

Unit 3: Valuation of Fixed Assets and Shares

Business assets

Importance of assets in business

Assets are items of value, such as property and equipment, which your company owns or leases in order to operate. They can also be a means of creating value in your business - for example, intellectual property, customer relations and goodwill.

Why are company assets important?

Assets are important as they can help you to:

- generate revenue
- increase your business' value
- facilitate the running of your business

You can sell or transfer assets, use them to lower your tax bill and increase the efficiency of your business.

A good understanding of the importance of assets can help you achieve potential savings. In some cases, for example, leasing assets (such as machinery, cars or furniture) may be cheaper than buying them outright.

You should look after your assets to help reduce risk to your business. For instance, maintaining production machinery can help protect your business from health and safety risks, inefficiency and lost working time.

Safeguarding intangible assets, such as your patents or trademarks, can help protect your business against infringement. Find out how to protect your business assets.

Role of assets in determining business value

Efficient management of fixed assets during their full lifecycle is vitally important, as errors can lead to an inaccurate valuation of your business or incorrect tax reporting. To make the most of your assets, you must record and value them accurately.

By maintaining accurate asset records on your company balance sheet, you can:

- show the profitability and the financial position of your business
- create accurate profit and loss reporting
- increase goodwill and positive attitudes towards your business
- assure shareholders and attract investors

If you are selling or closing your business, identifying assets and valuing them correctly will be vital in determining your business' net worth, whether for sale or bankruptcy purposes.

Asset valuation is the process of determining the current value of a company's assets, such as stocks, buildings, equipment, brands, goodwill, etc. This process often happens as part of a wider business valuation, or before you buy, sell or insure an asset.

Asset-based valuation allows you to calculate a business's net worth by adding up the current value of its assets less the value of its liabilities.

How to value business assets?

The first step in asset valuation is to have a clear understanding of the different types of business assets that you own. Look at your resources and create an inventory detailing all your:

- current assets
- fixed assets
- intangible assets, including intellectual property (IP)

You should consider both your tangible and intangible assets, although it can help to evaluate different types of assets separately.

How to calculate the value of tangible assets?

The starting point for determining the value of tangible assets is the net book value (NBV), which is the value of the assets stated in the accounts. This method suits mainly stable businesses with significant tangible assets.

When valuing tangible assets, you can adjust the NBV figures to take into account economic realities such as:

- property or other fixed assets which have changed in value
- old assets or stock which would have to be sold at a discount
- bad debts to the business

The value of many kinds of tangible assets - like machinery and equipment - often depreciates over time due to wear and tear. You will need to consider this when valuing such assets. See more on depreciation of assets.

Besides age and usage, many other factors can affect the value of assets. One example is bankruptcy, where asset liquidation value will typically be lower than its fair market value.

How to calculate the value of intangible assets?

Intangible assets often give businesses their competitive advantage. However, because they have no physical characteristics, their value can be hard to determine.

A common way of valuing intangible assets, including IP but excluding goodwill, is by using either:

- **Market approach** - based on market evidence of what third parties have paid for comparable intangible assets.
- **Income approach** - assumes that the value of an asset is the present value of future earnings from the asset
- **Cost approach** - based on estimating the costs of constructing or acquiring a new intangible asset that is of more or less the same use as the existing one

These methods look at things like comparable transactions, excess earnings, and relief from royalty, replacement or reproduction costs and simulation analysis.

Importance of Asset Valuation

Asset valuation is one of the most important things that need to be done by companies and organizations. There are many reasons for valuing assets, including the following:

1. Right Price

Asset valuation helps identify the right price for an asset, especially when it is offered to be bought or sold. It is beneficial to both the buyer and the seller because the former will not need to pay more than the asset's value nor will the latter be paid less than the asset's value.

2. Taxes

Every individual or organization that owns property or other assets needs to pay taxes on their assets. By doing asset valuation, taxes are calculated accurately.

3. Company Merger

In the event that two companies are merging, or if a company is to be taken over, asset valuation is important because it helps both parties size up the business.

4. Loan Application

When a company applies for a loan, the bank or financial institution may require collateral as protection against possible debt default. Asset valuation is needed then for the lender to determine the loan amount that can be covered by the company offering its assets as collateral.

5. Audit

Companies, especially public ones, are regulated, which means they need to present financial audits and reports for transparency. Part of the audit process involves verifying the value of assets.

Self-Constructed Asset

A manufacturing company may decide to construct an asset for its own use rather than purchase it from another source. Two financial accounting issues must be considered in dealing with this situation: (a) identification of cost and (b) treatment of costs in excess of the purchase price. In associating costs with the **self-constructed asset**, the direct material costs, direct labour costs, and interest are always included.

The cost of a **self-constructed asset** is determined using the same principles as for an acquired asset. If an entity makes similar assets for sale in the normal course of business, the cost of the asset is usually the same as the cost of constructing an asset for sale. Therefore, any internal profits are eliminated in arriving at such costs. Similarly, the cost of abnormal amounts of wasted material, labour, or other resources incurred in **self-constructing an asset** is not included in the cost of the asset.

According to the accounting rules, the cost of fixed assets includes – in addition to the acquisition cost – items such as interest expense on **self-constructed assets** (capitalized until the asset is ready for use), foreign exchange losses on the purchase price of the assets, the debts incurred for such assets, and long-term investments (capitalized until the debt for the asset or investment is paid in full).

According to the accounting rules, the cost of fixed assets includes- in addition to the acquisition cost- items such as interest expense on **self-constructed assets** (capitalized until the asset is ready for use), foreign exchange losses on the purchase price of the assets, the debts incurred for such assets, and long-term investments (capitalized until the debt for the asset or investment is paid in full

The **self-constructed assets** are valued centrally by the Property Management Unit in the Logistics Support Division of the Department of Field Support.

The cost of a **self-constructed asset** is determined using the same principles as for an acquired asset. Most “**self-constructed assets**” were not tracked, and major overhauls including substantial improvements to assets were expensed as incurred.

Self-constructed assets should include the cost of borrowed funds used during the period of construction (as set forth by IAS 23 regarding on capitalization of borrowing costs).

The other issue that arises most commonly in connection with self-constructed fixed assets relates to overhead allocations. While capitalization of all direct costs (labor, materials, and variable overhead) is clearly required and proper, a controversy exists regarding the treatment of fixed overhead. Two alternative views of how to treat fixed overhead are to either:

1. Charge the asset with its fair, pro rata share of fixed overhead (i.e., use the same basis of allocation used for inventory); or
2. Charge the fixed asset account with only the identifiable incremental amount of fixed overhead.

When an asset is self-constructed, it can be quite difficult to formulate the cost of the asset, since there are many types of costs to consider. Use the following steps to accumulate the necessary information:

1. Create a separate job in the accounting system for the asset that is to be self-constructed.
2. Assign the unique job number to all expenditures needed to construct the asset. The job number and related cost is entered into the accounting system by the accounts payable staff, so that these costs are assigned to the asset.
3. Have employees assign hours worked to the unique job number. The job number and related hours worked are entered into the accounting system by the payroll staff. The hours worked are then multiplied by the hourly pay rate of each employee and then assigned to the asset.
4. Allocate overhead costs to the asset. These costs will be closely reviewed by the company's auditors, so be sure to develop a standard methodology for assigning costs and follow it with no exceptions. To avoid charges of excessive overhead allocation, be cautious in assigning costs to overhead that might otherwise be construed as period costs.
5. Assign interest expense to the asset. The amount of interest applied is limited to the time period covered by construction, and calculated as the interest rate multiplied by the average accumulated expenditures in each accounting period. The amount capitalized is limited to the total amount of actual interest expense incurred by the company during the construction period.
6. Terminate cost accumulation. Stop accumulating costs for the asset as soon as it is ready for the purpose for which it was intended.
7. Depreciate the asset. Commence depreciating the asset over its useful life. It may be possible to use an accelerated depreciation method to defer the recognition of taxable income.

If a self-constructed asset is to be sold at a later date, do not recognize the anticipated profit as part of the construction accounting. Instead, any profit is only recognized when the asset is sold to a third party.

Goodwill

Goodwill is the value of the reputation of a firm built over time concerning the expected future profits over and above the normal profits. A well-established firm earns a good name in the market, builds trust with the customers and also has more business connections as compared to a newly set up business. Goodwill in accounting is an intangible asset that arises when a buyer acquires an existing business.

Goodwill is an intangible asset associated with the purchase of one company by another. Specifically, goodwill is recorded in a situation in which the purchase price is higher than the sum of the fair value of all visible solid assets and intangible assets purchased in the acquisition and the liabilities assumed in the process. The value of a company's brand name, solid customer base, good customer relations, good employee relations, and any patents or proprietary technology represent some examples of goodwill.

There are two distinct types:

- **Purchased:** Purchased goodwill is the difference between the value paid for an enterprise as a going concern and the sum of its assets less the sum of its liabilities, each item of which has been separately identified and valued.
- **Inherent:** It is the value of the business in excess of the fair value of its separable net assets. It is referred to as internally generated goodwill and it arises over a period of time due to the good reputation of a business.

To put it in a simple term, a Company named ABC's assets minus liabilities is \$10, and a company purchases Company ABC for \$ 15, the premium value following the acquisition is \$ 5. This \$5 will be included on the acquirer's balance sheet as goodwill. It is also recorded when the purchase price of the target company is higher than the debt that is assumed.

Factors Affecting Goodwill

1. **Quality of Product:** Better quality of product will increase the sales and profits which will increase the value of goodwill.
2. **Efficiency of Management:** A well-handled interest normally enjoys the merit of more cost efficiency and productivity, which will increase the value of goodwill.
3. **Location:** The better location will attract more customers resulting in an increase in sales and profits which in turn, will result in an increase in the value of goodwill.
4. **Market Condition:** The monopoly situation or limited competition facilitates the concern to earn more gains which leads to the more value of goodwill
5. **Access to Supplies (Raw Material Etc.):** If a firm has better access to supplies or assured supply of inputs then it enjoys a better reputation than others and higher goodwill.
6. **Special Advantages:** If a firm enjoys special advantages like patents, trademarks, brand image, or any other exclusive benefit, then the firm enjoys a higher value of goodwill.
7. **External resources:** After sales service, Research & Development, Effectiveness of Advertisement, the supply of electricity, import licenses, well-known collaborators, long-term contracts for the supply of materials, trademarks, patents, etc. certainly enjoy more value of goodwill.

Valuation of goodwill may be due to any one of the following reasons:

A Sole-Proprietorship Firm:

- If the firm is sold to another person.
- It takes any person as a partner, and.
- It converts into a company.

A Partnership Firm:

- If any new partner joins.
- Any old partner retires from the firm.
- There is any change in the profit-sharing ratio among the partners.
- Any partner dies.
- Different partnership firms amalgamate.
- Any firm sale, and.
- Any firm converts into a company.

A Company or Firm:

- If the goodwill has already been written-off in the past but the value of the same is to be recorded further in the books of accounts.
- An existing company taking over or amalgamated with another existing company.
- The Stock Exchange Quotation of the value of shares of the company is not available to compute gift tax, wealth tax, etc., and.
- The shares are valued based on intrinsic values, market value or fair value methods.

Goodwill is an intangible asset which is not visible or cannot be touched but can be purchased and traded and is real. The value of an enterprise's brand name, solid consumer base, functional consumer associations, good employee associations and any patents or proprietary technology represent some instances of goodwill.

What is the valuation of Goodwill?

The valuation of goodwill is based on the assumption obtained by the valuer. A successful business earns a reputation in the industry, develops trust with its clients, and has more extensive business links, unlike new companies. All these points contribute while evaluating the business, and its financial worth that a customer is eager to give is known as goodwill.

Customers who buy a company looking at its goodwill hope to gain super-profits. Hence, goodwill applies to only firms that make super-profits and not to those who earn regular losses or profits.

Methods of Valuation of Goodwill

Various ways are used in the valuation of goodwill. However, the valuation methods are based on the situation of an individual company and different practices of the trade. The top three processes of valuation of goodwill are mentioned below.

⇒ **Average Profits Method** – This method is divided into two sub-division.

- **Simple Average** – In this process, goodwill evaluation is done by calculating the average profit by the number of years it is called years purchase. It can be calculated by using the formula. $\text{Goodwill} = \text{Average Profit} \times \text{No. of years' of purchase}$.
- **Weighted Average** – Here, last year's profit is calculated by a specific number of weights. It is used to obtain the value of goods, which is divided by the total number of weights for determining the average weight profit. This technique is used when there is a change in profits and giving high importance to the present year's profit. It is evaluated by using the formula. $\text{Goodwill} = \text{Weighted Average Profit} \times \text{No. of years' of purchase}$
 $\text{Weighted Average Profit} = \frac{\text{Sum of Profits multiplied by weights}}{\text{Sum of weights}}$

While calculating profit ABNORMAL Profit or Loss will be ignored

⇒ **Future Maintainable Profit (FMP) Method** –

- (a) All actual expenses and losses not likely to occur in the future are added back to profits.
- (b) All actual income and gain not likely to occur in the future are deducted from profits.
- (c) All profits likely to come in the future are added and all expenses likely to come in future are deducted.

After adjusting profit in the light of future possibilities, average profit are estimated and then the value of goodwill is estimated. This method is a simple one and has nothing to recommend since goodwill is attached to profits over and above what one can earn by starting a new business and not to total profits. It ignores the amount of capital employed for earning the profit.

FMP is always calculated After Tax

Calculating future profit form past performance

Particulars	1	2	3	4
Earnings before tax	xx	xx	xx	xx
(-) Profit on asset sold	-	(xx)	-	-
(+) Loss by Fire	-	-	(xx)	-
(+) undervaluation	-	-	-	(xx)
Past Adjusted profit	xxx	xxx	xxx	xxx
Average past Adjusted profit =	xxxxx			
(+) Future earnings/ savings =	xxx			
(-) Future Expenses =	(xxx)			
	xxxxx			
Less: Tax	(xx)			
	FMP			

⇒ **Super Profit (SP) Method –**

Super profit is excess profit earn over and above normal profit.

The future maintainable profits of the firm are compared with the normal profits for the firm. Normal earnings of a business can be judged only in the light of normal rate of earning and the capital employed in the business. Hence, this method of valuing goodwill would require the following information:

- (i) A normal rate of return for representative firms in the industry.
- (ii) The fair value of capital employed. The normal rate of earning is that rate of return which investors in general expect on their investments in the particular type of industry. Normal rate of return depends upon the risk attached to the investment, bank rate, market, need, inflation and the period of investment.

1. $SP = FMP - \text{Normal Profit}$
2. $\text{Normal Profit} = \text{NRR} \times \text{Capital Employed}$
3. $\text{Capital Employed} = \text{Total Assets} - \text{liabilities}$

$$\text{Goodwill} = \text{No. of years} \times SP$$

The important points to be consider,

1. Normal Rate of Return (NRR) It is the rate at which profit is earned by normal business under normal circumstances or from similar course of business. Normal Rate of Returns means rate of profit on capital employed which is normally earned by others in a similar type of business. It will always be given in the problem in form of percentages.
2. Capital Employed: It is nothing but Net Assets. Only Trading Assets will be consider, Non-trading assets like Investment outside the business will not be consider. While taking liabilities only External liabilities will be consider.

⇒ **Capitalization Method –**

Capitalization of FMP Method

$$\text{Goodwill} = \text{Value of Business} - \text{Capital Employed}$$

$$\text{Value of Business} = \text{FMP} / \text{NRR}$$

$$\text{Capital Employed} = \text{Total Assets} - \text{External liabilities}$$

Capitalization of Super Profit Method

$$\text{Goodwill} = \frac{\text{Super profit}}{\text{NRR}}$$

Valuation of Shares

Valuation of shares is the process of determining the fair value of the company shares. It is the process of knowing the value of company's shares. Share valuation is done based on quantitative techniques and share value will vary depending on the market demand and supply. The share price of the listed companies which are traded publicly can be known easily. But w.r.t private companies whose shares are not publicly traded, valuation of shares is really important and challenging.

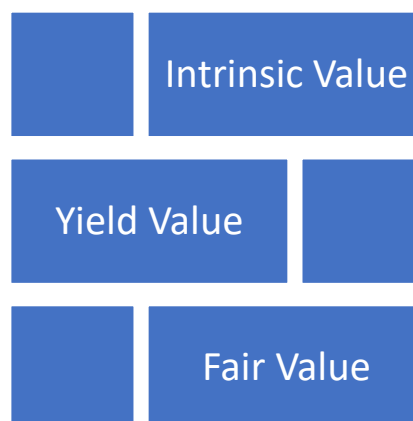
It may be required under these conditions

- One party wants to sell its business and they wanted to know business value
- When party approaches bank for a loan based on shares as a security
- Merger, acquisition, reconstruction, amalgamation etc – valuation of shares is very important
- When company shares are to be converted i.e. from preference to equity
- Valuation is required when implementing an employee stock ownership plan (ESOP)
- For tax assessments under the wealth tax or gift tax acts
- In case of litigation, where share valuation is legally required
- Shares held by an Investment company
- Compensating the shareholders, the company is nationalized

Factors Influencing Valuation

1. Current stock market price of the shares.
2. Profits earned and dividend paid over the years:
3. Availability of reserves and future prospects of the company.
4. Realisable value of the net assets of the company.
5. Current and deferred liabilities for the company.
6. Age and status of plant and machinery of the company.
7. Net worth of the company.
8. Record of efficiency, integrity and honesty of Board of Directors and other managerial personnel of the company.
9. Quality of top and middle management of the company and their professional competence.
10. Record of performance of the company in financial terms.

Methods for shares valuation



I. Intrinsic value Method/Asset Backing Method/Net Asset Method

This is also known as Balance Sheet Method or Intrinsic Method or Break-up Value Method or Valuation of Equity basis or Asset Backing Method. Here the emphasis is on the safety of investment as the investors always need safety for their investments. Under this method, net assets of the company are divided by the number of shares to arrive at the net asset value of each share. This method is based on the assumption of Liquidation. Since the valuation is made on the basis of the assets of the company, it is known as Asset-Basis or Asset-Backing Method. At the same time, the shares are valued on the basis of real internal value of the assets of the company and that is why the method is also termed Intrinsic Value Method or Real Value Basis Method.

Applicability of the Method:

- (i) The permanent investors determine the value of shares under this method at the time of purchasing the shares;
- (ii) The method is particularly applicable when the shares are valued at the time of Amalgamation, Absorption and Liquidation of companies; and
- (iii) This method is also applicable when shares are acquired for control motives.

The following points should be consider:

- (1) The value of goodwill will be ascertained.
- (2) Fixed assets of the company, disclosed or undisclosed in Balance Sheet, are taken at their realisable values.
- (3) Floating assets are to be taken at market value.
- (4) Remember to exclude fictitious assets, such as Preliminary Expenses, Accumulated Losses etc.
- (5) Provision for depreciation, bad debts provision etc. must be considered.
- (6) Find out the external liabilities of the company payable to outsiders including contingent liabilities.

Thus the value of net asset is:

Total of realisable value of assets

Less: Total of external liabilities

Net Assets

Less: Preference Share Capital

Net Assets Available to Equity Shareholders

$$\text{Value of share} = \frac{\text{Net Assets Available to Equity shareholders}}{\text{No. of Equity shares}}$$

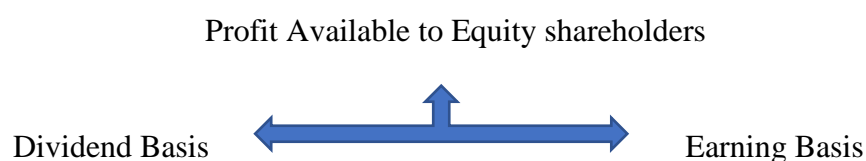
II Yield Value Method/Market Value Method

Under the Net Asset Method, the weightage is given on the safety of the investment. One, who invests money on shares, always needs safety. Even if the return is low, safety is always looked upon. At the same time under the yield method, the emphasis goes to the yield that an investor expects from his investment. The yield, here we mean, is the possible return that an investor gets out of his holdings—dividend, bonus shares, right issue. If the return is more, the price of the share is also more. Under this method the valuation of shares is obtained by comparing the expected rate of return with normal rate of return. For instance, if paid up value of a share is Rs.10 and expected rate of return is 9% while normal rate of return is 6%, then the value of shares will be Rs.15.

$$\text{Value of Share} = \frac{\text{Expected Rate of Returns (ERR)} \times \text{Paid-up value per share}}{\text{Normal Rate of Returns (NRR)}}$$

Where,

$$\text{Expected Rate of Returns (ERR)} = \frac{\text{Profit Available to Equity shareholders}}{\text{Paid-up Equity capital}} \times 100$$



Dividend Basis: This approach is followed by small investors having small lots of equity shares and investment in shares is made for short period of time. Their main purpose is to earn dividend.

Expected Earnings/FMP (After Tax)

Less: Preference dividend

Profit Available to Equity shareholders

Earning Basis: This approach is followed by investors having big lots of shares and investment in shares is made for long period of time. Their holding is for long period so they consider Retained earnings or Reserves created by company will be paid back to shareholders in long run in the form of Bonus shares or dividend.

Expected Earnings/FMP (After Tax)

Less: Preference dividend

Less: Transfer to Reserves

Profit Available to Equity shareholders

III. Fair Value Method

This method is nothing but the mean/Average of NAV and Yield value method.

Value of share = $\frac{\text{Net Asset value} + \text{Yield value}}{2}$

2