

The Employee Stock Options Debate

Expensing Without Accurate Valuation: Why Mandatory Expensing is Bad for Investors

The fundamental problems with valuing employee stock options without an accurate model have been described by opponents of expensing, supporters of expensing and even the chairman of the body that oversees the International Accounting Standards Board itself. Requiring companies to report what most agree will be highly inaccurate and unreliable numbers will neither restore investor confidence nor improve the quality of financial reporting.

Set forth below is a sampling of recent comments that raise significant, if not fatal, flaws with existing pricing models when applied to employee stock options. While there are a number of major accounting, economic and labor policies at issue with any mandatory expensing standard, this sampling of comments makes clear that expensing without accurate valuation is contrary to the core values of our capital market system – accuracy, reliability and transparency.

Paul Volcker, comments at Brookings-AEI conference on Corporate Governance, March 5, 2003.

“I have a rather classic view about stock options. I think the logic is you expense them. That’s easy to say. How you expense them is another question. There’s so much controversy about how to expense it, it may conceivably even now kill the credibility of expensing them.” (emphasis added)

Financial Executives Research Foundation, Employee Stock Option Valuation Models Compared, February 19, 2003.

“The Black-Scholes model systematically overvalues employee stock options.”

Sibson Consulting, Does the Black-Scholes Model Predict the Value of Employee Options?, January 2003.

“Overall, we have found that the Black-Scholes model performed poorly when given the task of predicting the actual option gains to the long-term option holder. . . . Because market movements – which appear to be the primary cause of inaccurate Black-Scholes estimates – are unpredictable, it appears we can safely say that no prior adjustments can be made to the Black-Scholes model that will correct for its inaccuracy when predicting actual gains to the option holder. . . . [T]he results demonstrate that any predictive power the Black-Scholes model may offer is *utterly overwhelmed by subsequent market movements* . . . In short, the accrued and generally fixed expense, as determined by the Black-Scholes option pricing model, is unlikely to approximate – or even come close – to the actual expense.” (emphasis in original)

America’s Community Bankers, FASB Comment Letter 175.

“The most widely used fair value measurement techniques for stock options, including Black-Scholes and other binomial option pricing models, are not appropriate for employee stock option valuation. Such methodologies tend to significantly overstate the value of employee stock options. By applying option pricing models directly, employee stock option expensing would thus result in less reliable and inaccurate income statements, which are likely to mislead rather than enlighten users of financial statements.”

Staples, FASB Comment Letter 55.

“We believe that the exchange of employee stock options for employee services should not be recognized on the income statement because their value cannot be reliably and objectively measured. In our view, stock option pricing models do not produce a reasonable or relevant value for employee stock options. . . . While in other contexts we are required to make subjective judgments as to future events, in this case there is no true-up at the end of the day where our estimates can be verified in an actual arm’s length transaction. Where the American public is demanding integrity in accounting for public companies, it is a leap backwards to require the inclusion of an inherently unreliable measure in the income statement.”

Maxim Integrated Products, FASB Comment Letter 66.

“It is disconcerting to consider that operating results that are in every other way reported with rigor and precision will be mingled with significant charges that result from ‘make believe’ results of a broad valuation model....The very fact that the accounting boards are discussing their willingness to sacrifice accuracy and precision in the preparation of this statement for the sake of comparability is, in our opinion, an indictment of the fundamental concept of mandating the inclusion of significant non-cash expenses into reported earnings.”

Jonathan Weil and Betsy McKay, The Wall Street Journal, March 7, 2003.

“Coke’s proxy shows the difference a few changes in assumptions can make. For purposes of disclosing the value of stock-option compensation granted last year to top executives, Coke says SEC proxy rules required it to assume the options’ time horizon would be the full life of the options’ terms, or 15 years. That drove Coke to assume relatively lower volatility and interest-rate risk, given the lengthy time horizon. Using those assumptions, Coke calculated that the grant date value of its options last year was \$19.92 per share. However, accounting rules require Coke to use options’ ‘expected life’ when calculating the time horizon used for preparing financial statements. Coke assumed six years. That reduced the options’ value, though the effect was partly offset by Coke’s assumptions that volatility and interest rate risk would be higher, given the shorter span. The result: Under that Black-Scholes calculation, the grant date value was \$13.10 a share. In 4 p.m. New York Stock Exchange composite trading, Coke shares were unchanged at \$37.55.”

Association of Financial Professionals, FASB Comment Letter 239.

“There are significant measurement issues associated with the model most widely used for estimating the cost of employee stock options, the Black-Scholes option-pricing model....AFP also wants to state its opposition to mandating the use of the Black-Scholes model.”

F5 Networks, Inc., FASB Comment Letter 34.

“...the Black-Scholes model...creates huge swings and illogical results for companies like ours with a volatile stock. It is also interesting to note that PWC, our outside audit firm, described the inadequacies of current valuation models in F5’s last audit committee meeting. Treating an incorrect and misleading number developed by these models as an expense in the income statement would not increase financial statement reliability, transparency or comparability, but would have quite the reverse effect. We do not believe that investors would be helped by a rule that mandates the inclusion of misleading numbers in the financial statement.”

CIENA Corp., FASB Comment letter 71.

“CIENA’s experience with the Black-Scholes model provides an example of how unrealistic the results it produces may be. As required by SFAS, we disclose in the notes to our financial statements the weighted average value of the options we granted for the last three fiscal years, as determined by the Black-Scholes model. For our fiscal years ended October 31, 2000, 2001 and 2002, the per share values were \$64.99, \$27.92 and \$4.88, respectively. The price of our stock has declined steadily since October 2000, and today, after hitting a low of \$2.41 in early October 2002, it trades in the range of \$5.50 to \$6.50 per share. In hindsight, it defies common sense to say that the average option issued during fiscal 2001 had a fair value of \$27.92.”

Apple Computer, Inc., FASB Comment Letter 92.

“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.”

Utah Medical Products, Inc., FASB Comment Letter 165.

“That the most relied on valuation model consistently produces such perverse results shows the fallacy of being able to report a stock-based compensation number that is meaningful.”

Citrix Systems, Inc., FASB Comment Letter 207.

“When one takes into account Citrix’s historical stock price over the past five years...it is difficult to see how the employees that were granted options in 2000 with an exercise price per share ranging from \$70-\$110 would place much ‘value’ at all in those options. Nonetheless, Citrix would have recorded significant compensation expense in 2000 (and in the following three to four years based on the ratable allocation of the expense over expected option life) for such options....While we realize that estimation is inherent in financial reporting, the above example illustrates the substantially misleading financial information that would result if the estimated fair value of employee stock options were required to be reflected in every company’s financial statements. Moreover, the estimated value of options, unlike other areas of financial reporting, will never be subsequently verified or ‘trued-up’ through an independent transaction. Because no independent verification of that estimate ever occurs, this calls into serious question the usefulness of the estimate and exacerbates the potential for abuse.”

PricewaterhouseCoopers, FASB Comment Letter 126A.

“Given the potentially significant impact of the adoption of a grant date model, we strongly encourage the Board to seek the counsel of valuation experts in deciding whether valuation techniques are sufficiently robust to make such a model operational.”

Eli Lilly and Company, FASB Comment Letter 136.

“We believe that standard option pricing models overstate the value of employee stock options.”

Financial Executives International and Institute of Management Accountants, FASB Comment Letter 171.

“Given that no robust valuation theory exists for determining the fair value of employee stock options, we believe that it would be inappropriate to provide highly prescriptive guidance in this area.”

Cisco Systems, FASB Letter 243.

“During 2002, Cisco granted approximately 282 million options to employees at a weighted average exercise price of \$17.72. These options had a weighted-average estimated value of \$8.60 per share based on the Black-Scholes option-pricing model. This represents approximately \$2.4 billion of ‘value’ based on Black-Scholes. Approximately two months later on October 4, 2002, Cisco’s ending stock price was \$9.46 per share. If the Black-Scholes estimated value were updated for the stock price only (all other variables held constant) the value generated by the model would be \$3.01 per share which results in approximately \$850 million of ‘value’ based on the Black-Scholes model. The difference of approximately \$1.6 billion, or \$5.59 per share, is based solely on the change in Cisco’s stock price over a two month period. Cisco’s ending stock price for its fiscal 2002 was \$11.82 which would make all of the 282 million options granted during the year under water representing no value to employees at that date. This example illustrates the point that the valuation based on Black-Scholes is nonsensical for employee stock options....Expensing of amounts that are subject to such ridiculous swings in value generated from such flawed models would be at the very least misleading as well as irresponsible.”

The Business Roundtable, FASB Comment Letter 169.

“...we wish to state that, despite the diversity of our membership, a majority of our member companies questions the premise that a mandated expense for the ‘fair value’ of employee stock options at grant is appropriate; they also question whether it would result in a fairer and more comparable representation of operating performance between companies....We, and many others in the business community, believe that option-pricing models, even with adjustments for expected rather than maximum term, overestimate the value of employee stock options.”

Safeway, Inc., Comment Letter 289.

“There is no acceptable model or method, including Black-Scholes, for determining the fair value of employee stock options. If the SFAS 123 guidance is required, the problem will not be solved. It could be the politically expedient answer, but bad accounting. The public debate will not go away, but just refocus on the lack of quality of the result.”

Broadview International LLC, FASB Comment Letter 177.

“Black-Scholes, accepted in the industry as the standard for option pricing, is flawed when it comes to valuing employee option grants for reasons related to liquidity, term and transferability. What is deeply troubling to me on this point is that the primary objective of the regulatory bodies is to better protect shareholders, yet this solution creates the opposite effect: less accurate disclosure; less accurate financial reporting; less accurate investment decisions.”

Warburg Pincus, FASB Comment Letter 194.

“We have always worked under the premise that Black-Scholes, and other related binomial models, was a tool for the business community to value short-term publicly traded options....We feel very strongly that these models do not recognize the fact that employee options are non-transferable, are not liquid, the underlying shares are often subject to ‘black out’ periods, can be subject to 144 limitations and the employee often cannot sell the underlying stock, or option.”

Pfizer, FASB Comment Letter 143.

“Our concern results from the fact that the absence of a reliable method of accounting for the ‘value’ of an employee stock option effectively forces an inaccurate valuation to be reflected in the financial statements. A user of such statements, who does not have a background in option valuation, is misled into believing the accuracy and appropriateness of the valuation.”

The Charles Schwab Corporation, FASB Comment Letter 205

“Though we do not object to recognition in the financial statements of measurable and meaningful economic information, we do object to the creation of a ‘fictitious’ expense resulting from option-pricing models that clearly and significantly overstate the cost of employee stock options. Further, we believe that recording a hypothetical value for stock option awards using subjective assumptions produces unreliable information for shareholders and other financial statement users....We do not believe that existing option-pricing models, such as the Black-Scholes and binomial option-pricing models, provide fair value estimates within acceptable limits for recognition in financial statements.”

Wells Fargo, FASB Comment Letter 262.

“...we have significant concerns with the reliability of any model used to estimate the fair value of stock options. The most commonly used methods to calculate the value of the option grant (e.g., the Black-Scholes model or the binomial model) utilize at least five faulty assumptions in the calculation of the fair value of the option grant...In addition, the fair value method actually provides less information to evaluate the company’s earnings.”

Anheuser-Busch, FASB Comment Letter 4.

“It is commonly held that current option-pricing methodologies do a poor job of capturing the true value of employee stock options because of structural differences between market-traded options and incentive stock options.”

Ernst & Young LLP, FASB Comment Letter 281.

“We continue to be concerned that the subjectivity of certain assumptions that have a dramatic impact on option values (e.g., volatility and expected life of the option) significantly reduces the reliability and comparability of estimated values for employee stock options.”

Netsolve, Inc., FASB Comment Letter 223.

“The existing valuation models were developed to price very short-term, publicly traded options that are exercised on expiration. It is unlikely anyone can be found at this point that believes this is an appropriate method of valuing employee options. The volatility factor alone is enough to give pause to any thinking person.”

Patterson Dental Company, FASB Comment Letter 204.

“The second aspect of the accounting for stock options that we find extremely troublesome is the FASB’s belief that certain mechanical measurement formulas, designed for a wholly different purpose, should be used to determine the hypothetical cost of an employee stock option. The major flaw here is that formulas assume that there is an open market for employee stock options. Obviously there is not.”

Forest Products Association of Canada, FASB Comment Letter 135.

“The valuation of stock-based compensation is not known to have a high degree of accuracy. The major shortcoming is the reliance on option-pricing models to determine the fair value measurement.”

Flextronics, FASB Comment Letter 214.

“We have examined the various option valuation models, and...we have found no option-pricing model that will yield judgment-free, manipulation-free results that are comparable between companies. We believe that FASB should be concentrating its efforts on further improving the transparency of financial results. This proposal will take financial results in the opposite direction.”

The Holman Group, FASB Comment Letter 123.

“Black-Scholes is balderdash. Everyone knows it. It is not predictive of anything, and its inaccuracy has long been proven. It is elegant mathematics and nothing more.”

Rockwell Medical Technologies, Inc., FASB Comment Letter 59.

“As measurements derived from use of option pricing models are assumption based, imprecise and undoubtedly inaccurate use of these estimates should be used only in proforma footnote disclosure. There is broad doubt that these measures are accurate or that they reflect economic reality.”

The European Employers' Federation (UNICE), Letter to EFRAG, February 24, 2003.

“The measurement requirements included in this exposure draft to provide a reliable value of an expense give cause for concern. This concern is caused by the fact that the measurement requirements in this exposure draft do not necessarily always provide reliable, transparent and comparable information because:

- valuing options using option pricing models cannot always be deemed reliable,
- option pricing may, under certain circumstances, yield inconsistent valuations, and
- valuation of options is a matter for specialists and is dependent on assumptions used, especially for non-listed companies; therefore valuations obtained are not evident to the ordinary user of financial statements.”

Johnson & Johnson, IASB Comment Letter, March 7, 2003.

“We believe the proposed IFRS does not take into account some of the unique characteristics of employee stock options...As you are aware, a number of valuation methods have been (and are being) developed to determine the (fair) value of employee stock options. Application of these methods can lead to very different results...The proposed IFRS uses a units-of-service attribution model to record compensation expense. This method may lead to recognizing expense for options that will not vest. This, in our opinion is flawed...The use of any pricing models that do not take into account that difference will lead to overstatements of the value of those instruments that are not traded. Replacing the contracted life with its expected life does not achieve this objective. More importantly, we believe that any method that does not recognize the change in value over time (true-up) is flawed.”

European Financial Reporting Advisory Group (EFRAG), Submission to IASB, March 7, 2003.

“We recommend that no reference is made to any specific option pricing models (such as Black –Scholes) or any specific kind of option pricing model (e.g. binomial model). Instead we prefer the standard to refer to the “most relevant generally accepted option pricing model.” Certain models such as Black-Scholes were created for perfect markets and intended for traded options with a short life. Therefore, their application may result in some overstatement of value when measuring share options that are not readily marketable.”

European Private Equity & Venture Capital Association (EVCA)

“Current option pricing models cannot accurately value employee stock options. There is evidence that the expensing of options on the grant date basis will have a significant impact on the companies and that it is unfairly over-weighted for technology firms, young firms and small firms.”