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Financial Accounting Standards Board
Director @fasb.org
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Response to FASB re ED on Share-Based Payment, an amendment of FASB Statements Nos. 123 and 95

Measuring the expense of a stock option is conceptually one of the most difficult problems in financial accounting today. The expense of a stock option at the time it is issued is the difference between the stock’s current value and what its value would be when exercised. Usually, an option can be exercised at a specific dollar amount four years from the date of issuance. If the market price now is $100 a share and the value of the stock four years from now will be $130 a share, the expense is the present value of $30. The trouble is there is no good way of estimating today what the price actually will be in four years.

Although “fair value” is described at length in various paragraphs of the proposed revision of Statement 123, there is no way to estimate the fair value on the exercise date, and the rules required are not feasible.

Many articles use the Black-Scholes-Merton model as a measure of this expense. This model works well for bond issues with a future value that is relatively easy to estimate. Other models, such as the lattice model, arrive at results in a much more complicated fashion than the Black-Scholes-Merton model but with no better success in estimating the price on the exercise date.

The “binomial method” is a complicated way of measuring the expense—more complicated than is worthwhile—and it has the same fatal weakness. This method requires an accurate estimate of what the exercise price will be on the exercise date, which usually is not possible.

Financial Accounting Statement 148 (December 2002) dealt with the stock option problem and refers to these changes as measuring “fair value,” but this alleged fair value does not and cannot change the fact that a stock’s value on the exercise date cannot be known on the grant date.

To illustrate the point that the expense is a wild estimate, I took data for 70 corporations listed in the NASDAQ 100 Index for April 1997 and compared each of them with the listing for April 2001. (The remaining 30 NASDAQ companies were not listed in both years.) I used NASDAQ companies because these are the corporations in which stock options are most common. I computed the percentage change in price between these two dates. Only 51 companies showed any gain. The median stock had a gain of
10 percent, and the top five stocks had gains of more than 40 percent. But averages drawn from these data are irrelevant. The average estimate is the average for all companies and it has no relevance for a specific company. The price as of the exercise date is for a specific company and, except for “blue chip” companies, there is no way of estimating the price four years from the grant date. A study of any other group of companies over any other time period has the same weakness.

At a meeting of the FASB on July 8, 2003, the attendees could not agree on a specific way to measure the expense of stock options at the time of issuance (FASB Report, August 29, 2003).

Currently, a company reports the number of shares of stock options granted in a note to the financial statements, which is useful information but is not the cost of stock options.

Companies should not be required to estimate an expense as of the grant date, as is required in the proposed statement.

If a company based its calculation on an estimate of its income at some future date, it is disclosing its projected income. Few companies would do this willingly.

Some people argue that several expense and balance sheet items involve estimates. They include depreciation, allowance for returns, bad debts, obsolete inventories, interest on capital leases, income taxes, inventory cost below market, oil deposits, mineral deposits, real estate, and motion pictures. Some assets are not even reported; they include value of research and development organization, trademarks (e.g., Coca Cola), lawsuits. These items are not comparable to stock options expense because one can make reliable estimates of them. Some estimates are based on known amounts. In most of them there is a transaction amount that is the basis for an estimate. None of them require an estimate of what the market price will be several years in the future. For stock options, the amount of expense can be anywhere from zero to a large number.

Recognition of Compensation Cost

Issue 1: As explained above, the value of the transaction can be reported as an expense only if the amount of the stock’s value at the exercise date can be reliably estimated. There is no feasible way of making such an estimate. Therefore, there is no reasonable way of obtaining the compensation cost, so this amount cannot be included as an expense.

Issue 2: I do not agree with this conclusion because a reliable estimate of the stock value at the exercise date cannot be made.

Measurement Attribute and Measurement Date
Issue 3: This implies that the “fair value” of the compensation can be estimated. Because the fair value can be estimated only if the stock price as of the exercise date can be reliably estimated, this is not feasible.

Fair Value Measurement

Issue 4(a): The text describes several possible models for measuring the expense. It refers to the Black-Scholes-Merton model, binomial, and lattice models, but none of these, nor any other models, are satisfactory because all of them require a reliable estimate of the stock value as of the exercise date. There is no way to arrive at such a value. I do not agree that the lattice model, or any other model, is an acceptable way of measuring the expense.

Issue 4(b): None of the reasons for concluding that a reliable estimate of the instruments’ value can be made on the exercise date is valid. There is no assurance that the share price of common stock on the exercise date can be estimated reliably. Unlike fixed assets, their depreciation gives a fairly reliable estimate of the annual cost. The estimate does vary with the estimated life of the asset. Other estimates of future events have some basis for using the amount as best available. Except for “blue chip” corporations, the value on the exercise date can be zero for many companies and can vary up to several times the current price in certain companies. I have included these differences in my analysis of the behavior of all NASDAQ companies and will be happy to refer to the details if you would like evidence of a fairly obvious result. Few analysts even attempt such an estimate for stock value four years after its award date.

Issue 4(c): There is no method of estimating the expense of a stock option, even one that includes a method of volatility.

Issue 4(d): Because the future value of the stock option cannot be measured, it is not necessary to estimate components of this calculation.

Issue 5: There is no point in attempting to measure the value each year because the only relevant value is the value on the exercise date, and this cannot be known until that time. The term “intrinsic value method” is misleading; there is no way of measuring an intrinsic value—or any other value—until the exercise date.

Employee Stock Purchase Plans

Issue 6: I agree.

Attribution of Compensation Cost

Issue 7: Because the expense cannot be measured, there is no point in attempting to report an attribution number.


**Issue 8:** Because the expense cannot be measured, there is no point in measuring the requisite service period.

**Issue 9:** Because the expense cannot be measured, there is no need to report a related compensation cost.

**Modifications and Settlements**

**Issue 10:** If a modification does nothing more than change the fair value of the shares, it can be disregarded because there is no feasible way of recording the shares’ value at any future time. If the modification changes the number of shares, this change should be recognized in a note to the financial statements as is present practice.

Paragraph 35 and the lengthy explanation of its contents serve no useful purpose.

**Income Taxes**

**Issue 11:** I do not attempt to comment on the income tax implications.

**Disclosures**

**Issue 12:** The information about the number of shares referred to in this section is useful information and is relatively easy to prepare. However, there should not be a requirement for an item of information that includes the “intrinsic value” or “fair value,” as described in paragraphs B191–B193. There is no way to find a reliable estimate of these amounts.

**Transition**

**Issue 13:** If the section is limited to listing the number of shares involved, I agree with it. The proposed disclosures of items that involve “fair value” or “intrinsic value” cannot be estimated reliably in most companies.

**Nonpublic Entities**

**Issue 14(a):** Neither the intrinsic-value nor the fair-value-based method produces reliable numbers in nonpublic companies.

**Issue 14(b):** Because nonpublic companies by definition do not have common stock whose value is published, the rules recommended in this proposed Statement probably do not apply to these companies.

**Small Business Issuers**
Issue 15: I do not agree with this statement because the required dollar amounts are not obtainable. References to the number of shares should be included in notes to the financial statements.

Cash Flows

Issue 16: I agree that the proposed treatment is acceptable. This assumes there will not be a journal entry as of the year of the grant date, because such a transaction is unrealistic for reasons given above.

Differences between This Proposed Statement and IFRS 2

Issue 17: In general, I prefer a treatment that is consistent with that in IFRS 2. However, this assumes the final document will remove recognition of an expense transaction as of the grant date.

Understandability of This Proposed Statement

Issue 18: I agree, provided the qualifications given above are excluded.

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