Investment Performance Oversight by Fund Boards

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Introduction

Investment performance oversight is among a fund board's key responsibilities. In addition to overseeing the adviser's management of the fund consistent with the fund's prospectus and other disclosures, this responsibility includes overseeing how well the adviser is investing and managing the portfolio, consistent with those disclosures.

Successful performance is the shared goal of a fund's shareholders, adviser, and board. The adviser manages the fund's portfolio investments as part of its responsibilities under the advisory contract with the fund. The fund's board oversees the adviser's management of the portfolio pursuant to the directors' fiduciary duties to the fund and their statutory responsibilities to annually review and approve continuation of the adviser's contract with the fund under Section 15(c) of the Investment Company Act of 1940 (15(c) process).

This paper discusses some primary steps for overseeing a fund's portfolio structure and risks and its performance results as outlined below.

- » Understanding the characteristics and performance expectations of the fund, based on disclosures and communications made to investors, including the bases (i.e., benchmarks) for evaluating the fund's performance and the levels and types of risks to be taken in order to achieve performance;
- » Understanding the adviser's investment organization and processes for portfolio management and investment oversight;
- » Reviewing the fund's performance on an ongoing basis through periodic reports and discussions with the adviser; and
- » Addressing performance issues, when appropriate, including with possible remediation steps.

Whether a fund's performance is considered successful over a specified period depends on a number of factors deriving from the fund's investment objectives and guidelines. This paper reviews those factors and the board's considerations in fulfilling their oversight responsibilities across an ever-expanding range of asset classes and investment strategies. The paper also discusses board governance structures and processes for investment oversight and resources available to fund directors to enhance their understanding of investment management. The appendices provide additional detail and include investment-related terms and potential questions for boards to discuss with the adviser. There are also additional resources provided for fund boards and individual directors to reference.

Investment performance oversight relates to topics addressed in several other IDC papers, including board oversight of risk management, derivatives, compliance, and subadvisers. This paper references these related reports where relevant. Investment performance oversight also is an integral part of the 15(c) process, which includes considerations of the fund's performance and the adviser's fees for managing the fund. This paper does not discuss the board's 15(c) process, but instead, focuses on the board's ongoing oversight of a fund's investment performance.

It is important to note that fund advisers encompass a large and diverse group whose members have a wide range and variety of styles of investment, focus on a broad array of asset classes, and use a number of different institutional and organizational structures. In an era of great market change and financial innovation, each of these categories is expanding as investors search for new asset classes and new techniques that offer the potential for better and less correlated returns. In particular, there has been much innovation in the management of alternative investment funds that seek returns using strategies that significantly differ from the traditional techniques of long-only, unlevered investments in stocks and bonds. Many of these strategies include the use of leverage, short exposures, and derivatives. They also may focus on other asset classes, such as commodity and real estate interests and financial indicators (such as exchange and interest rates). Similarly, recent years have seen a number of developments in investment analysis, for example in quantitative techniques and factor-based investing. Moreover, many investment firms have evolved into global enterprises with investment personnel located in many places and jurisdictions but interacting constantly through different communications and workflow channels.

This paper does not attempt to comprehensively cover all of these investment strategies and techniques or organizational structures. Instead, it focuses on the most common investment processes, strategies, and asset classes and some of the oversight practices that have evolved to address them. These practices reflect the collected wisdom of many boards and advisers over many years, and also may provide a potential starting point for oversight of less traditional investment strategies. Nonetheless, each fund adviser and board is distinct, and board investment oversight practices should be tailored to the strategies, asset classes, and operations of each fund and its adviser. Indeed, there is no one way to oversee investment performance, and one size does not fit all.

I. Fund-Specific Characteristics and Expectations

When a new fund is launched—and throughout the life of a fund—the board and the adviser should develop shared and realistic expectations for the fund's investment performance, given the fund's investment objectives, strategies, and risk parameters, based on disclosures and communications to investors. This common understanding is key to establishing the basis for subsequent evaluation of the fund's performance and, if necessary, determining the need—and plan—for possible remediation.

The board should understand a fund's key investment characteristics and how they correlate with the fund's benchmarks and expectations for performance and risks relative to those benchmarks in different market environments. The adviser should provide information, in oral and written presentations, to initially inform, and continually refresh and update, the board's understanding.

The adviser's presentations, and the board's discussions with the adviser, may cover the following key topics. Appendix B, Section I provides detailed questions for boards to consider relating to these topics.

A. Investment Objectives, Strategies, Policies, and Restrictions

The board should understand the fund's investment objectives, which could include capital preservation, current income, and/or capital growth, among others. The board also should understand and oversee the investment strategies the portfolio managers intend to follow to achieve the objectives, as well as the policies and restrictions regarding types and levels of investment exposures and sources of risk, as disclosed in the fund's prospectus and statement of additional information (SAI). Some funds, such as long-short, market neutral, and absolute return funds, seek multiple objectives. For example, such a fund might seek—over different time horizons—a combination of long-term growth with short-term stability and relatively low correlation with the returns of the major asset classes. Selecting and using a benchmark to evaluate the performance of these types of funds can be more complex than with other strategies, as noted below.

B. Asset Classes

The board should understand the asset classes in which a fund may invest, such as equities, fixed income, international, commodity or real estate interests, financial indicators (such as exchange and interest rates), or cash equivalents. Funds may target a specified sub-asset class, such as mid- or small-cap stocks, high-yield bonds, or emerging markets. Some funds, including balanced, asset allocation, and target date funds, may invest across a range of asset classes. The board and adviser should discuss the specific characteristics of the fund's asset classes and how they influence the investment process and potential returns and risks.

C. Benchmarks

Every fund must include in its prospectus a broad-based market index (constructed by a third party to ensure objectivity and broad application throughout the fund industry) for performance comparison (the market benchmark). A fund also may include more narrowly based indices that reflect the market sectors in which the fund invests. These benchmarks, as well as internally constructed custom benchmarks, establish the bases for evaluating relative performance, including assessing whether the portfolio managers have added value through their active management choices and evaluating the overall level of risk in the fund. The board should understand the rationale for selecting the fund's benchmarks, including how they are related to or reflect the fund's objectives, as well as the signals the benchmark may send to investors about the potential risks and sources of returns targeted by the fund. The board also should understand how the fund's portfolio structure may differ from that of the benchmarks. Fund returns on a gross basis (i.e., before the deduction of fees) can be compared to benchmark returns in order to understand portfolio performance independent of fees.

Another consideration is the effect of benchmark modifications or rebalancings on the fund's portfolio structure. The components of a benchmark may change on a periodic or regularly-scheduled cycle; rebalancings in some benchmarks may result in larger structural changes than in others. Changes in a fund's benchmark may cause portfolio managers to change the fund's portfolio structure or result in anomalous performance differences between the fund and the benchmark.

The adviser also may construct a custom benchmark, generally as part of detailed investment guidelines (discussed below), to assist the portfolio manager in structuring the fund and to establish the basis for monitoring portfolio structure and evaluating performance. The custom benchmark also may serve as a basis for determining portfolio manager compensation. The board and adviser should discuss how the internal guidelines and custom benchmark may influence portfolio structure and characteristics and, consequently, fund performance and risk relative to the market benchmarks and peer universe. In addition, the adviser should explain why it believes the custom benchmark is the preferable basis for performance evaluation, rather than one constructed by a third party.

The adviser may use multiple benchmarks for asset allocation or target date funds, among others. For example, an adviser might use a combination of a large-cap equity index, an international index, and a bond index. For alternative funds, with long-term return and shorter-term volatility objectives, the adviser might use one benchmark for measuring and evaluating the relative long-term returns and another for measuring and evaluating how the fund is accomplishing the shorter-term objective of limiting volatility.

D. Peer Universe

In addition to evaluating a fund's performance relative to its benchmarks, boards may evaluate a fund's returns relative to those of its peers. Vendors such as Morningstar and Lipper determine the criteria for a particular peer group and assign a fund to a group based on the characteristics of its holdings. The peer groups are often considered in the board's evaluation of performance during the 15(c) process, and also may be referenced in connection with ongoing performance evaluation. Peer group analysis may offer insights that benchmark comparisons do not when anomalies in the markets affect all actively managed funds in a particular category.

A fund's portfolio structure, risk, and relative returns might differ from those of its peers in different market environments, however. Some peer groups can be very broad and include a wide spectrum of funds, and the performance of funds in the peer group can exhibit wide divergence of returns. In a number of cases, such as evolving categories of alternative funds, socially responsible funds, and single-state municipal funds, there may not be a sufficient number of peers for the vendor to establish a peer group for that investment objective. The board and adviser should discuss expectations for when and why the fund's returns may differ from the peer group. In some instances, the adviser may identify a custom peer group that can be used in addition to, or instead of, the third-party peer groups. Similar to the use of custom benchmarks, the adviser should explain why it believes the custom peer group is the preferable basis for performance evaluation, rather than one constructed by a third party.

E. Active Management

The board should understand the degree of active management that the portfolio managers are using—i.e., the extent to which the fund's portfolio structure may differ from the benchmark's holdings and/or allocations among sectors or individual securities. While a passive (or index) fund may seek to track the structure, returns, and risk of a benchmark, actively managed funds seek to earn long-term returns above the benchmark by holding positions in different allocations from the benchmark—including securities that may not be reflected in the benchmark—and trading among holdings.

Passive and actively managed funds targeting the same markets and benchmarks will generally experience similar absolute risks—i.e., potential for loss of capital and uncertainty of returns (volatility as measured by the standard deviation of returns). A fund's market risk (beta) is a measurement of the degree to which a portfolio's value varies with changes in its market or benchmark. A low beta portfolio (e.g., less than one) will move less (up or down) than the market, while a high beta portfolio will move more than the market. Additionally, actively managed funds incur active risk, reflecting the impact of the differences between the fund's portfolio holdings and those of the benchmark.

A fund's risk-adjusted return relative to its benchmark is often referred to as "alpha," and its active risk is sometimes measured by "tracking error" or "active share." Funds may be arrayed along a continuum, ranging from low-alpha/tracking error/active share index funds, to high-alpha/tracking error/active share concentrated funds, with enhanced index and core active funds, and other variations, in between. The adviser may refer to several significant return-risk ratios (including the Sharpe ratio and information ratio) to assess the additional active return (positive or negative) per unit of risk. For more on this, see Appendix A: Investment Terms.

F. Investment Process

The investment process describes how the portfolio managers evaluate, select, and allocate assets among investments. For example, portfolio managers may employ a top down analysis, focused primarily on asset and sector selection, or a bottom up selection of individual securities. Portfolio managers also may follow a predominantly quantitative, model-driven process for evaluating and allocating fund holdings, or a more fundamental, qualitative assessment of the key characteristics and forecasts for security holdings. With the expansion of technology, many portfolio managers now combine elements of quantitative and fundamental processes, which may include a periodic quantitative review of portfolio risks and exposures. Many portfolio managers utilize macro-level economic and/or political analyses in addition to factors specific to the subject asset classes to determine the holdings upon which they will focus. Fixed income portfolio managers may focus on such elements as duration, credit, and the yield curve. Equity managers may categorize and analyze securities based on industrial sectors, capitalization size, and/or individual company specifics, including dividend rates and projected earnings growth.

Portfolio managers follow a wide range of processes to implement their strategies. Some may follow a process that narrows the focus from the broader investment universe in which the fund may invest to the selection and weighting of securities. For example, such a process might include the following components:

- 1. Investable universe. Identify the potential investable universe, as appropriate from the fund's asset classes and benchmarks (these will generally include thousands of possible holdings).
- 2. Focus list. Apply criteria/filters and screens to narrow the investable universe to a smaller list for more detailed analysis. For example, an equity fund manager may screen for minimum or maximum capitalizations or ranges of dividend rates, while a fixed income fund manager may focus on certain credit sectors (such as investment grade).
- 3. Portfolio holdings. Evaluate the focus list, using economic, industrial, political, market and/or individual company factors to select the fund's portfolio holdings.

- 4. Allocation. Determine the portfolio's allocation or weightings among holdings (e.g., sectors, industries, and individual issuers), frequently employing portfolio optimizers to analyze diversification and overall levels of risk.
- 5. Implementation. Implement the portfolio strategy with individual holdings, which may include physical securities and/or derivatives, in long and short combinations, as appropriate.

With changes in market prices, company and sector prospects, and other factors, the investment process is continuous, as portfolio managers continue to assess whether to hold, buy/increase, or sell/decrease portfolio holdings.

G. Investment Guidelines

The adviser may develop internal guidelines that—in tandem with the prospectus and SAI disclosures regarding the fund's objectives, restrictions, and policies—detail return and risk targets, constraints on concentration, sector holdings, and/or other items. For example, the guidelines may establish targets or ranges (minimum and/or maximum) for holdings including cash, industry or credit sectors, individual securities, and derivatives, as well as risk targets such as tracking error. As noted above, the guidelines may establish a custom benchmark for a more precise definition of how the portfolio may be structured and for internal assessments of relative performance and portfolio manager compensation.

H. Turnover and Transaction Costs

The board should understand the adviser's trading practices and how the fund's turnover and transaction costs affect the fund's performance. While portfolio turnover may be necessitated by daily net cash flows in or out of the fund, it also may be driven by market moves or changes in the portfolio managers' active strategy, or be a part of the strategy itself. A number of factors affect the fund's transaction costs. For example, the fund's asset class liquidity can influence the costs, as less-liquid securities (e.g., small cap equities or emerging market securities) are often more expensive to trade (especially through market impact costs) than highly liquid securities (e.g., large cap equities or developed market securities). In some cases, the portfolio manager may use derivatives, exchange-traded funds, or other pooled vehicles to achieve the portfolio's target exposures as a way to control the necessity for, and impact of, trading individual securities.

I. Favorable and Unfavorable Market Environments

Certain market environments may be more favorable for a fund's relative performance, given its investment universe, investment process, and historical experience. The board and adviser might discuss the market environments in which the fund would be expected to outperform its benchmarks and those in which it might trail, as well as how the fund would be expected to perform in rising or falling markets (i.e., expectations for "upside capture" and "downside protection"). They also might discuss the appropriate market cycle over which to evaluate the performance of the portfolio.

II. Adviser's Investment Organization and Internal Processes

Board oversight includes understanding the adviser's processes for selecting the fund's portfolio managers, monitoring portfolio structure, and evaluating performance. It also includes understanding the qualifications and roles of the research analysts, traders, and other personnel who contribute to the investment process, as well as those responsible for the process. Appendix B, Section II, suggests potential questions to assist boards in understanding the adviser's oversight organization and internal processes, as appropriate to the specific circumstances.

A. Portfolio Managers: Selection and Compensation

The board should have a general understanding of the criteria upon which the fund's portfolio managers have been selected, including their specific experience and performance record for the fund's investment strategy. The board also may seek to understand the adviser's processes for recruiting, hiring, and retaining portfolio managers and other investment personnel. The board also should be aware of the structure of portfolio managers' compensation; not the amount of compensation, but whether and how the financial incentives of the compensation structure emphasize consistent long-term performance in line with fund objectives and guidelines. In other words, the board should understand the extent to which portfolio managers' interests and incentives are aligned with those of fund shareholders.

A related topic is whether a succession plan is in place in the event a portfolio manager departs. A succession plan is especially important for "star" portfolio managers who have few people on their team.

A fund's portfolio managers may be part of the adviser's internal investment group or an unaffiliated investment firm (an external subadviser). The adviser's processes and personnel responsible for portfolio manager selection, oversight, and evaluation are likely to be similar for internal and external portfolio managers. (For more information, see IDC's Task Force Report, *Board Oversight of Subadvisers*.)

B. Investment and Risk Oversight

Fund adviser organizations, personnel, and analytics may vary considerably depending upon the size of the fund complex and the range and sophistication of the investment strategies, among other factors. An adviser's investment oversight responsibilities generally include ongoing monitoring of the fund's portfolio structure to ensure compliance with regulatory requirements and adherence to prospectus/SAI and investment guidelines. In addition, the adviser evaluates the fund's relative performance, including the sources of active management risk and alpha relative to the benchmarks.

1. Personnel

Within the adviser, investment oversight might be performed by portfolio management personnel, the chief investment officer (CIO), analysts, or a group of investment professionals separate from portfolio management. In addition, or alternatively, the adviser may have a risk management group that monitors portfolio risk exposures. Investment risk management includes ensuring that robust investment policies and processes are in place with proper controls, accountability, oversight, and reporting. The investment oversight and risk monitoring functions overlap, and advisers may organize these functions in various ways, including by combining them within the same group.

To the extent those responsible for investment oversight are separate from portfolio management (e.g., in an investment oversight group), the board might inquire about their knowledge and background. The type and complexity of investment strategies and instruments being used for the funds may dictate the type of expertise needed for this role. For example, those overseeing long-only U.S. equity strategies might require a certain level of industry analytical experience, while those overseeing fixed income and/or long-short strategies, which may rely upon derivatives in combination with physical securities, may require a certain level of quantitative expertise.

The board also might inquire regarding the reporting lines for those responsible for investment oversight, and, in particular, their authority to raise issues of potential concern with portfolio managers and senior management. Where the adviser has a separate investment oversight group, that group might report to the CIO or a non-investment senior officer, such as the chief executive officer or the chief risk officer (CRO).

Those responsible for investment oversight, even if they are not part of portfolio management, can serve as an important resource for portfolio management. For example, they can provide analyses and alerts regarding the portfolio's primary risk exposures to ensure that the exposures are intended and appropriate for the fund. Their reports can serve as a feedback loop for portfolio managers regarding the structure and risks of the funds they manage. The CIO and/or other senior management also may rely on investment oversight personnel to alert them to issues of concern that have not been resolved with the portfolio managers.

Investment oversight personnel also may serve the board as an independent resource and can provide valuable insights into portfolio structure and performance.

2. Process and Analytics

The adviser (through compliance or investment risk management teams) typically monitors adherence to guidelines as part of its overall policies and procedures. In addition, through investment oversight or risk management personnel, the adviser typically:

- » monitors on a periodic basis the fund's portfolio structure against guideline specifications such as concentration and level and sources of risk; and
- » evaluates portfolio performance, relative to benchmarks, peer universes, return-risk ratios, and expectations for the investment process in specific market environments.

The adviser also may conduct periodic stress testing and modeling of worst-case, extreme scenarios (e.g., "black swan" events) and their potential impact on portfolio diversification and liquidity of individual securities or sectors.

The adviser also may monitor:

- » risks, including absolute volatility (measured by standard deviation); market (measured by beta or duration), and active management (measured by tracking error) risks;
- » relative sector or security concentration (portfolio against benchmark) including—as appropriate to the asset class—industry, credit sector, currency, country, and individual issuer;
- » correlations among holdings and simulations of worst-case scenarios in which correlations move together; and
- » long-short combinations, which may include cash, physical securities, and/or derivatives.

These analytics are generally updated based on the time horizon and level of risk in a given investment strategy, which may be daily, weekly, or monthly. If significant changes or aberrations are identified, investment oversight and/or risk management personnel typically discuss the issue with the portfolio managers and/or senior management. Section VI discusses processes for addressing performance or other issues.

III. Board Oversight and Reports

The board provides ongoing investment oversight and receives regular reports from the adviser (investment oversight personnel, CIO, and/or the portfolio managers) to assist board members in overseeing the fund's portfolio structure, relative performance, and risk.

A. Board Oversight Considerations

In evaluating whether the fund is being managed consistently with its mandate as well as whether the fund's investment performance has been satisfactory, the board's primary considerations may include the following elements.

- » Relative performance. How did the fund perform relative to its benchmarks and peers?
- » *Risk-adjusted performance.* Did the active management add sufficient value to justify the added risk relative to the benchmarks (or passive investment alternatives)?
- » Market experience. Did the fund perform as expected in the actual market and economic environment?
- » Reasons for under- or over- performance. What were the primary reasons for the fund's performance relative to its benchmark and peer group, and were these consistent with the expectations discussed by the adviser with the board?
- » Portfolio structure and risk. Was the fund's portfolio structure consistent with disclosures and guidelines in terms of exposures, concentration, and risk relative to the benchmark?
- » *Investment process*. Did the portfolio managers follow their stated investment process, including selection and allocation of fund holdings?
- » Implementation. Did the portfolio managers efficiently implement their investment strategy, including prompt investment of cash, use of derivatives as appropriate, and control of turnover and transaction costs?
- » Lessons learned/changes. In light of market experience, are the portfolio managers or senior management considering any changes to the investment process or portfolio structure?

Appendix B, Section III includes additional potential questions for boards to ask on these topics.

B. Board Reports

With input from board counsel and other possible resources, the board and adviser should agree on the format, content, and frequency of reports. The objective is to provide the board with key information to support it in fulfilling its oversight responsibilities. This is likely to be a periodic subject for discussion, as boards and advisers continue to find ways to improve the communication and discussion around performance. Boards overseeing multiple funds managed by different portfolio managers (or different subadvisers) may request that the reports relating to each fund present similar content in similar formats. Boards generally receive written and oral performance reports in connection with each board meeting, and some may receive written summaries more frequently (e.g., monthly). The content and focus of the reports vary, however.

1. Time Frame

Performance reports focus primarily on long-term performance and often highlight performance over an entire market cycle. Reports also often measure returns over rolling periods, because a quarter—or even multiple years—is simply a snapshot, which may not be representative of the longer-term portfolio structure and relative performance, given the markets' short-term volatility. Annualized returns (e.g., for one, three, and five years) can change dramatically from one quarter to the next if the relative return for the quarter eliminated from the calculations differs significantly from the most recent quarter replacing it.

2. Content

The adviser's reports to the board should be succinct and highlight the primary factors influencing the fund's portfolio holdings and performance relative to the benchmarks, such as:

- » key market developments and any significant events affecting asset classes, sectors, or individual securities;
- » the portfolio managers' primary investment decisions (e.g., significant over- or underweights relative to the benchmark or changes in portfolio structure), including the impact of relevant market and economic events on the portfolio managers' decisions; and
- » the impact of portfolio managers' decisions on returns and risk.

Board reports often include commentary and analysis focused on the key measures and factors most pertinent to the fund's specific investment universe, objectives and process, in the context of the actual market environment.

Board reports might include the following elements.

Executive summary. An executive summary generally highlights significant data and information relating to the market environment, primary active management decisions, and the impact of the markets and management decisions on relative performance. The executive summary may cite key statistics to illustrate its commentary. Any statistics, however, should be presented in plain English, explaining their significance (as not all statistics will be significant at all times), and, if necessary, referencing more detailed quantitative exhibits.

Fund dashboard. To support a focused review of key information, a fund dashboard graphically displays the key fund statistics, which may include:

- » fund and benchmark returns (and fund versus benchmark characteristics and allocations);
- » return-risk ratios:
- » sector and geographic exposures; and
- » leverage (if any).

Amplifying the dashboard, the adviser may include more detailed exhibits illustrating, for example, rolling periods of relative or risk-adjusted returns.

Performance attribution. This analysis displays the sources and resulting impact of top-down sector allocations and/or bottom-up security selections within each sector. Performance attribution may be specific to the fund's asset classes and investment process, as the relevance of factors may differ among, for example, equities, fixed income, and international asset classes. If the attribution results reflect potential style drift (e.g., if a bottom-up stock picker derives most of the return and risk from sector exposures), then the board might ask for an explanation.

These primary reports may be supplemented with statistical reports highlighting the key elements of the fund's portfolio structure, returns, risks, and sources of relative performance.

IV. Board Governance Structure and Process

Governance structures and processes for fulfilling fund board investment oversight responsibilities vary, depending upon the range of funds and asset classes the board oversees, and the board's size and composition, including individual directors' professional backgrounds. Some fund complexes have multiple (cluster) boards, where one board oversees a specific group of funds (such as equity funds or fixed income funds). A board that oversees a large range of funds (for example, of different asset classes and investment processes) may designate one or more committees, which generally are divided by asset class. These committees conduct in-depth discussions with the portfolio management and investment oversight teams and report back to the full board. Other boards have found it most effective to form a "committee of the whole," so that all directors are informed at the same level of depth. The board's investment committee, or an asset class subcommittee, may rotate between meeting with the CIO, for an overview of the investment organization and specific fund portfolios, to more detailed discussions with the specific portfolio management teams.

Boards should consider how best to use the time at board meetings for investment-related presentations and discussions. One consideration is who should present to the board—the CIO, portfolio managers, and/or investment oversight personnel. Another is whether the board would like to receive a presentation or, instead, have solely a question-and-answer session. Some boards prefer the latter, because they will have already reviewed the written reports and wish to use the time at the board meeting to discuss pertinent issues.

Although boards receive performance reports regarding all of the funds they oversee, those overseeing a wide range of fund types may focus on a sub-category of funds at each quarterly meeting. For example, a board may concentrate on fixed income funds at one meeting and equity funds at the subsequent meeting. They also may meet with portfolio managers on a rotating schedule so that they meet with all portfolio managers within a specified period. Boards and advisers also may devote time at each meeting to discuss progress made and/or remediation plans for funds with performance issues, as discussed in the next section.

Review of investment performance is an important component of the board's annual 15(c) process. The investment reports and decisions throughout the year will generally be referenced in the board's deliberations concerning the advisory contract renewal.

V. Performance Issues and Remediation

The adviser and/or the board may, at times, determine that a fund warrants closer monitoring and possible remediation steps. While some fund groups may address these conditions on a situational basis, others have a process for enhanced monitoring (i.e., for placing funds on a "watch list"). Triggers for enhanced monitoring may include:

- » a specific number of rolling quarters of underperformance relative to the fund benchmarks:
- » risk outside the target or ranges specified for the fund, in the prospectus and/or internal guidelines (note, the adviser and board also might evaluate any fund that is outperforming significantly, to ensure the portfolio managers are not assuming a level of risk outside the expectations for the fund);
- » a specified period of negative risk-adjusted returns—i.e., consistent failure to earn positive returns sufficient to justify active risk relative to the benchmark;
- » increased portfolio trading or turnover that is inconsistent with the fund's past practice and not explained by responses to market moves or shareholder cash flows; or
- » changes to the portfolio management team or resource support staff, which may result in changes in investment strategy or portfolio structure.

If a fund has performance issues, the board and adviser might discuss the reasons and whether the performance issues appear to be temporary (such as an investment process that is out of phase with the specific market environment) or a persistent problem (such as a process that has not been applied consistently, apparent flaws in the analysis or implementation, or a need for more investment resources for the portfolio managers). The steps to remediate issues for a fund will generally escalate over time if performance concerns are not addressed, and the board should understand the adviser's specific remediation plans, expected outcome, and timeframe.

When an issue is first identified, the adviser may closely monitor the fund's investment positions and results. In the case of an underperforming fund, the adviser may work with the portfolio managers to address identified problems in the investment process, portfolio structure, or risk. Where there is a reasonable and consistent explanation for the underperformance, such as short-term, transitory factors, the adviser may be cautious about driving for precipitous change in the portfolio managers or investment process. For example, it may be that the appropriate response is to provide the portfolio managers with additional investment resources. Or, the fund's investment strategy may be "out of style" for an extended period of time but eventually overcome the cumulative performance deficit over a market cycle.

In some cases, the adviser may wish to make modifications reflecting long-term structural or fundamental changes affecting, for example, the asset class or market liquidity. Or, the adviser may determine to replace the portfolio managers, subject to oversight by and input from the board. Other potential actions include hiring an external subadviser or merging or closing the fund.

VI. Board Resources

The adviser's personnel provide a valuable resource for board education on broad investment topics, investment of individual funds, and evaluation of portfolio structure and performance. The board or individual directors may seek input and support from sources outside the adviser to expand their education and background on investment topics and terminology.

Additional education on investment topics may enhance director understanding of the adviser's investment strategies and its oversight, monitoring, and evaluation tools. Potential resources may include legal counsel and audit firms, which can provide general or customized educational materials as part of the board support function. Fund industry events for directors also may offer programs on investment topics and may include presentations by portfolio managers, consultants, or academics with specific expertise. Directors also may wish to explore programs offered through the broader investment industry. A list of some additional resources for directors is at the end of this paper.

Conclusion

Fund boards have a key oversight role with respect to a fund's investment performance. As the industry continues to evolve and become more complex, fund boards should continue to enhance their understanding of investment concepts generally and the specific characteristics of the funds they oversee. In doing so, fund boards will continue their long tradition of diligent oversight of fund investments on behalf of fund shareholders.

Appendix A: Investment Terms

The following terms may be used in the reports and discussions concerning a fund's investment performance.

Investment Returns

absolute return. The fund's return over a specified period of time; may be measured gross or net of fees.

relative return. The fund's return as compared to the return of a benchmark (gross or net of fees).

risk-free rate. Theoretical return for an investment with zero risk (e.g., U.S. Treasury note); represents the interest an investor would expect to receive from a riskless investment.

Measurements of Risk

active share. Active share represents the percentage of securities in a portfolio that differ from those in the benchmark. Active share is calculated by taking the sum of the absolute value of the differences between the weights of the securities in a portfolio and the weights of securities in the benchmark, divided by two. The higher the active share, the more active bets the adviser is placing in the portfolio.

standard deviation. A measure of the variability of a data set (including a data set of investment returns). A low standard deviation indicates that the data points tend to be very close to the same value (the mean), while a high standard deviation indicates that the data are spread out over a large range of values.

beta. A measure of a fund's volatility in relation to a securities market, as measured by a stated index. By definition, the beta of the stated index is 1; a fund with a higher beta has been more volatile than the index, and a fund with a lower beta has been less volatile than the index.

tracking error. Often measured as the standard deviation of the relative return; that is, the standard deviation of the difference between the benchmark return and the fund return. Tracking error measures active return—the impact of differences in holdings and returns of the fund's portfolio versus the benchmark.

value at risk (VaR). The maximum loss in cash terms over a finite period (e.g., one day or one month) given a certain level of confidence (such as 99 percent or 95 percent). VaR is best understood in terms of the bell curve or normal distribution: VaR focuses on the outcomes at the curve's left tail, two or three standard deviations from the mean. VaR also may be based on historical information and, thus, has its limitations. It is important to note that VaR is not the worst case loss (see CVaR below).

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conditional value at risk (CVaR). A statistical measure that represents the average loss that could be expected over a given time frame (generally 1 day, 1 week, or 1 month) with a given probability (generally 95 percent or 99 percent, once the loss exceeds VaR. CVaR can be thought of as the expected average loss during the worst 1 percent of market outcomes, whereas VaR is the maximum loss that can be expected during the other 99 percent of market outcomes, over a particular period of time.

correlation coefficient. Statistical measures of how two securities move in relation to each other. Perfect positive correlation (a correlation coefficient of +1) means that as one security moves either up or down, the other security will move in lockstep in the same direction. Perfect negative correlation (a correlation coefficient of -1) means that if one security moves in either direction, the security that is perfectly negatively correlated will move in the opposite direction.

Note that all the risk statistics above can be calculated based on actual historical returns, or calculated on an *ex ante* basis using a risk model. Historical statistics have the advantage of being based on actual data, but are limited as a measure of current risk levels, particularly if the portfolio has changed significantly over time. *Ex ante* risk statistics have the advantage of being based on the current portfolio holdings and exposures, but have the disadvantage of requiring significant estimates and assumptions in their calculation.

Risk-Adjusted Returns

Calculates returns at the same level of risk to allow comparisons of fund versus benchmark returns.

alpha. The difference between a fund's actual returns against its expected performance over a period of time, given its level of market risk as measured by beta. A positive alpha indicates the fund performed better than its beta would predict. A negative alpha indicates the fund's underperformance based on the expectations indicated by the fund's beta.

excess return. The fund's return minus the risk-free rate over a specified period.

expected return. The return that is expected for an investment, given a probability distribution for the possible rates of return. Expected return is often calculated as the benchmark return in excess of the risk-free rate, multiplied by the portfolio's beta, which can be adjusted by an expected alpha if appropriate.

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Return-Risk Ratios

Measures return per unit of risk to indicate the amount of return for bearing the risk.

Sharpe ratio. A measure of an investment's risk-adjusted returns. It is calculated by dividing an investment's returns in excess of the risk-free rate (i.e., Treasury bill rates) by the investment's standard deviation. Positive values indicate that a manager is generating incremental returns for the risk they have taken on. Negative values indicate a manager has underperformed the risk-free rate. Higher Sharpe ratios indicate better returns per unit of risk.

information ratio. An assessment of the value generated by active management of the portfolio. It is often calculated by subtracting the benchmark return from the portfolio return (or using the alpha) and dividing by the tracking error. A manager who did not add value would be expected to have an information ratio of zero. Any information ratio above zero means that the portfolio manager has outperformed the benchmark.

upside capture ratio. Ratio of the fund's return to the benchmark return during a specified period when the benchmark had a positive return. The ratio shows whether the fund gained more than the benchmark in an up market.

downside capture ratio. Ratio of the fund's return to the benchmark return during a specified period when the benchmark had a negative return. The ratio shows whether the fund lost less than the benchmark in a down market.

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Appendix B: Potential Board Questions

Investment oversight practices of fund directors (such as types of reports reviewed, topics discussed with the adviser, and questions asked) vary depending upon a number of different factors, including the investment objectives of the fund overseen by the board. Below is a list of topics and questions that a board might consider in connection with its oversight of a fund's investments.

The topics and questions are not intended to reflect best practices or serve as a model for boards to follow. Rather, they are meant to assist boards in considering the types of information they might seek and discuss with the adviser. Many boards may already address these topics, while others may determine that they are not applicable, given the facts and circumstances of their particular fund. In addition, the topics addressed are not intended to be comprehensive; the list does not cover all of the responsibilities that fund directors fulfill. Rather, the topics are intended to highlight some of the considerations pertinent to investment oversight.

The list below tracks the sections in the paper.

I. Fund-Specific Characteristics and Expectations

A. Investment Objectives, Strategies, Policies, and Restrictions

- » What are the fund's primary investment objectives (e.g., capital preservation, current income, capital growth)?
- » If the fund has multiple investment objectives (e.g., long-term growth with short-term stability and/or low correlation with major asset classes), how are these objectives specified, measured, and evaluated? Over what time frames?
- » If the fund has multiple "sleeves," as in a multi-managed fund, what are the investment objectives for each sleeve and for the overall fund?
- What primary investment strategies does the adviser pursue in seeking to obtain the fund's objectives?

B. Asset Classes

- » What are the asset classes (e.g., equities, fixed income) and markets in which the fund may invest?
- » Does the fund target sub-classes of assets, such as small-cap stocks or high yield bonds?
- » Is the fund a multi-asset fund that invests in a range of asset classes?

C. Benchmarks

- What are the fund's primary benchmark(s), as specified in the prospectus?
- » How and why were these benchmarks selected?
- » How do the benchmarks relate to or reflect the fund's objectives and risk levels?
- » Why are the fund's benchmarks appropriate to measure and evaluate the fund's portfolio structure and results?
- » Is the benchmark's construction or restructuring process (for example, annual reweighting of small or large capitalization indices) expected to trigger rebalancing in the fund's portfolio or affect its weightings relative to the benchmark?
- » Does the adviser also follow a custom benchmark, tailored to reflect the fund's investment objective and investment universe, to guide the fund portfolio managers?
 - » What are the custom benchmark's components and weighting?
 - Why is the custom benchmark considered to be more appropriate for guiding and evaluating the fund's structure and performance?
 - » Does the custom benchmark serve as a basis for internal performance and risk evaluation?
 - » Does it serve as a basis for determining portfolio manager compensation?
 - » What are the similarities and differences between the custom benchmark and the market benchmarks disclosed in the prospectus? How might the fund be expected to perform relative to each of these benchmarks in different market environments?
- » For multiple asset and/or alternative funds (with long-term return and shorter-term volatility objectives), what are the benchmarks for each objective?

D. Peer Universe

- » What are the differences between the fund and the funds in the peer group in terms of portfolio structure, exposures, risk, and relative returns in different market environments?
- What are the implications of those differences for evaluating the fund's performance relative to the peer group?

E. Active Management

- » To what extent is the fund actively managed? In particular, to what extent may the fund portfolio vary relative to the benchmark structure, to seek returns in excess of the benchmark return?
- » What is the target tracking error and range?
- » What is the expected long-term value added (alpha) above the benchmark return?

F. Investment Process

- What is the investment process used by fund portfolio managers for researching, evaluating, and selecting fund holdings from the investment universe?
 - » Is the primary focus on asset/sector selection (top down) or individual security selection (bottom up)?
 - » Do the portfolio managers follow a predominantly quantitative, model-driven process for evaluating and allocating fund holdings, or a more fundamental, qualitative assessment of key characteristics and forecasts for securities holdings?
- » With specific reference to the fund's asset classes, discuss:
 - » key investment staff's roles and responsibilities;
 - » primary sources of active returns and risk (for example, sector rotation; security selection/concentration; yield curve positioning);
 - » primary sources of research and data, i.e., internal (proprietary) and/or external;
 - » key analyses and inputs used to evaluate, rate, select, and sell investments;
 - » process for determining the portfolio allocation among sectors and securities, relative to the benchmark weights; and
 - » the history, and expectations for, turnover and transaction costs, in different market environments.
- » Has the investment process changed recently? If so, what was the origin of the change and how successful has the change been so far?

G. Investment Guidelines

- » Do the portfolio management and investment oversight teams follow internal investment guidelines that detail the fund's objectives, targets, and constraints?
- » If so, describe the guidelines. For example, do they cover:
 - » tracking error, reflecting the fund's positioning as, for example, an indexed, core active, or concentrated fund;
 - » cash, indicating whether the portfolio managers may hold significant amounts for defensive purposes;
 - » minimum/maximum portfolio holdings against the benchmark (securities, sectors, regions, assets), reflecting the fund's objectives and level of active management, as well as the portfolio managers' investment process;
 - » permitted use of derivatives, such as by percent of portfolio, type of derivative, and/or objective (which may include investing cash, hedging risk of existing portfolio holdings, and/or substituting for comparable physical security holdings); and
 - » permitted use of leverage?
- » Who within the organization is responsible for the development of the guidelines and metrics?
- » How do the investment guidelines influence portfolio structure and characteristics?

H. Turnover and Transaction Costs

- » What is the adviser's trading process for implementing the fund's investment strategy?
- » How do the adviser's traders interact with portfolio management?
- » What are the expected average turnover and transaction costs, and in which market environments may they increase?
- » How are transaction costs (including commissions and market impact) controlled and monitored?
- » How might transaction costs influence the amount of turnover and the required "hurdle rate" (i.e., the expected incremental return from the trade—versus buy-and-hold relative to the trading cost)?
- » What are the adviser's processes for promptly and efficiently investing excess cash?

I. Favorable and Unfavorable Market Environments

- » How does the adviser define the market cycle over which the fund's performance should be evaluated?
- » What are the expectations for fund performance, such as for:
 - » long-term (3-5 year market cycle) fund return (gross and net of fees) in excess of the benchmark return;
 - » current income (dividends or interest);
 - » capital preservation and/or growth;
 - » relative returns in rising versus falling markets (upside capture versus downside protection); and/or
 - » market or economic environments in which the fund may be expected to outperform or under-perform the benchmark?

II. Adviser's Investment Organization and Internal Processes

A. Portfolio Managers: Selection and Compensation

- Which portfolio manager(s) or team will be responsible for investing the fund?
- » How were they selected and what is their relevant experience and record with comparable investment strategies?
- » What are the criteria and process by which they will be evaluated and compensated?
 - » If the adviser uses internal portfolio managers and external subadvisers, are the criteria, process, and personnel similar for their selection, monitoring, and evaluation?
- » How is compensation for portfolio managers structured?
 - » Does the structure emphasize long-term relative performance in line with investment objectives and guidelines?
 - » How are short-term (one year and under) and long-term performance results considered in establishing the basis for the manager's incentive-based compensation?
- » What percentage of the portfolio managers' work time is available for investment-related activities (as opposed to marketing, client relations, and administration)?
- » What has been the turnover among the portfolio managers?

B. Investment and Risk Oversight

1. Personnel

- » Who within the adviser's organization are responsible for the following functions, if they are pertinent:
 - » monitoring of portfolio structure against guidelines and investment strategy (to identify potential style drift, among other things);
 - » evaluation of investment performance—relative to benchmarks and peer groups—including risk-adjusted returns, return-risk ratios (i.e., Sharpe ratio, information ratio), and sources of active returns (performance attribution); and
 - » overall investment risk oversight?
- What is the role of the CIO, the CRO, or other senior managers in the oversight and evaluation process?
- » What is the professional background and experience of the persons responsible for investment oversight?
 - » What is their experience with respect to the fund's investment strategies?
 - » How does their expertise compare with that of the portfolio managers?
 - » Has the staffing, structure, or responsibilities changed in light of any lessons learned during recent market events or adviser-specific challenges?
- » How do investment oversight personnel interact with the fund's portfolio managers?
 - » How do they interact with related functions including compliance, risk management, trading, and valuation?
- » What is the process for resolving issues of concern, such as potential overconcentrations?
- » If issues cannot be resolved, do investment oversight personnel have access to senior management?
- » What are the primary considerations in determining compensation for the investment oversight personnel?
- » Does the investment team have sufficient resources?

2. Process and Analytics

- » What are the primary metrics used to determine if investment performance is satisfactory?
- » How do investment oversight personnel evaluate risk-adjusted returns and measures i.e., what is considered successful relative investment performance?
- » If implementation of the fund's investment strategy involves use of derivatives and other complex instruments, how do investment oversight personnel monitor and model for:
 - » potential leverage, in excess of the fund's limits and guidelines;
 - » portfolio concentrations with combinations of cash securities and derivatives; and
 - » counterparty exposures?
- » Are the analytical tools sufficiently sophisticated for the complexity of the investment strategies and holdings that are being monitored and evaluated?
- » Is there an established process for identifying, quantifying, and managing investment risk?
- » Is there any formal type of risk budgeting? If so, what is that process?
- » What market events could cause serious liquidity concerns for the fund?

III. Board Oversight and Reports

Relative performance

- » Has the fund succeeded in fulfilling its objective(s)?
 - » For capital preservation: Given the benchmark return, did the fund limit its downside participation (which may still be a negative return) or avoid any capital loss?
 - » For current income: Did the fund achieve a specified dividend/interest rate or a percentage of the available rate?
 - » For *capital growth:* Given the benchmark return, did the fund participate fully in, or exceed the benchmark?

Risk-adjusted performance

» Did the fund outperform its benchmark(s), in absolute and risk-adjusted terms?

Market experience

» Did the fund perform as expected given market and economic events over the period?

Reasons for under- or over- performance

- » What are the primary reasons for the fund's performance relative to its benchmarks and peers?
- » Are the reasons consistent with what was/should be expected given the market environment?
- » Has the fund's performance been consistent with that of the adviser's other investment products with similar investment objectives and a similar investment process?

Portfolio structure and risk

- » Has the fund portfolio's structure been consistent with expectations in terms of exposures, concentration, and risk relative to the benchmark?
- » Did the portfolio managers hold positions in over- or under-weights relative to the benchmark as expected, given their investment process and the market and economic environment?
- » Did the portfolio managers adhere to investment guidelines and constraints, such as on risk exposures and concentration?

Investment process

- » Have the portfolio managers followed their stated investment process, including selection and allocation of fund holdings?
- » Are there some examples that illustrate when performance evaluation has identified particular strengths and weaknesses in the investment process? If so, what were the responses to those observations?

Implementation

- » Have the portfolio managers effectively controlled turnover and the impact of transaction costs?
- » Did the portfolio managers effectively invest incoming cash and/or provide liquidity for fund redemptions?
- » How were derivatives used, in combination with cash securities, to implement the investment strategy?
- » What has been the historic experience with turnover?
- » What has been the contribution to performance of turning over portfolio holdings relative to a buy-and-hold strategy?

Lessons learned/changes

» In light of market experience, are the portfolio managers or senior management considering any changes to the investment process or portfolio structure?

IV. Board Governance Structure and Process

There are no corresponding questions for this section.

V. Performance Issues and Remediation

- » Does the adviser have a process for identifying funds that warrant closer monitoring, such as a watch list?
- » If so, what are the criteria and factors for placing a fund on the watch list?
- » Does a change in the portfolio management team automatically trigger placement on a watch list, to monitor continued adherence to the stated investment objectives and process and avoid excessive turnover?
- » Are funds that perform above expectations monitored, as well as those trailing expectations?
- » Are trailing funds monitored to ensure the portfolio managers do not take on undue market or active risk in an effort to recover losses?
- » How does the adviser distinguish between temporary versus persistent issues?
- What are the key steps, timelines, and responsibilities for monitoring, evaluating, and potentially remediating a watch list fund (i.e., from enhanced monitoring to evaluating and potentially changing the current portfolio managers' investment process to replacing the portfolio managers)?
- » What resources has the adviser dedicated to improving future performance and/or adherence to fund guidelines and constraints?

Additional Resources and Acknowledgments

The following is a list of some resources directors can access for further reading and understanding of investment management and related topics. They are merely a sample of a large number of available sources. Except for the Investment Company Institute (ICI) and the Independent Directors Council (IDC) websites and publications, the websites and publications listed below are created, maintained, and published by other organizations. ICI and IDC do not control, cannot guarantee, and are not responsible for the accuracy, timeliness, or even the continued availability or existence of this outside information.

IDC Publications

- » IDC Paper, Board Oversight of Target Retirement Date Funds (April 2010)
- » ICI/IDC Paper, Fund Board Oversight of Risk Management (September 2011)
- » IDC Task Force Report, *Board Oversight of Subadvisers* (January 2010)
- » IDC Task Force Report, Board Oversight of Fund Compliance (September 2009)
- » IDC Task Force Report, Board Oversight of Derivatives (July 2008)

Peer Group Categories and Rating

Firms that evaluate funds may include information about their methodologies for classifying categories of funds and for rating them. Examples include:

» Lipper: www.lipperweb.com

» Morningstar: www.morningstar.com

Dictionaries/Glossaries

John Downes and Jordan Elliot Goodman, *Barron's Dictionary of Finance and Investment Terms* (7th ed. 2007)

Background Reading

Russell Research: Risk Management: A Fiduciary's Guidebook (2010)

The following two articles were written for investment committees of nonprofit organizations and include some helpful insights for fund boards as well.

The Research Foundation of CFA Institute: A Primer for Investment Trustees, 2011

Vanguard Investment Counseling and Research, *Evaluating Managers: Are We Sending the Right Messages?* (2006)

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The Independent Directors council (IDC) serves the fund independent director community and provides a venue to advance the education, interaction, communication, and policy positions of fund independent directors.

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