Valuation Methods

Nine Basic Valuation Methods

There are nine basic methods for valuing a business. Some methods are more appropriate for certain types of businesses than others. Often, the buyer and seller use different methods and only after lengthy negotiations do they arrive at a fair price. Which valuation method is most appropriate often depends upon your perspective.

For example, lenders and finance companies usually value a business at the amount its assets will bring in a liquidation auction. Venture capitalists typically use a discounted future cash flow methodology. Managers of public companies tend to favor an earnings multiple methodology and will examine the prevailing price/earnings ratios of similar businesses. It is also common to value a business by several methods and to use an average or weighted average of the results yielded by the various methods. An overview of nine commonly accepted valuation methods follows.

These methods include:

1. **Sales Multiple**: A multiple of annual sales is used to determine the value of the company.
2. **Price/Earnings Ratio** ("PE"): A ratio of the market value of a company to its earnings. The PE ratio is multiplied by the company's net earnings to determine its value.
3. **Free Cash Flow**: Free cash flow is the cash available to spend after operating expenses are paid. This is important when the buyer intends to finance the purchase using the revenue of the purchased company. A multiple of the free cash flow is used to determine its value.
4. **Book Value**: The value of a company's assets less its liabilities. The book value of the company may be used to determine its value, or more commonly, to provide a low end for the valuation range.
5. **Liquidation Value**: Values a company based upon what its individual assets would bring if it were liquidated today.
6. **Replacement Value**: The cost to replace the assets. In technology companies the cost to reproduce the product and the client/user base are typically more important than inventory or capital equipment.
7. **Comparable Transactions**: The selling prices of comparable companies are used to gauge what the business is worth. If the company is private, the comparables should also be private.
8. **Internal Transaction**: Frequently the bottom of the valuation range is determined by the last price paid for the company's stock, or the last price at which options were issued, multiplied by the number of shares outstanding.
9. **Internal Rate of Return**: The IRR is the company's projected profits over a period of time discounted back to their present value at some rate. The number of years used and the discount rate may vary greatly.

As previously mentioned, not all of these methods are appropriate, or can even be applied, to any given company. For example, if the company is a start-up with no revenue or earnings, the Sales Multiple and PE methods will be inapplicable. And a start-up might not have an established customer base or distribution network upon which to place value, but it may be able to leverage the replacement value of leading edge technology to increase its sales price. Conversely, an established company with revenue will probably have value in its established customer base and distribution network. The optimum valuation method depends not only upon the type of business being valued, but also upon whether you are the buyer or the seller. The seller will argue that certain valuation methods are the most appropriate for the company (i.e., those that result in the highest valuations), while the buyer will argue that other methods are more appropriate (i.e., those that result in the lowest valuations). In the end, the determination of value will depend upon the negotiating abilities of the buyer and seller, or their representatives.

The following is a more detailed discussion of each of these valuation methods.

<u>Sales Multiple</u>

Sales Multiple is a common valuation method, especially for technology companies. Typical sales multiples range anywhere from .5 to 5 times the company's sales, depending on a variety of factors. A higher multiple is appropriate if the company is growing its revenues or earnings rapidly. For example, sales multiples of 15 or more are not uncommon for certain Internet technology companies. Conversely, a lower multiple is appropriate if the company's sales are decreasing or its market is shrinking.

In applying the multiple, sales are sometimes adjusted to reflect net sales (i.e., gross sales less the cost of the goods sold and any one-time or non-recurring revenue items). The most frequently used base period is the last 12 months, but it is not uncommon to use the last recorded fiscal year, current fiscal year, projected twelve months or next fiscal year. If the company is growing rapidly, the seller will argue for current fiscal year, projected twelve months, or the next fiscal year. The buyer will likely object, arguing for the last twelve months, or even the prior year.

<u>Price/Earnings ("PE") Ratio</u>

Another popular valuation method is PE ratio. In order to use the PE method, the company should have a profitable operating history to provide a basis for applying the ratio. Also, the appropriate PE must be used. For example, a private information technology ("IT") services company should be compared to other private IT services companies, not to public companies. Public companies command higher PEs because they have better access to financing, typically have deeper management and generally are considered less risky than private companies.

The PE multiple is based upon the same figures as the Sales Multiple and presents the same issues with respect to which of the five base periods should be used. It is common to use the last twelve months as the base period, but if the company is growing rapidly, it is reasonable to use at least the current fiscal year earnings if not the next twelve months.

As previously mentioned, the books of many private companies do not reflect the true costs of the business. For example, earnings may be artificially low because the owners have been charging above-market rent on a facility they own, taking royalties out of the company, or paying themselves above-market salaries. If this is the case, recast the financial statements to reflect the true costs of the company before applying the PE multiple.

Free Cash Flow
This method of valuation is favored by financial buyers who plan to finance the acquisition with debt, committing as little of their own capital as possible and repaying the debt over some period using the free cash flow of the company. Under this method, the company's free cash flow is multiplied by some number, or multiple, which is usually between 3 and 8. The most common multiple is 4 or 5.

One issue that arises when employing the Free Cash Flow method is whether to use the free cash flow of the company in it's current form, or the free cash flow of the company after the acquisition. If there is synergy between the acquiring company and the target company, the target's free cash flow will improve after the acquisition, resulting in a higher valuation.

Book Value
Book Value is a valuation method based on a company's balance sheet. It ignores the company's earning power, focusing instead on the net worth of the company. The company's book value is determined by subtracting its liabilities from its assets. The assets as carried on the company's books probably do not reflect their fair market value. Consequently, the assets should be adjusted to their fair market value before book value is calculated.

The Book Value method may be appropriate for capital intensive businesses (e.g., manufacturing, construction), or businesses in shrinking markets, but it is inappropriate for technology and services companies whose book values will usually be very low.

Liquidation Value
Liquidation, breakup or salvage value is another valuation method based on a company's balance sheet. It ignores the company's earning power, or value as a going concern, and focuses on what the individual assets of the company would bring in a liquidation sale. This method, like the Book Value method, may be appropriate for capital intensive businesses, or businesses in shrinking markets, but it is inappropriate for most other types of businesses. Banks favor this valuation method when making business loans.

Replacement Value
Replacement Value is commonly used to determine a minimum value for a company. It is particularly appropriate where a young company lacks an operating history (and therefore cannot use the PE Ratio, Sales Multiple or Free Cash Flow methods), but nevertheless has invested a lot of time and proprietary capability into developing its product. In this instance, the Replacement Value method may result in the highest valuation for the company. Replacement Value may also be appropriate (and result in a higher valuation) for an established company that has recently experienced weakness in it sales, earnings, or cash flow.

Comparable Transactions

A common and rational way to value a company is to look at what others have been willing to pay for comparable companies. This is a very popular valuation method for public companies because the information is readily available from the public companies' filings with the Securities and Exchange Commission (the SEC database, known as EDGAR, can be searched online www.sec.gov). Unfortunately, using public companies as comparables for a private company may greatly overstate the value of the private company. Consequently, the seller of a private company must examine sales of similar private companies, which can prove to be a challenge because such statistics are not readily available. If a private company is acquired by a public company then the details of the transaction will be available in the public company's filing in EDGAR, but if both parties to the transaction are private, then public disclosure of the details of the transaction is not required. The best sources for information about private company transactions are experts in the industry such as business intermediaries, law firms, accounting firms and valuation firms.

Internal Transaction

The Internal Transaction method is based on the last price at which stock was sold to an investor. Although this may not truly be relevant to the actual value of the company, as a practical matter shareholders will resist selling the company for less. Consequently, if a company has investors, it will have to take this into consideration in determining its selling price. One solution is to structure the transaction so that shareholders recoup their investment, even if it comes over a long period of time through royalties, stock options, notes, etc.

Internal Rate of Return

Internal Rate of Return is a widely used valuation methodology that involves discounting projected profits back to the current period. The weakness in this method is that it requires that assumptions be made about future profits. It also leaves open for argument the appropriate discount rate to use and the appropriate time period over which future profits should be discounted. Discount rates typically range from 15% to 50% depending upon the company's stage of development and perceived risk. Time periods typically range from three years to five years. It is common to use 3 years, since the accuracy of projecting profits out five years is questionable.