Frederic W. Cook & Co., Inc.

New York • Chicago • Los Angeles

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FORCES TO OVERTHROW STOCK OPTION ACCOUNTING GAINING STRENGTH

The purpose of this letter is to alert HR and compensation professionals that major forces are building to change current accounting standards for employee stock options and to quantify the effects of such a change. As a result of the Enron collapse and the complicity of loose accounting practices in that scandal, the current accounting practices for stock options have fallen under attack as well.

Levin Bill

The first shot in this battle was fired by Senator Carl M. Levin (D-Mich.) who, on February 13, introduced a bill to deny a corporate tax deduction for option gains in the year of exercise unless the same amount was charged against earnings.[1] While being a tax bill, and ostensibly not directed at accounting, in the floor speech introducing his bill Senator Levin said, “As another lesson learned from the Enron debacle, this bill addresses a costly and dangerous double standard that allows a company to take a tax deduction for stock option compensation as a business expense while not showing it as a business expense on its financial statement.”

Business Week, in an editorial in its March 4, 2002, issue, “Don’t Get Rid of Stock Options. Fix ‘Em,” said that the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB), the U.S. and international accounting standards setting boards, respectively, both support the Levin bill.

Current and Proposed Stock Option Accounting

Currently, there is no P&L expense for most employee stock options because there is no gain, or intrinsic value, on the date of grant. The value of an option lies in the opportunity the employee has to participate in future stock price growth. **Proponents of change** believe that since stock options have a value, they also must have a cost, and this cost should be recognized in a company’s income statement. They believe the value of options can be measured at grant by option-pricing models such as Black-Scholes, and that this so-called “fair value” should be charged to earnings as compensation expense and amortized over the option’s vesting period. They believe that a charge for options will result in a more accurate representation of operating earnings, and that the absence of a charge has contributed to overuse of employee stock options (which dilute shareholders’ interests) and excessive executive compensation.

[1] "Ending the Double Standard for Stock Options Act” (S.1940); see our letter of February 28

Opponents of change argue that option-pricing models do not accurately measure the value of employee options at grant, and that the veracity of financial statements would be worsened, not improved, by adding a charge for an estimate of a hypothetical value that is never trued up.

The Black-Scholes Value of Options

It is not our purpose here to rehash the arguments for and against an accounting charge for stock options. These strongly held views have been amply documented elsewhere,[2] and have not changed since the early 1990s. Our purpose is to quantify the value of options at grant so that readers may arrive at their own conclusions as to the likely effect of a charging this "fair value" to earnings. We calculated the Black-Scholes values of stock option grants on February 25 for each of the 30 companies comprising the Dow Jones Industrial Average (DJIA) and, for perspective on the technology sector, those 100 companies comprising the NASDAQ 100 Index. The results, shown in full detail on the attached Exhibit, are summarized in the following table, with the option's value shown as a percent of the stock's fair market value at grant:

Black-Scholes Value as % FMV

	DJIA Cos.	NASDAQ 100 Cos.
High	65%	95%
75th Percentile	44%	81%
Median	**37%**	**71%**
25th Percentile	34%	61%
Low	18%	28%

Note: Values assume option price equals market price on grant date, a seven-year expected exercise term, and a three-year time-weighted volatility and dividend yield

Thus, for example, a DJIA company which granted seven-year options to its employees at $40 a share, with an option price of $40, would have an earnings charge of **37%** of market value at grant, or **$14.80** a share, if the proposed accounting change occurs. The accounting charge for the median Nasdaq 100 company would be **71%** of market value, or **$28.40** a share, with the same grant price and terms. Note that the Black-Scholes values for NASDAQ companies are almost twice as high as DJIA companies, reflecting higher volatility and lower dividend yields.

High-growth technology companies which tend to trade on the NASDAQ, typically have higher stock option grant rates and higher P/E ratios. Hence, they would be more adversely affected by the accounting change. If the median DJIA company had a P/E of 20 and an annual option grant rate of 2% of outstanding shares, the effect of the accounting change would be a net income reduction of **9%** a year. Conversely, if the median NASDAQ 100 company had a P/E ratio of 40

[2] See our opinion letters of December 14, 2001, November 9, 2001, October 3, 2001, August 9, 2001, June 22, 2001, and February 17, 1994

and an annual stock option grant rate of 4% of outstanding shares, its net income (and presumably its stock price) would decline **68%**:

Effect on Net Income of Stock Option Accounting Changes

	DJIA Cos.	NASDAQ 100 Cos.
1. P/E Ratio	20%	40%
2. Stock Option Annual Grant Rate	2%	4%
3. Black-Scholes Value	37%	71%
4. Annual Option Expense as % Net Income (1*2*3*[1-40%])	**9%**	**68%**

Inferences That May Be Drawn

Changes to GAAP accounting should only be made to improve the accuracy, relevance and comparability of financial statements, not to achieve some desired economic end. Thus, opponents of current accounting treatment for employee stock options should not argue for change because they believe present rules encourage excessive use of options. Likewise, opponents of change should not argue for preserving the status quo just because change would reduce the use of stock options, an action which could reduce productivity and further weaken the economy.

That said, it is reasonable to assess the implications of a change in stock option accounting on competitive practice. Our assessment is simple: the Black-Scholes values of options are so high in relation to market values that companies might severely cut back or eliminate their use if forced to expense the "fair value" of options on their income statements.[3] Recent research by Professors Brian Hall and Kevin Murphy shows that the perceived value of stock options to executives at grant is typically around one-half to two-thirds of the Black-Scholes value, but often it is as little as one-third.[4] If true, companies would not likely continue to grant options that had a cost 50-200% greater than their perceived value.

Stock options would be most adversely affected in those companies which have been among the heaviest users – high-growth technology companies. Companies that cut back or eliminate stock options would likely eliminate broad-based grants and employee stock purchase plans first. Then, for those at more senior levels, they would substitute some other form of equity grant for options, such as restricted or performance shares. This likely would only be for a fraction of the "fair value" of the forgone options, however, because companies would not believe that these Black-Scholes values were real values that needed to be replaced.

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[3] This assumes the FASB would not allow companies to treat option expense transparently as a separately identifiable non-operating expense.

[4] The Journal of Accounting and Economics, April 2002

Our intent in this letter has been to alert companies to an emerging issue in stock option accounting, to quantify the effects of what is otherwise an esoteric debate, and to encourage companies to think about the outcomes of a change in accounting on competitive practice. Questions about this letter may be directed to Fred Cook at 212-986-6330. This and other mailings of our firm are available at www.fwcook.com

DOW JONES INDUSTRIALS

Black-Scholes Values*

Company	Ticker	B-S Ratio as % of FMV
Alcoa Inc.	AA	43.00%
American Express Co.	AXP	39.30%
AT&T Corp.	T	44.12%
Boeing Co.	BA	45.50%
Caterpillar Inc.	CAT	32.44%
Citigroup Inc.	C	36.27%
Coca-Cola Co.	KO	34.52%
E.I. DuPont de Nemours & Co.	DD	28.29%
Eastman Kodak Co.	EK	36.66%
Exxon Mobil Corp.	XOM	21.75%
General Electric Co.	GE	33.82%
General Motors Corp.	GM	36.63%
Hewlett-Packard Co.	HWP	56.30%
Home Depot Inc.	HD	47.28%
Honeywell International Inc.	HON	53.44%
Intel Corp.	INTC	65.02%
International Business Machines Corp.	IBM	46.26%
International Paper Co.	IP	35.69%
J.P. Morgan Chase & Co.	JPM	34.01%
Johnson & Johnson	JNJ	33.08%
McDonald's Corp.	MCD	36.84%
Merck & Co. Inc.	MRK	34.07%
Microsoft Corp.	MSFT	58.90%
Minnesota Mining & Manufacturing Co.	MMM	27.69%
Philip Morris Cos. Inc.	MO	17.57%
Procter & Gamble Co.	PG	34.52%
SBC Communications Inc.	SBC	34.63%
United Technologies Corp.	UTX	43.94%
Wal-Mart Stores Inc.	WMT	41.28%
Walt Disney Co.	DIS	43.06%

High	65.0%
75th Percentile	44.1%
Median	36.6%
25th Percentile	34.0%
Low	17.6%

* Priced as of 2/25/02, assumes a 7-year term and a 4.83% risk-free rate

Exhibit

02/27/02

NASDAQ 100 COMPANIES

Black-Scholes Values*

Company	Ticker	B-S Ratio as % of FMV
Abgenix, Inc.	ABGX	90.23%
ADC Telecommunications, Inc.	ADCT	65.00%
Adelphia Communications Corporation	ADLAC	64.61%
Adobe Systems Incorporated	ADBE	71.49%
Altera Corporation	ALTR	72.87%
Amazon.com, Inc.	AMZN	81.43%
Amgen Inc.	AMGN	48.58%
Andrx Group	ADRX	62.47%
Apollo Group, Inc.	APOL	49.94%
Apple Computer, Inc.	AAPL	73.04%
Applied Materials, Inc.	AMAT	65.51%
Applied Micro Circuits Corporation	AMCC	91.13%
Atmel Corporation	ATML	77.22%
BEA Systems, Inc.	BEAS	85.86%
Bed Bath & Beyond Inc.	BBBY	54.29%
Biogen, Inc.	BGEN	51.99%
Biomet, Inc.	BMET	43.87%
Broadcom Corporation	BRCM	91.09%
Brocade Communications Systems, Inc.	BRCD	94.05%
CDW Computer Centers, Inc.	CDWC	69.10%
Cephalon, Inc.	CEPH	73.78%
Charter Communications, Inc.	CHTR	63.93%
Check Point Software Technologies Ltd.	CHKP	77.73%
Chiron Corporation	CHIR	53.92%
CIENA Corporation	CIEN	85.87%
Cintas Corporation	CTAS	51.59%
Cisco Systems, Inc.	CSCO	66.83%
Citrix Systems, Inc.	CTXS	84.54%
Comcast Corporation	CMCSK	39.64%
Compuware Corporation	CPWR	74.35%
Comverse Technology, Inc.	CMVT	67.00%
Concord EFS, Inc.	CEFT	47.36%
Conexant Systems, Inc.	CNXT	78.78%
Costco Wholesale Corporation	COST	51.47%
CYTYC Corporation	CYTC	61.42%
Dell Computer Corporation	DELL	64.99%
eBay Inc.	EBAY	72.45%
EchoStar Communications Corporation	DISH	66.37%
Electronic Arts Inc.	ERTS	56.88%
Express Scripts, Inc.	ESRX	59.67%
Fiserv, Inc.	FISV	52.02%
Flextronics International Ltd.	FLEX	78.14%
Gemstar-TV Guide International Inc.	GMST	80.71%
Genzyme General	GENZ	55.38%
Gilead Sciences, Inc.	GILD	67.02%
Human Genome Sciences, Inc.	HGSI	82.03%
i2 Technologies, Inc.	ITWO	91.58%
ICOS Corporation	ICOS	64.06%
IDEC Pharmaceuticals Corporation	IDPH	73.98%
ImClone Systems Incorporated	IMCL	86.21%
Immunex Corporation	IMNX	83.50%
Integrated Device Technology, Inc	IDTI	82.13%
Intel Corporation	INTC	65.02%
Intuit Inc.	INTU	68.50%
Invitrogen Corporation	IVGN	64.56%
JDS Uniphase Corporation	JDSU	76.90%
Juniper Networks, Inc.	JNPR	93.98%
KLA-Tencor Corporation	KLAC	74.42%
Linear Technology Corporation	LLTC	60.45%
LM Ericsson Telephone Company	ERICY	61.36%
Maxim Integrated Products, Inc.	MXIM	63.73%
MedImmune, Inc.	MEDI	60.71%
Mercury Interactive Corporation	MERQ	82.46%
Microchip Technology Incorporated	MCHP	67.27%
Microsoft Corporation	MSFT	58.90%
Millennium Pharmaceuticals, Inc.	MLNM	82.49%
Molex Incorporated	MOLX	49.84%
Network Appliance, Inc.	NTAP	91.58%
Nextel Communications, Inc.	NXTL	72.66%
Novellus Systems, Inc.	NVLS	74.02%
NVIDIA Corporation	NVDA	80.60%
Oracle Corporation	ORCL	70.87%
PACCAR Inc.	PCAR	27.80%
PanAmSat Corporation	SPOT	47.16%
Paychex, Inc.	PAYX	39.69%
PeopleSoft, Inc.	PSFT	82.89%
PMC - Sierra, Inc.	PMCS	92.68%
Protein Design Labs, Inc.	PDLI	91.85%
QLogic Corporation	QLGC	94.54%
QUALCOMM Incorporated	QCOM	69.02%
Rational Software Corporation	RATL	86.09%
RF Micro Devices, Inc.	RFMD	88.15%
Sanmina-SCI Corporation	SANM	75.12%
Sepracor Inc.	SEPR	76.24%
Siebel Systems, Inc.	SEBL	85.01%
Smurfit-Stone Container Corporation	SSCC	52.82%
Staples, Inc.	SPLS	53.35%
Starbucks Corporation	SBUX	59.41%
Sun Microsystems, Inc.	SUNW	70.07%
Symantec Corporation	SYMC	74.36%
Synopsys, Inc.	SNPS	58.73%
Tellabs, Inc.	TLAB	66.22%
TMP Worldwide Inc.	TMPW	71.07%
USA Networks, Inc.	USAI	54.45%
VeriSign, Inc.	VRSN	79.76%
VERITAS Software Corporation	VRTS	79.02%
Vitesse Semiconductor Corporation	VTSS	87.94%
WorldCom, Inc.	WCOM	62.25%
Xilinx, Inc.	XLNX	75.09%
Yahoo! Inc.	YHOO	79.44%

High	94.5%
75th Percentile	80.9%
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25th Percentile	60.6%
Low	27.8%

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