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Rating Methodology

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Analytical Implications of Employee Stock-Based Compensation

Product of Moody's Accounting Panel

Summary Opinion

Option-based employee compensation plans have achieved significant currency as a form of remuneration for executives and other employees of many US corporations. The basis for the popularity of such plans is the fact that they:

- Require little or no cash outlay to attract and retain employees.
- Often need not be reported as expenses on the income statement.
- Receive favorable tax treatment.

Moreover, many corporations hold the view that employee stock-based compensation aligns the interests of employees with those of the company's shareholders — a view that we examine more closely in this report.

This special comment will discuss:

1. How we analyze and use information about stock options reported in financial statements,
2. How the use of stock-based compensation affects our assessment of an enterprise's credit profile, and
3. Some of the principal accounting standards governing stock-based compensation plans.

The growth in employee stock option programs has not altered Moody's basic analytical approach to them — it only calls more attention to the long-standing accounting issues that they have always posed. In general, Moody's believes that stock options arc a form of compensation that transfer current resources of an enterprise to its employees in return for their past and future services. We account for all other costs of labor in our ratings analysis and believe that the cost of stock options should not be viewed differently.

Irrespective of the guidance in generally accepted accounting principles dealing with this subject, Moody's will analytically take such costs into consideration when evaluating the quality and consistency of an issuer's earnings and cash flow.

Although the tax benefit of employee option exercises has made a significant contribution to operating cash flow over the last few years, it is uncertain to what extent this trend will continue because of the decline in US equity markets and the resulting decrease in the exercise of options. Nevertheless, Moody's believes that the tax benefits associated with the exercise of employee stock options should be prominent in the statement of cash flows.

Finally, as stock option programs have grown, companies have increasingly purchased their stock in the open market to offset the potential dilution to their reported level of earnings per share. The use of financial leverage by issuers to acquire their stock in the open market to offset the potentially dilutive effects of exercised options can be a negative development for their credit profile.

BACKGROUND

Many U.S. companies compensate their employees with a combination of cash and stock options i.e. options to purchase equity shares in the company. Currently, the number of shares underlying options outstanding as a percentage of total common stock outstanding for companies in the Standard & Poor's (S&P) 500 Index is approximately 15%, compared with 5% in 1996.[1] Although 99% of the companies in the S&P 500 Index provide stock options to employees, only Boeing and Winn-Dixie as of December 31, 2001, reported stock option compensation as an expense. However, since July 2002, more than 150 companies, including a number of the largest U.S. corporations, have announced that they would prospectively recognize as expense the compensation costs related to employee stock options on their income statements.

According to 2001 annual reports, expensing stock options would have reduced the aggregate net income of the S&P 100 Composite by 16%. Furthermore, we estimate that the suppression of compensation expense added about two and a half percentage points to reported annual growth in earnings of the S&P 100 Composite between 1995 and 2001.

Table 1: S&P 100 – Earnings Effects

($ In Billions)	1999	2000	2001
Reported Earnings	242.4	260.3	171.3
Unrecorded Compensation*	12.1	18.0	23.8
Net Earnings	230.3	242.3	147.5
Overstatement of Net Earnings	5%	7%	16%

*Reflects Vested Amount
Source: R.G. Associates, Moody's

Moody's Perspective on Accounting for Employee Stock-Based Compensation Expense

Our assessment of a firm's true operating performance attempts to capture all of the costs of operating the firm — whether or not generally accepted accounting principles require the recognition of such costs. In general, Moody's believes that the costs of employee stock options are a recognizable cost and, like other elements of compensation, should be included in the assessment of the quality and consistency of earnings and cash flow.

Consequently, Moody's believes that a fair value method of accounting for employee stock-based compensation provides a more understandable, representationally faithful, and consistent measure of the compensation granted in an employee stock option than does the "Intrinsic Value Method" detailed under Accounting Principles Board (APB) Opinion No. 25, *Accounting for Stock Issued to Employees.*

Opponents of compensation expense have advanced several arguments including:

1. Measuring the cost of stock options is difficult,
2. Recognition will cause volatility in reported earnings,
3. Employee stock options do not require cash expenditures, and
4. Employee stock options are already reflected in the calculation of diluted EPS

We examine each of these arguments below:

1. Measurement is often cited as the most important roadblock to accounting for stock options as an expense. Arguments range from unique characteristics of employee options such as non-transferability and delayed exercise. Measurement also calls for substantial management discretion. We believe that the value of employee stock options can be estimated within acceptable limits for recognition in company financial statements. Many accounting measurements already reflected in financial statements involve significant estimates, such as estimates of liabilities for pensions, other post-employment benefits, and impairment of fixed assets. We also assume that in its negotiations with employees, management has actively considered the value of options granted to various classes of employees.

   Moreover, some argue that employee stock options are not tradable and may be forfeited if the employee leaves, and therefore an estimate developed with the Black-Scholes option-pricing model is inaccurate. Statement of Financial Accounting Standards (SFAS) No. 123, *Accounting for Stock Based Compensation* contemplates these concerns by allowing for the use of historical patterns of volatility to determine the life assigned to options for valuation purposes. This sharply reduces the expense reported.

1. The Federal Reserve

2. We also disagree with the contention that expensing stock options will increase earnings volatility; non-recognition serves only to hide an extant volatility that is a relevant attribute of the earnings of firms using stock-based compensation. Expensing would improve the comparability of reported compensation and profitability, and provide a better indication of the sustainability of a company's future earnings and cash flow from operations. We also believe that financial statement users will be able to better understand the level and trend in the expense amount.
3. Certain opponents contend that since cash is not used when employee stock options are granted, no cost has been incurred. That view suggests that a firm should recognize expense when it expends cash and is contrary to the basic tenets of the accrual basis of financial reporting. We assert that companies use valuable resources and that stockholders give up a portion of their ownership interests whenever options to buy the company's stock are granted. Note that financial statements would recognize both the expense and the dilution if companies were to separately issue stock and use the proceeds to compensate employees.
4. Some opponents argue that because the effects of employee stock options are already reflected in the calculation of diluted earnings per share, the dilutive effects of stock options on earnings per share will be double counted. However, as illustrated in table 3 on page 4, the calculation of diluted earnings per share does not capture the total number of equivalent sharps that may be exercised by employees, but includes only those that are "in the money" as of the reporting date.

GROWING GAP BETWEEN ACCOUNTING CONVENTION AND ECONOMIC REALITY

Accounting for employee stock option expense is currently governed by two accounting standards. The first is SFAS No. 123. This statement recommends, but does not require, that companies recognize the cost of stock options on the income statement. This cost is measured on the grant date in terms of the fair value of options using an option-pricing model and it is recognized over the option-vesting period.

Most companies have opted to account for employee stock options using the "Intrinsic Value Method" of APB Opinion No. 25 and subsequent interpretations. The intrinsic value method recognizes total compensation expense equal to the difference between the market price of the stock on the grant date and the exercise price, which is usually set at or above the market price on grant date. As a result, companies generally assign zero value to most options.

Under SFAS No. 123, companies using APB Opinion No. 25 must provide disclosure in the notes to financial statements. Such disclosure should include the pro forma net income for each year for which an income statement is provided and, if earnings per share are presented, pro forma earnings per share as well, as if the fair value based accounting method was used. (See Appendix 1) Because most companies use this pro forma approach, the associated cost of stock option grants has rarely shown up as an expense on the income statement.

Stock options are usually granted at the current market price, last up to ten years, and have vesting schedules. Though the difference between the exercise price and market price at the grant date may be zero, the possibility that the stock price will increase above the exercise price gives the options their economic value.

Appendix 4 details the impact of options based compensation on pretax margins for each firm included in the S&P 100. A marginal tax rate of *35%* is used to estimate the pretax employee stock option expense. Pretax earnings were not adjusted for non-recurring items. In 2001, the aggregate pretax income for the S&P 100 decreased by 14.5% when the fair value of stock options is charged to pretax earnings. In fact, 49% of the S&P 100 companies would have shown double digit percentage declines in reported pretax earnings when this charge is added. Three companies actually shifted from positive pretax earnings to a pretax loss as a result of our calculations.

Analytical Observations Related To Stock-Based Compensation

As mentioned above, most companies recognize no compensation expense related to their employee stock option programs because they continue to account for stock options using APB Opinion No. 25. For certain kinds of programs, however, tax rules permit companies to deduct from their taxable income the difference between the exercise price of employee options and the market price of the company's stock (See Appendix 3) The tax benefit received may be estimated as the difference between the exercise price of the option and the market value of the stock at exercise date times the marginal tax rate.

The economic significance of stock options is underscored by the magnitude of the tax benefit they provide to companies. In fact, some companies in the S&P 500 realized more cash benefits related to the exercise of stock options than they did from their actual operations in 1999 and 2000.

Both the number of options exercised and the size of the tax benefit increase as the stock price exceeds the option's exercise price by a greater and greater amount. In 2001, however, equity values declined sharply and fewer employees exercised their options. As a result, the tax benefit companies realized from the exercise of employee stock options was significantly lower than in previous years. It is clear, therefore, that the amount and timing of the tax benefit from employee exercises may vary. Consequently, such benefits may not be a sustainable source of operating cash flow. We believe companies should highlight that fact in their public disclosures in order not to overstate their financial flexibility.

Table 2: S&P 500 & 100 Firms' Tax Benefits (in $ Billions)

Year	1999	2000	2001
S&P 100*	14.9	24.6	15.4
S&P 500	22.8	31.6	20.1

**Not all companies disclose the tax benefit separately. Information on tax benefits associated with stock option exercise is readily available for about one-third of the companies in the S&P 100. For those companies that opt to combine the tax benefit with other line items, a rough proxy was used. Moody's estimated that exercised during the year were in aggregate exercised at the company's average share price for that year.*
Source: R.C. Associates, Moody's, Compustat.

Many companies have also implemented share buyback programs and say they do this to counter the potentially dilutive effect of shares issued as options are exercised. We view these programs with some concern, as they may require companies to divert real economic resources from other capital investment needs of the firm. In our opinion, the issuance of shares or their buyback should be driven by the capital needs of the firm, not as an adjunct in employee compensation.

The cash used to buy back the stock reduces capital, but does not directly affect a company's reported earnings. The cost of the repurchase is shown directly on the Statement of Cash Flow as "cash outflow from financing activities." In contrast, the tax benefit is reported as a component of cash from operations with no corresponding expense on the income statement.

However, share repurchase programs may have an effect on future earnings, because there is an opportunity cost associated with capital no longer available to an issuer or because of the interest costs related to incremental financial leverage used to buy the company's stock

The earnings per share (EPS) number is widely used by investors and analysts to evaluate company performance and is a factor in some stock valuation models. Executive compensation is often tied to this accounting measure. The number of shares used for the diluted earnings per share calculation understates the potential dilutive effect of outstanding options on earnings because it ignores all vested and nonvested options that are outstanding but not in the money on such date: It also ignores that the number of shares assumed to be issued upon exercise is reduced by the number of shares that can be repurchased applying the average exercise proceeds at the average market price under the treasury stock method. The treasury stock method is prescribed by Statement of Financial Accounting Standards No. 128, *Earnings Per Share.* Therefore, the ratio ignores the potential claims these options may have on future earnings and cash flow.

As stock compensation programs have grown, the effects of dilution have become more significant. Therefore, analysts should pay particular attention to the degree to which stock options are included in EPS and whether it reflects a comprehensive picture of potential dilution resulting from employee stock options.

Table 3: S&P 100 Composite: Diluted EPS Number Does Not Fully Capture Claim on Future Earnings

	Options Granted			Options Outstanding	Number of Options Included in Diluted EPS
(In Millions)	1999	2000	2001	2001	2001
Information Technology	828	1,534	1,396	4,641	755
Financials	472	512	480	1,969	469
Consumer Discretionary	254	263	451	1,758	122
Health Care	266	247	250	1,306	374
Consumer Staples	175	198	204	876	294
Telecommunication Services	148	248	210	849	50
Industrials	162	146	166	843	216
Energy	56	46	44	326	83
Materials	79	77	66	268	13
Utilities	27	39	77	172	37
Aggregate S&P 100	2,467	3,310	3,344	12,922	2,413

Source: R.C. Associates, Moody's

RATIO ANALYSIS

Below are some key measures we use to assess earning power and cash flow generation:

- (Total Operating Cash Flow minus Cost of Exercised Options) divided by Total Operating Cash Flow
- Stock Compensation Expense divided by Pretax Earnings.

Investors should note that the accuracy of the stock option expense depends highly on the accounting assumptions used in the option-pricing model. Small differences in assumptions can result in widely different estimates of fair value. In addition, the pro forma information disclosed in the notes may not reflect the full effects of a company's stock option program. Since the estimated value of options granted are amortized over their vesting period, it could take several years before the full impact is apparent. Furthermore, the effect of stock options granted prior to 1995 may not be reflected in corporate financial disclosure (See Appendix 1).

DILUTION EFFECTS BEYOND THE INCOME STATEMENT

When a company sells its shares to employees at prices below what it could obtain in the open market, it incurs a significant opportunity cost. If these shares are sold on the open market, the proceeds from the sale could be used to pay salaries, reduce borrowings, or be invested. However, the resources used for share repurchases to mitigate stock option dilution are not reported as an expense. The magnitude of the financing cost for the firms in the S&P 500 Composite is noted in the table below.

Table 4: S&P 500 Composite – Financing Costs of Options

($ Billions)	1997	1998	1999	2000	2001
Proceeds from the exercise of options, as reported in shareholders' equity	27.1	32.0	36.8	44.4	40.7
Fair Value of Shares Issued	91.8	125.3	166.3	278.0	236.9
Financing Cost	64.7	93.3	129.5	233.6	196.2

Source: R.C. Associates

Other Analytic implications of the Use of Employee Stock-Based Compensation

Current Option Usage Casts Doubt On their Ability To Align Management And Other Stakeholder Interest

Options have been viewed as a way for management and employees to more closely align their interests with those of shareholders. In addition, options enable management and employees to benefit from the growth of the company. The effectiveness of this incentive, however, may depend on such variables as:

1. The length of time it takes for options to vest,
2. When the options are exercised,
3. Whether the senior management retains share ownership,
4. To what degree options are part of the employee compensation package, and
5. How performance is evaluated and measured.

When the vesting period is short and the options are a substantial component of compensation, and not tied to long-term performance criteria, the employee's interests may differ from those of the company's other shareholders. Moody's believes that the short-term incentives created by the use of stock options can be mitigated through the use of long-term holding periods. An example of this might be to require top executives to hold 75% of stock acquired in option exercises through or beyond their employment tenure.

The decline of a stock's market price below the exercise price of employee options creates a dilemma for the compensation committee and management of the company, who must decide whether to modify stock options during a period of poor performance or risk losing key employees. Modifications include extending the term of the options, accelerating the vesting period, increasing the number of shares outstanding, or replacing or repricing the options.

In a repricing, the most commonly used method, underwater options are exchanged for new options featuring a lower exercise price. However, repricing options after a decline in the company's stock may be perceived as rewarding employees for failed performance. (See Appendix 2, Accounting for Repriced Options) Such practices enhance the perception that the interests of owners, employees and other shareholders are not aligned.

Executive Compensation Under Scrutiny

The use of stock options in compensation packages increased significantly throughout the bull market of the 1990s due, in part, to the "technology bubble", as well as to favorable changes in both the tax code and the financial reporting of stock-based compensation.

According to Pearl Meyer & Partners, between 1996 and 2002, the avenge base salary for CEOs at the top 200 US corporations rose just *15%* while alternative types of compensation that received more favorable tax treatment, notably incentive-based payments, such as restricted stock and stock-option grants, more than doubled. On average in 2001, 60% of CEO pay was stock options and only 9% was salary. In Moody's view, this has caused senior management of many firms to over-emphasize the importance of short-term stock price movements.

Overall:

- It is not clear that current stock option schemes serve the best interests of both employees and investors because the associated costs and benefits of these programs are not always obvious.
- The employee stock option plans most often used by companies set the value of grants (that is, the exercise price and number of shares) at the date of grant, thereby weakening the link between pay and performance.
- Moody's believes carefully structured stock based compensation programs can successfully align the interests of employees with those of the shareholders and add long-term value to the company.

Accounting Rules For Employee Stock Compensation Could Change

In the wake of several business scandals and increasing investor skepticism, pressure to change the accounting rules for stock compensation is building. The tax treatment of stock options has also garnered increasing attention from the public and US Senate leaders.

Moody's questions whether current tax incentives, which appear unlikely to change anytime soon, create excessive advantage for a form of pay that is risky for the recipients, and may therefore encourage risky behavior. That may not be in the best interest of creditors, even if it is in the interest of diversified shareholders

In February 2002, Senators Carl Levin, D-Mich., and John McCain, R-Ariz., introduced a bill (Bill-1940, "Ending Double Standard for Stock Options Act") that proposed to limit the amount of a company's stock option tax deduction to the extent that a company recognizes stock option expenses in its income statements. The Senate rejected the bill, however, citing its, opposition to having Congress set accounting standards, but agreed to a new study of the issue.

On August 14, 2002, the Financial Accounting Standards Board (FASB) proposed extending the SFAS No. 123 annual disclosure requirements to the quarterly financial statements and notes. But the FASB rejected a broad change that would have *required* pro forma information to be reported on the income statement. FASB outlined the requirements and also provided two transition alternatives to the one they now have on how to expense stock options.

In October, the FASB issued an Exposure Draft (ED), *Accounting for Stock-Band Compensation-Transition and Disclosure*, that would amend SFAS No. 123. The Board offered a 30- day period to comment on the ED.

The proposed changes would provide three methods of transition for companies that voluntarily adopt the fair value method. of recording expenses relating to employee stock options as follows:

- The existing transition provisions under Statement No. 123 (prospective application only to new awards).
- Prospective application to all new awards and the unvested portion of existing awards.
- Retroactive restatement of all periods presented.

In addition, the ED proposes clearer and more prominent disclosures about the cost of stock-based employee compensation and an increase in the frequency of those disclosures to include publication in quarterly financial statements. Currently, companies are not required to present stock option disclosures in interim financial statements.

As of the date of this report, we understand that the FASB plans to issue the amendment to Statement No. 123 by the end of this year and its provisions would be effective immediately upon issuance.

The proposed disclosures to be provided in annual financial statements would be required for fiscal years ending after December 15, 2002. The proposed disclosures to be provided in interim financial information would be required as of the first interim period of the first fiscal year beginning after December 15, 2002, with earlier application encouraged.

Also, the International Accounting Standards Board (IASB) issued its proposal on "share-based payments" on November 7, 2002. The proposal, which would take effect in 2004, would require all companies that prepare financial statements under IASB standards to recognize the fair value of employee stock options as an expense at the moment they are granted. The IASB's compensation cost methodology is similar to that of Statement No. 123 in many respects. Both IASB and FASB have concluded that stock-based compensation should be recognized as an expense. However, the FASB's proposed amendment to Statement No. 123 would continue to permit US companies to report employee stock options using the intrinsic value method, in which no compensation expense is generally recognized. Both also based the amount of compensation expense on the fair value of stock-based awards at grant date.

The FASB recently issued an invitation to comment on Accounting for Stock-Based Compensation: A Comparison of FASB Statement No. 123, *Accounting for Stock-Based Compensation*, and its Related Interpretations, and the IASB's proposed IFRS, *Share-Based Payments.* The Invitation to Comment summarizes the IASB's proposal and explains the similarities of and the differences between the guidance in the IASB's proposal and the accounting for stock-based compensation under Statement No. 123.

This invitation to comment was designed with the objective to improve US accounting and reporting standards and promote convergence of accounting standards. Comments are due February 1, 2003. We understand that FASB then intends to consider whether further convergence of accounting standards for stock-based compensation is appropriate, including presumably whether to require all companies to expense employee stock options.

Appendix 1 – Accounting for Stock Options - Two Approaches

There are two principal types of stock option programs, each with unique rules and tax consequences: non-compensatory and compensatory.

Characteristics of non-compensatory plans:

- Substantially all full-time employees may participate
- Stock is offered equally or in proportion to salary
- Limited exercise period
- Discount is reasonable
- Number of shares and strike price are known at the date of grant and the market price is equal to or greater than the strike price
- No compensation cost is recognized for such plans
- Meets section 423 of the Internal Revenue Code

Characteristics of compensatory plans:

- Plans not meeting the first four characteristics of non compensatory plans

Accounting for stock options expense is currently governed by Statement of Financial Accounting Standard (SFAS) No. 123, "Accounting for Stock-Based Compensation." This accounting standard recommends, but does not require, that companies charge to compensation expense the fair value of options granted to employees over the option-vesting period. 'Fair value' is calculated on grant date using an option-pricing model. Moody's believes this method produces a good approximation of a company's compensation cost for options granted.

Most companies, however, have opted to account for employee stock options using the "Intrinsic Value Method" prescribed under Accounting Principles Board (APB) Opinion No. 25 and subsequent interpretations. APB No. 25 assigns zero value to most options. This Opinion, however, was written roughly 30 years ago, before Black-Scholes and other option pricing models were developed. Although option pricing is now the basis for many transactions in our financial markets, only two companies in the S&P 500 Index (as of June 30, 2002) applied the recommended approach from SFAS No. 123. In recent months, however, a number of firms have announced that they will do the same.

'Intrinsic Value' Method Expressed in APB Opinion No. 25 Is the More Aggressive

APB Opinion No. 25 recommends that expense for stock options be measured on the first date ("measurement date") at which two factors become known: the number of shares that an employee is entitled to receive and the amount to be paid for the shares (the exercise price). The guideline also categorizes stock awards as either fixed (non-compensatory) or as performance or incentive-based (compensatory) plans.

For fixed plans, the exercise price and the number of shares are known or fixed at the grant date. Thus, the measurement date is the grant date, and compensation expense is determined as the excess of the quoted market price over the option strike price at the time the option is granted. The difference represents the intrinsic value of the option and is charged to compensation expense as the option vests.

Because fixed plans usually have an exercise price that is at least equal to the market value of the stock at the date of grant, the application of the intrinsic method generally results in no charge to earnings for stock option expense. With respect to variable (or, performance based) plans, either the exercise price or the number of shares is unknown at the grant date and is determined by events that occur after the grant date. The terms become known only on the measurement date. APB Opinion No. 25 therefore requires that the compensation expense be recognized based on the difference between the quoted market price and the exercise price at the measurement date (future appreciation must be expensed until the option becomes fixed).

In practice, variable plans are used less frequently, a fact that many have attributed to their accounting treatment. The scope of APB No. 25 is limited to employees. Independent directors' stock compensation is not addressed under this opinion.

Basic Flaws in APB Opinion No. 25

- Moody's believes it is illogical that companies are not required to recognize compensation cost if employee stock options have no performance criteria, but must charge earnings if they do.

- The Opinion provides a model for expense recognition for options granted only to employees.
- Non-employee stock options should be recognized as a form of payment like other currency, but an interpretation of APB Opinion No. 25 makes an exception for members of the Board of Directors.

'Fair Value' Method Enshrined in SFAS No. 123 Takes Conservative Approach

The FASB unsuccessfully attempted to supersede the Intrinsic Value Method in 1995 with an accounting standard that would have reflected the cost of options in a corporation's income statement. Ultimately, the standard that was issued, SFAS No. 123 (1996), defined a Fair Value Method of accounting for employee stock options and simply encouraged, but did not require, all companies to use this method. Companies that choose not to adopt Statement No. 123 will continue to measure compensation using the intrinsic-value method. These firms must disclose, among other items, pro-forma net income, and earnings per share, determined as if the fair value method of SFAS No. 23 had been used to measure compensation in the notes to the financial statements. SFAS No. 123 accounting is still required, however, for transactions in which a company issues stock options or other equity instruments to acquire goods or services from non-employees.

The fair value derived from the compensation cost of options takes into account such factors as market price at the date of grant, exercise price, the expected life of the option, the volatility of the underlying stock, expected dividends and the risk-free rate of interest over the life of the option. The compensation cost is then amortized over the vesting period. The FASB prescribes that the fair value of an option on the grant date be estimated using any accepted option-pricing model, such as the Black-Scholes model.

Unlike APB Opinion No. 25, SFAS No. 123 treats both fixed and variable (or, performance based) plans the same because compensation expense based on estimated fair value is measured at the grant date for both plans.

In general, Statement No. 123 will create or increase recognized compensation costs for stock-based plans, so a company can expect lower income and earnings per share if they adopt the standard. Companies likely to experience the greatest expense increase under Statement No. 123 include rapidly growing companies with high stock price volatility that rely heavily on employee stock-based compensation programs or companies whose intellectual capital is their most important asset.

While "fair value" reporting is recommended by the FASB, most companies use the guidelines set forth in APB Opinion No. 25 because that method often does not affect reported earnings. Among the corporations included in the S&P 500 Index, only Boeing and Winn-Dixie currently apply the recommend approach from SFAS No. 123. However, investor concern over accounting practices and transparency have spurred Coca-Cola, Bank One, The Washington Post and other prominent firms to announce that they will begin to record stock compensation as a cost on their financial statements.

Detailed Disclosure Required, Regardless of Method

Regardless of the method used to account for stock-based compensation arrangements, companies must provide detailed disclosures concerning the value of their stock options. These disclosures include a description of the plan(s), including the general terms of awards under the plan(s) such as vesting requirements, the maximum term of the options granted, and the number of shares authorized for the grants. In addition, the following information must be disclosed for each year for which an income statement is provided:

- The number and weighted-average exercise price of options outstanding at the beginning and the end of the year, the number of options that are exercisable at those dates, the number of options granted, exercised, forfeited, or expired during the year
- The weighted-average grant-date fair value of options granted during the year
- The option-pricing model employed and significant assumptions used to estimate the fair value of options, including the risk-free rate, expected life, expected volatility, and expected dividend yield
- Total compensation cost recognized for stock-based compensation awards
- The terms of significant modifications to outstanding grants

Appendix 2 - Accounting for Repriced Options

Under APB Opinion No. 25, modifications to options such as repricing trigger a new measurement date, i.e. the date the new options are granted. Compensation expense, however, is not recognized in the financial statements if the options are repriced at, or above, the then-current market price of the shares.

FASB Interpretation No. 44 (FIN 44) "Accounting for Certain Transactions Involving Stock Options", clarifies the accounting treatment of certain issues under APB Opinion No. 25, including the accounting consequence of certain modifications to outstanding fixed stock-option plans. FIN 44 establishes that, if the exercise price of a fixed option award is altered, the stock option is accounted as "variable" from the date of modification.

FIN 44 has made the repricing of "out-of-the-money" options to a lower exercise price potentially prohibitive, because it requires that the re-priced options be treated under variable accounting. The Interpretation, however, provides an exception for companies that desire to reprice options without subjecting their earnings to added volatility. Under FIN 44, companies that issue replacement options six months and a day prior to cancellation or wait six months and a day after cancellation to reissue options at a lower price can preserve fixed option accounting treatment.

FIN 44 also clarifies the definition of the term "employee" for purposes of applying APB Opinion No. 25, addressing the inappropriate extension of the opinion's accounting treatment to option awards made to persons other than employees. Under FIN 44, an individual would only be considered an employee if the company granting the options has sufficient control over the individual so as to establish an employer-employee relationship. The relationship is based on Internal Revenue Service regulations. FIN 44, however, provides an exception to the definition for elected independent members of the company's board of directors.

Moody's believes that independent directors provide services on behalf of shareholders, and stock compensation awarded to them should therefore be expensed.

Appendix 3 – Accounting for the Tax Benefit Related to the Exercise of Employee Stock Options

Presently, there are two types of employee stock options for tax purposes. "Incentive stock options" (ISOs), which provide employees with tax-favored treatment, and "nonqualified stock options" (NQSOs), which do not.

An option must meet several requirements to qualify as an ISO, including that it was not in the money when granted and that the employee agrees not to sell the shares received for at least one year after exercise. Options that are issued in the money or that do not meet one of the other requirements for ISO treatment are considered NQSOs. Furthermore, if an employee exercises an ISO and sells the stock received within one year, the sale is deemed to be a "disqualifying disposition," which causes the ISO to become an NQSO.

Presently, the Federal Tax Code permits a company to receive a tax deduction for an ISO exercise only if the exercising employee subsequently enters into a disqualifying disposition. In contrast, all NQSO exercises result in a tax deduction at the exercise date. In both cases, the amount of the deduction is the amount that the option was in the money when it was exercised.

In September 2000, the Emerging Issues Task Force (EITF) reached a consensus on Issue No. 00-15 "Classification in the statement of cash flows of the income tax benefit received by a company upon exercise of a nonqualified stock option." The consensus requires disclosure of the tax deduction directly on the Statement of Cash Flow, as a *reduction in cash outflow* from operating activities. Companies not reporting the tax deduction as a separate line item within cash flows from operations or a change in the Statement of Shareholder's Equity are required to disclose the tax benefit.

		Estimated Tax Benefits		
No. of Companies	**S&P 100 Major Sector Categories**	**2001**	**2000**	**1999**
17	Consumer Discretionary	2,102	1,661	1,379
11	Consumer Staples	728	682	850
4	Energy	168	336	200
13	Financials	3,239	4,004	2,976
11	Health Care	1,427	3,228	1,599
13	Industrials	891	1,341	1,255
13	Information Technology	5,859	12,651	6,222
7	Materials	169	162	201
4	Telecommunication Services	200	422	643
7	Utilities	106	154	77
100	**Total**	**14,889**	**24,642**	**15,402**

Not all companies disclose the tax benefit separately. Information on tax benefits associated with stock option exercise is readily available for about one-third of the companies in the S&P 100. For those companies that opt to combine the tax benefit with other line items, a rough proxy was used. Moody's estimated that exercised during the year were in aggregate exercised at the company's average share price for that year.
Source: R.G. Associates, Moody's, Compustat.

Appendix 4 – Estimated Impact of Expensing the Fair Value of Employee Stock Options on Pretax Margins

S&P 100 Composite

Ticker	Company	Pretax Margin % 2001	Pro-forma SFAS No. 123 Pretax Margin % 2001	% Change in Pretax Margin 2001
MMM	3M CO	13.6	12.1	-11%
AES	AES CORP. (THE)	8.6	7.9	-8%
AA	ALCOA INC	7.2	6.0	-17%
ATI	ALLEGHENY TECHNOLOGIES INC	(1.7)	(2.1)	NM
AEP	AMERICAN ELECTRIC POWER	2.6	2.6	-1%
AXP	AMERICAN EXPRESS	6.4	4.9	-23%
AIG	AMERICAN INTERNATIONAL GROUP	13.0	12.7	-3%
AMGN	AMGEN INC	42.0	34.9	-17%
BUD	ANHEUSER-BUSCH COS INC	20.3	19.5	-4%
AOL	AOL TIME WARNER INC	(11.7)	(17.4)	NM
T	AT&T CORP	(16.4)	(18.2)	NM
AVP	AVON PRODUCTS	11.1	10.7	-4%
BHI	BAKER-HUGHES INC	12.3	11.5	-7%
BAC	BANK OF AMERICA CORP	19.0	18.0	-5%
ONE	BANK ONE CORP	15.5	14.4	-7%
BAX	BAXTER INTERNATIONAL INC	12.6	9.3	-26%
BDK	BLACK & DECKER CORP	3.8	3.2	-15%
BA	BOEING CO	6.1	6.1	0%
BCC	BOISE CASCADE CORP	(0.6)	(0.9)	NM
BMY	BRISTOL MYERS SQUIBB	15.4	13.4	-13%
BNI	BURLINGTON NORTHERN SANTA FE	12.9	12.7	-2%
CPB	CAMPBELL SOUP CO	14.9	14.5	-2%
CI	CIGNA CORP	7.9	7.5	-5%
CSCO	CISCO SYSTEMS INC	(3.9)	(15.8)	NM
C	CITIGROUP INC	19.5	18.7	-4%
CCU	CLEAR CHANNEL COMMUNICATIONS	(15.6)	(16.6)	NM
KO	COCA-COLA CO	28.2	26.5	-6%
CL	COLGATE-PALMOLIVE CO	18.1	17.7	-2%
CSC	COMPUTER SCIENCES CORP	4.3	3.8	-12%
DAL	DELTA AIR LINES INC	(13.4)	(13.8)	NM
DOW	DOW CHEMICAL	(2.2)	(2.5)	NM
DD	DU PONT (E I) DE NEMOURS	27.3	26.7	-2%
EK	EASTMAN KODAK CO	0.7	(0.2)	NM
EPG	EL PASO CORP	0.8	0.4	-50%
EMC	EMC CORP/MA	(8.1)	(15.3)	NM
ETR	ENTERGY CORP	12.3	11.6	-6%
EXC	EXELON CORP	15.5	15.4	0%
XOM	EXXON MOBIL CORP	13.2	13.0	-2%
FDX	FEDEX CORP	5.5	5.2	-4%
F	FORD MOTOR CO	(4.7)	(4.8)	NM

NM = Not Meaningful.
A marginal tax rate of 35% was used to estimate the impact of expensing the fair value of options on pretax margins. Pretax earnings were not adjusted for non-recurring items.
Source: Compustat, Moody's.

S&P 100 Composite (Continued)

Ticker	Company	Pretax Margin % 2001	Pro-forma SFAS No. 123 Pretax Margin % 2001	% Change in Pretax Margin 2001
GD	GENERAL DYNAMICS CORP	11.7	11.4	-2%
GE	GENERAL ELECTRIC CO	16.0	15.5	-3%
GM	GENERAL MOTORS CORP	0.8	0.6	-24%
G	GILLETTE CO	15.0	13.0	-13%
GS	GOLDMAN SACHS GROUP	23.4	19.9	-15%
HAL	HALLIBURTON CO	7.4	6.8	-8%
HET	HARRAHS ENTERTAINMENT INC	9.4	9.1	-3%
HIG	HARTFORD FINL SVCS GRP INC	2.3	1.8	-23%
HCA	HCA INC	9.0	8.7	-4%
HNZ	HEINZ (H J) CO	5.1	4.9	-4%
HPQ	HEWLETT-PACKARD CO	1.6	(0.8)	NM
HD	HOME DEPOT INC	9.3	8.6	-7%
HON	HONEYWELL INTERNATIONAL INC	(1.8)	(2.4)	NM
IBM	INTEL CORP	8.2	1.4	-83%
INTC	INTL BUSINESS MACHINES CORP	12.8	11.0	-14%
IP	INTL PAPER CO	(4.8)	(5.1)	NM
JPM	J P MORGAN CHASE & CO	5.1	3.2	-37%
JNJ	JOHNSON & JOHNSON	23.9	22.9	-4%
LEH	LEHMAN BROTHERS HOLDINGS INC	7.6	7.2	-4%
LTD	LIMITED BRANDS INC	10.3	9.8	-5%
LU	LUCENT TECHNOLOGIES INC	(93.1)	(100.0)	NM
MAY	MAY DEPARTMENT STORES CO	8.1	8.0	-1%
MCD	MCDONALDS CORP	15.7	14.0	-10%
MEDI	MEDIMMUNE INC	36.9	16.7	-55%
MDT	MEDTRONIC INC	33.2	29.3	-12%
MRK	MERCK & CO	22.4	21.2	-5%
MER	MERRILL LYNCH & CO	3.1	(0.5)	NM
MSFT	MICROSOFT CORP	45.6	31.6	-31%
MWD	MORGAN STANLEY	13.0	11.6	-11%
NSM	NATIONAL SEMICONDUCTOR CORP	(8.3)	(19.8)	NM
NXTL	NEXTEL COMMUNICATIONS	(42.0)	(48.7)	NM
NSC	NORFOLK SOUTHERN CORP	9.0	8.6	-4%
ORCL	ORACLE CORP	35.2	27.9	-21%
PEP	PEPSICO INC	15.0	13.2	-12%
PFE	PFIZER INC	32.2	29.6	-8%
PHA	PHARMACIA CORP	11.5	10.5	-9%
MO	PHILIP MORRIS COS INC	19.6	19.3	-2%
PG	PROCTER & GAMBLE CO	11.8	11.0	-7%
RSH	RADIOSHACK CORP	6.1	4.4	-28%
RTN	RAYTHEON CO	0.7	0.2	-65%
ROK	ROCKWELL AUTOMATION	3.9	2.7	-32%
SLE	SARA LEE CORP	10.4	10.1	-3%
SBC	SBC COMMUNICATIONS INC	24.7	23.9	-3%

NM = Not Meaningful.
A marginal tax rate of 35% was used to estimate the impact of expensing the fair value of options on pretax margins. Pretax earnings were not adjusted for non-recurring items.
Source: Compustat, Moody's.

S&P 100 Composite (Continued)

Ticker	Company	Pretax Margin % 2001	Pro-forma SFAS No. 123 Pretax Margin % 2001	% Change in Pretax Margin 2001
SLB	SCHLUMBERGER LTD	8.2	6.7	-18%
S	SEARS ROEBUCK & CO	3.0	2.8	-6%
SO	SOUTHERN CO	16.7	16.5	-1%
TXN	TEXAS INSTRUMENTS INC	(5.2)	(10.7)	NM
TOY	TOYS R US INC	0.8	0.3	-65%
TYC	TYCO INTERNATIONAL LTD	17.2	15.6	-10%
USB	U S BANCORP	16.1	13.8	-14%
UIS	UNISYS CORP	(0.8)	(2.1)	NM
UTX	UNITED TECHNOLOGIES CORP	10.1	9.7	-4%
VZ	VERIZON COMMUNICATIONS	5.2	4.1	-22%
VIA.B	VIACOM INC -CL B	2.8	1.9	-32%
WMT	WAL-MART STORES	4.9	4.9	-1%
DIS	WALT DISNEY CO	5.1	3.4	-33%
WFC	WELLS FARGO & CO	19.3	18.6	-4%
WY	WEYERHAEUSER CO	3.5	3.3	-6%
WMB	WILLIAMS COS INC	13.9	13.7	-1%
XRX	XEROX CORP	2.5	1.8	-29%

NM = Not Meaningful.
A marginal tax rate of 35% was used to estimate the impact of expensing the fair value of options on pretax margins. Pretax earnings were not adjusted for non-recurring items.
Source: Compustat, Moody's.

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