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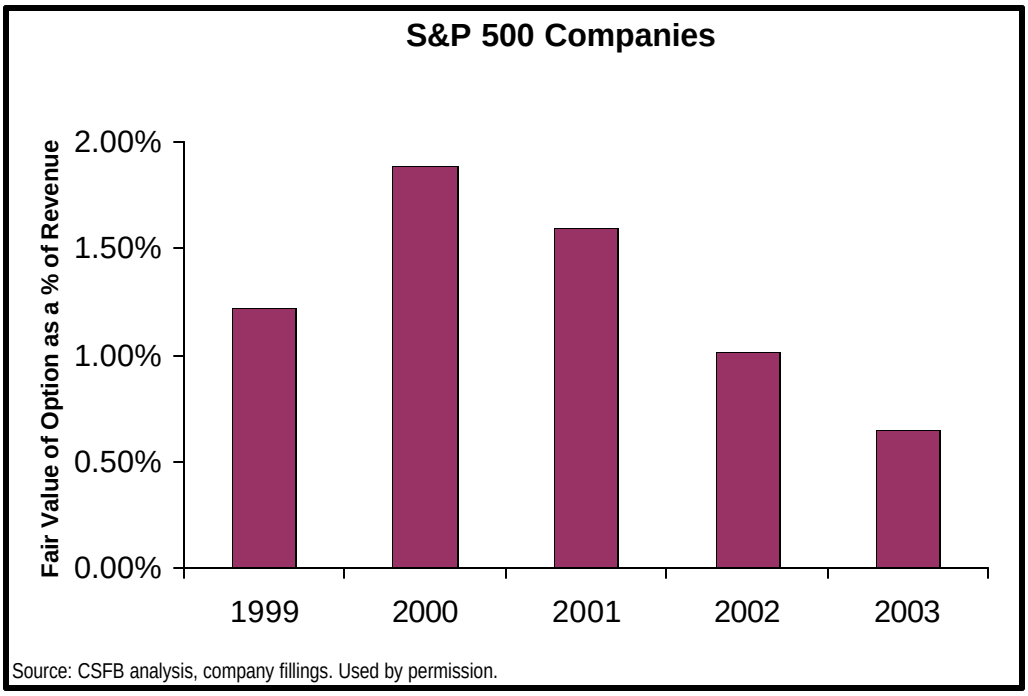
Employee Stock Options

Theory and Practice

I have no objection to the granting of options. Companies should use whatever form of compensation best motivates employees–whether this be cash bonuses, trips to Hawaii, restricted stock grants or stock options. But aside from options, every other item of value given to employees is recorded as an expense.

Warren Buffett
Fuzzy Math and Stock Options [1]



- **Employee stock options capture many corporate governance challenges, including compensation philosophy and financial disclosure policy.**
- **Options make sense if they motivate employees to create sufficient corporate value to offset the dilution they cause.**
- **Voluminous evidence now points to the reality that the market properly considers options expense in valuation.**
- **We believe investors should treat outstanding stock options as a contingent claim and future grants as an expense.**

Corporate Governance

Intelligent capital allocation is a management team's core responsibility. How a company allocates capital often relates directly to management's incentives. A company's corporate governance policy can often provide good insight into how managers will likely behave. [2]

Good corporate governance, in our opinion, boils down to two things. First is a company's ability to reduce, and ideally eliminate, agency costs. These costs arise when agents (managers) run a company in ways beneficial to themselves instead of the owners (shareholders). For instance, many mergers benefit managers by increasing firm size, and consequently executive pay, at the expense of shareholder value. Well-structured company policies should serve to align the interests of managers and shareholders.

Second, incentives must be consistent with economic value creation. Corporations frequently and unwittingly employ incentives they *believe* are consistent with creating wealth but which fail the value creation test. One prominent example is managing a company for earnings per share growth. A company must generate returns above the cost of capital in order to create value. But a company can still grow earnings while generating returns below the cost of capital. As a result, earnings growth can increase, decrease, or be irrelevant for shareholder value.

We choose corporate governance as a primary focus because it relates directly to economic performance. A recent academic study of about 1,500 companies showed firms with the best governance policies generated substantial excess shareholders returns, grew faster, and invested more judiciously than companies with less favorable governance profiles. [3]

Employee stock options (ESOs) have been a contentious issue in recent years. While only one facet of an overall governance policy, ESOs nonetheless encapsulate many of governance's challenges, including a company's compensation philosophy and financial disclosure policy.

This report addresses a number of questions:

- What is an appropriate philosophy regarding ESOs?
- How large an issue are ESOs?
- What is the proper accounting treatment for ESOs?
- How broadly should companies grant options within an organization?
- What's the best way to treat ESOs in a valuation model?

ESO Philosophy – Get More than You Give Up

Why should companies offer employee stock options at all? Options make sense if they motivate employees to create sufficient corporate value to offset the dilution they cause. Fundamentally, options are a motivational investment, and like any investment an option's benefit must exceed its cost to shareholders. Evidence that ESOs motivate superior performance is ambiguous at best. [4]

In fact, leading researchers argue that the swell in option programs over the past decade primarily reflects the favorable accounting treatment options receive versus other compensation forms—especially cash—and not an economic cost-versus-benefit analysis. [5] The stir created in the earnings-sensitive corporate sector, and especially in Silicon Valley, by the Financial Accounting Standards Board's (FASB) proposal to require all companies to expense options by 2005 supports this accounting-versus-economics reasoning.

While the focus on accounting results may have good intentions, the result is not always benign. Remarkably, one study found that the median company in its sample incurred $0.64 in *real economic costs* in order to avoid expensing options and increase reported pre-tax (but not economic) earnings by $1.00. The authors note that if managers are motivated by the accounting treatment, "then broad-based option grants are a manifestation of a corporate governance problem—the separation of ownership and control permits managers to take actions that owners would prefer to undo." [6]

We encourage managements to treat options as either compensation or as an incentive tool. If options are compensation, the company should reduce the amount of cash it pays its employees. This wage substitution occurs especially with start up companies, as companies tend to increase their cash compensation as the business matures. Further, options granted by startups are effectively equity stakes because strike prices for early stage companies are often very close to zero.

Options-for-cash substitution is potentially costly because, as a rule, the value of pay via options for the employee is lower than the cost to shareholders. Studies suggest that since employees are risk adverse and lack diversification, they only value an at-the-money option grant at 50-75% of its cash value. [7]

Ideally, companies should pay for performance when they use options for incentives. Corporate boards should structure payoffs for executives only after a company's stock price outperforms an appropriate benchmark like the S&P 500 index or a proper peer group. Index options—where the strike price changes to match an index or benchmark—solve this problem well. [8] But index options remain extremely rare due to a host of practical hurdles, including difficulties in valuation and onerous accounting treatment.

Shareholder Worries – Implicit Promises and Escalators

From a shareholder's perspective, an analytical challenge arises when companies grant options to employees with an implicit promise that the options will be valuable. When the stock market declines broadly, as it did in 2000-2002, companies frequently reprice options or grant new ones.

The decision to reprice creates a difficult trade-off. If the company doesn't reprice and can't afford to increase cash compensation, it risks losing the very lifeblood of its value creation: key employees. Evidence suggests that repricing does lead to higher retention. [9] On the other hand, if a company does reprice, it risks institutionalizing a pay delivery system, thus subverting the spirit and objectives of an incentive compensation program.

Option repricing may also be one of the last bastions of insider information. Researchers find that executives systematically time repricings to coincide with favorable movements in the company's stock price. Exhibit 1 shows the stock price performance before and after the repricing date for a sample of over 200 repricing events. Investors may be able to use repricings as cue of better days ahead. [10]

Exhibit 1: Repricing Often Signals Better Times Ahead

Source: Sandra Renfro Callaghan, P. Jane Saly, and Chandra Subramaniam, "The Timing of Option Repricing", *The Journal of Finance*, August 2004, 1670. Used by permission.

Good management (and compensation committee oversight) involves getting the best value for the money a company spends. While managers and boards generally treat executive compensation differently than every other expense, they should not. [11] Every dollar a company spends is gone for the owner, whether spent on labor, raw materials, marketing, or anything else. No company aims to have raw material costs or selling, general and administrative (S,G&A) costs in the top quartile of comparable companies. Likewise, no compensation committee should have an objective of paying management more than the competition: the goal should be to treat compensation like any other cost. It would be praiseworthy if a compensation committee said top management costs were in the bottom half, not top half, of a comparable-company range.

Yet this is not what happens. In a poll of 100 firms, compensation expert Graef Crystal found that one-third of the companies wanted to position their CEO pay in the top 25%, and the other two-thirds aimed at or above the average. Not a single company wanted to be below average. [12] From a shareholder perspective, the drawback is that executives peg themselves to an upward moving compensation target for no reason other than the fact that others do it as well.[13]

Crystal's results, while hardly surprising, provide an example of what critics call the Lake Wobegon Effect. Relative pay has no necessary connection to pay for performance.

How Large An Issue Are ESOs?

So how big an issue are employee stock options? [14] Over the past five years, every company in the S&P 500 used ESOs and about 60% used restricted stock. However, the amount of option grants is concentrated in a few industries—notably technology and financial services—where the primary assets are people. Today, the value of all outstanding ESOs in the S&P 500 is about $350 billion, a small fraction of the index's equity capitalization (over $10 trillion) and total debt (over $5 trillion).

The stock market's sizeable multi-year correction, the sharp focus on corporate malfeasance, and the imminence of accounting rule changes caused boards to reign in the grandiosity of option grants in recent years. The fair value of options the S&P 500 companies granted peaked in 2000 at $111 billion, and registered $42 billion last year. Intrinsic value accounts for about 60% of the value of the 28 billion options outstanding with time value making up the balance. Exhibit 2 provides data on how many options companies granted and their fair value for each of the past five calendar years.

Exhibit 2: Options Grants: Reigning in the Grandiosity

Year	Number of options granted	Fair value of options granted
1999	5.2	$ 61.2
2000	6.6	111.5
2001	7.1	100.7
2002	5.6	61.1
2003	4.8	42.1

figures in billions, except year

Source: David Zion and Bill Carcache, "The Cost of Employee Stock Options", *CSFB Equity Research*, June 14, 2004. Copyrighted material, used by permission.

If We Don't Expense Them, Do They Exist?

Conceptually, we can treat ESOs in one of two ways—either as a cost (the numerator of value per share) or as dilution (the denominator of value per share). The current accounting practice already reflects diluted shares. Isn't that sufficient?

Dilution measures aren't as informationally useful as costs for three reasons. [15] First, fully diluted shares reflect only in-the-money options and hence can understate the degree of likely dilution. Second, past dilution gives limited information about future dilution. Finally, dilution measures don't provide a reasonable assessment of the option cost companies incur to pay their employees.

To illustrate the last point, consider two companies with the same number of basic shares outstanding and granted options. The dilution measures, of course, are identical. But if company A has a much higher expected stock price volatility than company B, the value of the options it grants will vastly exceed those of company B. Business owners should have a clear sense of the cost of compensation.

Even if fully diluted measures aren't the answer, we're still left with the challenge of appropriately assessing option cost. That companies must make judgments in estimating option cost, however, in no way undermines the case for expensing. Accountants make estimates all the time, as in the case of a new factory or an R&D outlay.[16]

On March 31, 2004 the FASB released an exposure draft that would require all companies to expense employee stock options starting in 2005. Hundreds of companies have already elected to expense options voluntarily. Yet a substantial subset of companies—primarily in technology—remain vocal critics of option expensing. For instance, the technology industry threw their weight behind the Baker-Eshoo bill, which would require companies to treat only options granted to the top five executives as a cost. The House of Representatives resoundingly passed the bill in July 2004.

From an economic standpoint the bill makes no sense. (The press reported that bill only received broad House support because it was clear that it would die in the Senate. [17]) Warren Buffett suggests that the bill rivals in lunacy the Indiana House of Representative's 1897 decree to round pi from 3.14 to 3.2 to help schoolchildren. Fortunately that bill died, as Baker-Eshoo is likely to do as well.

Apparently, the primary argument against expensing options is that higher recorded expenses lead to lower earnings, and those lower earnings lead to lower stock prices. The lower earnings-lower price reasoning is fundamentally flawed because it assumes the stock market doesn't recognize the significant information about options *that companies already disclose* and that it simply capitalizes reported earnings per share.

Voluminous evidence now points to the reality that the market properly considers options expense in valuation. [18] A recent Towers Perrin study of more than 300 companies that started to expense options voluntarily showed no corresponding impact on share price. [19] A separate, earlier analysis by Ernst & Young came to the same conclusion. [20] The Towers Perrin authors suggest their study "confirms the view that accounting treatment of incentives does not influence stock prices," adding, "accounting treatment needn't drive management incentives. Rather, incentives should be designed to drive corporate performance."

However, just because option expensing doesn't affect stock prices doesn't mean that it doesn't affect management behavior. The very threat of unburying options from the footnotes and placing them prominently on the income statement compelled managers to reduce option-grant largesse. Part of the 60%-plus reduction in option grants likely stems from this potential embarrassment of riches.

Options and Incentives

How widely should companies distribute options within the organization? Many companies elected to grant options broadly to employees in recent years, with this pattern especially pronounced in the technology sector. One study shows that employees (excluding top officers) owned 19% of the equity in the hundred largest Internet-exposed companies. [21] How effective are these widespread grants?

Academics point out three potential justifications for granting options to all employees: providing incentives, inducing employees to sort, and employee retention. (Sorting refers to separating employees based on attitude. Options appeal to optimistic, risk-seeking employees and are less attractive to risk-adverse employees. Substantial option programs draw risk-seeking employees.) Empirical research suggests that only sorting and retention are consistent with the data. [22] We argue that options do not provide incentives for many employees whose day-to-day activities are too removed from the actual stock price performance. Many frontline employees use mental accounting when thinking about their options—they hope the options will do well but consider them separate from their main income sources.

The book *In the Company of Owners*, which advocates wide option distribution, provides some anecdotal evidence for this mental accounting. The authors recount a mid-level employee's reaction to his company's precipitous stock price decline in 2001 and what that meant for his options: "It really doesn't affect me, because all along I've thought of it as a lottery ticket." [23]

We believe a company needs appropriate incentive pay measures at every employee level to maximize its potential for superior returns. For senior executives, options tied to an appropriate performance benchmark are appropriate. Operating unit executives should be paid based on divisional value drivers that lead to superior performance on a firm-wide basis. Midlevel managers and frontline employees should have incentives tied to leading indicators of value—current measures that correlate strongly with the businesses long-term value. Examples include time to market for new products, employee turnover, and customer retention rates. [24]

How We Treat ESOs

When valuing a company, investors need to consider past and future option grants. Let's start with past grants.

We believe investors should treat outstanding stock options as a contingent claim. In a standard discounted cash flow model, corporate value equals the present value of future free cash flows. To calculate shareholder value, you need to add excess cash to the corporate value, and subtract debt, other liabilities, and the options contingent claim. Dividing shareholder value by basic shares outstanding yields shareholder value per share.

There are four main steps to calculate the value of the contingent claim. Companies provide most of the information you need for the calculation in their financial filings, but you need to make additional adjustments. A detailed explanation of this process, along with spreadsheets, is available at http://expectationsinvesting.com/tutorial6.shtml. We'll briefly walk through the steps, using Nextel Communications as our example:

1. *Value the options*. Companies typically disclose the vital information for groups of outstanding options. Information includes average strike price and option life. Companies also provide information about assumed volatility and risk-free rates. These data taken together allow us to value each of the option groups. Exhibit 3 shows an example for one of Nextel's option groups.

Exhibit 3: Valuing One of Nextel's Option Groups

Range of Exercise Prices	Weighted Average Exercise Price	Stock Price	Expected Life of Option	Risk Free Rate	Volatility (s)	Value of Call Option Equivalent
$14.06 - $20.62	$ 16.56	24.25	7.6	3.5%	83.0%	$ 16.57

Source: LMCM analysis.

2. *Consider employee churn*. Firms generally use options as a tool to retain employees. As a result, most companies structure options programs so employees who leave the firm before their options vest forfeit those shares. We estimate forfeiture by combining the rate of past option forfeiture and the time before a group of options vest. Options typically vest 2-4 years from grant date. Exhibit 4 shows the rate of Nextel's past options cancellations.

Exhibit 4: Nextel's Option Cancellation History

Year	Number of Options	Average Number of Options During Year	Annual Cancellations	Option Forfeit Rate
December-98	30.4			
December-99	40.6	36	5.1	**14.4%**
December-00	41.7	41	4.4	**10.7%**
December-01	54.4	48	6.0	**12.5%**
December-02	78.8	67	14.4	**21.6%**
December-03	88.2	84	6.1	**7.3%**
			Average	13.3%

Source: LMCM analysis.

3. *Warrant conversion*. Employee stock options are technically warrants, not options. Options are derivatives on outstanding shares, while companies issue new shares for warrants. In our ESOs calculations, this warrant adjustment generally reduces the value 2-4%.

4. *Tax deduction*. When an employee exercises an option, the difference between the company's share price and the option strike price is the amount a company can take as a tax deduction. So we must consider the value of options net of the tax benefit.

Exhibit 5 rolls up Nextel's option groups to calculate the aggregate value of the contingent claim. This total for Nextel is approximately $800 million after tax. Since you can mark-to-market this contingent claim, it is much more economically relevant than the FASB 123-mandated expenses.

Exhibit 5: The Value of Nextel's Contingent Claim

Range of Exercise Prices	Weighted Average Exercise Price	Stock Price	Expected Life of Option	Risk Free Rate	Volatility (s)	Value of Call Option Equivalent	Number Of Outstanding Warrants
$2.91 - $6.99	$ 5.23	$ 24.25	8.2	3.5%	83.0%	$ 21.09	19
$7.01 - $13.94	$ 11.29	$ 24.25	7.2	3.5%	83.0%	$ 18.20	19
$14.06 - $20.62	$ 16.56	$ 24.25	7.6	3.5%	83.0%	$ 16.57	17
$22.31 - $29.75	$ 23.25	$ 24.25	7.8	3.5%	83.0%	$ 14.76	17
$30.94 - $49.16	$ 39.59	$ 24.25	6.3	3.5%	83.0%	$ 10.44	1
$50.00 - $79.59	$ 61.78	$ 24.25	6.2	3.5%	83.0%	$ 7.01	14

Total pre-tax value of ESOs	$1,235
Marginal tax rate	35%
Total after-tax value of ESOs	$803

Source: LMCM analysis.

Now let's turn to future grants. We believe investors should expense the economic value of future grants on the income statement. [25] Our reasoning is based on the principle of arbitrage: there should be no difference between the company selling options (including all of the liquidity constraints) to an investment bank and using the cash proceeds to pay employees and granting those options directly to employees. Note again that employees often estimate the value of their options at only 50-75%, while shareholders bear the full cost.

How should an investor estimate future grant values, especially as companies go through a life cycle? One good starting point is past option grants. You can measure option grant values on a per employee basis or as a percentage of sales or expenses. We prefer to look at grant values as a percentage of sales. Exhibit 6 shows the data for Nextel.

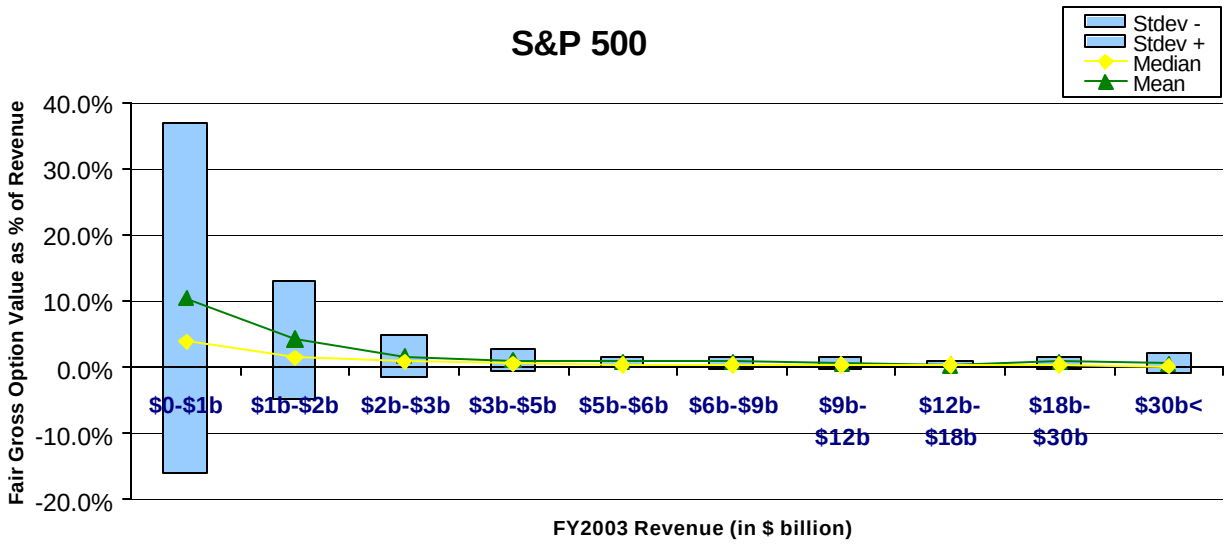
Exhibit 6: Nextel's Option Grants as a Percentage of Sales

Year	Revenues	Expected Pretax Economic Value Imparted to Employees	Option Cost as a Percent of Revenues
1998	$ 2,295	$ 89	3.9%
1999	$ 3,786	$ 102	2.7%
2000	$ 5,714	$ 503	8.8%
2001	$ 7,689	$ 218	2.8%
2002	$ 8,721	$ 63	0.7%
2003	$ 10,820	$ 153	1.4%

Source: LMCM analysis.

To provide guidance on these values for a broad range of sales figures we turn to data collected by CSFB accounting analyst David Zion, who looked at the option grants as a percentage of sales for each company in the S&P 500 over the past five years. Along the horizontal axis, we broke the S&P 500 down into deciles by absolute sales. We then studied the mean, median, and standard deviation in option grant value as a percentage of sales. Exhibit 7 shows the results for 2003. The average stock grant was 10.5% of sales for S&P 500 companies with sales under $1 billion but drifted to about 0.7% for companies over $5 billion. Further, the standard deviations tend to shrink as well.

Exhibit 7: Option Grants as a Percentage of Sales for the S&P 500 (2003)



Source: David Zion and Bill Carcache, "The Cost of Employee Stock Options", *CSFB Equity Research*, June 14, 2004. Copyrighted material, used by permission.

The data also reveal a sharp decline in grant values over the past few years. (See Exhibit 8).

Exhibit 8: S&P 500 Option Grants as a % of Sales (2003 versus 2000)

	FY 2000				
Rev Range	Mean	Median	Stdev	Stdev (1)+	Stdev(1) -
$0-$1b	27.0%	9.3%	51.1%	78.1%	-24.1%
$1b-$2b	17.5%	4.0%	41.7%	59.2%	-24.2%
$2b-$3b	3.7%	0.7%	12.6%	16.3%	-8.8%
$3b-$5b	2.2%	0.9%	3.4%	5.6%	-1.1%
$5b-$6b	1.8%	0.6%	3.7%	5.5%	-1.9%
$6b-$9b	1.2%	0.3%	2.4%	3.5%	-1.2%
$9b-$12b	2.1%	0.6%	4.8%	6.9%	-2.7%
$12b-$18b	1.4%	0.6%	2.3%	3.6%	-0.9%
$18b-$30b	2.0%	0.6%	4.8%	6.8%	-2.7%
$30b<	2.4%	0.6%	7.7%	10.1%	-5.3%

	FY 2003				
Rev Range	Mean	Median	Stdev	Stdev (1)+	Stdev(1) -
$0-$1b	10.5%	3.9%	26.4%	36.9%	-15.8%
$1b-$2b	4.2%	1.4%	8.9%	13.1%	-4.6%
$2b-$3b	1.7%	0.8%	3.3%	5.0%	-1.5%
$3b-$5b	1.1%	0.6%	1.6%	2.7%	-0.6%
$5b-$6b	0.7%	0.5%	0.8%	1.5%	0.0%
$6b-$9b	0.7%	0.3%	1.0%	1.8%	-0.3%
$9b-$12b	0.6%	0.4%	0.8%	1.4%	-0.2%
$12b-$18b	0.4%	0.3%	0.5%	0.9%	-0.1%
$18b-$30b	0.7%	0.4%	1.0%	1.7%	-0.3%
$30b<	0.7%	0.2%	1.5%	2.2%	-0.8%

Source: David Zion and Bill Carcache, "The Cost of Employee Stock Options", *CSFB Equity Research*, June 14, 2004. Copyrighted material, used by permission.

So how does this analysis fit with a valuation of Nextel? In calculating Nextel's future free cash flows, we need to reflect the expense of future options grants. To judge the magnitude of this expense, an analyst can draw on at least three sources: 1. Nextel's past cost as a percentage of sales; 2. Nextel past cost per-employee; and 3. aggregated data from S&P 500 companies.

Further, analysts should reflect Nextel's roughly $800 million contingent claim as part of enterprise value. This is the sum that should be subtracted from the present value of future cash flows to calculate the residual equity claim, and this amount should be added to enterprise value to calculate multiples.

Conclusion

Incentive is defined as what motivates behavior. Long-term shareholders must look for proper incentives. Governance policies often play a major role in shaping corporate executive behavior—for both the good and the bad.

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Endnotes

[1] Warren Buffett, "Fuzzy Math and Stock Options," *Washington Post*, July 6, 2004. See http://www.washingtonpost.com/wp-dyn/articles/A29807-2004Jul5.html.

[2] For an excellent summary of our view on corporate governance, see Nancy Dennin's commentary at http://www.leggmason.com/funds/ourfunds/whats_new/cgucomm.asp.

[3] Paul A. Gompers, Joy L. Ishii, and Andrew Metrick, "Corporate Governance and Equity Prices," *Quarterly Journal of Economics*, 118, 1, February 2003, 107-155. See http://finance.wharton.upenn.edu/~metrick/gov.pdf.

[4] Simi Kedia and Abon Mozumdar, "Performance Impact of Employee Stock Options," *Working Paper*, August 2002. See http://www.cob.vt.edu/finance/Faculty/am/eopt2.pdf.

[5] Brian J. Hall and Kevin J. Murphy, "The Trouble with Stock Options," *Harvard NOM Research Paper No. 03-33*, May 2003. See http://papers.ssrn.com/sol3/papers.cfm?abstract_id=415040.

[6] Paul Oyer and Scott Schaefer, "Accounting, Governance, and Broad-Based Stock Option Grants," *Working Paper*, June 15, 2004. See http://faculty-gsb.stanford.edu/oyer/wp/grant.pdf.

[7] Brian J. Hall, "Six Challenges in Designing Equity-Based Pay," *Journal of Applied Corporate Finance*, 15, 3, Spring 2003, 21-31.See http://papers.ssrn.com/sol3/papers.cfm?abstract_id=424170.

[8] Alfred Rappaport and Michael J. Mauboussin, *Expectations Investing* (Boston: Harvard Business School Press, 2001), 189-191.

[9] Sandra Renfro Callaghan, Chandra Subramaniam, and Stuart A. Youngblood, "Does Option Repricing Retain Executives and Improve Future Performance?" *Social Science Research Network Working Paper*, August 18, 2003. See http://papers.ssrn.com/sol3/papers.cfm?abstract_id=436964.

[10] Sandra Renfro Callaghan, P. Jane Saly, and Chandra Subramaniam, "The Timing of Option Repricing" *Journal of Finance,* 59, 4, August 2004. See http://www.afajof.org/Pdf/forthcoming/subramaniam.pdf.

[11] Contrast this with another tight labor market, professional baseball. Top players clearly fetch top dollar. But the Oakland A's, as Michael Lewis describes in his bestseller *Moneyball*, figured out how build a skilled team at a relatively low cost.

[12] "Executive Excess", *NewsHour with Jim Lehrer*, December 2, 2002. See http://www.pbs.org/newshour/bb/business/july-dec02/ceo1_12-02.html.

[13] The "Lake Wobegon Effect" takes its name from Garrison Keillor's town where "where the women are strong, the men are good-looking, and all of the children are above average."

[14] David Zion and Bill Carcache, "The Cost of Employee Stock Options," *Credit Suisse First Boston Equity Research*, June 14, 2004.

[15] John E. Core, Wayne R. Guay, and S.P. Kothari, "The Economic Dilution of Employee Stock Options: Diluted EPS for Valuation and Financial Reporting," *Working Paper*, December 2001. See http://papers.ssrn.com/sol3/papers.cfm?abstract_id=183068.

[16] Alfred Rappaport, "Beyond Quarterly Earnings," *Wall Street Journal*, March 8, 2004. See http://online.wsj.com/public/article/0,,SB107826184536344429,00.html?mod=2%5F1072%5F1.

[17] Gary Rivlin, "The Tech Lobby, Calling Again," *The New York Times*, July 25, 2004.

[18] David Aboody, Mary E. Barth and Ron Kasznik, "SFAS 123 Stock-Based Compensation Expense and Equity Market Values," *Social Science Research Network Working Paper 1694*, December 2003. See http://papers.ssrn.com/sol3/papers.cfm?abstract_id=276881.

[19] See http://www.towersperrin.com/hrservices/webcache/towers/United_States/press_releases/2004_03_31/2004_03_31.htm.

[20] See http://www.ey.com/global/download.nsf/Canada/Financial_Services_CrossCurrents_Fall2003/$file/Financial_Services_CrossCurrents_Fall2003.pdf.

[21] Joseph Blasi, Douglas Kruse, and Aaron Bernstein, *In the Company of Owners: The Truth About Stock Options* (New York: Basic Books, 2003), 88.

[22] Paul Oyer and Scott Schaefer, Why do firms give options to all employees?: An empirical examination of alternative theories," *Journal of Financial Economics,* forthcoming. See http://faculty-gsb.stanford.edu/oyer/wp/options.pdf.

[23] Blasi, Kruse, and Bernstein, 98.

[24] Rappaport and Mauboussin, 191-194.

[25] We recommend showing the expense after normal expenses so that operating profit margin comparisons remain valid.