

Draft. Do not quote.

Fair value and cost based accounting
Andrew Davidson
March 2004

Fair Value has been creeping into GAAP for a number of years. In the mortgage market, servicing assets as well as retained residuals from securitizations are recorded at fair value. In addition, under FAS 133, derivatives are marked to market on the balance sheet, but their treatment for income varies.

These steps toward fair value accounting have not been uniformly positive. In fact, fair value accounting may have caused more problems than it solved. The failures of the specialty finance industry may be traced, in part, to inflated fair values for residuals. Furthermore, the disparity of servicing values among firms has been the source of extensive criticism of the mortgage banking industry.

The differing treatment of assets, liabilities and hedges in GAAP has caused additional confusion. Often we find that firms cannot implement economically effective hedging strategies because the treatment under FAS 133 will cause excessive swings in income. Freddie Mac's accounting troubles extend, at least in part, from their attempt to produce accounting statements that reflect the true economics of their firm better than GAAP. Their restatements, which show large gains in asset values and hedges, but do not show the corresponding changes in liability values, while in accord with GAAP, fail to provide a true picture of their financial status.

With this background in mind, we cautiously recommend a more complete move to fair value accounting, but with sufficient links back to traditional cost-based accounting to provide investors with a clear picture of a firm's financial condition.

We believe that fair value accounting statements should satisfy three principles:

- First, accounting statements should show, not just the current fair value of the firm, but how that value has been created.
- Second, investors and other stakeholder should be provided with sufficient information to assess the quality of the fair value estimates.
- Third, while there may be arbitrary decisions about where to place items on the balance sheet, every effort should be made to treat all financial instruments and even non-financial instruments the same way.

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

While derivatives and hedges could appear anywhere on the balance sheet, even as a separate category, we believe it makes the most sense to associate hedges with assets so as to minimize fair value volatility of the combined asset and hedge. When a firm issues

short-term debt and swaps to a longer maturity, it is currently often shown as a liability hedge. We would favor showing that hedge relative to the fixed assets that have greater price volatility, rather than the short-term liabilities that have little price risk.

The source of fair values should be clearly delineated. Values based on live liquid 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. Separating fact from forecast will further enable investors to understand the degree of certainty in the fair value statements.

Income statements should clearly distinguish traditional cost-based income measures and gains in fair value. True revenue reduced by current costs and amortization of prior investment represents an important measure of income. Changes in value of existing positions, or the estimated creation of value from R&D or other activities, should be clearly segregated in a fair value income statement. With such segregation an income statement becomes merely management's forecasted value without any anchor in current performance.

For financial instruments, firms should provide an estimate of the net yield of 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. Likewise, an increase in asset values relative to liabilities may boost current period values, but may be reflected in lower future spreads.

Exhibit 1 shows a hypothetical balance sheet under dual cost/fair value accounting.

Exhibit 2 shows the associated income statements.

The firm has bonds, debt and hedges that are shown at fair value. It also has an R&D asset also shown at fair value. The value of the long-term debt has an increase in value above cost that is partially offset by decreases in the value of the associated hedges. Likewise, an increase the market value of the liabilities (which decreases the value of the firm) has been partially offset by hedges.

The firm had cost-based equity of \$290 and fair-value equity of \$1,090. Of the \$800 difference, \$700 arises from the value of its R&D activities. However, this value comes from a management estimate, not a market value. Investors may want to view this amount with some degree of skepticism unless management provides clear support for the value.

On the income side, cost-based income was \$97, while fair-value income was \$230. \$135 of that arose from fair value increases.

As the yield analysis shows, the high fair-value income for the current year will result in lower future earnings potential, since the spread between assets and liabilities has declined from 1.20% to 0.90%.

Financial statements such as these, accompanied by appropriate disclosure of methods of valuation, will provide investors and other stakeholders with a more complete picture of the financial condition of the firm. Full disclosure of fair values and cost-based books will eliminate the need for many of the complex and illogical rules about hedges. The performance of hedges will be clearly reflected in the fair value results and the reasonableness of the fair values can be determined from simpler cost-based results.