

Value Relevance of Recognition versus Disclosure in Financial Reporting

1. Description of grant-supported activity.

The issue of formal recognition versus disclosure of financial events has gained renewed interest in the accounting literature. Recognition of a financial event means recording the event in the company's accounting books. The effects of the recognized event are reflected in the company's financial statements, which are the primary means of providing accounting information to investors and creditors. For example, recognition of a company's promises to provide non-pension postretirement benefits (such as healthcare) to its employees results in reporting an expense on the income statement and a liability on the statement of financial position (balance sheet). Disclosure of a financial event, on the other hand, means showing the effects of the event in the notes to the financial statements or in another part of the annual report to the stockholders. The effects of the disclosed event are not reflected in the company's financial statements.

For a long time, the Financial Accounting Standards Board (FASB) relied on disclosure as an alternative to recognition. The proliferation of emphasis on disclosure raised the concern, as stated by Johnson (1992, 103), that "disclosure is supplementing recognition as a means of providing information to users of financial reports." The contention was that reliance on disclosure could reduce the effectiveness of the accounting standards. In two recent Statements of Financial Accounting Standards (FAS), Nos. 123 and 133, the FASB has placed more emphasis on recognition of financial information than disclosure. FAS No. 133, for example, requires recognition of the unrealized gain or loss (i.e., gain or loss from changes in the market value, not from the sale) on hedging instruments.

It is not clear how the financial market participants (i.e., financial analysts, investors, and creditors) incorporate disclosures in their decisions. Theoretically, if the market is efficient in the semi-strong form, then the same item of information, either incorporated in the financial statements or disclosed in footnotes, should influence analysts' forecasts of earnings and stock prices equally. The notion of market efficiency, however, has been questioned by recent empirical research. Anecdotal evidence also questions market efficiency. Enron's situation is an example. Enron created numerous special-purpose partnerships. It arranged for outside investors to invest 3%, and obtained loans for the remaining 97%, of capital needed for each partnership. The bank loans were guaranteed in some cases with Enron shares or a pledge to make up any shortfall. Enron then sold certain of its assets to the special-purpose partnerships to move the assets and the related debts off its balance sheet and to recognize a gain from the sale. Under FASB rules, a 3% outside investment allowed Enron not to classify the partnerships as subsidiaries, and thus to keep the assets and debts of the partnerships off its balance sheet. Enron did disclose, albeit not fully, the transactions.¹

While Enron situation has already resulted in changes in oversight over the accounting profession, the role and responsibilities of the board of directors and its audit committee, and

¹ It should be noted, however, that the financial market's misevaluation of Enron cannot be entirely attributed to the question of recognition versus disclosure. Many other factors could have contributed to the misevaluation. These include the auditor's error in analyzing certain special purpose entities, management fraud, auditor's and analysts' unethical conducts, poor oversight over financial reporting by outside directors and its audit committee, lack of timeliness of accounting information (reporting only quarterly and annually) and complexity of financial reports.

new federal regulations of pension plans and energy, the issue of recognition versus disclosure remains unresolved. More importantly, empirical evidence is lacking. Bernard and Schipper (1994), Healy and Palepu (1993), and Johnson (1992), among others, note the lack of empirical research on this important accounting issue, and urge academicians to address it. Bernard and Schipper attribute the lack of direct research in the area of disclosure versus recognition to two main reasons: (1) empirical tests of the equivalence of recognition and disclosure in financial reporting require a high level of precision in research design, methodology, and investigation; and (2) the accounting environment rarely provides a situation where disclosure and recognition can be compared for the same item of information.

FAS No. 106, *Employers' Accounting for Postretirement Benefits Other than Pensions*, provided one such rare situation. Issued in December 1990, FAS No. 106 concluded that non-pension postretirement benefits (NPPB) are a form of deferred compensation and thus required employers to account for NPPB under the accrual method, i.e., to recognize NPPB costs in the financial statements each year on the basis of services rendered by employees. Prior to FAS No. 106, employers accounted for NPPB under the cash method, i.e., they recognized the NPPB costs when payments were made during the employees' retirement years. Since under the accrual method required by FAS No. 106 expenses are recognized before cash payments are made, a liability arises and has to be recognized. An employer could choose to adopt the statement either in fiscal year 1991, 1992, or 1993. If an employer chose not to adopt the statement in 1991, it had to disclose the estimated NPPB liability in its 1991 financial statements. Companies that adopted FAS No. 106 in 1992 (the year examined in this study), therefore, disclosed their NPPB liabilities in 1991 and recognized them in 1992.

A few studies have investigated the impact of recognizing non-pension postretirement benefits (NPPB) liabilities on stock prices (see, e.g., Amir 1993 & 1996, and Choi et al. 1997). This line of research was extended by Davis-Friday et al. (1999), who regressed stock prices on NPPB liability (and other variables) to test whether the stock market valued the recognized NPPB liability at a different rate than the NPPB liability disclosed in the notes to the financial statements. However, by examining whether disclosures are reflected in the stock prices at a different rate than the recognized liabilities, Davis-Friday et al. only indirectly test the value relevance of recognition versus disclosure. This study takes a direct approach to testing the value relevance of recognition versus disclosure by: (1) investigating whether the NPPB liability provided value-relevant information to analysts in forecasting earnings, and (2) providing evidence on the incremental value relevance of recognition of the NPPB liability over and above its disclosure. Specifically, this paper tests whether analysts viewed (and incorporated in their forecasts) the estimates of NPPB liability disclosed in the notes to the financial statements in 1991 the same way they did when such information was recognized in the financial statements in 1992.

To test whether analysts incorporated the non-pension postretirement benefits (NPPB) liability in their forecasts in the same manner whether it were recognized or disclosed, this paper examines the revision in analysts' forecasts of annual earnings in each of the last three quarters of 1991-1992. Broadly speaking, a regression is run and the significance of the coefficient of NPPB liability is tested for the year firms disclosed such liability. (The regression does contain other variables in an effort to remove their confounding effect on the coefficient of interest.) If disclosure and recognition have the same value relevance, this coefficient should be

insignificant. A significant coefficient implies that disclosure of information in the footnotes to financial statements does not replace recognition of the expense and liability on the books.

Specifically, by extending the work of Amir (1996), Choi et al. (1997), and Davis-Friday et al. (1999), I designed the following regression model.

$$\text{FREV}_j = \beta_0 + \beta_1 \text{BVE}_j + \beta_2 \text{EPS}_j + \beta_3 \text{NPL}_j + \beta_4 \text{NPPB}_j + \beta_5 \text{DINT}_j + \beta_6 \text{DBVE}_j + \beta_7 \text{DEPS}_j + \beta_8 \text{DNPL}_j + \beta_9 \text{DNPPB}_j + \epsilon$$

FREV_j is forecast revision and is defined as $\text{AF}_j - \text{AF}_{j-1}$, where AF_j (AF_{j-1}) is the median of analysts' forecast of annual earnings in quarter j ($j-1$); BVE_j is the book value per share of common equity excluding the recognized pension and NPPB liabilities; EPS_j is basic earnings per share before extraordinary items; NPL_j is the net pension liability; NPPB_j is the recognized or disclosed net NPPB liability; DINT_j is a dummy variable, whose value is zero in the recognition year (1992) and 1 in the disclosure year (1991); all the remaining variables preceded by 'D' are the original variables multiplied by the dummy variable. All independent variables are measured as of the beginning of quarter j . This regression framework rests on the identity that the analysts' forecasts of earnings and the revisions thereto are a function of the book value per share of equity (BVE_j) and earnings per share (EPS_j), which is derived from the valuation model of Ohlson (1995). Ohlson shows that a firm's market value is (positively) related to both the book value of equity and accounting earnings.

The coefficients corresponding to the recognition year are β_0 through β_4 . The coefficients β_5 through β_9 represent the differences in the intercept and slope between the recognition and the disclosure years. The coefficients for the disclosure year are equal to those for the recognition year plus the corresponding D coefficients. For example, the disclosure year coefficient for BVE is $\beta_1 + \beta_6$. The coefficient of main interest is that of DNPPB, β_9 . It should not be significantly different from zero if analysts incorporated in their forecasts the NPPB liability disclosed in the notes to financial statements in the same manner as they did when the NPPB liability was recognized in the financial statements.

Sample and results

Firms included in the sample (1) are publicly traded; (2) have the required data in the Research Insight database; (3) have adopted FAS No. 106 in 1992 and disclosed an estimate of NPPB liability in 1991; and (4) are followed by Institutional Brokers Estimates System (IBES). These criteria are imposed to ensure data availability and to conduct the required tests. Research Insight database included 283 firms that met the first three criteria. The analysts' forecasts data were available on the IBES tapes for 257 of these firms. The sample size (257) is similar to that in Davis-Friday et al. (1999). It should allow for generalizing the results. The general rule is that the ratio of observations to independent variables should never be less than 5 to 1, while the desired level is between 15 and 20 observations for each independent variable (Hair et al., p. 166).

The results of my tests indicate that analysts indeed incorporated in their forecasts the estimates of NPPB liability recognized in the financial statements differently than they did when such information was disclosed in the notes to the financial statements. This in turn implies that disclosure of information in the footnotes to financial statements does not replace recognition of the expense and liability on the books.

2. Were you able to complete the project? Describe any difficulty you had.

Yes, the project is completed now. Sample size turned out to be slightly less due to data unavailability. Other changes may be made as I receive feedback from colleagues and journal reviewers.

3. Did, or will, the project result in a specific product – a manuscript, composition, syllabus, etc? If so, please describe and indicate state of development.

Yes, the project has resulted in a manuscript, on which I am currently seeking feedback from colleagues. I plan to revise the manuscript as necessary, and present it at a professional accounting or finance conference. I am expecting to finalize the manuscript by the end of June 2003, and submit it to *Review of Financial Economics* or a similar journal for possible publication.