



Mirror, mirror on the wall, who's the fairest of them all?

By Alan Snyder



Even if she hated the answer, the evil queen in *Snow White and the Seven Dwarfs* with her magic mirror, had an advantage over all of us. Identifying compelling asset classes, financial strategies and talented money managers is our challenge. Alas, there is no magic mirror, only hard work. However, attached is a diligence tool kit that we have refined over 30 years of searching, with many contributors helping us along the way. The question set is almost endless (363 strong), yet provides both a lens to focus attention, and a checklist. Do we ask every question? Of course not. Some apply more than others to a particular situation and stimulate deeper thinking. However, they keep us from being afflicted with either myopia (too nearsighted, with distance blurred), hypermetropia (overly farsighted with in-close issues fuzzy), or in our case, “presbyopia” (an aging eye condition). We hope you can use it to your advantage with one caveat or string attached. Tell us how to make the list even better!

We believe there are **four distinct elements** of the due diligence process. The first is **fraud**. Remember Tom Hanks, playing Apollo 13 astronaut Jim Lovell, who made the ultimate and fateful call to NASA from space? “Ah, Houston, we have a problem.” We want to avoid that call or press article announcing that “the books were cooked” and/or “the manager ran off to Buenos Aires with all the money.” In a nutshell, trust but verify track record, service providers, controls, and

principals' backgrounds. Most due diligence efforts concentrate on this, yet the biggest and more probable risk is the second element, **performance**.

Performance touchstones encompass:

- Ascertaining a definable “edge” with repeatable consistency. This can apply to an asset category as well as a manager. At the asset level, is there ongoing structural demand with a long enough runway to be worth the exploration cost, e.g., alternative lending? Within this space, does the manager have a unique competency not easily replicated by others? An example would be insights from enhanced data collection and forensic analysis to select more creditworthy borrowers with lower default risk.
- Separating luck from skill. Is successful performance a question of being in the “right” place at the “right” time? This may be fine at the asset category level, but can the frog, our manager, hop to the next lily pad when conditions change?
- Measuring operational robustness, ability to scale, and business vitality. Hard asset lending as a category is extremely demanding due to lockbox utilization with intense operational controls that limit scale for any execution. As a result, asset growth for any single manager necessitates careful monitoring to avoid outstripping their ability to monitor any attractive lending opportunities.

Performance is driven by both events and people, which leads to the third element, **human factors**.

Human factors are the most difficult to evaluate, while in many ways, the most important at the practitioner level. Will success spoil Rock Hunter? As manager wealth accumulates, will intensity change, risk aversion mute results, or distractions abound as focus is redirected to collecting art or trophy companions? In turn, will there be organizational turmoil from idiosyncratic behavior or unevenly shared rewards?

Our three elements can become overshadowed by **external events/shocks/secular shifts**, the fourth element. Consider payday lending which is now in the crosshairs of the Consumer Financial Protection Bureau, promulgating regulations effectively ending the economics of the business.

Closer to home and notwithstanding our enthusiasm for alternative lending, changing portfolio mark-to-market valuation practices can ruin both previously-reported metrics and those going forward. In marketplace lending, a subset of alternative lending, these practices are “a changin’.” Auditors are toughening their stance, driving consideration of interest rate changes and default curves in order to create honest performance comparability.

Event risks include the infamous “unknown unknowns.” While they may be unknown, sizing them can often be undertaken with expected value analysis and probability fans.

While the due diligence process is daunting, hard work pays off in risk mitigation and more durable returns. Better yet, Ben Franklin expressed it more positively: “Diligence is the mother of good luck.” We hope our contribution to your diligence efforts lets you find more Snow Whites.

cc: Doc, Grumpy, Happy, Sleepy, Dopey, Bashful and ?



MANAGER DUE DILIGENCE QUESTIONS AND INFORMATION REQUESTS TO CONSIDER

A. Firm

1. Organizational structure
2. Domicile
3. Date founded
4. Regulatory framework and date of registration
5. General partner / manager
6. Address
7. Telephone number
8. Primary contact
9. Fax number
10. Email address
11. Website

B. Investment Vehicle

1. Launch date
2. Form of organization, e.g. fund, separately managed account, etc.
3. Fees
4. High water mark
5. Hurdle rate
6. Redemption policy/Liquidity terms
7. Number of investors and largest investor by percentage
8. Investor qualification requirements

C. Company Organization

1. What is the strategy for the manager/fund and structure (onshore/offshore/master-feeder, etc.)?
2. Please explain the relationship between different entities.
3. Are there any predecessor firms? Please detail names of firms, nature of businesses, your role, and why it shutdown/you left.
4. Is the manager or fund registered with any regulatory authority? Which ones (SEC, NFA/ CFTC, etc.)? What registrations has it had in the past?
5. Has any regulatory authority ever examined your firm? If yes, please give the reason for the examination and the outcome, and any relevant correspondence (e.g., exit letter). Has any regulatory body issued an inquiry or complaint?
6. Has there been any litigation, or are there any pending or threatened lawsuits? If so, please describe. Have there been any tax liens, lawsuits or controversies? If so, please describe.
7. Have there been any customer complaints? How do you define a customer complaint? What was the resolution process for any complaints?
8. What is your projected capacity? When do you anticipate you will reach that level? Do you anticipate a soft close before a hard close?

9. Has a third party ever been engaged to investigate the background of the firm and/or key principals? If so, may we view it and who initiated the report?
10. We will engage a third-party background report on the firm and its key principals. Is there anything you wish to disclose before we read the report?
11. List all reports available to investors.
12. What is the compensation structure for personnel?
13. What functions have been outsourced to third parties, and which entities or persons are used?
14. Provide two investor references, including the last investor who redeemed.

D. Management and Personnel

1. Provide brief background and biographical information about the manager's principals or key persons.
2. Who owns the firm?
3. Are the current principals the only ones that the manager has ever had?
4. How many employees do you have in each of the following areas: trading, investment research, IT, marketing and business development, administration, programming, compliance/reporting/performance, and any other departments? Is there an in-house computer technician?
5. What is the greatest and least number of employees you have had in the past three years?
6. Are there any family relationships among the principals or key employees?
7. Please discuss any recent turnover in key personnel.
8. If there are new investment personnel: How are you managing the workflow with new people? How do the new roles fit into the overall investment process? How has this changed the portfolio manager's role in the investment process? Do you anticipate any hiring in the next 12 months? If so, in what areas?
9. Are there any "senior advisors," and what role do they play?
10. How are principals and employees compensated?
11. Does the investment manager receive any compensation in addition to management and incentive fees?
12. What do you see as your team's strengths and weaknesses? Areas of expertise?
13. Is there is anything in particular about your firm's culture that sets it apart from others in the field?
14. How are key persons vetted?
15. If a key person is incapacitated, what happens? In such an event is there a related redemption process, orderly windup, etc.?
16. Who has the authority to transfer money out of an account? What procedures are in place to provide checks and balances and to lessen the possibility of fraudulent activity?
17. Are your employees allowed to trade their own accounts? Do the principals trade personal accounts? What restrictions or monitoring is in place?
18. Do the principals have any other significant business involvements? If yes, please describe them.

E. Operations

1. Please describe your infrastructure.
2. Any changes in company strategy/focus since its inception?

3. Any seed investors? If so, what are the ongoing relationships with them (e.g., equity stake, profit shares)?
4. If employees or offices are located in different places, what parts of the operation and which individuals are where?
5. What happens if the lead PM/trader is out sick or on vacation?
6. How do you manage growth?
7. In the case of investor withdrawals, what AUM threshold is needed to maintain current operations? At what threshold will major changes need to be made in terms of personnel, operations, office space, etc.? What is the management company's "breakeven point?"
8. Please delineate any expense allocations made to accounts and/or funds. Are any expense caps in place?
9. Have there been any significant operational or administrative "bottlenecks" or difficulties in the past five years? If yes, please explain and describe any measures applied to avoid similar circumstances in the future.
10. What is your current annual research budget? Has it varied much from year to year?
11. What contingency plans do you have in terms of computer system default? For a technical failure at the prime broker?

F. Service Providers

1. Please provide names and contact information for the fund's administrator, cash custodian, broker(s), auditor, and legal counsel for use in independent verification of their services.
2. List all administrators since inception. What is your administrator tasked with? What is their role in managing cash controls? How do they value the portfolio? Do they base the valuations on any data received from you? Do they get statements directly from the broker(s), loan servicers, etc.? How are conflicts resolved if the administrator's valuation differs from your own? If the administrator is not mandated to independently value the portfolio, is there a third-party valuation firm?
3. Does the company or any of its officers or employees, directly or indirectly, receive any rebate on brokerage commissions, e.g., soft dollar commissions? If yes, please explain on what basis, and from which brokerage firms.
4. List all auditors since inception, with contact information. If more than one, please explain reason(s) for change.
5. Are there different auditors for your different fund vehicles?
6. Has a qualified opinion ever been issued by your auditing firm or have there been any other problems with prior audits?
7. List all legal counsel employed since inception, with contact information. If more than one, please explain reason(s) for change.
8. Detail all custodial relationships, including costs, balances required, hypothecation, titling, and processes.

G. Investor Information

1. Generally describe the investor mix, with percentages (individual, institutional, fund of funds, etc.) What percentage of your AUM is held by each of the five largest investors?
2. How has the investor mix evolved over time? How do you see it shifting in the future?
3. What investor groups do you primarily target?
4. Please elaborate on the history and nature of the relationship between your firm and any clients making up over 10% of your AUM.

5. Do you have a seed investor or other special investor relationships, i.e., side letters, MFNs?
6. How much of AUM is proprietary capital?
7. Please provide AUM by month since inception.
8. Please explain the largest three redemptions.
9. What would be the effect of your largest client making a full withdrawal?

H. Investment Terms

1. If there is a redemption fee, is it a rolling fee or for initial investment only? Has it always been charged? If not, why? Does it apply to all investors? Is the redemption fee paid to the fund or to the general partner?
2. If there is a lock up, is it a rolling lock up or for initial investment only?
3. Is there any cross-class risk?
4. Are higher or lower leverage versions of the program or fund available?
5. Do you allow notional funding? If yes, what is the strategy's AUM with and without notional amounts?
6. Is there a high water mark? If yes, is it calculated at the fund/investment vehicle level or the individual investor level?
7. Has any investor been redeemed with "in-kind" payments?
8. Describe any potential or historical use of "side pockets," valuation thereof, and fees to be charged against them.

I. General

1. What do you see as the greatest opportunities and greatest risks going forward?
2. What do you consider to be your biggest mistakes in the past? What lessons have you learned?
3. Where do you think you can improve in terms of strategy, research, execution, operations, and personnel?
4. Who do you consider to be the main competitors in your space?
5. Do you share your fees with any third parties?
6. Have you ever voluntarily returned assets to investors? If so, why?
7. Has your firm or any personnel been highlighted in any published articles during the past five years? If so, please reference them.
8. What is the strategy's tax efficiency (i.e., approximate breakdown of long-term and short-term capital gains, interest income, etc.)? Please provide a sample (redacted) K-1 statement from the most recent year.
9. When are K-1s typically issued?
10. When are audits typically issued?
11. Can you provide mid-month return estimates?
12. Can your administrator provide monthly independent verification of AUM?
13. What are the deadlines for funding investments and submitting subscription documents?
14. What is the reporting frequency for account statements (monthly, quarterly)? How are statements provided (mail, email, password-protected website)? How soon after period-end are account statements typically available?
15. Do you provide estimated returns prior to issuance of account statements? How soon after period-end is an estimated return typically available?

J. Strategy Overview

1. What is your investment strategy and how has it evolved since inception?
2. How similar is your current strategy to what was utilized in the past? How often are changes made and why? Please describe any significant changes.
3. What differentiates your strategy from your competition or peer group? Is your differentiation sustainable?
4. What does your strategy try to capture in the markets? How? Have you identified a fundamental reason your strategy is profitable?
5. What instruments do you trade?
6. Describe your “buy box”. What do you look for in an investment?
7. Do you ever veer from the strategy represented to investors? Could you do so in the future? If so, under what circumstances, and would investors be notified ahead of the changes with an opportunity to withdraw?
8. What types of environments are best/worst for your strategy?
9. What are the weaknesses in your strategy?
10. What are the criteria you have used to select the markets traded? Do you anticipate adding more in the future? Will asset growth result in fewer markets? If so, at what levels?
11. What is your portfolio turnover/number of trades per month?
12. Do you utilize multiple strategies? If so, how do you categorize them?
13. Do you seek non-correlation with certain assets classes or markets?
14. What is your target return/volatility/drawdown? Has the performance so far met your expectations? Do you have any historical backtests of the strategy? What does your backtesting show is the expected probability of various returns or drawdowns?
15. Do you consider this to be an absolute or relative return strategy? If relative, what is your comparison index?
16. Describe any efforts to improve the strategy through ongoing research.
17. Do you utilize leverage? If so, how do you calculate leverage, how much is used (average, maximum) and how is this leverage achieved? What is the cost of this leverage?
18. Has the amount of leverage utilized changed significantly? If used, please give min/max leverage allowed and a breakdown by month.
19. How many names/markets do you track? Is it a fairly constant list or high turnover?
20. Does your strategy have a directional bias, either deliberate or implicit?
21. If shorts are used, are they more for profit or hedging purposes? If both, how is execution different depending on the purpose? Please give a breakdown by month.
22. What percent of AUM is typically held in cash and where is the cash held? Describe what cash controls are in place.
23. What would be typical position size on entry? At market? How are geographic area/asset class/sector/instrument allocations determined?

K. Strategy Implementation

1. How do you generate your investment ideas (broad themes, specific positions)?
2. How are investment decisions made (individual, team, different individuals managing separate portions of portfolio)?
3. How is the research process driven (individual, team, different individuals driving their own research independently)?
4. Is your process more bottoms-up or top-down driven? Would you characterize your approach as fundamental, technical, and/or systematic?

5. How do you incorporate modeling into your investment process? Are the models adhered to strictly, or used as guidelines that discretion can override? When have you overridden any models? Under what types of scenarios do you adhere more/less strictly to your models?
6. What triggers an increase or reduction of overall exposure or leverage?
7. Do you scale in or scale out of positions?
8. How are position sizes determined?
9. Do you distinguish between core and more tactical positions? With core positions, is it a constant hold period or do you trade around it?
10. What is the average holding period for a position?
11. Describe all financing activities, e.g., margin agreements, securities lending, cash maintenance, custodianship titling, counterparty agreements, warehouse lines, leverage facilities, or term debt. What are the requirements of such lenders, e.g., asset quality, personal guarantees, liquidity mandates, etc.?

L. Risk Management

1. How do you define and control risk (as a whole and by position)? Please give as much detail as possible (e.g., VAR daily, monthly, etc.).
2. What type of stress testing is done? Please elaborate on the methodology and its underpinnings.
3. How do you measure covariance (correlation), and to what?
4. How do you define and measure the liquidity of your portfolio? How long would it take to go from fully invested to 100% cash?
5. Do you utilize hedging? If yes, please explain, including instruments used, how the hedges are calculated, and hedging costs.
6. What risks do you seek to hedge out? How do you implement the hedges? How do you calculate the hedging ratios?
7. Do you have any position limits on entry and/or on mark-to-market value? What are they by position, sector, geography, and market?
8. Have you ever exceeded any stated limits?
9. If, or when, position limits are reached, how will you modify your methodology?
10. Do you have downside risk thresholds that you manage (e.g., never want to lose more than x% in a month, or x% drawdown)?
11. What is your typical response when positions start moving against you? Will you tend to add to the position or trim it? If so, what are the thresholds for changing strategy (e.g., if moves x% against you, then will add/stop out). Please explain the dynamics of your response, including variations and specific examples of when different responses are applied.
12. Please provide information on your largest drawdowns, including amount, months until recovery, and cause for each.
13. At what percent drawdown or monthly loss would you either stop trading or recommend that an account be closed?
14. What attempts are there at diversification?
15. In terms of diversification and exposure by sector/instrument etc., how much variation has there been historically? Have there been periods of particularly high concentration to a certain sector/instrument? If so, approximately how long was the period approximately?
16. What do you worry about more – losses or illiquidity?
17. Historically, during what periods has liquidity dried up in the markets you are involved in? Going forward, what risks do you see from a liquidity perspective?
18. Going forward, what risks do you see from a regulatory perspective?

19. How is counterparty risk determined? How frequently do you review exposures? Who reviews counterparty risk and how are counterparty risks acted upon?
20. Have you ever suspended or delayed redemptions, or made securities-in-kind distributions? If so, what happened that caused you to do so?
21. Have you ever asked (but not required) investors to withhold redemption requests for a period of time?

M. Track Record

1. If you had to break your historical track record into periods of different themes or market regimes, how would you characterize each, and where would the lines be drawn?
2. If one year's or period's returns were dramatically different from others, why? Do you see this as an anomaly or something that may reoccur?
3. Is there anything in the track record calculations that requires explanation (e.g., adjustments, pro forma, composite, performance of different vehicles used for different periods, etc.)?
4. Is the performance record in any respect derived or excerpted? Is it GIPS compliant?
5. Are there any adjustments that we should make to the reported track record so that it reflects the results an investor would have experienced given current fees, other expenses, and leverage/trading level?
6. Do any accounts included in the composite track record have reduced fee structures?
7. Have you ever been required to restate any aspect of the performance record?

N. Disaster Recovery

1. What plans are in place for business interruptions?
2. What insurance coverage is in place, e.g., key man, errors and omissions, property coverage, etc.? Is there a "hot site" backup? What contingency plans are in place for trading, trade reconciliation, record retention and updating, etc.?
3. Escalation policy and procedures?
4. How often is your disaster recovery plan tested? Please describe the most recent test (when performed and what tested). Were any changes made to the disaster recovery procedures as a result of such tests?

O. Compliance

1. Do you have a designated Compliance Officer?
2. What does your compliance manual and code of ethics cover? Please provide a copy of each.
3. When hiring new personnel, do you require references, drug tests, or regulatory background checks?
4. Describe your AML/KYC process.

P. Valuation Methodology

1. How do you mark your portfolio to market?
2. Who undertakes the valuation process? If the management company provides the valuation, is there any third-party review? How are differences resolved?
3. What rules do you have in place, e.g., are non-public warrants held at cost or zero?
4. What is the frequency of valuation – daily, weekly, monthly, quarterly?

5. Are incentive fee calculations based on realized gains/losses only or both realized and unrealized?

Strategy, Style, and Asset Class Specific Questions

Q. Trading

1. What types of trading orders are used? Are different types of orders used for entry and exit?
2. What is the average gain per winner? Average loss per loser? Win-loss ratio?
3. Is trading done during regular market hours? Pre-market or after-market? 24 hours?
4. Is all trading done onsite from the main location? If any trading is done offsite, please elaborate.
5. Who has the authority to place trades?
6. Are large orders broken up? If yes, please explain how.
7. What percent of trading is electronic? What percent is via the exchange floor? Other methods?
8. Does trading frequency tend to increase/decrease during profitable/unprofitable periods?
9. Do you incorporate opportunistic trading? If so, describe the methodology, types of scenarios, and how it is implemented. Give an example.
10. Do you establish position limits for correlated market groups that may not be within defined sectors (i.e., positive correlation between gold and equities, or between equities and interest rates)?
11. Does adding or reducing a position in one market ever influence the size of positions held in other markets? If yes, please explain.
12. Are losses linear in the positions/portfolio? That is, are losses proportional to underlying instrument price changes or grow exponentially larger/smaller (concave/convex curve)?
13. How do you react if the volume and/or open interest of a market in which a position is held are suddenly reduced significantly?
14. What types of stops are used (e.g., price stops, time stops, volatility stops, money management stops, etc.)? If stops are used, are they actual stop orders placed with the broker, or executed manually upon reaching stop price?
15. If a stop is reached, is the entire position closed out at one time, or gradually? Would there ever be multiple stops for the same position? Please explain.
16. Are stops adjusted as a trade progresses or under any other circumstances?
17. Can you give an example of a trade that was executed poorly or in error? Can you give an example of a trade that was executed well?
18. Who does trade reconciliation?
19. Who supervises trading activity?
20. How often do you adjust equity levels?
21. What are the average annual commissions as a percentage of assets? Does this vary significantly from year to year?
22. How do you allocate trades between different funds/accounts?

R. Systematic

1. What is the basic categorization of your system/methodology (trend-following, counter-trend, short-term, etc.)?
2. Who developed your system/methodology? Are they currently employed by your firm? How was your system/methodology developed?

3. What types of data inputs are used by your system (price, volume, fundamentals, daily data, hourly data, tick data, etc.)?
4. Do you think of the model as one comprehensive entity or as discrete individual models or strategies? How many systems are utilized?
5. If you use different models, how is money allocated between them? Do they operate independently of each other?
6. Are there attempts to optimize a mix of strategies?
7. How are conflicting signals resolved?
8. Do all of the models or programs use the same risk management methodology? Are any adjustments made between markets?
9. Do you believe that your models emulate fundamental macro factors using price-based rules?
10. Does your system utilize machine learning, artificial intelligence or neural networks?
11. Does the system use different parameters for different commodities or sectors? If yes, how do you prevent “curve fitting”?
12. Does the system control all entries and exits or are there overriding factors such as an absolute stop-loss, etc.? Are there any macro-type rules (e.g., reduce position sizes during high volatility)?
13. Please describe the circumstances, if any, when the system may be overridden and discretion applied.

S. Managed Accounts

1. How are positions established for new accounts, liquidated for terminating accounts, or adjusted for existing accounts to reflect material changes in account equity? Please explain in detail.
2. How are executed trades allocated to accounts? Please explain in detail, particularly with respect to split fills. Are any positions allocated as of the end of the trading day rather than prior to or at the time of order entry?
3. Are new accounts put into all existing positions for the strategy, or are only new signals taken?

T. Equity, Futures, and Options

1. Do you invest in IPOs or new issues? Are criteria different than for other positions?
2. Have there been any major “out-trades”? If so, please describe them.
3. Do you put on positions as pair/spread trades? If not, does the portfolio sometimes have what is effectively a pair trade (although each position managed independently)?
4. Do you have any special relationship or affiliation with any broker?
5. If you trade EFPs (Exchange-For-Physicals), please describe the manner in which appropriate documentation is maintained, list all markets in which they are traded, and list the counterparties with whom they are traded.
6. If options are traded, please explain which types. Long/short only? Primarily puts or calls? Covered only, naked for hedging, naked for profit, spread?
7. Please provide a complete list of executing brokers used. Do you use give-ups for futures? If yes, please detail give-up fees charged by those brokers.

U. Lending

1. Is the portfolio marked up/down as interest rates fall/rise?
2. How many days in arrears before write-offs are commenced?
3. If in arrears, what is the markdown schedule, all the way to zero?
4. What are your expected recovery rates on written-off loans, and what is the timing of receipt?
5. Do you discount the portfolio against an expected default curve?
6. Do you maintain a loan loss reserve?
7. Do the loans include prepayment penalties? If so, what is the average prepayment penalty and what percent of the portfolio includes such penalties? What is your expected prepayment speed?
8. Who services the loans? Is there a backup servicer?
9. How are loan-to-value ratios determined and by whom?
10. What is the average interest rate charged and duration of the portfolio?
11. What are historical default rates for the loan portfolio by year? Historical recovery rates?
12. What forms of collateral are used to secure the loan portfolio, if any?
13. Do the loans include covenants? Describe the covenants.
14. What percentage of the portfolio is self-amortizing and what percentage has balloon payments?
15. Are the loans in your portfolio rated by any credit agencies? If so, by whom are they rated and what is the portfolio allocation by rating?