White Paper No. 32

The Challenge Of Identifying Managers Who Will Outperform

Greycourt

► **Greycourt White Paper**

White Paper No. 32 - *The Challenge of Identifying Managers Who Will Outperform in the Future*

Working with long-only[1] money managers is the aspect of the investment process that is usually the most interesting for investors but that all too often adds least to the growth of investor wealth. In fact, one of the principal methods of identifying investors who will encounter little success over time is to observe those who are most obsessed with money managers. The reason that money managers typically subtract value from, rather than add value to, the investment process is not that money managers are incompetent but that their services are, on the whole, overpriced relative to the value they bring to their customers. In the asset classes that matter most to investors – US large and mid-cap stocks and bonds – most managers will under-perform over time by at least an amount equal to their fees and trading costs, to say nothing of taxes. In the more complex and obscure asset classes, where useful information is difficult to come by, talented and hardworking managers may modestly add value net of all costs.

The main reason investors spend so much time and emotional energy on working with managers, despite the modest-to-negative return we are likely to receive for our efforts, is that money managers are actual human beings, while almost all other aspects of the investment process are purely intellectual. It's a lot more fun and a lot more interesting to spend time talking with an intelligent money manager than it is to run mean variance optimization algorithms or participate in long conference calls with accountants about tax managing our portfolios.

In this paper we try to address a couple of the principal issues associated with money managers. Specifically:

- ♦ We analyze why it is so difficult to identify best-in-class managers in time to profit by investing with them.
- ♦ We look at why it is that good past performance can be completely meaningless.
- ♦ We identify the (mainly qualitative) characteristics of best-in-class managers.

[1] This paper doesn't address hedge fund managers, but what we say here goes even more for finding good hedge fund managers. Lacking transparency, lacking normal custody arrangements, and frequently selling short and/or employing leverage, mistakes in hiring hedge funds can be far more disastrous than mistakes in hiring long-only managers.

- We disclose how one open architecture firm (guess which?) goes about the process of identifying best-in-class managers.
- We discuss, briefly, some approaches to optimizing the mix of managers in our portfolios.

The Challenge of Identifying Best-in-Class Managers

It is almost impossible to express how difficult it is to identify truly outstanding portfolio managers in time to profit by investing with them. By "truly outstanding," we mean managers whose outperformance relative to the broad markets and to other managers will be so great as to result in significant wealth creation for their investors. Consider that since 1970 several thousand Americans have won large lotteries – lotteries large enough to result in significant wealth for their winners. But since 1970 how many Warren Buffetts have there been? More than one, to be sure. But not thousands. Not hundreds. Not even dozens. Statisticians will tell us that playing the lottery is a fool's game,[2] that in the aggregate lottery players lose far, far more money than they win, and that even the remote possibility of gaining great winnings doesn't begin to justify the cost of playing. What would statisticians tell us about the challenge of finding outstanding money managers?

Periodically, Greycourt takes a look at manager out- or under-performance over longer periods of time. Recently, we took a look at the percentage of US large cap mutual funds that have outperformed the Vanguard S&P 500 Index Fund (Institutional) over the past ten years (through 12/31/02). Of the 3,724 US large cap stock managers in the Morningstar database, only 500 had a ten-year track record,[3] only 98 outperformed on a pre-tax basis, only 79 outperformed on a pre-tax, risk-adjusted basis, and only 40 (forty!) outperformed on an after-tax, risk-adjusted basis.[4] Now if you believe that, back in 1991, you could have picked those forty mutual fund needles out of the huge Morningstar haystack, you are a very confident investor!

And if identifying great managers weren't difficult enough, *timing* in the enterprise is everything. People who invested with the legendary hedge fund manager, Julian Robertson, early in the game had little idea how much money they were about to make. But people who invested with Robertson late in the game had little idea how much money they were about to lose. Same great manager, very different outcomes.

And the same phenomenon is commonly encountered on a mass basis. Consider that between 1984 and 2000, while the S&P 500 was producing an annualized total return of

[2] Voltaire supposedly remarked that a lottery is simply a tax on stupidity.

[3] Which tells us something important about survivorship bias.

[4] This work was performed by Gregory R. Friedman, Greycourt's Chief Investment Officer.

16.3%, the average mutual fund equity investor realized an annual return of only 5.3%.[5] Those investors could have achieved an annual return of 5.8% by simply investing in risk-free Treasury bills. True, equity mutual funds substantially underperformed the market during that period, but the worse culprit was extremely poor market timing by investors – retail investors chased performance, constantly selling out of funds that had underperformed (just as they were about to outperform) and buying funds that had outperformed (just as they were about to underperform).

Finally, outperformance among managers tends to show little persistence over time, at least if we define outperformance to mean "consistently landing in the top quartile of all similar managers." Not long ago Greycourt looked at persistence even among managers in a sector of the market that is generally considered to be inefficient, and where talented managers should have room to run – namely, small cap managers.

We prepared an analysis using a group of 57 small cap growth managers and compared relative performance over time (see Exhibit A).[6] Most investors believe that capable managers should be able to add value in inefficient sectors with reasonable consistency over time. Hence, the purpose of the exercise was to determine how often managers remained outstanding performers over time. Exhibit A illustrates the difficulty managers face in maintaining their top performance rating over even relatively short periods of time. Of the top fifteen managers in 1995, only two remained in the top fifteen by 2002. On the other hand, the manager who finished dead last (57th) in 1995, was the eleventh rated manager by 2002. In other words, investors hiring any of the top performers in 1995 would have been sorely disappointed by 2002.

Adding value is determined by the extent of wealth accumulation. To illustrate this point, we assumed that each of the 57 small cap growth managers referred to above was given $1 million at the beginning of 1996 and calculated the wealth accumulation through 2002 based on each manager's returns over that period. The best performing manager at the end of 2002 had accumulated $3.3 million. Unfortunately, that manager had been ranked number 48 of the 57 managers in 1995, and hence was highly unlikely to have been hired in 1996. The worst performing manager at the end of 2002 had reduced client wealth to $700,000 over the period. It will not surprise you, we hope, to learn that the worst-performing manager had been ranked number 1 of 57 in 1995. That manager was highly likely to have been hired by investors in 1996.

The non-persistence of manager outperformance wasn't limited to these unhappy examples – non-persistence was characteristic of the entire group. As noted, only two of the top fifteen managers in 1995 appeared in the top fifteen based on accumulated wealth through

[5] *Quantitative Analysis of Investor Behavior* (DALBAR, 2001 Update).

[6] This study was performed by Greycourt Managing Director Claude R. Perrier and by Patrick M. Parisi, Greycourt's Director of Manager Research.

2002, and a full *two-thirds of the original top performers in 1995 had fallen below the median manager* in wealth accumulation by the end of 2002.

The Main Problem: Recent Good Performance Is Almost Irrelevant

The main mistake investors make in engaging managers is hiring a firm that has experienced good recent performance – say, a better-than-average five-year track record. The reason this is a mistake is that, more often than not, a good five-year track record says virtually nothing about how the manager is likely to perform over the next five years. That track record *might* indicate that the manager will continue its outperformance, but it is far more likely that the track record indicates one of the following:[7]

The good track record is simply the result of "the law of small numbers"

In his endlessly amusing book, *A Mathematician Plays the Stock Market*,[8] John Allen Paulos points out that we tend to misunderstand the role chance plays in the outcomes of apparently even games. Imagine that two people – we will call them George Soros and George Bozos – flip a fair coin 1,000 times each, competing to see who can come up with the most heads. We tend to imagine that, after that many flips, the outcome would almost always come out very even, with Soros and Bozos each getting about 500 heads and 500 tails. We infer from that conclusion that if one of the players actually ends up well ahead of the other, that outcome must be due either to an unfair coin or to the special skill of one of the players.

In fact, as Paulos points out, there is a far greater probability that after 1,000 fair coin flips, Soros or Bozos would be well ahead of the other, having flipped 525 heads to, say, 475 heads. We might call this "the law of small numbers," that is, 1,000 flips may seem like a lot, but actually it's not enough observations to ensure that Soros and Bozos will come out even. Thus, if 10,000 people all flipped a fair coin 1,000 times, the aggregate results would tend to be that a goodly number would end up with pretty darn good records and an equal number would end up with pretty sorry records. A very few would have spectacular records and a very few would have abysmal records. Far fewer than we might expect would have "even" records.

This outcome looks alarmingly like the outcome of money manager five-year track records (which are based, after all, on only sixty monthly observations, or in some cases on only twenty quarterly observations): a tiny number have spectacular records, a tiny number

[7] We list these possibilities merely as examples; there are many other ways in which "a good five-year track record" can prove to be meaningless to future clients of the manager.

[8] (Basic Books, 2003). Paulos's other books are also well worth looking into, especially *Innumeracy: Mathematical Illiteracy and Its Consequences* (1988), and *A Mathematician Reads the Newspaper* (1995).

have abysmal records, a goodly number have pretty darn good or pretty darn bad records, and only a few have average track records. Investors who engage managers purely on the basis of good five-year track records are likely to fall victim to "the law of small numbers."

The good track record is simply the result of fortunate timing

Imagine a money manager who has been in business for fifteen years and who, for thirteen of those years, has reliably turned in undistinguished performance. But during the past two years, for reasons unknown to us or the manager, performance has been quite good. These two "lucky" years of performance pulled the manager's five-year record up to the point where it now has a very creditable five-year track record. As a result, many unfortunate investors, impressed with that record, will engage a manager who is clearly undistinguished and who can be relied upon to continue in that vein.

The good track record is simply a result of style rotation

Let's consider two managers. We'll call them Value Capital Investors (VCI) and Capital Value Investors (CVI). Both are deep value managers who do well, naturally enough, when value stocks are in vogue and less well when growth stocks are in vogue. Both have been in business for many years and have built their businesses in the same way. Just after periods of value outperformance, when their track records are strong, VCI and CVI both aggressively market their records, building their asset bases. After periods of value under-performance, when their track records are weak, VCI and CVI both work hard to keep their clients from defecting. The result of all this is a repeating pattern of strong asset growth followed by weak asset growth or even asset contraction, followed by strong asset growth, etc.

But there two things wrong with this picture. The first is that investors are constantly making the wrong decisions about VCI and CVI: engaging them just when they are about to enter a period of weak performance and terminating them just when they are about to enter a period of strong performance. Investors are, in effect, buying high and selling low.[9]

The second problem is that VCI turns out to be a very competent manager, while CVI is well below average: investors should be engaging VCI and should be avoiding CVI. But investors don't do this because the differences in aggregate performance between the firms are overwhelmed by the sector rotation effect: being a deep value manager had more impact on a manager's performance than did being a good manager.

[9] This is a measurement problem, of course: investors are measuring both managers against something other than the appropriate benchmark (in this case it would be something like the Russell 100 Value Index). Over very long periods, it's appropriate to measure deep value managers (and aggressive growth managers, etc.) against the S&P 500. But if we do that over shorter periods we will find ourselves constantly buying high and selling low.

The good track record is genuine, but the manager is a changed firm

Finally, the manager's good five-year track record may be unimpeachable, but investors who engage the manager will find that they have hired a very different firm from the one that produced the good performance. The firm may have changed, for example, because the asset base of the firm has grown dramatically and the founding professionals can no longer both manage the business and pick good stocks. (There is no necessary correlation between a people's ability to pick stocks and their ability to manage a business.) Or the firm may have changed because the investment professionals who produced the track record are no longer with the firm. Or the firm may have been sold, and the original owners are now rich and lazy or, worse, reporting to some bureaucrat in Duluth.

In other words, in addition to the track record being real, it is always useful for investors to be sure that the firm that built the track record is the firm we are hiring.

Characteristics of Best-in-Class Managers

It is, alas, not possible to define the characteristics of best-in-class managers in a way that is detailed enough to enable investors to apply a simple template and see if the manager fits it or not. Too much judgment and experience are involved. Nonetheless, the main characteristics of best-in-class managers are simple enough to state. They are as follows:

- *Investment philosophy*. The quality of a portfolio manager's investment philosophy is perhaps the single most critical element in judging whether the manager is likely to be capable of sustained outperformance. Unfortunately, this issue is also likely to be of little help to individual investors in identifying best-in-class managers. The reason is that there is no such thing as a money manager who can't articulate an investment philosophy that sounds good. The only way to know whether or not what sounds good actually holds any water is to put the manager through a thorough, multi-level scrutiny, as described above, ending with an intensive on-site grilling of the manager and its senior team by an investment professional who has had vast experience interviewing and working with managers.

- *Discipline*. Even the most solid investment philosophy won't create wealth unless it is implemented in a disciplined manner. To determine whether the manager is a disciplined investor and is sticking to its philosophy in good times and bad, it is necessary to conduct a detailed review of the manager's performance during periods when the wind has been at his back and when the wind has been in his face. Attribution analysis and a close examination of investment decisions that turned out badly can shed important light on these questions. In particular, "sell discipline" – strict rules that determine when a security is to be sold – is important. As noted above, sell discipline tended to disappear during the bull market of the 1980s and 1990s. Under more normal market conditions, however, sell discipline is crucial. Otherwise, managers will tend to hold appreciated securities far too long and to believe that they are "smarter than the market," therefore holding on to under-performing securities that should be sold.

- *Experience*. Any manager can outperform over a short period of time, and investors who hire such managers after that period of outperformance will almost always – almost always – be disappointed. The five-year rule is intended to enable investors to observe a manager's performance over a full market cycle, that is, a period of time during which the manager's investment style and philosophy are in vogue as well as a period of time when they are out of fashion. Hence, five years might be too short a period of time or, in a few cases, it might be more time than we need.

- *Asset base*. Some investment philosophies and styles can be carried on at huge scale, but others will be successful only if they remain niche businesses. Bond managers can oversee tens of billions of dollars with relative ease. Indeed, scale matters in bond management because trading costs, especially the costs of trading municipal bonds, can eat up a large fraction of the potential returns. But small cap managers face the opposite problem: the float[10] of most small cap stocks can be very thin, making the management of even a few hundreds of millions of dollars problematic. Many professionals believe that trading costs are so high with smaller stocks that any return advantage is completely negated. Thus, with small cap stocks smaller really is better all around.

- *Alignment of interests*. Money management is a business, and like any business operator, money managers will attempt to maximize their profits. If those profits can only be maximized by acting in the interests of clients, the manager-client relationship is likely to be satisfactory to both parties. Unfortunately, there are many ways in which money managers can increase their profits at the expense of client investment returns. One obvious example is for the manager to emphasize asset gathering over alpha generation.[11] It is far easier for a manager to increase its fee revenue by focusing on proven sales techniques than by focusing on the complex challenges associated with investment outperformance. As a result, most money management firms are really sales organizations, not money management organizations, and are to be avoided on that ground alone.[12] The general practice of charging asset-based fees is also problematic. If the manager's results are poor, the manager's fee declines but he still gets paid; the client, on the other hand, has lost real money.

- *Organizational stability*. A sound investment philosophy can only be implemented by an investment team that has worked together for years and that has experienced little, if

[10] "Float" is simply a measure of trading volume. It is the total number of outstanding shares less the number of restricted shares.

[11] "Alpha" is a measure of risk-adjusted outperformance.

[12] Looking at the manager-client relationship in terms of principal-agent theory, David Swensen (CIO at Yale) has acutely analyzed the problems investors face in trying to align manager interests with their own. See David Swensen, *Pioneering Portfolio Management: An Unconventional Approach to Institutional Investment* (The Free Press, 2000), pp. 4-6, 197, 248-292.

any, turnover. Even among managers who have produced outstanding long-term track records, organizational instability is an excellent early warning sign that performance is likely to deteriorate. The same is true of asset management firms that have recently been purchased – this is almost always a sure sign of bad things to come.

- ♦ *Quality of the client base*. This may seem an odd characteristic to focus on, but in fact the quality of a manager's client base can make an important difference in the manager's ability to function with minimal interference and maximum stability. Typically, managers who have performed competently over the course of many years, but who are never (or rarely) the best-performing managers in any year, will wind up with a stable, sophisticated client base that understands what the manager is doing and that will be patient with periods of underperformance. Managers who have shot the lights out now and then, followed by periods of very poor performance, will tend to wind up with a client base consisting mainly of unsophisticated, "hot money" clients. It is virtually impossible for a manager to operate sensibly if clients are constantly pouring money into the firm and then pulling it out again.[13]
- ♦ *Personal integrity*. This should go without saying. While it may seem harsh, any blemishes on a manager's record should disqualify the firm from serious consideration. This includes regulatory problems at the firm level and also personal problems at the individual professional level and even, on occasion, at the individual personal level.

President Reagan, during the SALT[14] negotiations, was fond of saying, "Trust – but verify." The same is true of managers. It is always interesting to hear a manager talk about its style, but a returns-based style attribution analysis rarely exaggerates. The professionals at a firm may appear to be the very soul of rectitude, but a background check will result in far fewer sleepless nights for investors. Broadly speaking, substantial investors have no choice but to place their capital at risk. But narrowly speaking, substantial investors never have to place their capital with any particular manager. Before we entrust our capital to a manager, we should always "trust – but verify."

Objectionable characteristics

In addition to these useful characteristics, it is also important to look for the presence or absence of objectionable characteristics in asset management firms, such as a focus on asset gathering, a weak trading or back office operation, a predominance of inexperienced

[13] It is interesting to speculate about how the quality of a manager's client base could be measured objectively. Unfortunately, like so many characteristics of money managers, this important dynamic can only be understood qualitatively. As an example, if we find that a significant part of the client base of a hedge fund is represented by banks that have issued principal-protected notes, we would do well to avoid that manager. Because of the principal protection feature, such investors cannot afford to be patient with even temporary underperformance: they are, by definition, "hot money." Similarly, managers whose asset bases are peppered with wrap account programs and/or retail investors will be best avoided.

[14] Strategic Arms Limitation Talks.

personnel, a bureaucratic organizational framework, a history of regulatory problems, an organization that is primarily engaged in activities other than money management, and so on. The presence of even one of these objectionable characteristics should raise an immediate alarm, requiring further investigation, and the presence of two or more should send investors running in the other direction.[15]

Manager habitat

Several of the positive and negative characteristics of managers discussed above are closely associated with the kind of organization in which a manager works. These organizations range from gigantic global banks that are involved in asset management activities only to help smooth out their earnings streams, to tiny boutique firms consisting of a manager, a trader and an administrative person. Managers can be paid salaries, can be paid salaries plus a bonus for performance or asset gathering, or can own the revenue stream of their firms.

Generally speaking, the closer a manager's working habitat is to the "boutique" end of the spectrum, the more likely the manager is to produce sustained outperformance. Managers who work in large organizations that are mainly engaged in activities other than asset management are really middle managers in a gigantic bureaucracy that doesn't much care about the work they do. The parent firm will blow hot and cold on asset management as a business depending on its short-term profitability. Managers with very modest talents can survive, and even thrive, in such firms because there are many career paths open to them. Managers with talent, and who are uninterested in other kinds of work, tend to migrate away from large organizations and toward smaller organizations that exist only to manage money and which will sink or swim according to the quality of their performance. Hence, investors looking for talented managers will do well to focus on smaller management firms.

In particular, hedge funds would appear, at least on the surface, to represent the ideal habitat for a talented manager. In a hedge fund the investment professionals own the firm and make their money mainly by generating good absolute performance. In addition, many hedge fund managers have much of their own money invested in their firms. Because most hedge funds are small, the annual asset-based fee will be relatively unattractive. In other words, most of hedge fund managers' compensation is expected to come from their share of the profits, plus their increase in wealth that results from the sound management of their own capital. As a result, untalented managers simply can't survive in the hedge fund world, or can't survive as well as they could if they were buried in a large, bureaucratic firm where good behavior and sucking up to senior management will count for more than alpha generation.

[15] One of the best summaries of desirable and undesirable manager characteristics was produced by The Investment Fund for Foundations. See TIFF's Web site at www.tiff.org.

But there are exceptions to every general rule and this one is no exception. Hedge funds, for example, have characteristics that make them problematic for many investors (including illiquidity and lack of transparency). But even among traditional, long-only managers, some asset classes and management styles tend to work better in larger, rather than smaller, institutions. As noted above, for example, bond management lends itself to large scale, and hence we find many talented fixed income managers who are happily working in very large organizations where scale results in much lower trading costs and where the cost of technology can be readily borne. The same is true of cash management and of certain complex derivative transactions that can only be conducted by firms with serious capital bases.

Ongoing monitoring of managers

This topic is beyond the scope of the paper – it deserves a white paper of its own – but it is important to point out that engaging a manager, even a very good one, is only half the battle. We must also monitor the manager closely to ensure that it is performing as advertised. The peculiar difficulty with this task is that we must balance monitoring that is strict enough to uncover early danger signals with the patience and perspective not to terminate the manager at the first sign of trouble. Every manager experiences periods of under-performance, markets when its investment style is out of fashion, quarters or even years during which it seems to have lost its way. The main mistake investors make, it should be remembered, is firing high quality managers just after a period of under-performance and hiring another manager who, over the next market cycle, under-performs the terminated manager. Roughly 75% of all manager terminations are mistakes in exactly that sense.[16]

Finding Best-in-Class Managers

We don't know how other advisory firms go about the process of identifying managers who are likely to outperform,[17] but we know how we do it at Greycourt. And while our processes and procedures – to say nothing of our judgment – could perhaps bear tweaking from time to time, we think the Greycourt system works pretty well. It's a three-level analysis, and it works generally like this.

The early phases of this process rely largely on quantitative screening and evaluation criteria while later stages are almost entirely qualitative in nature. Our ultimate goal is not to identify which managers have outperformed in the past – any fool with a computer can do that! Rather, our objective is to identify the reasons *why* selected managers have

[16] Note that this mistake is the flipside of the mistake of hiring a manager who has recently shot the lights out.

[17] Well, ok, we do know how other firms do it; we're just too polite to rat them out.

outperformed in the past and to judge whether those reasons are likely to persist into the future.

The first step ("Level I") in our due diligence process requires managers to be measured against a series of six objective criteria. These criteria vary somewhat from asset class to asset class but generally address:

- ♦ Criteria #1: Appropriate R^2 to the relevant benchmark.
- ♦ Criteria #2: Product return rank was in the top third of the peer universe.
- ♦ Criteria #3: Product return rank was not in the bottom quartile of the peer universe in any of the most recent 5 calendar years.
- ♦ Criteria #4: Product risk adjusted return rank was in the top third of the peer universe.
- ♦ Criteria #5: Product upside capture was at least 100%.
- ♦ Criteria #6: Product downside capture close to that of benchmark.

Greycourt uses these screening criteria in two ways. First, the Level I screen allows us to quickly determine if we should spend our limited time meeting with salespeople seeking to introduce us to their products. Second, The Level I screen allows us to efficiently comb through publicly available manager databases such as Morningstar, PSN and HFR to see if there are potentially interesting managers that we may not yet have knowledge of. It is important to note, however, that many of the managers we use or are interested in do not always pass all six of our Level I criteria. For example, we are often interested in concentrated equity managers who have low R^2 statistics but who otherwise are excellent. Greycourt Managing Directors have the discretion (which they use often) to pursue further research on any manager whether or not they pass all six Level I criteria. Finally, while the Level I screening process works well for most long-only asset classes, it is somewhat less useful in evaluating alternative asset classes such as private equity, real estate, hedge funds, etc.

The next step (Level II) in our manager process involves gathering as much information as possible about a potentially interesting manager. Initially, our information-gathering focuses on further screening-out inappropriate managers. For example, we seek to determine if a manager is closed to new assets, whether they have reasonable minimum account sizes, whether their fees are competitive, what kinds of investment vehicles they offer (e.g., separate accounts, limited partnerships, mutual funds, etc.), or whether they have unusually high turnover which may cause them to be tax inefficient. These additional early Level II questions do not take much time to complete and often weed out another 25% to 50% of the managers who made it past the Level I process.

Once the list of qualified manager candidates has been narrowed, we seek to gather a broad array of information about each manager in order to formulate an opinion as to how they were able to generate attractive results in the past. The types of information typically acquired includes:

1. Obtaining manager pitch books
2. Arranging for a live manager presentation
3. Completing a Greycourt Manager Questionnaire
4. Reviewing SEC Form ADV
5. Conducting web searches for relevant news and articles on the manager
6. Preparing comprehensive style-based return attribution analysis

All information gathered is immediately recorded in Greycourt's proprietary manager database so that it becomes instantly available to each of our investment professionals. We view our ability to access all manager information on a timely basis as critical to our ability to deliver high quality and consistent advice to our clients. As a result, we are constantly trying to improve the quality of available data. For example, one of the most recent enhancements to the Greycourt database has been to deploy WebEx technology, enabling us to record live manager presentations for later review.

Once we have evaluated all of a manager's information, a Greycourt investment analyst will prepare a brief two-page profile summarizing the manager's key attributes. At the same time, a Greycourt Managing Director will begin to formulate an initial opinion (referred to internally as our "Investment Thesis") seeking to articulate concisely why we believe the manager in question has succeeded in generating superior results in the past.

The third phase of our evaluation (Level III) is the most important and also the most qualitative. The objective of our Level III analysis is to attempt to validate the preliminary Investment Thesis established during the earlier Level II review. During this final phase, one or more of Greycourt's Managing Directors will meet with the senior members of the candidate manager's firm usually in their offices. At these meetings we seek to better understand the manager's investment philosophy, risk controls, tax sensitivity, organizational structure, incentive compensation plans, operating infrastructure, compliance efforts and interpersonal dynamics.

Our Level III efforts culminate in a peer review in which the sponsoring Managing Director articulates, in writing, his or her view of the candidate manager's differential advantages, comments on the sustainability of those advantages, and identifies potential risk factors that might invalidate the perceived sustainable advantage. Managing Director-wide conference calls are held approximately twice each month to discuss candidate managers who have completed all three levels of review. Very often the Level III peer review call results in additional questions being raised or further information being requested. Assuming that all additional questions are satisfactorily addressed, a formal vote is conducted in which all Managing Directors either approve or reject the candidate manager for inclusion on Greycourt's recommended list.

Once approved, we seek to monitor approved managers' continuing quality in several ways. First, we generate a report that measures the difference between each manager's monthly return and its relevant benchmark (This difference is referred to as "tracking error"). We then compare that month's tracking error to the manager's 5-year historical tracking error. To the extent that a manager's tracking error in any given month is +/- 1 standard deviation away from its historical tracking error, we initiate a call to the manager. During these calls we will ask them to describe what factor(s) caused them to perform unusually well or unusually poorly that month. Their responses are recorded in our database. Simply as a result of this monthly review process, we will, on average, speak to our managers three times per year. Our second form of review is to formally re-evaluate each approved manager on an annual basis in order to re-affirm our belief in our stated Investment Thesis.

When one of our managers experiences a change of control, acquires another firm or suffers the loss of a key portfolio manager, we immediately seek to understand how these changes may affect our stated Investment Thesis. The urgency with which we re-examine a manager undergoing a change depends on that manager's inherent volatility. For example, the departure of a key professional at a municipal bond manager is less alarming than the departure of a key professional in a small cap growth firm. We seek to quantify our view of each manager's inherent risk by developing a numerical risk measure on each manager used. Developing this numerical assessment of manager risk is a regular part of our Level III analysis. Also, as noted earlier, part of our Level III review is to articulate specific risk factors that may invalidate our Investment Thesis. If one of those identified risks becomes a reality (such as a key professional's departure) we will fully re-examine the manager.

Managers are rarely terminated for poor performance alone. We terminate managers when it is deemed that they no longer maintain the differential advantages that caused us to hire them in the first place. Examples of reasons that have prompted us to terminate managers in the past include:

1. Departure of a critical investment professional(s)
2. Significant style drift
3. Failure to limit asset growth to levels promised
4. Failure to communicate or be responsive to requests for information

It is the responsibility of the Managing Director assigned to track a particular manager to identify and research potential problems and to recommend a course of action.

Optimizing Manager Selection

In some ways, building a portfolio of money managers is analogous to designing an overall investment portfolio. Let’s examine several ways in which manager selection is similar to selecting assets classes.[18]

The problem of variance drain

Most investors understand that riskier portfolios must significantly outperform less risky portfolios because of the headwind of variance drain:[19] a high return doesn’t generate wealth very quickly if it is associated with high volatility, simply as a result of the mathematics.[20] The same principle holds with high-returning managers, but here the problem is even more insidious. Investors looking for talented managers understand intuitively that managers who hug their benchmarks are unlikely to outperform (thanks to their fees and trading costs), and that such managers are especially unlikely to outperform significantly (by definition, since they are benchmark huggers).

Hence, many investors focus their search for talented managers on firms that own highly concentrated positions – often no more than 10 to 20 stocks. Presumably, each of these positions represents an idea of great conviction on the part of the manager, and since the manager’s portfolio is quite different from that of the index it is managing against, the possibility of outperforming that index – and even of outperforming it significantly – is considerable.

Alas, this is the beginning of the inquiry, not the end. Like portfolios, managers face the headwind of variance drain. Our concentrated manager may outperform all right, but unless that outperformance is very considerable, it may not add as much to our wealth as the more modest outperformance of the benchmark-hugger we so easily disdained a few paragraphs ago. The problem is that risk drag rises faster than alpha, so that high-alpha managers must not simply outperform to grow our wealth – they must outperform very substantially. Let’s examine briefly how this phenomenon works.

We measure the volatility of investment portfolios absolutely (the Standard Deviation of the portfolio around its mean return), but the volatility of managers is typically measured

[18] An excellent discussion of this issue, from a slightly different perspective, appears in *Finding Consistent Alpha*, by Seth J. Masters and Drew W. Demakis (Alliance Capital Management LP, July 2003).

[19] See Greycourt White Paper No. 29 – *Numeracy, Innumeracy and Hard Slogging* (April 2003), pp. 2-3.

[20] To adjust wealth calculations for the variability of the returns, investors can use the approximation: $C = R - \sigma2/2$, where R is the mean return and σ is the variance in the return. See Tom Messmore, *Variance Drain*, Journal of Portfolio Management (Summer 1995), p. 106. But there is an even simpler way to understand the point: portfolios that decline by any amount must appreciate by a greater amount just to break even. A portfolio that declines by 50% in year one must appreciate 100% in year two to get even. And it works the other way: a portfolio that appreciates 100% in year one, then declines only 50% in year two, is back to breakeven.

relatively – relative to the benchmark the manager is being measured against. The measuring rod is "tracking error," the average deviation of the manager's performance from the performance of the benchmark. Managers can only add value to a benchmark's return by deviating from the benchmark, of course. They may own fewer stocks, they may buy and sell those stocks at different times, they may own stocks in weights that differ from the index weightings, and so on.

As noted above, many investors look for managers who hold fewer, higher-conviction positions. Unfortunately, these managers virtually always exhibit significant tracking error, and the larger that tracking error is the greater the manager's outperformance must be to grow wealth rapidly. A manager with low tracking error (our despised benchmark-hugger, for example) can grow wealth nicely by producing modest outperformance. But our venerated manager with the concentrated portfolio will have to outperform very substantially to produce as much wealth for us.[21]

Having our cake and eating it, too

Let's stare our dilemma straight in the face. As investors, we have three choices in our search for outperforming managers who will grow our wealth rapidly:

- We can throw in the towel and index our exposure. This will give us the market return – the risk premium we obtain simply by investing in stocks rather than T-bills – but our search for alpha will be over before it began.
- We can engage benchmark-hugging managers – firms that, in the large cap sector, may own 250 stocks. We might do this because we are fearful that more concentrated managers might dramatically *underperform*. Or we might do it because we recognize that the low tracking errors of benchmark-hugging managers mean that even modest outperformance will grow our wealth nicely: such managers face only very modest variance drain. But this choice is fraught with danger. If our benchmark-hugging manager has an information ratio of +0.1, it would require an astonishing 271 years for us to be 95% confident that the manager's performance wasn't just lucky.[22]
- Finally, if we are really serious about finding alpha, we can engage managers who hold only a few positions, in each of which they have great conviction. We are getting, we hope, only the managers' best ideas. If these managers have information ratios of +0.5, we could have 95% confidence in their skill after "only" 11 years. The problem, as

[21] We can handicap managers by combining tracking error with outperformance to determine a manager's "information ratio." Nobel laureate William Sharpe developed this concept, dividing the value added by a manager by the manager's tracking error. Obviously, managers who can deliver the same value-added with lower tracking error will have higher information ratios, and therefore be more desirable. Unfortunately, the time period required for an information ratio to be meaningful is huge: it requires 16 years to identify a top-quartile manager with 95 percent confidence. Masters and Demakis, op. cit., note 18, p. 3.

[22] *Ibid*., p. 3.

noted above, is that risk drag grows faster than manager alpha, with the result that only the most extraordinarily talented managers will outperform sufficiently to grow our wealth faster than the index fund or the benchmark-hugger.

What to do? One approach is to treat managers like asset classes. When we design our overall investment portfolios, we mix and match asset classes that have less than perfect return correlations in an attempt to achieve "the only free lunch available in the investment world," as someone has said. If we design our portfolios correctly, we will achieve both higher expected returns and lower expected risks than naively designed portfolios. Why not adopt the same approach with our money managers?

Like asset classes, the investment performance of any two or more managers can be highly correlated, can exhibit low correlation, or could even be negatively correlated. And while negatively correlated asset classes are hard to come by, it is relatively easy to find managers whose performance is negatively correlated.

Imagine that we are building out our US large cap portfolio. Rather than indexing or engaging a benchmark-hugger, we identify two highly concentrated managers in whom we have great confidence. Importantly, these managers are very different: a deep value manager and an aggressive growth manager. The likelihood that these two managers would own any securities in common would be remote, and it is nearly as unlikely that they will be invested in the same industries or sectors. While it is true that each of our managers would have a high tracking error, *the combination of the two managers would have a much lower tracking error*.[23] Our US large cap portfolio would track the S&P 500 Index pretty closely, and yet we would be receiving most of the benefit of the high alpha we expect each manager to deliver. We have succeeded in capturing the Holy Grail of high outperformance and low tracking error, and our wealth will grow rapidly.

Summary

Picking stocks that will outperform is an enormously difficult undertaking, but picking managers who can pick stocks (or bonds) that will outperform is even more challenging. The key issues to keep in mind are these:

- It is far, far more difficult to identify managers who will outperform in the future than anyone thinks it is (except possibly your humble correspondents).
- Aggregate manager track records look suspiciously like the outcomes of coin flips for a very good reason.
- Even good five-year track records are usually meaningless, and no one should engage a manager for that reason alone.

[23] *Ibid*., pp. 5-6.

- Distinguishing managers who will outperform from those who won't is overwhelmingly a qualitative, not a quantitative, enterprise. Because this is so, junior or inexperienced personnel simply cannot undertake it successfully.
- The process of identifying good managers is, of necessity, complex, time-consuming and expensive.

We will be happy to discuss this paper at your convenience.

GREYCOURT & CO., INC.
February 2004

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Disclosure

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EXHIBIT A

Top 15 Small Cap Growth Managers based on 3-Year Rolling Returns

	1995	1996	1997	1998	1999	2000	2001	2002
	1	1	3	7	2	2	2	3
	2	3	6	12	9	9	18	6
	3	5	12	15	10	11	20	23
	4	6	15	34	11	18	29	29
	5	9	34	36	18	29	39	37
	6	10	36	38	32	32	43	39
	7	12	41	41	36	38	46	43
	8	13	45	43	38	40	47	44
	9	15	52	45	40	43	48	47
	10	34	58	48	46	46	53	48
	11	36	59	52	47	47	55	57
	12	48	63	53	53	53	61	62
	13	53	65	63	55	55	62	63
	14	58	67	64	63	63	63	70
	15	59	68	68	65	65	70	24
Total Mgrs	57	61	68	68	69	69	70	70

The chart highlights the top 15 managers for the period ended 1995 and whether or not those same managers appeared in the top15 list in subsequent years.