Economic consequences of financial reporting changes: diluted EPS and contingent convertible securities

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Notes

1. See EITF Issue No. 04–8, "The Effect of Contingently Convertible Debt on Diluted Earnings per Share."

5. Equity analyst reports during this time (see, e.g., Gainey, 2004) similarly characterized overall COCO-related disclosure as “generally poor if the goal is to alert and inform analysts and investors of the existence of these instruments and their impact on the financials.”

6. In February 2003, the FASB introduced the FASB Staff Position (FSP) to issue application guidance like that previously found in Staff Implementation Guides and Staff Announcements. Before issuing an FSP, the FASB staff circulates a draft of a proposed FSP to board members for review. If a majority of the board does not object to the proposed FSP, it is announced at an open public meeting of the board. Following the meeting, the proposed FSP is posted to the FASB website for a comment period and is announced in that day’s Action Alert. At the end of the comment period, the FASB staff drafts the final FSP. As with the proposed FSP, if a majority of the board does not object to the final

announced it would on August 5, 2004. GM had $8 billion of COCOs outstanding and faced a possible decrease in its forecasted diluted EPS for 2004 of $1.00 from $7.00 if the proposed accounting change were ratified. The company announced that it would settle any conversions of its COCOs in cash rather than stock, thereby effectively nullifying the effects of the proposed change on its diluted EPS figure (Boudette, 2004). However, after the transition rules of EITF 04-8 were ratified, GM followed up its original announcement with an irrevocable election by the board directors on November 5, 2004, to settle par values in cash, thereby securing their right to apply the treasury stock method of calculating diluted EPS to their outstanding COCOs.

10. Consistent with PPL's reasoning, prior empirical research shows that stock prices reflect dilution of EPS (see Core, Guay, & Kothari, 2002; Huson, Scott,

16. We obtain this information from the “Report of the Compensation Committee” within the proxy statement. Ideally we would like to be able to determine whether the bonus plan relies on diluted EPS, as opposed to basic EPS, but the compensation reports do not provide this level of detail. Our assumption is that the term “EPS” refers to diluted EPS, as this is the figure that equity analysts forecast and investors use in valuation.

17. To the extent that firms respond to EITF 04-8 through means other than exchange offers or irrevocable elections to settle par values in cash rather than stock, there is potential for measurement error in our *RESTRUCTURE* variable. For example, firms may initiate or accelerate stock repurchase programs to offset the dilutive effects of EITF 04-8. A preliminary review

(Greene 2003). Condition numbers between 30 and 100 indicate moderate to strong dependencies among the variables (Judge, Griffiths, Carter Hill, Luetkepohl, & Lee, 1985). The highest condition number for the matrix of explanatory variables in all three models is less than 18.0, indicating that multicollinearity is not a problem.

21. As previously indicated, for firms with multiple offerings, *TRIGMET* is calculated using the average conversion trigger for all of the COCOs outstanding (typically two) compared with the firm’s stock price. For all but five firms in the sample with multiple offerings, either all of the COCOs had hit the trigger or none had. We assess the sensitivity of our results to two alternative definitions. First, we exclude five firms from the analysis where at least one COCO had hit the trigger and at least one had not. In the second set of tests, we redefine *TRIGMET* to equal one if the stock price threshold

pressures. This suggests that large firms, which are more sensitive to political costs, should experience muted shareholder reactions to such events. However, it is questionable whether regulators would focus on diluted EPS rather than, say, net income as a measure of firm profitability.

25. In fact, using three-day windows beginning the day before each event yield results that are qualitatively similar but have reduced significance levels. These findings suggest that market participants needed a relatively longer period to learn of the rule changes and/or interpret their effects on COCO issuers. However, to rule out the possibility that our results are driven by the longer return window, we perform a randomization test in which we randomly choose six dates during our event period, create three-day, five-day, or seven-day windows around each date, and run the time-series regression in Eq. 1. We repeat this procedure 100 times. Using an absolute *t*-

We find that 13, 3, 1, 64, 1, and 11 firms announced quarterly earnings within the five-day windows around D1, D2, R1, R2, R3, and R4, respectively. Of particular concern is event R2, where almost a third of the sample announced earnings and where we also find a significantly negative mean shareholder reaction. To determine whether these announcements are driving our results, we eliminate the 64 announcing firms from the portfolio and repeat our analysis. The *t*-statistic for the mean effect around R2 increases in its significance level when these firms are dropped (−2.49 vs. the −2.21 reported in Table 3). We thus conclude that any confounding effects from earnings announcements are unlikely to affect our inferences.

29. We perform White's (1980) test of heteroskedasticity for each column in Table 8. In every case, we cannot reject the null hypothesis of homoscedastic error terms at conventional levels of significance.

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