

Accounting Horizons
Vol. 18, No. 1
March 2004
pp. 65-76

COMMENTARY

Evaluation of the IASB's Proposed Accounting and Disclosure Requirements for Share-Based Payment

AAA Financial Accounting Standards Committee

Laureen A. Maines, Chair; Eli Bartov; Anne L. Beatty; Christine A. Botosan (principal co-author); Patricia M. Fairfield; D. Eric Hirst (principal co-author); Teresa E. Iannoconi; Russell Mallett; Mohan Venkatachalam; Linda Vincent

INTRODUCTION

The November 2002 International Accounting Standards Board (IASB) Exposure Draft, *Share-Based Payment* (hereafter the ED), addresses accounting and disclosure requirements for share-based payments. The Financial Accounting Standards Committee of the American Accounting Association (hereafter the Committee) submitted a comment letter on the ED to both the IASB and Financial Accounting Standards Board (FASB) in March 2003 and met with the FASB to discuss the comments in June 2003. This article summarizes the Committee's comments on issues related to share-based payments. Comments in this article reflect the views of the individuals on the Committee and not those of the American Accounting Association.

In brief, we support the ED's principles-based approach and the conclusion that share-based payments ultimately lead to expense recognition.¹ However, the Committee has significant concerns about the ED's proposal to distinguish between cash- and equity-settled stock options. We consider these instruments as sufficiently economically equivalent that their reporting should be the same. Although the Committee members were not unanimous in their views,² we argue against the use of grant-date measurement and provide reasons why "truing up" through exercise-date has important advantages.

We first describe the major features of the ED. Next we critically evaluate the proposal, supporting our positions with relevant research findings. We conclude with a summary of the Committee's position on accounting for share-based payments.

The Committee thanks Leslie Hodder for very insightful comments on an earlier version of this comment letter.

¹ The ED argues that share-based payments are made in return for goods and services received. Whether the goods or services received are expensed immediately depends on standard rules for asset recognition or liability fulfillment.

² Prior Committees have struggled with similar issues (e.g., AAA FASC 1994, 1999).

Submitted: July 2003
Accepted: November 2003
Corresponding author: Laureen Maines
Email: lmaines@indiana.edu

OVERVIEW OF THE IASB ED

The conceptual underpinning of the IASB's ED on share-based payments is that an entity should record all share-based payments in its financial statements, regardless of the ultimate form of settlement (i.e., shares or cash) and regardless of the counterparty involved (i.e., employees or others). The overarching measurement goal is to capture the value of the goods or services received in exchange for the options granted. Sometimes, measurement is based directly on the value of those goods (e.g., the purchase of property and equipment in exchange for options); sometimes, measurement is based on the fair value of the options granted (e.g., options granted to employees in return for their services). The ED discusses option valuation models such as the Black-Scholes and binomial models, but leaves the decision as to model choice to the entity.

The proposed accounting for share-based payments differs depending on the form of settlement. The ED identifies three forms of share-based payments: (1) equity-settled share-based payments, (2) cash-settled share-based payments, and (3) share-based payments that may be settled in equity or cash. Instruments issued in transactions settled in stock are classified as equity, whereas those settled in cash are classified as debt. Transactions settled in stock or cash at the counterparty's option are deemed compound instruments composed of both debt and equity components. Finally, transactions settled in stock or cash at the entity's option are deemed debt or equity depending on prior experience or policies regarding the expected form of settlement.

Contingent upon whether the instrument is classified as debt or equity, the ED specifies differential treatment of *changes* in the fair value of the instrument post-issuance. Changes in the fair value of instruments classified as equity are ignored. In effect, this approach results in grant-date measurement of the cumulative income statement effect of share-based payments settled in equity. In contrast, instruments classified as debt are adjusted to fair value at each reporting date and the resulting profit or loss is recognized in income. This gives rise to exercise-date measurement of the cumulative income statement effect of share-based payments settled in cash.

In addition to raising the classification and measurement issues outlined above, the ED raises issues related to financial statement recognition versus footnote disclosure and the definition of various financial statement elements. In the following section, we examine academic research relevant to these issues and present the views of the Committee on the ED. The Committee based its views on inferences from existing research findings, much of which focuses on one specific type of share-based payment—employee stock options. In addition, the Committee also relied upon its understanding of the IASB and FASB Conceptual Frameworks, and views expressed in previous Committees' communications with the IASB and the FASB on stock-based compensation and principles-based standards (AAA FASC 2003).

CLASSIFICATION AND MEASUREMENT ISSUES

Classification and Measurement as a Function of Settlement Form, or "What is Equity?"

A key feature of the ED is the differential reporting that arises across different forms of settlement. In the Committee's view, this focus on form over substance brings with it several undesirable consequences. These range from transaction structuring to meet reporting goals to estimate manipulation that goes uncorrected due to a lack of truing up. The Committee has repeatedly argued that economically identical items should be accounted for in the same way (AAA FASC 2003, 79). Consequently, we begin by evaluating the merits of distinguishing between options based on their form of settlement.³

³ Similar arguments are made by Balsam (1994).

The ED discusses whether stock options outstanding meet the definition of a liability as defined in the IASB Conceptual Framework. The ED states:

The definition of a liability in the Framework is as follows:

A liability is a present obligation of the enterprise arising from past events, the settlement of which is expected to result in an outflow from the enterprise of resources embodying economic benefits. (ED, Basis for Conclusions, para. 93)

The IASB argues that although this definition does not refer to an outflow of assets per se, it is unlikely it was the intent of the authors of the Framework to broaden the definition of liability settlement to include an outflow of equity instruments. As such, the ED maintains:

The Discussion Paper concluded that a share option does not meet the definition of a liability, because it does not contain an obligation to transfer cash or other assets. (ED, Basis for Conclusions, para. 92)

Although the Committee agrees that cash-settled options meet accepted definitions of a liability, we question the position of the IASB that equity-settled options are not liabilities because they ultimately involve an outflow of equity, which is not viewed as an outflow of economic benefits. When an entity issues stock to a counterparty for less than fair value, the company transfers an economic benefit to the counterparty equal to the difference between the market value of the stock on the date of issue and the price paid. This transfer of economic benefits is no different than writing a check to a supplier. In both cases existing shareholders' wealth is diminished. The issue comes down to: "Who are the shareholders for whom we are accounting?" The ED lumps both existing shareholders and potential shareholders (i.e., option holders) into one group and argues that wealth transfers among shareholders do not result in performance statement effects.

Regardless of one's position on what groups of investors should be accounted for as equity, it is easy to conceive of a sequence of events that challenges the IASB's conclusion that settling a share-settled option involves no outflow of economic benefits or even no outflow of cash. For example, consider the case where the shares ultimately distributed are treasury shares purchased on the exercise-date by the enterprise in the open market. Acquiring those shares for purposes of distribution to the option holders clearly involves an outflow of assets, offset in part by the exercise price received on settlement of the option. Why should interjecting this transaction change one's perspective on whether settlement of the option does or does not involve an outflow of economic resources? It is apparent that the form of the transaction and not its economic substance is driving its financial reporting, an undesirable characteristic in a principles-based standard.

To be sure, the ED draws on the IASB's Framework to arrive at its recommendations, but in doing so the Framework's limitations come to the fore. First, the definition of a liability is subject to interpretation as demonstrated by the preceding debate concerning the appropriate interpretation of the phrase "resources embodying economic benefits." Second, the IASB's determination that stock options settled in equity are not liabilities deems these securities to be equity by default. Consequently, the IASB implicitly defines equity in terms of existing and potential shareholders for purposes of the ED even though the Conceptual Framework is silent with respect to which investor groups are appropriately considered equity.

The demarcation between debt and equity drawn by the IASB with respect to share-based payments leads to markedly different accounting results for securities that the Committee considers economically equivalent. This is problematic because such accounting lends itself to transaction structuring and, arguably, is not neutral. Moreover, the absence of a pervasive understanding of whether the IASB defines equity to encompass existing investors, or existing and potential investors, obscures the appropriate treatment of stock options outstanding from a valuation perspective.

Share-Based Payments and Equity Valuation

To illustrate how the definition of equity matters, we adopt a valuation perspective and consider appropriate accounting for employee stock options under two scenarios.⁴ First, we limit equity to existing shareholders only. We then expand the definition of equity to incorporate existing and potential shareholders. We couch our discussion in terms of the total market value of equity (MV) to abstract away from the dilutive effects of share-based payments and to focus on the implications of share-based payments for total firm (equity) value. In a later section, we return to the dilution issue.

We employ the Residual Income Valuation (RIV) model in our analysis, in part, because it builds directly on accrual accounting, but more importantly, it proves to be a useful tool to highlight critical issues regarding appropriate accounting for share-based payments from a valuation perspective. Furthermore, because the dividend discount model, discounted cash flow models, and residual income model can be shown to be algebraically equivalent, our discussion is not model-dependent. That is, what holds true for one should hold true for the alternative valuation models.

The RIV model is represented by the following equation:

$$MV_t = BV_t + \sum_{\tau=1}^{\infty} \frac{E_t(NI_{t+\tau} - rBV_{t+\tau-1})}{(1+r)^\tau} \quad (1)$$

where:

- MV = market value of equity;
- BV = book value;
- NI = net income;
- r = cost of equity capital; and
- t = time period

E_t indicates that the terms that follow are the expected levels of future net income and book value as of time t .

Ohlson (1995) shows that clean surplus accounting is a necessary condition for maintaining equivalence between the dividend discount model and the RIV model. Clean surplus accounting is achieved when all items of gain or loss (or alternatively all changes in net assets unrelated to transactions with owners) flow through a performance statement. For convenience, we refer to the measure of performance as "net income."

Generally, clean surplus is not a useful tool for choosing between alternative accounting practices. For example, it cannot be used to argue for or against alternative patterns of expense recognition, as differences in the timing of expense recognition do not violate clean surplus. However, consideration of the RIV model and clean surplus accounting is a useful mechanism for highlighting the importance of employing measurement practices that are internally consistent with the definition of equity adopted. An examination of stock option accounting within the framework of the RIV model identifies the share-based payments information investors need to incorporate into firm valuation.

If equity is defined in terms of existing common shareholders, the left-hand side of equation (1) (MV_t) is the market value of outstanding common equity, and clean surplus accounting requires that the right-hand side of equation (1) capture all changes in net assets unrelated to transactions with existing common shareholders. Option holders are not existing common shareholders and hence, clean surplus accounting requires the impact on net assets of transactions with option holders flow through income.

⁴ We believe a valuation perspective is appropriate since the IASB adopts the position in its Framework that investors are the user group of primary focus. Although the Committee appreciates that other perspectives may be held and might lead to different conclusions about the ED, we adopt a valuation perspective to demonstrate weaknesses in the ED and to offer alternatives that overcome them. We do not claim that this is the only, or even the best, perspective from which to evaluate the ED. We do, however, believe it to be an important and useful one.

What is the impact? The issuance and subsequent exercise of stock options produces an outflow of net assets equal to the difference between the market price of the stock on the exercise-date and the exercise price paid to acquire the stock.⁵ Although clean surplus accounting requires this outflow of net assets be recorded as a charge to net income, it says nothing about the timing of its income statement recognition. It simply requires that the *cumulative* income statement impact of share-based payments equal the difference between the market value of the stock issued on the exercise-date and the exercise price of the options rendered. Hereafter we refer to this as exercise-date measurement. This form of accounting ultimately trues up all accounting estimates and captures the effect of forfeitures, expirations, and option exercises in their entirety.

In contrast, if equity is defined in terms of existing and potential (i.e., option holders) common shareholders, then the left-hand side of Equation (1) (MV_t) is the market value of outstanding common equity *plus* the market value of outstanding stock options. In this case, option holders are considered "owners" and, hence, clean surplus accounting requires that the right-hand side of Equation (1) capture all changes in net assets unrelated to transactions with existing common shareholders and option holders. Accordingly, the impact on net assets of transactions with option holders subsequent to option issuance bypasses income.

Under this scenario, only the initial issuance of stock options produces an outflow of net assets that must be recorded through net income. Ohlson (2000) states that dividends net of capital contributions must be measured in terms of market value at the dates the transactions occur. Thus, a charge to net income equal to the fair value of the options issued on the grant-date is necessary. Changes in the fair value of the options subsequent to grant do not give rise to an income statement impact, however, just as changes in the fair value of common stock are ignored subsequent to issuance. Moreover, ultimate exercise of the option results in a reclassification between equity accounts with no income statement impact.

Again, it is important to note that clean surplus accounting is silent regarding the timing of recognition. In this case, clean surplus requires only that the *cumulative* income statement impact of share-based payments net to the grant-date fair value of the stock options issued. Hereafter we refer to this as grant-date measurement. Unlike exercise-date measurement, this form of accounting does not lead to the ultimate truing up of accounting estimates.

Clearly, the definition of equity has implications for both the debt versus equity classification of stock options outstanding as well as exercise- versus grant-date measurement of the cumulative income statement impact of share-based payments. This issue is important not only for share-based payments, but also for other securities for which the demarcation between debt and equity may not be clear. Accordingly, the Committee recommends that the IASB's Framework be refined to clarify the definition of equity in terms of existing or existing and potential shareholders.⁶

In theory, financial statement users are indifferent between the classification of options as debt or equity for accounting purposes, provided all related balances are classified in a consistent manner and users have sufficient information to impose a consistent definition of equity on the left and right-hand sides of Equation (1). For example, when stock option issuance gives rise to future tax-deductible amounts, a deferred tax "asset" arises. If stock options are classified as equity, then the related deferred tax balance should be classified as a contra-equity account. In addition, the cash inflow from settlement of the deferred tax balance would be classified as a financing activity. (See Hanlon and Shevlin [2002] for a more detailed discussion of the tax issues related to share-based payments.) In this case, neither post-issuance changes in stock options outstanding nor the resulting changes in the deferred tax balance impact income. Instead such changes, when they occur, result in transfers between equity balances.

⁵ This value is distinct from, but related to, the grant-date fair value of options, in the sense that grant-date fair value is the discounted value of the expected difference between the stock's market price and the option's exercise price on the exercise-date.

⁶ Note that defining equity solely in terms of existing shareholders simplifies much of the effort involved in distinguishing instruments with features of debt and (potential) equity. All would be considered nonequity.

The ED does not achieve this degree of classification consistency, however. Instead, stock options settled in equity are classified as equity, but the related deferred tax balance is classified as an asset. The ED requires that post-issuance changes in the value of the deferred tax asset flow through income, while post-issuance changes in the value of stock options outstanding classified as equity do not. Doing so avoids a violation of clean surplus accounting, but leads to the undesirable outcome of income absorbing the tax effects of an item not included in the computation of net income—a violation of interperiod tax allocation.

Finally, Kirschenheiter et al. (2004) demonstrate the distortions that arise in commonly used accounting measures (return on equity, forward PE ratios, and market values measured at the present value of expected free cash flows to equity) when users do not impose a consistent definition of equity on the left and right-hand sides of Equation (1). Kirschenheiter et al. (2004) argue that the simplest solution to these problems is to classify employee stock options as liabilities with changes in fair values post-grant-date through to exercise-date recognized in net income. The Committee agrees with this suggestion.

Grant-Date Measurement Issues

Irrespective of one's position regarding what types of investors are appropriately deemed equity investors, grant-date measurement is unlikely to capture the outflow of net assets in its entirety. That is, even with perfect foresight, the net assets ultimately transferred at exercise-date differ from the discounted expected value estimated at the grant-date due to the unwinding of time value of money factors embedded in the grant-date valuation. The income statement impact of the unwinding of the time value of money is ignored in the accounting treatment proposed by the ED because stock options are classified as equity and "interest charges" on equity are not included in the computation of net income.

An even greater concern with grant-date measurement however, is the emphasis grant-date measurement places on the reliability of management's grant-date estimates (e.g., of the expected number of options to be exercised, the expected volatility of share price, the expected dividend yield, the risk-free rate of interest, the term of the option and, for nontraded companies, the current market price of a share). Both unintentional error and intentional bias introduced at the grant-date are not trued up under grant-date measurement. In contrast, the impact of unintentional error and intentional bias is mitigated under exercise-date measurement because the cumulative income statement impact is constrained to equal the difference between the market price of the stock on the exercise-date and the exercise price of the option.

Existing research demonstrates that grant-date estimates of employee stock option fair value are highly sensitive to the parameter estimates employed. Applying methods acceptable under SFAS No. 123 to the options of six firms, Collier and Higgs (1997) obtain widely different estimates of compensation expense depending on alternative measures of stock return volatility and dividend yield.⁷ In a study of the option exercise behavior of more than 50,000 employees at eight firms, Huddart and Lang (1996) find that employees tend to exercise options earlier than they would if they held ordinary options, leading to significant losses compared with the Black-Scholes value of the option.⁸ Huddart and Lang (1996) also find that employee stock option exercise patterns are difficult to predict and vary over time, which implies that grant-date estimation of expected option life is susceptible to unintentional measurement error.

⁷ Their volatility estimates included volatility of daily returns computed over 60 days, volatility of monthly returns computed over 60 months and Black-Scholes imputed volatility from traded options. Their dividend yield estimates included Value Line's estimate of "expected annualized dividend yield," a *Wall Street Journal* estimate computed as the last quarterly dividend \times 4/stock price, the sum of the last four quarterly dividends/year-end stock price, and the sum of the last four quarterly dividends each scaled by stock price on the relevant declaration dates.

⁸ Carpenter (1998) provides insights into how modified models can be used successfully; however, her evidence is limited to executive stock options. Huddart and Lang (1996) document differences in exercise patterns across employee groups. Since research intended to improve the models available to value employee stock options at the grant-date is ongoing, the Committee supports flexibility in the option-pricing models employed to allow managers' to take advantage of improvements in option-pricing methodology as they evolve.

While unintentional measurement error is a concern, even more troubling is the vulnerability of grant-date accounting to intentional bias arising from managers' reporting incentives. As discussed earlier, a unique feature of grant-date measurement is that managers' accounting estimates are not constrained by the "truing up" mechanism common to most accrual accounting estimates. This enhances managers' abilities to manipulate financial statement numbers.

Academic research as well as anecdotal evidence shows that firms use discretion over accounting estimates to achieve reporting goals (e.g., McNichols and Wilson 1988).⁹ Aboody et al. (2002a) document evidence of estimate manipulation in the options arena. They show that firms granting more options, and firms with higher levels of CEO compensation, reduce stock compensation expense by assuming shorter option lives. Related work by Aboody and Kasznik (2000) finds that CEOs manage the timing of voluntary disclosures around option grant-dates in a manner consistent with efforts to manipulate the exercise price. In particular, bad news is disclosed early (leading to reduced exercise prices) and good news is delayed (avoiding an increase in exercise prices).

Despite the challenges of achieving reliable and unbiased measurement, market participants find current disclosures reliable "enough" to use. That is, research indicates that disclosures about stock options are associated with security prices. For example, Li (2002) documents a negative association between unexpected stock returns and changes in stock option expense disclosed in Form 10-K filings. Based on this finding, she concludes that SFAS No. 123 footnote disclosures communicate useful information to investors.

Bell et al. (2002) investigate the stock market's perception of the economic effect of employee stock options on firm value for 85 profitable software firms. For this subset of firms, they find that stock prices treat employee stock option expense as an intangible asset (i.e., as a net benefit to the firms). This evidence suggests that users may need sufficient information to adjust the balance sheet for intangible human capital assets in some industries. However, human capital asset creation may not be a function of the form of compensation. That is, the market might also view cash salaries as contributing to intangible human capital assets where such assets are significant.

Aboody et al. (2002b) build on the analysis in Bell et al. (2002) and estimate explicitly both stock compensation expense and the beneficial effect of motivating employees with stock-based compensation. Using analysts' forecasts of long-term growth in earnings to capture the benefits, they find that stock prices are negatively associated with SFAS No. 123 compensation expense, as one would expect. Finally, Li (2002) finds that share prices are associated with both outstanding employee stock options (based on a Black-Scholes model) and expected future option expense (on the basis of the current disclosed expense or current disclosed expense adjusted for expected growth).

Enhanced Disclosure

The vulnerability of grant-date measurement to earnings manipulation highlights the importance of requiring firms to disclose information that allows users to assess the reliability of their grant-date estimates. Hirst et al. (2003) provide evidence that individual investors use such reconciling information in assessing earnings quality and deriving security price estimates. Considerable research targeting the usefulness of reconciling information is found in research on property and casualty insurers' claim development reserves (e.g., Petroni 1992; Petroni et al. 2000). Given the complexity of option measurement and the long periods over which estimates and actual realizations take place, disclosures similar to those by U.S. property and casualty insurance companies would be helpful to users attempting to evaluate the quality of a firm's reporting.

⁹ McNichols and Wilson (1988) show empirically that firms manage their earnings by over-providing for bad debts when income is extreme.

One specific piece of information critical from a valuation perspective is the post-issuance fair value of stock options outstanding (Soffer 2000). As discussed above, this information is needed irrespective of whether "equity" is defined in terms of existing or existing and potential shareholders.¹⁰ Since stock options employed in share-based payments are generally not publicly traded, the firm may be the only reliable source of post-issuance fair value data making the lack of disclosure of post-issuance fair value information particularly problematic. Li's (2002) findings suggest that investors attempt to estimate these fair values, but her findings do not imply such estimates are error-free.

Early-stage research by Gooch and Lipe (2003) suggests the potential for considerable measurement error. They find significant differences between grant-date fair values of options and their estimates of exercise-date intrinsic values—differences that seem distinct from the unwinding of the time value of money. Gooch and Lipe (2003) also find no significant correlation between grant-date and exercise-date fair values. Their results suggest that users will benefit from disclosure of post-issuance fair values and parameter estimates when they assess the adequacy of management's grant-date estimates.

Financial Statement Recognition versus Footnote Disclosure of Fair Value Adjustments

Considerable research indicates that users incorporate information provided in financial statement footnotes. As Lipe (2001) and this Committee in its 2001 evaluation of the lease accounting proposed in a G4 + 1 Special Report (AAA FASC 2001) noted, analysts (e.g., since Graham and Dodd 1934) and credit-rating agencies (e.g., Standard & Poor's 2002) are aware of off-balance-sheet items and maintain that they adjust for such items in their analyses. Academic research suggests that market measures of equity risk and the market value of equity are associated with estimated liabilities generated using footnote disclosures of operating lease obligations (Ely 1995; Imhoff et al. 1993, 1995). Other academic accounting studies also demonstrate that investors find footnote disclosure useful. For example, studies of the valuation implications of pension and post-retirement benefit obligation footnotes demonstrate the usefulness of footnote disclosure of disaggregated information relating to summary numbers recognized in the financial statements (e.g., Barth 1991; Choi et al. 1997).

We caution, however, that the research examining the market's reaction to footnote disclosures does not test for market efficiency. In other words, the tests detect whether the market impounds this information in price, but does not test whether the magnitude of the market reaction is appropriate. Given recent finance and accounting research that documents instances of market inefficiency with respect to accounting and nonaccounting information, footnote disclosure may create or enhance opportunities for subsets of users with the ability to identify and exploit market inefficiencies. For example, research by Fairfield and Whisenant (2001) reports that analysts from the Center for Financial Research and Analysis successfully identify overvalued firms by analyzing the full set of disclosures provided in firms' SEC filings.

Hirst and Hopkins (1998) find that professional analysts are more likely to discover earnings management when earnings components are clearly reported in a performance statement than when they need to be determined through fundamental analysis. Thus, holding recognition constant, the location of information in the financial statements affects analysts' valuation judgments. Aboody (1996) shows that stock market participants react differently to asset write-downs that are recognized in the financial statements by oil and gas firms adopting the full cost method than for firms using the

¹⁰ If equity is defined in terms of *existing* shareholders for valuation purposes and in terms of existing and potential shareholders for accounting purposes, users need the fair value of stock options outstanding post-issuance to make appropriate adjustments to the right-hand side of Equation (1). If equity is defined in terms of existing and potential shareholders for both valuation and accounting purposes, fair value information is still required to apportion total market value (the *left-hand side* of Equation (1)) between existing and potential shareholders.

successful efforts method that are required only to disclose the decline in asset value. These findings can be interpreted as evidence that capital markets value disclosure and recognition differently. As such, some argue that disclosure is not an adequate substitute for recognition and that the benefits of footnote disclosure are limited (see also, Hirst et al. forthcoming). Any recommendations for recognition as opposed to disclosure involve trade-offs between costs and benefits to various user groups, as well as to preparers.

The Dilutive Effects of Share-Based Payments

Our discussion to this point has been limited to the impact of share-based payments on total firm value, allowing us to avoid the issue of the dilutive effects of share-based payments on per share measures of firm performance and value. However, these effects are significant to investors because the presentation of diluted EPS is intended to communicate the exposure existing common shareholders face while stock options (and other dilutive securities) are outstanding. Although a comprehensive discussion of EPS is beyond the scope of the Committee's comments on this ED, we note that under the "options as liabilities regardless of settlement form" approach that we adopt, the dilution issue is moot. That is, when the cost of share-based payments to existing shareholders is recorded in the income statement (and thus the numerator of the EPS calculation), there is no need to adjust the EPS denominator for potential dilution.

Extant research has looked at the dilution issue from the perspective of existing (and prior) accounting standards. Huson et al. (2001) examine whether stock returns are influenced by the extent to which a company has potentially dilutive securities outstanding. They argue and find that if some claimants can acquire equity interests in the firm for less than the market value, then a given level of earnings change (i.e., unexpected recurring earnings) is priced lower due to the dilution.¹¹ Interestingly, they also find that current reported measures of dilution appear to inadequately pick up the effect of dilutive securities. They note that under the U.S. GAAP treasury stock method in SFAS No. 128, only options currently in the money are considered dilutive in determining EPS. Employee stock options generally are issued at or out of the money and are, thus, ignored in the EPS computation. Note that the Huson et al. (2001) paper uses data from the pre-SFAS No. 123 period (1970–1995). New data from SFAS No. 123 may alter some of their findings, but the essential finding that stock returns are associated with the level of dilutive securities seems robust.

Core et al. (2002) look at the dilution problem for employee stock options more directly and propose an alternative method to the treasury stock method for calculating the "denominator" effect. They examine 731 employee stock options and find that their method, on average, leads to economic dilution 100 percent greater than the FASB's treasury stock method. They also find evidence that market prices consider this additional dilution. Finally, Kirschenheiter et al. (2004) find that employing diluted EPS does not fully correct the distortions in the commonly used accounting measures they examine. Together, Huson et al. (2001), Core et al. (2002), and Kirschenheiter et al. (2004) suggest that current EPS measures do not fully capture the dilutive effect of employee stock options and that the market corrects for this to some extent.

SUMMARY OF THE COMMITTEE'S POSITION

The Financial Accounting Standards Committee is pleased with the IASB's principles-based approach to developing a standard for share-based payments. The Committee supports the goal of reporting stock-based compensation as an expense as well as the ED's considered treatment of share-based payments in general.

¹¹ Their models incorporate potentially dilutive securities of all sorts including employee stock options, convertible debt, and preferred stock.

The Committee supports the approach of providing guidance in the choice of option valuation models, but not requiring specific models. This allows firms and their advisors to adopt new methods as they develop and to tailor general models to their specific circumstances. We are in favor of providing disclosures sufficient to allow users to compare models across enterprises and to assess the estimates used to measure the value of share-based payments.

We are not in favor of the use of grant-date valuation with no subsequent adjustments for equity-settled share-based payments. This leads to artificial distinctions between cash-settled and equity-settled options when their underlying economics are identical. As such, we anticipate that firms will engage in transaction structuring and estimate selection to obtain desired reporting outcomes, potentially limiting the representational faithfulness of financial reporting.

We propose that exercise-date measurement be used for all share-based payments, regardless of settlement form. We recommend exercise-date measurement be operationalized via remeasurement at each balance sheet date with changes running through net income. Treating all outstanding options as either liabilities or a form of equity subject to remeasurement through exercise-date affords financial statement users a perspective that ties directly into well-accepted valuation models and overcomes the problem of like events being accounted for differently.

Exercise-date measurement leads to the eventual truing up of management's initial, grant-date measurements. With adequate disclosure of such changes, users can assess the quality of the estimates and adjust security prices as they deem appropriate. Furthermore, knowing that this truing up will take place in the future, management has greater incentive not to act opportunistically on the date of grant. The Committee believes that careful consideration of how periodic remeasurement adjustments are presented in the financial statements is important and falls within the purview of the IASB's project on performance reporting.

Consistent with our view that share-based compensation should be reported in a performance statement, the Committee agrees with the ED that the associated tax consequences should not be treated as direct adjustments to equity. Doing so results in a violation of clean surplus accounting, which is one of the Committee's bases for recommending exercise-date measurement of share-based payments.

Finally, if the IASB continues with the ED's grant-date measurement approach, then the Committee strongly suggests supplementing financial statements with footnote disclosure of *pro forma* earnings and net assets using exercise-date measurement.

REFERENCES

- Aboody, D. 1996. Recognition versus disclosure in the oil and gas industry. *Journal of Accounting Research* 34 (Supplement): 21–32
- , and R. Kasznik. 2000. CEO stock option awards and the timing of corporate voluntary disclosures. *Journal of Accounting and Economics* 29 (February): 73–100.
- , M. Barth, and R. Kasznik. 2002a. Do firms manage stock-based compensation expense disclosed under SFAS 123? Unpublished paper, Stanford University.
- , ———, and ———. 2002b. SFAS 123 stock-based compensation expense and equity market values. Unpublished paper, Stanford University.
- American Accounting Association (AAA) Financial Accounting Standards Committee (FASC). 1994. Response to the FASB exposure draft "Accounting for stock-based compensation." *Accounting Horizons* 9 (June): 114–116.
- . 1999. Liability and equity. *Accounting Horizons* 13 (September): 305–307.
- . 2001. Response to FASB invitation to comment on the G4+1 special report: Leases: implementation of a new approach. *Accounting Horizons* 15 (September): 289–298.

- . 2003. Evaluating concepts-based versus rules-based approaches to standard setting. *Accounting Horizons* 17 (March): 73–89.
- Balsam, S. 1994. Extending the method of accounting for stock appreciation rights to employee stock options. *Accounting Horizons* 8 (December): 52–60.
- Barth, M. E. 1991. Relative measurement errors among alternative pension asset and liability measures. *The Accounting Review* (July): 433–464.
- Bell, T., W. Landsman, B. Miller, and S. Yeh. 2002. The valuation implications of employee stock option accounting for computer software firms. *The Accounting Review* 77 (October): 972–996.
- Carpenter, J. N. 1998. The exercise and valuation of executive stock options. *Journal of Financial Economics* 48 (May): 127–158.
- Choi, B., D. W. Collins, and W. B. Johnson. 1997. Valuation implications of reliability differences: The case of nonpension postretirement obligations. *The Accounting Review* (July): 351–383.
- Coller, M., and J. Higgs. 1997. Firm valuation and accounting for employee stock options. *Financial Analysts Journal* 53 (January/February): 26–34.
- Core, J., W. Guay, and S. P. Kothari. 2002. The economic dilution of employee stock options: Diluted EPS for valuation and financial reporting. *The Accounting Review* 77 (July): 627–652.
- Ely, K. 1995. Operating lease accounting and the market's assessment of equity risk. *Journal of Accounting Research* 33 (Autumn): 397–415.
- Fairfield, P., and J. S. Whisenant. 2001. Using fundamental analysis to assess earnings quality: Evidence from the Center for Financial Research and Analysis. *Journal of Accounting, Auditing, and Finance* 16 (Fall): 273–205.
- Gooch, R., and R. C. Lipe. 2003. An empirical comparison of grant-date and exercise-date measurements in employee stock option accounting. Unpublished paper, University of Oklahoma.
- Graham, B., and D. L. Dodd. 1934. *Security Analysis*. New York, NY: McGraw-Hill.
- Hanlon, M., and T. Shevlin. 2002. Accounting for tax benefits of employee stock options and implications for research. *Accounting Horizons* 16 (March): 1–16.
- Hirst, D. E., and P. E. Hopkins. 1998. Comprehensive income reporting and analysts' valuation judgments. *Journal of Accounting Research* 36 (Supplement): 47–75.
- , ———, and J. M. Wahlen. Fair values, performance reporting, and bank analysts' risk and valuation judgments. *The Accounting Review* (forthcoming).
- , K. E. Jackson, and L. Koonce. 2003. Improving financial reports by revealing the prior accuracy of estimates. *Contemporary Accounting Research* 20 (Spring): 1–31.
- Huddart, S., and M. Lang. 1996. Employee stock option exercises: An empirical analysis. *Journal of Accounting and Economics* 21 (February): 5–43.
- Huson, H., T. Scott, and H. Wier. 2001. Earnings dilution and the explanatory power of earnings for return. *The Accounting Review* 76 (October): 589–612.
- Imhoff, E., R. Lipe, and D. Wright. 1993. The effects of recognition versus disclosure on shareholder risk and executive compensation. *Journal of Accounting, Auditing and Finance* 8 (Fall): 335–368.
- , ———, and ———. 1995. Is footnote disclosure an adequate alternative to financial statement recognition? *Journal of Financial Statement Analysis* 1 (Fall): 70–81.
- International Accounting Standards Board (IASB). 2002. *ED 2 Share-Based Payment*. Exposure Draft. London, U.K.: IASB.
- Kirschenheiter, M., R. Mathur, and J. Thomas. 2004. Accounting for employee stock options. *Accounting Horizons* (June) (forthcoming).
- Li, H. 2002. Stock option compensation and equity valuation. Unpublished dissertation, The University of Texas at Austin.
- Lipe, R. C. 2001. Lease accounting research and the G4+1 proposal. *Accounting Horizons* 15 (September): 299–310.
- McNichols, M., and G. P. Wilson. 1988. Evidence of earnings management from the provision for bad debts. *Journal of Accounting Research* 26 (Supplement): 1–31.
- Ohlson, J. 1995. Earnings, book values, and dividends in equity valuation. *Contemporary Accounting Research* 33 (Spring): 661–687.

- . 2000. Residual income valuation: The problems. Unpublished paper, New York University.
- Petroni, K. 1992. Optimistic reporting in the property-casualty insurance industry. *Journal of Accounting and Economics* (December): 485–508.
- , S. Ryan, and J. Wahlen. 2000. Discretionary and non-discretionary revisions of loss reserves by property-casualty insurers: Differential implications for future profitability, risk and market value. *Review of Accounting Studies* 5 (June): 95–105.
- Soffer, L. C. 2000. SFAS No. 123 disclosures and discounted cash flow valuation. *Accounting Horizons* 14 (June): 169–189.
- Standard & Poor's. 2002. *Corporate Ratings Criteria*. New York, NY: Standard & Poor's Corporation.