

## Options Options

*By Reuven Brenner and Donald L. Luskin*

In the wake of the Enron debacle, the firefight over reforms to prevent abuses in executive stock options has only proved one thing: that no one has learned the lessons of Enron.

The adversarial prejudices of the politicians, pundits and big-business spokesmen have focused the debate on isolated symptoms -- deceptive earnings reporting, tax breaks, fat-cat compensation, lax corporate governance -- and ignored the underlying disease: a fundamental misunderstanding of the nature of options. For all the billions of dollars of options that have been issued and exercised, no one has understood options for what they really are: risky assets and liabilities that should live first and foremost on a firm's balance sheet.

Every investment and activity entails risk. Companies both take risk and use strategies to hedge against -- or control -- risk. They don't always succeed, especially when risk is not well disclosed. Enron, for example, with its massive hidden debt, was a risk-control problem. The high-flying hedge fund Long Term Capital Management, with its levered derivatives portfolio, was a risk-control problem. So are stock options, which entail elements both of hidden debt and of derivative securities. Thus the solution to options abuses will be a risk-control solution, beginning with proper risk-disclosure on the firm's balance sheet.

But first, let's set aside what's *not* really important about options:

Abuses of stock options don't happen because their costs fail to show up on company income statements -- a helpful if imperfect version of this has been a mandatory part of the notes to consolidated financial statements for years;

Abuses don't happen because option expenses are tax-deductible to the firms that issue them -- the current tax code allows a fair deduction based on the true economic cost of options issuance;

Abuses don't happen because boards of directors and shareholders don't have to approve all options grants -- there are loopholes, but generally grants must be duly approved;

And abuses don't happen because options misalign incentives between executives and shareholders -- the alignment isn't perfect and diligent boards should work to improve it, but at least options get executives working toward a higher share price.

Here's what is important about options abuses. Options abuses happen for precisely the reason that Enron blew up: because accounting rules permit them to be kept off a firm's balance sheet -- despite the fact that they represent material risks. And that keeps investors, analysts, regulators and boards of directors in the dark about the true risks being taken by the firm.

Options issued as part of compensation packages are risky derivatives. The risk profile for Cisco or Microsoft or General Electric when they issue options is the same as it would be for you if you shorted exchange-traded options on those stocks. Specifically, if the option-holder exercises an option, whoever sold it to him has to deliver stock to him at the option's exercise price – no matter how much higher than that the stock happens to be. Such risks should appear on balance sheets, and should be marked to market to reflect their current value. Right now, options are an off-balance-sheet risk, just like Enron's famous partnerships. Sure, diligent investors can learn a lot from what's already disclosed in the footnotes – but risky liabilities belong right on the balance sheet, for all the world to easily see.

The willingness of an employee to forego wage income in order to get options of unknown future value is an off-balance sheet risk, in which the employee trades his own “human capital” for the option. An option holder may labor for nothing during the bad times when the firm's stock declines – and shareholders' losses will be offset by wage savings. When the firm's stock is higher, employee option-holders get a piece of the upside, while shareholders keep the lion's share. So options are a heads-I-win, tails-I-win deal for shareholders – owners of financial capital. But employees -- owners of human capital -- like them too because it gives them a shot at the gold ring on the upside.

This risk-bearing by employees is thus an *asset* of the firm -- the crystallization of human capital -- and should be carried on the firm's balance sheet as such. Besides creating a clear-eyed accounting, this would make a vibrant reality out of the hollow slogan we've heard for years from business pundits: “People are a company's most important asset, and one that goes down the elevator at 5 o'clock every day.”

If the options liability and the human capital asset they represent were on the balance sheet, we would see, for the first time, how much risk a firm is really taking by using options. And we would have an analytical framework that would lead straightforwardly to robust solutions for all the other concerns that have so far dominated the debate -- expensing, taxation, incentives and shareholder rights. If you get the definitions right—options are liabilities, not wages; and people are assets, not labor—everything else falls into place.

Here's how it could work.

When options are first issued, the claim on human capital that they have purchased would be recorded on the balance sheet as an intangible *asset*. At the same time, the options themselves would be recorded as a financial *liability* on the balance sheet. Both would be assigned the same value, estimated by a standardized options valuation algorithm such as the well-known Black Scholes model.

Because an asset and liability of perfectly offsetting value are put on the balance sheet at the same time, there is no immediate impact on earnings. At this stage the asset representing human capital—the employee in question—has not yet produced anything. And the option liability reflects the obligation to pay if the human capital is eventually transformed into something tangible: a commercially successful new technology, drug, movie, other product or service.

Even though the asset and liability perfectly offset each other, the now-larger balance sheet sends an important signal to investors: The firm has become more levered, and is taking more risk. It has acquired a risky asset in the form of human capital, and has committed to a risky liability in the form of the option.

Over the life of the option, the value of the human capital asset on the balance sheet depreciates toward zero, as the claim on human capital runs off. At the same time, the option liability on the balance sheet is marked to market at its current Black Scholes value, reflecting the ongoing success or failure of the initiatives undertaken by the people who put their human capital at risk. Increases in the value of the option liability (when the firm's stock goes up) would be recorded in the income statement as an expense; decreases (when the firm's stock goes down or remains unchanged) would be recorded as a gain.

When the option is exercised, the human capital asset is depreciated all the way to zero. The option liability is marked at its intrinsic value -- the difference between the exercise price at which the employee can buy the firm's stock, and the stock's market value. The corresponding income statement entries will bring the cumulative gains and expenses from the asset and the liability, taken together, to precisely the intrinsic value of the option at the time of exercise. On the other hand if the option holder leaves the firm and abandons his entitlement, both the human capital asset and the option liability on the balance sheet are written down to zero. On the income statement the cumulative expenses and gains go to zero.

The table below illustrates how IBM's balance sheet and pre-tax earnings would change by applying the balance sheet solution. Naturally, some simplifying assumptions have been made considering that not all necessary data is publicly available in sufficient detail. Figures are in millions, except for share prices.

Fiscal year	Options issued	Stock price	As reported			Balance-sheet solution			The options effect		
			Assets	Liability	Pre-tax net	Assets	Liability	Pre-tax net	On assets	On liabilities	On pre-tax net
1995	26.0	22.84	80,292	57,869	7,813	80,605	58,857	6,765	313	988	(1,048)
1996	30.8	37.80	81,132	59,504	8,587	81,585	61,815	6,871	453	2,311	(1,716)
1997	42.8	52.31	81,499	61,863	9,027	82,184	65,528	7,336	685	3,665	(1,691)
1998	41.2	92.19	86,100	66,667	9,040	87,274	74,625	4,305	1,174	7,958	(4,735)
1999	42.7	107.88	87,495	66,984	11,757	89,977	76,519	9,478	2,482	9,535	(2,279)
2000	42.6	85.00	88,349	67,725	11,534	91,835	73,631	14,947	3,486	5,906	3,413
2001	43.4	120.96	88,313	64,699	10,953	92,756	75,497	5,537	4,443	10,798	(5,416)

First warning: options liabilities begin to exceed human capital assets

The stock surges, option liabilities swell, and earnings are impaired

The stock drops, option liabilities collapse, and earnings get a boost

The stock runs to new highs as more options are issued -- liability hits new highs, too, and earnings suffer

How does the balance sheet solution impact the issues at stake in today's debate about stock options? First, it addresses inadequacies in the two alternative options accounting regimes available under Generally Accepted Accounting Principles.

Accounting Policy Board Option No. 25 permits options to be expensed at zero because they have no cash value at issue, and consume no cash at exercise. This regime is economically wrong, because it ignores the cost to the firm entailed by issuing stock at a below-market price when options are exercised, and thus fails to recognize that a true economic cost is being borne beyond the dilution that results from share issuance. When an IBM option holder exercises an option with an exercise price of 50 when the stock is at 90, that's a cost to IBM of 40 – and it should be reflected on the income statement like any other cost of doing business.

On the other hand, Financial Accounting Standards Board Statement No. 123 permits options to be expensed at their Black Scholes value at the time of issue, spread over their expected life. This regime is economically wrong, too. It enshrines a highly subjective Black Scholes estimate forever—too low if the options are eventually exercised at a price higher than their value at issue, too high if either the intrinsic value goes lower than at issuance, or the option is abandoned altogether.

Under our approach, expenses flow naturally from the balance sheet to the income statement. This approach uses the Black Scholes value only as an approximation, for risk signaling purposes *during* the option's life. But at exercise the subjective Black Scholes values converge to objective intrinsic value, and at abandonment they become zero.

The logic of a balance sheet solution dictates that options *should be* expensed. As the value of human-capital assets and option liabilities change, the inevitable results are expenses and charges on the income statement. Yes, not just charges, but credits as well -- in periods when a firm's stock declines, the marked-to-market value of its options liability declines, and that will show up on the income statement as a credit to earnings.

Other than an executive's fantasy of not having to disclose expenses, we don't see any arguments against this approach. We dismiss the typical op-ed columns that rail against expensing options under the banner of "options are good for the economy," no matter how they accounted for. Form matters, because it reflects reality, and brings clarity and transparency to important issues of risk. But on the other hand, we dismiss "options are evil" arguments that seek to impose expensing as a means of curbing options issuance. The question isn't whether options are good or bad—although we believe they are often quite useful. The question is simply how to best reflect this risky form of compensation in financial statements.

The balance sheet solution also resolves the debate about taxation of options expenses. The cumulative expenses recorded on the income statement would correspond exactly to the tax deduction to which the firm is entitled, ending the so-called "double standard" between expensing rules and tax deduction calculations targeted by Senators Levin and McCain in Senate Bill 1940.

The balance sheet solution would also apply perfectly to new generations of incentive arrangements -- not just today's simple stock options. A balance sheet solution provides all the information necessary for informed evaluation of incentives by boards of directors and shareholders. Until that kind of information is available, it will do no good to pass new regulations requiring new board committees and ever-longer proxy statements.

So let the self-interested pleadings about options end -- from the anti-options Old Economy companies that don't use them, pro-option New Economy companies that need them, senators seeking new revenue sources and regulators seeking new powers. Let's learn the right lesson from Enron.

And let Warren Buffet ask yet again, "If options expenses shouldn't go into the calculation of earnings, where in the world should they go?" We have an answer. Put options and their associated human capital on the balance sheet, where they belong.

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