

THOUGHT CONTAGIONS

Stock Options Expense: The Big Truth

Wednesday, May 15, 2002

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Standard & Poor's [announced yesterday](#) that it will henceforth include the expense of stock options in their computation of corporate operating earnings. Under current accounting rules, only two companies in the S&P 500 opt to include such expenses in their own income statements.

S&P warns that its "Research shows that options expense could lower Core Earnings by as much as 10%." While a 10% hit to earnings sounds like a lot, the real impact of options expense is much greater. The method S&P will use to calculate options expense produces unrealistically low results. Our research using more robust methods shows that options expense lowers earnings by far more than 10% for many significant companies, especially technology companies that use options heavily and have highly volatile stocks.

S&P's definition of options expense will be the one given by **Financial Accounting Standards Board [Statement 123](#)**, which, since 1995, has required companies to disclose such expense on a pro forma basis in the notes to the consolidated financial statement. SFAS 123 defines options expense as the "fair value" of stock options at the time they are first issued, as calculated by an options pricing model such as **Black-Scholes** -- spread over the expected life of the options.

Even if we ignore the estimation issues associated with any options pricing model, fair value at time of issue is almost certain to not reflect the actual economic expense of stock options. Actual expense is only known when the option expires, is cancelled, or is exercised. An option that expires or is cancelled has an economic expense of zero. An option that is exercised has an economic expense equal to its "intrinsic value" -- the difference between its exercise price and the stock price at the time of exercise.

In a bull market, options *don't* expire and they *do* get exercised. So the true economic costs to companies that issue options -- even over a full market cycle -- will generally be far greater than the SFAS 123 pro forma numbers that investors are used to seeing, and that S&P will use. The table on the following page shows **Microsoft's** option expense for fiscal years 1995 to 2001 using the SFAS 123 method -- and compares it to three alternative methods, which will be explained in a moment.

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Microsoft Corporation
Pre-tax income and option expense
In \$millions
Source: Company filings, Trend Macrolytics research

Fiscal year	Reported pre-tax income	Options expense			
		SFAS123 method	Tax method	Exercise method	Risk method
1995	2,167	314	511	870	4,393
1996	3,379	451	1,006	1,520	3,290
1997	5,314	615	2,263	3,308	15,812
1998	7,117	852	4,437	5,844	19,512
1999	11,891	1,041	8,877	10,935	26,391
2000	14,275	1,443	15,814	16,003	(7,518)
2001	11,525	3,377	5,903	6,466	(4,538)
Total	55,668	8,093	38,811	44,946	57,342
		15%	70%	81%	103%

The SFAS 123 method shows the lowest expense among the four methods. But at \$8.1 billion, representing 15% of cumulative pre-tax income, even this lowest number this blows past S&P's warning of "as much as 10%." The other three methods calculate far greater expense -- and *they* are right.

The tax method shows option expense of \$38.8 billion, or 70% of cumulative pre-tax income. This is based on the tax benefits claimed by Microsoft for options expense, as reported on their statement of shareholder equity. Tax laws allow companies to treat the intrinsic value of exercised options as an expense (even though it is not reported as such on the income statement), and thus as an offset to taxable income. Assuming a 35% tax rate, the reported tax benefit can be converted into an estimate of total intrinsic value of exercised options, which is a better estimate of true options expense than the fair value of options at the time of issue.

The exercise method shows option expense of \$44.9 billion, or 81% of cumulative pre-tax income. This is based on the number and weighted-average exercise price of options exercised each year, as reported in the notes to consolidated financial statements. Assuming that options were exercised at the average stock price for each fiscal year, the total intrinsic value can be calculated.

The risk method shows options expense of \$57.3 billion, *more than Microsoft's entire cumulative pre-tax income from 1995 to 2001*. This is based on treating newly issued options as offsetting assets and liabilities on the balance sheet -- the asset representing the company's claim on human capital, and the liability representing the human capital's claim on the company. Over time the asset is depreciated as work is performed, and the liability is marked to market as the stock fluctuates. Changes in the net value of the human capital assets and option liabilities are reflected each fiscal year as charges or credits on the income statement. This method is described in great detail in our article for *The American Spectator*, ["Options Options."](#)

The risk method gives the highest options expense because it accounts for *both* the expense of options that are exercised each year *and* the liability of options that have not yet been exercised. When a company's stock goes up, the value of all its unexercised options goes up,

increasing the liability and leading to a charge to income. When the stock goes down, the value of the liability decreases -- leading to a credit to income. Note that in the table above, sharp reductions in the options liability in 2000 and 2001 resulted in significant credits for Microsoft as its stock price declined.

Microsoft is an especially potent example of the true magnitude of options expense, because it has granted options lavishly over a long period, and its stock has risen steadily over the years (except for the last two years, of course). But other companies show similar pattern of options expense over time, and at a level of magnitude that would probably shock most investors into disbelief.

Indeed, it does seem unbelievable that the world's most powerful technology company hasn't made a profit for the last seven years -- or, more precisely, that all the profits it *did* earn were consumed by option holders who enjoyed an uncapped claim indexed to a runaway stock price in a great bull market. But -- believe it or not -- it's true.

The inescapable fact is that when an option is exercised, the company issues stock at a below-market price. That's an expense, as surely as if the company had issued stock at the full market price and turned around and paid the difference to the option-holder in cash.

And unexercised outstanding options are indeed important liabilities. They are risky and levered derivative securities, no different in principle from the derivatives employed by **Long Term Capital Management**. Under current accounting rules these liabilities are off-balance sheet, no different in principle from **Enron's** famous partnerships.

It will take time for these truths to be digested, and for their impact to be felt. As with other issues of accounting integrity that we've confronted over the last year, one impact will probably be a re-examination of the premiums investors are willing to pay for growth stocks. Investors may hesitate to bid up stocks speculatively once they understand that this will increase options liabilities. Another impact could be a wholesale renegotiation of the terms on which financial capital and human capital engage each other. That bargaining process will be rocky, and many babies are bound to be thrown out with much bathwater.

Trend Macrolitics will be monitoring these developments carefully for clients. **TM**