



moving beyond the numbers

SELECTING INVESTMENT MANAGERS FOR SUCCESS



OUR FIVE STEP MANAGER SELECTION & DUE DILIGENCE PROCESS

EXAMPLE OF OUR PROCESS

Small Cap Value Fund Needed, Let's Get to Work

In this example the current analyst top-pick fund in our small cap value asset class has announced it is closing to new investors; subsequently a replacement fund is needed. In this instance, we need to select a manager we believe would be an "all-weather" performer, i.e., a manager that has potential to outperform regardless of the market environment.

1 INITIAL SCREENING

Refining the Investment Universe

The mutual fund universe is comprised of thousands of mutual funds. Our initial screen focuses on identifying the pure small cap value managers within this universe of which there are approximately 300. To identify these managers we screen for specific average market capitalizations, investment style or sector allocations, among other fund characteristics

2 QUANTITATIVE ANALYSIS

Look At All the Numbers

The goal of the quantitative screen is to take our list of 300 small cap value managers down to a short list of managers we believe have the correct characteristics we are searching for. Quantitative analysis plays a large role as we can assess the market environment and screen on those factors we believe are the most relevant to our search. We screen on risk statistics such as the fund's beta, tracking error, and standard deviation relative to its respective benchmark and peers, which would tell us how volatile the particular fund has been historically.

With quantitative analysis, we have reduced the list to about 15 managers so we can roll up our sleeves and engage in the next step.

3 QUALITATIVE ANALYSIS

Develop an Investment Thesis

At this point we need to dig deeper to find out how the manager of a fund has arrived at their track record, why a fund has acted the way it has in the past, and get a sense of how it will act going forward. Each manager tends to have a unique investment approach and it is important for our team to know what that is and if it is the correct approach we are looking for in a certain screen.

Once we have a short list of funds we deem have the right characteristics for a screen, we need to visit with the key decision makers. By visiting with the team, we can look at the quantitative data and see if their historical performance can be understood. We want to walk away with knowledge of how the team and process work, management's biases and philosophy, and expectations of how the fund will act in all market environments.

After this phase, we should have intimate knowledge of the fund we believe is the most appropriate for this search.

4 STRESS TESTS

Presenting to the Committee

Now we are ready to present the fund to the investment committee for the final decision. The committee stress tests the analyst's investment process and recommendation. This collaborative effort allows us to be confident that the recommendation is correct for this search.

The final recommendation is made to advisors.

5 ONGOING MONITORING

Our Work Continues

The ongoing monitoring of any recommended fund is as paramount to our process, as is the initial decision to purchase the portfolio. Continuous monitoring of the fund's performance, the investment management team, and their firm is conducted. The performance of the fund has to fall in line with our expectations. Changes in the performance profile, team, process or philosophy are all causes for us to reassess the fund's suitability. Should a change occur in which we are uncomfortable going forward, the analyst will present the details to the investment committee with a recommendation on further actions. If warranted, your advisor will be promptly notified of said decision.



sophistication

LPL Financial Research continues to set the industry standard for independent and unbiased investment research across a wide array of investment product types. The investment products that comprise your portfolio may vary—what differentiates a strong performer from the pack is a manager demonstrating a repeatable process, and proven consistent results through multiple economic cycles. Understanding how a manager performs in various conditions is a key to our recommendation process.



We understand your need to utilize a vast array of investment products offered by the best available investment managers to meet your individual goals and to help your portfolio maneuver through all kinds of market environments.

We conduct [in-depth, comprehensive analysis](#) in order to identify the most attractive products. Our diligent investment process translates into [sophisticated, quality advice](#) and tools your advisor may access to assist in building and managing the investment portfolios [designed for your unique financial goals](#).



freedom

At LPL Financial, our independence places the research team in a unique position to access virtually the entire universe of managers. Side-by-side with your advisor we have no business conflicts that prompt us to recommend (or reject) any investment product. Our decisions are unbiased and based solely on whether the investment fits a specific need or requirement.

Our breadth of investment product coverage includes mutual funds, separately managed accounts, alternative investment strategies*, exchange-traded funds (ETFs), and other sophisticated investment solutions.

*Alternative Investment Strategies include hedge fund strategies, private equity, managed futures vehicles, structured products, equipment leasing partnerships, real estate investment trusts (REITs), 1031 real estate exchanges, exchange funds, and oil and gas partnerships.

Investing in mutual funds involve risk, including possible loss of principal. Investments in specialized industry sectors have additional risks, which are outlined in the prospectus.

Alternative investments may not be suitable for all investors and should be considered as an investment for the risk capital portion of the investor's portfolio. The strategies employed in the management of alternative investments may accelerate the velocity of potential losses.

Principal risk: An investment in Exchange Traded Funds (ETFs), structured as a mutual fund or unit investment trust, involves the risk of losing money and should be considered as part of an overall program, not a complete investment program. An investment in ETFs involves additional risks: not diversified, the risks of price volatility, competitive industry pressure, international political and economic developments, possible trading halts, Index tracking error.

INDEPENDENCE MEANS WE HAVE

- *no* proprietary investment products to sell
- *no* investment banking relationships to promote
- *no* business conflicts to get in the way of providing your advisor with unbiased recommendations



1 INITIAL SCREENING

Refining the Investment Universe



They've got style

Within an asset class, there can be multiple styles and variations, each of which will act differently in a given market condition. LPL Financial Research focuses on finding the managers that best represent each sub-style within an asset class. Even the best sub-style manager may underperform when market conditions cause their sub-style to be out of favor. Therefore, we also try and find "all-weather" managers. These managers tend to perform well regardless of what sub-style is in or out of favor.

We select each manager for a specific purpose. Defining the purpose increases our chances of finding the right managers to deliver outperformance for a particular situation or condition. We may be working to fill a specific gap, such as replacing an Alternative Investment Strategy Mutual Fund, or seeking the right combination of managers for an all-inclusive model.

Since our money manager recommendations are generally implemented within an asset allocation framework, it is important that we know ahead of time in what types of securities the money manager will invest. Statistical tools such as regression, optimization, and attribution analysis are used to determine the value that a manager has added within a particular asset class.

The Screening Process

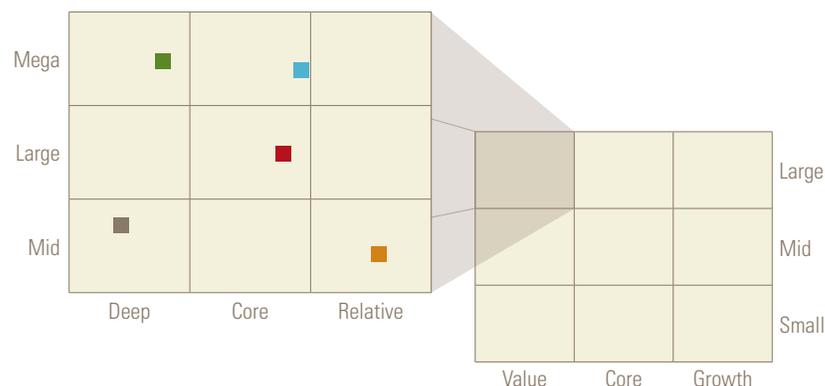
Samples of the types of characteristics we screen for include:

- **Style factors:** (% Value or Growth, Price-to-Book ratio, Price-to-Earnings ratio)
- **Market capitalization:** We review several calculations of current and historical market cap, as well as the distribution of market caps to determine which asset class the portfolio best represents.
- **Tracking error:** How much does the manager's returns deviate away from the benchmark?
- **Beta:** How much risk is in the portfolio relative to the benchmark?

The result is a set of managers which have the appropriate complementary characteristics for a targeted position on our Recommended List.

Our screening process is constructed to capture the best performing investment products while at the same time leaving enough flexibility to consider strong managers whose style may simply be out of favor.

Sub-Styles within the Large Value Asset Class



2 QUANTITATIVE ANALYSIS

Look At All the Numbers



Understanding Active Management

Active management (also called active investing) refers to a portfolio management strategy wherein the manager makes specific investments with the goal of outperforming a benchmark index.

Because managers must take on risk to deliver outperformance, periodic underperformance is unavoidable. Moving beyond screening solely on past performance and instead screening for managers who match a particular style and have appropriate risk/return characteristics is extremely important.

To put active managers in perspective, it is important to keep in mind:

- Active managers can outperform or underperform dramatically over time versus their benchmark.
- To outperform, managers have to take risk.
- There is a relationship, albeit imperfect, between the amount of risk a manager is willing to take and the degree of potential outperformance.
- All managers endure periods of underperformance.
- Short-term outperformance and underperformance are often more tied to style than skill. Conversely, long-term outperformance and underperformance are often more tied to skill than style.

Once the managers have been narrowed to a group with appropriate characteristics, we begin an exhaustive review of historical performance. The goal is not to find managers that have recently performed the best, but to find managers that meet the performance requirements of the asset allocation models, whose performance demonstrates effective implementation of their strategy, and are positioned to deliver future outperformance.

Performance and risk statistics

Including but not limited to:

- **Periodic excess returns:** The amount by which a manager beats their benchmark over a set time period, such as 1-, 3-, 5-year returns.
- **Rolling excess return:** It is important to review timeframes that are not just static, i.e., the three years 2006-2009. We also will review a rolling period, in this example the three years leading up to each month end date in the period from March 2006 to March 2009, or daily, for example June 15, 2006 to June 15, 2009. This produces returns based on varying market conditions and can show us the consistency of returns.
- **Rolling risk:** The amount of risk a manager takes on relative to their benchmark to generate returns. This demonstrates the consistency of risk.
- **Up and down capture:** The percent of return a manager records or captures when the benchmark has positive or negative returns. Up and down capture can be positive or negative and can exceed 100%. Ideally, managers have high up capture percentages and low down capture percentages.
- **Scenario-based period performance:** Scenario-based performance helps explain “where” the managers’ return came from or “how much” risk they took. We use a proprietary, statistical tool called the Scenario Attribution Tool, or SAT, to determine what drove manager performance, where manager biases are, and how the manager is positioned.

This analysis helps to develop a short list of managers who meet the characteristics we are looking for.

3 QUALITATIVE ANALYSIS

Develop an Investment Thesis



Since change is constant and the future is unknown, past performance data is, in some ways, of limited value to the investment selection process. In our view, personal skill, intuition, and experience are critical elements of successful portfolio management and qualities that we highly value.

Once the universe has been narrowed down, through quantitative screens, the next step is to delineate why we would recommend one manager over another with similar performance. We learn as much as we can about the investment management team, their strategy, and their investments' performance by interviewing them directly and gathering information from third-party sources to develop our "investment thesis" for each manager. The critical role of this thesis is to tie what we have learned about the manager's historical performance in various market environments to the team and strategy.

The investment thesis helps us to decide not only whether to recommend a manager but also to determine why in the future we might remove the recommendation. We believe that the right investment thesis guides both of these decisions and helps drive effective outperformance.

The factors we look at include these primary elements:

- **Team:** Does the portfolio have the appropriate managers and analyst team to continue to deliver performance in the future? Does the team have the experience necessary to maintain the portfolio's strategy through varying market conditions? Does the manager's firm provide an environment that can retain talented managers?
- **Performance:** Can the portfolio's performance be appropriately explained by the team's stated investment philosophy, process, and strategy?
- **Strategy:** Does the portfolio have a well-defined, repeatable strategy which explains the performance traits we identified during our review of rolling and situational performance?

4 STRESS TESTS

Presenting to the Committee



The Watch List

We place recommended products on what we call the Watch List when an uncertainty has been introduced with the potential to negatively impact future investment results. Watch List status is a temporary measure used to inform your advisor that we are assessing new, potentially unfavorable information on a product in order to determine whether or not it should remain a current recommendation.

We take seriously our responsibility to provide clear and concise guidance regarding our investment recommendations. Should we change our view on a recommendation your advisor will be notified immediately. Our goal is to have analysis completed within 90 days after placing a manager on the Watch List. Upon completion of this analysis, we decide to either retain our existing recommendation or remove it from our Recommended List.

Once a manager has been selected, it is presented to our investment committee that makes the final decision as to whether the fund is appropriate for the specific purpose. The committee reviews the recommendation for red flags, anomalies, and performance as a piece of a portfolio.

This committee is comprised of the Chief Investment Officer, strategists, and analysts who question the research that has been done on the manager and look for possible holes in the Investment Thesis. The committee also questions the manager's appropriateness for a particular position in the models or on the Recommended List.

Stress Test Questions

Including but not limited to:

- **Hidden risks:** Are we aware of the different risks that a manager is currently taking, and may take; have we considered everything?
- **Position and sector concentrations:** Given our views of the markets and what sectors and types of securities will perform well, is the timing of the recommendation appropriate?
- **Portfolio fit within a model:** Is the recommended strategy the right complement to other components of the model portfolio?
- **Peer comparison:** How does this recommendation stack up against the other managers in the universe as well as the other "finalists" in the search?

The goal is to ensure that the proposed investment manager is the best choice for a position on the Recommended List. We believe an impartial group, not in the trenches, is better positioned to question and vote on the recommendation to ensure all details and potential red flags are vetted. No manager can be added to the Recommended List without a majority vote by the committee.

5 ONGOING MONITORING

Our Work Continues



Staying Focused

We strive to do all we can to provide your advisor with the guidance they need to partner with you as effectively as possible to design a portfolio in line with your investment objectives.

The markets change quickly and we need to ensure our recommendations are poised to keep up with those changes. When necessary, we evolve our manager selection and due diligence process to keep up with those changes: screens can be tweaked, analyses can be honed, and discipline can be reinforced; pulling together the unique capabilities of each member of our team, and making the most of our expanding resources.

We are experienced analysts whose main responsibility is to recommend, monitor and, if necessary, remove money managers. Our goal is to identify above-average investment opportunities positioned to outperform, conduct ongoing and thorough due diligence, provide quality recommendations with complete transparency, and communicate our insights in a timely fashion.

Once a recommendation has been made, our work is really just beginning. Ongoing monitoring is an essential component of the LPL Financial Research process. Often overlooked, ongoing monitoring of a manager's investment process, personnel changes, and performance results is one of the most important aspects of our value proposition.

Our rigorous monitoring process focuses on a number of key factors that can be leading indicators of deviations from historical performance patterns and enhance our ability to make proactive investment decisions before investment performance deteriorates substantially. Monitoring our recommendations and, when appropriate, making a sell recommendation are just as important as the initial buy recommendation.

Key Factors

We monitor and track:

- **Performance:** We monitor our recommendations on a daily basis. When we observe performance that is inconsistent with what we expect in a given market condition, it may signal an underlying shift in the investment philosophy, process, style, or portfolio construction methodology.
- **Changes in Portfolio Risk Levels:** Overall portfolio risk levels are also monitored. Increases or decreases in security, industry, or sector concentrations may signal changes in the investment approach of the manager.
- **Style Drift:** Likewise, deviations in investment style—for example, if a manager who has traditionally invested in value stocks begins to take significant positions in growth stocks—can change the risk/return characteristics of a fund. Some managers thrive on drift so we monitor differently those from whom we expect drift and those from who we do not expect drift.
- **Changes in Key Investment Personnel:** Changes in the management team can be early indicators of fundamental changes to the investment process. Those changes can, in turn, lead to changes in traditional performance profiles and risk levels.
- **Investment Thesis:** We monitor our strategies against our investment thesis, which becomes the basis of our Sell Discipline. If there are any material changes to the team, performance, or investment strategy, we will re-evaluate the manager to determine if a sell recommendation is warranted.

IMPORTANT DISCLOSURES

The opinions voiced in this material are for general information only and are not intended to provide or be construed as providing specific investment advice or recommendations for any individual. To determine which investments may be appropriate for you, consult your financial advisor prior to investing. All performance referenced is historical and is no guarantee of future results. All indices are unmanaged and cannot be invested into directly.

Stock investing involves risk including loss of principal.

The Standard and Poor's 500 Stock Index (S&P 500) is an unmanaged index generally representative of the U.S. Stock Market, without regard to company size.

Investments in specialized industry sectors have additional risk such as credit, regulatory, operational, business, economic and political risk which should carefully be considered before investing.

Principal Risk: An investment in an Exchange Traded Fund (ETF), structured as a mutual fund or unit investment trust, involves the risk of losing money and should be considered as part of an overall program, not a complete investment program. An investment in ETFs involves additional risks: not diversified, the risks of price volatility, competitive industry pressure, international political and economic developments, possible trading halts and Index tracking error.

Investing in mutual funds involve risk, including possible loss of principal. Investments in specialized industry sectors have additional risks, which are outlines in the prospectus.

Alternative investments may not be suitable for all investors and should be considered as an investment for the risk capital portion of the investor's portfolio. The strategies employed in the management of alternative investments may accelerate the velocity of potential losses.

Alternative investment mutual funds strategies are subject to increased risks due to the use of derivatives and/or futures.

Investing in real estate/REITs involves special risks such as potential illiquidity and may not be suitable for all investors. There is no assurance that the investment objectives of this program will be attained.

GLOSSARY

Beta measures a portfolio's volatility relative to its benchmark. A Beta greater than 1 suggests the portfolio has historically been more volatile than its benchmark. A Beta less than 1 suggests the portfolio has historically been less volatile than its benchmark.

Tracking error is a measure of the consistency or volatility (standard deviation) of excess returns relative to a benchmark.

Standard deviation is a historical measure of the variability of returns relative to the average annual return. A higher number indicates higher overall volatility.

Regression is a statistical measure that attempts to determine the strength of the relationship between one dependent variable and a series of other changing variables known as independent variables.

Optimization is the process by which portfolios are constructed to maximize expected return based on a given level of market risk, emphasizing that risk is an inherent part of higher reward.

Attribution Analysis is a tool used to uncover the impact of the manager's investment decisions with regard to overall investment policy, asset allocation, security selection and activity. A fund or portfolio's returns are compared to a benchmark in order to determine whether a manager is actually skilled or just lucky.

Price-to-Earnings is a tool for comparing the prices of different common stocks by assessing how much the market is willing to pay for a share of each corporation's earnings. It is calculated by dividing the current market price of a stock by the earnings per share.

Price-to-Book compares a stock's market value to the value of total assets less total liabilities (book value) determined by dividing the current stock price by common stockholder equity per share (book value), adjusted for stock splits.

This research material has been prepared by LPL Financial.

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