OPTIONS WARS
by James V. DeLong

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Suppose that, a year ago, an investor dialed up his local Psychic Network to get advice on the hot business issues for 2002. Suppose, further, that his Miss-Cleo-equivalent responded: "I see that whole tankers of ink will be spilled arguing whether stock options granted to employees should be classified as compensation expenses on corporate income statements."

A sensible person would have instantly suspended his credit card payment on the grounds that he might be gullible but he wasn't crazy, and some propositions are just too ludicrous to take seriously. But what do you know, the psychic would have been right, because during 2002, combat over whether to classify options grants as expenses drew in some very big business and economic names.

On the pro-expense 'em side are financier Warren Buffet, Fed Chairman Alan Greenspan, ex-SEC Chairman Arthur Leavitt, economic Nobelist Joseph Stiglitz, the Financial Accounting Standards Board (a.k.a. FASB), Senators Carl Levin and John McCain, and TIAAlCREF, the giant teachers' retirement fund. They duel a con roster that includes venture capitalist extraordinaire John Doerr, the National Venture Capital Association, President George Bush, former SEC Chairman Harvey Pitt, market gurus Burton Malkiel and William Baumol, Silicon Valley's political lobbying arm TechNet, and Washington think tanks such as the Employment Policy Foundation and the Competitive Enterprise Institute (I, too, have a dog in this fight).

Even as the ink gushed, many thoughtful observers were troubled by one burning question: "Who cares?"

The "who cares" camp offers some persuasive arguments. The contention that investors are misled by the failure to treat options as expenses seems vastly exaggerated. Basic data on options is available on the forms companies must file with the SEC on a regular basis. The required information is a bit sketchy. But to the extent it is significant, the facts quickly disseminate to the market. A recent study by the Heritage Foundation found that that market is able to account for the value of stock options as long as the basic information is disclosed.

Furthermore, for most companies, treating options as expenses would affect earnings per share by only pennies. When *PIE* ratios are in the ether, no one believes that this matters much. So why are the pro-expense forces so adamant?

One could object that huge option grants distort managerial incentives, encouraging executives to jazz up stock prices in the short term at the expense of the long term. But this incentive is built into the practice of granting options, and is not a consequence of the accounting treatment. When the market was hot, no one objected because they thought the execs were making them rich. It was only after the fall that virtue reared its head.

The intensity of the anti-expense forces also appears a bit puzzling. Jeff Bezos of Amazon was one of the few high tech chiefs to surrender quickly, reasoning that the basic issues and uncertainties involved in valuing his company would not change and that markets would adapt to the new approach in about a microsecond. So why bother to fight it? He has a point, and the Heritage work confirms it.

Nonetheless, fight it they do, especially along the high tech axis of Silicon Valley, Austin, Redmond, and Boston. The lobbying is fierce, and TechNet, with 200 members, and the American Electronics Association, with 3,000, recently proposed guidelines for improved disclosure of options, a move which is both an excellent idea and a transparent effort to undercut the pressure for accounting rules that require expensing.

It is an iron law that when the energy devoted to a battle seems out of proportion to the apparent stakes, something else is going on. So it is here. The options issue actually ties into profound questions about the nature of capital and the structure of business enterprises in the 21st century. It embodies serious conflicts between the generators of intellectual capital allied with their gun slinging venture finance allies on the one hand and the conventional providers of financial capital on the other. The expense-or-not issue is of modest importance in itself. But it has considerable potential to cause problems in the future -- especially with taxing and regulatory authorities that are hostile to new forms of business organization.

Since the birth of the modem corporation, owners have faced the classic "principal/agent" problem: managers have some incentives and many opportunities to siphon off corporate resources, either by overt thievery or simply by sinking into sybaritic sloth. They also tend to focus on their narrow areas of immediate responsibility, not on the health of the organization as a whole.

One way to prevent such conduct is to watch the "agents" carefully -- and, as Enron/Tyco/WorldCom illustrate anew, this route should never be neglected. But while policing can catch theft, it cannot motivate managers to do their best work; indeed, policing can be counterproductive, as will be affirmed by any Dilbert confronted with the expense account monitors. ("You can't buy that pencil until you fill out this form in triplicate.")

Another technique is to make the managers into shareholders, on the theory that this will keep their incentives properly aligned. It is not a new idea: management legend Alfred P. Sloan started a bonus plan, payable in stock, at General Motors in 1918. Payment in the form of stock is still common, but it presents some problems. For one thing, giving stock to the employees dilutes the stake of the existing shareholders. Employees can asked to buy shares for their retirement plans, but they may lack the capital to make significant investments. And in any case, financial planners are aghast at the lack of diversification that is almost inevitable when someone has both his employment and savings eggs in the same basket (Remember Enron?)

The logical solution is to give an employee the option to buy stock, exercisable in the future but at a strike price equal to the current market price. This gives the employee an incentive to promote the interests of the corporation over the medium to long term since most options do not vest for around five years and then remain open for, perhaps, another five. The employee need not commit capital: if the stock goes down the option simply expires, and if it goes up it is easy to borrow the necessary cash at the time of exercise. Also, from the shareholders' point of view, option compensation has the advantage over direct grants of stock because it does not dilute ownership if the stock fails to rise.

In the public mind -- and as historical fact -- stock options are labeled a perk of top management. And given the rationale for creating them, it has made sense for shareholders to limit the number of employees so blessed. Shareholders are not charities. They are willing to dilute their stake only to change the incentives of employees whose performance is both hard to monitor and capable of providing great benefit (or perhaps causing great damage) to the company. Run-of-the-mill drones can be paid salaries, controlled by supervisors, rewarded in cash for superior performance, and readily replaced if they leave.

Embodied in these calculations, however, is a set of assumptions about the nature of the business enterprise. Most fundamentally, it divides the firm into labor and capital. Even the managers are regarded as hired hands, to be grudgingly given some status as capitalists only because they can do good or ill and are hard to monitor -- not because they are regarded as a source of capital.

But the nature of capital has changed and expanded. In the firm of the 19th or early 20th century, capital was tangible - plant, equipment; land. In the contemporary firm, tangible capital is less important, because key assets often take intangible form as patents, copyrights, trade secrets, customer relations, internal synergies and working arrangements. As economists Lawrence Summers and Bradford DeLong have noted:

> "Back in the [late 19th Century] intellectual capital as such was not such an important factor. Industrial success was based on knowledge, but on knowledge crystallized in dedicated capital. Many people knew organic chemistry. Few companies - those that had made massive investments –could make organic chemicals. Today, it appears that intellectual property is rapidly becoming a much more important source of value."

In 1978, 80 to 85 percent of the value of debt and equity of public non-financial corporations in the United States was represented by the book value of their tangible assets. In 1998, before the last great stock market blow-out, tangible assets accounted for only about 30 percent. Granted, 1978 was a low point in the markets, but the shift to the intangible is still impressive. Nor is it limited to New Economy companies: the figures are for the broad swathe of corporate America. Even automobile companies, long a paradigm of bricks and steel investment, are now rich with intangible assets ranging from engineering and design capacity to specialized software for controlling assembly lines.

True New Economy companies, of course, show an even greater swing to intangibles. Microsoft consists of a bunch of nondescript buildings, a few tons of etched silicon, some incomprehensible scratchings called software code that are protected by copyright and a few Google's of neurons dwelling in employees' skulls. In 2002 Microsoft will invest $5 billion to produce more assets, and these, too, will take the form of code and neural connections -- not physical plant and equipment.

The rising importance of intangible assets creates a dilemma for providers of monetary capital. Sometimes they can capture the value of the assets completely - that is, pay the programmer, grab the code, and say goodbye. But often they cannot. The code has bugs, the users need help, or version 1.0 is only a trial run for the really nifty 2.0.

Obviously, these forces work differently in different industries and companies. The value of Coca-Cola is based largely on the intangible assets of its secret formula and its brand identification, but these are largely independent of the efforts of current employees. Sure, some creativity in the lab might produce a new formula, and a continuing stream of novel ad campaigns is needed. But most of the value is crystallized, to use the Summers/DeLong term.

Cisco, on the other hand, lives or dies with the ability of its design teams and other producers of intangibles. The crystallization is less complete. And much of the asset value may lie in the brains of the designers, ready to be applied to the next project, whether at Cisco or elsewhere.

Intellectual capital presents the financier with another distinctive problem: it is difficult to appraise in advance. A photograph circulates on the Web that shows the Microsoft staff circa 1978, when it consisted of 11 long-haired geeks. Bill Gates looks about 12 years old. The legend is: "Would you invest in this company?"

It is tough enough for an investor to evaluate a physical product -- a railroad, a store, or an entire business -- but at least it will clearly have some value once it is built. Moreover, we have accumulated considerable experience in valuing physical assets. Intellectual property is less familiar, and it is often an all or nothing proposition: it hits big or not at all. There were probably thousands of group geek shots taken in 1978, but they are not on the Web. They repose in attics somewhere, along with the photos of grunge bands that never got out of the garage, ambitious novels that collected a hundred rejection slips, and soft drink recipes that were going to be bigger than Coke®.

Indeed, the growth of intangibles is undermining financiers' ability to assess tangible property. Back around 1996, the press fretted about the forthcoming constriction of the Internet because traffic was expanding more rapidly than fiber-optic cable could be laid. Telecommunications companies, and everyone else with access to right-of-way, such as power companies and pipelines, responded like good capitalists. They binged on construction. Then, improvements in software called wave division multiplexing multiplied the carrying capacity of single fiber by a factor of 100 or more. By 1999, the companies that had worked so valiantly to wire America were excoriated for profligate overbuilding, and the financial value of their networks went to somewhere around zero. (Note that the actual value is still immense. But it appears that it will be captured by users rather than investors as competition forces prices down to marginal cost.) The lesson is that even if you think your property is physical, it may not be.

Plainly, the old dichotomy between capital and labor is getting fuzzy. Companies now have finance capital, workers who produce a mix of intellectual capital and current earnings, and labor drones. Heaven knows where management fits; in the high tech company of the future, the CEO might be easily replaced while the chip design team is pure gold.

The obvious response to this evolution is to recognize that the work of key employees creates capital as well as immediate earnings, and to bring them into the ownership structure. Stock options are a neat way to do this because they serve several functions at once:

• From the financiers' point of view, an option is better than a direct grant of stock; if the ideas **fail** ˜, the option holders will have no claim on the residual assets of the company.

• The number of employees who are crucial to success and who cannot be monitored has expanded greatly beyond the category of top management. Moreover, the old argument that stock is the way to keep the incentives of workers and financiers in alignment still holds.

• A venture capitalist cannot easily tell whether the nerds who are pitching him are any good. Nor can he tell if they believe their own pitch; they could be looking for cushy salaries for a few years before saying, "well, that didn't work." To reward only for success, and to calibrate that reward to the degree of success, ensures not only best efforts but the sincerity of the techies' own belief in the enterprise.

• Stock options guarantee that employees will stay long enough for the option to vest, which increases the proportion of capital created that the financier can capture. Furthermore, since success and value creation may indeed depend on a whole group working together, options constitute a cross-guarantee among the workers that they believe in the enterprise and are committed to staying.

All of these factors may explain why the high tech community is so ferocious in defense of its ability to use stock options. It does not explain why they care so much about the proposals to classify them as expenses.

One reason is obvious: this accounting treatment is misleading. The evaluation methods are erroneous, the time periods are mismatched, and creation of assets is counted as a cost rather than a benefit. Indeed, expensing actually makes the task of valuing new economy companies more difficult. But, largely thanks to the publicity given the effort, it makes everyone think that accounting has improved.

Another reason is that the effort will be expensive, and perilous. The F ASB pamphlet on accounting for stock-based compensation runs on for 146 pages, and it is not written at the eighth grade level. Investment banks will have to be hired. Also, corporate officials are particularly gun-shy at the moment about undertaking new obligations which add to their legal exposure.

Beyond **these concerns** is the fear of the tax man. The IRS is not interested in metaphysics of the corporate form or other such nonsense. The law levies taxes on "all income;" gains from options are income, and thus must be rendered unto Caesar. Present tax treatment is an illogical compromise. Nothing happens tax-wise until the option is exercised. At that point, the employee pays tax on the difference between the strike price and the current market value at ordinary rates, the corporation takes a deduction of the same amount, and that is the end of it. The employee then owns a capital asset.

The advantage of this treatment is that the employee lays out no cash for taxes until he has the stock in hand, knows he has a real benefit, and has an asset that can be sold to raise money if necessary.

If the accountants start requiring that corporations treat options as expenses before they are exercised, who doubts that the IRS will be close behind? Then employees would be required to pay taxes at the time of the grant, on options that might or might not produce any gain. And taxes would be paid from current income rather than from gains realized through the exercise of the option.

This would seriously inhibit the use of stock options, and thus seriously undermine incentives in the most entrepreneurial sector of the economy. And who can doubt that the tax man would follow the accountants? The Social Security Administration would probably be ahead of the IRS, desperate for revenues to prop up a failing system, and already on the alert to efforts to convert employees into independent contractors for the purposes of avoiding FICA.

These two factors explain the opposition. But what motivates of the expense 'em crowd? Why are they so adamant?

One explanation (a charitable one) is that they focus on situations in which option grants do indeed appear to be interchangeable with direct compensation. The application of the income tax to corporate dividends encourages companies to accumulate cash or use it to buy back stock. Either step should cause the stock of a company to rise even if business is stagnant - which, in turn, implies that granting an option can be the equivalent of putting part of an employee's compensation into a tax-deferred account.

To add to the incentive to pay with options, **a decade ago** Congress got huffy about excessive compensation for corporate executives, so it limited tax deductions to $1.3 6 million per salary. Companies began to look for alternative ways to pay their top hands, and all options almost guaranteed to increase thanks to earnings retention fit the description nicely.

The number of people in corporate America whose incomes are affected by these factors is pretty small, though. And the obvious response is to change the incentive structures rather than toss out a useful financing device.

A second explanation - one not quite as charitable **--** is that the expense 'em proponents are fixated on the past, and are thus oblivious to the changing nature of capital. They assume that the classic division into capital and labor still holds, they see stock transferred to labor, and since labor isn't capital such transfers must be wages. QED.

A third explanation is not charitable at all: proponents *have* thought about the changing nature of capital, do not like it, and want to stop it. In this view, old-line capitalists are trying to stem the pressure to share the loot with the creative classes by eliminating the means by which this sharing is occurring. If the peons are creating capital assets, then, by golly, the assets should belong to the capitalists.

In terms of *realpolitik*, eliminating stock options for the creative classes would help to protect the cartel of old-line providers of finance capital. The availability of options allows the geeks to force the financiers to bid against each other **--** not in terms of absolute dollar amounts but in the coin of who will give the biggest share of the enterprise to the idea people. It also allows the geeks to guarantee their own sincerity by reducing their immediate reward in exchange for more of the long term profits.

If this mechanism were removed from the system, the geeks would lose a powerful bargaining tool, and thus would be able to capture less of the pie. And who gets what they lose? The financiers. And who is disadvantaged, besides the geeks? The venture capitalists, who are far better at playing the game of investing in intangible assets than are the conventional moneymen. It is no accident, Comrade, that leading proponents of expensing options include giant retirement funds that represent public employees and conventional financiers such as Warren Buffett.

Clearly, the pro-expense forces have the momentum. Enron, WorldCom, Tyco, etc. have put impetus behind anything labeled reform. The International Accounting Standards Board is moving to require that options be treated as expenses, and everyone expects that the United States will follow, whether through FASB or the new audit board. **In November 2002, FASB issued an invitation for comments on its current approach, which encourages but does not require that options be expensed. The notice emphasizes the Board's dedication to "promoting international**

convergence" on accounting standards, which the sensibly paranoid Silicon Valley executive will take as a threat to adopt the IASB approach.

However, this may be a situation in which worse is better. Admittedly, worse is usually just worse, but the tech companies made a shrewd move when they decided to reveal the impact of applying standard options valuation techniques to their earnings. The basic problems will become obvious within a year or two. And if the **accounting boards** can be staved off for that long, the issue will become ripe for reconsideration. At that point, if there is even a little justice in the world, the expense 'em crowd will have lost considerable credibility, and some might even be willing to rethink their position.

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(SIDEBAR) VALUING EMPLOYEE OPTIONS

From an accounting point of view, options are an odd duck. The company pays out nothing, neither at the time of the grant nor at its exercise. The costs are reflected in the form of dilution of the shareholders' stake. Because accounts are kept for the company as an independent entity, option grants have no effect on the company's income statement. Their impact shows up in the earnings-per-share numbers and on the shares outstanding on the balance sheet -- but not in the account of expenses.

Those who favor treating options as an expense item point out that economic value is being transferred, and that companies would otherwise have to payout more cash to obtain employees' services. Thus, they argue, failing to include option grants as compensation is deceptive because it creates an impression that labor costs less than is actually the case.

However, this position assumes that the options are awarded for creating earnings during the options period - a dubious assumption. The value of the option depends on the price of the shares at the time of the option's exercise, five years or more after its grant. This value will depend on the market's assessment of the company's earnings prospects in a future that does not begin until five years after the grant. Thus the earnings produced by the employee's efforts in the period between the grant of the option and its exercise seem relevant only insofar as they predict future earnings. So it would be inaccurate to match the reward with the company's earnings during the period between grant and exercise. The reality is that options are awarded as an incentive to the employee to create capital assets that will result in earnings in the future.

One could argue that the option's worth should be depreciated against earnings over an extended period following its exercise, much as a capital asset is depreciated. This is worth considering, but it would have to be accompanied by better techniques of accounting for the creation of intellectual property. This area is, at present, a muddle.

The practical issues associated with valuing options granted to employees are almost as thorny as the theoretical ones. Proponents claim that the well-known Black-Scholes financial option model is adequate to assign a value at the time of the option's grant, and that a fraction of this value can then be charged against earnings each year until the option is exercised or expires.

This proposal has defects. First, there are significant differences between ordinary financial options and employee options in terms of transferability, duration, price, forfeitability, and timing of exercise. Second, a purchaser of a conventional financial option is an outsider investor; an employee receiving an option is hoping to profit from the capitalized value of his own future efforts, and is thus in a position to influence the value of the option for better or worse. Third, Black-Scholes depends on significant and uncertain assumptions about volatility, and was developed for use in highly liquid markets -- a condition that rarely applies to start-ups or small companies.

These factors make the applicability of Black-Scholes suspect. When Coca Cola recently announced, with considerable sanctimony, that it would treat options as compensation expense items, it did not simply decide to apply Black-Scholes. It will hire two investment banks to appraise the options, and then combine the two.

Finally, the argument that expensing options will provide investors with a more accurate earnings number is absurd. A company will be required to make a B-S estimate when the option is granted, in Year 0. This estimate will then be spread as a cost over the period during which the option is open - say, five years. During that period, the stock will fluctuate in market value. In Year 5, the option will, obviously enough, be worth something different than 20 percent of the estimate made five years before. Perhaps it will be worthless; perhaps it will be valuable. But it will certainly be different. Nonetheless, investors would be faced with an earnings number that reflected the original estimate. This would make it more a nuisance than a help, since it would have to be stripped out to provide a picture of current operations.

For example, in November 2002, Cisco reported that expensing outstanding options according to B-S estimates applied as of the time of the various grants would reduce its quarterly earnings from $618 million to $250 million. Sound impressive? Not really: over two-thirds of its outstanding options are currently underwater.