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## A simple way to value stock options

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## **Abstract (summary)**

None available.

## **Full Text**

The 10-year debate over whether or not to treat stock options as an expense probably ended on Wednesday with the publication of the Financial Accounting Standards Board's proposal that companies deduct the cost of options from income, using a method based on fair value.

Opponents have long argued that there is no meaningful way to value employee options, and that any attempt to do so will destroy the comparability of income statements. They predict dire consequences - a severe decrease in the US competitive advantage in high technology, increased legal liability for chief executives and chief financial officers and even a rash of lawsuits against companies for publishing misleading financial statements.

We sharply disagree, for two reasons. First, the FASB is requiring companies to reflect the cost of employee compensation. It is not taking a position on whether or not companies should issue options, only that those options should be treated as an expense, as are salaries, cash bonuses and restricted stock and benefits. Second, the fair value of an option can be measured at least as accurately as other items that form part of an accrual accounting system. It is far better to be approximately right than precisely wrong - as companies are if they assume that one important part of employee compensation has a cost of zero.

Valuation models for long-dated options are complex, and become more complex if they have to deal accurately with the particular characteristics of employee options.

We happen to believe that options can be fairly valued by tried and tested models. Huge quantities of highly esoteric long-dated options, far more complex than employee options, are valued and traded daily on world markets. But, as a practical matter, the valuation of options in typical plans does not require complex models at all.

Jeremy Bulow and John Shoven of Stanford University recently came up with an insight into the nature of employee options that suggests that valuation should be quite straightforward and acceptable to the current opponents of "expensing". The critical point is that a typical option plan does not give the employee a complex, medium- term (usually 10-year) option on the stock but, rather, a simple, usually 90-day, option after vesting. This reflects the fact that, if an employee resigns or is terminated without cause, he must usually exercise any outstanding, vested options within 90 days. Of course, continued employment extends the expiration date of the option, but only by a further 90 days each quarter.

For example, assume a traditional 10-year option with a strike price of \$20, which vests immediately on the grant date. The company calculates the value of a \$20-strike option with a 90-day life and deducts this cost from the prior quarter's income statement. But, if the holder of the option continues to work for another quarter, he earns an extension of the option for a further 90 days. The company would calculate the value of this extension and deduct this amount from the prior quarter's income statement. The company then repeats this process quarterly until the option is exercised or expires.

This greatly simplifies matters. The cost of the option is fairly allocated to the period in which it was earned. For larger public companies the question of how to value the option disappears because 90-day options trade freely in listed and over-the-counter markets. Companies can work out the cost by observing market prices.

Of course, traditional option plans usually vest over one to three years. This presents a different set of problems: technically, the company does not incur a cost since the employee does not own, and thus is not entitled to exercise, the option until the vesting date. There is a variety of ways to deal with this,

consistent with the effective 90-day life of vested employee options. We would favour an accrual method with the essential feature that at the end of the vesting period the company would have deducted from its income the value of a \$20-strike option with a 90-day life on the vesting date.

Deducting option costs from income is not likely to have much impact on companies' market values. But it will help ensure that the US accounting system maintains its position, alongside the UK, as the gold standard for financial reporting and disclosure.

Adopting fair-value expensing may also stimulate innovation in the design of compensation systems by removing the accounting incentive for companies to ignore the cost of options in income statements. All shareholders will benefit as a result.

The writers are co-founders of Integrated Finance Limited

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