FAS 157 and the Role of the Pricing and Evaluation Service Vendor

May 22, 2007

Interactive Data Pricing and Reference Data (Interactive Data) has prepared this FAS 157 Position Paper to provide an overview of FAS 157 requirements with a focus on fair value hierarchy determinations. This Position Paper also highlights the role that pricing and evaluation service vendors can play in providing information to their clients to assist them in meeting FAS 157 requirements.

In addition to this Position Paper, Interactive Data can provide its clients, upon request, with a Summary of Inputs by Asset Class, and our evaluation methodology sheets. These documents provide more detailed information on the inputs, models and processes that we use in our evaluation services.

Ongoing Dialogue
We hope you find this Position Paper informative and useful in advancing your preparations for FAS 157. We look forward to participating in additional industry discussions and continuing to share our perspective on FAS 157. If you have any feedback, questions or would like additional information, please contact your Interactive Data Pricing and Reference Data representative.

Overview of FAS 157
The Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards No. 157: Fair Value Measurements (FAS 157)\(^1\), in September 2006. The standard is mandatory for financial statements prepared in accordance with GAAP and issued for fiscal years beginning after November 15, 2007 (and related interim periods), although FAS 157 may be voluntarily adopted for earlier periods.

FAS 157 “defines fair value, establishes a framework for measuring fair value, and expands disclosures about fair value measurements.”\(^2\) FAS 157 does not change when statement preparers must use fair value measurements; rather its focus is on what fair value means and the disclosures firms must include in financial statements when they use fair value measurements. Firms will need to understand the FASB definition of fair value and develop procedures for the fair value disclosures in their financial statements, as well as review their existing valuation policies and procedures, in order to comply with FAS 157.

FAS 157 Definition of Fair Value
FAS 157 defines fair value as an “exit price” - “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.” FASB has indicated that they believe this definition is consistent with current industry practice and fair value accounting guidance from the Securities and Exchange Commission.\(^3\)

---


\(^2\) Ibid., p.1.

**Inputs to Fair Value Determinations**

FAS 157 states that “inputs refer broadly to the assumptions that market participants would use in pricing the asset or liability, including assumptions about risk....” It characterizes inputs as observable or unobservable, and requires that statement preparers “maximize the use of observable inputs and minimize the use of unobservable inputs.”

- **Observable inputs** are inputs that reflect the assumptions market participants would use in pricing the asset or liability developed based on market data obtained from sources independent of the reporting entity.

- **Unobservable inputs** are inputs that reflect the reporting entity’s own assumptions about the assumptions market participants would use in pricing the asset of liability developed based on the best information available in the circumstances.

**Fair Value Hierarchy**

FAS 157 establishes a fair value measurement hierarchy for inputs. When a valuation utilizes multiple inputs that are in different levels, the fair value hierarchy level is “determined based on the lowest level input that is significant to the fair value measurement in its entirety.”

The fair value hierarchy levels are summarized below.

- **Level 1 inputs** are “quoted prices (unadjusted) in active markets for identical assets” for the instrument or security to be valued. A commonly cited example is a New York Stock Exchange closing price.

- **Level 2 inputs** are inputs that are “observable for the asset or liability, either directly or indirectly.” FAS 157 provides several examples of level 2 inputs, including: “quoted prices for similar assets and liabilities in active markets”; “quoted prices for identical or similar assets or liabilities in markets that are not active...”; “interest rates and yield curves observable at commonly quoted intervals, volatilities, prepayment speeds, loss severities, credit risks and default rates”; and “inputs that are derived principally from or corroborated by observable market data by correlation or other means (market-corroborated inputs).”

- **Level 3 inputs** are “unobservable” and contain the assumptions of the party fair valuing the asset or liability. FAS 157 states: “Unobservable inputs shall be used to measure fair value to the extent that observable inputs are not available, thereby allowing for situations in which there is little, if any market activity for the asset or liability....”

**Inputs from Third Parties - Role of the Pricing/Evaluation Vendor**

Financial statement preparers subject to FAS 157 make fair value determinations often based on inputs received from third parties, including: counterparties, broker-dealers and pricing/evaluation vendors, like Interactive Data. FAS 157 does not provide guidance to statement preparers as to how inputs observed or utilized by third parties such as pricing services may be treated by statement preparers.

Many of the firms with whom we have discussed FAS 157 are dividing the securities they fair value into “buckets” by asset class. At a recent ISDA seminar, Melissa Allen, of Credit Suisse, and the Chair of the ISDA European Accounting Policy Committee, commented it was not practical to review each of the firm’s derivative positions to test the appropriateness of each level. As a result, Credit Suisse has chosen to review...
hierarchy levels through groups, rather than individual instruments. Brian Stevens, a Practice Fellow at the FASB replied this approach was, in his personal view, “not inconsistent” with how FASB viewed the issue. This approach would allow firms to identify the inputs that may be used for a specific asset class and determine the fair value hierarchy for all of the securities they hold across that asset class, rather than examining the input(s) for each individual security for which they are making fair value determinations.

**Interactive Data Inputs to Evaluations**

Interactive Data collects, edits, maintains and delivers data on more than 3.5 million securities, including daily evaluated pricing (evaluations) for approximately 2.5 million fixed income and international equity issues as well as valuations for single name credit default swaps (CDS) and bank loans, and broker quotes for some fixed income securities. Our evaluations represent an exit price, our good faith opinion as to what a buyer in the marketplace would pay for a security (typically in an institutional round lot position) in a current sale. These evaluations are used by our clients for many purposes in the front, middle and back office, including risk management, financial modeling and as possible inputs in their calculation of mutual fund or hedge fund net asset values.

Interactive Data seeks to utilize market data and observations in its evaluation services. For our evaluations, we utilize evaluated pricing applications that vary by asset class and incorporate available market information and, because many fixed income securities do not trade on a daily basis, apply available information through processes such as benchmark curves, benchmarking of like securities, sector groupings, and matrix pricing. In addition, we use model processes, such as the Option Adjusted Spread model to develop prepayment and interest rate scenarios for securities that have prepayment features.

Interactive Data has been discussing FAS 157 with clients and independent accounting firms and developing informational resources for clients to assist them with their preparations for FAS 157. We conducted an internal project to review and categorize the inputs we use for each subset of evaluations we prepare. Information about inputs to our evaluations, and about valuations we receive from third parties, is set forth in our Summary of Inputs by Asset Class. This enhanced transparency will provide our clients with information for their determinations under a “bucketed approach” of input levels for securities we evaluate. Interactive Data will provide the Summary of Inputs to clients upon request, and we are, of course, also available to answer questions about the information in the Summary.

Listed below, in approximate order of priority, are the inputs we usually consider across our fixed income asset class evaluation methodologies. For certain security types, additional inputs may be used or some of the standard inputs may not be applicable. The inputs listed may relate either directly to the security being evaluated, or indirectly to a similarly situated security (e.g., another bond of the same issuer or a bond of a different issuer in the same industry with similar maturity, terms and conditions, etc.).

The inputs we currently consider to be standard for evaluations are:

- Benchmark yields
- Reported trades (as provided by TRACETM, MSRB, etc.)
- Broker/dealer quotes
- Issuer Spreads
- Two-sided markets
- Benchmark securities
- Bids
- Offers
- Reference data (e.g., corporate actions or NRMSIR material event notices)
- Industry and economic events

---

11 Evaluated pricing is provided in the U.S. through Interactive Data Pricing and Reference Data, Inc. and internationally through Interactive Data (Europe) Ltd. and Interactive Data (Australia) Pty Ltd. We deliver valuations from Markit Portfolio Valuations™ for single name CDS and bank loan valuations, and valuations from Securities Valuation (SVC) for Canadian dollar denominated fixed income securities.
Not all of the inputs will be considered or given the same weight for a given security on a given day. As an example, a trade for a specific corporate bond may be reported via TRACE™. In reviewing this input, an evaluator will assess factors, such as the time and size of the trade, in order to determine the appropriate contribution of this information. The evaluator also may consider information for related bonds, for example, those of the same issuer, or an issuer in the same sector. When news has been released on the issuer or sector after the time of the reported trade, the evaluator may adjust the evaluation for the corporate bond to reflect the new information.

**Examples of Inputs to Evaluations**

Take for example, an investment grade corporate bond, Residential Capital Corporation 6.375%, maturing on June 30, 2010. On March 8, 2007, we provided an evaluation of $101.151 for this issue. Key components of this evaluation were a spread of 151 basis points and the interpolated 3 year point on the benchmark Treasury curve. This data was corroborated by contemporaneous trades on TRACE between $101.027 and $101.188.

Another example is the March 13, 2007 Fair Value Information Service evaluated price for Sony Corp NPV (SEDOL® 682150). The security closed on the Tokyo Stock Exchange at 6,110 Japanese Yen on March 13, 2007. On that day, the S&P 500® dropped 2.04% percent on a day-over-day basis. Using an ordinary least regression model based on five observable market factors (the Sony ADR, the Nikkei 225® futures contract, the Philadelphia Semiconductor index, the Japanese Yen to US Dollar and the S&P 500 futures contract), the Fair Value Information Service provided an evaluation of ¥5934.

<table>
<thead>
<tr>
<th>Component</th>
<th>ID</th>
<th>Type</th>
<th>( \beta \text{ (coef)} )</th>
<th>t-value</th>
<th>Factor Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sony Corp ADR (NEW)</td>
<td>93559530</td>
<td>ADR</td>
<td>+0.8733</td>
<td>+14.44</td>
<td>-0.0146</td>
</tr>
<tr>
<td>Nikkei 225 Futures Contract</td>
<td>40999811</td>
<td>Index</td>
<td>-0.0301</td>
<td>-0.23</td>
<td>-0.0195</td>
</tr>
<tr>
<td>PHLX Semiconductor Index Sox</td>
<td>52759210</td>
<td>Index</td>
<td>-0.1526</td>
<td>-3.18</td>
<td>-0.0109</td>
</tr>
<tr>
<td>Japanese Yen</td>
<td>JPY</td>
<td>Currency</td>
<td>-0.0213</td>
<td>-0.27</td>
<td>-0.0092</td>
</tr>
<tr>
<td>S&amp;P 500 Futures Contract</td>
<td>50999811</td>
<td>Index</td>
<td>+0.4896</td>
<td>+3.05</td>
<td>-0.0199</td>
</tr>
</tbody>
</table>

**Limitations**

This document is provided for informational purposes only. Interactive Data Pricing and Reference Data, Inc. does not provide legal, accounting or other professional advice. Clients should consult with an attorney or accounting professional regarding any specific legal or accounting situation. The information contained in this document is subject to change without notice and does not constitute any form of warranty, representation, or undertaking. Nothing herein should in any way be deemed to alter the legal rights and obligations contained in agreements between Interactive Data Pricing and Reference Data, Inc. and/or affiliates and their clients relating to any of the products or services described herein.

Interactive Data Pricing and Reference Data makes no warranties whatsoever, either express or implied, as to merchantability, fitness for a particular purpose, or any other matter. Without limiting the foregoing, Interactive Data Pricing and Reference Data makes no representation or warranty that any data or information (including but not limited to evaluations) supplied to or by it are complete or free from errors, omissions, or defects.

Interactive Data™ and the Interactive Data logo are service marks of Interactive Data Corporation. Other products, services, or company names mentioned herein are the property of, and may be the service mark or trademark of, their respective owners.