 2011. "Do the best hedge funds hedge?" Review of Financial Studies 24:123-168.