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## Due Dilligence:
## A managers perspective

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# Due diligence: A manager's perspective

*Land mines that consultants can help clients avoid.*

*Robert D. Arnott*

Vast sums of money are forfeited by pensions, endowments, and other institutional investors as a result of slippage, mismanagement, and poor timing of shifts in portfolio structure. The consulting community is sometimes part of the problem. It often serves to ratify costly decisions that the client wishes to make. But the consulting world can be *and should* be a key catalyst for solving these problems.

In one sense, the investing world faces a hierarchy of pressures that virtually assure that active decisions will be counterproductive more often than not. The portfolio manager faces pressure from the head of an investment organization (pressure to perform, pressure that increases as performance lags). The investment officer of an investment management firm faces pressure from the client, the pension officer. Pension officers face pressures from their own boards of directors. Indeed, the board of directors can be viewed as the "client" of the pension officer.

In essence, all these pressures stem partly from human nature, and partly from a clash of cultures. Human nature encourages us to do *more* of whatever has been recently successful, and to give up on what has been recently unsuccessful. Obviously, this pattern is often counterproductive in investment management.

There is a clash of cultures at work here also. It is most notable at the board level, and the pressures ripple down through the whole hierarchy of the decision process. That clash of cultures is a result of the fact that board members most typically are successful business executives who have achieved their positions by aggressively rewarding success and aggressively punishing failure. Yet, ironically, that pattern of behavior tends to be counterproductive in the investment management process.

What follows is an investment manager's perspective on the key consulting challenges that face us all.

- The greatest challenge is avoiding the land mines that afflict investment results (see "Plugging the Performance Drain" [1990]).
- It is imperative to address the Seven "P's" of manager selection.
- There are obvious and important pitfalls associated with looking at investment performance.
- Finally, we should deal with what we might call "performance hooey," detecting misrepresentation.

#### WHERE ARE THE LAND MINES?

Let's look at the first of the land mines in a little more detail. The greatest land mines in institutional investment management are summarized in Table 1. One of these is idle cash reserves. Federal Reserve data today show that the average pension fund in the United States has 12% in idle cash reserves.

During a declining market, cash is a wonderful place to be invested; it is the best performing asset class. But, in the long run, cash is the worst performing asset class. Over time, a fully invested balanced portfolio outperforms cash by an average of perhaps 4% a year. This means that the average pension fund in the United States is walking away from forty-eight



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TABLE 1

Where Are the Land Mines?

- Idle Cash Reserves Erode Long-Term Performance.
- A Drifting Asset Mix Assures the Wrong Allocation at Market Turning Points.
- Style Mismanagement: A Formula for Disaster.
- Client Risk Tolerance: Misjudge it at your Peril!

basis points a year in annualized returns. A $1 billion fund, losing forty-eight basis points each year, loses roughly $150 million at the end of a decade, with compounding, as a result of idle cash reserves alone. These costs are a terrible burden.

A drifting asset mix is another problem. This assures that we are overweight at market highs and underweight at market lows. This drifting asset mix comes as a direct consequence of the normal policy statement for many pension funds, which typically specifies a normal asset mix *and a range*. That range is often wide enough to allow the mix to drift over the course of an entire market cycle without any need for adjusting the asset allocation.



This particular land mine is compounded by the fact that ad hoc shifts in asset allocation are most typically made at exactly the wrong time. How many institutional investors were bailing out of stocks at the end of the market crash in 1987, or at the end of the horrendous bear market of 1973-1974? How many were giving up on bonds in 1980, 1981, and 1982, during a period of peak yields, just in advance of the biggest bond bull market of the century? In many instances, tactical bets on the markets masquerade as shifts in asset management policy.

Style mismanagement is another land mine. We all know that different styles of investment management carry rewards at different times. Sometimes growth managers perform best; at other times, value managers are best. Sometimes big stocks outpace small; other times it's the small stock managers who take the brass ring. Style mismanagement most typically takes the form of watching performance relative to a market aggregate index, such as the S&P 500 or the Wilshire 5000. This leads to counterproductive decisions.

We are aware of one major institutional investor that made the decision in June 1990, after a period of eighteen months in which it had *wonderful* performance as a result of a growth bias, to throw in the towel on most of its remaining value managers because they had been so dismal. This kind of shifting of style, in response to recent relative performance, is terribly counterproductive because human nature will often encourage us to make such shifts in precisely the wrong direction at precisely the wrong time.

The final land mine is more subtle. It is client risk tolerance. Most clients are less risk-tolerant than they think they are. This applies to more than just the pension officer. It also applies to the "client's client," the board of directors to whom the pension officer reports. Most clients will look at a strategy with an interesting set of long-term performance numbers, with a historic worst-case scenario, a shortfall of 500 or 1,000 basis points, and say, "Given strong long-term performance, I can accept that risk."

But, looking back retrospectively is not the same as living through it. Most clients have a risk tolerance that is lower than even they believe it is. Understanding a client's risk tolerance is absolutely critical in the institutional investment management process. This knowledge is essential to the fulfillment of our fiduciary responsibilities to provide the best guidance that we can to our clients.

In essence, *the most treasured asset in investment management is a steady hand at the tiller*. This is a rare attribute. One of the most important services that consultants can provide is to help clients maintain that steady hand at the tiller. That requires not exceeding the client risk tolerance in the first place.

We are aware of one very large fund that has had an extremely successful equity process over the past decade, adding an average of 200 basis points per year over median fund results. 200 basis points may not sound like a huge increment, but, when you're dealing with the management of a multi-billion dollar fund, it is a very large increment over passive results. In 1989, the fund had a 7% shortfall. That exceeded the risk tolerance of the board of directors, which ordered the indexation of much of the equity assets, despite a decade-long history of 200 basis points per year incremental returns *inclusive* of the shortfall in 1989.

All these potential errors represent key land mines. All are land mines that consultants can help clients to avoid.

## THE SEVEN "P'S" OF MANAGER SELECTION

In evaluating an investment manager in the effort to fulfill "due diligence" responsibilities, the points in Table 2 are important. It is also worth noting (although it is uncomfortable for us to admit this) that there is *no* investment manager in the country who gets a perfect score on all of these issues. They are all important, and how you weigh them is largely up to you. But each issue represents an area where a manager might turn out to be a disappointment.

### Philosophy

We put philosophy first, because if a firm does

TABLE 2

The Seven P's of Manager Selection

1. Philosophy
2. People
3. Process
4. Product
5. Progress
6. Performance
7. Price

not have a clearly articulated, well-defined, and sensible philosophy on investing, chances are that its historic results, whether good or bad, are largely luck. Future results will also be hampered by the lack of a clearly focused investment process. We must also ask whether this philosophy is sufficiently independent of conventional wisdom to offer reasonable hope of persistent performance.

John Templeton once remarked that conventional investing yields conventional results. This is a truism that many investors forget. Only those with the courage of convictions, and a clearly defined investment philosophy, are likely to deliver the superior long-term performance that we all seek.

**People**

There are several questions that need to be asked about a firm's people. Do they have the skill to add value? Do they know how to do their jobs? Do they know how to translate the firm's philosophy into a process and into the actual portfolios?

By no means less important, do they have the talent to adapt? While at Salomon Brothers, I was occasionally brought into various investment management firms as, more or less, the "doctor" to fix a broken investment process. What I saw as perhaps the greatest shortcoming in many of the most successful and largest investment firms was a lack of will or of talent to *adapt*.

The nature of market inefficiencies is constantly changing. If an investment manager has a good idea and a good process, he or she will attract imitators. Those imitators will have the effect of arbitraging away the very inefficiency that that manager has been exploiting. Therefore, if a process is a good one, it sows the seeds of its own demise. It may happen quickly, or it may happen slowly. But many institutional investors show remarkable inertia and a lack of

TABLE 3

Philosophy

- Does the firm have a clearly articulated, well-defined, and sensible philosophy on investing?
- Is the philosophy sufficiently independent of conventional wisdom to offer reasonable hope of persistent performance?

desire to adapt to changing market circumstances and to the changing nature of the market inefficiencies that are available to us.

Is the structure and compensation in place to keep the key people? Are the key people (who are the *reasons* that you hired that manager) going to be there two years, five years, ten years from now? Are there gaps in the organization? An organization may be great at research and lousy at implementation. That's a problem. It's not necessarily sufficient reason to exclude a manager, but it is something worth noting.

Perhaps most importantly, do the people function well as a team, or is theirs an organization where talent comes and goes?

TABLE 4

People

- Do they have the skill to add value?
- Do they have the talent to adapt?
- Is the structure/compensation set to keep key people?
- Are there gaps in the organization?
- Are they a team?

**Process**

Are all elements of the process optimally designed in accordance with the firm's philosophy? The process is the mechanism by which philosophy is translated into product. Therefore, it is key that *all* elements of the process be designed with an eye toward a fit with the firm's philosophy. If it's a quantitative process, is the trading process judgmental? These are the kinds of questions that merit attention.

Does the firm have the operational infrastructure to fulfill its potential, to translate its philosophy into product? Does the firm have the research and capability to adapt to a changing world? Simply having the will to adapt is not enough. There has to be a capacity in place to permit that adaptation.

Is there slippage between the investment decision process and the implementation process? This is another area where many firms fall down. The implementation process must be as disciplined as the investment decision process itself. To borrow a phrase

TABLE 5

Process

- Does the firm have the operational infrastructure to fulfill its potential?
- Does the firm have the R&D capability to adapt to a changing world?
- Is the choice of instruments for implementation sufficiently opportunistic?
- Are all elements of the process optimally designed in accordance with the firm's philosophy?
- Is there "slippage" between the investment decision process and the implementation process?

from Shakespeare, "There's many a slip twixt cup and lip." This certainly afflicts the investment industry more than most industries.

Is the choice of the instruments for implementation sufficiently opportunistic? Many institutional investors err on this point. As with all of these questions, a shortcoming in this area isn't necessarily a reason for excluding the manager, but it is a shortcoming that one should be aware of as part of the due diligence process.

Consider an example. Many global managers invest by trading from groups of stocks in one country to groups of stocks in another country. How many of them use the widely available and relatively liquid futures markets to make such shifts on a cost-effective basis? The list is comparatively short. Many investment managers have an opportunity to improve their process by taking advantage of new instruments.





#### Product

In terms of product, the first and obvious question is, "Is this product a good fit with the immediate- and long-term needs of the client?" If a client is looking for a global manager, we don't have to worry about whether a manager is good, bad, or indifferent on U.S. bonds. We need to concentrate attention on the managers who represent a good fit with the immediate needs of the client. But, we can sometimes overlook the long-term fit. Are the product and the manager a good fit with the long-term needs of the client?

Is the product well-designed? Is it the best possible way to effect the firm's philosophy? The purist might argue that the answer to this question for every manager and every product is "no"; after all, there is always something that could be improved. But, how closely does the product fit this "ideal?" Is the product flexible and adaptable enough to represent a good fit with the unique needs of clients?

Clients do have different needs, and often products are canned: The client must take the "plain vanilla" or take nothing at all. Inflexible products are the norm in our industry; for the prices that these products command, *this should not be so.*

Very importantly, is there adequate communication to help the clients stay the course during inevitable dry spells? Any investment process will have periods of disappointment. In the absence of an effective communication mechanism, clients may not stick around, even with the very best products.

#### Progress

There may be many pitfalls in manager selection, but don't reject innovation in your care to avoid all of them. The best investment ideas often have their greatest successes *when they are new.* When they are new, they often don't have a real-time track record. Don't reject simulations out of hand. To do so will assure that your clients never benefit from new ideas until they are at least a little stale. Just know very well what kind of simulation you are looking at.

Progress and innovation, often ignored, are actually very important. The nature of market inefficiencies is constantly changing. The manager who cannot or will not adapt to a changing world is doomed to steadily diminishing performance.

Some investment managers proudly claim that they are using the same process they used five or ten or fifteen years ago. Sponsors often find such a claim reassuring. They should not. It is instead an admission of failure. Such managers are admitting that for several years they have found no substantial way to refine or improve their process. They are admitting that they have found no subtle change in the way that the capital markets respond to their process.

Innovation is an important source of investment performance. Don't reject new ideas with the notion that "We have to wait five years and see how this performs." If you do, you will often be missing the very best performing years of a new idea. In essence, "due diligence" requires that we evaluate ideas on their merits, not necessarily on historic results, real or simulated.

#### Performance

There is a marvelous piece in *Pensions and Investments* debunking the importance of historical performance (Barksdale and Green [1990]). We all

TABLE 6

Product

- Is the product a good fit with the immediate- and long-term needs of the client?
- Is the product well-designed? Is it the best possible way to effect the firm's philosophy?
- Is the product flexible or adaptable enough to represent a good fit with the unique needs of clients?
- Is there adequate communication to help clients stay the course during the inevitable dry spells?

TABLE 7

Progress: The Merits of Innovation

- The best ideas may offer their strongest results when new.
- New ideas lack a track record.
- Simulations, if well-crafted ex ante tests, have merit for exploring and understanding new ideas.
- New ideas should be judged on their intellectual merits, not their numbers.

know that when a manager is hired, prospective performance is extremely important. But, as it turns out, historic performance has remarkably little correlation (indeed, many argue zero correlation) with subsequent performance. Therefore, performance is relegated to the sixth most important element.

This rank should not diminish its importance. If you are looking at a roster of managers, it doesn't make sense deliberately to choose the ones who are in the bottom quartile just because historical performance doesn't matter. Fiduciary, legal, and liability considerations would all dictate that historical performance does matter in investment management, perhaps far more than it ought to.

Some other performance questions are worth noting. Has long-term performance been consistent with the goals of the strategy? Let's suppose you are looking for a growth stock manager, and let's suppose that a particular growth stock manager happened to have very good performance in the third quarter of 1990, during a plunging market when growth stocks were hit particularly hard. The natural question in that instance is, "Is this *really* a growth manager?"

Have results been superior for the right reason? By definition, one out of four managers is going to be in the top quartile. The question is simple: Are they there as a result of their investment philosophy, or by the luck of the draw?

What are the results relative to tracking error? Now, why do we say "relative to tracking error?" Let's suppose we have two managers, Manager A and Manager B. Manager A has an $R^2$ of 96% and has outpaced the market by 3% per year for the last five years. Manager B has an $R^2$ of 80%, and has outpaced the market by 4% per year over the same five years. Manager A, relative to the risk taken, has done a far better job than Manager B.

It is important *not* just to take return numbers at face value. Indeed, there are some risk-controlled core strategies that would *never* be in the first or fourth quartile; the very best of these will be fairly persistent in the second quartile. That's a worthy achievement with a risk-controlled strategy. It is always important to look at returns relative to the risks associated with those returns.

Are the results real-time or simulated? Real-time results are more useful, more valuable, more reliable, and more important than simulated results, but that isn't to say that we should always discard simulated results. No new investment idea can ever begin with a real-time track record. This is an important issue that we revisit shortly.

What results are *not* being discussed? Are there any failed strategies? Are there strategies that the manager chooses not to talk about because they have been a disappointment?

TABLE 8

Performance

- Has long-term performance been consistent with the goals of the strategy?
- Have results been superior? For the right reasons?
- What are the results, relative to tracking error?
- Are results real-time or simulated?
- What results are NOT being discussed? Any failed strategies?
- Why the focus on performance?

Last of all, why the focus on performance in the first place? We all know that historic performance is not a good predictor for prospective near-term future performance. The answer to this question is fairly straightforward: Clients buy hope, not performance. You cannot know what the performance will be over the next five years. You can only hope that performance will be good.

So, the process of due diligence is to assess whether the people, the philosophy, the process, the product, and its progress are likely to provide good future performance. Clients buy hope, not performance, hence the focus on historical results.

The ironic twist is found on the flip side: Managers *sell* hope, not performance. They cannot say with certainty that they will add 2%, 5%, or 10% per year over the next five years. What they can do is to sell hope, and suggest that their process is more likely to deliver results than their competitors. If managers sold performance, not hope, managers would embrace incentive fees. Most don't.

**Price**

What about price? Price is surprisingly important. Suppose the average investment management fee paid by the pension sponsor is about 0.5% on total assets. If the long-term total return for the fund is likely to be 10% or 12%, then 4% to 5% of the total return goes to pay fees. It looms larger, but still not excessive relative to a hoped-for "alpha" of 2% or more. It is very large, however, relative to the more typical alpha of 0% or -1%, particularly when compared with passive management, which offers a zero alpha at very low fees.

Interestingly, few managers embrace incentive

TABLE 9

Performance: Promises and Pitfalls

- Clients buy HOPE, not performance. Hence, the focus on historical results.
- Managers SELL hope, not performance. Else, managers would embrace incentive fees.

fees. Suppose the fee were set at 20% of the alpha. Obviously, managers earn a handsome fee if they can add 10% to returns. On the other hand, long-term alphas rarely exceed 2% to 4%. With an incentive fee of 20% of the alpha, the sponsor will pay 1/2% on total assets only if it is earning a very sound 2.5% alpha on those same assets.

It is beyond the scope of this article to discuss the positives and negatives of incentive fees. We do postulate that managers who resist the notion of a fee set at 20% of their alpha are telling you something about their product. To be sure, there are negatives associated with incentive fees, and these negatives may be ample reason to shun them. The reaction does tell you something about the confidence managers have in their ability to deliver incremental returns.

#### PERFORMANCE "HOOEY"



Let's talk about "performance hooey," and the resulting need to detect misrepresentation. There are several forms of misrepresentation that are sadly common in the institutional community, and thus merit some intensive focus.

- Beware selective reporting. Suppose a manager retrospectively chooses the best-performing portfolio, and reports the results to the consulting community as representative of the product. Averages across multiple portfolios sharing a similar investment style and process are more relevant and more reliable.
- Beware cumulative wealth differences. This is a subtle problem. We recently saw one interesting example. One manager we know has added just over 250 basis points, per year, for seven years. That's a fine achievement and an excellent incremental rate of return. With compounding, this has made the difference between a 180% cumulative return and 232%. The representation to the world, however, is that the process has added over 50% in seven years!

To our way of thinking, that's misrepresentation. In fact, that end-point wealth is some 18% higher than with passive results, not 50%. The results have also benefited from the rising tide of strong equities and bonds since 1983. This manager is wrongly taking credit for both the alpha and the growing value of that alpha resulting from rising markets.

TABLE 10

Performance Hooey:
Detecting Misrepresentation

- Beware Selective Reporting
- Beware Cumulative Wealth Differences
- Beware Backfitting
- Don't Reject Innovation in Trying to Avoid the Pitfalls

Representations of cumulative performance can be a source of serious misrepresentation. Be very sure that you know whether you are looking at the difference between end-points on a chart (in this example, a 52% "gain") or the cumulative incremental wealth relative to the benchmark (which in this example would be 18%), or annualized incremental returns (in this case, a 2.5% excess return).

In this instance, a relative return of 2.5% or 18% or 52% are all, technically, correct. On any of those three bases, this particular product has done well. But, the representation that the manager has added over 50% is a serious distortion.

#### SIMULATIONS—USE AND MISUSE

Beware of backfitting. There are two major types of simulations, backfitting and ex ante simulations. Backfitting (or ex post simulation) involves developing a model based on historic results and then testing the model on the same data.

Suppose you take the last ten years of data, and you build a model based on that data. You find the variables that fit the data, variables that turn out to be very good at explaining what happened in those ten years. Then you test it on the same ten years of data. Voila! You have a model with marvelous back-test numbers. But, it doesn't mean a thing. Ex post testing of this sort is of limited value in assessing whether the process can add value.

There is a second type of simulation: Ex ante simulation. Suppose you build a model based on historic results, and then you test it on *subsequent* historic data, not included in the data used to design the model. Then you move the window forward. You take into account this new data, build a model and test it on the next span, and so forth. This is a most laborious process, but it is the only honorable way to develop a simulation.

Two caveats remain:

- First, there is no such thing as a pure ex ante simulation. We are an organization that is involved heavily in the development of new products. New products cannot exist with a real-time track record. For this reason, we make use of historical simulations in product design. Even with an ex ante simulation, however, our biases, which have been shaped by our own historical experience, are built into the choice of variables to examine. Even an ex ante test will reflect these biases.

So, no pure ex ante simulation is possible. Accordingly, expected returns should be pegged somewhat lower than even a well-crafted ex ante simulation. On the other hand, the responsible researcher can and should develop an ex ante simulation that comes as close to realistic testing as one practically can.

- Second, caveat emptor. Know what type of simulation you are looking at. In my experience, you can deliver 50% to 80% of the historic performance of a proper ex ante test, but you will deliver far less of the results from an ex post backfitted simulation.

These caveats merit attention. Subject to these caveats, simulations serve a useful function. They can form the basis for innovation. They can be a useful tool in shaping and refining products. Properly designed, they can help us to shape expectations for the future (with an appropriate "haircut" reflecting the fact that the future will differ from the past). They are often the only record available for the newest and best ideas. Accordingly, with a suitable dose of salt, they can play an important and useful role in investment management.

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