

# **FOXBORO CONSULTING GROUP, INC.**

## **Stock Valuation and Stock Option Pricing Alternatives**

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Publicly traded companies, venture capital firms, and private equity firms are now dealing with the same set of financial accounting & reporting, tax reporting and disclosure requirements related to their stock options. These requirements include ASC 718 (formerly SFAS 123R) - Accounting for Stock based Compensation, Securities and Exchange Commission (SEC) Staff Accounting Bulletin (SAB) No. 107, and Internal Revenue Code (IRC) Section 409A regulations, which all provide guidance on valuation for purposes of valuing stock options and setting the stock option exercise price.

ASC 718 deals with the voluntary expensing of the cost of employee stock options (ESOs), and ASC 718 requires a public entity to measure and recognize the cost of the employee stock option based on the options grant-date fair value, where the grant date fair value will be estimated using option-pricing models adjusted for the unique characteristics and features of those financial instruments. ASC 718 also contains related guidance on certain tax issues associated with ESOs and disclosures that must be provided in the notes to the financial statements. SEC-SAB No. 107 contains implementation guidance emphasizing that the "grant date fair value" should be the equivalent of an exchange price for ESOs. All of these regulations have three main parts: 1) the fair value measurement of the financial instrument, 2) recognition on the balance sheet and 3) recognition of the compensation cost of ESOs in the income statement.

### **Major Risk Areas**

The 2004 passage of the American Jobs Creation Act brought with it the addition of IRC Section 409A. Section 409A carries potentially burdensome tax implications for the company and key executives or other individuals compensated under non-qualified deferred compensation plans.

Board of director compensation committees must now exert due diligence and extreme care to structure company plans in such a way as to comply with the requirements of IRC Section 409A. The major areas for risk and uncertainty reside in following stock option valuation areas:

- a) The way stock options are valued, the methods used and the reasonability of the methods
- b) Whether or not the valuation methods utilize established economic and financial theories used in the valuation field
- c) The option strike price as compared to the fair market value of the underlying common stock at the grant date,
- d) The likelihood of forfeiture of those stock options before the vesting period.

Boards of directors and their related compensation committees are concerned about potential liability for the company, tax implications for key employees and the adverse consequences resulting from:

- a) Unpaid withholding taxes due upon option vesting,
- b) Employees incurring ordinary income tax, 20% additional tax penalties, and interest charges under Section 409A if discounted options are granted inadvertently,
- c) Any potential litigation that may result from the above mentioned circumstances.

Many boards may wish to rely on outside experts for their valuations to minimize such exposure thereby strengthening their position with the IRS in the event of an audit. Foxboro Consulting Group, Inc. has outlined its valuation approach and solution below in order to assist your company to mitigate the risks outline above.

Other companies may respond to IRC Section 409A regulations in any of the following three ways:

**1) Status Quo** - A company may choose to retain its existing option pricing practice. If the company's option exercise prices equal or exceed the fair market value of the underlying stock, Section 409A generally will not apply to such options (see the flow chart detailed below). This is true whether or not the company applies any of the rules or factors set forth in the proposed regulations. If the company's option exercise prices are later found to be below fair market value upon audit by the IRS, then the burden will be on the company to prove that its stock valuation method was reasonable by referencing the standards and rules found in the tax code regulations. If the company's current valuation method doesn't consider or reference the factors and methods outlined in the tax regulations, or if it uses no valuation method at all, the company will fail to satisfy this burden, and the adverse consequences of Section 409A will apply.

**2) Informal Valuations Using Specified Factors** - A company may choose to perform its own internal stock valuation based on specified factors set forth in the regulations, which are called "general valuation factors." If the company's option exercise prices are later found to be below fair market value, then the burden will be on the company to prove that its stock valuation method was reasonable. The company will improve its chances of satisfying this burden if it employs the factors specified in the regulations.

**3) Adopt One of the New "Presumptive" Methods** - A company may choose to adopt one of the "presumptive" stock valuation methods set forth in the regulations, thereby putting the burden on the IRS to prove that both the company's stock option prices are below fair market value and the company's application of the presumptive method was "grossly unreasonable."

These presumptive methods are described below. They involve either a written valuation by an appraiser or other person with knowledge and experience in stock valuation, or a binding formula.

### **Presumptive Valuation Methods**

The regulations specify three methods that will be presumed reasonable if consistently used for all of an employer's equity-based compensation arrangements. The valuation resulting from any of these presumptive methods will be considered to be fair market value and may only be rebutted by the Internal Revenue Service if the company's application of the method is found to be "grossly unreasonable." The three presumptive methods are as follows:

**1) Independent Appraisal Presumption.** A valuation performed by a qualified independent appraiser using traditional appraisal methodologies (as would be applicable to an appraisal of common stock for estate tax planning or an employee stock ownership plan ESOP) will be presumed reasonable if it values the stock as of a date that is no more than twelve months before the applicable stock option grant date. However, this presumption would not apply if events subsequent to the appraisal date have a material effect on the company's stock value.

**2) Illiquid Start-Up Presumption.** A special presumption is provided for "illiquid stock of a start-up corporation." A start-up corporation is defined as a corporation with no publicly traded stock that has conducted business for less than 10 years. A valuation of illiquid start-up stock will be considered reasonable if five requirements are satisfied:

- 1) The valuation is evidenced by a written report;
- 2) The valuation takes into account the General Valuation Factors described below. As indicated below, events subsequent to the valuation must be taken into account and may render an earlier valuation inapplicable;
- 3) The valuation is performed by a person with significant knowledge and experience or training in performing similar valuations;

- 4) The stock being valued is not subject to any put or call right, other than the company's right of first refusal or right to repurchase stock of an employee (or other service provider) upon termination of service;
- 5) The company does not reasonably anticipate an IPO, sale or change in control of the company within twelve months following the equity grant to which the valuation applies.

The valuation factors specified in the regulations incorporate the following:

- The tangible and intangible assets of the company
- The present value of future cash flows
- The public trading price or private sale price of comparable companies
- Control premiums and discounts for lack of marketability
- Whether the method is used for other purposes
- Whether all available information is taken into account in determining value.

Even if a valuation applies these factors, it will not be considered reasonable if it is more than twelve months old. In addition, significant events occurring even before the twelve month anniversary will require the valuation to be updated. Such events would include:

- The possibility of/or plans for a future investment in the company by an outside investor,
- An initial public offering or sale of the company,
- Resolution of material litigation
- The issuance of a patent.

**3) Binding Formula Presumption.** A valuation based on a formula used in a shareholder buy-sell agreement or similar binding agreement will be presumed reasonable if the formula price is used for all non-compensatory purposes requiring the valuation of the company's stock, such as regulatory filings, loan covenants, and sales of stock to third parties. This method will not be available if the stock may be transferred other than through operation of the buy-sell or similar arrangement to which the formula price applies. Because of the restrictive conditions on use of this presumption, we do not expect it to be widely utilized by private technology and life sciences companies.

### **Foxboro Consulting Group, Inc. - Stock Option Valuation Solution**

Foxboro Consulting Group, Inc. will provide a valuation analysis and report that will stand up under rigorous IRS scrutiny. Our stock and stock option valuation analysis will consider all three basic approaches to value: income, market/sales comparison and cost.

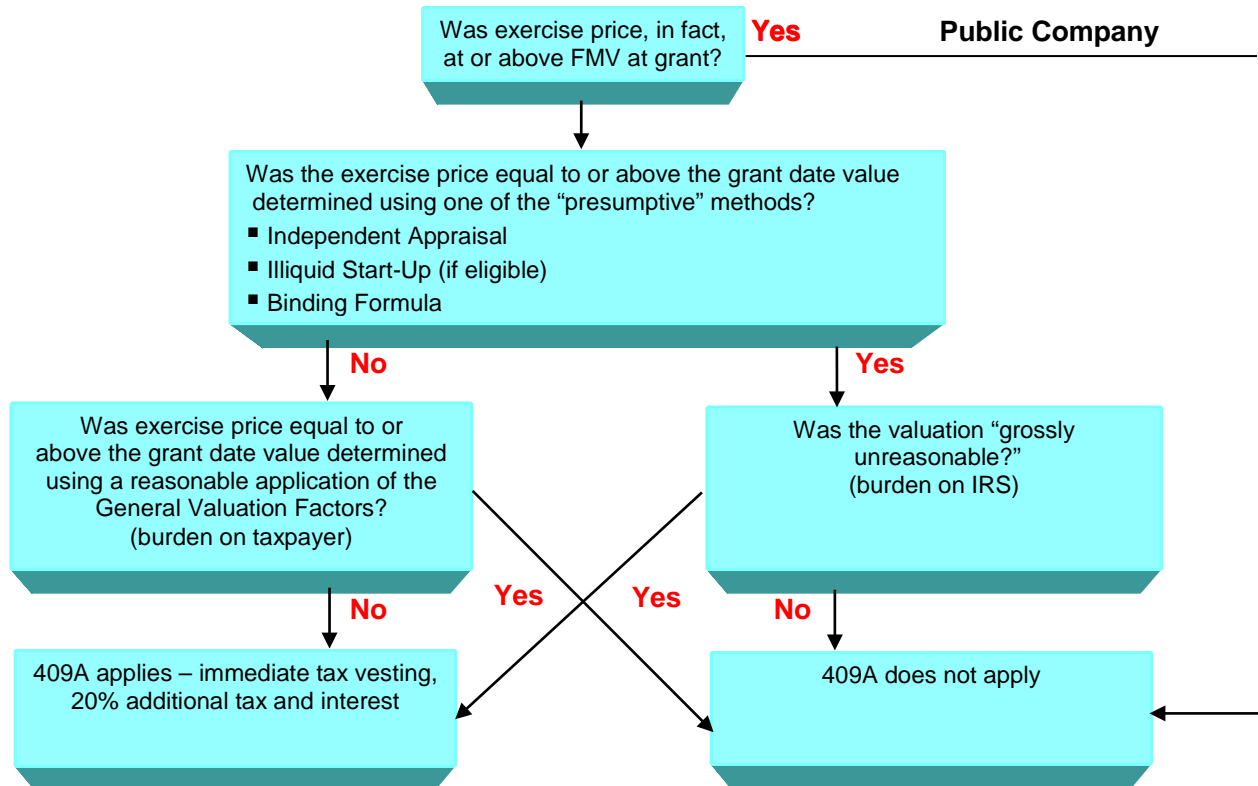
Where more than one approach is utilized to form an opinion of value, the results of each approach will be reconciled giving consideration to the type of asset, the applicability of the approach, and the nature and reliability of the data used. Our valuation will take into consideration many factors that influence the fair market value of closely held common stock and employee stock options including, but not limited to, the following:

- The nature and dynamics of the Company's business, including its lines of business, its competitiveness, its customer base and management strength;

- The economic and operating outlook of the Company business and its historical and prospective operating results;
- The book value of the stock and the financial condition of the Company as of the valuation date and its capability to finance and sustain future operations;
- Valuation of the Company's business by estimating the present value of its projected operating net cash flow, as well as analyzing the earning and dividend paying capacity;
- Analyzing the enterprises intangible assets and goodwill;
- Correlation of the public market price (and corresponding investor ratios) of common stocks of corporations engaged in lines of business similar to the Company that have their stocks traded in a free and open market, either on an exchange or over-the-counter;
- Examining the recent sale of stock and the size of the block of stock to be valued;
- The transfer features and characteristics of the common stock and employee stock options including their marketability and vesting restrictions.

Our valuation study will be executed in accordance with practices currently accepted and utilized by the financial and valuation communities and in conformity with the Uniform Standards of Professional Appraisal Practice (USPAP) promulgated by the Appraisal Standards Board of the Appraisal Foundation, as well as meet the requirements of IRS Revenue Ruling 59-60 of the Tax Code.

## STOCK OPTION PRICING FLOW CHART



### Practical Implications for Private Companies

The proposed regulations will affect private company valuation and option grant practices differently at three (3) different stages in the private company lifecycle.

**Founding Stage** - During the very early stage of a typical technology company, in particular from the time of founding to the time when the company begins to have assets (whether tangible or intangible) and operations and begins to make option grants to multiple employees, we generally do not expect to see formal appraisals or written stock valuations. Companies at this stage typically issue stock (rather than stock options) to their initial founding shareholders, and Section 409A generally does not apply to employee stock issuances. Thus, the concern noted above about issuing discounted stock options is often not present at this stage. It is still necessary to value the new company's stock to determine whether the company must report taxable income to the founders on their stock purchases (this would generally be the case if the amount paid by the founders for their stock is less than its fair market value). However, at this stage, performing a meaningful valuation using the General Valuation Factors is often impossible due to the company's lack of assets and financial history or projections.

**Post-Founding to Expectation of IPO or Sale** - Many private technology companies will now obtain periodic, independent appraisals of stock value for purposes of setting the exercise price on their stock options, once they have assets (whether tangible or intangible) and operations and begin to make option grants to multiple employees. There is no clear line demarcating when a company has entered this stage, and in some cases, the company's first venture capital or "angel" financing will mark the company's entry into this stage. This would be particularly true in cases where the first financing occurs soon after the founding. In other cases, the company will enter this stage long before its first financing, perhaps because the company develops assets and operations without financing and these assets and operations can be valued using the General Valuation Factors. The company's board of directors will need to rely on its judgment and consultations with counsel to determine when it makes sense to begin obtaining independent stock valuations.

As noted above, the proposed regulations do not REQUIRE that a company obtain a formal appraisal. Why, then, do we expect to see technology companies obtaining independent appraisals of their stock value for purposes of pricing stock options?

Here are some of the reasons:

- The Independent Appraisal Presumption is the clearest presumption available under the proposed regulations. Relying upon this presumption provides the best protection against the adverse consequences of Section 409A.
- Many boards of directors will be concerned about possible liability for both the company (unpaid withholding taxes due upon option vesting) and option holders (the 20% additional tax and interest charge) under Section 409A if discounted options are granted inadvertently. Thus, we expect many boards will wish to rely on outside experts for their valuations to minimize such exposure.
- For financial accounting purposes, auditors have long pressed private companies to be more rigorous about their stock valuations. This pressure from the auditors will increase as the new option expensing rules under FAS 123R go into effect for calendar years beginning after December 31, 2005. In addition, we have seen accounting firms refuse to accept new audit engagements with private companies unless the company agrees to obtain regular independent appraisals of its stock.

Most technology companies experience frequent value-changing events (such as financing transactions, development milestones, granting of patents, and customer wins). Accordingly, companies will choose to rely on independent appraisals and will choose to obtain annual appraisals with quarterly or semi-annual updates to their valuation—presumably from the same appraiser that performs the annual valuation — in order to ensure that they have a valuation that takes all available information into account when setting the exercise price for stock options granted during a given year. Grant dates for such companies likely will cluster around appraisal dates (or the dates of appraisal updates) to ensure that options are priced appropriately.

Of course, many companies at the post-founding/pre-expectation of IPO or sale stage may choose to rely instead on the Illiquid Start-Up Presumption, or simply may forego any of the presumptive methods. Although the proposed regulations are unclear on this point, it is possible that the Illiquid Start-Up Presumption may be satisfied by a written report produced by one of the company's internal financial personnel or a board member who has experience or training in stock valuation. This would obviously be less expensive and perhaps more timely than a formal outside appraisal. However, if more and more companies begin to rely on the Independent Appraisal Presumption, and if auditors continue to pressure companies to obtain outside valuations, we expect that fewer boards of directors will choose to rely on alternative methods. Appraisal firms, over time, will develop more cost-effective and timely appraisal procedures for private company stock to meet the demands triggered by these new regulatory pressures.

**After Expectation of IPO or Sale.** Once a company reasonably anticipates that it will undergo a change in control event or an IPO within the next 12 months, the company no longer may rely on the Illiquid Start-Up Presumption. We expect most companies at this stage (whether on track for an IPO or sale) effectively will be required to use the Independent Appraisal Presumption.

- For those companies planning an IPO, their auditors and SEC rules will likely require formal appraisals of their stock for financial accounting purposes.
- Most importantly, for those companies planning a sale, the buyer now will be concerned about the company's compliance with Section 409A and will want some assurances that the company has not granted discounted options. Complying with the Independent Appraisal Presumption will be the clearest way to provide such assurances.

#### What to Do About Previous Option Grants

Many private companies have outstanding options that either were granted intentionally with a discounted exercise price, or were priced without reference to the valuation factors and methodologies described in the proposed regulations. Some of these stock options are subject to Section 409A because they were granted or vested after certain “grandfather” dates (see the attached chart below for those dates).

What should companies do about such option grants?

The response may depend on factors such as:

- (i) the size of the prior grant;
- (ii) the extent to which—in the board's (or management's) judgment—the exercise price of the prior grant may be less than the grant date fair market value;
- (iii) which (if any) valuation method was used to price the prior option grants;
- (iv) the number of prior grants and option holders that may be affected; and
- (v) the potential tax exposure for the company and option holders if the options were determined to be under priced. If the option in question is an “incentive stock option” intended to qualify under Section 422 of the Internal Revenue Code (commonly referred to as an “ISO”), the board also may wish to discuss with legal counsel whether the option is protected against the application of Section 409A because the board's prior determination as to fair market value was made in good faith. The board may choose to obtain an after-the-fact valuation (whether formal or informal) to support the prior grant price or at least ascertain whether there is a discount on prior options.

#### Fix Prior Discounted Stock Options

If the board determines that action is needed to avoid the application of Section 409A to prior option grants, there are several available alternatives. The proposed regulations and IRS Notice 2005-1 allow companies **time to “fix” discounted stock options** and other deferred compensation arrangements that do not comply with Section 409A. The chart outlined below describes various option grant permutations, whether Section 409A is applicable, whether a correction is appropriate, and the applicable deadline.

For existing discounted stock options, one of the following correction methods may be used in order to avoid the adverse consequences of Section 409A:

- Before January 1, 2007, raise the strike price of the non-complying option to fair market value as of the option grant date. In addition, it is permissible for the company to pay the option holder a cash or stock bonus (which will be taxable) to compensate for any lost economic benefit. If the company “ties” the cash or stock bonus to the increase in the option price (i.e., as a means of obtaining option holder consent), the cash or stock bonus must be paid before January 1, 2006

(notwithstanding that the increase in the exercise price need not occur until January 1, 2007). Alternatively, the cash or stock bonus may be made subject to a vesting schedule and/or delivered in the future as part of a deferral arrangement. If the cash or stock is to be paid or delivered in the future, such arrangement would need to comply with the requirements of Section 409A, unless payment or delivery is made within a short period of time after vesting pursuant to the short-term deferral exception (2½ months after the taxable year of vesting).

- Exercise the option before January 1, 2006.
- Before January 1, 2006, exchange the discounted option for stock having a value equal to the difference between the fair market value and the exercise price (i.e., the “spread” on the option).
- Before January 1, 2006, exchange the discounted option for cash equal to the spread on the option. Alternatively, the cash may be made subject to a vesting schedule and paid at a future date; such an arrangement would need to comply with the requirements of Section 409A, unless payment is made within a short period of time after vesting pursuant to the short-term deferral exception.

Note that any corrective action, other than merely raising the exercise price of the option, may result in immediate or deferred application of income and employment taxes, but if properly structured would avoid the application of the additional taxes imposed by Section 409A. Corrective action usually will require board approval and option holder consent as well. In certain cases, corrective action may have financial accounting consequences.



## Decision Matrix for Previously-Granted Discounted Options

Description of Option	Status under 409A	Action Corrective Needed?
At-the-money (non-discounted) stock option granted at any time	Exempt from 409A by virtue of the general rule exempting at-the-money option grants	None needed — make sure no material modifications are made that will result in loss of exemption
Discounted stock option granted prior to 10/4/04 and earned and vested by 12/31/04	Exempt from 409A by virtue of the grandfather provisions.	None needed — make sure no material modifications are made that will result in loss of grandfather status
Discounted stock option granted after 10/3/04 and before 12/31/04 and earned and vested by 12/31/04. (Option not yet exercised.)	Potentially subject to 409A unless it can be shown to be part of a pattern and practice	Determine if a pattern and practice of granting discounted options in the relevant time period can be established. If yes, see above. If no, see below.
Discounted stock option granted prior to 12/31/04 but not earned and vested by 12/31/04. (Option not yet exercised.)	Subject to 409A since it qualifies for neither the general exemption nor the grandfather exemption, but eligible for transition relief	See list of correction alternatives in text of Alert and discuss with counsel.
Discounted stock option granted after 12/31/04 and prior to 12/31/05	Subject to 409A, but eligible for transition relief	See list of correction alternatives in text of Alert and discuss with counsel.
Option (whether or not discounted) that is with respect to stock other than common stock and was not earned and vested on 12/31/04. An option of this type may be part of a “carve out plan” for a privately held company.	Does not qualify for the at-the-money exemption, but arguably can rely on Notice 2005-1 until 1/1/07. Can still qualify for the ISO exclusion.	Corrective action may be required. Discuss with counsel.
Option having a “feature for the deferral of compensation” (other than vesting)	Apparently subject to 409A	Corrective action required. Discuss with counsel.

### Notes

1 Although the proposed regulations are not yet technically effective, IRS Notice 2005-1 (guidance under Section 409A that is currently effective) requires taxpayers to comply with Section 409A in “good faith” during this transition period. Compliance with the proposed regulations will be considered good faith for this purpose. Because the proposed regulations contain the only rules on numerous issues under Section 409A, the IRS is likely to apply the principles described in the proposed regulations even before they become effective, and many companies likely will wish to utilize those principles to ensure good faith compliance during this transition period.

2 Although the IRS has informally indicated that the 20% additional tax is not a withholding tax, no formal guidance to this effect has been issued.

3 In some cases, newly founded companies obtain venture capital or “angel” financing simultaneously with (or soon after) the founders’ stock issuances. In such cases, it has been and will continue to be necessary to take into account the effect of the financing on the company’s prospects and assets for purposes of determining the tax implications of the founders’ stock issuances. It is, of course, also permissible to take into account differences in the stock purchased by the investors (typically preferred stock with liquidation preferences and special voting rights) and the stock issued to the founders (typically common stock).

## **Conclusion**

The Section 409A regulations, along with recent changes in the ASC 718, and SEC-SAB No. 107 financial accounting rules and practices will motivate the need for stock option pricing and compensatory stock valuation among venture capital firms, private equity and public companies. Boards of directors should be consulting with valuation specialists to determine how best to address these changes. You can contact us by calling Ronald J. Adams, CPA, CVA, ABV, CBA, CFF, FVS, CGMA, Managing Director – Valuations, at Foxboro Consulting Group, Inc. (774) 719-2236; for a free consultation. Mr. Adams is a Certified Valuation Analyst (CVA), he is Accredited in Business Valuation (ABV), he is a Certified Business Appraiser (CBA), he is Certified in Financial Forensics (CFF), he is a Business Certified Appraiser (BCA), he is Certified in Forensic & Valuation Services (FVS), he is a Chartered Global Management Accountant (CGMA), and he is a Certified Public Accountant (CPA).

## **Sources:**

Real Options Analysis – Tools and Techniques for Valuing Strategic Investments and Decisions – Wiley/Finance, 2006, Johnathan Mun, Ph.D.

Valuing Employee Stock Options - Wiley/Finance, 2004, Johnathan Mun, Ph.D.

IRS – Revenue Ruling 59-60

Financial Reporting Alerts – Employee Stock Option Accounting: FASB 123(R), SEC SAB No. 107 – AICPA – Louis P. LeGuyader, Ph.D., CPA

Financial Accounting Standards Board - Statement of Financial Accounting Standards No. 123 – Accounting for Stock-Based Compensation, October 1995

Cooley Godward, LLP – Article, October 19, 2005

Guidance Under Section 409A of the Internal Revenue Code – Notice 2005.1 – Stephen Tackney of the Office of Division Counsel/Associate Chief Counsel; Neil D. Shepherd of the Office of Division Counsel/Associate Chief Counsel.

Securities and Exchange Commission – 17 CFR Part 211 Staff Accounting Bulletin No. 107 – March 29, 2005.