

## Accounting for Option Exchanges

We continue to get calls every day from clients considering exchanges and the alternatives to exchanges. As we work with these clients and explore their needs, we are finding that some misunderstand the accounting ramifications of exchanges and even more are unaware of the tax accounting and EPS impacts. Many assume that their software or provider will automatically compute the results of the modification correctly from accrual to tax accounting to diluted EPS. Unfortunately, often that's not the case. What follows is a quick, English-language description of the accounting, tax accounting, and EPS impact of exchanges to help you understand this side of the story.

### Modification Accounting & Incremental Expense

Exchanges require modification accounting under FAS 123(R), but can be structured to minimize (or even eliminate) the "incremental expense" that may result from the modification. You compute the current fair value of the exchanged (the "old") option and the value of the new grant, and the excess of the new grant over the exchanged grant is the incremental expense that will be recognized in addition to the original fair value. For computing incremental expense, the original grant-date fair value of the original grant is not considered. You compute the fair value today as of the modification date, generally using a Black-Scholes option-pricing model and working up all the same inputs (exercise price, market value, volatility, interest rate, dividend rate, expected term) for your underwater options.

Let's consider an example of an option-for-option exchange: the original option for 1,000 shares was granted in 2007 when the market value of the stock was \$10. The exercise price is also \$10. The expected term was 5.5 years, the risk-free interest rate was 3.6%, and the company's volatility was 22%. (Dividends were not paid.) Plugging those values into a Black-Scholes model, at the time of grant, resulted in a fair value on grant date of \$2.87 or a total fair value of \$2,870 (1,000 options \* \$2.87 fair value per share).

Now in 2009, the current market value is \$3; however, the exercise price remains \$10. To arrive at the current fair value of this option, we need to revalue the original option with new assumptions. The expected term is recalculated at 6.5 years (the option is deeply underwater so the expected term was derived using a Monte Carlo simulation or binomial model and is now longer than the original expected term), the interest rate is 1.8%, and the volatility has increased to 34%. The current fair value of the original option is now \$.21 a share, for a total fair value of \$210.

Next we compute a fair value for the new option (the "regrant"): market value is \$3, and exercise price is \$3. Expected term is 5.5 years (shorter, since the much lower exercise price makes the option more likely to be in-the-money, and therefore exercised, sooner). Interest rate and volatility are also lower than the revalued 2007 grant, because of the shorter expected term, at 1.7% and 32% respectively. The option fair value is calculated to be \$.98 a share.

If our company had decided to do an exchange with a 2-for-1 exchange ratio, the value of the new grant would be \$490 (500 options \* \$.98 fair value). Since the current fair value of the old grant is \$210, the incremental expense of the new grant (new grant fair value less “revalue” of 2007 grant) would be \$280. Remember that the original grant date fair value of \$2,870 is not a part of the calculation of incremental expense.

But let’s say that our company has instead decided to do a value-for-value exchange. To compute the exchange ratio (the number of shares a participant would have to give up under their revalued 2007 option to receive a regrant) for a value-for-value exchange, we simply divide the current fair value of the old grant, \$210, by the fair value of a share of the new grant (\$.98) to determine how many new shares are “equal” to the fair value of the old grant (214.29 shares). For this value-for-value exchange the participant will have to “tender” back to the company approximately five shares for every one share she’ll receive in return.

Since each set of options with the same attributes will have a different fair value (because of different prices, expected terms, etc.) to do a true value-for-value exchange, the result is many different exchange ratios. If your company only grants options once a year, this may be manageable, but since many companies grant throughout the year, this could mean hundreds of different exchange ratios for one company. Therefore most companies choose to “band together” sets of options with similar fair values (and therefore similar ratios) and may say, for example, that options granted in 2007 have a 5-to-1 ratio while those in granted in 2006 have a 4-to-1 ratio.

Even if you do structure your exchange program as a “value-for-value” exchange, in many cases you will end up with some incremental expense, either because of the “banding” technique described above, or because different methodologies were used to compute the exchange ratio and the accounting expense. In some cases this incremental expense is due to stock price movement during the tender offer period. So, in any case, understanding and computing incremental expense is something to consider for all exchange programs.

In our example, let’s assume the exchange ratio selected was 5-to-1, so the participant received 200 options. However, during the 20 days of the tender offer, the market value declined from \$3.00 to \$2.50. So now on the date the exchange is finally implemented, the current fair value of the original grant (the revalued 2007 grant) is \$.12 per share for a total value of \$120 and the fair value of the regrant has changed to \$.82 a share, for a total value of \$164. The value of the new option exceeds the current value of the revalued 2007 option resulting in incremental expense of \$44. (This may not seem like a significant dollar amount, but with larger dollar and share amounts, multiplied by all the grants being exchanged, the expense can really add up, sometimes into the millions.)

## **Accrual of Expense & True Up for Forfeitures**

### **Exchanges with Incremental Expense**

Now that you have this incremental expense, how do you accrue it? That actually depends on whether or not you “reset” or extend your vesting as part of the exchange. Many companies add on at least a

little vesting to the new grant rather than keeping the original vesting schedule intact, to put some ‘teeth’ back in the retention tool we call options (especially for grants or tranches that are already vested).

If you do not choose to change the vest schedule, but instead continue the original vest schedule, the accrual of any incremental expense is simply added to the original fair value and accrued over the remaining service period, along with any of the original expense yet to be accrued.

If you do choose to modify the vest schedule, FAS 123(R) prescribes that the original fair value should continue to be accrued over the original vest schedule and any incremental expense should be accrued over the new vest schedule. (An easy way to remember this is “old expense, old vest schedule; new expense, new vest schedule”.)

However, a little-known conclusion of the FAS 123(R) Resource Group made on May 26th, 2005 ([link to FEI notes from the meeting](#)) provides another choice for the accrual of any unamortized expense from the original grant. The alternate method allows the remaining expense to be carried forward and accrued over the service period of the new grant. Your company can choose which method it prefers to use.

But, regardless of which expense accrual method is used, if the grant is forfeited between the original vest date and the new vest date, only the incremental expense is reversed, not the original expense. (The logic here is that since the original goal of the grant was met – staying employed until the original vest date – then the original expense is “locked in” just as it would be if the grant were never modified. Your company shouldn’t ever recognize less expense due to a modification. There are exceptions to this rule, but only for Type III modifications, which are not generally applicable to grants with solely time-based vesting and are beyond the scope of this article.)

### **Accrual for Cash Exchanges**

Many companies are looking for a way, any way, to eliminate or at least reduce the expense for the original grants, which are likely to expire underwater. Unfortunately, there is no way to avoid this expense unless the employee terminates prior to the vesting date of the grant. And, though some companies have said that a cash offer “reduces future expense” that is somewhat misleading. Yes, it reduces *future* expense by accelerating all the remaining, unamortized expense into the *current* period. So though it reduces future expense, it *increases current* expense. (Though, it is possible that for some companies this is a benefit rather than a detriment.)

### **Tendering Shares for No Consideration**

And, believe it or not, the same is true for turning your options in without any consideration. Some companies, because of dwindling share reserves or high overhang have asked executives to turn in underwater shares and receive nothing in return. And yes, some executives have done so. But again, this accelerates the original expense into the current period, possibly increasing expense since even if the employee later terminates prior to vesting, the expense will be retained rather than reversed, as would have been the case.

## Tax Accounting for Modifications

Now on to everybody's favorite topic: tax accounting... Unlike the accrual of expense in connection with an option exchange program, where the old expense remains with the old grant and the new (incremental) expense is tied to the new grant, for tax accounting generally both the old (original) and the new (incremental) expense are tied to the new grant. Both are therefore used when determining whether a transaction (exercise, expiration, etc.) has created an excess or deficiency for tax accounting purposes and the associated deferred tax assets (DTA) from both the old and the new grant are reversed at the time of exercise, expiration, etc.

Let's look at our example from above as it relates to tax accounting: the original 2007 grant with a fair value of \$2,870 results in a DTA of \$1,148 (assuming a 40% corporate tax rate - \$2870 fair value \* 40% corporate tax rate) which is being booked over the vesting period. The new grant of 200 shares, with a 5-to-1 exchange ratio, resulted in an incremental expense of \$44, which resulted in an additional DTA of approximately \$18. Assume that the option (price of \$2.50) is exercised in 2015 when the stock price is \$5.50 per share, resulting in a tax benefit of \$240 (gain of \$600 multiplied by the 40% tax rate). To calculate whether or not the exercise results in an excess or deficiency you compare the total DTA booked (original fair value of 2007 grant plus the incremental fair value of the regrant multiplied by the corporate tax rate) to the actual tax benefit. If the DTA exceeds the tax benefit, as in this case, the result is a deficiency of \$926 (\$1,166 DTA less \$240 actual tax benefit) which either reduces your additional paid-in capital (APIC) pool or, if sufficient APIC pool does not exist, increases your tax expense. The entire DTA is also reversed at the time of the exercise. If only the DTA from the regrant is considered at the time of exercise (as is the case in many systems), the DTA from the original 2007 grant is "orphaned" and is never reversed.

Now, to our knowledge, there is no published guidance on this treatment either from the FASB or from any major accounting firm. However, having worked through this issue with several clients and their advisors, we do believe it to be the prevailing practice.

We recently encountered a compensation practitioner that was so surprised by this treatment that he referred to it as "voodoo accounting" and sought confirmation from another professional within his firm. His (in our opinion, justifiable) concern was that the tax deduction from the new, often much smaller, grant in many cases will never result in an excess tax deduction so any excessive DTA that has been or will be accrued should be reversed at the time of the exchange. In our example above, the option would have to be exercised while the stock price is at or above \$17.07 to "break even" in terms of the total DTA that has been or will be booked. That's a stock price increase of nearly 700%!

While this argument certainly does have merit, we haven't yet seen practitioners implementing it. If you have seen diversity in practice, please drop us a line, we'd love to discuss it further.

## Modification Accounting & Diluted EPS

No discussion on accounting could be complete without a mention of diluted earnings per share (EPS), but don't worry, we'll keep it brief. Since there are three sources for "assumed" proceeds for your weighted options outstanding calculations under FAS 128, and since two of these are impacted by

modification accounting, the EPS numbers will also be impacted. (Assumed proceeds are calculated as part of the Treasury Stock Method prescribed by FAS 128, wherein all outstanding options are first assumed to be exercised and dilutive, and then this impact is mitigated by assuming that all “proceeds” from the exercise are used to buy back shares from the open market, tempering somewhat the dilutive effect. The three sources of proceeds are exercise price, average unamortized expense, and tax benefit.) First, the changes to expense accrual, as discussed above, will impact the “average unamortized expense” portion of your assumed proceeds calculation. Second, the tax benefit calculations for diluted EPS will also be impacted: both the fair value from the original grant and the incremental fair value from the regrant (if any) should be considered when computing assumed proceeds for tax benefit (or deficiency).

## **Conclusion**

Though accounting for modifications is a dense topic, if you break it down to its more basic elements, it is understandable, even by those of us that typically shy away from accounting topics. However, please do not assume that just because your software or system allows you to enter the modification that it can perform the appropriate accounting calculations without at least a little manual intervention. If you are considering or have implemented an exchange, please talk to your provider about what the system can and cannot support and loop your accounting team in early to begin testing the results produced by your system.

If you have questions on any portion of this article, please e-mail us at: [xtra@sos-team.com](mailto:xtra@sos-team.com).<sup>i</sup>

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For more information about our products or services, please contact us at:

[sales@sos-team.com](mailto:sales@sos-team.com)

888 SOS-0199 (888 767-0199)

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