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REPORT OF THE MUTUAL FUND DIRECTORS FORUM

PRACTICAL GUIDANCE FOR FUND DIRECTORS ON VALUATION OVERSIGHT



MUTUAL FUND DIRECTORS FORUM
The FORUM for FUND INDEPENDENT DIRECTORS

STRADLEY
RONON

Executive Summary

Proper valuation of a fund's portfolio securities is critical to the calculation of a fund's net asset value per share. While fund independent directors do not play a day-to-day role in the pricing of a fund's individual investments, directors bear the ultimate responsibility for valuing those securities without a readily available market quotation. Under section 2(a)(41) of the Investment Company Act of 1940 (the "1940 Act"), such securities must be assigned a "fair value" as determined in good faith by a fund's board of directors.

Rule 2a-5 under the 1940 Act ("Rule 2a-5" or the "Rule") provides requirements for determining fair value in good faith, addresses valuation practices, and outlines the role of a fund's board of directors with respect to the fair value process. Rule 2a-5 allows the board to designate a valuation designee to perform fair value determinations. In almost all cases, the valuation designee must be the fund's investment adviser. When boards designate a valuation designee, the board's role becomes one of oversight.

This report examines the valuation of a fund's portfolio securities, requirements surrounding fund valuation procedures, the board's responsibility in overseeing valuation, and the responsibilities of the valuation designee under Rule 2a-5. Beyond the specific requirements of Rule 2a-5, boards must determine how to perform their ongoing oversight, including considering how to organize themselves to oversee the valuation process; determining the frequency, type and format of board reporting; and developing a communication process with management.

The board, however, may avail itself of additional assistance for valuation oversight. The fund's chief compliance officer ("CCO"), auditor, and the fund's and/or independent directors' legal counsel each have a unique perspective on the valuation process that can be helpful to fund directors.

Director oversight of valuation is a board responsibility and acts as a safeguard to protect a fund and its shareholders. This report provides an overview of the legal responsibilities of directors in carrying out these important duties and offers suggestions directors may find useful in doing so.

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Mutual Fund Directors Forum Valuation Working Group

- **Stacie Anctil**, Managing Director, Deloitte Consulting
- **Joshua Borneman**, Associate, Stradley Ronon
- **David Grim**, Partner-in-Charge, Washington, DC, Stradley Ronon
- **Jennifer Hillman**, Associate, Stradley Ronon
- **Katie King**, Partner, PwC US
- **Paul Kraft**, Lead Partner U.S. Mutual Fund and Investment Adviser Practice, Deloitte & Touche LLP
- **Eliza Kwong**, Partner, PwC US
- **Patricia Maleski**, Independent Director, Morgan Stanley Mutual Funds
- **Garry Moody**, Chair and Independent Director, AB Mutual Funds
- **Ronald Parker**, Independent Director, Pimco Funds & Mutual Fund Directors Forum, Board of Directors Member
- **Trevor Swanberg**, Chief Compliance Officer, John Hancock Investment Management and John Hancock Group of Funds
- **David Trerice**, Asset and Wealth Management Governance Leader, PwC US

Introduction

Proper valuation of a fund's assets is essential for the calculation of net asset value per share ("NAV"). The 1940 Act permits transactions in open-end fund shares only at a price based on NAV.¹

Inaccurate valuation of a fund's underlying investments can have significant consequences if not identified and corrected. If portfolio securities are not valued appropriately, one category of shareholders (either sellers of fund shares or buyers of the shares) will gain a benefit at the expense of the other group. A consistent and accurate valuation process is essential for pricing of fund shares and performance calculations.

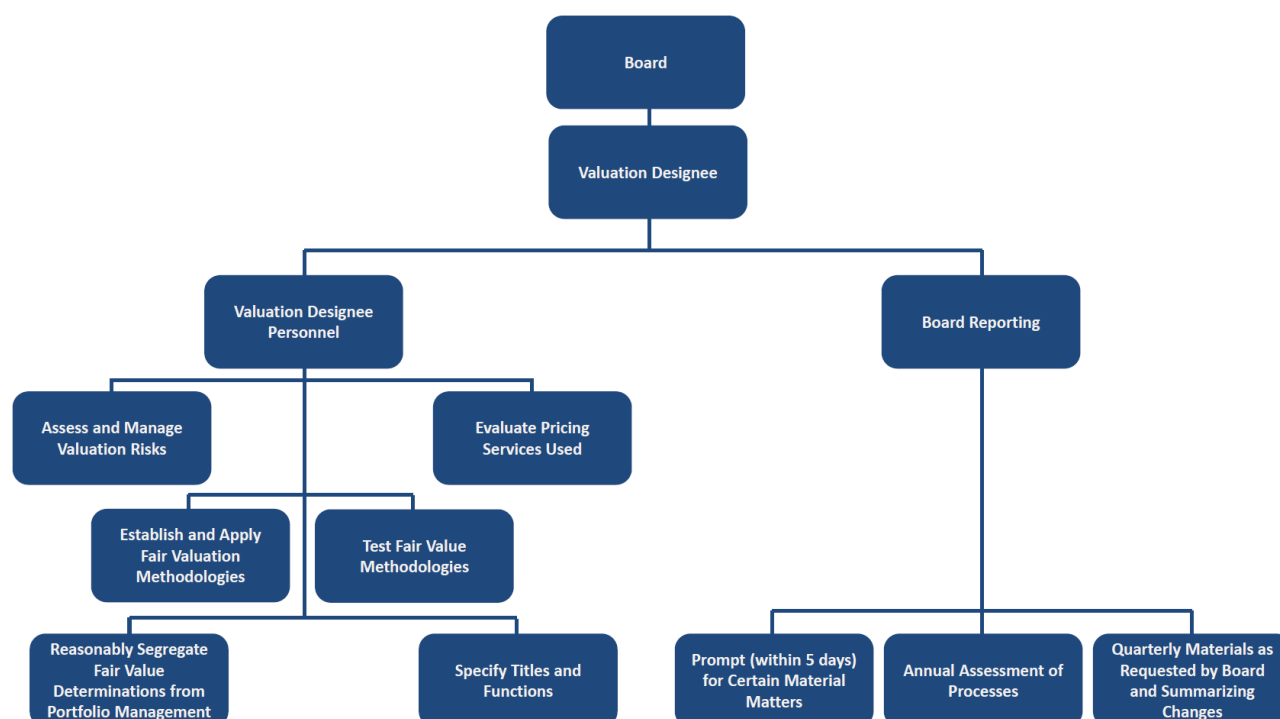
Fund directors have a statutory obligation to determine the fair value of securities for which market quotations are not readily available.² However, Rule 2a-5 permits boards to designate the day-to-day responsibility for determining the fair value of all or some securities to a "valuation designee," who generally must be the fund's adviser.³ Rule 2a-5 generally requires that the board, or the valuation designee:

- Assess and manage valuation risks;
- Establish and apply fair value methodologies;
- Test the appropriateness and accuracy of the methodologies selected; and
- Oversee pricing services, if used.⁴

When a board designates the fair value determinations to its adviser under Rule 2a-5, the board's role becomes one of oversight, largely through various reporting requirements outlined in Rule 2a-5.⁵ Given that boards typically designate valuation responsibilities to a valuation designee, this report assumes such designation throughout and discusses valuation-related responsibilities accordingly.⁶

Rule 2a-5 replaces a patchwork of prior SEC guidance that surrounded the valuation process. The Rule establishes a consistent framework for determining fair value.⁷ In addition to the permitted designation, the Rule provides more formalized processes for management of valuation risks, oversight of pricing services, and testing of valuation methodologies.

The following graphic generally illustrates the responsibilities of the board and valuation designee.



The Adopting Release states that board oversight of valuation should be an “iterative process.”⁸ Such a standard requires that boards and service providers remain vigilant to new issues and changing market dynamics that may create price uncertainty in the valuation process. The fund’s valuation procedures should adapt to meet changes in a fund’s investment strategies and underlying investments. Due to the constantly evolving nature of valuation issues, advisers and boards should work together to build a process that continues to be actively monitored and effective.

This report⁹ is designed to provide information to boards about their responsibilities for fund valuation. Because Rule 2a-5 applies to all registered investment companies, including open-end mutual funds, exchange-traded funds, business development companies, and closed-end funds,¹⁰ the information provided herein is intended to be broadly useful for fund boards of all types. This report will detail the legal requirements related to fund valuation practices and discuss how boards may carry out their responsibilities in overseeing the valuation process.

How is NAV Determined?

The 1940 Act requires that registered investment companies offer and redeem their shares at a price based on the fund's current NAV.¹¹ A fund's NAV per share is calculated based on the value of the fund's portfolio securities and other assets less any liabilities, divided by the total number of outstanding shares of the fund. Mutual funds calculate their NAVs on each business day at a time set by the fund.¹² Most funds calculate their NAVs at the time of the close of the New York Stock Exchange ("NYSE"), which is usually 4:00 pm Eastern time. Under the 1940 Act, securities and assets without "readily available" market quotations are valued at fair value as determined in good faith by a fund's board of directors.¹³ Rule 2a-5 defines "readily available" and establishes requirements for determining fair value in good faith for purposes of the 1940 Act.

"Readily Available" Market Quotes

If a security has a market quotation that is "readily available," its value is that market quotation.¹⁴ A market quotation is considered readily available only when that quotation is a quoted price (unadjusted) in active markets for identical investments that the fund can access at the measurement date, provided that a quotation will not be readily available if it is not reliable.¹⁵

The definition of "readily available market quotations" is consistent with the definition of a level 1 input in the fair value hierarchy outlined in U.S. Generally Accepted Accounting Principles ("GAAP"). A security will be considered to have a readily available market quotation if its value is determined solely by reference to these level 1 inputs.¹⁶ Level 1 inputs are defined as quoted prices (unadjusted) in active markets for identical assets or liabilities that the reporting entity can access at the measurement date, and generally correspond with exchange-traded securities and certain derivatives.¹⁷

Market Quotations Not "Readily Available"

In some cases, market quotations are not "readily available," even for securities trading on exchanges. For instance, a particular security may have had a market quotation, but the price may no longer be reliable if there has been a gap in time or if a significant event has taken place after the last market price, but before the fund's NAV is calculated so that the quotation does not reflect the current market value at the time a fund calculates its NAV.¹⁸ For example, the fund may be unable to rely on the last market price in the following circumstances:

- The primary market on which a security trades (other than the NYSE) closes before the time at which the fund's NAV is calculated;
- A security experiences a halt in trading;
- Events close markets early;
- Scheduled market holidays (other than NYSE holidays); and
- An absence of trading in a particular security.

Equity securities of foreign issuers traded on foreign exchanges are likely to fall into this category. Foreign markets close before the close of the NYSE; therefore, the closing price of the foreign exchange may be several hours old at the time a fund calculates its NAV. With respect to foreign securities, the SEC has stated that funds generally should identify and monitor for the kinds of significant events that, if they occurred after the market closes in the relevant jurisdiction but before the fund prices its shares, would materially affect the value of the security and therefore may suggest that market quotations are not reliable.¹⁹ To address this, many fund groups systematically determine the fair value of equity

securities traded in foreign countries as of the time a fund calculates its NAV. Many fund groups also employ third-party pricing services that offer methodologies involving statistical analyses and quantitative models for calculating fair value adjustments that can be applied to such foreign equities.

In addition to foreign securities, many fixed-income securities, securities traded over the counter (“OTC”), and securities priced using evaluated prices from third-party pricing services also are not considered to have readily available market quotations.²⁰

“Fair Value”

If a security’s price is deemed not to be “readily available,” that security must be fair valued. Fair value is “the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.”²¹ The SEC has recognized that for any particular investment, there may be a range of appropriate values that could reasonably be considered fair value, and fair value will depend on the facts and circumstances of the particular investment, the relevant market, and market participants.²²

The SEC has recognized that there may be more than one value that is reasonably considered fair value.

What are the Valuation Designee’s Responsibilities under Rule 2a-5?

Boards Typically Designate Day-to-Day Responsibilities for Valuation

Rule 2a-5 specifically allows a board to designate a valuation designee, who in almost all cases must be the fund’s adviser.²³ The SEC limited designation to the adviser given the adviser’s fiduciary duties to, and comprehensive and direct knowledge of, the fund(s) it advises.²⁴

Fund Valuation Procedures

Policies and procedures reasonably designed to comply with the requirements of Rule 2a-5 must be adopted under Rule 38a-1 under the 1940 Act (“Rule 38a-1”).²⁵ **Where the board has designated a valuation designee, the valuation designee must adopt, and the board must approve, policies and procedures to comply with the requirements of Rule 2a-5.**²⁶ While funds had valuation policies and procedures prior to the adoption of Rule 2a-5, implementation of the Rule required most funds and advisers to update their policies and procedures to align with the new requirements. The policies and procedures should be reasonably designed to:



- Periodically assess material risks associated with the determination of the fair value of fund investments, including material conflicts of interest, and manage those identified valuation risks;
- Establish and apply appropriate fair value methodologies to be used in the valuation process (including periodic review of the appropriateness and accuracy of the methodologies, and monitoring for circumstances that may necessitate the use of fair value);
- Periodically test appropriateness and accuracy of the fair value methodologies used in the valuation process; and
- Oversee pricing services (third-party vendors that provide pricing estimates and other information to funds) when used in the valuation process.

Each of these requirements is discussed in more detail below.

Assess and Manage Valuation Risks

Rule 2a-5 requires periodic assessment of any material risks associated with the determination of fair value of a fund's investments, including any material conflicts of interest.²⁷ Once risks are identified, they must be managed.²⁸ The Rule gives the valuation designee flexibility to determine a fund's particular risks and how often those risks should be assessed and reevaluated.²⁹ The SEC has provided the following non-exhaustive list of examples of valuation risks that may be considered:

- The types of investments held or intended to be held by the fund and the characteristics of those investments;
- Potential market or sector shocks or dislocations and other types of disruptions that may affect a valuation designee's or a third-party's ability to operate;
- The extent to which each fair value methodology uses unobservable inputs, particularly if such inputs are provided by the valuation designee;
- The proportion of the fund's investments that are fair valued as determined in good faith (especially with respect to securities valued using level 3 inputs), and their contribution to the fund's returns;
- Reliance on service providers that have more limited expertise in relevant asset classes, the use of fair value methodologies that rely on inputs from third-party service providers, and the extent to which third-party service providers rely on their own service providers (so-called "fourth-party" risks); and
- The risk that the methods for determining and calculating fair value are inappropriate or that such methods are not being applied consistently or correctly.³⁰

As the SEC's list of risks is not meant to be exhaustive, additional risks may apply to a given fund. Please see Appendix 1 for some additional potential valuation risks and questions that boards may want to consider.

Questions for Boards to Consider

- Are the valuation risks identified by the adviser reasonable in light of the fund's investment strategy?
- How does the adviser monitor changes to a fund's valuation risks?
- Does the adviser have a process for evaluating whether risks continue to be appropriate or require modification?

Establish and Apply Fair Value Methodologies

Rule 2a-5 requires establishing and applying fair value methodologies, which must entail:

- Selecting and applying in a consistent manner appropriate fair value methodologies, including specifying the key inputs and assumptions specific to each asset class or portfolio holding;
- Periodically reviewing the appropriateness and accuracy of the methodologies selected and making any necessary changes or adjustments; and
- Monitoring for circumstances that may necessitate the use of fair value.³¹

A fund’s valuation process must include a description of the methodologies that the adviser will use when making fair valuation determinations.³² The SEC expects such descriptions to be fairly detailed; simply stating the name of a model to be used would not be sufficient without providing additional detail on the specific qualitative and quantitative factors to be considered, the sources of the methodology’s inputs and assumptions, and a description of how the calculation is to be performed (which may, but need not necessarily, take the form of a formula).³³



Methodologies often establish a hierarchy that determines the sources that an adviser will use when valuing securities. Different hierarchies can be established for different types of securities. Fair valuation methodologies may be changed if different methodologies are equally or more representative of fair value of the investments, and such changes must be reported to the board as required by Rule 2a-5.³⁴ Methodologies must be consistent with the principles of the valuation approaches laid out in ASC 820.³⁵

Questions for Boards to Consider

- How does the adviser monitor whether methodologies continue to be appropriate? How is this monitoring documented?
- What process does the adviser use to determine that a change in methodology is equally or more representative of fair value than the prior methodology (e.g., the results of back-tests)?
- How often are methodologies reviewed?

Testing of Fair Value Methodologies

Rule 2a-5 requires testing the appropriateness and accuracy of the fair value methodologies used, which must include identifying such testing methods, and the minimum frequency with which testing will occur.³⁶ Rule 2a-5 does not prescribe particular testing methods or a minimum frequency for testing, leaving this to funds to determine based on their unique circumstances.³⁷ Calibration and back-testing are common examples of testing used by funds. Calibration, according to the SEC, “is the process for monitoring and evaluating whether there are material differences between the actual price the fund paid to acquire portfolio holdings that received a fair value under the [1940] Act and the prices calculated for those holdings by the fund’s fair value methodology at the time of acquisition.”³⁸ Back-testing, according to the SEC, “involves a comparison of the fair value ascribed to the fund’s investment against observed transactions or other market information, such as quotes from dealers or data from pricing services.”³⁹

Funds have flexibility to determine testing methods and frequency.

In addition to calibration and back-testing, other commonly used testing methods include:

- Data analysis using vendor pricing (for instance, comparing prices provided by various pricing services);
- Conducting “deep dives” of methodologies and assumptions applied to a sample of securities;
- Price challenges; and
- Utilizing third parties to test certain methodologies.

Questions for Boards to Consider

- How does the adviser determine which tests are appropriate to review the effectiveness of the fund's fair valuation methodologies?
- How does the adviser determine the appropriate frequency to test the effectiveness of the fund's valuation methodologies? How do testing results influence the adviser to make changes to valuation methodologies?
- What results from testing would the board like to review to provide appropriate oversight of the valuation process?

Oversight of Pricing Services

Many funds use third-party pricing services. Rule 2a-5 requires that the valuation designee oversee pricing services, if used, including establishing the process for approving, monitoring, and evaluating each pricing service provider.⁴⁰ Pricing services should be subject to oversight so that the valuation designee has a reasonable basis to use the pricing information it receives as an input in determining fair value in good faith.⁴¹ **Boards should understand that pricing services typically do not accept legal responsibility for prices they generate even if done negligently.**



The SEC provided a list of factors that should generally be considered by valuation designees before deciding to use a pricing service, as follows:

- The qualifications, experience, and history of the pricing service;
- The valuation methods or techniques, inputs, and assumptions used by the pricing service for different classes of holdings, and how they are affected (if at all) as market conditions change;
- The quality of the pricing information provided by the service and the extent to which the service determines its pricing information as close as possible to the time as of which the fund calculates its net asset value;
- The pricing service's process for considering price "challenges," including how the pricing service incorporates information received from pricing challenges into its pricing information;
- The pricing service's actual and potential conflicts of interest and the steps the pricing service takes to mitigate such conflicts; and
- The testing processes used by the pricing service.⁴²

While the SEC provided that this list of factors should generally be considered "before" deciding to use a pricing service, the factors also are often utilized in ongoing oversight. Advisers, depending on their particular circumstances, also may utilize "scorecards" before determining to use a pricing service, which act to survey and score vendors through polling on various metrics and criteria. Historically, some boards have met with pricing services periodically to conduct due diligence visits. However, since the implementation of Rule 2a-5, many boards may now rely on the valuation designee to report to the board on such due diligence meetings.

Boards now often rely on updates on pricing service due diligence from the valuation designee, rather than meeting regularly with the pricing service.

The valuation designee must report to the board quarterly on any material changes or events related to its oversight of pricing services.⁴³ In developing the content of these reports, the valuation designee can consider the factors that the SEC has provided related to oversight of pricing services with respect to each pricing service used. The adviser's report may also include items such as an examination of the financial stability of the pricing service, its ownership, and any affiliations that the pricing service has with the adviser. Lastly, the report will often discuss diligence conducted related to ongoing monitoring, which may include due diligence visits to determine whether the pricing service continues to have competence in valuing particular securities and maintains an adequate control environment.

Additionally, valuation designees must have a process in place outlining the circumstances under which they may challenge prices provided by pricing services.⁴⁴ While pricing challenges should be governed by robust process with appropriate controls, boards should recognize that price challenges can be a part of a healthy valuation process. For example, an adviser may have a process for challenging quotations by a pricing service when the quotation is at odds with information known to the adviser, such as information on recent trades.

Questions for Boards to Consider

- What role do third-party pricing services play in the valuation of securities?
- What is the process that the valuation designee uses for price challenges? When may the designee override prices provided by the fund's pricing services? How does the board monitor the trends in price challenges and evaluate the checks and balances that are in place surrounding price challenges?
- Is the board reporting sufficient to allow the board to be comfortable with the designee's due diligence process regarding a third-party pricing service?
- How does the adviser evaluate the quality of the pricing service's prices?

How Does the Adviser Carry Out its Valuation Responsibilities?

Adviser-Organized Valuation Committees

In many cases, the adviser relies on a valuation committee composed of individuals with the experience and expertise necessary to value a fund's portfolio securities. Such committees are often comprised of all or a majority of advisory personnel, though personnel of other fund service providers may also be members. Independent directors generally do not serve on the adviser's valuation committee.

Consistent with the reasonable segregation requirements of Rule 2a-5 (*discussed in the next section*), with respect to any valuation committee the adviser should specify:

- The titles of the persons responsible for determining the fair value of the designated investments and the particular functions for which persons with the identified titles are responsible; and
- The specific personnel with duties associated with price challenges, including those with the authority to override a price, along with the roles and responsibilities of such persons.⁴⁵

Questions for Boards to Consider

- Who are the voting members of the committee and how are they selected?
- Is at least one member of the valuation committee sufficiently familiar with markets to be able to assess market information as an input to a price determination?
- How is the board kept apprised of the actions of the adviser's valuation committee and what level of detail is appropriate?
- Have significant shifts in fund investments occurred? Is the committee sufficiently familiar with new investment types, or would it benefit from additional member(s) with expertise in such investments?
- Are all members of the committee able to participate equally in decision-making and discussions, or is there one or a few members that have a "primary voice"? Do members have sufficient stature within the adviser to confidently participate?
- Are legal, compliance, and risk personnel adequately represented on the committee either as members of the committee or by invitation?

Reasonable Segregation

Rule 2a-5 requires that the valuation designee "specifies the titles of the persons responsible for determining the fair value of the designated investments, including by specifying the particular functions for which they are responsible, and reasonably segregates fair value determinations from the portfolio management of the fund such that the portfolio manager(s) may not determine, or effectively determine by exerting substantial influence on, the fair values ascribed to portfolio investments."⁴⁶ The SEC provided that an example of this "would be if the fair values ascribed to portfolio investments are based solely on information provided by the portfolio manager."⁴⁷ Nonetheless, under Rule 2a-5, portfolio managers are not prohibited from being involved in the fair value process; however, their involvement may present potential conflicts of interest. For instance, advisers and portfolio managers may have an incentive to inflate the value of portfolio investments because the adviser typically receives a management fee that is calculated based on a percentage of the fund's net assets. Further, portfolio managers are generally evaluated based on a fund's performance, and the NAV of the fund can be a key component of their compensation. Therefore, the SEC has provided that if portfolio managers provide a significant amount of input on the fair value of an investment, the segregation process should be appropriately rigorous and robust to mitigate these and any other potential conflicts of interest.⁴⁸

Portfolio management can be involved in the fair value process, subject to appropriate checks and balances.

Questions for Boards to Consider

- Are portfolio managers involved in the valuation process and if so, how?
- How does the adviser achieve reasonable segregation when portfolio managers are involved in the valuation process? For example, independent reporting chains, oversight arrangements, or separate monitoring systems and personnel may be useful.
- What information is provided by portfolio managers, or obtained by the committee, to support valuations proposed by portfolio managers (e.g., market color, or the results of back-tests)?

Adviser Resources for Valuing Securities

The board should determine what resources the adviser has for determining the fair value of the fund's portfolio securities. Portfolio managers can be some of the most knowledgeable resources in determining fair value of securities due to their deep knowledge of a fund's investments, though such involvement must be consistent with the "reasonable segregation" requirement (*detailed in the prior section*). The portfolio manager also will be able to provide information during times when the price movement of a security is not what is expected.

In addition to portfolio management personnel, the adviser may also develop its own proprietary pricing model methodologies. Quantitative pricing models can be important additions to or alternatives to market prices – particularly with respect to difficult-to-value securities like certain structured products and derivatives.

In addition to internal resources, a fund's valuation designee may also receive assistance from third parties, including pricing services, pricing specialists, fund administrators, sub-advisers, accountants, internal auditors, or counsel.⁴⁹ The SEC has provided that this assistance can take a variety of different forms. For example, third parties may conduct back-testing as specified by the valuation designee or perform calculations as part of the application of a valuation method.⁵⁰ **Receiving outside assistance, however, does not change the valuation designee's responsibilities under the Rule – the valuation designee remains ultimately responsible for the fair value determinations, and may not designate or assign that responsibility to a third party.**⁵¹



Questions for Boards to Consider

- How does the adviser structure its valuation process, including the internal resources it uses to determine fair valuations?
- Are the resources devoted to the valuation process sufficient?
- How does the adviser use proprietary models to value fund investments? How does the adviser evaluate how the models function? What are the controls around the models and are the models well understood by those who utilize them? How does the adviser determine independence and reliability of data?
- How does the valuation designee use other fund service providers in the valuation process?
- How does the valuation designee oversee third parties who participate in the valuation process?

Broker Quotes Used in Valuing a Fund's Securities

Broker quotes can be valuable inputs into fair valuations of securities. In determining how broker quotes are used in the valuation of a fund's securities, some considerations include:

- The circumstances under which broker quotes may be used in lieu of a valuation provided by a pricing service;
- Whether broker quotes may be the sole source used for determining the value of a particular security;
- Whether the procedures include a preference for quotes from two or three brokers, as well as the circumstances under which only one quote can be relied on; and
- The process by which brokers are selected and how frequently those brokers are changed.⁵²

Questions for Boards to Consider

- Why is a broker quote being used rather than a pricing service or other input?
- Who obtains the broker quotes used as valuation inputs – portfolio management personnel, traders, the custodian or accounting agent, or others?
- What checks and balances are in place to manage conflicts of interest presented by the use of broker quotes (i.e., the broker's incentive to inflate a portfolio security's valuation in order to maintain its relationship with the adviser)?
- How does the adviser use broker quotes to value securities? Does the adviser average the quotes, discard the high and low quotes, or use another method?
- How does the adviser determine whether a transaction could be carried out at the quoted price? Does it consider whether market makers exist for a particular security, or the likelihood that a trade may be executed based on the fair valuation given current trading volumes?
- What percentage of a fund's investments are valued by single source broker quotes?
- Is trading volume in a security sufficient such that a broker quote may be relied upon? Has there been a recent market transaction in the security?

How Does the Board Carry Out its Valuation Responsibilities?

While most boards designate the adviser as "valuation designee" to perform the fair value function, they still must satisfy their statutory responsibility with respect to fair valuation. The SEC established the framework for board oversight of the process in Rule 2a-5, which contemplates receiving sufficient reporting to oversee the process, performing active oversight, and ensuring procedures are reasonably designed to comply with the Rule's requirements.⁵³

The SEC has stated that boards are not providing appropriate oversight if they simply rely on information presented to them, as oversight cannot be a passive activity.⁵⁴ **According to the SEC, directors should ask questions, seek relevant information, and approach their oversight of the performance of fair value determinations by the valuation designee of the fund with a skeptical and objective view that takes account of the fund's particular valuation risks, including with respect to conflicts, the appropriateness of the fair value determination process, and the skill and resources devoted to it.**⁵⁵ Additionally, boards should view oversight as an iterative process and seek to



identify potential issues and opportunities to improve the fund's fair value processes. The SEC has stated that boards should:

- Seek to identify potential conflicts of interest of the valuation designee and other service providers involved in the determination of fair value as part of their oversight duties, and work with the valuation designee, which has a duty to disclose its conflicts, to address or manage such conflicts to the board's satisfaction;
- Use an appropriate level of scrutiny based on the fund's valuation risks, including the extent to which the fair value of the fund's investments depends on subjective inputs;
- Probe the appropriateness of the valuation designee's fair value process, including through periodic review of the financial resources, technology, staff, and expertise of the valuation designee, and the reasonableness of the valuation designee's reliance on other fund service providers, relating to valuation;
- Consider the valuation designee's compliance capabilities that support the fund's fair value processes, and the oversight and financial resources available for the fair value process;
- Consider the type, content, and frequency of the reports they receive from the adviser;
- Become acquainted with valuation techniques to adequately evaluate the adviser's valuation process, specifically when there is no readily available market price, such as prices computed by quantitative models or based on quotations from dealers. It may be helpful to ask the adviser to walk through the valuation process for the different types of methodologies; and
- Understand the fund's valuation policies and procedures and the adviser's internal governance structure and the valuation operating model.⁵⁶

In carrying out these responsibilities, directors should ensure that their engagement with the adviser is appropriately documented, both with respect to the formal requirements of the Rule and other discussions, for example through board minutes and meeting materials. This will demonstrate the board is adequately carrying out its responsibilities with respect to fair value.

Board Reporting

The valuation designee must provide three different types of written reports to the board under Rule 2a-5, as outlined below. Rule 2a-5 requires that the reports can be made to the board, or a committee thereof composed of a majority of independent directors.⁵⁷

Report	General Requirement	Specific Reporting Requirements
Quarterly Reports ⁵⁸	A written report including materials requested by the board related to fair value or the valuation designee’s process for fair valuing fund investments and a summary or description of material fair value matters that occurred in the prior quarter.	<ul style="list-style-type: none"> ▪ Material changes in the assessment and management of valuation risks, including conflicts of interest that present a valuation risk; ▪ Material changes to or material deviations from the fair value methodologies that occurred; and ▪ Material changes to the valuation designee’s process for selecting and overseeing pricing services, as well as any other material events relating to the valuation designee’s oversight of pricing service.
Annual Reports ⁵⁹	A written report including an assessment of the adequacy and effectiveness of the valuation designee’s process for determining the fair value of the designated portfolio of investments.	<ul style="list-style-type: none"> ▪ A summary of the results of the testing of fair value methodologies; and ▪ An assessment of the adequacy of resources allocated to the process for determining the fair value of designated investments, including any material changes to the roles or functions of the persons responsible for determining fair value.
Prompt Reports ⁶⁰	Written notification to the board on the occurrence of matters that materially affect the fair value of the designated portfolio of investments. Such reporting must occur within a time mandated by the board, but in no event later than five business days after the valuation designee becomes aware of the material matter.	<ul style="list-style-type: none"> ▪ A significant deficiency or a material weakness in the design or effectiveness of the valuation designee’s fair value determination process; and ▪ Material errors in the calculation of the net asset value.⁶¹

As with report content, the frequency of reports laid out in Rule 2a-5 are also minimum requirements.⁶² However, most boards choose to receive quarterly and annual reports as dictated by Rule 2a-5 and rely on “prompt” reporting to keep themselves apprised of important valuation information in the interim. To that end, directors should understand or work with the adviser to determine what will be reported under the prompt reporting requirement. For instance, what may be reported as a “significant deficiency” may vary from what is reported as a “material weakness” in the design or effectiveness of the valuation designee’s fair valuation process.

Boards should work with the adviser and counsel to determine what information is most helpful to the directors in quarterly, annual and prompt valuation reports.

A board's responsibilities do not end with fielding the reports. **The SEC has provided that "boards are not providing appropriate oversight if they simply rely on information presented to them without actively probing it, asking questions, and seeking relevant information, particularly when there are red flags or other indications of problems."**⁶³ Additionally, directors should also request follow-up information when appropriate and take reasonable steps to see that matters identified are addressed.⁶⁴



Under the terms of Rule 2a-5, the mandated reports are simply minimum requirements, and valuation designees must also provide "any reports or materials requested by the board related to the fair value of designated investments or the valuation designee's process for fair valuing fund investments."⁶⁵ Therefore, directors should consider whether there are additional types of reports related to the fair value process that may be useful. Such additional reports should be discussed with the adviser to ensure that any expectation gaps are narrow and/or eliminated.

Other reports that the board may find helpful, depending on a fund's specific facts and circumstances, are included in Appendix 2.

Questions for Boards to Consider

- What format does the board find most helpful for the required reporting? For instance, the SEC has explained that reports can take the form of narrative summaries, graphical representations, statistical analyses, dashboards, or exceptions-based reporting, among other methods.
- Are reports provided only for the reporting period covered, or do they cover multiple periods so that they may demonstrate trends?
- How do the reports balance the need to provide the board with sufficient information with the usefulness of summary and trend data? While reports should contain information adequate to allow the board to conduct its oversight, they should not be overly voluminous or technical such that directors cannot efficiently assess their content.
- What reports can help the board evaluate how the valuation process is functioning generally?
- What fair value issues did the adviser spend a significant amount of time on during the reporting period?

Board Organization

Directors should determine how they can best organize themselves to evaluate the adviser's valuation and pricing activities effectively and efficiently. Rule 2a-5 provides that either the full board, or a committee thereof composed of a majority of independent directors, may carry out the board's responsibilities under the Rule.⁶⁶ Some fund boards have created board valuation oversight committees. These committees can help the board provide oversight of the adviser's internal valuation and pricing policies, procedures, and practices. If directors determine to establish a board valuation committee, the committee's charter should clearly distinguish between that committee's responsibilities and the responsibilities of the adviser's valuation committee. Boards that have no valuation committee frequently assign responsibility for valuation oversight to another committee, such as the board's compliance or audit committee. In other instances, valuation oversight is undertaken by the full board.

Boards should consider whether a committee composed of a majority of independent directors can facilitate efficient oversight of valuation.

Questions for Boards to Consider

- What percentage of the fund’s securities are fair valued? A board that oversees a fund with few fair valuations may find that a separate committee is not necessary.
- If a board establishes a board valuation oversight committee, how does the board determine who sits on that Committee?
- If a board chooses to assign valuation oversight to an existing committee, which committee is appropriate? How does the board determine that a particular committee does not get overloaded with responsibilities?
- How does a committee report to the full board regarding valuation issues?

Disclosure Review

Fund directors may be held personally liable for any material inaccuracies or omissions in a registration statement.⁶⁷ Directors’ primary defense to registration liability is the “due diligence” defense, which requires a showing that “after reasonable investigation, the director had reasonable grounds to believe, and did believe, that the registration statement did not contain any materially false or misleading statements or material omissions that made the registration statement misleading.”⁶⁸ Therefore, directors should receive reporting on the fund disclosure process. The board should obtain assurances that the disclosure describing the fund’s valuation methodologies is consistent with the methodologies used and accurately describes such methodologies. The disclosure process should include any changes to the valuation process.

Directors should be diligent in their oversight of fund disclosure, including with respect to valuation.

Questions for Boards to Consider

- What is the process to review fund disclosure related to valuation?
- Who is responsible for updating fund disclosure when the fund makes changes to its valuation procedures?

Other Resources for Boards

A board may look to a number of resources to support its oversight of the valuation function. Among others, this would include, a fund’s CCO, fund counsel, the independent directors’ legal counsel, personnel at the adviser (including internal audit), and personnel at other service providers to the funds, such as the administrator, auditors, and pricing services. In addition, the valuation committee can be an important resource to the board. A further discussion of the ways in which certain parties may support a board in the valuation process is provided below.

The Insight of the CCO

A fund’s CCO is a valuable resource for boards in the valuation process.⁶⁹ The CCO can be helpful in establishing and monitoring effective valuation policies and procedures. Further, the CCO may have additional insights regarding how the adviser carries out its valuation responsibilities on a regular basis. A board can ask the CCO to perform compliance checks to provide insights into the ongoing functioning of the valuation process and to devote special attention to any pricing overrides by the adviser. In addition, the CCO may be able to identify potentially problematic patterns that arise in day-to-day

pricing. Fund boards also may find the adviser's CCO to have a valuable perspective on the valuation process, depending on the structure of a particular fund complex.

Boards should consider how involved they would like their CCO to be in the fair value process. Some may think that because the CCO must test the adviser's valuation process, it may not be appropriate for the CCO to serve as a voting member of the adviser's valuation committee. Regardless, the CCO would typically have the ability to attend valuation committee meetings.⁷⁰

The Auditor's Capacity to Provide Independent Observation and a Third-Party Point of View

A fund's auditor can provide the board with another perspective regarding a fund's valuation process.⁷¹ As of the year end reporting period, a fund's auditors assess the reasonableness of the valuation of all securities.⁷² In doing so, the auditors review detailed information on a fund's fair valued securities, and may obtain comparative prices from a secondary source.⁷³ As such, the fund's auditors are able to provide an independent perspective on a fund's valuation process and can discuss their independent valuation results with the board. Auditors do not play a role in the fund's daily control environment, but their perspective on the year end valuations are another source of data and insight for boards and advisers to consider. Further, when auditing a fund's financial statements, valuation of securities is tested in the context of the financial statements taken as a whole (taking into account materiality considerations); it is not the entire focus of the auditing process.

A fund's auditor may provide a good perspective on the fund's processes, controls, valuations, and the testing performed to issue an audit opinion. Further, given their role, auditors can also provide broader industry insights in terms of leading practices. However, it is important to understand the role of the auditor as the audit process does not validate the valuation process. The board may also request that the auditors perform special procedures, if appropriate, to review pricing methodologies or controls.

Independent Counsel's Role

Independent directors may also look to their independent legal counsel for assistance in carrying out their duties in the fair valuation process, and as another useful third-party perspective.⁷⁴ Independent counsel can guide independent directors as they carry out their duties and ensure that independent directors are doing so within legal requirements. Independent legal counsel may also keep directors apprised of legal developments that may affect the fair value process and/or director oversight thereof.

Independent legal counsel may also be a valuable resource in ongoing compliance. For instance, they may assist in the development or review of valuation policies and procedures and amendments thereto. Additionally, they may assist directors in determining the frequency and content of fair value reports, and in reviewing such reports when received to identify trends and issues. Independent counsel may further assist in a board's oversight of the valuation designee, including making recommendations of issues to raise or questions to ask the adviser in board meetings or upon reviewing reports. Independent counsel may also be useful in identifying industry leading practices and making recommendations on ways in which a fund's process may be enhanced.

Conclusion

Fund directors have a statutory obligation to determine the fair value of portfolio securities that do not have readily available market quotations. However, they generally designate the adviser to carry out the fair value determinations under Rule 2a-5. Even though directors do not perform the fair value determinations, they still must satisfy their statutory obligation with respect to fair value determinations through an “iterative” oversight process, which must include fielding various reports and requesting follow-up information when appropriate. Director oversight of a fund’s valuation process is not only a statutory responsibility, but also acts as a safeguard to protect a fund and its shareholders.

Appendix 1

The following table lists other potential sources of valuation risk, and questions boards may consider asking the adviser in determining whether such risks apply. To the extent applicable, such questions can be part of a board's ongoing oversight of risk management.

Risks	Questions to Consider
Changing market liquidity	<ul style="list-style-type: none"> ▪ How does limited liquidity factor into the fund's valuation process? ▪ What happens if liquidity conditions change?
Valuations obtained from a single source or counterparty	<ul style="list-style-type: none"> ▪ Under what circumstances will a security be valued using a single source or counterparty? ▪ What controls are in place for valuing securities using a single source? ▪ For single source securities, what level of price change in the aggregate would result in a change to the Fund's NAV?
Reliability of data provided by pricing services for securities that are not traded on an exchange	<ul style="list-style-type: none"> ▪ Does the adviser test prices received from pricing services or broker quotes against subsequent purchases/sales or open prices? ▪ To what extent does the pricing service consider adviser input?
Use of internal information provided by portfolio managers to estimate fair value	<ul style="list-style-type: none"> ▪ What controls are in place to address the potential conflict where portfolio management personnel provide valuation information? ▪ Is a committee used to make final judgments? ▪ How is internal information validated by the adviser or valuation committee?
Use of internally developed models to value securities	<ul style="list-style-type: none"> ▪ What controls does the adviser have in place to test the models? ▪ Does the adviser have a process for reviewing the results of the model? ▪ Are the models' underlying assumptions reevaluated based on historical or market data? ▪ Who is involved in developing the models' assumptions?
Extensive use of matrix pricing (Matrix pricing bases the price of a security on the price of another security that is comparable in credit rating, interest rate, etc.)	<ul style="list-style-type: none"> ▪ What percentage of a fund's portfolio is priced using matrix pricing? ▪ Does a vendor's matrix pricing process account for differences in liquidity among securities? ▪ Does a pricing vendor test the matrix prices against subsequent sales prices?

Risks	Questions to Consider
<p>Process surrounding management overrides</p>	<ul style="list-style-type: none"> ▪ What controls are in place to address the potential conflict where portfolio management personnel seek to override a price from a pricing vendor? ▪ How are overrides authorized and tracked? Are they sorted by security type? ▪ Does the adviser have a procedure to monitor the overrides (e.g., secondary reviews) or the process used to generate an override? ▪ What personnel at the adviser are responsible for overrides? Do they have appropriate expertise? ▪ Does the adviser consider information gleaned from overrides (i.e., whether there may be a better source to obtain prices from)?
<p>Timely identification of significant events</p>	<ul style="list-style-type: none"> ▪ What process is used to prevent opportunities for timing arbitrage in the value of the foreign securities? ▪ How does the adviser monitor for significant events that might require securities to be fair valued or that may necessitate a change in fair value methodology?
<p>Complexity risk</p>	<ul style="list-style-type: none"> ▪ Does the adviser have an established procedure for vetting valuation complexities in new securities and other assets, including derivatives?

Appendix 2

The following table lists other potential reports that boards may find useful in overseeing the valuation designee's valuation process. Boards can determine whether these reports are helpful based upon the fund's particular facts and circumstances.

Report	Purpose
NAV Accuracy Statistics	<ul style="list-style-type: none"> Allows directors to review NAV errors, including an explanation of the error, the cause, the impact of the error on the fund's NAV, required action, and the date of the error
Price Challenges	<ul style="list-style-type: none"> Can demonstrate how many challenges were made during a period Can demonstrate how many challenges were affirmed by the pricing vendor, and how many were affirmed upward/downward
Fair Value Look-Back	<ul style="list-style-type: none"> Allows directors to compare the price of a security that was previously fair valued against a subsequent market price, particularly with respect to level 3 securities
Broker Priced Investment/Sales	<ul style="list-style-type: none"> Allows directors to evaluate the number and materiality of broker priced securities and the accuracy of those prices as well as the brokers most frequently used for prices
Fair Value Trend Analysis	<ul style="list-style-type: none"> Allows directors to monitor changes in the number and materiality of fair valuations over different time periods
Trigger Analysis	<ul style="list-style-type: none"> Identifies the triggers that an adviser or other third party uses to identify circumstances where securities should be fair valued
Fair Value Hierarchy Report	<ul style="list-style-type: none"> Identifies percentage of securities valued by the accounting inputs used to apply their value (i.e., level 1, 2 or 3), which can be demonstrative of a fund's level of valuation risk Demonstrates trends in the type of inputs used, often across specified periods of time (e.g., by quarter)
Alternative Source	<ul style="list-style-type: none"> Identifies securities valued using a source different from that which is typically used for given instrument

Notes

¹ See Rule 22c-1 under the 1940 Act, which applies to open-end funds and unit investment trusts. Calculation of NAV is also important for closed-end funds, including those closed-end funds that issue new shares. It also enables investors in exchange-traded closed-end funds to determine whether their shares are trading at a premium or discount. See Section 23(b) of the 1940 Act. Under Rule 2a-7 under the 1940 Act, money market funds are permitted to use amortized cost or penny rounding method to value fund shares. This report does not address these issues.

² Rule 2a-5(b).

³ *Id.*

⁴ Rule 2a-5(a).

⁵ See Good Faith Determinations of Fair Value, Investment Company Act Release No. 34128 (Dec. 3, 2020) (hereinafter, the “Adopting Release”), at [9](#).

⁶ Some boards may be unable to designate fair value determinations, for example, due to constraints at the adviser regarding segregation of valuation from portfolio management personnel.

⁷ Adopting Release at [7-8](#).

⁸ *Id.* at [57](#).

⁹ This publication has been reviewed by the Forum’s Steering Committee and approved by the Forum’s Board of Directors, although it does not necessarily represent the views of all members in every respect. One representative from each member group serves on the Forum’s Steering Committee. The Forum’s current membership includes over 1000 independent directors, representing 145 mutual fund groups. Nothing contained in this report is intended to serve as legal advice. Each fund board should seek the advice of counsel for issues relating to its individual circumstances.

¹⁰ Adopting Release at [9](#).

¹¹ See Rule 22c-1 under the 1940 Act.

¹² See Rule 22c-1(b) under the 1940 Act (requiring the NAV to be calculated at least once daily at the time or times set by the fund’s board).

¹³ Section 2(a)(41) of the 1940 Act. See also Rule 2a-4 under the 1940 Act.

¹⁴ See Section 2(a)(41) under the 1940 Act.

¹⁵ Rule 2a-5(c).

¹⁶ Adopting Release at [89](#).

¹⁷ Financial Accounting Standard Board Accounting Standards Codification 820: Fair Value Measurements and Disclosures (hereinafter “ASC 820”).

¹⁸ Adopting Release at [26](#).

¹⁹ *Id.*

²⁰ *Id.* at [94-95](#).

²¹ *Id.* at [23](#), n. 67; ASC 820.

²² Adopting Release at [22](#).

²³ See *id.* at [8](#).

²⁴ See *id.* at [44-45](#).

²⁵ *Id.* at [38-39](#).

²⁶ *Id.* at [40](#).

²⁷ Rule 2a-5(a)(1).

²⁸ See *id.*

²⁹ Adopting Release at [14](#).

³⁰ *Id.* at [16-17](#).

³¹ Rule 2a-5(a)(2).

³² See Adopting Release at [18](#), n. 51.

³³ *Id.*

³⁴ Rule 2a-5(a)(2)(i); Rule 2a-5(b)(1)(i)(A)(2)(ii).

³⁵ Adopting Release at [21](#).

³⁶ 2a-5(a)(3).

³⁷ Adopting Release at [29](#).

³⁸ *Id.*, n. 89.

³⁹ *Id.* at [30](#), n. 91.

⁴⁰ Rule 2a-5(a)(4). While the SEC declined to adopt a specific list of criteria for who may qualify as a pricing service under the Rule (citing that such a definition may become outdated over time, and the scope of a pricing service is generally understood by boards and advisers), in the Adopting Release the SEC provided that “we refer to pricing services as third parties that regularly provide funds with information on evaluated prices, matrix prices, price opinions, or similar pricing estimates or information to assist in determining the fair value of fund investments.” Adopting Release at [34](#). The SEC further explained that it “believe[s] that the types of entities that would be pricing services under the final rule would include pricing services as defined in the PCAOB standards.” *Id.* at [35](#). Therefore, directors should be mindful that the definition of pricing service extends to third-party pricing specialists and experts that provide input into a fund’s process.

⁴¹ Adopting Release at [32](#).

⁴² *Id.* at [37](#).

⁴³ Rule 2a-5(b)(1)(i)(A)(2)(iii).

⁴⁴ Adopting Release at [31](#).

⁴⁵ See *Id.* at [76-77](#).

⁴⁶ Rule 2a-5(b)(2).

⁴⁷ Adopting Release at [80](#), n. 298.

⁴⁸ *Id.* at [81](#).

⁴⁹ *Id.* at [52](#).

⁵⁰ *Id.* at [51](#).

⁵¹ *Id.* at [52](#).

⁵² For an example of a process the SEC considered to be deficient, see *In the Matter of Evergreen Investment Management Company, LLC and Evergreen Investment Services, Inc. Administrative Proceeding File No. 3-13507* (June 8, 2009) (providing that a fund’s valuation committee had not reviewed or approved a broker’s method for determining prices, but continually used the broker’s quotes to override a pricing service’s lower prices).

⁵³ See Adopting Release at [9](#).

⁵⁴ *Id.* at [56](#).

⁵⁵ *Id.* at [54](#).

⁵⁶ *Id.* at [55-59](#).

⁵⁷ Rule 2a-5(e)(3)

⁵⁸ Rule 2a-5(b)(1)(i)(A).

⁵⁹ Rule 2a-5(b)(1)(i)(B).

⁶⁰ Rule 2a-5(b)(1)(ii).

⁶¹ Significant deficiencies or material weaknesses in the design or effectiveness of the valuation designee’s fair value determination process and material errors in the calculation of NAV are collectively defined by 2a-5(b)(1)(ii)

as “material matters.” The SEC declined to define what would constitute a material matter for purposes of Rule 2a-5, but provided that the significant deficiency or material weakness standard is based on auditing concepts, while relying on the NAV error threshold generally utilized by the industry at \$0.01 a share or 0.5% of the NAV would not be unreasonable. Adopting Release at [73](#).

⁶² *Id.* at [60](#).

⁶³ *Id.* at [54](#).

⁶⁴ *Id.* at [57](#).

⁶⁵ Rule 2a-5(b)(1)(i)(A)(1); Adopting Release at [60](#).

⁶⁶ Rule 2a-5(e)(3).

⁶⁷ 15 U.S.C. §77k.

⁶⁸ *Id.*

⁶⁹ For a thorough discussion of the relationship between a fund’s board and its CCO, see [The Board/CCO Relationship](#) (April 2015).

⁷⁰ Not all fund CCOs are also employees of the fund’s investment adviser. Therefore, such participation may not be possible at every fund complex.

⁷¹ While this section focuses on a fund’s external auditors, fund directors may also find a fund’s internal auditors helpful in providing insight into a fund’s valuation processes.

⁷² 15 U.S.C. §80a–31.

⁷³ Recent PCAOB inspection findings as disclosed in public reports show an increased focus on procedures around valuation for companies, including mutual funds.

⁷⁴ For boards that do not have separate, independent counsel, fund counsel can be an additional resource.