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Letter of Comment No: 6536  
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To: Director, FASB  
Re: Exposure Draft for Options Expensing, No. 1102-100

Disclaimer: The opinions presented in this letter are mine and do not represent the opinions of my employer or associates.

Respondent Background: I am an equity research analyst at an investment management organization.

Dear FASB:

Accounting for options-based compensation has recently been a heated debate. Proponents of expensing assert that options have significant value that is not captured by financial accounting treatments, and opponents point out that available valuation methods are inaccurate, opaque, or both. However, it occurs to me that restricted stock grants are easily valued and accounted for on the grant date without resorting to complex valuation models, and that an option grant is very much like a restricted stock grant with an addition: an agreement by the employee to pay a specified amount (the exercise price) by a certain date. I therefore submit that accounting for options-based compensation could be made quite straightforward and accurate by separating the economic components of company-issued option contracts and accounting for those components individually. As shown below, this approach would simply and accurately capture the true cost of option-based compensation more completely than the currently existing or proposed approaches.

Consider that if a company-issued call option is like a stock grant in which the company gets something back from the employee, it can be viewed in terms of the following two components:

1. Rights to a newly-issued share of stock granted to the employee, and
2. An agreement by the employee to pay the stated exercise price prior to the stated maturity date.

There is also a probabilistic element in that there is a chance the transaction will simply not occur for whatever reason (lack of vesting, out-of-the-money, etc). Such probabilities also exist with restricted stock grants, though the list of potential reasons for forfeiture is not identical. With an option, the consequences of this uncertainty are that the employee waives the right to all dividends until the exercise price has been paid, and the company retains custody of the new share until that time.

When viewed in this way, a company-issued option grant functions as a company-financed stock issuance. The equity "purchaser" (the employee) receives rights to a newly issued share of stock, and in exchange the company does not receive cash but rather gains a kind of "receivable" that reflects the contributed capital that has not yet been paid. In effect, the company has provided 0% financing to the employee, and the employee has purchased a newly issued share of stock on a "no interest, no payments and

no money down” financing plan. To collateralize the “borrowing” by the employee, the company retains custody of the newly issued share of stock. Under the terms of the “borrowing agreement” (i.e. the option contract), the collateral (the newly issued share) is not released to the employee’s custody (and hence may not be sold) until the specified exercise payment has been paid, and the collateral is forfeit if the employee “defaults” (elects not to exercise). Dividends are waived until the exercise price is paid.

The grant of a company-issued option could therefore be accounted for as the immediate issuance of a share of stock in exchange for a kind of receivable, both of which are easily valued at the grant date, and both of which kinds of items are already accounted for by well understood methods. Also, stock and receivables accounts can be easily adjusted by means of traditional valuation allowances to reflect such items as expected forfeitures, “prepayments” (early exercise) and other such probabilistic adjustments. The “expense” in this situation would therefore be the cost of the stock grant (much like restricted stock) less the value of the payment to be recovered from the employee.

This interpretation of the company-issued option contract clearly shows that the cost of such options exists in two components, namely:

1. The cost of the share dilution, and
2. The financial cost of the 0% financing package (the “expense”).

### **Accounting Treatment**

Note: The accounting illustrations throughout this letter are intended to demonstrate the general principles of this recommendation. Were this proposal to be put into practice, the specific standards and guidelines should be constructed by accounting professionals.

The general accounting treatment for application of this approach to an at-the-money option is straightforward.

On the option grant date:

1. The company records the issuance of a basic share of stock (record-keeping entry only – increasing basic shares outstanding).
2. The company makes the following journal entry:

Debit: “Option Receivables”

Credit: Common Stock and/or Additional Paid-in Capital

Upon exercise of the option, the company makes the following journal entry:

Debit: Cash

Credit: “Option Receivables”

Note that this basic treatment offers some flexibility in its application, and may be applied in either an “intrinsic value” manner or an “expensing” manner, as described below.

### **Intrinsic Value Application: Use the Face Value of the Receivable**

The basic accounting entries presented above represent an “intrinsic value” application in that the recorded value of the stock issued and the recorded value of the receivable are

identical and therefore do not result in recognition of an expense item on the income statement. However, a critical distinction between this application and the intrinsic value method that is currently used for financial reporting is that the treatment presented above DOES capture the dilution component of the cost of the option, because it recognizes the share issuance immediately. Thus, the “intrinsic value” application of this proposed accounting method is a substantially more complete and accurate measure of option cost than the intrinsic value method that is currently employed.

#### Expensing Application: Use the Fair Value of the Receivable

As mentioned above, the total cost of a company-issued option includes a financial cost component which the above “intrinsic value” application does not capture. One might then ask how this cost should be determined and accounted for. I submit that the value of this financing cost, and hence the “expense,” is equal to the difference between the current stock price (fair value) and the fair value of the option receivable. The fair value of this receivable is equal to that of a risk-free zero-coupon bond with a face value equal to the exercise price and a maturity date equal to that of the option. The rationale for this assertion is below.

Under the intrinsic value method that is currently used for financial reporting, the value of a share of stock at the grant date is compared to the value of the exercise price and the difference is considered the “value” of the option. Thus, for any option with an exercise price at-the-money or higher, the option value is measured as zero. Proponents of option expensing, however, argue that it is inappropriate to compare the current value of the stock against the exercise price because the exercise price is to be paid at a later date, and conclude that an option’s value should be measured by comparing the values of the stock and the exercise payment at the same moment in time. Simply put, proponents of expensing have recognized that there is a financial cost of the option related to the time value of money. This is the element of the option cost I referred to above as the financial cost component.

Option pricing models such as the Black-Scholes and lattice models seek to quantify this time value impact by probabilistically projecting the stock price forward by means of volatility assumptions, risk-free rates and no-arbitrage principles, and then comparing the value of the stock and exercise payment as of the same date (the assumed exercise date). The requirements of this probabilistic methodology (volatility assumptions or highly complex and opaque lattices) are what render such models less than desirable for option accounting purposes.

The approach suggested above is philosophically identical in that it defines the option expense as the time-matched difference between the stock value and the exercise price value. The key difference in this approach, however, is that these values are measured at the grant or measurement date rather than the exercise date, which simplifies the calculations dramatically since it permits us to adjust for the time value of money through the receivable rather than through the stock price, on the principle that regardless of anyone’s expectations for a stock’s future value, the present value of a share of stock should be equal to the value of a share of stock at present (i.e. today’s market value).

At the grant date, the payment to be received upon exercise is known, and the contract maturity date is known, and so the present value of the option receivable is equal to the present value of the exercise price, as determined by discounting the exercise price over the remaining contract life at the prevailing zero-coupon risk-free rate appropriate for that maturity. Note that the zero-coupon rate is most appropriate because the option exercise payment is a bullet payment, and the risk-free rate is most appropriate because the borrowing is fully collateralized by the underlying share of stock. Note also that the value of the receivable as calculated in this way will necessarily be equal to the current price of a risk-free zero-coupon bond with a face value equal to the exercise price and a maturity date equal to that of the option contract.

Therefore, the value of the financial cost component of the option (the option "expense") is equal to the difference between the current stock price and the current price of the zero-coupon bond discussed above, and so the "expense" is analogous to a "loss on sale of stock." If we use a \$10 stock and a \$3 present-value of the receivable (bond) for example, the accounting treatment would become:

On the option grant date:

1. The company records the issuance of a basic share of stock (record-keeping entry only – increasing basic shares outstanding).
2. The company makes the following journal entries:  
Debit "Option Receivables": \$3  
Debit "Option Expense": \$7  
Credit: Common Stock and/or Additional Paid-in Capital: \$10

Upon exercise of the option,

1. The company must somehow true-up the "Option Receivables" account.
2. The company makes the following journal entry:  
Debit Cash: \$10  
Credit "Option Receivables": \$10

Note that applying this method for recognition of the option expense will necessitate an eventual reconciliation (true-up) of the option receivable to reflect the amortization of the interest cost that is built into its initial valuation, such that the final value of the receivable is equal to the exercise price. In principle, this phenomenon is identical to accrual of interest income to the reported value of a zero-coupon bond such that the reported value will equal the cash payment at maturity. And although there are several ways this true-up could be achieved for the option application, either by adjusting the balance sheet directly or by recognizing some form of "interest income" in one or more subsequent periods, there is no escaping the fact that the "expensing" approach requires more accounting complexity than the "intrinsic value" application.

Incidentally, measurement of the option "expense" by the above method is supported by the fact that if a company wishes to hedge the exposure to the stock price, it would buy a share of stock from the market on the grant date, resulting in a net expense to the company which would be equal to the price paid for the stock less the present value of the recovery from the employee (the option receivable).

## Expensing versus Intrinsic Value

The “expensing” application proposed above creates a mismatch between the dollar value of the receivable recorded at the grant date and the cash exercise price that will eventually be received, necessitating some form of true-up later on. Implementation of the method would most effectively capture the complete cost of option grants, but may also have several undesirable consequences over time. For example:

1. As options are granted in successive periods, the relationship between the reported (fair) value of the options receivables account and the dollar (face) value of cash to be received may become murky, making interpretation by shareholders and comparisons between different firms more difficult.
2. Since options granted at different times would have different costs (as exercise prices change and zero-coupon bond prices will fluctuate with interest rates), expressing and updating an aggregate fair value of the option receivables will be much more complex than reporting the aggregate face value.
3. Reporting options receivables on a fair-value basis would require eventual valuation true-ups, which could contribute volatility to the financial statements and create the appearance of income accruals in periods far removed from (and hence poorly matched to) the grant date.
4. Truing-up of the discount imbedded in the fair-value of the option receivables account would require a separate calculation for each individual option in the outstanding option portfolio, which could be much more onerous than reporting the aggregate face value – especially if revaluation of the fair value were required in every reporting period.

Despite these consequences, however, I submit that this expensing approach offers superior accuracy, transparency, comparability, interpretability and ease of implementation than model-based valuation methods.

## **This Proposal versus Current Option Accounting Methods and those Proposed in Exposure Draft No. 1102-100**

I submit that the accounting approach proposed above is superior to the existing and proposed accounting methods in two fundamental ways.

### 1. Dilution cost

First and foremost, the above approach captures the dilution cost to shareholders that persists long after the option contract itself has been exercised. On this point it is imperative to recognize that a company-issued option differs from a third-party option in that exercise of a company-issued option triggers the issuance of a new share of stock which thereby alters the company’s capital structure and dilutes the prior shareholders’ interests, while exercise of a third-party option does not. Thus, any option accounting approach that values only the option contract itself, such as the Black-Scholes and lattice models, fails to capture the cost of the option’s aftermath – which is potentially much greater than the value of the option contract itself. Furthermore, this proposal’s recognition of dilution in its true form – new shares – relieves us of the dubious task of assigning a dollar value to the dilution effect.

Some might argue that the recognition of a new share of stock when the option is exercised fully captures the dilution costs. I point out, however, that recognizing the dilutive effects only upon exercise is not helpful if the goal is to recognize the full cost of the grant at the time the grant occurs. Rather, such delayed recognition highlights a significant omission. Specifically, for any option grant which we expect will be exercised (which I submit is true of most options at the time they are granted whether they are in-the-money or not), we know that we have granted a contract with value in and of itself and have also incurred the dilution that necessarily follows exercise. It therefore seems quite irresponsible to document only the value of the contract itself at the grant date and recognize the dilution cost only after it “surprises” us when the option is exercised.

Furthermore, since the failure to capture this dilution cost seems to be one of the principal drivers behind the push for expensing, and since neither the current nor proposed accounting treatments will capture this value (because the models are designed to value only the option contract itself), I strongly recommend that the issuance of a share of stock be recognized immediately upon the grant of a company-issued option regardless of the expensing approach ultimately used. Only by recognizing the share dilution immediately can the dilution costs ever be captured accurately at the time the option is granted.

## 2. Accuracy and the need for assumptions

The accounting treatment proposed above is extremely straightforward and also eliminates the need for assumptions, in stark contrast to labyrinthine lattice models and the Black-Scholes reliance on the often-criticized volatility assumption. This achievement is accomplished by identifying and valuing the components of the expense rather than the expense itself. And regardless of which application – “intrinsic value” or “expensing” – is chosen, this accounting treatment will still be more accurate than the intrinsic value or expensing approaches currently in use, because it captures the post-exercise dilution cost, as discussed above, and does so in a way that does not require estimation of a dollar value of dilution.

## Regarding Timing of Recognition of Stock Issuance

The proposal described above recommends full recognition of the share issuance and receivable at the grant date. Though some may argue otherwise, I believe that immediate recognition of the share issuance at the grant date is most appropriate since that is the moment at which the control over the underlying share of stock materially passes from the company to the employee.

For instance, if a company issues an at-the-money option with a 10-year contract life and a 3-year vesting period, and the company typically experiences a 20% forfeiture rate due to employee turnover, some might argue that the cost of the option, including the share issuance, should not be recognized until it has vested, and should be valued at 80% to reflect the historical probability of forfeiture. Furthermore, if the company expects options to be exercised within 5 years of the grant date, some might argue that the option should be valued on a 5-year expected life rather than the 10-year contractual life. I submit that such adjustments are inappropriate, as the company has negligible influence

over whether the grant vests, whether the employee stays with the company, or when the employee will choose to exercise.

Once a company has granted the options, control over the exercise lies materially with the employee. Unless the employee elects to leave the company or performs so badly as to be terminated, the options will vest and be exercisable. Therefore, company-issued options are granted with full knowledge that the grant represents the commitment of newly issued shares of stock to the employee. Any accounting treatment should therefore also recognize the commitment of the shares and the associated dilution at the grant date by recording the issuance, and any forfeiture of the grant (and reversal of the original accounting entries) should only be recognized when such forfeiture becomes a certainty.

Similarly, if the receivable is being discounted to present value for expensing purposes, then the principle of accounting conservatism suggests it is inappropriate to discount the exercise price over the shorter “expected life” rather than the stated contract life, as the company cannot force exercise before maturity. If the company believes the option is likely to be exercised early, then a footnote disclosure – or at most a valuation allowance – would be the appropriate forum for addressing that expectation. Such footnote disclosures or valuation allowances would also be the appropriate means of incorporating specific forfeitures that are expected but have not yet occurred.

Finally, a separate and simple argument is that since options, like any incentive compensation, are typically awarded based on performance in past or current periods, the matching principle suggests it is inappropriate to defer recognition to some later date(s).

Thus, I submit that option grants should be valued in full at the grant date, and that the values of outstanding options should be adjusted with valuation allowances on a grant-by-grant basis, and only if the company has reason to believe that a particular grant is likely to be forfeit for a specific reason (which the company should also disclose). Any other expectations the company has regarding the option plan would be appropriate to disclose through footnotes and valuation allowances, but not by altering the gross values reported in the financials. Despite my preferences, however, the general accounting treatment I have proposed has significant flexibility and could easily be applied to such alternative applications and recognition schedules.

### **Suggested Disclosures**

If this new approach to accounting for options-based compensation were adopted, I suggest the following disclosures (in addition to disclosing the numbers and terms of the options granted):

1. Disclose the period-by-period composition of the undiscounted option receivables account in a manner similar to the “1<sup>st</sup> year, 2<sup>nd</sup> year, ... 5<sup>th</sup> year, thereafter” presentation used for debt and operating leases.
2. If the “intrinsic value” application is used, the disclosures should include the expense that would have been reported had the “expensing” application been used.
3. If the “expensing” application is used, the disclosures should include the aggregate, undiscounted value of the option receivables account that would have been reported had the “intrinsic value” application been used.

4. Any adjustments to the gross account balances should be made through valuation allowance accounts, and the rationale for any adjustment should be disclosed. Such disclosures should describe why the options in question are unlikely to EVER be exercised. Just being currently out-of-the-money is not such a reason.

5. Option-related accounts should be reported separately from other accounts and not aggregated or netted against other accounts. For example, the option receivables account should be reported separately from other receivables accounts, and cash spent on share repurchases should not be netted against proceeds from option exercise.

### **Summary**

Just as a restricted stock grant involves some uncertainty pertaining to vesting, forfeiture and so on, but can yet be valued and accounted for at the grant date without resorting to valuation models, so too can an option if we recognize that an option is essentially just a stock grant plus a recovery from the employee. Since a company-issued option contract specifies an exchange of items whose values are known at the grant date – namely a share of stock and a specific future cash payment – with an overlying probability that the exchange will actually occur, the contract can be easily captured in financial statements by accounting for the individual components separately and then using valuation allowances to adjust for any probabilistic elements. Such an approach offers accuracy, comparability, transparency, interpretability and ease of implementation that is superior both to existing methods and the proposed model-based methods.

Sincerely,

/s/ Y. Dogan Sahin

Y. Dogan Sahin