Chapter 4: Business Valuation (Adjusted Book Value or Cost Approach)

In adjusting the balance sheet, the most difficult task is to "mark to market" (substitute market values for book values) the assets and liabilities. This section focuses on the adjustments and nuances of making these adjustments.

Overview

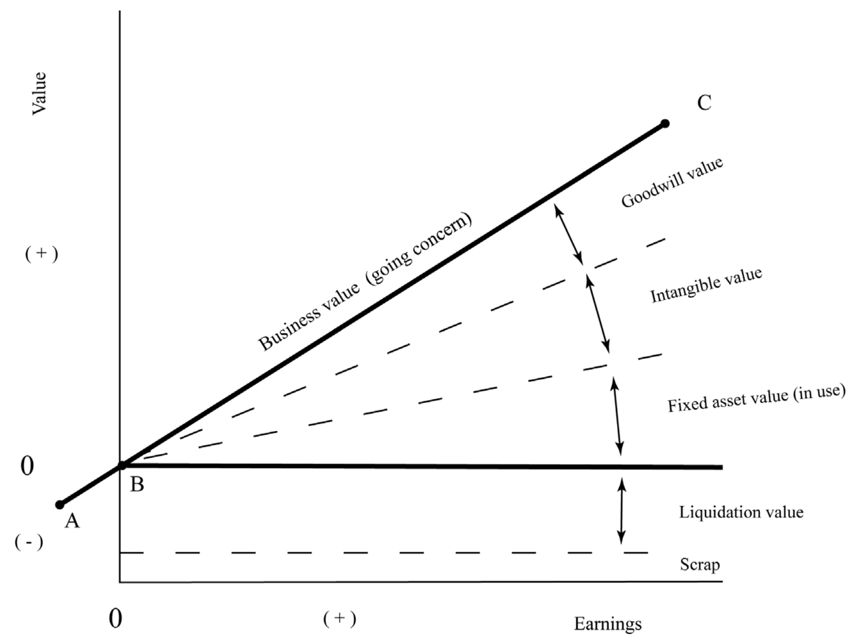
One of the shortcomings of the historical-cost balance sheet is that it is unlikely to reflect intangible assets. This approach is most appropriate for the valuation of a holding company, particularly one in which the current returns available to shareholders do not adequately reflect the fair market value of the business in its entirety. It is appropriate to look at the underlying assets of the firm to determine what investments might be justified over the longer term.

The adjusted-balance-sheet (or cost) approach to value involves a determination of the going-concern fair market value of all assets and liabilities of a business. After calculating the value of the business via an income approach, many buyers will only pay for the fair market value of the assets less liabilities, *plus* some intangible value (e.g. from zero to two times annual pretax income). When a business is more of a commodity business with low margins, then this approach is most relevant. Visually, the determination of a going concern can be seen in Figure 4-1 on page 66.

"Adjusted" means that the book value of assets and liabilities are adjusted to their fair market values, or *marked to market*. The difference between the adjusted assets less the adjusted liabilities is the assumed market value of the stockholder equity.

One problem with this approach is that much of a business' worth may be derived from its cash flows and working capital and not from fixed or intangible assets. When this is the case, then the adjusted book value of a company's equity may be worth *less* than the book value.

Figure 4-1: Business Value of Assets Relative to a Going Concern



Assets

The adjustments to each of the assets of a balance sheet are described below.

Cash

Cash is almost always treated as cash, without adjustments made to this value.

Accounts Receivable

Accounts receivable are generally reflected at their face value. However, it is important to determine whether the accounts receivable are net of questionable receivables which will not be collected. Note that if the firm is in financial distress, then the ability to collect these accounts is called into question, as well as all other current assets. For example, if a firm is about to declare bankruptcy, then the value of these receivables may only be a fraction of their face values since the company might have extended credit to questionable customers as they attempted to increase sales.

Inventories

Inventories need to be adjusted to some degree. Most adjustments are made pursuant to IRS Revenue Procedure 77-12, which governs the treatment for manufacturing and retail inventories.

First, raw materials are valued at their most recent cost. If the inventory is a commodity, then it may be valued at its purchase cost. Second, "work-in process" inventory gets special treatment. It may be approached either from its cost (plus an allowance for the value that has been embedded by the manufacturer) or from its ultimate sale price. Third, the "finished-goods" inventory is typically valued by determining the amount that will be received from its sale in the ordinary course of business, less any normal discounts and allowances, less the cost that the new owner incurs in holding, transporting, and making the sale of the inventoried products, less any returns. Finally, the buyer's share of the anticipated profit should be adjusted.

If the company is using the FIFO (first in, first out) method of inventory, then one may utilize the book value as a proxy for the fair value. If the company is using the LIFO (last in, first out) method of inventory, then one *must* add the LIFO reserve to conclude at a rough approximation of the FIFO value. This method is often used when valuing auto and truck dealerships for the auto or truck inventory. Note that LIFO can understate the value of the existing inventory when the cost per unit is increasing over time. An example of the extent to which LIFO can affect the value on a balance sheet can be seen in Table 4-1.

Table 4-1: Example of Auto Dealership Relative to LIFO Reserve

Line Item	Amount
Existing Net Book Value	$500,000
LIFO Reserve	1,670,000
Adjusted Net Book Value	$2,170,000

Other Current Assets

Most other current assets are held at their book value. However, items such as notes from shareholders may need to be adjusted if there is no intention of ever repaying these notes. Furthermore, if the minority interest is being valued, then it is important to recognize that the minority interest shareholder cannot influence their repayment.

Fixed Tangible Assets

The largest adjustments are usually made to the land, building and improvements, as well as machinery and equipment as the largest investments made by many companies are in these assets.

Land and improvements should be valued at their highest and best use. It is important to start with assessor information, but comparable sales for a true market value should be found and used. Sometimes if there are no comparables available, then a recent insurance appraisal can be used instead.

With respect to the machinery and equipment, the cost approach is typically used as a proxy for their fair market value, valued in a continued-use or going-concern valuation. However, it is critical to adjust these values due to potential obsolescence, or on the other hand, possible inflation since the original date of purchase. It must be noted that values may need to be concluded at orderly liquidation rates or at rates which a dealer would pay. The differences in these values can have an enormous affect upon the value of the adjusted equity.

Nonoperating Assets

Nonoperating assets are those assets that are not critical to the operating needs of a business. For example, excess land, a vacation home for executives, a company plane or a motor boat would meet this definition.

These values would also be different if there were a minority valuation or a control valuation. If the company was valued on a control basis, then these assets would be *marked to market*. The rationale is that a new owner could utilize these assets. On the other hand, a minority interest valuation would either simply utilize the book value or provide some discount to its fair market value. The reason for the difference is that the minority shareholder cannot influence the accumulation or liquidation of company assets. For a more detailed discussion of minority interests, please see Chapter 10.

Intangible Assets

These assets should be identified and appraised but are often overlooked in a business valuation. Sellers always want "blue sky," but if they are not making a profit, then there is no "blue sky." Generally the cost and income approaches are most often used. Adjustments are typically made for items such as those shown in Table 4-2.

Table 4-2: General List of Intangible Assets*

Formulas	Loan and Mortgage Portfolio	Files and Records
Know How	Copyrights	Film and Record Libraries
Personnel	Core Bank Depositors	Film Rights
Trademarks and Names	Covenants-Not-To-Compete	Franchise Agreements
Packaging	Customer Lists & Goodwill	Unpatented Technology
Indirect Construction Costs	Designs, Drawings, and Models	Backlog
Run-In Costs	Distribution Networks	Contracts
Systems	Easement Rights	Leasehold Interests
Microfiche	Favorable Debts	License Agreement
Rights	Mineral Water Rights	Location Value
Going Concern	Patents	Software
Assembled Plant	Patent Applications	Trade Secrets
Work Force	Performance Rights	Product Line

* this is not a comprehensive list

The separation of goodwill is a problem and can sometimes be resolved by utilizing an excess earnings method. However, this method is usually circular and has its limitations. An example of excess earnings can be seen in Table 7-23 on page 165. Sometimes other assets need to be extracted, such as patents and trademarks. In this case, usually a cost or income approach must be utilized. Chapter 7 on intangible assets more fully describes these methods.

Liabilities and Equity

Long Term Debt

Long term debt, including the current portion, is valued by utilizing a bond discount model.

Two schools of thought pertaining to the adjustment are: (1) ignore any (advantage) disadvantage due to (below) above market financing; or, (2) do not ignore this discrepancy.

In general, the minority interest discrepancy must be dealt with in some manner. If the interest rate being paid exceeds the market rate, then the added interest expense and risk must be reflected in the true worth of the company. On the other hand, if the interest is below market, then this should also be reflected, since interest expenses are low, and as a result there is theoretically more cash to pay in the way of dividends to minority interest holders.

Deferred Taxes

There are two schools of thought on the adjustment of deferred taxes. On the one hand, if the company is growing, then the company may never actually pay those taxes, or if so, at a much reduced rate in the future. As a result, the line item is eliminated. On the other hand, if one believes that this item needs to be paid in the near future, then this should be kept on the balance sheet. The second instance is preferable. Deferred taxes must be paid at some point by someone, especially for small businesses. As a result, this will have a direct impact upon stockholders' equity and must be accounted for.

Contingent Liabilities

Contingent liabilities are difficult to account for. They are not usually itemized, since no one discloses these items.

Stockholders' Equity

Having adjusted the assets and liabilities, one can arrive at a *plug* (assets less liabilities) for the adjusted stockholders' equity. The equity value is the total of adjusted assets less the total of adjusted liabilities.

Additional Adjustments

The stockholders' adjusted equity represents a control value (additional value or premium) of the business since the full contributive value of each of the assets and liabilities has been adjusted. On the other hand, a slight marketability discount may be applied.

Minority interests take substantial discounts because they are more difficult to sell than majority interests in a privately held company. As a result, a discount for lack of control, as well as a discount for a minority interest need to be made. A comprehensive discussion of minority interest discounts and control premiums is made in Chapter 10.