

Letter of Comment No: 92
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January 30, 2003

MP&T Director
File Reference No. 1102-001
Financial Accounting Standards Board
401 Merritt 7, P.O. Box 5116
Norwalk, Connecticut 06856-5116

Re: Invitation to Comment – Accounting for Stock-Based Compensation

To Whom It May Concern:

We appreciate the opportunity to provide some feedback with respect to recent proposals by the IASB regarding accounting for stock-based compensation and differences between those proposals and existing U.S. accounting standards.

Specifically, we wish to address three areas of particular interest to us.

1. Broader Feedback on Accounting for Stock-Based Compensation:

Under the heading “Issues for Respondents” in your Invitation to Comment you state: “The Board is sensitive to the many issues related to stock-based compensation and to the diverse views of constituents on this matter. The Board believes a project on stock-based compensation is the most suitable forum for the evaluation and discussion of those issues and views.” You go on to identify 4 key areas related to accounting for stock-based compensation for which you are not currently seeking comments or input from your constituents. We strongly encourage the FASB at the appropriate time to seek such input on these and other important matters related to accounting for stock-based compensation.

We believe that the impact of changes in the accounting requirements for stock-based compensation will have a profound impact on many of the companies currently applying U.S. GAAP and may produce financial reporting results that are not in the best interest of preparers and users of financial statements alike. We look forward to participation in a deliberative process conducted by the FASB to address these issues.

2. Comments on Issues 2(a) - Do you believe that an accounting standard should mandate the use of an option-pricing model for measurement purposes? If not, what other approaches do you believe would provide more consistent and reliable estimates of the fair value of employee stock options granted and why?

We do not believe that any of the current valuation methodologies utilizing option-pricing models proposed by the IASB or required by the FASB are adequate. At the time SFAS No. 123 was adopted, FASB believed that current option pricing models were an adequate way to value employee stock options. However, the data that has been developed since SFAS No. 123 was adopted shows that while FASB may have believed current pricing models were adequate, they are not. We wish to make several points regarding the FASB’s position:

- The FASB decided option-pricing models were adequate for two primary reasons. First, as you state in paragraph 20 of your Invitation to Comment, “billions of dollars of transactions take place in options and other markets that use option-like instruments (the pricing of those transactions is often based on complex mathematical models such as the Black-Scholes model).” However, many of the unique aspects of employee stock options are not accounted for in these models. While it is true that option-pricing models are one of factors influencing the pricing of many of the “billions of dollars of transactions” referred to above, these models were never intended to be applied to transactions with the characteristics of employee stock options. Additionally, the markets for traded options do not rely solely on blind adherence to the results of complex mathematical models as suggested by the FASB’s position. Rather, option pricing in a real market reflects a broad range of subjective factors that are subject to constant change.
- Second, also as noted in paragraph 20 your Invitation to Comment, “the imprecision associated with using option-pricing models would not necessarily be greater than the imprecision inherent in other complex accruals, including those for pensions and other postretirement benefits.” The logic of this point escapes us. The argument seems to be that inadequacies inherent in the fair value approach

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adopted in other areas of accounting justifies the inadequacies of fair value accounting as applied to accounting for stock-based compensation. We believe that if stock-based compensation is to be subjected to a fair value approach, then such an approach must truly and with confidence reflect the fair value of the underlying transactions.

We believe that the assumptions required when using existing option-pricing models are subject to a high degree of judgment and variability making the output of such models inconsistent and subject to manipulation. In particular, assessing the expected life of options and the expected volatility over that life is virtually impossible to do with any degree of certainty. Therefore, when the expected future volatility and expected life assumptions used to value options are subsequently compared against actual results, significant variations are common.

We have also observed wide variations in practice among U.S. companies currently valuing employee stock options for purposes of applying the pro forma disclosure provisions of SFAS No. 123. For example, while some companies only consider their stock's historical volatility in determining their expected volatility assumption, others employ a variety of methods to subjectively adjust downwards the expected volatility assumption from their stock's historical volatility. The most common method we have seen is for expected volatility to be adjusted to reflect the volatility implied by actual traded options. This approach is usually highly subjective because most companies utilizing it do not have traded options with the same life as the expected life of their employee stock options. Therefore, some highly subjective analysis is needed to reconcile the volatility of the traded options with the volatility assumption used to value employee options.

On several occasions, we have sought informal valuation of our employee stock options by investment banks that regularly work in active options markets. In every case, the informal valuations we received from these investment banks were substantially less than those obtained by applying the Black-Scholes option-pricing model. In the real world, such valuations are not based exclusively on "complex mathematical models," but reflect numerous subjective adjustments to arrive at the true value of the options. It has been our experience that markets never value options based on historical volatility. There is always a discount that increases with the life of the option. Not only was each investment bank's valuation significantly below those results generated by application of the Black-Scholes model, but the valuations have been extremely consistent between the various investment banks from which we have received quotes. To us this indicates that we are getting reasonable quotes from the bankers, and indicates that the Black-Scholes model is consistently overstating the theoretical value of our employee stock options. Our anecdotal observations are consistent with recent academic studies that indicate the Black-Scholes model consistently and significantly overstates the value of employee stock options.

We believe that the inadequacies of the option-pricing models in valuing employee stock options can be manifested in numerous ways. For example, when using an option-pricing model like Black-Scholes to value an employee stock option, a shorter vesting period will generally lower the calculated fair value of an option because it will shorten the estimated life of the option. However, from the employee's perspective, a shorter vesting period makes the option more valuable because employees perceive value in being able to exercise the option earlier.

In summary, it is our position that the inadequacies inherent in available option-pricing models, including Black-Scholes, with respect to valuing employee stock options are so great that they should not be used for measurement of employee stock options. We believe that the Black-Scholes option-pricing model overstates the value of employee stock options by a factor of two to three times. Reflecting these inflated values in either pro forma disclosures or as a recognized expense has an inappropriate impact on financial statements. Use of Black-Scholes and similar option-pricing models impairs the transparency of reported financial information and make comparisons between companies and across multiple periods difficult for investors and others to comprehend.

3. Alternative Valuation Approaches

We do not have a definitive answer to the question "what other approaches would provide more consistent and reliable estimates of the fair value of employee stock options granted?" In general, we believe it may be extremely difficult to develop a method of valuing employee stock options that produces reasonable and consistent results. However, we do recommend that the FASB reconsider the use of option-pricing models and/or reconsider how such models are required to be applied in valuing employee stock options. Some suggestions include:

- Consider sponsoring the development of a new valuation model to be used solely for the purpose valuing employee stock options. Such a model must consider the unique nature of employee options and value them accordingly.
- For the volatility assumption, consider use of the volatility implied by actual traded options even if the life of such traded options differs from the expected life of employee stock options. Also consider the use of quotes from independent and qualified investment banks to value employee stock options.
- Consider placing a "cap" on the volatility assumption based on industry or exchange norms or some other reasonable metric.
- Consider allowing changes to be made to the assumptions used to value options on a prospective basis as time passes and actual data becomes available.
- Because many companies provide no insights into how they actually develop the values for the assumptions used to value employee stock options, consider requiring detailed disclosure concerning the methodology employed to derive assumption values. Specifically, such disclosures should identify all factors considered in developing assumption estimates and indicate in detail how each factor was used in arriving at the related estimate. This will provide users with a better assessment as to the reasonableness of the option expense calculated and drive more uniformity in application by preparers.
- Mandate an "inflexible approach" to selecting model assumptions that does not allow for any subjective adjustment to the input assumptions. For example, require that the expected life of an option be based solely on the assumption that it will be exercised immediately upon vesting. For expected volatility, require that composite historical volatility of the stock exchange on which the company's common stock is traded (or likely to be traded) over a time frame equal to the expected life of the option be used. While we do not necessarily agree with this approach over others we have mentioned, such an approach will generate more consistent results than current practice.

We again wish to thank you for this opportunity to comment on these matters which we believe are of extreme importance to issuers and users of financial statements.

Yours truly,


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and Chief Financial Officer
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