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## VALUATION METHODS FOR DETERMINING PURCHASE PRICE UNDER BUY-SELL AGREEMENTS

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### 1. INTRODUCTION

This paper addresses the three types of valuation methods used to determine the purchase price under a buy-sell agreement. They are: (a) agreed value; (b) appraisal; and (c) valuation formula.<sup>1</sup>

#### A. AGREED VALUE

Under the agreed value method, the shareholders, in conjunction with the corporation's accountant, set a price per share when they enter into the buy-sell agreement. Thereafter, on a periodic basis, typically once per year, the shareholders agree on a new price per share, and attach a signed certificate of value to the buy-sell agreement. The rationale in using this method is that there is no one in a better position than the shareholders and the corporation's accountant to determine the value of the corporation and the price per share.

One drawback is that often, the shareholders do not update the certificate of value. Therefore, the agreement should include a mechanism to determine the value/purchase price of the shares when there is an event triggering the buy-sell obligation in the absence of a current certificate of value. Among other mechanisms, the

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<sup>1</sup> This paper uses a corporation and its shareholders for illustrative purposes. However, the comments also apply to other forms of business entities, such as limited liability companies and partnerships, and their owners. Also, although the term "buy-sell agreement" is used, a buy-sell obligation can be included in various documents, such as a stockholders agreement, an LLC operating agreement and a partnership agreement.

agreement can provide for (a) an adjustment of the price per share based upon an increase or decrease in the corporation's book value since the last certificate or (b) an appraisal.

## **B. APPRAISAL**

The second type of valuation method is an appraisal or valuation, typically by an independent certified public accountant with experience in business valuations. The buy-sell agreement may specify the person or entity to do the appraisal (such as the corporation's accountant) or provide a method for the selection of an appraiser. The buy-sell agreement can also specify the method of valuation and/or any adjustments to be made to earnings or assets (discussed below under valuation formulas).

With regard to the selection of an appraiser, the buy-sell agreement can provide that:

- i. The parties mutually agree on an appraiser
- ii. If they cannot agree, then each party selects an appraiser
- iii. If the two appraisals are within a certain value, such as 5%-10%, then the two appraisals are averaged
- iv. If the two appraisals are more than 5%-10% apart, then the two appraisers can select a third appraiser and
  - a. the third appraiser can select from the two existing appraisals, or
  - b. the three appraisals can be averaged, or
  - c. the middle appraisal can be the binding valuation, or
  - d. the third appraiser's appraisal can be binding

Some of the more common valuation methods used by appraisers to determine the value of a corporation are described below.

## **C. VALUATION FORMULA**

The third type of valuation method is the use of a formula specified in the buy-sell agreement. There are numerous formulas that can be used to determine the value of a corporation. This paper summarizes some of the more common formulas. An attorney should select the valuation formula only after consultation with the shareholders and the corporation's accountant.

### **i. BOOK VALUE**

An easy way to determine the value of a corporation is to simply use its book value as reflected on the corporation's financial statements. Book value is also known as net worth—the difference between the corporation's assets and liabilities. The problem with using book value is that the valuation does not reflect (a) assets, liabilities, income and expenses that are not disclosed on the financial statements or (b) the fair market value of the corporation's assets on the financial statements. Book value reflects the original cost of the assets less depreciation. For example, a corporation may

have purchased a building for \$1,000,000, and taken depreciation of \$600,000, resulting in the building showing a value of \$400,000 on the corporation's balance sheet. However, the current fair market value of the building may be \$5,000,000. Therefore, the use of book value may result in a valuation that does not reflect the real value of the corporation.

## **ii. ADJUSTED BOOK VALUE**

Due to the aforementioned problem of simply using book value, another valuation method is to use adjusted book value. Under this method, adjustments (increases and decreases) are made to the book value of specific assets and other items are considered in the valuation of the corporation. For example, in the example above, the book value of the building would be adjusted from its book value of \$400,000 to its fair market value of \$5,000,000. Other items that may be adjusted or considered include the following:

- i. Machinery and equipment, which are reflected on the balance sheet at their original cost and not fair market value
- ii. Inventory, which is reflected on the balance sheet at its original cost and not fair market value
- iii. Assets not on the balance sheet, such as:
  1. Goodwill / going concern
  2. Work in progress
  3. Know-how
  4. Trade name or brand name
  5. Patents, trademarks and copyrights
- iv. Contingent liabilities that are not on the balance sheet
- v. Insurance proceeds
- vi. Loss of a shareholder's services to the corporation
- vii. Accounts receivable, which may need adjustment due to the age of receivables

The buy-sell agreement must specify the items to be adjusted or considered when determining the adjusted book value of the corporation.

## **iii. CAPITALIZATION (OR MULTIPLE) OF EARNINGS**

Another way to determine the value of a corporation is the capitalization of average earnings over a period of several years. This is sometimes called the multiple of earnings method.

Earnings are also known as profits, net earnings and net profits. However, these terms are not universally defined. That is, they mean different things to different people. For example, profits can mean profits before taxes to one shareholder and profits after taxes to another. Therefore, the buy-sell agreement must define the term.

a. Earnings Per Share. The corporation's earnings divided by the number of issued and outstanding shares results in the corporation's earnings per share ("EPS"). For example, assuming \$10,000 in earnings and 100 shares, the EPS is \$100. When determining the value of a corporation under the capitalization (or multiple) of earnings method, the EPS can be weighted, by giving more weight to recent years. The average EPS is then applied to the capitalization rate to determine the value of the corporation. For example, the earnings of the corporation over the last five years may be as follows:

<u>Year</u>	<u>Price per Share</u>	<u>Weight</u>		<u>Weighted Price per Share</u>
2011	\$100 per share	x 5	=	\$500
2010	\$95 per share	x 4	=	\$380
2009	\$70 per share	x 3	=	\$210
2008	\$65 per share	x 2	=	\$130
2007	<u>\$40 per share</u>	x <u>1</u>	=	<u>\$ 40</u>
	\$370	15		\$1,260

The average EPS is \$74 ( $\$370/5$ ). However, the weighted average EPS is \$84 ( $\$1,260/15$ ).

As shown in the next example, although the dollar amounts are exactly the same as above, the years in which they have been earned are different, resulting in a different weighed average EPS:

<u>Year</u>	<u>Price per Share</u>	<u>Weight</u>		<u>Weighted Price per Share</u>
2011	\$70 per share	x 5	=	\$350
2010	\$65 per share	x 4	=	\$260
2009	\$100 per share	x 3	=	\$300
2008	\$40 per share	x 2	=	\$ 80
2007	<u>\$95 per share</u>	x <u>1</u>	=	<u>\$ 95</u>
	\$370	15		\$1,085

Again, the average EPS is \$74 ( $\$370/5$ ). However, the weighted average EPS is \$72.33 ( $\$1,085/15$ ), as compared to \$84 in the prior example.<sup>2</sup>

b. Capitalization Rate. Next, a capitalization rate must be selected. The buy-sell agreement must specify the rate or how it is to be determined. The capitalization rate is a fair rate of return. For our purposes, assume that the capitalization rate is five percent (5%). This means that the shareholders have agreed that they are entitled to a rate of return of five percent (5%) on their investment in the corporation. Therefore, using the weighted average EPS in the first example, the price per share is \$1,680 ( $\$84/.05$ ).

<sup>2</sup> These examples have been derived from Howard M. Zaritsky, Structuring Buy-Sell Agreements—Analysis with Forms, §9.03[3][a][ii].

As noted above, this method is also known as the multiple of earnings method, where a multiple is applied against the earnings to determine a purchase price per share. In the example above, the multiple is twenty (20). Therefore, average earnings of \$84 per share times a multiple of 20 equals a purchase price per share of \$1,680 ( $\$84 \times 20$ ).

c. Adjustments to Earnings. Often, the corporation's earnings must be adjusted in connection with determining the true value of a corporation. For example, the shareholders may receive generous salaries and fringe benefits, which are often added back to the corporation's earnings. Likewise, other adjustments may be needed to accurately reflect the fair market value of the corporation. For example, the accounting method used for inventory may cause lower profits and, consequently, in a valuation of the corporation that does not reflect fair market value. Therefore, an adjustment to earnings may be needed to take into account the accounting method used for inventory.

## 2. "FAIR MARKET VALUE" VS. "FAIR VALUE"

There is a difference between "fair market value" and "fair value." Fair value is the value of a shareholder's pro rata portion of the entire corporation. Generally, minority discounts are not taken into account when determining fair value. Fair market value is the value of the shareholder's percentage interest in the corporation, which takes into account minority discounts and discounts for lack of marketability of the shares. See Robert D. Frawley, "Valuation Issues in Shareholder and Operating Agreements—The Benefits of Using a Formula," N.J. Lawyer Magazine, 18, 20 (June 2006).

Therefore, assuming that a corporation is worth \$1,000,000, the fair value of a shareholder's 25% interest in the corporation is \$250,000. However, the fair market value of the shareholder's 25% interest can be significantly less than \$250,000 after taking into account discounts for lack of control (i.e., minority discount) and lack of marketability of the shares.

When determining the value of a corporation and the purchase price under a buy-sell agreement, the valuation is usually based on the fair market value of the shareholder's shares. However, the shareholders can specify in their agreement whether or not discounts will be applied in determining value, which will result in the terminology of fair market value versus fair value to be immaterial.

## 3. VALUATION DATE

Some thought should be given to the date of the valuation. Should it be the date of the triggering event? Should it be the end of the last fiscal year or last fiscal quarter?

Generally, if the valuation date is a date when the corporation will normally prepare financial statements (e.g., end of a fiscal quarter or fiscal year), the corporation will avoid the additional cost of preparing financial statements as of the date of the triggering event. However, a party may give up an increase in the corporation's value by

using a date other than a triggering date. For example, the corporation may have had a great year from January through the triggering event in November, but the buy-sell agreement requires the use of the last day of the last fiscal year as the valuation date, when the corporation had a lower value.

The converse is true as well. The corporation may have had a terrible year from January through the triggering event in November, but the buy-sell agreement requires the use of the last day of the last fiscal year as the valuation date, when the corporation had a higher value.

Also, the buy-sell agreement can provide different valuation dates for different triggering events. For example, if the triggering event is death or disability, then the date of the event can be the valuation date. For other triggering events, the last day of the last fiscal year can be the valuation date.

#### **4. DIFFERENT VALUATIONS FOR DIFFERENT TRIGGERING EVENTS**

Finally, the buy-sell agreement can provide for different valuation methods depending on the triggering event. For example, adjusted book value can be used for the triggering events of death or disability, whereas unadjusted book value can be used for triggering events such as termination of employment with cause of a shareholder-employee. Likewise, 100% of the valuation can be used for the triggering events of death or disability, whereas 50% of the valuation can be used for triggering events such as termination of employment with cause of a shareholder-employee. It is important to make certain that the valuation method used is applicable to all triggering events or, if the valuation methods differ as to specific triggering events, that a valuation method be clearly assigned to the specific triggering event.