ACCOUNTING FOR STOCK BASED COMPENSATION

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INTRODUCTION

Stock-based compensation plans are used to both motivate and reward managers. Two common types of stock-based plans are non-transferrable Employee Stock Option Plans (ESOPs) and non-transferrable Stock Appreciation Rights (SARs). Currently, these plans can be accounted for using either Accounting Principles Board (APB) Opinion No. 25--clarified by Financial Accounting Standards Board (FASB) Interpretation No. 28—or Statement of Financial Accounting Standards (SFAS) No. 123. SFAS No. 123 was issued in 1995 and addresses stock-based compensation plans including stock purchase plans, stock options, restricted stock, and stock appreciation rights. This statement also applies to all transactions where an entity acquires goods or services by issuing equity instruments.

Accounting for ESOPs and SARs using GAAP in effect prior to 1995 has been highly criticized for two reasons. (1) The accounting for incentive ESOPs (option price greater than or equal to market price at date of measurement) as opposed to the non-qualified plans (option price less than market price at date of measurement) is inconsistent because some compensation expense is recorded for non-qualified plans while no compensation expense is recorded for the incentive plans. (2) The accounting for ESOPs and SARs is not the same although the two types of reward systems are in substance economically equivalent. SFAS No 123 recommends a “fair value” method of accounting for stock based compensation, but because of extensive opposition to the proposed method, accounting under GAAP in effect prior to 1995 is allowed if specified disclosures are made in the notes accompanying the financial statements. This paper compares the economic substance of non-transferrable ESOPs and SARs and evaluates the accounting for them. Accounting which reflects the substance of ESOPs and SARs is recommended.

SUMMARY OF GAAP AND RELATED LITERATURE

Statement of Financial Accounting Standards No. 123 recommends charging to compensation expense over the employee’s service period the estimated fair value of ESOPs and
stock-issue SARs at the grant date. This estimated compensation expense is never changed (for 
vested employees) to the actual benefit received by the employee from exercise of the option. The 
estimated fair value of the granted contract is to be computed using an options valuation model. 
The “fair value” accounting method recommended in SFAS No. 123 is encouraged but is not 
required. Corporations are allowed to continue accounting for ESOPs and stock-issue SARs under 
APB No. 25 and Interpretation No. 28 if extensive disclosures are made. These disclosures include 
pro forma amounts for earnings and earnings per share as if the recommended accounting in SFAS 
No. 123 were used. If the method recommended by SFAS No. 123 is adopted, the company cannot 
change back to the requirements of APB Opinion No. 25 and Interpretation No. 28.

If the recommended accounting in SFAS No. 123 is adopted, SARs settled in cash are still to 
be accounted for under APB Opinion No. 25 and FASB Interpretation No. 28 (market value--
percentage method). However, if SARs require issuance of stock, the value of the SAR is estimated 
at the grant date and charged to compensation expense over the service period in the same manner 
recommended for ESOPs. The FASB’s reasoning for these different accounting treatments for SARs 
is attributed to whether or not an equity instrument is granted.

Under APB No. 25, compensation expense is recognized equal to the excess of the market 
price of the stock over the ESOP exercise price at the measurement date, which is the date on which 
both the number of shares and the exercise price are known. However, no compensation expense is 
recognized when the exercise price is equal to or greater than the market price of the stock at the date 
of measurement. Under APB Opinion No. 25, there is no adjustment to compensation expense for a 
change in stock price between the measurement date and the exercise date. This generally results in 
the recording of a much lower compensation expense for ESOPs than for other forms of 
compensation (Balsam 1994).

FASB Interpretation No. 28 applies to APB Opinion No. 25 and addresses the accounting for 
stock appreciation rights and other variable ESOP award plans. The following summary is presented 
in Interpretation No. 28:

The interpretation specifies that compensation should be measured at the end 
of each period as the amount by which the quoted market value of the shares 
of the enterprise’s stock covered by a grant exceeds the option price or value 
specified under the plan and should be accrued as a charge to expense over 
the periods the employee performs the related services. Changes in the 
quoted market value should be reflected as an adjustment of accrued 
compensation and compensation expense in the periods in which the changes 
occur until the date the number of shares and purchase price, if any, are both 
known.

The Interpretation No. 28 method of accounting for SARs is referred to in this paper as the 
“market value--percentage method.” Compensation expense is allocated to the service period, and 
ultimately the excess of the market price over the designated price at the exercise date (the spread) is
the total amount charged to compensation expense.

Nordquist and Ellingson (1997) present a detailed history of accounting for ESOPs since their inception in the 1920s and conclude that no consensus has been reached on any one method of accounting for them. They also state that many accountants feel that self-regulation of the accounting profession may be in jeopardy as a result of the recent controversy over ESOP accounting. Some accountants wonder if top executives and their corporate employers (preparers) should have as much influence over the standard-setting process as they appeared to have in the recent controversy about ESOP accounting.

Thomas and Farmer (1984) argue that ESOPs and SARs are economically identical and should produce identical reported results. Accounting for ESOPs does not adjust compensation expense for changes in the market value of the stock after the measurement date, but these changes would be reported for SAR plans. Balsam (1994) agrees with this position and suggests that the accounting for SARs should be extended to ESOPs.

Balsam (1994) argues that the FASB should look beyond the definitions of liabilities and equities to the substance of the transaction. Since SARs and ESOPs are economically equivalent, the amount of compensation expense recognized should be the same whether a SAR or an ESOP is granted. Although he does not believe the SAR method (Interpretation No. 28) is perfect, he thinks it has fewer flaws than other alternatives. Financial statements should represent the financial position and performance of the company in a way that is cost effective for the firm and understandable to the user, and the SAR accounting method applied to ESOPs would help achieve that objective.

Pacter, Fender, Jones, Akresh, and Fuersich (1995) briefly describe SFAS No. 123 as the FASB standard where accounting for cash SARs does not change. Stock SARs are to be valued at the grant date (if SFAS No. 123 is followed) using the same method recommended for ESOPs because they are equity instruments. This statement encourages companies to recognize compensation cost as expense over the employee service period. If APB Opinion No. 25 is used to account for the stock based compensation, the entity is required to report pro forma earnings and earnings per share as if the recommended accounting in SFAS No. 123 had been used.

The FASB's initial exposure draft on stock based compensation required what they called the "fair value" method of accounting for ESOPs. However, extreme opposition caused the FASB to only encourage use of this fair value method in SFAS No. 123 (Nagy and Williams 1996). Under APB Opinion No. 25, corporations are able to completely avoid recording compensation expense for ESOPs. Moore (1996) adds that even if the accounting recommended in SFAS No. 123 is not chosen, the estimated value of the ESOPs (using the Black-Scholes or another valuation model) must still be calculated because pro forma amounts for earnings and earnings per share as if FASB No. 123 were used are to be disclosed in the notes accompanying the financial statements. Compensation expense reported for ESOPs on the income statement will generally be higher using the fair value approach, and most companies will elect to continue with the accounting required by APB Opinion No. 25.
Kieso and Weygandt (1998) point out that a corporation can avoid recording compensation expense for ESOPs under APB No. 25 and Interpretation No. 28; however, the full amount of the spread at exercise date must be charged to compensation expense for all SARs. On the other hand, the recommended accounting under SFAS No. 123 requires the estimated value at the grant date to be recorded as compensation expense over the service period for all ESOPs and stock-issue SARs. Therefore, a company using primarily ESOPs will probably choose to continue APB No. 25 accounting, and those using primarily stock-issue SARs will probably choose the recommended accounting of SFAS No. 123 if the company objective is to record a minimum amount of compensation expense. This situation indicates there are still major inconsistencies in the recommended accounting for ESOPs and SARs.

III. Substance, Logic, and Consistency

In recommending the “fair value” method of accounting for ESOPs and extending that method to SARs for which stock is issued, the FASB has recommended accounting which is inconsistent and does not logically account for the substance of these forms of stock based compensation.

1. ESOPs are not in substance the same type of instrument as traditional stock options. Each ESOP is a unilateral contract issued by a corporation to an employee whereby the corporation agrees to sell a specified number of common shares to the employee at a specified price during specified future dates if certain contingencies are met. Unlike traditional stock options, ESOPs are not transferable, have no established market price, and represent no investment risk to the holder; therefore, an ESOP is not in substance an equity instrument.

2. Because of the characteristics noted in item number one above, the substance of ESOPs is not the issuance of stock options for compensation, but rather the contingent issuance of stock for compensation. The stock issued under an ESOP is the equity instrument which should be recorded as paid-in at market value of the stock on the exercise date. The spread at the time of exercise is the benefit received by the employee and the opportunity cost of the employer and should be recorded as compensation expense.

3. It is inconsistent to account for stock issued to employees for services differently from stock issued to others for services.

4. It is not logical to record compensation expense for ESOPs if no stock is purchased by the employee under the plan. If no stock is purchased, the firm has not given up an economic benefit and the employee has not received an economic benefit.
5. In the case of SARs for which stock is to be issued, it is inconsistent with accounting for cash SARs to record compensation expense and paid-in capital different from the spread at the exercise date. If cash were issued, the compensation expense and the cash disbursement would be equal to the spread at the exercise date. When stock with a fair value equal to the spread is issued, the obvious benefit to the employee and opportunity cost to the employer is the market value of the stock issued.

These points about substance, logic, and consistency are discussed at greater length in the remainder of this paper.

**ESOPs NOT EQUIVALENT TO STOCK OPTIONS**

When the attributes of traditional stock options and ESOPs are compared, it is apparent they are quite different in nature. Traditional, trading stock options and ESOPs are similar in only one of the six attributes noted below:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Traditional Stock Options</th>
<th>ESOPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Market for the instrument exists, and/or it may be transferred to another person or entity</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>2. Consideration given to corporation for issuance of the instrument</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>3. Primary objective is executive compensation for excellent job performance</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>4. Instrument is a unilateral contract</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>5. Original holder must be employed by the corporation to the vesting date in order to purchase stock at the exercise price</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>6. Instrument allows the holder to buy stock at future date at the exercise price</td>
<td>YES</td>
<td>YES</td>
</tr>
</tbody>
</table>

Stock options are generally issued by a corporation for some type of consideration, and the options are bought and sold in a competitive market. The holder of stock options has an investment to manage, i.e., the holder can elect to hold or sell the options at any time in an attempt to maximize economic benefits or minimize losses. The stock option holder can manage the investment and risks associated with the investment. On the other hand, an employee gives no consideration for a non-transferable ESOP and the employee's rights under the plan cannot be sold or transferred. Under the unilateral contract issued by the corporation, the employee cannot receive any benefits unless two contingencies are met. (1) The employee must work for the corporation until the vesting date, and
(2) the employee (or his/her estate) must exercise the option to buy stock when the market acquisition price of the stock exceeds the option price. The holder of an ESOP cannot make the decision to hold the contract or sell the contract in order to manage risk.

An ESOP is in the form of stock options, but in substance such plans are a delayed compensation technique similar to a bonus whereby the bonus (if any) is the spread at the exercise date. The decision of the employee to purchase common stock at less than the market acquisition price is the act from which the employee obtains economic benefits, and sale of this stock by the corporation at less than the net market price is the economic benefit (opportunity cost) given up by the corporation.

The FASB has taken the position that ESOPs and SARs for which stock is issued are equity instruments that should be recorded at fair value when granted to the employee. The only direct equity instrument of a corporation is some type of capital stock. Stock options, stock purchase warrants, and stock rights may be referred to as derivative or indirect equity instruments. However, all direct or indirect equity instruments have one characteristic in common, and that is title to the instrument can be transferred from the holder to another entity at any time after initial issuance. Therefore, non-transferrable ESOPs and SARs are not in substance equity instruments. ESOPs and stock-type SARs appear in form to be indirect or derivative equity instruments, however, they are in substance a unilateral contract to issue stock for compensation on a contingency basis.

INCONSISTENT STANDARD FOR ACQUISITION OF SERVICES

In SFAS No. 123, the FASB reiterated its support for the current GAAP used to record the acquisition of goods and services purchased from other than employees by the direct issuance of stock. When stock is issued for goods and services, the GAAP generally followed (also supported by SFAC No. 6) has been to record the goods or service at the fair value of the goods or service acquired or the market value of the stock issued, whichever is more readily (objectively) determinable. When stock is issued for the services of an employee, it is apparent that the market value of the stock issued is more readily determinable than the fair value of the services rendered by the employee.

In the case of stock purchased under an ESOP, the economic benefit given up by the corporation for the services of an employee is the spread at the exercise date. However, the FASB recommends that the estimated, theoretical value of the unilateral contract at the grant date be charged to compensation expense and never changed even though the exact compensation can later be determined. This estimated, theoretical value (derived from an options valuation model) is likely to be materially different from the spread at the exercise date. Given, as previously stated, that ESOPs and stock-issue SARs are in substance the issuance of stock for compensation, it is inconsistent to account for stock issued for services of employees differently from stock issued for the services of non-employees. In order to consistently account for the substance of economically equivalent transactions, stock purchased under the terms of an ESOP or issued under an SAR should be recorded as paid-in at market value on the exercise date and ultimately the spread should be
recorded as compensation expense. Following the practice of recording stock as paid-in at market value on the date issued would be theoretically sound for all ESOPs, SARs, and payment for the services of employees as well as non-employees by issuing stock. If stock is not purchased under the terms of the unilateral ESOP contract, no economic sacrifice has been incurred by the corporation and no compensation has been received by the employee. Therefore, if the contract option is never exercised, any previously recognized compensation expense should be adjusted to zero.

ESOPs and SARs are analogous to offering a profit-based bonus as part of a compensation plan. Through an ESOP, the value of the economic benefit to be received by the employee and given up by the corporation is based on stock price (rather than profit) as a measure of job performance. It would not be generally accepted to estimate the value of a profit-based bonus when granted and record this estimate as compensation expense rather than (1) the fair value of the cash or other economic benefit awarded under the bonus plan, or (2) zero if the employee does not ultimately meet the criteria for receiving a bonus.

INCONSISTENT ACCOUNTING RECOMMENDED FOR SARs

If a company adopts SFAS No. 123, SARs which require the issuance of cash are accounted for by charging compensation expense for the amount of cash (the spread) paid to employees. On the other hand, if stock with an equal fair value is to be issued, the estimated value of the SAR at the grant date is charged to compensation expense over the service period and is never changed (if employee vests) even though the exact amount of the compensation can later be determined. It seems clear that if the spread at the exercise date of the SAR is $10,000 and cash of $10,000 is disbursed to the employee, the compensation expense is $10,000. If stock with a market value of $10,000 is issued to the employee instead of cash, the compensation expense should still be $10,000 because the employee has received an economic benefit of $10,000 and the corporation has incurred an economic sacrifice of $10,000 (opportunity cost of not selling the stock at market value). The SAR is not an equity instrument; the stock issued is the equity instrument which should be recorded as paid-in at market value on the date issued. Recording anything other than $10,000 as compensation expense would not account for the substance of this stock-based compensation.

Apparently, the inconsistent accounting for stock-issue SARs as opposed to cash SARs was an attempt to make the accounting for SARs comparable with the recommended accounting for ESOPs in SFAS No. 123. However, the recommended accounting does not reflect the substance of the stock-type SARs and creates an additional inconsistency.

SELECTION OF FORM OVER SUBSTANCE

The FASB argues that ESOPs are equity instruments, and the granting of ESOPs is equivalent to the issuance of stock options for compensation. The degree to which members of the FASB believe this argument is unknown; however, the argument is a convenient way to avoid recommending exercise date measurement for ESOPs. The Board members probably believe that recognition of some compensation expense for all ESOPs is preferable to recognition of no
compensation expense for most ESOPs. They probably thought their recommended accounting had a much greater probability of acceptance than exercise date measurement. This could possibly be the line of reasoning which led to the recommendation of form over substance in the accounting for ESOPs and stock-type SARs. However, later events showed that preparers were vehemently opposed to the changes recommended by the FASB.

Since the accounting recommended by the FASB does not reflect the substance of ESOPs or SARs for which stock is issued, the use of this method for financial reporting provides very little useful information. In many cases, the compensation expense recorded will bear little relationship to the actual economic benefit (if any) given up by the corporation and received by the employee. Therefore, the “fair value” method recommended by the FASB is not likely to satisfy the concepts of relevance, reliability, and representational faithfulness or pass the cost-benefit test recommended in SFAC No. 2.

ACCOUNTING RECOMMENDED FOR ALL ESOPs AND SARs

A fair value method which accounts for the substance of ESOPs and all SARs should record any stock issued to employees as paid-in at market value on the exercise date and ultimately record the spread on the exercise date as compensation expense. To the extent possible, the method should match the compensation expense with the service period of the applicable employee. The accounting required for SARs in FASB Interpretation No. 28—Market Value—Percentage Method (MVPM)—ultimately records the spread at the exercise date as compensation expense; however, the matching process is not the best attainable. The MVPM does not directly match adjustments to compensation expense with stock performance during a fiscal period. If stock price increased uniformly during a three-year service period, the MVPM would recognize a smaller amount of compensation expense in the first year and larger amounts in the later two years because of the percentage allocation feature. Given uniform price increases each year, compensation expense should be recognized in uniform amounts each year in order to match compensation expense with stock performance and presumably employee performance...

A method of accounting for all ESOPs and SARs which would report the substance of the transactions and achieve matching to the extent possible may be called the “current total value method” (CTVM). This method would record cumulative total compensation expense equal to the value to employees if the contract option were exercised on the balance sheet date. The CTVM would match adjustments to compensation expense with stock price performance during the service period and applicable portion of the exercise period. Since stock price should be generally correlated with employee performance, the compensation expense should be better matched with employee performance than is possible with the MVPM. If an ESOP or SAR is never exercised, no compensation expense is recognized, and any previously recognized compensation expense is adjusted to zero. A brief example of the CTVM is shown below.

Assume that an option contract is granted for the purchase of 10,000 shares of stock. At the grant date, the market price and exercise price are $40 per share. The service period is three years,
and is directly followed by a six-month exercise period. Stock price at the end of years 1, 2, and 3 of the service period are: year 1, $48; year 2, $54; and year 3, $65. Assume the option contract is exercised when the market price of the stock is $68. The following schedule shows the allocation of compensation expense among the service period years using both the MVPM and the CTVM:

| Service Periods | Method | 1 | 2 | 3 | Total Compensation
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>MVPM</td>
<td>$26,667</td>
<td>$66,666</td>
<td>$156,667</td>
<td>$30,000</td>
<td>$280,000</td>
</tr>
<tr>
<td>CTVM</td>
<td>$80,000</td>
<td>$60,000</td>
<td>$110,000</td>
<td>$30,000</td>
<td>$280,000</td>
</tr>
</tbody>
</table>

In those situations where stock price is constantly increasing as it did in this example, the MVPM records a smaller amount of compensation expense in the first year and larger amounts in the later years of the service period than does the CTVM. Both methods recognize the same amount of compensation expense in the exercise period and in total. Note that the compensation expense recorded using the CTVM method matches the compensation expense directly with performance of the stock which is in turn the performance indicator used to judge the employee. Therefore, the authors recommend the CTVM method of accounting for all ESOPs and SARs.

**SUMMARY AND CONCLUSIONS**

Accounting for ESOPs and SARs is currently stated in APB Opinion No. 25, FASB Interpretation No. 28, and SFAS No. 123. The FASB recommends a fair value accounting method described in SFAS No. 123 (1995); however, the GAAP in effect prior to 1995 may be used if pro forma amounts for earnings and earnings per share using the recommended method are disclosed.

None of the requirements of current pronouncements adequately account for the substance of ESOPs and are inconsistent in accounting for SARs. A non-transferrable ESOP is a unilateral contract for the contingent issuance of stock for compensation; therefore, the substance of ESOPs is the issuance of stock (not options) for compensation. The ESOP contract has no market value when issued and cannot be sold or transferred by the employee to manage risk. The employee has potential for gain but is not subject to risk from holding an ESOP. The benefit received by the employee (if any) is the excess of market price over exercise price at the exercise date (spread), and this is the economic sacrifice (opportunity cost) of the corporation. Therefore, it is not consistent with GAAP for the issuance of stock for goods and services to ultimately record any amount other than the spread at the exercise date as compensation expense. It is inconsistent to record the value of services rendered by non-employees differently from services rendered by employees as required by SFAS No. 123. For cash SARs, the amount of cash paid and compensation expense is equal to the
spread at the exercise date; it is inconsistent to record compensation expense and paid-in capital
different from the spread at the exercise date if stock with a market value equal to that spread is
issued when the SAR is exercised.

The “current total value method” (CTVM) of accounting described in this paper reflects the
substance of ESOPs and SARs by ultimately charging the spread at the exercise date to
compensation expense and directly matching any adjustment to compensation expense with stock
performance during the service and exercise periods. If the ESOP or SAR is never exercised, any
compensation expense previously recorded is adjusted to zero. Use of the CTVM to account for
ESOPs and SARs would record compensation expense equal to the economic benefit conveyed to
the employee and the economic sacrifice (opportunity cost) to the corporation. It would also match
compensation expense with stock performance to the extent possible, reflect the substance of these
transactions, and result in greater comparability of financial statements among firms.
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