

Watching out for FAS 157: *Fair Value Measurement*

Unless you are involved directly with financial reporting, accounting issues tend not to get all that much consideration. However, some rather significant things are brewing at the Financial Accounting Standards Board (FASB), and bank asset/liability professionals should be aware. In most cases, the issues discussed in this article probably will not affect market participants' strategies or tactics, but the financial disclosures relating to these activities will likely change. Moreover, complying with these new accounting rules will probably require an allocation of additional resources.

Most accounting standards are technical in nature, replete with nuances and exclusions. Additionally, auditing firms, and particularly the big four (Deloitte & Touche, Ernst & Young, KPMG, and PriceWaterhouseCoopers), have great authority in terms of their interpretive guidance, which is widely distributed. For that reason, this article should be recognized as a high-level introduction. This article should not be considered to serve as definitive guidance.

With that caveat, this article turns attention to Financial Accounting Standard No. 157 (FAS 157), *Fair Value Measurement*. While some financial institutions have adopted early, this standard was originally scheduled to become effective for financial institutions commencing at the start of their fiscal year after November 2007.

It applies, with some exemptions, to financial institutions in situations where assets or liabilities are carried on balance sheets at fair market value. Among those affected are banks that use derivative instruments, which are required to be carried on the balance sheet at fair value. It also applies to non-banks that elect a fair value option (i.e., firms that elect to carry certain financial assets at market rather than at their historical values).

FAS 157 Defined. The starting point is the definition. FAS 157 defines "fair value" as an exit price (i.e., the price to get out of the position). In the standard's words, "Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date."

Many industry analysts have found this definition disturbing in that the standard makes no distinction for an instrument being carried by a dealer versus one carried by a customer. What is more, the standard requires both categories to mark their positions to exit prices. This requirement applies despite the fact that customers bear

the cost of the bid/ask spread, while the dealer enjoys the benefit or earnings associated with the bid/ask spread. Accordingly, for dealers, this definition actually codifies realizing a day-one profit. This codification legitimizes the type of trading earnings acceleration we saw at ENRON a few years back.

This definition notwithstanding, the standard also dictates a number of other considerations relevant to determining appropriate balance sheet values. These considerations include the following:

- Fair value should not reflect a forced liquidation price or a distressed price that might be a market clearing price in a period of financial distress.
- For assets, it is a price that reflects the *best* liquidation prices available (e.g., the highest bid, to *knowledgeable* market participants).
- For liabilities, the company's own credit risk (i.e., the risk of non-performance, should be incorporated in any estimate of an instrument's fair value).
- It should reflect the same-day settlement so as to exclude any incremental price impacts associated with settlement risks.

With an eye toward derivative instruments, bullets two and three may be the most problematic in that they appear to be calling for a valuation procedure that is at odds with current practice. At this point, this author is unaware of any valuation services that provide the wherewithal to appropriately distinguish between the credit standings of the two counterparties of a derivative contract, effectively applying one yield curve when the derivative is an asset and another when it is a liability. It is not that it cannot be done. The problem is finding data that appropriately captures differential credit risk across the spectrum of market users.

Doing this exercise correctly would require knowing credit spreads of all parties to trades at the appropriate point of the yield curve. For example, it would be an error to assume that the risk premium associated with bank XYZ is the same for, say, a one-month horizon as it is for a five-year horizon. Where are these data supposed to be found?

Perhaps FASB has granted a carve-out with this sentence that seems to be at odds with the above discussion: "This Statement does not preclude the use of mid-market pricing or other pricing conventions as a practical expedient for fair value measurements within a *bid-ask spread*." But perhaps not...

Some portion of the standard addresses alternative approaches as to the question of how to generate fair value estimates. However, no specific guidance is mandated when modeling is necessarily required (i.e., when explicit market prices are not readily observable). For instance, the standard discusses basing the estimate on an observed market price, inferring a price based on discounted expected future cash flows, or making a judgment on the basis of replacement costs. All approaches would seem to be valid, where the only restriction would be that the selected approach be applied in a consistent manner, and a methodology that is inferior to another available methodology should undoubtedly be avoided. For example, if one possible valuation procedure ignores relevant, observable data but a second approach takes these data into account, the reporting entity would not be able to justify reliance on the first approach.

When all is said and done, preparers of financial statements are simply left with the charge of doing the best they can to come up with a number. And the fact is, depending on the instrument under consideration, the range of reasonable estimates could vary considerably from case to case.

Where the guidance is more prescriptive is in its requirements relating to disclosures pertaining to the valuation procedures that have been devised. Specifically, compliance requires identifying and categorizing the various quality levels of inputs that are used in the valuation process for each class of instruments for which fair values are presented. These levels are listed below:

Level 1: Unadjusted prices quoted in an active market

Level 2: Other significant, but observable variables

Level 3: Significant unobservable variables (e.g., assumptions)

In the disclosures, reporting entities are expected to discuss the process for determining their various fair value estimates, including the quality, or levels, of the data underlying these estimates. Additionally, the disclosures would detail the effect of the measurements on current earnings, inclusive of realized and unrealized effects.

Exactly how all of this settles out in practice still remains to be seen. Accordingly, bank asset/liability managers should be prepared for auditors to apply greater scrutiny in connection with valuations and what goes into them.

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Liquidity Risk Measurement Techniques and Stress Tests

In the first article in this series on the considerations to the formulation of a liquidity stress testing framework, the background to liquidity risk and liquidity stress testing was presented (see March 2008 *BALM*). This second article in the series investigates various stress-testing categories in order to gain a better understanding of stress testing and how it could be applied in liquidity risk measurement. The basic liquidity risk measurement techniques are explored to establish a framework of potential analytical techniques to apply in the formulation of a liquidity stress testing methodology.

Liquidity Stress Testing. The formulation of a liquidity stress testing framework requires a clear and decisive understanding of the stress testing technique applied, exactly what is stress tested, and the type of analyses conducted. This section will explore the methods of stress testing that can be applied in the liquidity risk management process. Furthermore, the types of analyses conducted in measuring liquidity risk and other considerations that should be incorporated in the stress testing framework will be discussed.

Categories of Stress Testing. Generally, stress testing falls in two main categories – sensitivity tests and scenario tests.

- Sensitivity tests specify financial parameters that are moved instantaneously by a unitary amount, for example, a 10 percent decline or a 10 basis point increase. This approach is a hypothetical perspective to potential future changes in the risk factor(s). Such sensitivity tests lack historical and economic content which limits its usefulness for longer-term risk management decisions. Sensitivity tests can also examine historical movements in a number of financial parameters. Historical movements in parameters can be based on worst case movements over a set historical period (e.g., the worst change in interest rates, equity prices and currencies over the past 10 years). Alternatively, actual market correlations between various factors may be analyzed over a set period of time to determine the movement in factors that would have resulted in the largest loss for the current portfolio. In sensitivity stress tests, the source of the shock is not identified and the time horizon for sensitivity tests is generally shorter, often instantaneous, unlike scenario tests.