

Letter of Comment No: 6363
File Reference: 1102-100

Accounting for
Employee Stock Options: Another Option

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The Financial Accounting Standard Board (FASB) recently issued an Exposure Draft (ED) of a Proposed Statement of Financial Accounting Standards, *Share-Based Payment – an amendment of FASB Statements No. 123 and 95*. The ED addresses accounting for transactions in which an enterprise receives employee services in exchange for (a) equity instruments of the enterprise or (b) liabilities that are based on the fair value of the equity instruments or that may be settled by the issuance of such equity instruments.

In this paper our focus is on the most controversial guidance in the ED, the proposed accounting for stock option awards to employees. We propose an alternative to the FASB's treatment that we believe is simpler and more conceptually sound.

Suppose that an executive of a company is granted stock options. There is some period of time that must pass before the executive is issued (vests in) all of the options. On the FASB model, the period of time is called the service period, and the executive is providing enhanced services during this period in return for the options. These enhanced services must be valued at some point and must be expensed over the service period because the services are consumed by the company as they are provided. The services count as "momentary assets" per the discussion of such assets in paragraph 31 of *Statement of Financial Accounting Concepts No. 6 (Con 6)*. Therefore, under the FASB model, "stock option expensing" is, in reality, the expensing of services obtained in return for the options.

The FASB accepts that the services should be measured at their fair value. Since the fair value of the services cannot be directly measured, the FASB uses the fair value of the options issued as a proxy for the fair value of the services provided in return for the

options. The question arises, “Fair value *when* of the options issued?” since the fair value of the options changes over time.

The FASB proposes that the fair value of the options issued be measured at the date of the grant of the stock option award. Hence, if an executive is granted a stock option award, and one third of the service period passes, and the executive is issued (vests in) one third of the options, then the amount of compensation expense to date is one third of the fair value of the total number of options at the date the option award was granted. Measurement at the grant date of the fair value of stock options requires the use of some mathematical model, like the Black-Scholes-Merton model. The proposal by the FASB is complicated and not simple precisely because such a mathematical model must be used.

With respect to option valuation models, the ED states that some parties believe that the Black-Scholes-Merton and other “closed form” models should not be used because they do not take into account the unique characteristics of employee stock options. Although the FASB concluded that such models are capable of measuring the fair value with sufficient reliability, it believed that a “lattice” or “open model” is preferable because it offers greater flexibility to capture these unique characteristics of employee stock options. (See Issue 4(b) in the ED.) An editorial in the Chicago Tribune (April 6, 2004) titled “The cost of stock options” succinctly stated the problem with all such models, closed or open ended:

There also is no consensus on how stock options should be valued. Yes, there are mathematical models for estimating the cost of options granted today, but those models all amount to calculated bets on future stock prices.

Since the use of such models is necessitated by grant date measurement of compensation expense, why did the FASB choose this date for measurement purposes?

In paragraph C20 of the ED, the FASB stated its rationale:

The Board reaffirmed the conclusions on grant-date accounting in that on the grant date, (a) the employer and the employee come to a mutual understanding of the terms of a share-based payment arrangement and (b) the employer gives a conditional promise to issue equity instruments to the employee in exchange for services.

Here the FASB made an assumption that can be challenged. On the grant date a board of directors and a chief executive come to a mutual understanding, but what that understanding results in is an incentive for the executive to render enhanced services over the services over the service period that will increase the market value of the shares over the exercise price of the options. Such a mutual understanding does not result in an intention by the executive to render services, the fair value of which is equal to the fair value of the options at the date of grant.

Consider cash compensation arrangements. An executive may come to terms with a board of directors that he or she will be paid a cash salary of \$5 million for a year's services plus a bonus of \$1 million payable if the board deems such work superior. Suppose the time comes to recognize compensation expense for the year's services, and the board decides not to give the bonus. Compensation Expense will be debited for \$5 million, even if the board deems that the executive is being overpaid. There will be no debit to Loss Resulting From Compensation Agreement and a debit to Compensation Expense such that the sum of the two debits is \$5 million. It is generally accepted accounting practice that compensation expense is measured by the compensation received by the employee. In generally accepted accounting practice it is implicitly assumed that the fair value of the services rendered is the fair value of the compensation received; the

fair value of the services rendered does not depend on any prior understanding between the board and the executive, except in so far as those understandings affect the fair value of the compensation ultimately received. If the FASB wishes to deny this assumption for stock option awards, it must do so for cash compensation arrangements as well.

With respect to stock option awards, the employer receives compensation when he or she exercises the options. The options will be exercised when the fair value of shares that will be obtained exceeds the exercise price of the options. The compensation received by the employee will be equal to this excess. This excess is equal to the intrinsic value of the options on the exercise date. On the assumption that the fair value of services rendered is equal to the fair value of compensation received, compensation expense should be measured by the intrinsic value of the options on the exercise date. If an employee is issued (vests in) options prior to the date they are exercised, compensation expense can be estimated by the intrinsic value of the options at the vesting date, and later adjusted through the exercise date.

In *Statement of Financial Accounting Standards No. 123 (FAS 123)*, paragraphs 133, 134, and 138, the FASB made some favorable comments concerning an exercise date-intrinsic value method:

- 133. ...Other advocates of exercise date measurement contend that the gain, if any, that an employer realizes upon exercises of a stock option appropriately measures the total compensation paid...
- 134. ...Exercise date advocates also note that measurement at that date is simple and straightforward...
- 138. ...An exercise date-intrinsic value method also would level the playing field, and some Board members think that it would enhance the relevance and representational faithfulness of financial statements.

The FASB, in FAS 123, rejected exercise date measurement not because of any specific argument against such measurement, but simply because of its adoption of grant date measurement. As discussed above, the rationale of the FASB for grant date measurement implies denial of the assumption that the fair value of services rendered equals the fair value of compensation received.

The following example is provided of the use of the intrinsic value-exercise date method. On 1/2/05, ABC Company granted 10,000 options to purchase its common stock at \$30 a share. On that day the common stock was publicly traded at \$30. The service period was three years with the earliest exercise date 12/31/07 and the latest 12/31/08. The stock traded at these prices on the following dates: 12/31/05, \$35; 12/31/06, \$40; 12/31/07, \$38; 12/31/08, \$36. The stock options were exercised on 12/31/08. The following journal entries illustrate the compensation cost to be recorded. The par value of the stock was \$1.

12/31/2005

Compensation Expense	\$16,666
Paid In Capital-Stock Options	\$16,666

($\$35 - \30) x 10,000 x 33%

This is the end of year fair value of the stock less the option price, multiplied by the number of options. The 33% is the percentage of the options issued to (vested in by) the employee.

12/31/2006

Compensation Expense	\$49,334
Paid In Capital-Stock Options	\$49,334

$$(\$40 - \$30) \times 10,000 \times 66\% = \$66,000 - \$16,666 = \$49,334$$

Again, this is the end of the year fair value less the option price multiplied by the number of options. The 66% is the percentage of the option issued to the employee. The provision for the 2005 expense is subtracted from the \$66,000 to arrive at the 2006 expense.

12/31/2007

Compensation Expense	\$14,000
Paid In Capital-Stock Options	\$14,000

$$(\$38 - \$30) \times 10,000 \times 100\% = \$80,000 - \$66,000 = \$14,000$$

The calculation is the same as in the previous year, except that all options have been issued to the employee. Also, the total expense for the previous two years is deducted from the three year total needed.

12/31/2008

Paid In Capital-Stock Options	\$20,000
Compensation Expense	\$20,000

$$(\$36 - \$30) \times 10,000 \times 100\% = \$60,000 - \$80,000 = (\$20,000)$$

Cash	\$300,000
Paid In Capital-Stock Options	\$60,000
Common Stock	\$10,000
Paid in capital	\$ 350,000

The calculation for the compensation expense is the same, with the 100% representing the fact that all options have been issued to the employee. The previous

three years' compensation expense is subtracted from the \$60,000. At this point in time, the total expense of \$60,000 is the exact amount by which the fair market value of the stock exceeds the option price. This is the compensation received by the employee on 12/31/08.

As to the earnings per share calculation, the treasury stock method is currently used. For example, in 2005 the 10,000 options are assumed to have been exercised and 10,000 shares are assumed issued. However, the \$300,000 proceeds (10,000 options x \$30 option price) are then assumed to buy treasury shares at the average market price (in this case we will use the year end as the average). Accordingly, 8,571 treasury shares are purchased ($\$300,000/\35). The net increase in the diluted denominator would be 10,000 shares less the 8,571 treasury shares acquired, or 1,429 incremental shares.

A better representation might be the following. Since there are 10,000 options granted but only 33% issued, the shares included would be 3,333. In 2006, the service period is 66% completed, therefore, the shares included in the denominator would be 6,666. At the end of the service period, the 10,000 shares would be included.

As can be seen from the example, the application of the intrinsic value-exercise date method is straightforward. In summary, we hope that the FASB will reconsider the use of this method for stock option awards, because it is consistent with the assumptions that the fair value of services rendered equals the fair value of compensation received and that compensation received is the difference between the market price of the stock and the exercise price of the options at the date of exercises.

As Kimberly Crook (Principal Author) states in the FASB Financial Accounting Series No. 211-A, July 2000, *Special Report* (from the G4+1 group) – *Accounting for Share-Based Payment*, paragraph 5.14:

...many people regard the benefit of share options to an employee as being the difference between the market value of the shares on exercise of the options and the exercise price paid by the employee to obtain the shares; only exercise date measurement will ensure that the amount recognized by the entity is the same amount as the perceived value of the benefit to the employee.