NERA
Economic Consulting

At A Glance

Valuing Equity Compensation for Private Companies

Overview

Privately-held companies that reach later stages of development often contemplate exit strategies for their initial investors. Many such exit strategies require financial statements that conform to United States Generally Accepted Accounting Principles (GAAP). This requires proper recognition of compensation expenses. If the company paid any past compensation in the form of securities, including options, warrants, and other derivatives, a retrospective valuation of these securities will be required.

The valuation of privately-held company equity securities for the purposes of recognizing compensation expenses under GAAP can present unique challenges to the valuation analyst. These assignments often involve companies that expect to experience a liquidity event within a few years. Such companies:

- often have complex capital structures, including preferred or debt securities that may, among other characteristics, be convertible, have liquidation preferences, or have contingent claims;
- often have a range of possible future outcomes, including (but not limited to) going public, being acquired by or merging with another company, failing and dissolving, or continuing operations as a private company;
- may be at an early stage of development, involve proprietary and untested technologies, or depend on the success of a small number of specific contracts; and
- may operate in a new or undeveloped industry, or one without clear comparables. These characteristics can further complicate the already challenging task of valuing a privately-held enterprise. In 2004, the AICPA released a Practice Aid, aptly named "Valuation of Privately-Held-Company Equity Securities Issued as Compensation."[1]

Valuations performed in accordance with this Practice Aid may be more likely to meet the approval of a company's auditors. While all of the methodologies endorsed by the Practice Aid are recognized in the valuation community, the Practice Aid often expresses a preference for the use of one or more methods depending on company characteristics and/or the circumstances surrounding the valuation assignment.

NERA has previously worked with companies in valuation assignments that adhere to the guidelines within the Practice Aid for approval by the companies' auditors and for use in SEC filings. The following chart illustrates a set of questions that can be asked to determine the method or methods preferred according to the Practice Aid.

[1] The AICPA has also released a publication on general valuation standards for its members entitled "Statement on Standards for Valuation Services (SSVS) No. 1." These standards are effective forengagements accepted on or after 1 January 2008.

Guide to AICPA Practice Aid

Valuation of Privately-Held Company Equity Securities Issued as Compensation

Practice Aid Guidance

Was there a recent arm's-length issuance of securities?

Yes

Assuming the issuance represents fair market value for the class of securities issued, methodologies such as options-based analyses may be used to calculate an implied enterprise value as well as values for all other securities.

Paragraph 11 of the Practice Aid states: "Securities of privately held enterprises, by definition, are not traded in public markets and, therefore, quoted prices are not available. However, privately held enterprises may sometimes engage in arm's-length cash transactions with unrelated parties for issuances of their equity securities, and the cash exchanged in such a transaction is, under certain conditions, an observable price that serves the same purpose as a quoted market price."

No

Is the company still in its earlier stages, having not yet generated any significant intangibles or internal goodwill, and having not yet reached any significant milestones?

Yes

The asset approach is often employed to value the enterprise of such a company. The current-value method is then employed to allocate the value of the enterprise to the various securities.

Paragraph 109 of the Practice Aid states: "The use of the asset-based approach is generally less appropriate once an enterprise has generated significant intangibles and internal goodwill."

Paragraph 154 of the Practice Aid states: "[The current-value method may be appropriate] when an enterprise is at such an early stage of development that (a) no material progress has been made on the enterprise's business plan, (b) no significant common equity value has been created in the business above the liquidation preference on the preferred shares, and (c) there is no reasonable basis for estimating the amount and timing of any such common equity value above the liquidation preference that might be created in the future."

No

Are there comparable transactions or publicly traded companies, and has the company progressed to the point where it is generating material earnings and/or revenues?

Yes

With the availability of comparable transactions and/or companies, the market approach is often employed to value the enterprise of companies that have progressed beyond the initial stages of development.

Paragraph 53 of the Practice Aid States: "A significant limitation of the market approach is that 'true' comparables are unlikely to exist, particularly in valuing privately held enterprises. Another limitation arises if the enterprise being valued has no earnings or has immaterial revenue, as forecasts of financial statement amounts may then be highly speculative."

No

Has the company progressed to the point where there is a financial history on which to base a forecast of future results?

Yes

With an available forecast of future cash flows, the income approach may be employed to value the enterprise of companies that have progressed beyond the initial stages of development.

Paragraph 109 of the Practice Aid states: "The income approach typically is applied to later-stage enterprises … as opposed to early- stage enterprises because there is a greater likelihood at later stages of there being a financial history on which to base a forecast of future results."

No

Has the company progressed to the point where specific outcomes are expected and can be predicted, such as an IPO, merger, acquisition, trade sale, liquidation, etc.?

Yes

The probability weighted expected return method (PWERM) is often used in conjunction with the market and income approaches to determine likely scenarios for both the enterprise value and enterprise value allocation among various securities for companies that have expectations of specific liquidity events likely to occur in the near future.

Paragraph 142 of the Practice Aid states: "[The PWERM method] involves a forward-looking analysis of the possible future outcomes available to the enterprise, the estimation of ranges of future and present value under each outcome, and the application of a probability factor to each outcome as of the valuation date."

No

In the absence of likely specific liquidity events, the option-pricing method is often used in conjunction with the market and income approaches to determine the allocation of enterprise value among various securities. It is also sometimes used along with the PWERM method to provide an alternative set of results that ideally corroborate the PWERM.

Paragraph 149 of the Practice Aid states: "The option-pricing method, as applied under the Black-Scholes model, is appropriate to use when the range of possible future outcomes is so difficult to predict that forecasts would be highly speculative."

About NERA

NERA Economic Consulting (**www.nera.com**) is a global firm of experts dedicated to applying economic, finance, and quantitative principles to complex business and legal challenges. For half a century, NERA's economists have been creating strategies, studies, reports, expert testimony, and policy recommendations for government authorities and the world's leading law firms and corporations. We bring academic rigor, objectivity, and real world industry experience to bear on issues arising from competition, regulation, public policy, strategy, finance, and litigation.

NERA's clients value our ability to apply and communicate state-of-the-art approaches clearly and convincingly, our commitment to deliver unbiased findings, and our reputation for quality and independence. Our clients rely on the integrity and skills of our unparalleled team of economists and other experts backed by the resources and reliability of one of the world's largest economic consultancies. With its main office in New York City, NERA serves clients from more than 25 offices across North America, Europe, and Asia Pacific.

Contacts

Dr. David I. Tabak
Senior Vice President
+1 212 345 2176
david.tabak@nera.com

Raymund Wong, CPA, ABV, CFA
Senior Consultant
+1 212 345 9361
raymund.wong@nera.com