Bank Disclosure Quality and the Subprime Crisis
- Fair Value Disclosures Beyond SFAS 157

Executive Summary

The objective of this study is twofold. Stemming from concerns over the informativeness of SFAS 157 fair value estimates, we first examine factors that might influence financial firms' decision to provide more fair value disclosures beyond SFAS 157's disclosure requirements. The factors that we examine include those that are specific to fair value reporting (e.g., the materiality of the Level 1, Level 2 and Level 3 estimates), as well as other factors (e.g., the demand for information from analysts and auditor independence).

We next examine whether firms' discretion in providing these fair value disclosures reduces the uncertainty associated with the three-level fair value hierarchy's measurements. There is great interest whether fair value reporting will reduce investor uncertainty. In the fair value reporting setting, we expect greater amount of fair value disclosures to help investors interpret fair value estimates more precisely, especially toward the relatively more opaque fair value estimates.

We construct a disclosure score that measures the amount of fair value disclosure in the SFAS 157 footnote. This score, which ranges from zero to four, is assessed along four dimensions. The footnote of a firm is given a score of one for each of the following criteria: i) explanation and quantification of valuation techniques, input parameters or market adjustments made to the fair value estimates as reported by firms, (ii) description and identification of the specific fair value assets and liabilities held by the firm, (iii) commentaries, analyses and discussions of the valuation changes of the fair value estimates of fair value assets and liabilities over the year, and (iv) additional fair value tabular information not required by SFAS 157.

We find that firms with more Level 3 items disclose more. In contrast, we do not find significant associations between the amount of Level 1 and Level 2 items and the amount of disclosure. We also find that there are more disclosures when there are more transfers from Level 1 and Level 2 items to Level 3 items and when Level 3 fair value gains are higher. However, we do not document any association between the amount of disclosure and purchases of Level 3 items. Finally, we find that firms which are early adopters disclose more, consistent with the expectation that early adopters are firms that face a larger demand for fair value information and/or are firms that wish to be more transparent.

Turning to institutional factors that could influence the amount of fair value disclosure, we find that banking institutions provide more fair value disclosures than other financial institutions, consistent with the notion that banks are subject to greater scrutiny and are more likely to provide more detailed disclosures relating to fair values estimates. We also find that firms with greater analyst coverage provide more fair value disclosures. The latter result suggests that analysts serve as a monitoring mechanism and demand greater transparency from the firms they cover. We also find that greater auditor independence, proxied by a lower proportion of non-audit fees to total audit fees, is associated with more disclosure. Finally, we find that greater business complexity also engenders more fair value disclosures.

We next examine whether managers' discretion in providing fair value disclosures reduces the level of investor uncertainty associated with the use of fair value estimates, especially the more opaque Level 3 estimates. Compared to Level 1 and Level 2 estimates, Level 3 estimates are likely to generate the most uncertainty for investors. Using stock return volatility in the five-day window after the filing date as our proxy for investor uncertainty, we first examine whether stock return volatility is associated with the various fair value items under the three-level fair value hierarchy.

We document a positive association between stock return volatility and the amount of Level 3 assets; the association between stock return volatility and the other fair value items are statistically insignificant. These results are consistent with the notion that Level 3 fair value estimates are less transparent and might induce greater stock volatility. More importantly, we show that investor uncertainty toward Level 3 fair value estimates is reduced when managers exercise their discretion to provide more fair value disclosures. This evidence suggests that an important outcome of fair value disclosures is to reduce investors' uncertainty over the relatively more opaque fair value estimates.

In further analyses, we document that fair value disclosures lower the uncertainty associated with Level 3 assets more when the level of total or transient institutional ownership is low. This finding suggests that greater fair value disclosures have a larger effect in reducing uncertainty when the investor base is less sophisticated. We also document that the disclosures lower uncertainty more when there are more concurrent 10-K filers. This finding suggests that more concurrent filers could facilitate information transfers and synthesis of the fair value information, which in turn reduces uncertainty.

Our results are important to standard setters because we document evidence that greater fair value *disclosures* have a positive impact in alleviating investor uncertainty. There has been extensive debates whether fair value accounting exacerbates investor uncertainty during the financial crisis in 2008 and 2009. We provide empirical evidence to demonstrate that greater fair value disclosures to existing reported fair value measurements have positive informational benefits to market participants.[1]

There are some calls for additional fair value information to be mandated by standard setters. We show that such information can be useful and perhaps should be mandated. We believe our study is of interest to the IASB with respect to current fair value accounting standards issued by the Board (e.g., IFRS 13 *Fair Value Measurement*) as well as ongoing fair value accounting projects (e.g., IFRS 9: *Financial Instruments*). We also believe that our study is relevant to IASB's joint projects with the FASB to converge requirements for fair value measurement and disclosure (e.g., ASU 2011-04 *Fair Value Measurement: Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs.*).

[1] We do not address the issue of whether there should be greater fair value accounting in financial reporting nor directly examine the reliability / representational faithfulness of these fair value measurements.