Overview of the Exposure Draft

The Financial Accounting Standards Committee of the American Accounting Association ("the Committee") is charged with responding to requests for comment from standard setters on issues related to financial reporting. The Committee is pleased to respond to the FASB Exposure Draft on Share-Based Payment (hereafter, the ED). The comments in this letter reflect the views of the individuals on the Committee and not those of the American Accounting Association.

The March 2004 Financial Accounting Standards Board Exposure Draft, Share-Based Payment: An Amendment of FASB Statements No. 123 and 95, addresses accounting and disclosure requirements for share-based payments made in connection with employee services. The ED takes the position that the cost of employee services received in exchange for share-based payments should be recognized as expenses to the extent the services are consumed. Since the value of the services consumed cannot be measured directly, the amount of expense is established based on the fair value of the options granted (adjusted for forfeitures).

The ED distinguishes awards made by public entities from those made by nonpublic entities. It also distinguishes awards classified as equity instruments from liability awards. An award is a liability award if the employee can compel the entity to settle in cash or other assets or if the choice of settlement is the entity’s but the substantive terms of the agreement (established by past practice, for example) are such that cash or other asset settlement is anticipated.

The ED establishes the fair value of public entities’ awards by reference to observable market prices of similar traded options. If market prices are not available, fair value is estimated using an option pricing model. The ED states a preference for, but does not require, the use of a lattice model (e.g. binomial model). In contrast, nonpublic entities must choose whether to establish fair value in a similar manner as public entities or use intrinsic value remeasured at each reporting date through settlement.

Public entities’ awards classified as equity instruments are effectively accounted for using grant-date accounting, since fair value is not adjusted post-grant (other than for
forfeitures). As a result, a difference between the compensation cost reported on the entity’s tax return and the amount reported for financial reporting generally arises. Write-offs of the deferred tax asset resulting from this difference are recognized in the income statement, whereas excess tax benefits are recognized as additional paid-in capital with the cash flow statement adjusted to reflect the excess benefit as a financing cash inflow. Public entities’ awards classified as liabilities are effectively accounted for using settlement-date accounting since the liability balance is remeasured to fair value at the end of each reporting period through settlement. In contrast, nonpublic entities choosing to use intrinsic value remeasured at each reporting date through settlement for their awards, effectively use settlement-date accounting for both awards classified as equity instruments and liability awards.

Summary of the Committee’s Position

In brief, our general position on accounting for share-based payments remains unchanged from that in the Committee’s 1994 response to the FASB on the exposure draft for SFAS No. 123, Accounting for Stock-Based Compensation (AAA FASC 1994) and the Committee’s 2003 response to the IASB on the exposure draft for Share-Based Payments (AAA FASC 2004). In both letters, the Committee strongly endorses the conclusion that share-based payments ultimately lead to the recognition of compensation expense. We encourage the FASB to hold firm in its desire to have this form of compensation expensed and to resist Congressional pressure to weaken the proposed standard. In addition, research demonstrates that the fair value of stock options can be reliably measured using option pricing methodologies. Given the complexity and variety of stock-compensation arrangements the Committee agrees that the FASB should not specify a single option pricing model for their measurement. Finally, we agree with the position espoused in the ED that cash-settled options are liability awards that should be remeasured to fair value at the end of each reporting period.

Nonetheless, the Committee has several concerns about the ED. First, the Committee has significant concerns regarding the implementation of grant-date accounting. Second, the proposed disclosure requirements are inadequate in the Committee’s view. Third, the Committee has concerns regarding the use of intrinsic value through settlement date by nonpublic entities. Fourth, the Committee questions the asymmetric treatment of the write-off of deferred tax assets and excess tax benefits. Finally, the Committee questions the requirement that entities’ adopt the standard prospectively.

The Committee argues that settlement-date accounting overcomes many of the implementation concerns associated with grant-date accounting. The Committee does not recommend settlement-date accounting for awards classified as equity instruments,

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1 For purposes of this letter “grant-date accounting” is used to refer to any expense attribution pattern which equates the cumulative expense charged to income over the life of the option to the fair value of options granted (net of forfeitures). “Settlement-date accounting” is used to refer to any expense attribution pattern which equates the cumulative expense charged to income over the life of the option to the intrinsic value of the option on the date of settlement.
however. Settlement-date accounting is conceptually inconsistent with the equity classification afforded these awards and classifying such awards as liabilities is difficult to defend. Instead the Committee calls for disclosure of: (1) the fair value of stock options outstanding remeasured at the end of each reporting period, (2) a comparison of grant-date fair value to settlement-date intrinsic value for all options settled (i.e. exercised or expired) during the period and (3) sensitivity analysis of the effect of changes in significant valuation model input assumptions within a reasonable range on the fair value of options granted and stock option expense. Many of the implementation advantages of settlement-date accounting may be realized by combining these disclosures with grant-date accounting for awards classified as equity instruments. In addition, the fair value of stock options outstanding remeasured at the end of each reporting period is an essential ingredient needed for valuation purposes.

The Committee concluded that nonpublic entities’ use of intrinsic value through option settlement for awards classified as equity instruments is logically inconsistent with an equity classification for such awards. The Committee urges the Board to reconsider this decision and consider requiring nonpublic entities to follow substantively similar procedures as public entities. The Committee recommends nonpublic entities use an option pricing model with inputs drawn from comparable public companies or other sources if sufficiently reliable internal estimates are not available. For practicality, if a sufficiently reliable estimate of volatility is not attainable internally or by reference to a comparable public company or other sources, the Committee recommends a lower bound estimate, computed using a volatility assumption of zero, be allowed. Even so, the Committee believes it should be possible to arrive at a reasonable, non-zero estimate of volatility in the vast majority of cases, and that the use of a zero estimate should be reserved for those unusual and rare circumstances in which it is impossible to arrive at a reasonable, non-zero estimate.

The Committee did not achieve consensus regarding the asymmetric treatment of the write-off of deferred tax assets and excess tax benefits. Some members of the Committee agree with the ED’s proposed accounting, whereas others argue that both sides of the adjustment to deferred tax assets should be accounted for symmetrically.

Finally, the Committee urges the Board to reconsider its decision to adopt the standard prospectively. The Committee recommends retrospective adoption of the standard with previously reported pro forma or recognized share-based payment expenses viewed as a reasonable ex-ante approximation of the amount of expense that would have been computed under the ED’s proposed guidelines.

In the following paragraphs we begin by elaborating upon those issues for which research addresses the Board’s position. We then discuss our five primary reservations with the ED. The final section of our letter addresses several other specific issues raised in the ED to which academic research pertains. Throughout our discussion we link our comments to the specific issues raised in the ED.
I. Research in Support of Various Issues

I.i. Recognition of Compensation Cost (Issue 1)

Our general position on accounting for share-based payments remains unchanged from that in the Committee's 1994 response to the FASB on the exposure draft for SFAS No. 123, Accounting for Stock-Based Compensation (AAA FASC 1994) and the Committee's 2003 response to the IASB on the exposure draft for Share-Based Payments (AAA FASC 2004). In both letters, the Committee strongly endorses the conclusion that share-based payments ultimately lead to expense recognition.

I.ii. Recognition versus Disclosure of Compensation Cost (Issue 2)

Considerable research indicates that users incorporate information provided in financial statement footnotes. As Lipe (2001) and this Committee noted in its 2001 evaluation of the lease accounting proposed in a G4+1 Special Report (AAA FASC 2001a), analysts (e.g., since Graham and Dodd 1934) and credit rating agencies (e.g., Standard and 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 footnote disclosure is useful for investors. For example, studies examining the valuation implications of footnote disclosures about pensions and post-retirement benefit obligations demonstrate the usefulness of footnote disclosure of disaggregated information relating to recognized numbers in the financial statements (e.g., Barth 1991; Choi et al.1997).

We caution, however, that the research that examines the market's reaction to footnote disclosures implicitly assumes market efficiency (i.e., if the market impounds this information in price, it does so appropriately). Papers in the finance and accounting literature document instances of market inefficiency with respect to both accounting and non-accounting information. Accordingly, footnote disclosure may have the effect of creating or enhancing opportunities for subsets of users 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.

Moreover, existing evidence suggests that capital market participants respond to disclosure and recognition differently. 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. Hirst et al. (2004) find that disclosure of the fair value of financial instruments along with piecemeal recognition of fair value gains and losses is not a substitute for full-fair-value reporting. In their study, buy-side analysts that specialized in financial institutions more fully priced interest rate risk when its impact
was more transparently disclosed (i.e., under full-fair-value accounting). 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 successful efforts method that are required only to disclose asset write downs. Accordingly, the Committee agrees with the FASB’s conclusion that disclosure is not an adequate substitute for recognition.

I.iii. Option Pricing Methodology (Issue 4(b))

Several studies examine the reasonableness of the fair value estimates produced by option-pricing methodologies when applied to employee stock options. Marquardt (2002) reports that the Black-Scholes model can be adjusted to provide reasonable estimates of ESO costs. Bettis, et al. (2004) extend Huddart and Lang (1996) and Carpenter (1998) and conclude that adjusting the maturity of an American option to reflect the expected time to option exercise produces a reasonable estimate of grant-date fair value. Even so, Rubenstein (2004) cautions that certain features of employee stock options, in addition to the risk of early exercise, complicate the application of option-pricing methodologies to employee stock option valuation. Specifically, he notes that employee stock options have longer times to expiration than traded options requiring input variables be forecasted for much longer horizons. Second, he notes that over long horizons the valuation of options is much more sensitive to the method used. Best practices for employee stock option valuation continue to evolve. The Committee recognizes that allowing firms’ flexibility in choosing the option pricing models employed might impair the consistency of the information presented. However, the Committee agrees with the decision to leave valuation model choice up to firms, because innovations in financial economics and firms’ experience with alternative models hold the possibility of improved estimate reliability as time passes.

The Committee further agrees with the Board’s conclusion that the fair value of employee share options can be measured with sufficient reliability because despite the challenges of achieving reliable and unbiased measurement, market participants find current disclosures reliable ‘enough’ to use. 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. (2004b) build on the analysis in Bell et al. (2002) and explicitly estimate 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).

II. Primary Reservations

II.i. Grant-Date Accounting (Issue 3)

The Committee agrees that fair value is the relevant measurement attribute, however the Committee notes significant implementation concerns with using the grant date as the relevant measurement date. These implementation issues include opportunities for transaction structuring to achieve desired accounting outcomes and opportunities for earnings management. These implementation issues are mitigated by using the settlement date as the measurement date. Recently a number of academic papers have been produced which support the use of settlement (or vesting) date accounting including Hull and White (2003), Kaplan and Palepu (2003), Bulow and Shoven (2004), Kirschenheiter, Mathur and Thomas (2004), and Rubenstein (2004). However, settlement-date accounting for awards classified as equity instruments is not defensible on a conceptual level under the existing liability and equity framework. Accordingly, the Committee supports using the grant date as the measurement date, but strongly encourages the Board to require entities to disclose the fair value of stock options outstanding remeasured at the end of each reporting period, a comparison of grant-date fair value to settlement-date intrinsic value for all options settled (i.e. exercised or expired) during the period and sensitivity analysis of the effect of changes in significant valuation model input assumptions within a reasonable range on the fair value of options granted and stock option expense. The provision of this information overcomes some of the short-comings associated with grant-date accounting. We discuss these issues more fully in the following paragraphs.

The use of grant-date accounting for awards classified as equity instruments, but settlement-date accounting for liability awards provides managers with a motive to structure share-based payment transactions to achieve desired accounting objectives. Since settlement method (the mechanism used to distinguish between awards classified as equity and liability awards) can be manipulated by managers, managers also have the opportunity to structure share-based payment transactions to achieve desired accounting results.

For example, to avoid the dilution in EPS, which occurs upon exercise of employee stock options, firms can repurchase shares on the open market and distribute them when options are exercised. Indeed, recent evidence indicates that share repurchases are associated with options grants. Kahle (2002) finds that share repurchase decisions and
levels are associated with the number of options firms have outstanding. She finds that the stock market views repurchases that appear motivated by the desire to avoid dilution as less positive than repurchases that may be signaling undervaluation or a return of free cash flow to shareholders. Bens et al. (2003) find that repurchase decisions are associated with incentives to manage diluted EPS and to maintain a desired rate of EPS growth. Furthermore, Bens et al. (2002) show that these share repurchases crowd out real investment (i.e., research and development expenditures and capital expenditures). They find some evidence too that such behavior is associated with declines in future performance. Thus, evidence exists that treasury stock transactions are linked to option granting and exercise.

Taken to an extreme, if an entity’s practice is to settle employee stock options in cash, the award is classified as a liability and settlement-date accounting results. However, if the entity’s practice is to repurchase shares on the open market and immediately use those shares to settle employee stock options, the award is classified as an equity instrument and grant-date accounting results. Except for differences in transaction costs, the impact on the entity’s cash position is identical and presumably, all else equal, the economic benefit derived from the employee services is unaffected and yet the cumulative amount of compensation expense is dramatically different.

Empirical research suggests that, given a choice of accounting alternatives, managers structure transactions (with no change in the underlying economics) to achieve desired accounting outcomes. For example, Marquardt and Wiedman (2003) investigate whether firms structure their convertible bond transactions to manage diluted EPS. They find that the likelihood of firms issuing contingent convertible bonds (COCOs), which are often excluded from diluted EPS calculations under SFAS No. 128, is significantly associated with the reduction that would occur in diluted EPS if the bonds were traditionally structured. They also document notable differences in bond features across the two classifications that are consistent with firms incurring additional costs to secure the financial reporting benefits associated with COCOs. The authors suggest that one motivation for the behavior is the existence of performance-related management compensation contracts. The authors connect their research to an extensive literature that focuses on the interaction between accounting rules and transaction structuring including Imhoff and Thomas (1988), Comiskey and Mulford (1986), Engel et al. (1999) and Ayers et al. (2002).

There is also recent theoretical work by Dye (2002) which predicts that when accounting reports consist of one of two binary classifications and one of these classifications is preferred by preparers, preparers engage in “classifications manipulation” in order to receive the preferred accounting treatment. When this situation occurs, more firms attain the preferred treatment than would otherwise be the case, and

\[2\] The Committee does not believe that a history of treasury stock transactions should be used to classify an equity-settled stock option as a liability, but similarly the Committee struggles with using a history of cash settlement to justify liability classification for stock options that may be settled in cash or equity at the entity’s option.
accounting standards are consequently less effective in distinguishing between real economic differences in transactions (Marquardt and Wiedman 2003, 8).

Finally, Nelson et al. (2002) use auditor survey data to document that managers are more likely to attempt earnings management through transaction structuring when accounting standards are precise and through interpretation and judgment when standards are imprecise. Additionally, auditors are less likely to adjust structured (unstructured) earnings management attempts when standards are precise (imprecise). For example, earnings management "attempts involving leases, consolidations, and determining the appropriateness of the equity vs. cost method tend to be governed by precise standards, and transactions in these areas are amenable to structuring, so they are less likely to be adjusted" by auditors (Nelson et al. 2002, 177).

The existence of both motive and opportunity for transaction structuring is an undesirable property of a principles-based accounting standard, which should capture the economic substance of the transaction as opposed to its form. The motive and opportunity for transaction structuring could be eliminated by accounting for all stock options similarly, regardless of settlement method. However, it is difficult to defend on conceptual grounds one classification for all types of stock options regardless of the particulars of the arrangement. For example, stock options which compel the entity to settle in cash are economically different from stock options which compel the entity to settle in equity. That is, although the equity-settled option could be effectively turned into a cash-settled one, it need not be and that is an important difference. At the same time, however, when an entity can choose between settling a stock option in cash or equity, the Committee does not perceive a clear distinction in the economic position of the entity if the option is settled with treasury stock, in which case cash is used to repurchase shares on the open market, versus cash settled, in which case cash is used to effectively repurchase shares from the employee. The Committee is concerned that the tenuous distinction between these two scenarios, combined with the significantly different accounting applied in each case, is one example of the opportunities for transaction structuring allowed by the ED.

In addition to concerns about transaction structuring the Committee is also concerned with the considerable demand grant-date accounting places on the reliability of management's grant-date estimates (e.g., 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 non-traded companies, the current market price of a share). A unique feature of grant-date accounting is that managers' accounting estimates are not constrained by the "truing up" mechanism common to most accrual accounting estimates. This makes the reported amounts susceptible to unintentional measurement error and enhances managers' abilities to manipulate financial statement numbers by intentionally biasing their grant-date estimates. In contrast, the impact of unintentional error and intentional bias is mitigated under settlement-date accounting because the cumulative income statement impact is constrained to equal the difference.

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1 In fact, one estimate is trued up: the forfeiture rate is trued up through to the vesting date.
between the market price of the stock on the settlement-date and the amount received from the employee on settlement.

Existing research demonstrates that grant-date estimates of the fair value of employee stock options are highly sensitive to the parameter estimates employed. Applying methods acceptable under SFAS No. 123 to the options of six firms, Coller and Higgs (1997) obtain widely different estimates of compensation expense depending on alternative measures of stock return volatility and dividend yield. In a study of the option exercise behavior of over 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. 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.

Academic research as well as anecdotal evidence shows that firms use discretion over accounting policies and/or estimates to achieve reporting goals (e.g., McNichols and Wilson 1988). In general the evidence is consistent with managers using discretion in accounting choice in an attempt to satisfy various objectives including maximizing management bonuses (Healy (1985)); smoothing earnings or enhancing future performance via "big bath" accounting (Elliott and Shaw (1988); Strong and Meyer (1987)); avoiding debt covenant violations (Sweeney (1994)); and meeting management or analyst earnings forecasts (Kasznik (1999)). In the options arena, Bartov and Mohanram's (2004) evidence suggests that managers manage earnings upwards prior to large option exercises by top-level executives in order to increase the cash they receive on exercise.

Aboody et at. (2004a) also 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

4 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 x 4/year end stock price, the sum of the last 4 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.

5 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.

6 McNichols and Wilson (1988) show empirically that firms manage their earnings by over-providing for bad debts when income is extreme. For a relatively recent review of the earnings management literature see Fields, Lys and Vincent (2001).
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). Bartov, et al. (2004) find that managers strategically incorporate the use of forward-looking information in deriving expected volatility to yield lower volatility estimates and smaller option expenses. A working paper by Hodder et al. (2004) compares input estimates (and resulting option values) to a series of benchmark input estimates (and resulting benchmark option values). They find that on average, discretion over input values leads to considerable understating of ESO fair values. Nonetheless, fully 30% of their sample firms use discretion in a fashion that increases the ex post accuracy of the fair value estimates and signals subsequent changes in future operating risk. Thus, while the predominant effect of allowing managers discretion over input assumptions appears to be a self-serving use of discretion, there is some evidence that discretion is used by some managers to enhance estimation accuracy.

A critical difference between most types of earnings management and the management of stock compensation expense is that the latter permanently impacts cumulative reported income whereas most other types of earnings management shift income inter-temporally resulting in no permanent impact on cumulative reported income. Inter-temporal income shifting frequently reverses itself over short periods (e.g., in the case of allowances for bad debts and inventory obsolescence), but can also occur over longer periods (e.g., in the case of certain in-process research and development charges or post-retirement obligation assumptions). In the case of share-based payments, however, no such truing up takes place. This unique characteristic of the management of stock compensation expense may provide managers with even greater incentive to use their discretion to achieve desired reporting goals.

Providing managers with the opportunity and enhanced incentives to manage reported employee stock compensation expense is an undesirable property of the ED. Managers' ability to permanently impact cumulative reported income by managing employee stock compensation expense could be curtailed by employing settlement-date accounting for all employee stock options, regardless of settlement method. However, settlement-date accounting is logically inconsistent with the equity classification afforded to stock options settled in equity. Classifying these awards as liability awards overcomes this problem, but classifying such awards as liability awards is not consistent with existing or proposed definitions of liabilities.

In light of this, the Committee recommends that grant-date accounting be applied to option awards classified as equity instruments. To overcome the vulnerability of grant-date expense measurement to manipulation through transaction structuring and manipulation of input assumptions, however, the Committee recommends entities disclose the balance of stock options outstanding remeasured to fair value at the end of

7 Similarly, Davis-Friday, Miller and Mittelstaedt (2004) provide evidence that firms use the discretion available in reporting pension expense (income) to choose assumptions that lead to higher (lower) pension expense (income).
each reporting period. In addition, to allow users to assess the quality of earnings, managers should disclose a comparison of initial grant-date fair value estimates with settlement-date intrinsic values for all options settled (i.e. exercise or expired) during the period. Finally, to allow users to assess the sensitivity of managements’ fair value estimates to reasonable perturbations in the input assumptions, we recommend managers provide a sensitivity analysis of the effect of changes in significant valuation model input assumptions within a reasonable range on the fair value of options granted and stock option expense.

Such disclosures could provide users with information useful in assessing the quality of earnings by documenting the difference between managements’ estimates and subsequent realizations. Hirst et al. (2003) provide evidence that individual investors consider reconciliations of prior estimates in assessing earnings quality and deriving security price estimates. Moreover, considerable research into the usefulness of reconciliations 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 US property and casualty insurance companies would be helpful to users attempting to evaluate the quality of a firm’s reporting, thereby mitigating managers’ opportunities to manipulate stock compensation expense.

The discussion to this point touches on the difficulty of distinguishing between debt and equity for instruments with characteristics of both. Clearly, this issue is important not only for share-based payments but also for other securities for which the demarcation between debt and equity is not clear. Previously (AAA FASC 2001b), the Committee expressed its support for separate balance sheet classification of four possible categories of financial instruments; those being:

• Liabilities from both a solvency and valuation perspective.
• Liabilities from a solvency perspective and equity from a valuation perspective.
• Equity from a solvency perspective and liabilities from a valuation perspective.
• Equity from both a solvency and valuation perspective.

The recommendation proposed in that letter is that where the solvency and valuation perspectives align as liabilities (equity), the instrument be classified as liabilities (equity). The two categories for which the solvency and valuation perspectives differ are to be designated as well-defined mezzanines (AAA FASC 2001b, 391).

While most members of the current Committee agree that employee stock options settled in equity are not liabilities, there is some debate among the members as to whether employee stock options settled in equity are strictly equity from both a solvency and valuation perspective because existing common shareholders and stock option holders are inherently different; they do not share the same voting rights and they are characterized

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8 Davis-Friday, Liu and Mittelstaedt (2004) investigate the factors that make disclosures more or less reliable. They provide evidence that the reliability, and therefore the usefulness of postretirement benefit disclosures provided to comply with SAB No. 74 may have been enhanced if more supporting details had been disclosed.
by different pay-off functions. The distinction between debt and equity is complex even
in the relatively simple context of stock options, but is clearly very important since the
classification of instruments has implications not only for the balance sheet, but also the
income statement. Accordingly, the Committee is strongly supportive of the FASB’s
ongoing efforts to reconsider and clarify the definitions of liabilities and equity.

II.i. Disclosure Requirements (Issue 12)

A review of major textbooks on financial statement analysis reveals little
coverage of the role of stock-based compensation in business analysis and security
valuation. One exception is Soffer and Soffer (2003) who provide a well-developed
discussion of the theoretical importance of estimating future grants of employee stock
options and the fair value of existing employee stock options (all net of taxes to the firm)
in arriving at the value of common equity. Recent empirical work by Li (2002) yields a
similar result. That is, in equity valuation both expected future employee stock options
and outstanding employee stock options are value relevant. This thinking also seems to
be gaining acceptance in practice (see for example Clement and Joseph Cohen 2002).

To illustrate why information related to current period expense and the fair value
of options outstanding are both essential inputs needed for valuation purposes, we invoke
the Residual Income Valuation (RIV) model. We employ this model, in part, because it
builds directly on accrual accounting, but more importantly because it is a useful tool for
highlighting the essential inputs related to share-based payments needed from a valuation
perspective.

The RIV model is represented by the following equation:

\[ MV = BV + \sum_{t=1}^{\infty} \frac{E_t (CI_t - rBV_{t-1})}{(1+r)^t} \]

Where: \( MV \) = market value of equity.
\( BV \) = net book value.
\( CI \) = comprehensive income.
\( r \) = cost of equity capital.
\( \tau \) = time period.

\( E_t \) indicates that the terms that follow are the expected values of future
comprehensive income and net book value as of time \( t \). In words, this specification of the
model equates the market value of the firm’s equity to its present net book value plus the
present value of future abnormal earnings, where abnormal earnings are defined as the
amount by which earnings exceed the required return on equity investment (that is,
beginning net book value times the cost of capital).

Ohlson (1995) shows that clean surplus accounting is a necessary condition for
maintaining equivalence between the classic dividend discount model and the RIV
model. Clean surplus accounting is achieved when all changes in net assets unrelated to
transactions with equity holders flow through a performance statement. In the FASB's Statement of Concepts series, the summary measure of this performance statement is referred to as Comprehensive Income.

If equity is defined to include outstanding common stock and option awards classified as equity instruments (as proposed in the ED), the left-hand side of equation (I) \( (MV_e) \) must be interpreted as the market value of equity defined to include both components: the market value of common stock outstanding and the fair value of stock options outstanding.\(^9\) Since option holders are classified as equity, clean surplus compliant accounting requires that the right-hand side of equation (I) capture all changes in net assets excluding changes arising from transactions with common shareholders or option holders. Ohlson (2000) states that capital contributions must be measured in terms of market value at the date the transaction occurs. This implies that options granted (and the related stock compensation expense) should be recorded at fair value as of the date of grant. Since post-grant changes in the fair value of stock options outstanding are not associated with changes in net assets independent of transactions with an equity claimant, they must bypass income, just as post-issuance changes in the fair value of common stock outstanding do. However, the consumption of services provided by employees compensated with stock options gives rise to a change in net assets, which must flow through income for clean surplus accounting to be maintained.\(^10\)

The RIV model illustrates that two pieces of information regarding stock-based compensation are critically important for security valuation. First, users must forecast future stock compensation expense when forecasting future comprehensive income. Information on past stock compensation expense may be useful to users in forming these expectations. Second, users interested in assessing the value of the common stock component of equity separate from the stock option outstanding component could use information provided by firms regarding the fair value of stock options outstanding to make this separation. In the ED, the disclosure of the fair value of the outstanding options is not among the required disclosures. The Committee feels strongly that the provision of this information by the firm is critically important for valuation purposes as well as to mitigate some of the shortcomings of grant-date accounting for awards classified as equity instruments as discussed in Section II.i. Since employee stock options frequently differ from traded options in important respects, reliable estimates of the fair value employee stock options outstanding may not be available to users from any other source.

### II.iii. Remeasurement to Intrinsic Value for Equity Settled Options Issued by Non-Public Companies (Issue (5), Issue 14(a) and Issue (15))

In a previous letter (AAA FASC 2003), the Committee conveyed to the FASB our support of principles-based standards and described the characteristics we believe principles-based standards should possess. We emphasized that principles-based

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\(^9\) For simplicity, we assume that these are the only equity instruments issued by our hypothetical firm.

\(^10\) As stated in the ED, “When an employer exchanges its valuable equity instruments for employee services, the receipt of those employee services creates an asset that should be either capitalized as part of another asset of the enterprise (as permitted by U.S. GAAP) or expensed when consumed.” (pg. xii)
standards should: (1) use the economic substance, rather than the form, of a transaction to
guide financial reporting, (2) provide a description of the economics of the transaction
and any assumptions made in reporting the transaction, and (3) if needed, provide
implementation guidance in the form of examples, rather than rules.

The Committee views share-based payments issued by nonpublic entities and
small business issuers as economically equivalent to share-based payments issued by
public entities. Accordingly, the Committee does not support the proposal to permit
nonpublic and public entities to elect different methods of accounting for share-based
payments. Moreover, the use of different methods will reduce the comparability of
information among entities and may impair consistency as companies change status.
Further, the use of intrinsic value remeasured at each reporting date through settlement is
not logically consistent with an equity classification for awards settled in equity. Using
settlement-date accounting for such awards gives rise to a potentially significant source
of dirty surplus, thereby increasing the complexity of the information provided to users.

The Committee recommends that similar to public entities, nonpublic and small
business entities should be required to use an option pricing model to estimate the fair
value of employee stock options, if the fair value of the award cannot be established by
reference to observable market prices of similar traded options. If sufficiently reliable
internal input estimates for use in the option pricing model are not available, the inputs
should be drawn from comparable public companies or other sources. If a sufficiently
reliable estimate of volatility is not attainable internally or by reference to a comparable
public company or through other sources, the Committee recommends that, for reasons of
practically, nonpublic entities be allowed to use a lower bound estimate of fair value,
computed using a volatility assumption of zero. The Committee believes it should be
possible to arrive at a reasonable, non-zero estimate of volatility in the vast majority of
cases, and that the use of a zero estimate should be reserved for those unusual and rare
circumstances in which it is impossible to arrive at a reasonable, non-zero estimate.

II.iv. Treatment of Income Taxes (Issue 11)

The Committee did not achieve consensus regarding the asymmetric treatment of
the write-off of deferred tax assets and excess tax benefits. Some members of the
Committee agree with the ED’s proposed accounting, whereas others argue that
adjustments to the deferred tax asset balance should be accounted for symmetrically.

One of the criticisms of those opposed to the accounting proposed in the ED is
that it leads to income absorbing the tax effects of an item not included in the
computation of net income. They question why reductions in the deferred tax asset are
recorded through income when the post-grant changes in the fair value of options that
give rise to them are ignored in the computation of income. For example, when an award
classified as an equity instrument expires unexercised, a redistribution between equity
claimants is recorded with no effect on income. Even so, the write-off of the deferred tax
asset associated with the expired stock options is recorded as an adjustment to tax
expense. The members of the Committee opposed to this treatment argue that this
violates intraperiod tax allocation. Further, these members find the asymmetric nature of the treatment afforded changes in the deferred tax asset to be illogical. They question why the write-off of the deferred tax asset is treated as if it arises from a transaction with an employee whereas an excess tax benefit is treated as if it arises from a transaction with an equity claimant.

The members of the Committee considered several alternative approaches to accounting for post-grant changes in the deferred tax asset and the pros and cons of each. The accounting proposed in the ED for deferred tax write-offs violates intraperiod tax allocation, but is clean surplus compliant. In contrast, the accounting proposed in the ED for excess tax benefits does not violate intraperiod tax allocation, but does violate clean surplus accounting. One could avoid violating intraperiod tax allocation by recording all adjustments to the deferred tax asset directly to paid in capital, but this violates clean surplus accounting. Alternatively, one could avoid violating clean surplus accounting by recording all adjustments to the deferred tax asset through income, but this violates intraperiod tax allocation. The crux of the problem is that the stock option is classified as equity whereas the related deferred tax balance is classified as an asset. The Committee notes that both the clean-surplus violation and the intraperiod tax allocation violation could be resolved by classifying the deferred tax asset associated with stock options outstanding as a contra-equity account. However, the Committee questions the conceptual basis for doing so. The Committee did not resolve this issue since all of the "solutions" involve a trade-off between violating intraperiod tax allocation and clean surplus accounting, and the members could not agree which of these should be sacrificed.

II.v. Prospective Adoption (Issue 13)

As stated in our response to the FASB Exposure Draft, "Accounting Changes and Error Corrections," the Committee supports retrospective application as the standard transition method for mandatory adoption of a new accounting standard. Retrospective application results in more consistent and comparable financial information. The Committee is disappointed that the ED does not require retrospective application. We are concerned that the decision not to require retrospective application in this case sets a dangerous precedent. The Committee's position is that the standardization of accounting principle transitions is important because it enhances consistency, which reduces preparers' and users' implicit costs when implementing and processing changes in accounting standards.

The Committee recommends retrospective adoption of the standard with previously reported pro forma or recognized share-based payment expenses viewed as a reasonable ex-ante approximation of the amount of expense that would have been computed under the ED's proposed guidelines. Since entities were required to provide pro forma data under SFAS No. 123, we do not believe that retrospective application is prohibitively costly.
III. Other Issues

III.i. Estimating Volatility (Issue 4(c))

The Committee agrees that enterprises should make their best estimate of expected volatility (as well as other assumptions) based on all available information. However, the Committee is concerned that research demonstrates that managers bias their assumptions to achieve preferred outcomes. The Committee is particularly concerned that this behavior results in permanent measurement errors when the measurement date is the grant date of the option. As discussed in Section II.i., the Committee urges the Board to consider requiring firms to disclose the fair value of options outstanding remeasured at the end of each reporting period to mitigate the managers' opportunity and incentive to manipulate the option pricing model input assumptions. Along with that disclosure we recommend a comparison of initial grant-date fair value estimates with settlement-date intrinsic values for all options settled (i.e. exercise or expired) during the period and we recommend managers provide a sensitivity analysis of the effect of changes in significant valuation model input assumptions within a reasonable range on the fair value of options granted and stock option expense.

II.ii. Employee Stock Purchase Plans (Issue 6)

The Committee believes that this proposition captures the economic substance of the transaction and concludes that the guidance as stated is appropriate.

II.iii. Differences Between the ED and IFRS 2 (Issue 17)

In paragraph C11, the Board states as one of its reasons for undertaking this Project “its commitment to accelerate convergence to a set of high-quality, compatible accounting standards than can be used for both domestic and cross-border financial reporting.” In the following paragraphs we discuss several differences between the ED and IFRS 2, with which the Committee takes issue.

1. The decision to exclude share-based payment arrangements with nonemployees from the ED is a difference in scope. The Committee views share-based payment arrangements with employees and nonemployees to be sufficiently similar that we question the decision to approach these issues in a piecemeal fashion as doing so adds to standard complexity.

2. IFRS 2 applies the same measurement requirements to employee share options regardless of whether the issuer is a public or nonpublic entity. The Committee views share-based payments issued by nonpublic entities as economically equivalent to share-based payments issued by public entities. Therefore, the Committee supports the IFRS 2 requirement that nonpublic and public entities use the same method to account for share-based payments.

3. The ED establishes four specific disclosure objectives whose purpose is to explain and elaborate on information recognized in the financial statements. As in IFRS 2, the ED describes the minimum disclosures needed to achieve each objective. The disclosure requirements in the ED are almost identical to those in IFRS 2. However, the Committee reiterates its concern that the
required disclosures are inadequate to meet the needs of users. In the absence of settlement-date measurement, disclosure of the fair value of stock options outstanding remeasured at the end of each reporting period, a comparison of grant-date fair value to settlement-date intrinsic value for all options settled (i.e. exercised or expired) during the period and sensitivity analysis of the effect of changes in significant valuation model input assumptions within a reasonable range on the fair value of options granted and stock option expense is critically important. Additionally, the Committee recommends the following required disclosures, which will make the ED even more comparable to IFRS 2.

- The weighted average share price at the date of exercise for options exercised during the period;
- The range of exercise prices and weighted average remaining contractual life of share options outstanding at the end of the period;
- In addition to the inputs to the option pricing model already explicitly stated, the weighted average share price and the exercise price;

**II.iv. Economic Consequences of Mandatory Changes in Accounting Standards**

Empirical evidence on the economic consequences of accounting standards suggests that managers sometimes respond to mandatory accounting changes by changing their behavior. One interpretation of this evidence is the managers sometimes fail to fully understand the economic impact of transactions until accounting standards come into existence requiring that the effect of the transactions be measured and disclosed. For example, Amir (1993) found that prior to the discussions on SFAS No. 106 (1984-1986), firms underestimated the full effect of the post-retirement benefit liability on firm value, even though the information to calculate the economic consequence was disclosed in the footnotes to financial statements. Another study attempted to measure the direct impact of the mandatory accounting change by investigating management's reaction to the new rules. Mittelstaedt, et al. (1995) document benefit reductions in employer-sponsored retiree health care plans following the approval of SFAS No. 106. These studies and others demonstrate that there are economic consequences to accounting rule changes.

Opponents argue that the Board should not require firms to expense employee stock options because doing so may cause firms economic hardship by negatively impacting their stock prices or limiting their ability to raise investment capital. Moreover, opponents argue that employees may be harmed if firms reduce their use of employee stock options upon being forced to record compensation expense. The Committee takes issue with this position in several respects. First, since stock compensation expense is disclosed in the footnotes to the financial statements, to the extent the information is value relevant, it has been impounded in stock price already. In theory, the move from disclosure to recognition should have a minimal effect on firm value. Second, prior experience shows that managers may appreciate the economic impact employee stock option grants once their effect must be recognized in the income statement. Since many academics agree that it is possible to reasonably quantify the magnitude to stock compensation expense, one must conclude that employee stock option use was in excess of an economically viable level if managers are motivated to reduce their reliance on
employee stock options if they are required to record the compensation expense associated with them. Third, once the accounting benefit APB No. 25 affords to zero grant-date intrinsic value options is eliminated, managers may be motivated to use options with superior incentive effects that managers currently shun, because they generate stock compensation expense under both APB No. 25 and SFAS No. 123. In summary the Committee contends that the efficient functioning of the capital market which ultimately benefits all economic participants (firms, employees, investors, creditors, etc.) through the appropriate allocation of resources between competing investment opportunities is best served by full and fair disclosure.

Summary and Conclusion

The Committee strongly endorses the conclusion that share-based payments lead to compensation expense recognition and argues that research demonstrates that the fair value of stock options can be reliably measured using option pricing methodologies. The Committee agrees that the FASB should not specify a single option methodology and we agree that cash-settled options are liability awards that should be remeasured to fair value at the end of each reporting period.

One of the Committee’s concerns with the ED centers on implementation issues that could reduce the usefulness of the information produced by grant-date accounting. To mitigate these concerns and ensure that critical information needed for valuation purposes is reasonably accessible the Committee calls for enhanced disclosure requirements including requirements to disclose: 1) the fair value of stock options outstanding remeasured at the end of each reporting period, (2) a comparison of grant-date fair value to settlement-date intrinsic value for all options settled (i.e. exercised or expired) during the period and (3) sensitivity analysis of the effect of changes in significant valuation model input assumptions within a reasonable range on the fair value of options granted and stock option expense.

The Committee also is concerned with the use of intrinsic value through settlement date by nonpublic entities for awards classified as equity instruments as the Committee views this approach as logically inconsistent with an equity classification for such awards. The Committee urges the Board to reconsider this decision and consider requiring nonpublic entities to follow substantively similar procedures as public entities.

Some members of the Committee also question the asymmetric treatment of the write-off of deferred tax assets and excess tax benefits, while others agree with the ED’s proposed accounting. Those members expressing concerns recommend that both sides of the adjustment to deferred tax assets be accounted for symmetrically.

Finally, the Committee urges the Board to reconsider its decision to adopt the standard prospectively. The Committee recommends retrospective adoption of the standard with previously reported pro forma or recognized share-based payment expenses viewed as a reasonable ex-ante approximation of the amount of expense that would have been computed under the ED’s proposed guidelines.
References


