

## Federal Reserve Bank of Cleveland

# Expensing Stock Options

by Joseph G. Haubrich

Many companies give stock options to their employees as a form of compensation. This gives the employees the right to buy company stock at a given price (the “strike price”), though often employees cannot exercise the option until a year or more has passed. If the firm’s stock goes up, the employee can get the stock and make a tidy profit. Firms often find options a good way to compensate employees: Along with restricted stock grants, options can give the employee a stake in the firm’s success and serve both as motivation and reward. Furthermore, they are a way to pay employees without handing over cash, which many start-up firms need to pay outside suppliers.

The popularity of options has engendered a surprisingly intense controversy about how these options should be accounted for, and what effect they should have on the firm’s reported earnings. Some people argue that the option should count as a compensation expense to the firm (which in turn reduces the firm’s reported earnings), others that it shouldn’t. Each side has its share of prominent politicians, business leaders, and Harvard professors (Alan Greenspan, Warren Buffet, and Robert Merton for expensing, George W. Bush, Andrew Grove, and William Sahlman, against). The numbers involved are large enough to be striking: In 2001, AOL Time Warner (now known as Time Warner) reported an operating income of \$700 million, but expensing stock options would have resulted in a loss of \$1.7 billion. The difference is most notable in so-called new economy firms; expensing stock options would double the number of firms in the computer, software, Internet, telecommunications, and networking industries with negative pretax earnings in 1999 (from 23 percent to 45 percent).

This debate does not reflect a sudden taste for arcane accounting among America’s leaders. Rather, it reflects disagreement over whether the proposed changes will make reported earnings more or less informative to investors. So while understanding the issues requires some accounting, the real questions concern economics.

## ■ The Current Situation

In 1972, the Accounting Principles Board (the organization authorized to establish accounting standards) issued APB 25, a standard that required companies to treat options as an expense measured by the “intrinsic value” of the options, that is, the difference between the current price of the stock and the strike price. Thus, if a company with stock price of \$10 issued options with a strike price of \$10 or higher, there would be no expense. This was, in fact, the practice followed by most firms, so the options had no impact on earnings whatsoever.

In 1995, the Financial Accounting Standards Board (the successor to the Accounting Principles Board) issued SFAS 123. This standard recommended that firms expense options using a “fair value” calculated using an option-pricing model, although it allowed firms to continue to use APB 25 if they wished. (Option-pricing models did not exist in 1972.) If a firm uses the “intrinsic value” approach, however, it must calculate a “pro forma net income,” that is, net income using the fair value approach, and report this in the footnotes. Most firms continued using APB 25.

The current controversy revolves around whether or not firms should be required to use the fair value method, which effectively would force them to count employee stock options as an expense, reducing net income.

Many market commentators argue that companies should expense the stock options they give their employees. Will expensing give investors better information about what companies earn and spend?

## ■ The Accounting Debate

The popular case for expensing stock options is largely a reaction to revelations of corporate fraud and wrongdoing over the past several years. It seemed that executives could grant themselves huge options in lieu of other compensation, which, because they were not reported as an expense, made the firm’s earnings look good. Good earnings increased the stock price, after which the executives could exercise the option at great profit—in the vernacular, “pump and dump.”

The accounting case is perhaps more staid. Net income should measure firm compensation costs, and options are a cost. As a recent article by Robert Kaplan (developer of the balanced scorecard), Robert Merton (Nobel Prize, 1997), and Zvi Bodie put it, “It is a basic principle of accounting that financial statements should record economically significant transactions.” Options clearly have value—that is why employees take them as compensation—and thus should be treated as an expense, just as stock grants and deferred compensation are treated as an expense. Furthermore, they represent an expense to the firm—which might have sold the options to outside investors instead of giving them to the employee. The ultimate goal of an accounting standard is to make the earnings of different firms comparable:

A firm's earnings shouldn't look higher than another's just because it paid workers with options rather than cash.

Some people, though, argue that the options are already accounted for. If employees exercise their options, they will get shares of stock, and this will increase the total number of shares outstanding of the company's stock. Thus, when the firm reports its earnings-per-share ratio, or EPS, it is lower because there are more shares. Furthermore, even before the options are exercised, the company must report EPS on a "fully diluted basis," counting the shares from the options even if they haven't been exercised. Fully diluted EPS counts all the shares the firm has an obligation to issue, even if the firm hasn't, or won't, issue them.

Is this adjustment enough to solve the problem? No. First, the fully diluted EPS doesn't actually count all the shares a firm has an obligation to issue; EPS needs to be adjusted for options only when the current stock price is higher than the option's exercise price, so not all options are reflected in the diluted EPS. That is, the dilution is incomplete. Second, this adjustment makes an adjustment to the number of shares but not to the earnings of the firm. An option should affect the earnings part of EPS as well as the per share part. Finally, earnings are used in other measures of company performance beyond EPS, such as return on investment and economic value added, and these are not affected by dilution.

### ■ The Economic Debate

Opponents of expensing are less likely to argue the fine points of accounting and more likely to stress the negative economic consequences. They have three main arguments: Current reporting in footnotes is enough disclosure; expensing employee stock options would add noise to earnings reports because these options are hard to value; and expensing would particularly hurt small, growing firms.

The economics behind these arguments bears a closer look, however. Often the arguments made in discussing stock options (on both sides!) are inconsistent. You can't really argue both that investors already know the true value of the options and that options are too hard for firms to value. Likewise, if you think that investors already deduct options from earnings, don't say that expensing will make it easier to compare earnings

across firms. Either people have the information or they don't.

### Enough Already

If people have the information, then the accounting question does not matter. After all, changing how the expense is reported won't sell more cars or reduce worker turnover. SFAS 123 already mandates that firms report the options in their financial statements. Why should it matter if this information is reported on one line rather than another? Put differently, if the market already values these options, there would be little benefit to counting them as an expense.

There is good evidence that investors can see through accounting conventions and that changes to standards that alter the form or placement rather than the amount or type of information have little effect on the value of the firm. For example, firms may value their inventory using either a last-in-first-out (LIFO) or a first-in-first-out (FIFO) method. Using LIFO decreases reported earnings but can result in lower taxes. When firms switch from FIFO to LIFO, their stock price increases, even though earnings decline; the market understands that the firm has gained value by reducing taxes, even if earnings don't show the gain. Similarly, stock prices react to pro forma earnings, which have been adjusted for option expenses, so the market does find information on employee stock options, even when it's reported in the footnotes. Investors and analysts pour over these financial statements, filling up nearly endless newsletter columns and chat-room bandwidth with their analyses and interpretations.

Even so, expensing may still increase information. Firms report earnings quarterly, but the footnotes about options appear only annually. Earnings figures get greater scrutiny from executives and auditors than do footnotes, and so may be more accurate. Of course, opponents will hardly think the extra information worth the added administrative cost.

In the end, all the fuss really makes sense only if investors do not have full information about firms and take some sort of cue from earnings reports. Unfortunately, we do not know the answer to this question yet, but if the footnotes don't provide sufficient information, the implications are worth getting excited about. Chairman Greenspan perhaps said it best:

*"There is a legitimate question as to whether markets see through the current nonexpensing of options. If they do, moving to an explicit recognition of option expense in reported earnings will be a nonevent. If, however, markets do not fully see through the failure to expense real factor inputs, market values are distorted and real capital resources are being diverted from their most efficient employment. This would be an issue of national concern."*

### Earnings Distortion

Opponents of expensing warn that not only does expensing options have few potential benefits (because they contend current disclosure is enough), but that it may seriously distort the earnings signal. It is here that they bring up arguments about employee stock options being hard to value, so that expensing them would add noise to earnings.

While it might seem unclear that employee stock options are harder to value than other common expenses, such as stock grants, future product liability settlements, or medical retirement benefits, the adjustments needed may make valuation nontrivial. One economist, Mark Rubinstein, provides a compelling illustration of the difficulties involved. Using an option-pricing model and varying a few assumptions about choices that firms can make at their discretion, he was able to get a range of option prices from \$19 to \$36 for an option really worth \$29. Now, any number in that range is closer to the mark than the \$0 currently being used, but add in the uncertainty of how the standard will be written and the ability of firms to "game the system," and expensing options might very well make earnings reports noisier.

### Small Firms Harder Hit

Noisy earnings reports would hurt small, growing firms more than others, say expensing opponents. Opponents further argue that if young firms were forced to expense their options, net income would be much smaller, making those firms unable to find financing. Firms might then forgo options, but then they could not hire the quality people they need.

This argument rests on a very delicate view of what the market does and doesn't know and, on the face of it, does not make economic sense. If the market

correctly values options—the full information case—then reporting them on a different line won't matter. If the market has trouble valuing options, then reporting them as an expense gets the needed information out there. Using accounting tricks to make earnings look better smacks of getting funding under false pretenses. In fact, this is just what proponents of expensing argue—that given a clearer picture of earnings, people wouldn't have invested in Worldcom and Enron. Only if, for some reason, the government both wants to subsidize small firms and finds that the cheapest way to do so is to ignore the option expense, does this story make sense.

Reconsidering the question of whether earnings reports currently provide sufficient information to investors may provide a more sensible way to evaluate the claim, however. Although stock prices reflect costs reported in the footnotes, they may not fully reflect the costs. Moving the costs to earnings may have an effect, particularly if it makes the costs easier to compare across firms. This may have a downside, though, because lack of information may very well make the uncertainties Rubinstein identifies in calculating option value larger for small firms. To the extent that noise in earnings reports is also larger, this increased uncertainty can make investors less willing to fund small firms.

### ■ Beyond the Investor

The stock market is not the only place where questions about the information in reported earnings matter. Expensing stock options can make compensation more transparent—not just to the stock market, where a few smart investors can move prices to where they should be—but to rank-and-file investors, who are more important for corporate governance. After all, it's pretty obvious that stockholders don't know everything going on at the firm, and increased information about the pay and incentives of managers is useful. Clarifying compensation contracts can make it harder for executives to use options to expropriate wealth from the shareholders.

It turns out that a good predictor of whether a firm has lobbied against expensing stock options is the amount of options granted to senior executives. It's not just that these firms gave out a lot of options and therefore would face a big decline in earnings—because what matters is not total options given to all employees, but just those given to

the senior executives. It seems possible that options were one way of hiding high executive compensation from shareholders, and expensing would make it harder to hide.

### ■ Manage What You Measure

One argument in favor of expensing stock options asserts not that companies are hiding costs from their investors, but from themselves. Some evidence shows that employees only value options at 25 percent to 50 percent of their cost to the firm. After all, the employee is taking on more risk—so if the firm does poorly, not only is he laid off, but his portfolio suffers as well. An outside investor with the option in her portfolio is unlikely to face such a double whammy. Giving options thus looks like an expensive way to compensate people. Why would firms do it?

An economist's view is that options are a particularly good form of compensation—helping with motivation, retention, and cash flow problems—and thus well worth their cost. Some people, however, argue that firms are making a mistake. Because the firms don't have to put out any cash or reduce accounting profits, they think the options are cheaper, and thus overuse them. Expensing stock options, then, would make the firms realize the cost of what they are doing. Expensing options does not change the benefits of using options to motivate and retain people, but if firms realize the costs involved, then alternatives, such as restricted stock grants, might look better. If it is true that people will manage what they measure, then forcing firms to measure the stock-option expense will make them realize the costs involved and reduce their use.

Although it may seem strange (to some) that firms are making such an obvious mistake, their doing so may make sense on some level. One reason is that if management's compensation depends on earnings or the current stock price, managers have an incentive to hit earnings targets and keep the stock price up. If they can do that by using stock options instead of compensation that must be expensed, they will. Mandating that options be expensed removes the temptation. Another reason is that the mistake is perhaps not so obvious. Acquiring—and using—information is costly, even for the firm itself. The attempts by companies to accurately measure their true costs and benefits have led to a long list of management systems, including the balanced

scorecard, six-sigma quality programs, and reengineering, not to mention supporting a virtual army of consultants, change gurus, and caterers at corporate retreats.

A very similar change has already been observed. Firms used to reprice their stock options quite often. If the stock price declined, a firm would lower the exercise price of its options so that employees had a better chance of cashing in. In 1998, however, the FASB changed the rules and counted repriced options in a way that reduced earnings. Firms then dramatically reduced their repricing of options—even though the accounting change had no impact on the cash flow of firms, only on how things were reported.

### ■ Beneficial Controversy

The accounting case for expensing employee stock options looks quite strong. The economic case is considerably weaker, and indeed raises a puzzle. If the economic effects are so small, why all the fuss? Business school professors we can perhaps understand, but what gets the president of the United States and the chairman of the Federal Reserve into the middle of an arcane accounting dispute?

Evidence from the stock market indicates that the current method of reporting option expenses is providing information to investors. Whether it is the right amount or not is still open to dispute. Possibly reporting earnings net of option expenses will make it easier to compare firms and benefit investors, though it is also just as possible that the resulting accounting rule will obscure comparisons.

Perhaps, though, too exclusive a focus on investors misses the central issues. To the extent that expensing stock options will bring executive pay under greater scrutiny, some executives may have reason to dislike it. Whether they fear greater transparency will hurt their bargaining position vis a vis the firm or worry about added regulatory oversight is matter of opinion. Likewise, this controversy may present an opportunity for firms to reexamine their compensation plans and rethink the true costs—and benefits—of employee stock options, whatever the ultimate accounting standard.

## ■ Recommended Reading

*For the dueling Harvard professors, see* William A. Sahlman, 2002, "Expensing Options Solves Nothing," *Harvard Business Review*, December, pp. 91–96.

Zvi Bodie, Robert S. Kaplan, and Robert C. Merton, 2003, "For the Last Time: Stock Options Are an Expense," *Harvard Business Review*, March.

*The source of the Greenspan quote is:*

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*Data on lobbying efforts by firms is from:*

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*Other related articles:*

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*Joseph G. Haubrich is a consultant and economist at the Federal Reserve Bank of Cleveland,*

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**Federal Reserve Bank of Cleveland  
Research Department  
P.O. Box 6387  
Cleveland, OH 44101**

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