

## Stock Options: Corporate Lottery Ticket – or Not?

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Employers use call options as a form of compensation in lieu of higher salaries and to align employees' interests with the firm. Call options can be quite valuable or they can expire worthless – just like a lottery ticket. However at least with options, the owner has some input over how valuable the options might become.

If your clients own options, have you thought about what they really own? Economically, they own a right to purchase their employer's stock by a certain date for a certain price. Sounds pretty good – they know the price they will pay in the future and the deadline to pay that price. However, other parameters are not so concrete. Today, one does not know if they will win the proverbial lottery at one extreme, or if their options will expire worthless at the other extreme.

The value of any option is dependent upon six factors:

1) The current stock price – if one works for a public company this is easy enough to determine. If an individual works for a private company, the value of their stock will be set by management or determined by business appraisers. The higher the company stock price, the greater the value of their call option, all else being equal.

2) The strike price, or exercise price, is the price one will pay for the stock in the future should they choose to do so. Notice we said choose. An option is just that – a right and not an obligation. The strike price is generally set at the then-current stock price. The lower the strike price, the greater the value of the call option.

As the company's stock price increases, the value of the option becomes greater. For example, if the exercise price of the option is \$10 and the stock is trading at \$15, then the intrinsic value of the option is \$5. You are, as the song says, "In-the-Money" by \$5. Conversely, if one can buy the stock using the option for \$10 and it is trading for \$5, you are "Out-of-the-Money". "Out-of-the-Money" is not a good place to be. Why would you ever pay \$10 using your option when you can directly buy the stock for \$5? Keep in mind, an option might be deep "Out-of-the-Money" today and still have a significant time value depending on other characteristics mentioned below and the probability that the stock will increase in value in the future.

3) The time to expiration - the longer the term to expiration, the greater the value of the option. Simply stated, the longer you are able to hold the option, the greater your chance of

it becoming “In-the-Money”. Thus, an option is a “wasting asset”, meaning that options lose some value, all else being equal, as the clock ticks down to expiration.

These first three inputs are known at the outset of an option grant. The next three inputs are not fully knowable at the outset, or are subject to change throughout the life of the option.

4) The volatility of the company’s stock price – simply defined as the frequency and magnitude of stock price movements. Historically speaking, high technology stock prices have been much more volatile than Exxon Mobil’s stock price, for example. The greater the volatility of a stock, the greater the probability that the option will eventually be “In-the-Money” and the greater the value of the option. Volatility can only be estimated. It is a future-looking concept. For public companies, proxies for volatility might be the historical volatility of a company’s stock price or the implied volatility resulting from publicly-traded stock options in the company’s stock. For private companies, business appraisers use appropriate publicly-traded stock benchmarks as proxies.

5) Risk-free interest rate – this rate will fluctuate due to market conditions and will vary over the life of the option. The higher the risk-free rate, the greater the value of the option since one can invest money now at higher interest rates to eventually pay the option’s strike price.

6) Dividends – dividends detract from a call option’s value since the option holder does not receive any dividends and the company pays dividends from retained earnings that otherwise might be used for reinvestment. Reinvestment in the company theoretically increases the value of the company’s stock price and, therefore, the value of the option.

Options have been in the news a lot recently. As you are aware, public companies now have to expense stock options (FASB 123R). Recent evidence indicates that public companies will not be so generous with stock option grants, much to the dissatisfaction of high technology companies. Some public companies have come under intense scrutiny recently due to back-dating of exercise prices. These companies have selected the most opportune time to “select” management’s exercise prices. For example if in the last year a stock has traded between \$15 and \$35, by either just pure luck or an artificial hand, management set the exercise price at \$15. Rest assured; greed is alive and well.

Finally, regulation 409A requires valuation of private companies to support the exercise price of stock option grants. If an employee receives an “In-the-Money” option at the date of grant, this award is now considered deferred compensation. Thus, options whether exercised or not, may affect both your clients’ business and individual tax returns. If your client is “lucky”, he or she just might have to win the lottery to pay his or her taxes.

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