Report of the Mutual Fund Directors Forum

Practical Guidance for Fund Directors on Valuation Oversight

June 2012
Executive Summary

Proper valuation of a fund’s portfolio securities is critical to the calculation of a fund’s daily net asset value per share. Credit crises, natural disasters, and wider use of increasingly complex securities have made this fundamental task more difficult. In addition, regulators have recently expressed a renewed interest in the valuation processes at mutual funds.

While fund independent directors do not generally 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 price.

Considering a fund’s primary valuation risks can help boards carry out their valuation responsibilities. Having an understanding of these risks can help directors work with a fund’s adviser to establish effective valuation policies and procedures. In addition to valuation risks, directors should consider a fund’s particular investments, as well as the board’s desired ongoing involvement when establishing a fund’s valuation policies and procedures. These procedures will help directors gain a thorough understanding of the adviser’s valuation process, a key to performing their oversight role.

A board’s responsibility does not end with the approval of the valuation procedures; a board must monitor the implementation of the procedures. Boards need to determine how best to perform the ongoing monitoring, and consider how best to organize themselves to oversee the valuation process, what documentation to review regarding valuation determinations, and how often to communicate with management regarding the process. The documentation needs to be sufficient to allow directors to understand the adviser’s valuation methodology. In addition, ongoing monitoring can help boards and advisers identify situations where the fund’s current valuation policies and procedures no longer work.

A board has many resources at its disposal for helpful insight into how well the adviser’s valuation process is functioning. For example, the fund’s CCO is a valuable resource that is present at the management company and can therefore provide information about the ongoing functioning of the process. The fund’s auditors can also provide a helpful outside perspective on the effectiveness of a fund’s valuation procedures.

By providing oversight of the valuation process, fund directors not only fulfill their statutory valuation responsibilities, but also provide a valuation risk oversight function for the funds they oversee.
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PwC provided extensive assistance with this report.
I. Introduction

Proper valuation of a fund’s assets is critical for the calculation of daily net asset value per share. The Investment Company Act of 1940 (“1940 Act”) permits transactions in fund shares only at a price based on the net asset value of its shares (“NAV”). Credit crises, natural disasters, and a proliferation of complex securities make pricing a fund’s portfolio investments increasingly difficult.

Inaccurate valuation of a fund’s underlying portfolio securities and other assets can give rise to some serious issues. If portfolio securities are not valued appropriately, one group of shareholders (either sellers of fund shares or buyers of the shares) will gain a windfall at the expense of the other group. In addition, mispriced fund shares can result in arbitrage opportunities as some investors exploit the fund’s inaccurate share price, possibly at the expense of long-term shareholders. A robust and consistent valuation process can help ensure that all fund shareholders are treated equitably and is critical for effective portfolio management.

Valuation is one of the most significant areas of potential risks for funds, particularly those that hold complex or thinly traded securities that must be “fair valued”. As directors consider their risk oversight responsibilities, they should pay careful attention to the adequacy of a fund’s valuation policies and procedures.

Fund directors have a statutory obligation to determine the fair value of securities for which market quotations are not readily available; however, boards can and do delegate the day-to-day responsibility for determining the valuation of particular securities to the fund’s adviser. (For the purposes of this report, “adviser” will be used to designate the party responsible for day-to-day valuation, even though the actual party may vary by fund complex.) Although directors themselves are rarely the subject of enforcement actions by the SEC, directors do have the ultimate responsibility for valuation. The SEC has held directors responsible for failing to monitor the liquidity of a fund’s portfolio securities, failing to adjust a fair value when an issuer’s financial condition and liquidity were deteriorating; and failing to correct the mispricing of securities in a fund’s portfolio.

Because of the importance of valuation coupled with the general lack of day-to-day participation, boards strive to find the appropriate balance between delegation and participation in the valuation process. An important factor to consider as a board defines its involvement in the valuation process is the adequacy of the fund group’s processes and personnel. The fund’s Chief Compliance Officer (“CCO”), its external auditors, and independent counsel all provide directors with valuable guidance in the valuation process.

As with many other areas, directors should consider what may lie ahead. As the complexity of a fund’s investment strategy and available investment products increases, the fund’s valuation procedures should adapt to and keep up with these changes. 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 report is designed to provide information to boards about their responsibilities for fund valuation. In addition, it will examine some practical issues regarding how boards carry out their oversight role in this area.
II. Valuing a Fund’s Portfolio Securities: Legal Requirements

The 1940 Act requires that mutual funds offer and redeem their shares at a price based on the fund’s current NAV. A fund’s NAV 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. 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.

If a security has a market quotation that is “readily available,” its value is that market quotation. However, in some cases, market quotations are not “readily available,” even for securities trading on exchanges. In such cases, as well as securities that have no current market price, the 1940 Act requires fund directors to determine in good faith the fair value of those securities.

A. When Is a Market Quotation Not “Readily Available”? 

There are situations when an exchange-traded security may need to be “fair valued.” For example, the following are circumstances in which a fund may be unable to rely on the last market price:

- 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.

A particular security may have had a market quotation, but the price may not be reliable. A market quotation may not be “readily available” 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. This is particularly relevant for equity securities of foreign issuers traded on foreign exchanges that close before the close of the NYSE, because the closing price from the foreign exchange may be several hours old at the time a fund calculates its NAV.

The SEC staff has stated that funds should continuously monitor for events that might necessitate the use of fair value prices and that funds should establish criteria for assessing the reliability of market quotations. With respect to foreign securities, for example, many fund groups systematically ascertain the fair value of equity securities traded in foreign countries as of the time a fund calculates its NAV. Many fund groups employ services that offer methodologies involving statistical analyses and quantitative models for calculating fair value of foreign equities.
B. What Is “Fair Value”?  

Once the fund has a procedure to determine whether a security needs to be “fair valued,” the next question is what is that value? Fair value is the price the fund “might reasonably expect to receive for [the securities] upon their current sale.”\(^{13}\) Because valuation in circumstances where market quotations are not readily available or are unreliable is uncertain at best, there can be a range of appropriate values for a particular security.

Different boards can legitimately arrive at different prices for a particular security as long as they act in good faith. The SEC’s Division of Investment Management described the “good faith” obligation as “a flexible concept” that varies “depending on the nature of the particular fund, the context in which the board must fair value price, and, importantly, the pricing procedures adopted by the board.”\(^{14}\)

In contrast to the 1940 Act, accounting rules do not distinguish between fair value and market value. Instead, ASC 820 (formerly, FAS 157)\(^{15}\) calls for assets to be booked at their “fair value,” which is defined as the price that would be received for the asset in an orderly transaction between market participants. ASC 820 looks to market value as one of the inputs used to value a particular security.\(^{16}\)

Funds must report the “fair value” of their assets, as defined in ASC 820, in each annual and semi-annual report and must include information intended to show the levels of objectivity and transparency of the information used to determine that value. The reports can, therefore, help identify those assets in the fund’s portfolio that rely on unobservable inputs in the determination of value and therefore may involve greater elements of judgment in ascertaining value. In addition, review of movements of securities between levels can help directors evaluate changes in the way the fund’s securities are valued or changes in the composition of the fund’s portfolio from period to period.

III. Fund Valuation Procedures

A. Boards May Choose to Delegate Day-to-Day Responsibilities for Valuation

Because mutual funds must calculate their NAVs daily, most boards adopt procedures to govern the method in which the NAV is to be determined on a day-to-day basis. The procedures generally delegate the determination of fair value for portfolio securities and other assets for which market quotations are not readily available to the adviser. Delegation is appropriate because the adviser generally has the required expertise to make judgments about fair value prices and is available to make valuation determinations on a daily basis. In most cases, the adviser or other service provider establishes a valuation committee composed of individuals with the experience and expertise necessary to value a fund’s portfolio securities. Fund boards must then decide how best to review the fair value determinations made by the adviser.

B. What Must Be Included in a Fund’s Fair Valuation Procedures?

Rule 38a-1 under the 1940 Act requires funds to adopt policies and procedures for fair valuing a fund’s securities. The SEC stated that a fund’s procedures should:
- Monitor for circumstances that may necessitate the use of fair value prices;
- Establish criteria for determining when market quotations are no longer reliable for a particular portfolio security;
- Provide a methodology or methodologies by which the fund determines the current fair value of the portfolio security; and
- Regularly review the appropriateness and accuracy of the method used in valuing securities and make any necessary adjustments.\(^\text{17}\)

### C. Monitoring for Circumstances that May Require Fair Value Pricing

For domestic securities, the SEC staff has asked funds to “carefully consider various indications of the validity and reliability of market quotations.”\(^\text{18}\) For example, infrequent sales, a thin market, or questionable quotations from broker-dealers may require fair value pricing.

Many funds have found that establishing triggering mechanisms is helpful in monitoring for circumstances that require the use of fair valuation models or tools with respect to foreign securities. Third party pricing services may be helpful in identifying triggering events as well. Boards are frequently called upon to exercise their judgment on whether a fair value service should be engaged, and if so, the trigger point at which fair value would be used. Usually, the trigger is a percentage of the daily change in the value of an index of domestic securities between the time of the close of a foreign exchange and the close of the NYSE. Triggers used by fund groups may vary, though they typically range from 0% to 1%.

### D. Methodologies Used to Establish Fair Value

In addition, the board can expect the fair valuation procedures to include a description of the methodology that the adviser will use when making fair valuation determinations. The methodology should 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. Like establishing triggering mechanisms, defining hierarchies may help the board gain comfort that the adviser is using a consistent valuation process, even during difficult markets.

### E. A Board Should Monitor the Implementation of the Fund’s Valuation Policies and Procedures

A board’s responsibility does not end with its approval of valuation policies and procedures. As Chief Counsel of the SEC’s Division of Investment Management has stated, a board must “periodically review the appropriateness of the methods used to fair value price portfolio securities and the quality of the prices obtained through these procedures, and . . . make changes when appropriate.”\(^\text{19}\)
To carry out its oversight responsibility, a board should consider what documentation of the valuation process it would like to see from the adviser’s valuation committee. The documentation should be sufficient for the directors to understand the methodology used by the adviser. Some boards may choose to designate one fund director (or available members of a committee of directors) as a liaison to discuss difficult valuation issues with management as they arise.

In addition to overseeing the adviser’s compliance with the fund’s policies and procedures, ongoing monitoring can help identify situations where the established procedures may no longer be appropriate. As funds and markets evolve, situations may arise in which the existing policies become less effective or outdated, prompting a discussion between the adviser and the board to identify areas that may warrant their own specific policies and procedures. The board may wish to establish a regular review of the procedures, and seek input from counsel and the fund’s auditors, to ensure that any appropriate changes are considered in a timely fashion.

F. Examining a Fund’s Primary Valuation Risks May Help Directors Carry Out Their Valuation Responsibilities.

As directors consider how best to carry out their valuation responsibilities, it is critical to consider the valuation risks for a particular fund. Having an understanding of valuation risks will help fund directors work with the adviser to put into place effective valuation policies and procedures. For example, directors may find it helpful to consider the following risks and related questions based on the particular circumstances of their funds.

<table>
<thead>
<tr>
<th>Risks</th>
<th>Questions to Consider</th>
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<tbody>
<tr>
<td>Changing market liquidity</td>
<td>• How does limited liquidity factor into the fund’s valuation procedures?</td>
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<tr>
<td></td>
<td>• How does the adviser monitor liquidity of a fund’s investments?</td>
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<td>• What happens if liquidity conditions change?</td>
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<tr>
<td>Valuations obtained from a single source or counterparty</td>
<td>• Under what circumstances will a security be valued using a single broker quote?</td>
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<td></td>
<td>• What controls are in place for valuing securities using a single source?</td>
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<td>• How are these securities classified under ASC 820 guidance?</td>
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<tr>
<td>Risks</td>
<td>Questions to Consider</td>
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| Reliability of data provided by pricing services for securities that are not traded on an exchange | • Does the adviser test prices received from pricing services or broker quotes against subsequent sales or open prices?  
• Are the pricing services periodically reviewed?  
• To what extent does the pricing service consider adviser input? |
| Reliability of information provided by credit rating agencies        | • If credit ratings are an input in a matrix pricing model for debt securities or asset backed securities, does the adviser have an understanding of the criteria used by the rating agency?  
• Does the adviser independently monitor for changes in credit ratings or events that could affect a security's credit rating? |
| Use of internal information provided by portfolio managers to estimate fair value | • 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? |
| Use of internally developed models to value securities               | • 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 assumptions underlying models reevaluated over time based on historical data?  
• Who is involved in developing the model's assumptions? |
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| 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.) | • Do the adviser and the board understand a pricing vendor’s process for matrix pricing?  
• Do the adviser and the board understand any shortcomings from reliance on matrix pricing?  
• 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?  
• How are values derived from matrix pricing classified under ASC 820 guidance? |
| Process surrounding management overrides                             | • 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?  
• Does the adviser have a procedure to monitor the overrides or the process used to generate an override? |
| Timely identification of significant events                           | • What process is used to prevent opportunities for timing arbitrage in the value of the foreign equity securities?  
• How does the adviser monitor for significant events that might require securities to be fair valued? |
| Complexity risk                                                       | • Does the adviser have an established procedure for vetting valuation complexities in new securities and other assets, including derivatives? |

Recent history has confirmed that risk is not a static concept. All of the risks listed above may not be an issue for all funds at all times, and there may be others that arise, particularly when a fund begins to invest in a new instrument. When the adviser begins to invest in a new instrument, the board should be assured that the adviser has a thorough understanding of the product and has appropriate systems in place to value the security. In addition, new risks should be considered on a timely basis as part of the board’s regular review of the fund’s valuation procedures.
IV. How Can Boards Carry Out Their Valuation Responsibilities?

A. Directors Should Develop an Understanding of the Valuation Process.

Directors should work to gain an understanding of the valuation process. While they need not be experts in valuation, directors should have familiarity with valuation techniques in order to adequately evaluate the adviser’s valuation process. For example, directors should be familiar with how the adviser values securities when there is no readily available market price, such as prices computed by quantitative models or based on quotations from dealers. Directors should be sure to understand and approve the fund’s valuation policies and the adviser’s internal governance structure. Taking the time to understand the adviser’s internal processes will help directors evaluate whether the tone at the top supports strong valuation practices.

B. Directors Should Determine How Best to Organize Themselves to Appropriately Oversee the Valuation Process.

Directors who provide oversight of a fund’s valuation and pricing policies, procedures, and practices should determine how they can best organize themselves to evaluate the adviser’s valuation and pricing activities effectively and efficiently. Management and the board need to develop mutually agreed upon policies and procedures to guide the day-to-day activities.

Directors generally delegate the day-to-day determinations of valuation to the adviser’s internal valuation or pricing committee to make decisions pursuant to the pricing procedures approved by the board. Typically, independent directors are not part of this valuation committee. Because independent directors may not be available in the time required to set the fund’s NAV, it is often impractical to have them sit on the adviser’s valuation committee. Further, some boards believe that “real time” participation in the business of managing the fund is inconsistent with an oversight function. There may be circumstances at a particular fund group that leads a board and adviser to determine that it is desirable for an independent director to be involved in day-to-day decision-making, whether as part of the adviser’s valuation committee or by reviewing and ratifying the committee’s decisions daily.

Even if no directors serve on the adviser’s valuation committee, the fund board should be comfortable with the committee’s composition. For example, at least one member of the valuation committee should be sufficiently familiar with markets to be able to assess market information as an input to a price determination. Directors also should understand the level of involvement of portfolio managers in the valuation process. While portfolio managers can provide invaluable information to the valuation committee, it may not be appropriate for investment personnel to constitute a majority of a valuation committee, or for portfolio managers to vote on the valuation committee as to securities in their respective portfolios, because they may have an interest in the outcome of the valuation decisions. To help assess the quality of the adviser’s process, independent directors could participate periodically in meetings of the adviser’s internal valuation committee or review the minutes of the meetings.
In addition to the adviser’s valuation committee, some fund boards have created board valuation 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.

C. A Board Should Choose a Reporting Cycle for Valuation Determinations That Is Appropriate for a Particular Fund.

Boards must also consider how frequently the directors would like to receive reports on the valuation process. (More information about board reports is available in Section VII – Board Reporting.) Because boards cannot delegate ultimate responsibility for fair valuation, the reporting must be frequent enough so that the board can gain comfort that the adviser is fair valuing securities in accordance with the pricing policies set by the board.

Many boards review valuations quarterly. Some boards may determine that more or less frequent reviews are desirable – either because of the particular securities in a fund’s portfolio or due to market conditions. For example, boards may want more communication with the adviser during times of market stress, such as that following the Japanese tsunami in March 2011 or the credit crisis of 2008. In addition, a board may wish to designate an independent director (or directors) as liaison to facilitate communication. The adviser could then contact the appropriate director(s) when any particularly difficult pricing issues arise.

To facilitate board oversight of the adviser’s valuation determinations, the adviser should document why a particular security has been fair valued, the method used to arrive at the value, as well as the price determined by the committee. Boards may find it helpful for representatives of the adviser’s valuation committee to attend meetings of the board (or meetings of a board committee responsible for valuation) to discuss valuation issues. Some boards have found it useful for a member of the board to participate in valuation committee meetings from time to time or conduct periodic discussions with valuation committee members to stay abreast of processes and methodologies being used. Some boards also receive information on the market price for a fair valued security if that information should become available.

D. Boards Should Understand the Role of Third Party Pricing Services.

Many funds use third party pricing services. Boards should develop an understanding of when their funds will or will not rely on third party pricing services to provide values for securities. Boards should understand that pricing services typically do not accept legal responsibility for prices they generate even if done negligently. Lastly, boards should also understand the circumstances under which management personnel may determine to override the prices provided by a pricing service and should review these actions or
understand the checks and balances in place to review an override. 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. The adviser may then accept the result of the challenge or override the service’s price. Boards should recognize that these challenges can be part of a healthy valuation process.

The board should seek input from the fund’s adviser on the performance of third parties that provide prices for fund portfolio securities. Boards also may wish to seek input from the third party itself. When conducting such a review, the board should be comfortable that the adviser conducted appropriate due diligence when selecting the pricing service. Boards can expect that the adviser’s due diligence will include an examination of the financial stability of the pricing service, its ownership, and any affiliations that the pricing service has with the adviser. The board should also be aware of how management evaluates the quality of a vendor’s prices.

The adviser also should have an established procedure for ongoing monitoring, including due diligence visits, to determine whether the pricing service continues to have competence in valuing particular securities and maintains an adequate control environment. Some directors may find it worthwhile to accompany management on its due diligence visits. Additionally, some boards may periodically interview the pricing vendors to determine their qualifications and independence.

E. The Board Should Understand the Adviser’s Resources for Valuing Securities.

The board should determine what resources the adviser has at its disposal should there be a need to fair value the fund’s portfolio securities. For example, a fund’s portfolio manager can be a valuable resource when fair valuing securities. While it may not be appropriate for a portfolio manager to vote on the valuation committee as to securities in his or her portfolio or for investment personnel to constitute a majority of an internal valuation committee, a portfolio manager can still add value due to their understanding of the fund’s portfolio securities. 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 provide an important addition to or alternative to a market price – particularly with respect to difficult-to-value securities like certain derivatives. If such models are used, directors should receive information about the rationale for the models, how often the models are used, the key inputs and assumptions (including sources) used in the models, and whether the prices determined by the models are (or even can be) compared to market transactions.

F. Directors Should Understand How Broker Quotes Are Used in Valuing a Fund’s Securities.

Funds can also look to brokers to provide valuations for securities. Directors should understand the process used when broker quotes are used to value portfolio securities.
First, directors should be aware of whether valuation procedures allow broker quotes to be the sole source used for determining the value of a particular security. Directors should understand 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. A board may wish to inquire about an adviser’s process regarding the selection of brokers, and how frequently those brokers are changed. For example, in one enforcement action, the SEC criticized a practice it described as follows:

In addition, from at least July 25, 2007, to June 16, 2008, the Valuation Committee valued one or more securities owned by the Ultra Fund in accordance with prices obtained from an individual broker-dealer located in Florida, whose method for determining prices it had not reviewed or approved. On various occasions in 2007 and 2008, third-party pricing vendors reduced prices on securities held by the Ultra Fund, but rather than reducing the prices for purposes of calculating the Fund’s NAV, the portfolio management team recommended – and the Valuation Committee approved – vendor overrides, through which the Fund valued the securities in question in accordance with prices provided by the Florida broker-dealer rather than in accordance with the prices provided by the vendor.20

The board should also understand whose job it is to obtain the quotes – portfolio management personnel, traders, the custodian or accounting agent, or others. Boards may want to pay special attention to circumstances where portfolio management personnel obtain the quotations from broker dealers to make sure checks and balances are in place to guard against a result-oriented process.21 Finally, the board should understand the procedure that management will use to value a security when obtaining quotes from broker dealers. Does the adviser average the quotes, discard the high and low quotes, or use another method? Additionally, how does management determine whether a transaction could be carried out at the quoted price?

**G. Directors Should Understand How the Adviser Addresses the Valuation of a Security Held Across Multiple Funds in the Complex**

Boards should be aware of any different valuation procedures the adviser uses across its business. The SEC staff has stated that “We generally believe, however, that a board could not arrive at different fair valuations for identical securities held by two or more funds that the board oversees consistent with its good faith obligation.”22 Accordingly, a board should understand that an adviser or other vendor bears a heavy burden if different values are assigned to a particular security from time to time. Boards should be aware of this possibility and understand the adviser’s process in this area. In addition, a board may wish to consult independent counsel or its auditors with questions in this area.

**H. Boards or Counsel Should Review Disclosure Regarding Valuation**

Because fund directors sign fund registration statements, directors or their delegates should carefully review fund disclosure as well as the adviser’s disclosure process management. The board should obtain assurances that the disclosure describing the fund’s valuation methodology is consistent with the methodology used and accurately described. Disclosure should also be reviewed when any changes are made to a fund’s valuation procedures.
V. Board Resources

A. The Fund’s CCO Is a Valuable Source for Boards as They Carry Out Their Valuation Responsibilities.

A fund’s CCO is a valuable resource for boards in the valuation process. The CCO can be helpful in establishing effective valuation policies and procedures. Further, the CCO is present at the management company and therefore can see 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 on-going functioning of the valuation process and to devote special attention to any valuation overrides by the manager. In addition, the CCO may be able to identify potentially problematic patterns that arise in day-to-day pricing.

Boards should consider how involved they would like their CCO to be in the day-to-day valuation process. Some feel 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. However, directors may wish to have the CCO attend the meetings of the valuation committee (as a non-voting member) to gain additional insight into the committee’s process.

B. A Fund’s Auditors Can Be a Valuable Tool in Assessing the Functioning of a Fund’s Fair Valuation Procedures.

A fund’s auditor can provide the board with another perspective regarding the effectiveness of a fund’s valuation procedures. As of the year end reporting period, a fund’s auditors assess the reasonableness of the valuation of all securities. In doing so, the auditors review the information presented to the board for securities that have been fair valued and may obtain comparative prices from a secondary source. As such, the fund’s auditors are able to provide an independent perspective on the implementation of a fund’s valuation procedures and can discuss their independent valuation results with the board. Auditors, however, do not play a role in the fund’s daily control environment; therefore, their perspective on the year end valuations are another source of data and insight for boards to consider but are not a control on which boards or the adviser can rely. Further, when auditing a fund’s financial statements, valuation of securities is tested in the context of the financial statements taken as a whole; it is not the entire focus of the auditing process. A fund’s auditor is able to provide a good perspective on the fund’s processes, controls and valuations based on the testing performed to issue an audit opinion. Further, given their role, auditors can also provide broader industry insights in terms of best practices. However, it is important to also clearly understand the limitations in the role of the auditor in terms of the board’s understanding and assessment of the valuation procedures.
VI. Board Reporting

A. A Board Should Determine the Depth of Valuation Reporting That Would Be Most Helpful to Provide Effective Oversight of the Valuation Process.

Boards should consider the information they want in reports on the valuation process for a fund group. Reports may vary depending on the volume of fair valuations and the types of securities or other assets held by the fund complex. Verbal reports provided at meetings of the board also vary. Approaches some boards have used include the following:

- **A case-by-case review of each asset that received a fair value.** This process provides the board or its committee with a comprehensive report and allows directors to ask questions about each fair value determination. This method may not be practical for a complex with a large number of assets that are fair valued during the reporting period.

- **A sampling approach.** In this approach, a representative from the adviser would provide a full report on an asset that was assigned a fair value that is intended to provide a sample of the methodology that is used by management. The intent is that over time, reports will be provided on each type of fair value process used for a complex. Typically a sampling would include those fair value situations that had the greatest impact on the fund’s NAV.

- **A deep dive.** A board delegated director or group of directors would conduct an on-site visit with personnel of the adviser responsible for valuation and observe the team in action. The directors would conduct a deep dive into the methodologies and seek to observe how fair value situations are identified, how information is gathered, how judgments are made, and how processes are applied. The directors may sit in on a meeting of the adviser’s valuation committee as observers. These directors would then report to the full board or appropriate board committee. This method may make sense for a complex with a large number of fair value situations that come up on a routine basis.

B. A Board Should Determine What Reports and Analysis Are Most Helpful in Carrying Out Its Valuation Responsibilities.

Boards may find that different information is helpful depending on whether a particular security is routinely fair valued compared to those that are fair valued due to specific circumstances. In routine cases, the board may decide that summary information is sufficient. In unusual circumstances, however, the board may wish to receive more timely or additional information about the security being fair valued. For example, the board may ask to see the fair value price assigned to the security, the effect of that security on the fund’s NAV, and the reason that the adviser decided to fair value the particular security.

Boards may find some of the following reports helpful as they oversee the adviser’s implementation of the fund’s valuation procedures.
## Report Purpose

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| NAV Accuracy Statistics        | • 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  
  • Can help directors identify issues with valuing securities |
| Disposition Analysis           | • Allows directors to see how the sales price of a security compares to the prior day’s price  
  • Disposition analysis can help directors evaluate the effectiveness of a fund’s valuation procedures  
  • If the difference between the value and subsequent disposition is greater than a pre-established tolerance, a fund’s valuation procedures may need to be reevaluated |
| Fair Value Look-Back           | • Allows directors to compare the price of a security that was previously fair valued against a subsequent market price  
  • Comparing the fair value price to a subsequent market price can help directors evaluate the quality of an adviser’s valuation process |
| Liquidity Monitoring           | • Because lack of liquidity is a factor in determining the need to fair value a particular security, the board should ensure that the adviser has a process for monitoring the liquidity of the fund’s securities  
  • Can help directors ensure that the adviser is factoring liquidity into the valuation process |
| Broker Priced Investment/Sales | • 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  
  • Can help directors identify issues with broker-priced securities and other assets |
### Report Purpose

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<td>Fair Value Trend Analysis</td>
<td>• Allows directors to monitor changes in the number of fair valuations over different time periods</td>
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<td>• Prompt questions to the adviser if the number of fair valuations has significantly changed over time</td>
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<td>• Also can identify trends in the number of price overrides of prices provided by vendors which may indicate a quality or reliability issue with that vendor or a management bias</td>
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<tr>
<td>Trigger Analysis</td>
<td>• Identifies the triggers that adviser or other third party uses to identify circumstances where securities should be fair valued</td>
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<td>• The trigger analysis can be useful to directors as they evaluate the effectiveness and consistency of the implementation of the fund’s pricing procedures</td>
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### VII. Conclusion

Fund directors have a statutory obligation to determine the fair value of portfolio securities that do not have readily available market prices. However, they generally delegate the task of valuing a fund’s securities to the adviser.

Delegating the day-to-day task of valuing portfolio securities to the adviser through the fund’s valuation procedures does not absolve boards of responsibility for the process. Even though directors do not perform the day-to-day valuations, they should develop an understanding of the adviser’s process and valuation resources in order to provide adequate oversight. Further, boards should determine the form and frequency of reporting on valuation in light of the portfolio investments in the complex.

By providing oversight of the valuation process, fund directors not only fulfill their statutory valuation responsibilities, but also provide a valuation risk oversight function or the funds they oversee.
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 For a recent example of an SEC suit against a fund’s adviser, see, e.g., In the Matter of UBS Global Asset Management (Americas) Inc., SEC Administrative Proceeding File No. 3-14699 (January 17, 2012) (The SEC charged the investment advisory arm of UBS with failing to follow fund valuation procedures for certain non-agency mortgage backed securities.)


4 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 675 independent directors, representing 97 independent director 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.


6 Results of the PwC Asset Management Valuation Survey (November 2010) provided the stimulus for this report. For more information and publications of interest to mutual fund directors, visit PwC’s website at www.pwc.com/us/assetmanagement.

7 See Rule 22c-1 under the 1940 Act.

8 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).

9 See Section 2(a)(41) of the 1940 Act.

10 See Investment Company Institute, SEC No-Action Letter (April 30, 2001) (“2001 Letter”). (If an event affects the price of a security after the close of the market on which it trades, but before the fund’s NAV is calculated, the last market price would not be a “readily available" market quotation. Similarly, if trading in a particular security is halted prior to the close of the market, the last market quotation is not “readily available.”) See also Accounting Series Release No. 118 (Dec. 23, 1970),
stating that quotations for securities with infrequent sales or a thin market are not "readily available."

See Section 2(a)(41) of the 1940 Act.

See 2001 Letter.


Letter from Douglas Scheidt, Associate Director and Chief Counsel, Division of Investment Management, to Craig S. Tyle, General Counsel, Investment Company Institute (December 8, 1999). ("Scheidt 1999 Letter")

FASB Accounting Standards Codification 820: Fair Value Measurements and Disclosures.

It establishes a hierarchy, ranging from most objective to least objective, for determining the value of a security as follows:

Level 1: securities with quoted prices for identical securities in active markets

Level 2: securities with quoted prices from markets that are not active or securities valued using market prices of similar assets and other observable, non-proprietary information

Level 3: securities valued using a pricing model or the firm's own, nontransparent data.


2001 Letter.

Scheidt 1999 Letter.

In the Matter of Evergreen Investment Management Company, LLC and Evergreen Investment Services, Inc. Administrative Proceeding File No. 3-13507 (June 8, 2009).

In one enforcement action, the SEC charged that a portfolio manager influenced broker quotes on securities, see In the Matter of Morgan Asset Management, Inc.; Morgan Keegan and Company, Inc.; James C. Kelsoe, Jr.; and Joseph Thompson Weller, CPA, SEC Administrative Proceeding File No. 3-13847 (June 22, 2011). In that case, the SEC charged Morgan Keegan (an investment adviser), a portfolio manager and the head of fund accounting with failing to follow established valuation procedures by, among other things, failing to receive adequate documentation to support portfolio manager price adjustments and allowing the portfolio manager to choose which dealer price confirmations to use and which to ignore.

Scheidt 1999 Letter at footnote 16.

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.

Recent Public Company Accounting Oversight Board (“PCAOB”) inspection findings as disclosed in public reports show an increased focus on procedures around valuation for companies, including mutual funds.

Without procedures that require the ongoing monitoring of a particular security’s liquidity, the value assigned to a particular security may be inaccurate. A number of enforcement actions can be attributed to a failure by the board or the adviser to monitor for changes in a security’s liquidity and subsequent failure to adjust the price accordingly.