File Reference: Proposed FSP FAS 107-a

Thank you for the opportunity to comment on the proposed FASB Staff Position (FSP) amendment to FAS Statement 107, Disclosures about Fair Value of Financial Instruments. Andrew Davidson & Co., Inc. is a leading provider of prepayment models, credit models and valuation tools to the mortgage investment community. The intersection of quantitative financial modeling and financial reporting is an area of great concern to us and our clients. In recent months issues of impairment and fair value have become increasingly important.

Enhanced Disclosures

We support the proposed FSP. For some time now we have supported the idea of concurrent reporting of fair value measures and historical cost based measures for financial instruments, indeed for the entire balance sheet. In April 2004, in our client newsletter, “The Pipeline,” we wrote:

"...we cautiously recommend a more complete move to fair value accounting, but with sufficient links back to traditional cost-based accounting to provide investors a clear picture of a firm’s financial condition."

"...we strongly recommend that fair value balance sheets be accompanied by, indeed be derived from, cost based states. Costs represent the true basis for the creation of an asset. Value exists relative to the cost of creation."

"The source of fair values should be clearly delineated. Values based on live markets should be separated from those derived by management based on models of future cash flows. Where models are used assumptions should be provided in sufficient detail for investors to assess their reasonableness."

"Income statements should clearly distinguish traditional cost-based income measures and gains in fair value."

The current FSP and the similar proposals from the IASB seem very much in line with these comments, even if the implementation details differ.

At the time we also recommended:

"For financial instruments, firms should provide an estimate of the net yield of the assets, liabilities and hedges on a cost basis as well as at the fair value mark. One shortcoming of fair value accounting is that if a firm’s assets fall in value relative to its liabilities on a mark to market basis, this will be reflected as a decline in fair value. The inclusion of a net yield measure will show the increase in future earnings from these value changes."

The full text of the piece along with a hypothetical balance sheet and income statement under dual cost/fair value accounting is available at: http://www.ad-co.com/newsletter/Apr04/ConsultPRINT.htm

While we support the concept behind the FSP, we recognize that it may not be possible for many firms to fully comply with its provisions in a timely fashion. Therefore we believe that there should be some leeway allowed in the timing of its implementation.
Analytical Example
In our comment to the proposed FSP FAS 157-d, we provided an example of how we would analyze a particular subprime bond. Here we would like to present an extended analysis that demonstrates how we would analyze a series of bonds and the data we would provide to clients to assist them in the determination of fair value, incurred loss amount and other than temporary impairment.

All measures are based on our LoanDynamics™ model and credit OAS simulation tools. The model projects collateral cash flows at the loan level based on loan level characteristics. The OAS simulation tool computes a distribution of outcomes for interest rates and home prices. We use INTEX subroutines to generate bond cash flows. The construction of each analytical measure is determined by (1) whether the probabilities are physical (expected) or risk neutral, (2) whether computation is stochastic or static and (3) the discount rate used to compute value.

For this analysis we look at SASC 2006-BC4 Classes A4, A5 and M2 as of November 28, 2008. As of November, losses totaling nearly 5% of original balance had been realized and 40% of the loans still outstanding were 60 days or more delinquent. The remaining loans had an average credit score of 625 and about 40% of the loans had limited documentation.

The first step in the analysis is to construct a base case loss for the underlying collateral of the bonds. This requires a home price forecast. We construct the home price forecast on a physical (or expected) basis and on a risk neutral basis. For this example, the physical forecast assumes home prices decline an additional 15.4% before beginning a recovery, while the risk neutral forecast, based on traded values of home price indices, assumes an initial decline of 21.8%.

Given this home price forecast we produce base case defaults of 70.3% and losses of 43.8% based on the remaining collateral balance for the physical case. This represents a lifetime collateral loss of approximately 34% of the original balance. For the risk neutral case we forecast defaults of 72.4% and losses of 47.4% for remaining loans. For both cases we can produce a distribution of possible defaults and losses. These distributions are shown in Figure 1. The risk neutral assumption produces higher defaults and losses due to the more extreme home price declines. These results are model dependent and we cannot guarantee their accuracy. We do however believe that they are reasonable given current market conditions.

Figure 1

Default Probabilities
Once we have determined a probability distribution for the underlying collateral, we can turn to the bonds. For each bond, we determine its amount of write down at different levels of collateral default and loss. These bond losses are shown graphically in Figures 2A and 2B. We also show the collateral loss amount at each collateral default level. In these charts the collateral default probability density has been transformed into a cumulative probability to provide a better indication of the probability of each occurrence. Note that at the base case or median scenario of the physical analysis bonds A5 and M2 show losses (Figure 2A). At the risk neutral base case all three bonds show losses (Figure 2B).

Figure 2A

Physical Bond Losses

Figure 2B

Risk Neutral Bond Losses
As we understand, other than temporary impairment generally occurs for bonds for which it is "probable" that they will not receive contractual cash flows. While an exact probability is not specified, bonds with a high probability of loss (beyond a threshold somewhere around 66% to 90%) might be considered to be other than temporarily impaired.

Table 1 shows breakpoint ratios and breakpoint probabilities. The breakpoint ratio is the ratio of the collateral loss level at which the bond takes its first dollar of loss divided by the base case collateral loss using the physical assumptions. Bonds with a breakpoint ratio greater than 1 have a less than 50% chance of experiencing loss according to our model. The breakpoint probability is the probability of taking a loss. Bond A4 is not likely to take a loss, although losses are certainly possible. Bond A5 is in the range where some firms will consider it "probable" that it will not receive contractual cash flows. Bond M2 is almost certain to take a loss.

Table 1. As of November 28, 2008

<table>
<thead>
<tr>
<th>Bond</th>
<th>Pricing Service Price</th>
<th>Fair Value Price</th>
<th>Incurred Loss Amount Price</th>
<th>Breakpoint Ratio</th>
<th>Breakpoint probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>A4</td>
<td>47.60</td>
<td>86.76</td>
<td>100.00</td>
<td>1.07</td>
<td>33.1%</td>
</tr>
<tr>
<td>A5</td>
<td>38.41</td>
<td>52.79</td>
<td>52.46</td>
<td>0.88</td>
<td>81.2%</td>
</tr>
<tr>
<td>M2</td>
<td>5.47</td>
<td>4.40</td>
<td>4.52</td>
<td>0.62</td>
<td>99.4%</td>
</tr>
</tbody>
</table>

Table 1 also shows three different values for the bond: current market value as determined by a pricing service, fair value based on our credit OAS model (under the assumption that the market is illiquid and distressed) and incurred loss amount. Fair value is determined using the risk neutral distribution of outcomes. Discounting is at an assumed credit OAS spread of 100 basis points which represents the excess return over LIBOR that the investor would receive if they invested in this bond at this price. The incurred loss amount represents the expected cash flows using the median result of the physical distribution, discounted at LIBOR plus the bonds original spread. (We have assumed that the investor purchased the bond at par.) Differences between the measures are summarized in Table 2.

Table 2

<table>
<thead>
<tr>
<th>Measure</th>
<th>Framework</th>
<th>Scenarios</th>
<th>Discounting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair Value</td>
<td>Risk Neutral</td>
<td>Stochastic</td>
<td>Assumed spread</td>
</tr>
<tr>
<td>Incurred Loss Amount</td>
<td>Physical</td>
<td>Median</td>
<td>Original spread</td>
</tr>
<tr>
<td>Breakpoint ratio</td>
<td>Physical</td>
<td>Median</td>
<td>N/A</td>
</tr>
<tr>
<td>Breakpoint probability</td>
<td>Physical</td>
<td>First loss scenario</td>
<td>N/A</td>
</tr>
</tbody>
</table>

We believe that results such as these will be helpful to firms seeking to meet the requirements of the proposed revisions to FSP FAS 107. We recognize that in using results such as these firms need to consider possible errors in models and assumptions that might create higher or lower values and other inputs. We hope that presenting this methodology provides you with additional insight into your decisions on disclosure.

January 14, 2009