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*IR Strategy Series*

## Expensing of Employee Stock Options under FAS Statement No. 123R

Accounting for employee stock options has been a subject of great debate for many years. In 1972, the Accounting Principles Board (APB) issued Opinion No. 25, *Accounting for Stock Issued to Employees*, which utilized an intrinsic value methodology for valuing stock options granted to employees. Under Opinion No. 25, companies that issued at-the-money options to their employees reported no compensation cost associated with these options on their financial statements. In 1995, the Financial Accounting Standards Board (FASB) issued FAS Statement No. 123, *Accounting for Stock-Based Compensation*, which established, but did not require, a fair-value-based method of accounting for share-based compensation. Companies were slow to adopt this optional standard, and instead continued to utilize the intrinsic value methodology under APB Opinion No. 25.

In recent years, accounting scandals and other failures in financial reporting created an environment that demanded more transparent and higher-quality financial reporting. At that time, the FASB determined that a revision to the current accounting treatment for stock options was needed. A hotly contested debate over the most appropriate accounting treatment ensued. Public accounting professionals, Congress, the Securities and Exchange Commission, business leaders, and members of the investment community all had input in this discussion, and in December 2004, the FASB issued Statement No. 123R, *Share-Based Payment*, which revised FAS 123, and superseded Opinion No. 25.

*These new rules have the potential to significantly impact earnings estimates and, potentially, stock valuations as they are adopted by an increasing number of companies reporting in the first half of 2006. Public companies must not only prepare a careful communications strategy concerning the earnings impact of this transition, but in many cases substantially rethink their approach to stock-based compensation.*

FAS 123R is based on the underlying accounting principle that compensation costs resulting from share-based payment transactions should be recognized in financial statements at fair value.<sup>1</sup> This means that companies are required to report compensation expenses from employee stock options on their income statements for the first time. The amount of the expense is based on the fair value of the employee stock options and is calculated using a valuation model chosen by the company. Managers must formulate estimates to be used in the model, such as the exercise behavior of their employees and the volatility of their company's stock price.

FASB 123R is a major accounting change that carries many implications for analysts, managers and board members, as well as institutional and individual investors. In anticipation of FAS 123R, many companies have begun employing measures to reduce the near-term effects of this accounting policy on earnings. These include accelerating the vesting of out-of-the money options and changing the characteristics of their employee stock option programs.

Not only must managers and board members address the accounting issues surrounding the adoption of FAS 123R, but they must also prepare themselves to address issues from an investor relations perspective. These include:

- Analyst and consensus estimates
- Earnings guidance
- Pro forma financial reporting
- The optimal structure of compensation programs
- Alternatives to employee stock options

The new rules apply to most public companies at the beginning of the first interim or annual reporting period after June 15, 2005. For companies with a December fiscal year the new rules will affect their March 31, 2006 first-quarter financial results.

### Overview of FAS 123R

Under the new guidelines, companies are required to select a valuation model to determine the fair value of employee stock options on the date they are granted to employees. This value is used to determine the amount of the compensation expense that will be recorded over the service period in which an employee earns the right to benefit from the options, also known as the vesting period. This differs significantly from the previous guidelines of FAS 123, which required companies to disclose this information on a pro forma basis in the footnotes to their financial statements.

**Accounting treatment of FAS 123R.** To illustrate the impact of the new accounting rules on the income and cash flow statements, assume:

- Company X has granted 300,000 share options that will vest over the next year;
- The valuation model calculated a fair value of \$14.69 per option;
- Corporate tax rate is 35%.

When the options are granted, the net after-tax effect on the income statement is to reduce net income by \$2,865,550. This is the result of a \$4,407,000 compensation expense (300,000 share options  $\times$  \$14.69 fair value per option), which is

partially offset by a deferred tax benefit in the amount of \$1,542,450 ( $\$4,407,000 \times 0.35$ ). There is no effect on cash flow, as cash flow from operations reflects a net inflow of \$2,865,550 ( $\$4,407,000$  inflow from compensation expense, partially offset by the \$1,542,450 outflow from the deferred tax benefit).

When and if these options are exercised, the income statement will reflect a deferred tax expense in the amount of \$1,542,450. This effectively reverses the benefit previously recorded. Cash flow from operations will reflect an inflow of \$1,542,450 from the deferred tax expense and cash flow from financing activities will reflect the excess tax benefit, if any, received by the company at exercise.

**Selecting a Valuation Model.** As shown in the example above, the \$2.9 million hit to Company X's earnings was determined by applying the fair value estimate to the number of stock options granted to employees over the reporting period. These options may not be exercised for years to come—if at all. Assuming Company X continues to grant stock options to employees in the future, selection of the valuation model used to calculate their fair value will be the major factor in determining the impact of FAS 123R on its financial statements. While the FASB has not specified a preference for a particular valuation technique, it lists a set of general guidelines for an acceptable model.<sup>2</sup>

*Lattice models* and *closed-form models* are two valuation methods that meet the requirements of FAS 123R.<sup>3</sup> A lattice model produces estimates of fair value based on assumed changes in share prices over successive periods of time. An example of a lattice model is a binomial model that allows for at least two possible price movements in each subsequent time period. A *closed form model* uses an equation to produce an estimate of fair value. A modified Black-Scholes formula is an example of this type of model.

Managers should carefully evaluate the appropriate valuation model, as different models can generate a wide range of fair value estimates. A recent study by Financial Executives International

(FEI) showed that fair value estimates produced by the modified Black-Scholes model were 18-49% greater than those produced by a lattice-based model.<sup>4</sup>

**Estimating Volatility.** The use of a valuation model forces companies to estimate key inputs to be used in the model. The most important of these inputs is the volatility estimate. The *volatility estimate* is the amount by which a company anticipates its share price will fluctuate over time, and is a key input in option valuation models. Volatility estimates can be based on historical price data, or measured on an implied basis using data from the company's publicly-traded options.

Managers need to determine the most appropriate combination of implied and historical volatility data to be used in estimating volatility. For companies with publicly traded options, greater reliance should be placed on implied volatility.<sup>5</sup> Historical volatility can be used in conjunction with implied volatility or on a stand-alone basis for a company that has no publicly traded options. For companies that have only been publicly traded for a short time and have no publicly traded options, FAS 123R recommends utilizing the historical, expected or implied volatility of similar companies based on factors such as industry, stage of the life cycle, size and capital structure. In the case of thinly-traded stocks, companies should consider using weekly or monthly prices in calculating historical volatility.

### Potential Impact of FAS 123R

While there are minimal cash flow consequences associated with the new guidelines, GAAP earnings and earnings per share will be impacted substantially. The amount will vary from company to company and from industry to industry. A recent research report by Credit Suisse First Boston (CSFB)<sup>6</sup> estimated that option compensation cost would reduce the S&P 500 consensus EPS estimate for 2006 by approximately 3%. Specific sectors, such as technology, will be affected even more. The CSFB report also estimated that option compensation expenses would reduce 2006 consensus EPS estimates for the Semiconductor and Semiconductor Equipment and the Internet Soft-

ware and Services industry groups by 23% and 19%, respectively.

The following table illustrates the estimated the impact of option compensation costs on fiscal 2006 earnings. In many cases, these costs represent over 50% of the First Call consensus estimates for fiscal 2006.

#### Estimated Per Share Option Compensation Cost in 2006 and Consensus Estimates<sup>7</sup>

Company	First Call	Option Comp
Applied Micro Circuits	\$0.10	\$0.11
Freescale Semiconductor	\$1.33	\$0.76
Power-One Inc	\$0.13	\$0.07
Sun Microsystems	\$0.09	\$0.05
Novell Inc	\$0.14	\$0.07
JDS Uniphase	\$0.05	\$0.02
Gateway Inc	\$0.20	\$0.09
Monster Worldwide Inc	\$1.20	\$0.53
PMC-Sierra Inc	\$0.37	\$0.14
Teradyne Inc	\$0.56	\$0.20
Advanced Micro Devices	\$0.64	\$0.21

Sources: Company data and Credit Suisse First Boston estimates

The CSFB report found that nine industries accounted for 57% of estimated 2006 estimated pre-tax option compensation costs for the S&P 500.

#### Proportion of Estimated 2006 Pretax Option Compensation Costs for S&P 500 Companies by Industry<sup>8</sup>

Industry	Portion
Semiconductors and semiconductor equipment	12%
Pharmaceuticals	9
Communications equipment	8
Computers and peripherals	7
Software	5
Media	5
Capital markets	4
Health Care Providers & Services	4
Commercial banks	3
Other industries	43

Sources: Company data and Credit Suisse First Boston estimates

### Analyst and Consensus Estimates under FAS 123R

For many companies, expensing options will have a major impact on earnings per share. However, there are not yet any standards regarding how analysts choose to incorporate these expenses into

their EPS estimates for fiscal 2006 and beyond. Brokerage firms such as UBS, Bear Stearns and Merrill Lynch & Company require their analysts to include options expenses in their EPS estimates beginning in 2006. Because there is no real cash flow consequence to expensing stock options, some analysts are excluding these expenses from their estimates, while others are not. As a result, estimates from different analysts may not be useful for comparative purposes.

This begs the question: “What is the appropriate consensus estimate?” Thomson Financial has stated that First Call will store and collect two types of estimates: one that includes option compensation expenses and one that excludes them. The consensus estimate for each company will be determined based on the method used by the majority of analysts covering the stock. This presents a major problem, as consensus estimates for companies in the same or similar industries may or may not be comparable.

Analysts, institutional investors, managers, board members and individual investors often conduct comparable valuation analysis in determining whether or not a stock is undervalued or overvalued relative to its peers. This analysis compares the stock’s forward-looking price-to-earnings (or other earnings-based multiple) to the average of similar companies, or peers. If the estimates used in this exercise are not based on the same criteria, then the corresponding analysis will not yield a useful valuation benchmark. Until a standard emerges, careful study of estimates used in this type of analysis is required.

Another challenge that managers face in regard to FAS 123R deals with reported quarterly earnings. Although managers prefer to focus on long-term strategies and growth, there is a great deal of pressure for companies to meet or beat the “street estimates.” Since consensus estimates may or may not include stock option compensation expenses, companies should avoid situations where they appear to “miss” estimates purely on the basis of stock option expenses. Managers need to be conscious of whether the consensus estimate includes or excludes these expenses. They must also effectively communicate this information in company earnings releases, conference calls and other discussions with the investment community.

## **Earnings Guidance**

Most experts anticipate that companies will begin lowering their guidance to include stock option compensation expenses when they begin providing guidance for 2006. This is not necessarily the case, as some companies have begun providing guidance excluding these effects. Until a standard emerges, managers should clearly state whether their guidance figures include or exclude the effect of option compensation expenses. In industries in which stock option expense has a significant earnings impact, companies would be well advised to provide guidance for both scenarios.

## **Return to Pro Forma Financial Reporting?**

In its Staff Accounting Bulletin No. 107, the Securities and Exchange Commission expressed the view that presenting Net Income Before Share-Based Payment Charge, or an equivalent measure, meets the definition of a non-GAAP financial measure as defined by Regulation G. This means that companies are free to report pro forma, or non-GAAP, earnings that exclude the effect of option compensation expense, so long as they meet the requirements of Regulation G. These requirements include featuring the GAAP measure more prominently than the non-GAAP measure, providing a table that reconciles the non-GAAP measure to the closest GAAP measure and explaining the reason(s) that management believes the non-GAAP figure is beneficial to investors.

As evidenced by companies that have already begun reporting under FAS 123R, the new accounting rules may usher in a new wave of pro forma financial reporting. For example, Sun Microsystems and eBay have reported non-GAAP earnings excluding option compensation charges associated with FAS 123R. This is not only limited to technology companies. Coach Inc., a designer of leather goods and other fashion accessories, and Checkfree Corporation, a provider of financial commercial services, have reported non-GAAP earnings as well. When companies with December fiscal year-ends begin to report first quarter 2006 earnings, the number of companies providing non-GAAP earnings may increase.

## Optimal Structure of Compensation Programs

In theory, FAS 123R is an accounting rule that should have little or no impact on cash flow and valuation. In reality, managers spend a great deal of time and energy focusing on earnings and accounting results. As reported in the “2005 Global Equity Incentives Survey Report” from PriceWaterhouseCoopers, the number of stock options offered by multinational companies has fallen dramatically since 2003. According to the study, only 51% of the 131 multinational companies surveyed currently offer employee stock options, compared to 100% in 2003. In the future, it is likely that companies will continue to reduce reliance on employee stock options and turn to either cash compensation or utilize non-traditional instruments in their equity compensation plans.

Despite the transition away from employee stock options, they still have a place in equity compensation programs. Managers and board members will need to carefully examine their programs in order to optimize the needs of both shareholders and employees. Since any new equity-based compensation programs must be approved by shareholders, finding the optimum construction of an equity compensation program is very important.

Academic studies demonstrate that granting options can contribute to improving corporate performance by enabling companies to attract and retain talented people who are critical to the company’s success. This is particularly true in sectors where the market opportunities are very large and technology changes very rapidly. In addition, options enable young companies to reduce their cash usage and thus avoid issuing stock at unfavorable current valuations.<sup>9</sup>

Empirical evidence regarding the optimum construction of an equity compensation policy is complex and still evolving.<sup>10</sup> However, the underlying principle is simple: It is in the interest of shareholders to provide managers and employees with equity compensation to the extent that the marginal increase in shareholder value that results is in excess of the Company’s cost to provide that compensation. Thus, the primary factors that should influence the use of stock options in equity compensation programs are:

- What is the appropriate level of employee stock options in which the marginal gains in company performance will outweigh the fair value of the options that are issued?
- How can an options plan be designed so as to maximize the incentive alignment for senior management?

These decisions will be driven by company-specific factors, including: the degree of dependence on key personnel; level of competition in the labor market; the perceived size of the market opportunity and achievable earnings growth rate; the mix of salary, bonus and stock compensation; and the risk and diversification preferences of individual managers.

### Alternatives to Employee Stock Options

Non-traditional instruments (NTIs) present attractive alternatives to traditional employee stock options. They equip managers with the tools to reduce dilution, attract and retain qualified employees and align the interests of employees and shareholders. In addition, the fair value of NTIs is generally lower than traditional employee stock options. In determining which, if any, of these instruments to utilize, managers must evaluate the difference between the cost to the company and the perceived value to the employee. Other factors, such as potential dilutive effects, should also be taken into consideration.

*Non-traditional options* include discount and premium options, capped options, purchased options, performance-based options and indexed options. These instruments can lower compensation costs as fewer options are awarded than under traditional employee stock option programs while maintaining the perceived value to employees of the options granted.

*Restricted stock* and *restricted stock units (RSUs)* are granted to employees once vesting requirements are met. Because the shares retain value even if the stock price declines, the company can issue fewer shares compared with traditional employee stock options while maintaining the perceived value to employees of the restricted stock or stock units granted.

*Stock Appreciation Rights (SARs)* entitle employees to receive the difference between the stock price and the exercise price in either cash or stock. *Cash SARs* eliminate dilution, while *Equity SARs* reduce dilution as fewer shares are required at settlement than a traditional employee stock option.

### Summary

FAS 123R is certain to bring many challenges to senior management, investor relations professionals and board members. The era of profligate granting of employee stock options is over. A more thoughtful approach to stock-based compensation and its relation to value creation is required.

In addition to the accounting and disclosure issues involved, this major accounting change is likely to create significant confusion and uncertainty regarding the value and comparability of reported earnings. As there are no standards in regard to analyst and consensus earnings estimates, guidance and pro-forma financial reporting, companies will need to develop an approach that reflects the evolving dynamics of their sector in order to provide the most useful information possible to their shareholders. Managers and board members must be cognizant of these issues when communicating guidance and financial results to the investment community in the post-FAS 123R environment. Disclosures will have to explain not only which valuation methodology was selected, but why management believes it most accurately reflects the expense of the specific instruments that are employed.

Finally, many companies will be well advised to significantly alter the scope of, and the instruments used to construct, stock-based compensation programs. This will require obtaining shareholder support in order to get new plans approved. It will also establish that the approach is designed to maximize shareholder wealth creation, rather than simply enrich management. Ultimately, the new rules will provide an impetus for

managers and board members to revisit their equity compensation programs and make sure they align the interests of shareholders and management with those of employees.

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<sup>1</sup>FAS Statement of Financial Accounting Standards No.123R, *Share-Based Payment*, December 2004, paragraph 1.

<sup>2</sup>Securities and Exchange Commission Staff Accounting Bulletin No. 107, pp. 13-14.

<sup>3</sup>FAS 123R, paragraph A13.

<sup>4</sup>"Valuing Employee Stock Options and Other Share-Based Payments: Approaches for Complying with and Optimizing Performance under FAS 123R," Ron D. Rudkin, Financial Executives International, 2005.

<sup>5</sup>SAB No. 107, p. 16.

<sup>6</sup>"Building a New Consensus: Expensing Stock Options to Drive Analysts' Estimates Lower," Bill Carcache and David Zion, Credit Suisse First Boston, p. 1.

<sup>7</sup>*Ibid.*, p.7.

<sup>8</sup>*Ibid.*, p. 4.

<sup>9</sup>"Performance Impact of Employee Stock Options," Simi Kedia and Abon Mozumdar, Harvard University, January 2002.

<sup>10</sup>"Executive Equity Compensation and Incentives: A Survey," John E. Gore. Wayne Guay & David F. Larcker, The Wharton School, January 2002.



**Crocker Coulson**  
President



**Elaine Burns**  
VP Financial Writing

#### CCG Investor Relations

10960 Wilshire Blvd., Suite 2050  
Los Angeles, CA 90024  
(310)477-9800/f: (310)231-8663  
[crocker.coulson@ccgir.com](mailto:crocker.coulson@ccgir.com)  
[elaine.burns@ccgir.com](mailto:elaine.burns@ccgir.com)  
Website: [www.ccgir.com](http://www.ccgir.com)

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