

## PERSPECTIVES

---

# Stock Options and the Lying Liars Who Don't Want to Expense Them

Clifford S. Asness

**W**hy this essay when the arguments in favor of expensing options are so clear-cut and obvious? Well, the forces of logic and sense have yet to win.<sup>1</sup> For instance, many days still bring an editorial in the *Wall Street Journal* or an interview on cable news with a technology stock executive, a NASDAQ chieftain, or a politician on why options should remain unexpensed. Because this collection of pundits does not mind repeating falsehoods, I believe another article is called for that repeats the truth. My apologies go out to the many who have already made the following arguments in other venues. I am not copying you; rather, I am simply saying “amen” to your work. In a more formal paper, I would cite each of you. Suffice it to say that little that follows is original save the sarcasm.

Accounting is inherently adversarial, with corporate managers trying (within the rules and sometimes by influencing the rules) to paint their companies in the best light possible. So, what makes this issue any different from the normal give-and-take? Well, it is a matter of degree. There are lines you should not cross and arguments you should not make. You should not—in a knowing effort to inflate your current stock price at the long-term expense of anyone buying your shares and for financial gain for yourself, all while hiding behind a false populism—spend lobbying money to get financially addled members of the U.S. Congress to legislate that  $2 + 2 = 17$ . That is beyond the pale of even the most adversarial system. If you do it, someone should write an angry essay calling you names.<sup>2</sup>

### Why Options Must Be Expensed

This part is easy. Options are something of value even if they are out of the money. They are valuable

---

*Clifford S. Asness is managing principal at AQR Capital Management, LLC, New York.*

*Note:* The information presented here and the opinions expressed are exclusively those of the author and do not necessarily represent the views of AQR Capital Management, LLC, or its affiliates.

because they will be exercised only when it is advantageous to the employee and harmful to the company's shareholders (when the future price exceeds the price at which the option was struck). That is, they will be exercised only when the option-holders can take part of the company from shareholders at below-market prices. The right to do this, with no risk of loss, is valuable. Even more simply, options are something people want and desire. When the company gives them away, the company is giving away something of value, and that is called an expense.

If it helps to understand this concept, imagine that, instead of giving options to executives, the company gave options out randomly as gifts at a shopping mall. Would they be an expense then? The company is taking something of value and giving it away, which sounds awfully like an expense.

Now, go a step further and imagine that the company did not issue new options to give away (which means if the options are exercised, existing shareholders' ownership is diluted) but, rather, bought the options in the open market from a broker.<sup>3</sup> For example, say Company A goes to Investment Banker B and buys for cash \$1 million worth of at-the-money call options on its own stock and gives them away to random people. There is no dilution. If those options eventually get exercised, shares will change hands and money will be exchanged, but the only effect on the company is the initial outlay of the options' cost in the year the company buys them and gives them away. Well, the real-world case of companies issuing options against an implied promise to supply shares or spending cash if the options are exercised is little different except in how the activity is financed (which does not change whether the activity is an expense or not).<sup>4</sup>

In fact, go another step: Imagine that companies buy options in the open market for cash and give them to employees. Again, clearly, an expense has just occurred (cash has been used and the company is now out of the loop forever). Now imagine a second transaction, in which the company gets

the cash back by issuing stock options and, instead of giving the options to employees, sells them to outside speculators. Is this second transaction an earnings generator? Of course not. Issuing a security for market value is not earnings; it is raising capital and affects the balance sheet, not the income statement. Thus, we are left with the original expense, and this set of transactions adds up to the same thing as issuance of executive stock options.

Consider again the observation that issuing and selling options to the public is not an earnings generator. Unfortunately, if you follow the “logic” of anti-expensers, this opinion might have to change. Assume that the company sells options to the outside investing public for cash. This activity differs from most option-dependent compensation schemes only in that the outside investors are paying the company cash whereas the executives normally get options for free. If the stock option issuance itself is not an expense, this leaves only the cash paid by outside investors to the company to account for. This cash must then be revenue that goes straight to the income statement bottom line. Where else is this cash going to land? Thus, under the “logic” of not expensing executive stock option issuance, companies can boost current earnings by simply issuing and selling options to the public, and it can be done on any scale. Of course, it is also the Ponzi scheme to which all other Ponzi schemes must bow and scrape in deference.

Finally, if you think that employees would accept at least \$1 less in salary because they received options, have you not just admitted that options are a substitute for salary—an expense? For that matter, when options are traded on an exchange (as they are every day in large quantities), does money not change hands and are the prices not printed in the newspaper?

Issued options are an expense. They are an expense in a house; they are an expense to a mouse; they are not an expense only to a louse. Now that this has again been proven beyond a reasonable doubt, we can move on to systematically eviscerating and ridiculing the many specific arguments against options expensing.

## False Reasons Not to Expense

None of the arguments against bringing option expenses up out of the footnotes and into the bright light of the income statement’s top line hold water. Read on:

**Options Have No Value When Issued and Should Be Expensed Only When Exercised (If at All).** If options have no value when issued, then the executives should be happy to simply give them

to me.<sup>5</sup> No? The executives are keeping them? Really? How interesting.

Still, some do argue that companies should not expense options because the options might never be exercised, so sometimes the company will take an expense hit for something that might not ever actually hurt the company. This argument is particularly insidious because it preys upon the misunderstandings of finance and probability theory common to the general public (and, you know, Congress). Option valuation methods (Black–Scholes and others) are exactly about determining what options are worth now based on the fact that they may or may not be worth something down the road. That is the whole point. The tech executive who has received tons of options but goes on television and brags about only taking a dollar in compensation and, when asked about the options, says that they may not ever be exercised so they should not be counted, is simply spinning a false tale and praying that public innumeracy sees him through.<sup>6</sup>

To see an example of how silly this argument is, suppose a company goes to its widget supplier and says, “Instead of paying you now, let’s agree to a deal in which next year, if a coin flipped then comes up heads, we pay you 3 times the normal amount but if it comes up tails, we pay you nothing.” Did the company simply eliminate all expenses this year? Is there no expense this year and only an expense next year if heads comes up? Nope. The basic principle of accrual accounting is to recognize expenses when they are incurred, not when they are actually paid.<sup>7</sup> A reasonable estimate for expense this year under this scheme is 1.5 times normal levels (and, by the way, that is how the widget supplier would recognize it as a bad deal!) because there is a 50 percent chance of 3 times normal expense and a 50 percent chance of 0.<sup>8</sup> Black–Scholes valuation, or anything like it, is basically carrying out a similar exercise for stock options—looking at future payoffs and probabilities and estimating *today’s* economic expense. If this 50/50 gamble were not an expense, imagine the incentive companies would have to inflate current earnings by paying for things with noncounted bad-deal gambles on the future! Oh, wait a second . . . Doesn’t this sound a bit like not expensing options?

A related argument against expensing is simply that issuing stock options involves no current outlay of cash, so it is not an expense. True. So what? Issuing a promissory note to pay for the commissary donuts also involves no current outlay of cash, but it is an expense (and a pretty big expense at any firm I would work at). Even simpler, paying with a credit card does not move an expense into the future.

**Options Values Are Difficult to Calculate.**

Yes, there are definitely some issues regarding how to value executive stock options. The justly famous and reasonably accurate, for its purpose, Black-Scholes option-pricing model is geared to short-term options with fully rational exercise policies (not all employee stock options are rationally exercised) and constant volatility.<sup>9</sup> In general, the Black-Scholes model, for several reasons, probably over-values executive stock options.

This argument is probably the most widespread, but still quite ridiculous, rationale not to expense options. First, many, if not most, accounting numbers are subject to wide bands of error (ever hear of depreciation or its tricky pal amortization or, even more apropos to unexercised options, finger-in-the-wind guesses of bad-debt expense?). There is little evidence that option values are more difficult to estimate than many other components of financial statements. Second, many methods have been developed, by academics and practitioners, to correct some of the deficiencies of the Black-Scholes model for this purpose.<sup>10</sup> Third, and most important, there is only one nonnegative option value that we know is demonstrably false—that is, zero. Saying we cannot calculate option values accurately so let us choose the one and only value we know for a fact cannot be correct is simply nuts. If you recommend using some fraction of the Black-Scholes price or argue for a conservative model, those choices are legitimate subjects for debate. But zero is the only provably wrong choice; thus, to advocate it is simply not reasonable.<sup>11</sup>

Finally, if option values really are much too difficult to calculate accurately except within wildly variable bands, then options should not be used at all for compensation. Is it prudent to pay people with a currency whose value we cannot even estimate? Is the best argument of tech executives against expensing really “we have literally no idea and cannot even begin to estimate how much of shareholder wealth we are giving ourselves, so therefore, QED, we can issue as much of the company to ourselves as we want and you cannot even make us ballpark it for our income statement”? If so, it is a wonder my computer works at all.

**This Stuff Is Already Reported in the Footnotes.** Is this argument saying we should bury the truth in the footnotes and lie on the front page in bold type? How about we switch the order? I know, it's a radical idea. Also, if options are really an expense, why are other expenses not relegated to the footnotes? This argument is not worth any time.

**Issuing Options Is a Capital Structure/Balance Sheet Transaction, Not an Income Statement Transaction.**

This argument was prominently made in a recent *Wall Street Journal* editorial; yet, somehow, I can still bring myself to disagree. If a company sells options to the outside investing public and retains the cash at time of issuance, this activity is, indeed, not a transaction that hits the income statement. But imagine the company immediately gives this cash away to its own executives (this is commonly called “salary”). That is an expense on the income statement. In fact, together with “cost of goods sold,” it is pretty much the canonical example of an expense in Accounting 101. Now, add up those two transactions (the options issuance to the public and the salary given out). The company is now net even on cash (no outlay or inflow) and has written potentially dilutive (and certainly valuable) options.

Although in this example executives have received cash instead of options (which are in the hands of the investing public), the company is in the exact same financial position it would be in if it had given out executive stock options. And in this case, an income statement expense has quite obviously been generated. The astounding part of this false argument is that it fails to distinguish between a security issuance in which the benefits are retained by existing shareholders and a security issuance in which those benefits are given away to executives.

**Options Are Worth Less Than Their Market Prices to Executives Because the Executives Are Not Diversified.**

Here is how this argument goes in more detail: Executives end up concentrated in their own stock, so executive stock options are worth less to them than the options' open market prices because the executives are forced to own a concentrated and risky portfolio. This is probably true. It is simply a downside to using options as compensation, however, not a reason to avoid expensing options. Since when does a company calculate expenses based on the value of the payment to the other party rather than to the company itself? If you gave away cash to a Buddhist monk who did not care at all for material goods so he burned the cash for warmth, would that mean the cash outlay was not an expense? Would you try to estimate how much the warmth meant to him? Or would you simply footnote a BMB (Buddhist monk bonfire) and move on?

**Mandatory Expensing of Options Will Destroy Tech Companies.** Well, this statement is simply not true. Expensing stock options will not kill the technology industry. If it did, it would

mean that the only reason tech now lives and prospers is that the companies currently get to mislead investors about options. Are tech companies really saying investors must be tricked into investing in technology? “If we had to report our true earnings, nobody would invest in us” is not a reason to grant an exemption from reality. In fact, it is rather insulting. Furthermore, if this reason not to expense were valid, why should technology companies acknowledge other expenses in full? Instead of letting them mislead about options, how about a law that tech companies have to report expenses only every other month?

I believe technology companies are too healthy and strong, and their executives too smart and energetic (their confusion on this options issue aside), to need to rely on false accounting to be successful. It is a pity that many of them disagree.

**It Will Hurt the Little Guy, Who Won't Get Options.** If helping the “little guy” employee is the noble goal behind not expensing options, one does not have to sing the “Internationale” to marvel that a major ironic consequence of this grand humanitarian gesture is to incredibly enrich a handful of managers (often not the original creative entrepreneurs) at existing large technology companies. It is also interesting that the real little guy—the investor buying one share of a networking or semiconductor giant because he forgot to read the footnotes containing the real expenses—is forgotten in this pious, pandering, pretend proletarian argument made by tech titans.<sup>12</sup> Perhaps this realization is the reason tech investors lately have shown an annoying habit of voting to expense options and promptly being ignored by management. Still, simply put, whom the action helps or hurts does not change the fact of whether something is or is not an expense.

Some pundits have actually acknowledged that we should expense stock options—but only those options granted to the five highest-paid executives at each company. I would not address this obvious silliness except that it actually made the *Wall Street Journal* editorial page and has been banded about by Congress. Hey, I am a free-market capitalist who happens to think free-market capitalists are the ones who should be the most critical when the system is not working right. If socialism is your bag, we disagree, but I wish you good luck, comrade. On this issue, however, let's separate socialism from accurate accounting. Political philosophy has little to do with whether options should be expensed. If you want to punish companies for paying top executives too much, why on earth stop at options? Come on, *tovarishch*, think big! Seeing as this silliness has nothing to do with

expensing options, why not make companies expense the regular cash salaries of only their top five executives? The labor of everyone else is free! It is exactly the same thing—and just as silly and as unrelated to the discussion at hand.

In the midst of this controversy, a bunch of anti-expensing protest rallies have actually been held (e.g., the Palo Alto, California, “rally in the valley”), where tech employees ran around with signs saying things like “I am the face of options” that were designed to tug on our heartstrings. Now, I am not indifferent to people being scared about the future, and generally, these employees are not the ones at fault for the accounting lies. The ones at fault are those who have misled and intentionally frightened the employees. But let's try to keep this issue in perspective. “I am the face of options”? Please! However much today's technology employees are saddened that they missed the 1960s, they are not rallying against a controversial foreign war or to end apartheid. They are rallying to retain an accounting loophole. With that said, if it will help, I will happily counter with my rendition of the classic “All I Am Saying Is Give FASB a Chance.”

**Options Are an Expense Only If and When Companies Repurchase Shares and Thus Spend Cash at Time of Exercise to Prevent Dilution.** This argument is so completely irrelevant that I am at a loss for analogies. You would be hard-pressed to find anything less relevant to whether options are an expense when issued.

The company incurs an economic cost when it makes the promise (namely, at issuance) to redeem options should the optionholder choose to exercise them. What the company does when making good on the promise—issuing new shares, using cash to buy back shares in the marketplace, or using some other method (say, buying back options from the employee)—is quite obviously irrelevant to the expense incurred at issuance. Specifically, this type of share repurchase, if carried out, is a cosmetic *ex post* transaction in which a company decides that its investors would be upset to have their shares diluted but, for some reason, would not be upset to have the same percentage share of a company with less cash. The transaction changes nothing in reality—certainly not whether options should be expensed when issued.

**The Effect of Options Should Be Recognized by Using Fully Diluted Shares, Not by Showing an Expense.** This approach is probably better than not acknowledging options at all, and those advocating this recognition may have their hearts in the right place, but it is still not right.

Consider this example of a hypothetical company. In the beginning, it does not issue any executive stock options:

Shares outstanding	100
Revenues	\$1,000
Expenses (including salaries of \$400)	\$800
Total earnings	\$200
Earnings per share	\$2

Let's assume the market assigns a P/E of 20 to this company, giving the stock a market price of \$40.

Now suppose this company eliminates half of employee salaries and replaces the salaries with option issuance. Say it issues a two-year option struck at \$50 with a value of \$5. To replace \$200 of salaries, the company needs to give employees options on 40 shares (again, ignoring these being warrants).

Now, EPS originally, and in reality, before the replacement of salary with options, was \$2. If we ignore dilution and option expensing, EPS is a misleading \$4 (expenses fall to \$600 from \$800 as salaries are halved, so earnings go to \$400 and EPS to \$4). If we count the option issuance as an expense (i.e., tell the truth), we get back to the true \$2 EPS (as we subtract the 40 options  $\times$  \$5 per option cost from current earnings). Of course, this outcome has to happen because true EPS is, in fact, \$2.

Now, say we go the fully diluted route. Fully diluted, shares outstanding go to 140, while reported earnings stay the bloated, options-ignoring \$400. Thus, the EPS figure calculated this way is \$2.86. Given that the true EPS figure is \$2, we know this new figure is simply wrong. It is closer to the truth than \$4 but still wrong.

Basically, what is going on is that when a company gives away options, it does not dilute this year's earnings alone; it dilutes them also in subsequent years. Thus, if the company adds the potentially dilutive shares to the base this year, it is showing a diminished effect based only on that one year's earnings. For instance, if the company earned nothing that year, there would be no effect from options issuance—clearly the wrong answer. The proper thing to do is to show the *value hit* this year of what was given away—that is, to expense the options.

**If Companies Have to Move Options to the Top Line, Companies Will Lie about Them More and Analysts Will "Go Pro Forma" and Ignore Them.** This argument postulates that, although option expense is now relegated to an ignored footnote, companies basically tell the truth in that footnote by disclosing their methods of valuing options but if the expense is moved up in prominence, com-

panies will cheat on the number (i.e., use unrealistically low prices calculated from cheating models that they will not fully explain to us). This possibility may, in fact, come to pass, and financial statements should be monitored for it, but it is not specific to options; it applies to any complex part of accounting. I really do not think we want to assert that to encourage veracity, for anything complicated, for which stretching the truth might be particularly lucrative or easy, top-line reporting is not required. That approach seems a bit like giving away all our worldly possessions because we fear thievery.

Of course, ironically, after all the Sturm und Drang, perhaps the side of truth will indeed prevail, options will have to be expensed, but alas, Wall Street's sell-side analysts will simply choose to focus on "earnings before options expense." The battle will then all be for naught—at least for a while. Sunshine may be the best disinfectant, but Wall Street has some powerful window shades known as "*pro forma*" reporting. This possibility is not, of course, an argument against expensing; it is simply a statement that other battles must be fought after this one.

**The Market Is Efficient, So Expensing Does Not Matter Because the Information Must Be in Prices Already.** This argument is near and dear to my heart. It says, "None of this debate should matter to investors and may, in fact, have little or no consequence when and if the change to expensing options is made." After all, the information is currently in the footnotes, and we are not talking about changing anything real, only about whether companies have the right to lie on the top line when the truth is quietly already there for anyone willing to spend time with a financial statement. Even the weakest form of market efficiency (often called the "if only we are all not complete morons" form) says that making companies tell the truth in the top line cannot matter if we all have easy access to the truth already.

So, will expensing matter? Who knows? It might not matter for a while as Wall Street finds a way around it through the *pro forma* approach. And it might not matter because investors have already accounted for it, in which case we are all arguing about a point made moot by an efficient market. This, however, is simply not an argument to continue avoiding the truth; it is an argument that telling the truth might not matter (and by the way, if it does not matter, it will not kill technology or hurt the little guy either).<sup>13</sup>

Finally, footnotes are great, but would making the truth as accessible and obvious as possible really hurt anyone? The efficient market does not get efficient simply by wishing to be so. Frictions and information-gathering costs of all kinds can

lead to inefficiencies. Because option expensing when options are granted is clearly correct, why would we tie a blindfold around the market's eyes and say, "There, try to be efficient now"?

In fact, why do we have a set of accounting standards if not to ease the market on its path to efficiency, which, in turn, protects investors? Perhaps we should do away with all financial accounting standards and even financial statements and simply let a set of University of Chicago graduates like me "efficiently" intuit the right prices by extrasensory perception or channeling Louis Bachelier? Basically, if we are going to have accounting standards, they should be designed to best reflect the truth. That principle seems straightforward.

## Conclusion

There are legitimate arguments and difficult issues related to how to go about expensing options. Which formulas or methods to use and how often

to update the values are points for debate. There are no credible arguments, however, for ignoring these expenses and thus intentionally overstating the earnings and understating the P/Es of not only companies with large options programs but also the market in general.

Seldom do we have a bright line dividing right and wrong in an area as nuanced as financial accounting. This issue presents one of those rare cases. Options unambiguously should be expensed. If expensing options is ultimately not required, we will have knowingly chosen a falsehood over truth and done so in the most callously public fashion—after much debate, hand-wringing, and lobbying. That would be bad. Options are the canary in our coal mine. If the canary dies, watch out.

*I would like to thank many anonymous readers for comments, but I will not name them for fear their computers will mysteriously stop working.*

## Notes

- Given the vagaries of publication dates and the political process, the issue (at least according to the Financial Accounting Standards Board) may well be settled by the time this article reaches publication. If not, I hope this essay will be one more voice for the open-and-shut case for expensing options. If the issue is settled *against* expensing, this essay is a lamentation that one of the most obvious debates in financial history has been decided in favor of mendacity. Finally, if the debate is settled in favor of expensing, it will be a celebration that the process does (eventually) work, a review of the important arguments, and a call for Wall Street to keep its *pro forma* hands off option expenses and to report earnings accurately.
- Before anyone gets too worked up, I would not truly brand all who disagree with me on this issue liars! The title is meant to be somewhat whimsical, and frankly, if you are going to take a position like "expenses should not be expensed," you had better have a sense of humor. And yes, the irony inherent in the watering down of my vitriolic title only in a footnote is completely intentional.
- Employee stock options are really warrants (i.e., they increase the number of shares outstanding), so the example is not precise unless warrants are trading in the open market. Still, precision is not important here; it's the concept that counts.
- The cases are no different in terms of being a current expense, but they are different in terms of the future because the shareholders remain "short" the option in the case of a direct grant (and future fluctuations of the option value do matter). When options are bought in the open market, any fluctuations in the future are between the employees with the options and whoever took the other side in the open market.
- I believe Warren Buffett also made this argument, so he would be first in line, but there should be plenty to go around.
- I am paraphrasing some very real interviews.
- An entirely different and very reasonable argument says that option issuance is an expense *but* not entirely in the year the options are issued. This argument makes some sense if companies are essentially prepaying future salary with multiyear vesting options and are getting some future benefit from tying employees to the company. Note that this argument is simply about when to expense issued options, not about whether they are expenses (regardless of final outcome). Furthermore, if option issuance is similar year by year, the total expense in a given year (now representing the partial expensing of current and prior issued options) would not necessarily be much different from simply expensing this year.
- Ignoring such things as risk aversion and present value.
- My position, and that of the Norwegian Nobel Committee, must be contrasted with that of a major technology company executive who recently called the Black-Scholes model (paraphrasing here) "the stupidest thing ever invented."
- For example, see "How to Value Employee Stock Options" by John Hull and Allan White (*Financial Analysts Journal*, January/February 2004) and "Does the Model Matter in Valuing Employee Stock Options?" by Manuel Ammann and Ralf Seiz (*Financial Analysts Journal*, forthcoming September/October 2004).
- Moreover, when tech companies have engaged in transactions in which Wall Street firms have taken their under-water options off their employees' hands, somehow a price was determined.
- When I get angry, I get awfully alliterative.
- Why, then, are the companies that issue the most options having a hissy fit (a term that admittedly could also be applied to this essay) over the prospect of expensing options? Presumably, because they think ignoring the expense works! If earnings are artificially inflated and the P/E stays the same, the price of the stock rises—for artificial reasons. Better still, if the inflated earnings create an inflated appearance of EPS growth, maybe the company can command a premium P/E. If so, then artificially inflated earnings are valued at artificially inflated multiples. If the companies believed that the value of the option grants is already in the share price, then much of the strenuous resistance to expensing them presumably would dissipate. Although the tech executives' anti-expensing hissy fit proves nothing about whether the market has already discounted option expenses, it does clearly show that the executives believe the market has not done so and the companies are getting away with something by reporting the expenses only in the footnotes.

"Stock Options and the Lying Liars Who Don't Want to Expense Them"

Copyright 2004, CFA Institute. Reproduced and republished from *Financial Analysts Journal* with permission from CFA Institute. All rights reserved.