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Executive Summary and Key Trends and Findings

Executive Summary

The 2008 Fair Value Pricing Survey (2008 Survey) represents our seventh survey on the valuation practices and industry policies and procedures used by asset managers. We have seen many trends over these seven years. Valuation practices have evolved into a mature set of practices, policies and procedures that continue to be refined as the range and complexity of investment types expand and the investment valuation tools improve.

Consistent with our past surveys, our 2008 Survey was designed with two goals in mind:

- 1. Provide information that will allow survey participants to understand how their practices, policies and procedures compare to other asset managers in the industry; and
- 2. Identify emerging trends within the industry.

The 2008 Survey was expanded to mine benchmark information from hot topic areas that are not widely available, such as broker pricing, the price challenge process, and Statement of Financial Accounting Standards No. 157, *Fair Value Measurements* (the Statement or FAS 157).

Credit crisis

What is now known simply as the credit crisis began when U.S. homeowners began to default on subprime and adjustable interest rate mortgages. Today it has turned into a global financial storm affecting all the global economy and financial markets: investment and retail banks, asset managers, hedge funds, private equity firms, public and private companies, and institutional and retail investors. As a result, asset managers have experienced unprecedented challenges in valuing portfolio securities in the past year. Information needed to value portfolio securities became scarce and third-party pricing vendors were challenged in their ability to provide evaluated prices. Asset managers were left to seek pricing alternatives such as internal modeling and also had to update valuation policies and procedures to address unforeseen events and a dynamic environment.

Valuation guidance

Although the U.S. Securities & Exchange Commission (SEC or the Commission) did not issue its much anticipated guidance during the first half of 2008, as expected, it was active on the valuation front. SEC representatives, such as Buddy Donahue, Director, Division of Investment Management, and Lori Richards, Director, Office of Compliance Inspections and Examinations, made a number of speeches and participated on several panels, highlighting the importance of valuation and the need for fund board involvement to oversee the valuation process as well as their role in understanding third-party pricing vendors. The SEC conducted a sweep examination on difficult-to-value investments, gathering relevant information on the current practices in place at many fund groups. The SEC also held a roundtable on fair value accounting standards on July 9 and, later in the month, issued its second *ComplianceAlerts* letter for Chief Compliance Officers, which contained a section on valuation risks and considerations for funds investing in high-yield municipal bonds. The section also provided recommendations for board oversight, and the Commission's expectations of board involvement on valuation and other investment company governance matters has been a subject of much discussion during 2008, with many hoping that the SEC will more narrowly redefine the fund board's overall responsibilities.

The SEC also continued to provide informal comments on the disclosure of fair value securities in the portfolio of investments as part of their mutual fund financial statement reviews. The SEC still prefers that investment companies highlight fair-valued securities in the portfolio of investments, and such disclosure continues to be more prevalent in the industry.

Funds devoted time in 2008 evaluating and preparing for the implementation of Statement of Financial Accounting Standards No. 157, *Fair Value Measurements* (the "Statement" or "FAS 157"). The objective of the Statement is to define fair value, to establish a framework for measuring fair value, to expand disclosures about fair value measurement, and, where applicable, to codify existing guidance under generally accepted accounting principles. The Statement specifies that:

"A fair value measurement assumes that the asset or liability is exchanged in an orderly transaction between market participants to sell the asset or transfer the liability at the measurement date. An orderly transaction is a transaction that assumes exposure to the market for a period prior to the measurement date to allow for marketing activities that are usual and customary for transactions involving such assets or liabilities; it is not a forced transaction (for example, a forced liquidation or distress sale). The transaction to sell the asset or transfer the liability is a hypothetical transaction at the measurement date, considered from the perspective of a market participant that holds the asset or owes the liability. Therefore, the objective of a fair value measurement is to determine the price that would be received to sell the asset or paid to transfer the liability at the measurement date (an exit price)."

The Statement requires asset managers to categorize and track each investment using a fair value hierarchy (Levels 1-3 based on market activity and inputs used to determine the prices) established in the Statement for financial reporting and disclosure purposes. Industry groups, service providers and third-party pricing vendors actively collaborated and discussed implementations issues related to FAS 157. These collaborations and discussions helped provide some guidance on the determination of hierarchy levels.

The Center for Audit Quality issued *Measurements of Fair Value in Illiquid (or Less Liquid) Markets* in October 2007. The white paper discussed the effects of, illiquid markets, supply and demand for security issues, definitions of forced sales, low volume market transactions and how to correctly apply a fair value for a security under FAS 157. At a time when the industry was uncertain how it should view trades that were occurring at prices far below their intrinsic value as determined by models, the paper suggested that it is not appropriate to assume that all transactions in a relatively illiquid market are forced or distressed unless persuasive evidence exists in establishing that an observable transaction is forced or distressed. It also stressed that valuation models should only be utilized when active market data or "observable inputs" are not available for a security, or similar securities, and should reflect any market data that would be used by a buyer.

Staff Audit Practice Alert No. 2, *Matters Related to Auditing Fair Value Measurements of Financial Instruments and the Use of Specialists*, was issued by the Public Accounting Oversight Board (PCAOB) in December of 2007. The Practice Alert discussed the requirements for an auditor to understand and evaluate 1) how management applies fair value measurements for financial instruments, 2) management's fair value policies and procedures 3) management's classification of financial instruments within the fair value hierarchy under FAS 157, and 4) pricing services utilized by management and the assumptions considered by such services. The alert also discussed instances where the auditor should evaluate the need to involve specialists. Although the practice alert focuses on the auditor's responsibilities, it also provides insights as to management's responsibilities to understand, in detail, the methods and assumptions used by either management or its service providers in developing valuations that are not based on market transactions. The auditor is then responsible for evaluating management's processes and procedures, often through a review of documentation. Comments made by SEC Staff seem to suggest that the SEC's view of management's responsibilities is consistent with those articulated in the Practice Alert.

2008 Fair Value Survey results

Industry professionals representing more than 50 asset managers completed the 2008 Survey. Those asset managers advise more than 2,700 funds with assets under management (AUM) exceeding \$3.5 trillion. The population of survey participants included those from fund complexes of varying sizes. Funds managed by these asset managers cover the full spectrum of investment types held by registered products.

While we historically noted significant differences in certain policies and procedures between large asset managers and small asset managers (based on AUM), the gaps have continued to narrow or, in some cases, have been eliminated, indicating that a more universal view of fair value exists today and that it can be achieved

by managers of varying sizes and complexities. This transformation is partly due to continued focus on fair value by the small firms, as well as, the prominence of third-party vendors who have emerged and have been engaged by small firms to help level the playing field. Nonetheless, large asset managers continue to devote more resources to investment valuation and are more likely to use these resources to continue to "raise the bar" and perform detailed analyses of certain valuation situations.

FAS 157 has increased the transparency of the valuation process, especially as it relates to the information used and provided by third-party pricing sources. Fund groups are spending more time understanding the inputs used by these sources, and, as a result, fund boards and management are in a better position to understand, evaluate and anticipate future challenges in the valuation process.

Price challenges continue to be on the rise. The rise is not unusual given the volatility and uncertainty in the investment marketplace and the general strengthening of fund policies and procedures. Fund groups are more successfully teaming within their organizations, sometimes on a daily basis, to assess valuations provided by other using traditional and newly-developed internal tools. Portfolio managers and traders have become more proactive in their assessment of the valuation process, and additional relevant information is being considered. However, extra care and controls need to be considered to ensure that changes to valuations are properly scrutinized.

Valuation continues to be an area of increased focus by regulators, such as the SEC and PCAOB in their examinations, standard setters, such as FASB in the development of FAS 157, and ultimately, financial statement users and investors that are making decisions based on the reported valuations. Overlying these demands are the complications resulting from a very volatile and increasingly global investment market that requires an ever increasing amount of financial data to perform a thorough analysis. As widening credit spreads continue to exist and the global markets yet to stabilize, the challenges in the valuation process remain. Differences relating to investment valuation between International Financial Reporting Standards and U.S. GAAP may also require additional thought as global convergence of those two sets of accounting standards occurs over the next few years.

As the results of the 2008 Survey indicate, progress continues to be made by the industry participants in addressing these many demands in a difficult environment that requires appropriate valuation results be determined and disseminated on a daily basis. Specific trends and findings identified in the 2008 Survey are highlighted in the next section.

Key Trends and Findings

Specific trends and findings identified in the 2008 Survey are highlighted below.

Valuation governance considerations

- Sixty-four percent of survey participants indicated that the board of directors has created a separate Fair Valuation Committee.
- Nineteen percent of survey participants indicated that at least one member of the board's Fair Valuation Committee is involved in fair value decisions on a "real-time" basis (i.e., members participate in the application of the fair value policies and procedures or are notified as those decisions are made). On a related matter, 31 percent of survey respondents in the prior year noted that the Board or its Fair Valuation Committee would approve the use of a new pricing methodology before a fair valuation decision was finalized, compared to 54 percent in the prior year, as many boards have seemingly reached the conclusion that new methodologies are being used more frequently given market conditions and that it is not practical to be involved in evaluating all of them before they are used.
- Thirty-seven percent have added internal controls over valuation as a result of the credit crisis. In addition, 39 percent indicated that the Treasurer's Group is responsible for monitoring controls designed to prevent or detect price overrides or bias in valuation; 27 percent indicated that the Compliance department is responsible.

- Thirty-three percent of portfolio managers and traders perform analyses of security prices each day prior to calculating the NAV of the fund, whereas 13 percent perform this monthly.
- Chief compliance officers (CCOs) continue to be involved in the valuation process undertaken by the board's Fair Valuation Committee. Over 60 percent of participants stated their CCOs are involved in the adviser-led Internal Pricing Committee meetings, most commonly in the role of an observer.
- Asset managers appear to be employing more resources for their fair valuation processes. Over 46 percent of survey participants stated they have at least two full time resources focused on fair valuation as compared to 29 percent last year.

Deloitte Point of View: The role of the Board has not changed significantly from the prior year, but management's responsibility has grown into much more of a daily role. Re-evaluating the sufficiency of internal controls over valuation is important, as in ensuring that all knowledgeable parties are active in the identification of fair value situations and in the fair valuation process itself.

Fair valuation policies and procedures

- Seventy-four percent of survey participants indicated that they had made changes to their valuation policies
 and procedures. Of these, 45 percent described their current year changes as minimal, and 53 percent
 indicated that they were making at least a moderate level of change.
- Twenty-nine percent of survey participants reported that they had plans to develop models to supplement the
 third-party information they obtain in regards to the challenges in obtaining valuation information on hard-toprice securities. Several participants reported that such models had already been developed.

Foreign equities

- Eighty-eight percent of asset managers said they use proxies for foreign securities, representing a continued upward trend dating back to 2004.
- Sixty percent of participants use one proxy and 40 percent use two or more proxies. Over 20 percent
 of participants had changed their proxy or the number of proxies used in the past year.
- The S&P 500 and the Russell 1000 continue to be the two most frequently used proxies.
- More than 90 percent of those with proxies use triggers. Trigger percentages ranged from zero to 300 basis points. Thirteen percent had decreased their trigger levels from the prior year, while 81 percent had kept their trigger levels the same.
- In addition to back-testing, several participants indicated that they perform sensitivity analyses in order to test the appropriateness of current trigger levels being used.

Foreign fixed-income securities

 Use of proxies to monitor the valuation of foreign fixed-income securities continues to be an uncommon practice, cited by only 4 percent of survey participants.

Significant events-fair valuation adjustments and materiality

 Fifty-three percent of survey participants reported that they do not consider materiality before adjusting a price when a significant event occurs, representing only a slight decrease from the prior year.

Monitoring fair valuation decisions

Ninety-six percent of all asset managers employ back-testing to analyze fair value procedures.

 There was a decrease in survey participants who reported supplementing back-testing with additional activities (such as evaluating shareholder cash flows or market-timing analysis). Whereas 55 percent stated they had them in place last year, only 41 percent reported having them this year.

Deloitte Point of View: Funds continue to make changes to their policies and procedures, but they are generally more focused on either traditional focus areas like foreign equity valuation or board governance or emerging areas like the credit crisis and new investment types. As always, policies and procedures should be revised throughout the year when the results of back-testing indicate that the current policies and procedures are not as effective as desired or as other circumstances arise, such as the purchase of a new type of investment.

Specific fair value considerations

Domestic fixed-income

- Ninety-one percent of participants indicated that they are asking pricing vendors questions about the prices they are supplying; seventy-nine percent indicated that they are asking brokers questions.
- The survey showed an increase in the use of Trade Reporting and Compliance Engine (TRACE)-related data to assist in valuing traded corporate fixed-income securities. Results show 36 percent of survey participants use TRACE data for comparative purposes in their valuation process, 26 percent ensure that their pricing vendor is factoring TRACE data into their models/calculations and another 4 percent use TRACE as a secondary source.
- For nongovernmental securitized assets (such as mortgage-backed and asset-backed securities), 43
 percent of participants generally perform supplemental analysis to assess prices provided by pricing
 vendors.
- When obtaining broker quotes, more than 50 percent of participants seek more than one quote for non-money market fund securities. A slight majority indicated that such quotes were averaged, although a strong minority indicated that one of the broker sources had been designated as the primary source.
- When performing the mark-to-market testing for money market funds, commonly called "shadow pricing," only 30 percent of participants seek more than one quote.

Senior loans

- Ninety percent of survey participants use either Loan Pricing Company or Markit Partners as their primary source in pricing senior bank loan holdings. Seven percent were using brokers as their primary source.
- Fifty-five percent of participants are performing additional procedures to corroborate the valuations they obtain from their vendors on senior loans.

Small cap/Micro cap equities

- Thirty-nine percent of survey participants reported that they use the last available market price to value a small cap/micro cap equity security even when they have determined its price to be stale (assuming they determine that such price is representative of fair value), a decrease of about 11 percent from the prior year's survey results.
- Thirty-eight percent of asset managers monitor trading volume on small cap/micro cap securities to assist in identifying securities with stale prices.

Derivative contracts

- For participants, there is a clear trend in using pricing vendors as the primary source in valuing derivatives that are not traded on an exchange. Whereas we once saw counterparties being the primary source, this year survey indicated that over 50 percent of participants were using pricing vendors.
- Thirty-nine percent of survey participants reported that their analyses had detected errors in counterparty quotes for non-exchange traded derivative contracts during the last twelve months, an increase of 13 percent from the prior year.
- Forty-eight percent of survey participants indicated that they consider the effect of significant events
 on the valuations of derivative contracts provided by counterparties or third-party vendors. This was a
 decrease from last year, but still a higher percentage than survey results in previous years.

Thinly-traded and illiquid securities

- More than 80 percent of survey participants have procedures in place to detect situations where securities are either illiquid or thinly-traded.
- Based upon their policies and procedures, a majority of participants will use the most recent market quote to value a thinly- traded or illiquid security, assuming that they believe it is representative or fair value.

Restricted securities

- Discount percentages on restricted securities have increased from the prior year. Approximately 80 percent of respondents use a discount percentage in excess of 5 percent, and more than 40 percent use a discount percentage exceeding 10 percent.
- Seventy-one percent of those applying a discount will adjust the discount based upon the remaining term of the restriction.

Warrants and rights

 Thirty-six percent of survey participants indicated that they use a formulaic methodology (most commonly, Black-Scholes) to value warrants and rights, while 38 percent use an intrinsic value methodology.

Deloitte Point of View: Fund groups should pay close attention to the valuation of new investment types, especially those that are thinly-traded or less liquid. If the expertise relating to such investment types does not exist in-house, such as when a fund is managed by a sub-adviser, additional resources might be necessary, and monitoring techniques not previously used may be warranted.

Foreign currency exchange rates

• Seventy-four percent of survey participants reported that they use foreign currency exchange rates at 4 p.m. Eastern, representing a slight increase from the prior year.

Deloitte Point of View: Using a rate as of the close of the New York Stock Exchange (typically 4 p.m. Eastern) is clearly most common. In situations where they are not used, fund groups should have a mechanism to evaluate significant events that could occur between the time the rates are obtained and the time of day that the NAV is calculated.

Index funds

Among survey participants offering index funds, nearly 80 percent reported that they apply fair valuation
override when the closing exchange price is deemed not to be a reasonable estimate of the fair value of the
security or securities, consistent with the percentage from prior year. Most offering exchange-traded funds
also apply fair valuation techniques.

Deloitte Point of View: As ETFs grow in the marketplace, the need for clear disclosure between the differences between the pricing methodology used by an ETF versus the benchmark will increase. ETFs are playing an increasing role in other aspects of the valuation process, especially the determination of fair value adjustments for foreign equities.

Third-party pricing vendors

- Funds continue to conduct internal analysis on valuations supplied by the vendors and that analysis is most likely to occur daily. On-going face-to-face meetings with the pricing vendor most commonly occur annually.
- Ninety percent of survey participants said they use third-party fair value pricing vendors for foreign securities.
- The most common parties who are permitted to challenge prices supplied by the pricing vendor include the
 pricing group/coordinator, portfolio manager, and the fund accountant.
- Sixty-two percent of participants indicated that they have chosen to change the evaluated price of third-party pricing vendors providing matrix-pricing.
- Fifty-seven percent of participants noted that their third-party fair valuation pricing vendor now provides a SAS 70 or similar type of report.

Deloitte Point of View: Due diligence visits of pricing vendors used to be focused on gaining an understanding of the vendor's organization and an overview of its pricing process. While these discussions are valuable, fund groups should look to raise the bar on their level of inquiries to really understand the key assumption used in models and the expertise of those providing evaluated prices. Fund personnel knowledgeable about the specific investments held by the fund group should attend the meeting.

FAS 157

- Sixty-three percent of participants indicated that FAS 157 has impacted their valuation policies and procedures
- Eighty-one percent of survey participants indicated that they monitor, or intend to monitor, the appropriateness of the classification of investments at different levels prescribed by FAS 157. Fifteen percent stated they will perform monitoring on a daily basis, 28 percent on a monthly basis and 38 percent on a quarterly basis.

Deloitte Point of View: A core message within FAS 157 is that fund groups should understand the key inputs into the valuations produced by others. The industry should use care in determining the classification of investments using the 3-level hierarchy outlined in FAS 157 and should also ensure that they are adequately considering other FAS 157 requirements, including the need to adjust valuations (for financial reporting purposes only) for significant events after the time at which funds calculate their NAVs.

Financial statement disclosure

• Sixty-five percent of participants have updated their financial statement footnote disclosure relating to fair value policies.

Deloitte Point of View: Periodically reviewing the adequacy of fair value disclosures in shareholder reports and in regulatory filings continues to be a leading practice.

SEC examinations

Forty-five percent of respondents indicated that they had been subjected to a sweep examination by the SEC.
Of those that were examined, all indicated that the SEC had made certain inquiries relating to valuation, most
commonly about the general fair value pricing policies and procedures. There were also focused inquires on
particular types of investments.

We would be pleased to answer any questions you may have about our survey, its results, or other fair value issues. Please feel free to contact Cary Stier, U.S. Practice Leader, Asset Management Services, Paul Kraft, Partner and Fair Value Pricing Survey Leader, or any of the following partners:

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