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Now that new fair value disclosures are required for all public companies, many financial statement issuers, and their auditors, face new litigation risks associated with the issues of transparency, comparability, and subjectivity inherent in asset and liability valuations. This article provides a brief background on fair value, an analysis of the fair value disclosures by early adopters of FAS 157, and a discussion of the effect of fair value disclosures on litigation risk.

The authors:

Bala Dharan, Vice President

+1-617-425-3684

bdharan@crai.com

Jody Goldman, Vice President

+1-617-425-3788

jgoldman@crai.com

Kim Train, Principal

+1-617-425-3097

ktrain@crai.com

FAS 157—Fair Value Disclosures and Litigation Risk

What is fair value under FAS 157?

Several accounting standards issued in the past by the Financial Accounting Standards Board (FASB) required companies to present certain assets and liabilities at their fair values, but until recently, the term “fair value” lacked a consistent usage in accounting. The FASB rectified this by issuing Financial Accounting Standard No. 157, Fair Value Measurements (FAS 157), in September 2006. FAS 157 requires companies to measure the fair value of assets and liabilities at what they could be sold or settled at, a value known as the exit price. This fair value concept is similar to the concept of fair market value that most attorneys are familiar with in taxation and valuation contexts.¹

FAS 157, effective for all public companies starting in 2008, also instituted a fair value hierarchy that requires fair value assets and liabilities to be grouped into one of three levels based on the subjectivity in determining the fair value. At the top of the hierarchy are level 1 assets and liabilities, whose value can be observed using quoted prices in an active market (e.g., a share of publicly traded stock or the quoted price of an identical asset).

If observable values are not available, fair value must be estimated based on a valuation model, and the estimated fair value is classified as level 2 or level 3 depending on the degree of observability of the valuation model inputs. The value of level 2 assets and liabilities is based on models that require observable model inputs (e.g., the quoted price of a similar, but non-identical asset). Level 3 assets and liabilities, by contrast, are valued by management using models with unobservable inputs. This essentially requires management to provide the necessary input values² based upon relevant facts, trends, and expectations as of the valuation date.

What can we learn from the early adopters?

Several large investment banks and diversified financial institutions voluntarily adopted the reporting requirements of FAS 157 in late 2006 and early 2007. CRA analyzed the disclosures that ten early adopter firms made during their first 15 months after implementing FAS 157. The early adopter firms in our sample were Lehman Brothers, Goldman Sachs, Merrill Lynch, Morgan Stanley, JP Morgan, Citigroup, Bank of America, Bear Stearns, Jefferies Group, and Wells Fargo. The early adoption coincided with the turmoil in various credit markets beginning in the summer and fall of 2007.

As markets for mortgage-backed securities and related financial products suffered unprecedented liquidity issues, including reported writedowns and losses in excess of \$500 billion, the implementation of FAS 157’s “exit value” concept raised questions about the difficulties of measuring fair value when little or no market information about prices existed. In the absence of liquid markets for many credit

¹As noted in Internal Revenue Service Revenue Ruling 59-60, fair market value is the price at which an asset would exchange hands between a willing buyer and a willing seller, each having reasonable knowledge of the relevant facts, and neither under any compulsion to act.

²FAS 157 requires that these management inputs reflect what a knowledgeable and independent market participant would use.



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products, financial institutions were left to rely on their own proprietary models to value them. The inherent subjectivity of the resulting level 2 and level 3 fair value disclosures have led some critics to question the usefulness of the resulting valuations. It is important to note that subjectivity alone does not imply that the resulting valuations are inappropriate or inaccurate. Ultimately, this debate placed further emphasis on the need for strong internal controls over the management processes used by companies to determine fair value reliably.

CRA’s analysis of the trends in these fair value disclosures shows that assets and liabilities priced from objectively verifiable sources (i.e., level 1 disclosures) decreased; conversely, those valued through more subjective means (i.e., level 2 and level 3 disclosures) increased. Figure 1 shows the growth in fair value assets by the three levels of the FAS 157 hierarchy. During our analysis period, level 2 and 3 assets grew dramatically, from approximately \$4 trillion to \$7 trillion. The increase in level 2 and 3 assets was particularly pronounced in the first quarter of 2008 when they grew by 31 percent. By contrast, level 1 assets declined during this quarter by 9 percent.

The growth in level 2 and 3 assets could potentially be explained by numerous factors including:

1. Recategorization of assets as certain markets became more illiquid and little to no observable market data existed to price these instruments
2. Consolidation of “off-balance sheet” assets onto the balance sheet
3. Acquisition of new assets
4. Growth in value of existing assets

However, the data does not allow us to decompose the value changes into the categories described above.

Although the growth rates for level 2 and 3 assets were dramatic, they generally comprised a small portion of the firms’ total assets. For example, at Goldman Sachs, reported level 3 assets were only 6 percent of total firm assets at the end of fiscal year 2007.

Figure 1

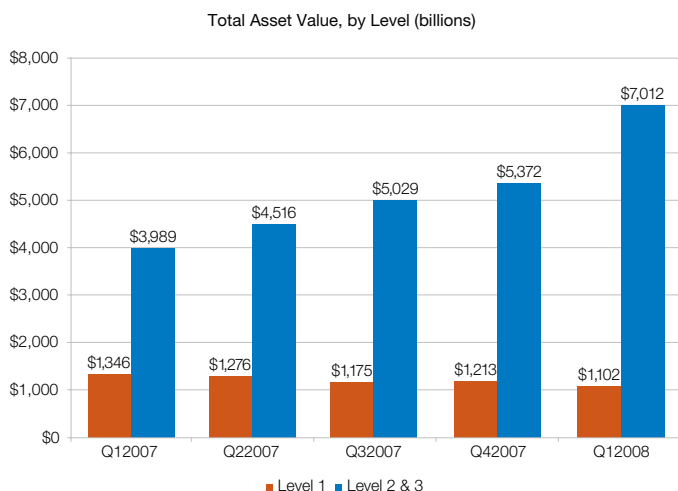
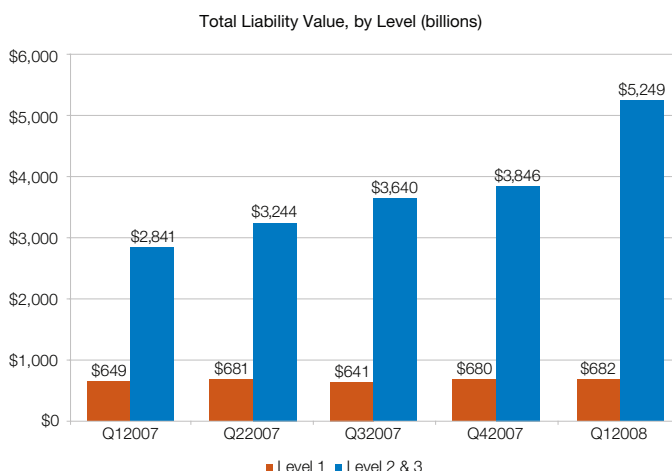


Figure 2



CRA also analyzed the fair value liability disclosures for the ten early adopting firms and examined the trends in their level 1, 2, and 3 liabilities. Figure 2 shows the changes for these instruments during 2007 and early 2008. These changes were consistent with the changes we observed in assets. Level 1 liabilities remained generally flat, while level 2 and 3 liabilities grew rapidly. The growth of level 2 and 3 liabilities accelerated during the first quarter of 2008. It increased by 37 percent, which indicates a growing reliance on proprietary valuation models for fair value measurement. The reasons for this growth in level 2 and 3 liabilities could potentially be explained by several factors including:

1. Recategorization of liabilities as certain markets became more illiquid and little to no observable market data existed to price these instruments
2. Consolidation of “off-balance sheet” liabilities onto the balance sheet
3. Increased borrowings

Overall, our analysis of the firms’ footnote disclosures indicates that the growth of level 2 and 3 net assets (assets less liabilities) was partially driven by a shift in classification due to increasing illiquidity and the consolidation of assets and liabilities that were part of special purpose entities. However, we are not able to identify an exhaustive list of the reasons for this growth because firms are not required to provide the same level of disclosure for level 2 assets and liabilities as they are for level 3.

CRA also analyzed the impact of the changes in level 2 and 3 assets and liabilities on the income statement. Our analysis shows that the changes in balance sheet fair values significantly impacted the performance of some of the firms. This underscores the importance of not viewing fair value assets and liabilities from the balance sheet perspective alone. Although the reported value of level 3 assets or liabilities may only represent a small proportion of total assets or liabilities, gains and losses from level 3 instruments can still be a significant percentage of income. For example, Goldman Sachs’ level 3 assets were only 6 percent of total firm assets, but 31 percent of its 2007 pre-tax income came from gains from level 3 assets and liabilities. Similarly, even though Merrill Lynch’s level 3 assets accounted for only 4 percent of its total firm assets, the 2007 loss from level 3 assets and liabilities represented 103 percent of its total pre-tax loss.

Finally, because financial institutions' balance sheets typically carry a large leverage ratio (i.e., ratio of total assets to equity), level 3 assets can be a significant percentage of a firm's equity even when they comprise a small part of total assets. For example, Lehman Brothers' net level 3 assets were approximately 173 percent of its net equity position at year-end.

What issues does FAS 157 bring to the forefront in today's markets?

Our analysis shows that the vast majority of large financial institutions' assets and liabilities subject to fair value reporting are financial, synthetic³, or structured assets and/or liabilities. Many of the financial instruments that would have been priced using level 1 observable values are now priced using level 2 or level 3 models because of the illiquidity in some credit markets. In addition, some of these level 3 assets and liabilities have become difficult to model with traditional resources and tools, and they require new models and methodologies. For example, JP Morgan's 2007 Form 10-K, states that, "as markets and products develop and the pricing for certain products becomes more or less transparent, the Firm continues to refine its valuation methodologies."

Because financial institutions rely heavily on models for pricing transactions and valuing assets and liabilities, they must manage the so-called "model risk." This is the risk that pricing or valuation models might be wrong due to errors in model methodology, assumptions, or implementation.

The models used in determining the fair value of level 3 assets and liabilities of an entity include many firm-specific and economic factors, including the entity's performance history and growth prospects, interest rate and other financial market variables, and the expected behavior of other market participants. Given the complexities of cash flows and risks, different financial instruments might require different valuation models. Citigroup, for example, notes in its 2007 Form 10-K that it employs more than 800 valuation models to comply with the FAS 157 fair value disclosures.

Due to the newness and complexity of many financial instruments, there may also be several acceptable alternative valuation methodologies. This means that the same or similar financial instruments could potentially be valued by different companies using different models. For example, in our study, disclosures by Goldman Sachs and JP Morgan suggest that they use different mixes of valuation techniques for each major group of level 3 assets and liabilities.

It is important to note that projections and estimates of value that later turn out to be incorrect are not, on their face, synonymous with a failure to manage model risk. For example, many of the synthetic and structured products that are at the heart of the credit crisis involve residential and commercial mortgages. Home ownership and real estate prices reached all-time record levels in recent years. Many of the models that investment banks used to develop projections and values for these synthetic and structured products included assumptions with respect to future interest rates, default rates, prepayment rates, and expected growth in real estate prices. These inputs are always difficult to estimate with complete accuracy.

Even though the most sophisticated financial professionals did not foresee the unprecedented decline in real estate prices and the higher than expected default rates on certain mortgage tranches, the fact that actual valuations differ from initial expectations is not, by itself, an indication of fraud or lack of systematic processes or controls.

Mitigating factors related to fair value

To manage and mitigate model risk, senior management needs to continue to provide an appropriate level of oversight and control, which includes ensuring that methodologies, assumptions, and implementation techniques are sound and that controls and systematic processes are in place to control the integrity of changes in the models and assumptions.

The use of proprietary models for valuing level 2 and 3 assets and liabilities does not, by itself, render the resultant valuations unreliable. Reliability of fair value disclosures is in part determined by how well a firm uses internal controls to:

1. Manage and document the processes used by managers to select the model (if competing valuation approaches exist),
2. Select the model assumptions, and
3. Implement the methodology

Litigation risk from fair value measurement and disclosures can be mitigated by the continued maintenance of sound internal controls for these processes.

Additionally, to mitigate model risk, firms need to continue a well-documented model validation and review process and augment it as new models and methodologies are adopted. Process documentation should include descriptions of relevant sources, the design of the model, and the validation of model accuracy through back-testing or other techniques. Back-testing involves the comparison of model-calculated values for past periods with actual results for those periods. When noticeable disparities emerge, the results are used to modify the model or change the model's parameters.

Fair value litigation

Our study of early adopters of fair value highlights the fact that although strong internal controls have always been paramount to a company's long-term success, compliance with FAS 157 brings additional risk-mitigation considerations and underscores the continued importance of internal controls. The proprietary models and methodologies developed to value these instruments have increased the complexity and subjectivity of fair value measurement. This has created significant model risk, and it will be subject to scrutiny by auditors, regulators, and investors. Litigation will come in many forms, including securities class action matters, disclosure of risks, and breach of contract disputes. Issuers and auditors will likely be challenged on whether accounting and valuation judgments, which are inherent to the financial statements and required to measure fair value, were made appropriately and in good faith. Companies, on the other hand, will have to defend their fair value models as well as their internal control processes and systems.

³Synthetic instruments are created exclusively from one or more derivatives. The contracts generate cash flows that meet the end-user's specifications.

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Contact

For additional information about how CRA's financial experts can help you with your litigation and regulatory needs, please contact:

Austin

512-652-5799

Jeff Andrien

Boston

617-425-3000

Tom Blake

Bala Dharan

Jody Goldman

John Griffin

Paul Maleh

Scott Mayfield

Christopher Noe

Stephen O'Neil

Chicago

312-357-1000

Fran Burns

Elizabeth Davis

Rich Lettiere

Mike Mayer

Bjorn Pettersen

New York

212-520-7100

Yvette Austin Smith

David Babbel

Bill Foote

Alan Friedman

Mark Meyer

Oakland

510-595-2700

Mukarram Attari

Pasadena

626-564-2000

Simon Cheng

John Hirshleifer

Brian Palmer