

Valuation of shares and goodwill

Meaning of Goodwill:

Goodwill may be described as the aggregate of those intangible attributes of a business which contributes to its superior earning capacity over a normal return on investment. It may arise from such attributes as favorable locations, the ability and skill of its employees and management, quality of its products and services, customer satisfaction etc.

Some definitions of goodwill are:

1. According to SSAP-22, UK Accounting Standard on Accounting for Goodwill, "Goodwill is the difference between the value of a business as a whole and the aggregate of the fair values of its separable net assets."

2. If time value of money is taken into account, goodwill may be defined as the present value of the firm's anticipated excess earnings.

3. "Goodwill is nothing more than the profitability that the old customers will resort to the old place." —Lord Eldon

4. According to Lord Macraughton "Goodwill is a thing very easy to describe, very difficult to define. It is the benefit and advantage of good name, reputation and connection of a business. It is the attractive force which brings in customers. It is one thing which distinguishes an old established business from a new business at its start."

Features of Goodwill:

The following are the features of goodwill:

1. Goodwill is an intangible asset. It is non-visible but it is not a fictitious asset.

2. It cannot be separated from the business and therefore cannot be sold like other identifiable and separable assets, without disposing of the business as a whole.

3. The value of goodwill has no relation to the amount invested or cost incurred in order to build it.

4. Valuation of goodwill is subjective and is highly dependent on the judgment of the valuer.

5. Goodwill is subject to fluctuations. The value of goodwill may fluctuate widely according to internal and external factors of business.

Types of Goodwill:

Goodwill is generally of two types:

(a) Purchased goodwill; and

(b) Non-Purchased or Inherent goodwill.

(a) **Purchased Goodwill:** Purchased goodwill arises when a business concern is purchased and the purchase

consideration paid exceeds the fair value of the separable net assets acquired. The purchased goodwill is shown on the assets side of the Balance sheet. Para 36 of AS-10 'Accounting for fixed assets' states that only purchased goodwill should be recognized in the books of accounts.

(b) Non-Purchased Goodwill/Inherent Goodwill:

Inherent goodwill is the value of 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 good reputation of a business. The value of goodwill may be positive or negative. Positive goodwill arises when the value of business as a whole is more than the fair value of its net assets. It is negative when the value of the business is less than the value of its net assets.

Factors Affecting Goodwill:

The important factors that give rise to goodwill are as follows:

1. Outstanding quality of products/services.
2. Locational factors—if a business is located at a favorable place; it enhances the value of goodwill.
3. The period for which the business has been in business.
4. Special advantages—A company that enjoys special advantages such as favorable contracts, assured supply of raw material at low rates, possession of trademarks, patents, copyrights, technical knowhow and research and development, well known collaborators etc. contribute to higher value of goodwill.
5. Nature of Business—a business having stable continuous demand for its products such as consumer goods is able to earn more profits and hence has more

goodwill. If the business is risky, profits will be uncertain. The monopoly condition or limited competition enables the enterprise to earn higher profits which leads to higher value of goodwill.

6. Good relations with customers, suppliers, labour and government.

7. Efficiency of Management— a firm having efficient management enjoys advantages of high productivity and cost of efficiency. This leads to higher profits which in turn increases the value of goodwill.

8. Capital required— if two businesses have same rate of profit, the business which requires lesser amount of capital tends to enjoy more goodwill.

Accounting for Goodwill:

The various ways in which goodwill can be accounted for are as follows:

(a) Carry it as an asset and write it off over a period of years through the profit and loss account.

(b) Write it off against profits or accumulated reserves immediately.

(c) Retain it as an asset with no write-off unless a permanent diminution in value becomes evident.

(d) Show it as a deduction from shareholders' funds which may be authorized carried forward indefinitely.

In this connection, it is important to state that goodwill should be recognized and recorded in business only when some consideration in money or money's worth has been paid for it.

Need for Valuation of Goodwill:

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

(a) In the Case of a Sole-Proprietorship Firm:

- ⇒ If the firm is sold to another person;
- ⇒ If it takes any person as a partner and
- ⇒ If it is converted into a company.

(b) In the Case of a Partnership Firm:

- ⇒ If any new partner is taken;
- ⇒ If any old partner retires from the firm;
- ⇒ If there is any change in profit-sharing ratio among the partners;
- ⇒ If any partner dies;
- ⇒ If different partnership firms are amalgamated;
- ⇒ If any firm is sold;
- ⇒ If any firm is converted into a company.

(c) **In the Case of a Company:**

⇒ If the goodwill has already been written-off in the past but value of the same is to be recorded further in the books of accounts.

⇒ If an existing company is being taken with or amalgamated with another existing company;

⇒ If the Stock Exchange Quotation of the value of shares of the company is not available in order to compute gift tax, wealth tax etc.; and

⇒ If the shares are valued on the basis of intrinsic values, market value or fair value methods.

Methods of Valuing Goodwill:

⇒ Years' Purchase of Average Profit Method:

Under this method, average profit of the last few years is multiplied by one or more number of years in order to ascertain the value of goodwill of the firm. How many years' profit should be taken for calculating average and the said average should be multiplied by how many number of years — both depend on the opinions of the parties concerned.

The average profit which is multiplied by the number of years for ascertaining the value of goodwill is known as Years' Purchase. It is also called Purchase of Past Profit Method or

Average Profit Basis Method:

Average Profit = Total Profits for all the
years/Number of years

Value of Goodwill = Average Profit × Years' Purchase.

Illustration 1: Sumana, Suparna and Aparna are partners in a firm. They share profits and losses in the ratio of 3: 2: 1. The partnership deed provides that, on the retirement of a partner, Goodwill shall be calculated on the basis of 5 years' purchase of the average net profits of the preceding 8 years. Aparna retires from the business on 31.12.1993.

The net profits for the last 8 years are as follows:

1996 Rs. 6,000; 1997 Rs. 12,000; 1998 Rs. 20,000;

1999 Rs. 16,000; 2000 Rs. 25,000; 2001 Rs. 30,000;

2002 Rs. 36,000; 2003 Rs. 31,000.

Compute the Goodwill of the firm which is payable to Aparna.

Solution:

Average profit of the last 8 years:

$\text{Rs. } 6,000 + \text{Rs. } 12,000 + \text{Rs. } 20,000 + \text{Rs. } 16,000 + \text{Rs. } 25,000 + \text{Rs. } 30,000 + \text{Rs. } 36,000 + \text{Rs. } 31,000$

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= Rs. 22,000

Total value of Goodwill = Rs. 22,000 × 5 = Rs. 1, 10,000

Aparna's share of Goodwill Rs. 1, 10,000 × 1/6 = Rs.

18,333 Say, Rs. 18,300

⇒ **Years' Purchase of Weighted Average**

Method:

This method is the modified version of Years' Purchase of Average Profit Method. Under this method, each and every year's profit should be multiplied by the respective number of weights, e.g. 1, 2, 3 etc., in order to find out the value of product which is again to be divided by the total number of weights for ascertaining the weighted average profit. Therefore, the weighted average profit is multiplied by the years' purchase in order to ascertain the value of goodwill. This method is particularly applicable where the trend of profit is rising.

Weighted Average Profit = Total Profits for all the years/Number of years

Value of Goodwill = Weighted Average Profit x Years' Purchase.

Illustration 2: X Y, Z Co. Ltd intends to purchase the business of ABC & Co. Ltd. Goodwill in the purchase is agreed to be valued at 13 years' purchase of the weighted average profits of the past 4 years.

The appropriate weights to be:

2003 — 1

2004 — 2

2005 — 3

2006 — 4

The profits in these years were 2003 Rs. 30,900; 2004 Rs. 45,400; 2005 Rs. 35,700; and 2006 Rs. 48,000.

The following information was available:

(i) On 1.9.2004 a major repair was made in respect of a Plant at a cost of Rs. 8,000 and this was charged to revenue. The said sum is agreed to be capitalized for Goodwill calculation subject to adjustment of Depreciation of 10% p.a. on Diminishing Balance Method.

(ii) The Closing Stock for the year 2005 was overvalued by Rs. 3,000.

(iii) To cover the Management cost an annual charge of Rs. 10,000 should be made for the purpose of Goodwill valuation.

You are asked to compute the value of Goodwill of the company.

Solution :**Adjusted Annual Profits :**

	2003	2004	2005	2006
	Rs.	Rs.	Rs.	Rs.
Profits	30,900	45,400	35,700	48,000
<i>Add :</i> Repair for Plant (being a capital expenditure) charged to revenue	—	(+) 8,000	—	—
	<u>30,900</u>	<u>53,400</u>	<u>35,700</u>	<u>48,000</u>
<i>Less :</i> Development not provided for @ 10% on Rs. 8,000 on Diminishing Balance Method	—	(-) 800	(-) 720	(-) 648
	<u>30,900</u>	<u>52,600</u>	<u>34,980</u>	<u>47,352</u>
<i>Less :</i> Overvaluation of Stock	—	—	(-) 3,000	(+) 3,000
	<u>30,900</u>	<u>52,600</u>	<u>31,980</u>	<u>50,352</u>
<i>Less :</i> Management Cost	(-) 10,000	(-) 10,000	(-) 10,000	(-) 10,000
	<u>20,900</u>	<u>42,600</u>	<u>21,980</u>	<u>40,352</u>

Weighted Average Profit :

Year	Profit	Weights	Product
	Rs.	Rs.	Rs.
2003	20,900	1	20,900
2004	42,600	2	85,200
2005	21,980	3	65,940
2006	40,352	4	1,61,408
		<u>10</u>	<u>3,33,448</u>

$$\text{Weighted Average of 4 years' profit} = \frac{\text{Rs. 3,33,448}}{10}$$

$$= \text{Rs. 33,345 (approx.)}$$

$$\therefore \text{Value of Goodwill} = \text{Rs. 33,345} \times 3 = \text{Rs. 1,00,035}$$

$$\text{or say } \text{Rs. 1,00,000}$$

⇒ **Capitalisation Method:** Under this method, the value of the entire business is determined on the basis of normal profit. Goodwill is taken as the difference between the Values of the Business minus Net Tangible Assets. Under this method, the following steps should be taken into consideration for ascertaining the amount of goodwill:

- (i) Expected Average Net Profit should be ascertained;
- (ii) Capitalised value of profit is to be calculated on the basis of normal rate of return;
- (iii) Net Tangible Assets (i.e. Total Tangible Assets - Current Liabilities) should also be calculated;
- (iv) To be deducted : (iii) from (ii) in order to ascertain the value of Goodwill.

Capitalised Value of Profit = Profit (Adjusted)/Normal
Rate of Return × 100

Value of Goodwill = Capitalised Value of Profit - Net
Tangible Assets.

Illustration 3:

The following is the Balance Sheet of P. Ltd as at
31.12.1999:

<i>Liabilities</i>	<i>Rs.</i>	<i>Assets</i>	<i>Rs.</i>
Share Capital		Goodwill	20,000
20,000 Equity Shares of Rs. 10 each	2,00,000	Building at Cost	80,000
Profit and Loss Account	40,000	Plant & Machinery at cost	50,000
Depreciation Fund :		Sundry Debtors	30,000
Building	5,000	Less : Reserve for Bad Debts	3,000
Plant and Machinery	3,000		27,000
	8,000	Stock-in-Trade	43,000
Sundry Creditors	22,000	Cash at Bank	50,000
Bills Payable	4,000	Discount on issue of shares	10,000
Provision for Taxation	6,000		
	<u>2,80,000</u>		<u>2,80,000</u>

The profits of the past four years (before providing
for taxation) were:

1996 Rs. 20,000; 1997 Rs. 30,000; 1998 Rs. 36,000 and
1999 Rs. 40,000.

Compute the value of Goodwill of the company assuming that the normal rate of return for this type of company is 10%. Income Tax is payable @ 50% on the above profits.

Solution :

		Rs.
Computation of Capital Employed/Net Tangible Assets :		
Building (Rs. 80,000 – Rs. 5,000)		75,000
Plant and Machinery (Rs. 50,000 – Rs. 3,000)		47,000
Sundry Debtors (Rs. 30,000 – Rs. 3,000)		27,000
Stock-in-Trade		43,000
Cash at Bank		50,000
		2,42,000
Less : Current Liabilities :		Rs.
Sundry Creditors	Rs. 22,000	
Bills Payable	Rs. 4,000	
Provision for Taxation	Rs. 6,000	
		32,000
		2,10,000
Average Profit :		
4 years' total Profit	= Rs. 20,000 + Rs. 30,000 + Rs. 36,000 + Rs. 40,000	
	= Rs. 1,26,000	
Less : Income-tax @ 50%	= Rs. <u>63,000</u>	
4 years' Adjusted Profit	= 63,000	
∴ Average Profit =	Rs. 63,000 ÷ 4 = Rs. 15,750	
Captialised value of profit =	$\frac{(Rs. 15,750 \times 100)}{10}$	= 1,57,500
Less : Net Tangible Assets		Rs. 2,10,000
∴ Value of Goodwill		Nil

⇒ **Super-Profit Method:** Super-profit represents the difference between the average profit earned

by the business and the normal profit (on this basis of normal rate of return for representative firms in the industry) i.e., the firm's anticipated excess earnings. As such, if there is no anticipated excess earning over normal earnings, there will be no goodwill.

This method for calculating goodwill depends on:

(i) Normal rate of return of the representative firms:

(ii) Value of Capital Employed / Average Capital

Employed; and

(iii) Estimated future profit, i.e. the average profit of the last few years.

Super-Profit = Average Profit (Adjusted) - Normal Profit

Value of Goodwill = Super -Profit X Years' Purchase

The students should remember that the number of years' purchase of goodwill differs from firm to firm and industry to industry. Also that one or two years' purchase should be taken into consideration if the retiring partner of a business was the main source of success. It should also be remembered that three to five years' purchase is usually taken. Of course, a large number of years' purchase may be considered if the super-profit itself is found to be large. If there is a declining trend in super-profit, one or two years' purchase may be considered.

Illustration 5:

State with reasons whether the following statement is correct or not: X and Y's financial position is as under:

	Rs.
Sundry Assets	9,27,342
Current Liabilities	52,492
Average Net Profit of the last four years (before partners' remuneration)	1,20,500
Average Capital Employed	9,00,000
Partners' average annual remuneration	18,000
The goodwill valued at 4 years' purchase of Super-Profit is	50,000
Therefore, expected rate of return is 15%	

Solution :

	Rs.
Since goodwill is 4 years' purchase of Super-profit.	
Super-Profit per year will be Rs. 12,500 (i.e., Rs. 50,000 \times $\frac{1}{4}$); Average Net Profit	1,20,500
Less : Average remuneration	18,000
	<u>1,02,500</u>

We know :

$$\begin{aligned}
 \text{Super-Profit} &= \text{Adjusted Net Profit} - \text{Normal Profit} \\
 \text{Normal Profit} &= \text{Adjusted Net Profit} - \text{Super-Profit} \\
 &= \text{Rs. 1,02,500} - \text{Rs. 12,500} \\
 &= \text{Rs. 90,000}
 \end{aligned}$$

Since, the Average Capital employed is Rs. 9,00,000 normal profit is equal to 10% of capital employed
 (i.e. $\frac{90,000}{\text{Rs. 9,00,000}} \times 100$)

So, the expected return will be 10% and not 15%.

Illustration 6: The following is the Balance sheet of Mithu Ltd as on 31.12.2005:

The following is the Balance sheet of Mithu Ltd as on 31.12.2005 :

<i>Liabilities</i>	Rs.	<i>Assets</i>	Rs.
Share Capital :		Goodwill	20,000
10,000 Equity Shares of Rs. 10 each	1,00,000	Plant & Machinery	40,000
General Reserve	15,000	Land and Building	45,000
6% Debentures (Rs. 100 each)	25,000	Investment	20,000
Profit and Loss Account :		Stock	25,000
Balance as on 1.1.05 Rs. 5,000		Debtors	20,000
Profit for the year Rs. 40,000		Cash and Bank	25,000
	45,000	Discount on Issue of Debtors	5,000
Creditors	10,000		
Provision for Taxation	5,000		
	<u>2,00,000</u>		<u>2,00,000</u>

The Assets were revalued as under :

Plant and Machinery Rs. 50,000; Land and building Rs. 40,000; Investment Rs. 25,000; Profit included Rs. 1,000 income from Investment.

Calculate the value of Goodwill on the basis of 3 years' purchase of Super-Profit. Normal rate of return in this type of business is 12%.

Solution :

Average Capital employed :		Rs.
Prepare value of Assets :		
Plant and Machinery		50,000
Land and Building		40,000
Stock		25,000
Debtors		20,000
Cash and Bank		25,000
		<u>1,60,000</u>
Less : Current Liabilities :		
Sundry Creditors	10,000	
Prov. for Taxation	<u>5,000</u>	
		15,000
		<u>1,45,000</u>

Less :	$\frac{1}{2}$ of current year's profit :		
	Profit	Rs.	40,000
Less :	Income from non-trading assets	Rs.	<u>1,000</u>
		Rs.	39,000
Less :	Income-tax, say, 50%	Rs.	<u>19,500</u>
		Rs.	19,500 ($\frac{1}{2} \times 19,500$)
	Average Capital employed		<u><u>9,750</u></u>
			<u><u>1,35,250</u></u>

Actual Profit :

		Rs.
	Profit for the year	40,000
Less :	Income from non-trading assets, i.e., Investment	<u>1,000</u>
		39,000
Add :	Interest on Debentures	<u>1,500</u>
		40,500
Less :	Depreciation to be provided for increased value of P & M Rs. 10,000 (Rs. 50,000 – Rs. 40,000) Dep. say, @ 5%	<u>500</u>
		40,000
Add :	Depreciation on decreased value of L & B Rs. 5,000, Dep. say, 10%	<u>500</u>
		40,500
Less :	Income-tax, say, 50%	<u>20,250</u>
		20,250
Less :	Normal Profit	<u>16,230</u>
		<u><u>4,020</u></u>

∴ Value of Goodwill Rs. 4,020 × 3 = Rs. 12,060 or, say, Rs. 12,000

Illustration 7: The Balance sheet of ABC Co. Ltd disclosed the following financial position as at 31.12.2005:

<i>Liabilities</i>	<i>Rs.</i>	<i>Assets</i>	<i>Rs.</i>
Paid-up Capital :		Land & Building	3,50,000
10,000, 8% Preference Shares of Rs. 10 each	1,00,000	Plant & Machinery	4,00,000
10,000 Ordinary Shares of Rs. 10 each	1,00,000	Stock-in-Trade	2,00,000
General Reserve	10,000	Book-Debts	1,50,000
Unappropriated Profits	40,000	Cash at Bank	50,000
7% Mortgage Debentures	5,00,000		
Sundry Creditors	4,00,000		
	<u>11,50,000</u>		<u>11,50,000</u>

You are asked to value the Goodwill of ABC Co. Ltd. for which purpose the following information is supplied :

- (i) Adequate provision has been made in the accounts for Income-tax etc.
- (ii) The assets of the company have been adequately depreciated.

(iii) Plant and Machinery of Rs. 4,00,000 is shown after charging adequate depreciation. The present market value of Plant and Machinery is Rs. 5,00,000.

(iv) Given below are figures of profits and losses (after charging depreciation) and Sales from first year to 2005 :

Year	Profits (before taxation) Rs.	Sales Rs.
1999	1,40,000	11,00,000
2000	1,10,000	12,00,000
2001	(-) 1,20,000	9,00,000
2002	40,000	6,00,000
2003	1,00,000	12,00,000
2004	1,50,000	14,00,000
2005	1,70,000	17,50,000

The reasonable rate of return on capital invested in this class of business is 10%.

It may be assumed that the company will be able to maintain profits for the next few years on the same level as for the previous years. The loss in 2001 was due to special circumstances.

You may assume any further facts necessary.

[C.A.—Adapted]

Solution :

	Rs.
Capital Employed :	
Total Assets as per Balance Sheet	11,50,000
<i>Add :</i> Profit on revaluation of Plant	1,00,000
	<u>12,50,000</u>
<i>Less :</i> Creditors	4,00,000
	<u>8,50,000</u>
∴ Nominal Profit = $(Rs. 8,50,000 \times \frac{10}{100})$	85,000

Average Profit :

The average profits for the last three years (weighted average is not followed here) :

$$= \frac{Rs. 1,00,000 + Rs. 1,50,000 + Rs. 1,70,000}{3} = Rs. 1,40,000$$

Average Profit	1,40,000
<i>Less :</i> Income-tax, say, 50%	70,000
	<u>70,000</u>
<i>Add :</i> Debenture Interest $(35,000 \times \frac{1}{2})$	17,500
	<u>87,500</u>

Super-Profit	= Average Profit - Nominal Profit
	= Rs. 87,500 - Rs. 85,000
	= Rs. 2,500
Value of Goodwill	= Rs. 2,500 × 3 (say, 3 years' Purchase)
	= Rs. 7,500

Illustration 8:

From the following information, compute the Goodwill of the firm XYZ Co. Ltd on the basis of four years' purchase of the average Super-Profits on a 10% yield basis:

XYZ Co. Ltd
Balance Sheet as at 31st December

	2003	2004	2005
	Rs.	Rs.	Rs.
Capital and Liabilities :			
10,000 Equity Shares of Rs. 100 each fully paid	10,00,000	10,00,000	10,00,000
Creditors	3,00,000	4,00,000	5,00,000
General Reserve	5,00,000	6,00,000	7,00,000
Profit and Loss Account	70,000	80,000	1,20,000
	<u>18,70,000</u>	<u>20,80,000</u>	<u>23,20,000</u>
Property and Assets :			
Goodwill	5,00,000	4,00,000	3,00,000
Factory, Building and Machinery (Less : Depreciation)	9,00,000	10,00,000	10,00,000
Stock-in-Trade	4,00,000	5,00,000	6,00,000
Debtors	10,000	80,000	2,20,000
Cash and Bank	60,000	1,00,000	2,00,000
	<u>18,70,000</u>	<u>20,80,000</u>	<u>23,20,000</u>

The following assets have been undervalued, their real worth to the business being :

	2003	2004	2005
	Rs.	Rs.	Rs.
Factory, Building and Machinery	10,00,000	11,00,000	12,00,000
Stock-in-Trade	6,00,000	7,00,000	8,00,000
Net Profit — after writing-off depreciation and making provision for Taxation and General Reserve (including opening bal.)	4,10,000	5,10,000	6,10,000

As per the Articles of Association of this private company, its Directors have declared and paid dividends to its members in the month of December each year out of the profit of the related year.

The cost of the Goodwill to the company was Rs. 5, 00,000. Capital employed at the beginning of the year 2003 was Rs. 19, 30,000 including the cost of Goodwill and balance in Profit and Loss Account at the same time was Rs. 60,000.

Solution :

Capital Employed :

	2003	2004	2005
	Rs.	Rs.	Rs.
Goodwill (as it has to be paid for)	5,00,000	4,00,000	3,00,000
Factory, Building and Machinery (as revalued)	10,00,000	11,00,000	12,00,000
Stock-in-Trade	6,00,000	7,00,000	8,00,000
Debtors	10,000	80,000	2,20,000
Cash and Bank	60,000	1,00,000	2,00,000
	<u>21,70,000</u>	<u>23,80,000</u>	<u>27,20,000</u>
	Rs.	Rs.	Rs.
Less : Creditors	3,00,000	4,00,000	5,00,000
Capital Employed (closing)	18,70,000	19,80,000	22,20,000
Capital Employed (opening)	19,30,000	18,70,000	19,80,000
	<u>38,00,000</u>	<u>38,50,000</u>	<u>42,00,000</u>
Average Capital employed	19,00,000	19,25,000	21,00,000
∴ Normal Profit @ 10% on Capital Employed	1,90,000	1,92,500	2,10,000
Profit as given	4,10,000	5,10,000	6,10,000
Less : Opening balance	(-) 60,000	(-) 70,000	(-) 80,000
	3,50,000	4,40,000	5,30,000
Add : Undervaluation of Closing Stock	(+) 2,00,000	(+) 2,00,000	(+) 2,00,000
	5,50,000	6,40,000	7,30,000
Less : Undervaluation of Opening Stock	—	(-) 2,00,000	(-) 2,00,000
	5,50,000	4,40,000	5,30,000
Amounts written-off to Goodwill	—	(+) 1,00,000	(+) 1,00,000
	5,50,000	5,40,000	6,30,000
Add back : Amounts transferred to General Reserve (+)	1,00,000	(+) 1,00,000	(+) 1,00,000
Adjusted Profit :	6,50,000	6,40,000	7,30,000
Less : Normal Profit	1,90,000	1,92,500	2,10,000
Super-Profit :	4,60,000	4,47,500	5,20,000

$$\therefore \text{Average Super-Profit} = \frac{4,60,000 + \text{Rs. } 4,47,500 + \text{Rs. } 5,20,000}{3} = \text{Rs. } 4,75,833$$

Value of Goodwill will be four years' purchase of Average Super-Profit, i.e. Rs. 4,75,833 × 4 = Rs. 19,03,332 or, say, Rs. 19,00,000.

Valuation of shares

Meaning:

The share capital is the most important requirement of a business. It is divided into a 'number of indivisible units of a fixed amount. These units are known as 'shares'.

According to Section 2 (46) of the Companies Act, 1956, a share is a share in the share capital of a company, and includes stock except where a distinction stock and shares is expressed or implied. The person who is the owner of the shares is called 'Shareholder' and the return he gets on his investment is called 'Dividend'.

Example: Total capital of a company is? 5, 00,000 divided in to 50,000 shares of Rs. 10 each, each unit of Rs. 10 is called share. In this case there are 50,000

units i.e. shares of Rs. 10 each and the capital is Rs. 5,00,000.

Nature of Shares:

- The shares of company are movable property and are transferable in the manner provided in the Articles of Association.
- A share is undoubtedly a movable property in the same way in which a bale of cloth or a bag of wheat is a movable property. Such commodities are not brought in to existence by legislation but a share in a company belongs to a totally different category of property.
- It is incorporeal in nature and it consists merely of a bundle of rights and obligations.

Factors Affecting the Value of Shares:

The value of a share is greatly affected by the economic, political and social factors such as:

- ⇒ The nature of the company's business
- ⇒ The economic conditions of the country
- ⇒ Other political and economic factors (e.g., possibility of nationalization, excise duty on goods produced etc.)
- ⇒ The demand and supply of shares
- ⇒ Proportion of liabilities and capital
- ⇒ Rate of proposed dividend and past profit of the company
- ⇒ Yield of other related shares of the Stock Exchange etc.

Need for Share Valuation:

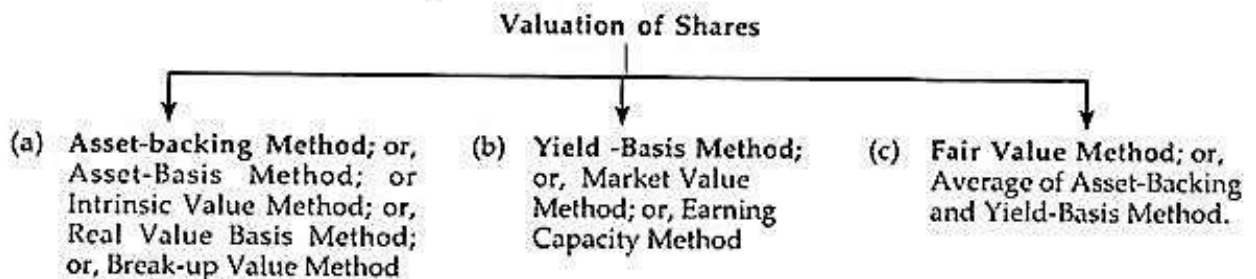
The necessity for valuation of a share arises in the following circumstances:

- a) For Estate Duty and Wealth Tax purposes
- b) For Amalgamation and Absorption schemes
- c) For Gift Tax purposes
- d) For discharge of debts and liabilities, in exceptional nature
- e) Purchasing shares for control
- f) For selling shares of a shareholder to a purchaser (which are not quoted in the Stock Exchange)
- g) For the conversion of one class of share to another class
- h) For the compensation made to a company when the said company is being nationalized

i) For granting loans on the basis of security of shares (i.e. when the shares are held as security, etc.).

Methods of Share Valuation:

The valuation of Shares may broadly be classified as:



Asset-Backing Method:

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 as Intrinsic Value Method or Real Value Basis Method.

This method may be made either:

- (i) On a going/continuing concern basis; and
- (ii) break-up value basis.

In the case of the former, the utility of the assets is to be considering for the purpose of arriving at the value of the assets, but, in the case of the latter, the reliable value of the assets is to be taken.

Under this method, value of the net assets of the company is to be determined first. Thereafter, the net assets are to be divided by the number of shares in order to find out the value of each share. At the same time, value of goodwill (at its market value), investment (non-trading assets) are to be added with net assets. Similarly, if there are any preference shares, those

are also to be deducted with their arrear dividends from the net assets.

Computation of Net Assets

	Rs.
<i>Net Assets</i>	
<i>Fixed Assets (Market Value)</i>	* *
<i>Investments (Market Value)</i>	* *
<i>Current Assets (Market Value)</i>	* *
<i>Goodwill, if any (Market Value)</i>	* *
	* *
<i>Less :</i>	
<i>Current Liabilities</i>	* *
<i>Debentures</i>	* *
<i>Prof. Share Capital (with arrear Dividend)</i>	* *
<i>Net Assets/Funds available for Equity Shareholders</i>	—
	* *
$\therefore \text{Intrinsic Value of each share} = \frac{\text{Funds available for equity shareholders}}{\text{Number of equity shares}}$	

Alternatively —

Net Assets = Share Capital + Reserves and Surplus -
 Miscellaneous Expenditure + Profit on Revaluation -
 Loss on Revaluation.

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.

Illustration 1:

From the following Balance Sheet of Sweetex Ltd you are asked to ascertain the value of each Equity share of the company:

<i>Liabilities</i>	Rs.	<i>Assets</i>	Rs.
20,000 Equity Shares of Rs. 10 each, fully paid	2,00,000	Goodwill	30,000
1,000, 6% Preference Shares of Rs. 100 each, fully paid	1,00,000	Land and Building	1,00,000
Reserves	60,000	Plant and Machinery	1,20,000
Sundry Creditors	40,000	Investments (at cost)	60,000
Provision for Taxation	20,000	Stock	50,000
Other Liabilities	10,000	Debtors	40,000
		Cash at Bank	24,000
		Preliminary Expenses	6,000
	<u>4,30,000</u>		<u>4,30,000</u>

For the purpose of valuing the shares of the company, the assets were revalued as under:

Goodwill Rs. 50,000; Land and Building at cost plus 50%, Plant and Machinery Rs. 1,00,000; Investments at book values; Stock Rs. 80,000 and Debtors at book value less 10%.

Solution :

	Rs.		Rs.
<i>Net Assets :</i>		<i>Alternative Approach :</i>	
Goodwill	50,000	Equity Share Capital	2,00,000
Land and Building (Rs. 1,00,000 + Rs. 50,000)	1,50,000	Reserve	60,000
Plant and Machinery	1,00,000		<u>2,60,000</u>
Investments	60,000	Less : Preliminary Expenses	6,000
Stock	80,000		<u>2,54,000</u>
Debtors (Rs. 40,000 – Rs. 4,000)	36,000	<i>Add : Profit on Revaluation</i>	
Cash at Bank	24,000	Goodwill	20,000
Less : Current Liabilities	<u>5,00,000</u>	(Rs. 50,000 – Rs. 30,000)	
Sundry Creditors	40,000	Land and Building	50,000
Prov. for Taxation	20,000	(Rs. 1,50,000 – Rs. 1,00,000)	
Other Liabilities	<u>10,000</u>	Stock	30,000
	70,000	(Rs. 80,000 – Rs. 50,000)	1,00,000
	<u>4,30,000</u>		<u>3,54,000</u>

Less : Preference Share Capital	1,00,000	<i>Less : Loss on Revaluation :</i>	
Funds available for Equity Shareholders		Plant & Machinery	20,000
		(Rs. 1,20,000 – Rs. 1,00,000)	
		Debtors	4,000
		(Rs. 40,000 – Rs. 36,000)	24,000
	<u>3,30,000</u>	Funds available for Equity Shareholders	<u>3,30,000</u>

Intrinsic Value of each share = $\frac{\text{Funds available for Equity Shares}}{\text{Total Number of Shares}}$

∴ Intrinsic value of shares = $\frac{\text{Rs. 3,30,000}}{20,000}$

= Rs. 16.50

I. Yield-Basis Method:

Yield is the effective rate of return on investments which is invested by the investors. It is always expressed in terms of percentage. Since the valuation of shares is made on the basis of Yield, it is called Yield-Basis Method. For example, an investor purchases one share of Rs. 100 each (face value and paid-up value) at Rs. 150 from a Stock Exchange on which he receives a return (dividend) @ 20%.

In that case, yield of the said investor will be:

$$\text{Yield} = \frac{20 \times 100}{150} = 13.33\%$$

Yield may be calculated as :

$$\text{Yield} = \frac{\text{Normal Profit}}{\text{Capital employed}} \times 100$$

Note:

Practically, yield may also be termed as:

Expected Yield, Normal Rate of Return/Earning, Rate of Fair Return, Rate of General Expectations, Estimated Rate for Capitalisation etc.

Under Yield-Basis method, valuation of shares is made on (i) Profit Basis; (ii) Dividend Basis.

(i) Profit Basis:

Under this method, at first, profit should be ascertained on the basis of past average profit.

Thereafter, capitalized value of profit is to be determined on the basis of normal rate of return, and, the same (capitalized value of profit) is divided by the number of shares in order to find out the value of each share.

The following procedure may be adopted:

$$\text{Capitalised Value of Profit} = \frac{\text{Profit}}{\text{Normal rate of Return}}$$

Here, profit means and includes Future Maintainable Profit, i.e., the rate of profit which is expected to be earned in future. "It is to be remembered that the analysis of profit that is made in order to determine future annual maintainable profit must seek a profit

that is capable of distribution as dividend."— Yorston, Smyth and Brown, *Advance Accounting*.

$$\text{Value of each equity share} = \frac{\text{Capitalised Value of Profit}}{\text{Number of shares}}$$

$$\text{Or, Value of each equity share} = \frac{\text{Profit}}{\text{Normal rate of Return} \times \text{Number of equity shares}} \times 100$$

Illustration 2:

Two companies, A Ltd and B. Ltd, are found to be exactly similar as to their assets, reserves and liabilities except that their share capital structures are different.

The share capital of A. Ltd is Rs. 11,00,000, divided into 1,000, 6% Preference Shares of Rs. 100 each and 1,00,000 Equity Shares of Rs. 10 each.

The share capital of B. Ltd is also Rs. 11,00,000, divided into 1,000, 6% Preference Shares of Rs. 100 each and 1,00,000 Equity Shares of Rs. 10 each.

The fair yield in respect of the Equity Shares of this type of companies is ascertained at 8%.

The profits of the two companies for 1993 and 1994 are found to be Rs. 1,10,000 and Rs. 1,50,000, respectively.

Calculate the value of the Equity Shares of each of these two companies on 31.12.1993 on the basis of this information only. Ignore taxation.

Solution :

A. Valuation of shares of A. Ltd	Rs.	Valuation of shares of B. Ltd	Rs.
Average profit of 2 years	= 1,30,000	Average Profit	1,30,000
$\frac{(\text{Rs. } 1,10,000 + \text{Rs. } 1,50,000)}{2}$		Less : Pref. dividend	
Less : Preference dividend 6% on		6% on Rs. 1,00,000	6,000
Rs. 10,00,000	60,000	Maintainable Profit :	<u>1,24,000</u>
Maintainable Profit	<u>70,000</u>	Capitalised value of Profit :	
Capitalised value of Profit = Rs. $\frac{70,000}{8} \times 100$		$\frac{\text{Rs. } 1,24,000}{8} \times 100 = 15,50,000$	
∴ Value of each Equity Share		∴ Value of each Equity Share	
= $\frac{\text{Rs. } 8,75,000}{10,000} = \text{Rs. } 87.50$		= $\frac{\text{Rs. } 15,50,000}{1,00,000} = \text{Rs. } 15.50$	

(ii) Dividend Basis:

Valuation of shares may be made either (a) on the basis of total amount of dividend, or (b) on the basis of percentage or rate of dividend.

(a) On the basis of total amount of Dividend:

$$\begin{aligned} \text{Capitalised Value of Profit} &= \frac{\text{Divisible Profit, i.e. Total amount of Dividend}}{\text{Normal Rate of Return i.e. Yield}} \times 100 \\ \therefore \text{Value of each Equity Share} &= \frac{\text{Capitalised Value of Profit}}{\text{Number of Equity Shares}} \\ \text{OR, Value of each Equity Share} &= \frac{\text{Divisible Profit} \times 100}{\text{Normal rate of Return} \times \text{No. of Equity Shares}} \end{aligned}$$

(b) On the basis of percentage or Rate of Dividend:

$$\text{Value of each Equity Share} = \frac{\text{Rate of Dividend}}{\text{Normal Rate of Return} \times \text{No. of Equity Shares}} \times \text{Paid-up value of each Equity Share}$$

When the Rate of Dividend is not given :

$$\text{Rate of Dividend} = \frac{\text{Profit}}{\text{Equity Share Capital (Paid-up)}} \times 100$$

Whether Profit Basis or Dividend Basis method is followed for ascertaining the value of shares depends on the shares that are held by the respective shareholders. In other words, the shareholder holding minimum number of shares (i.e., minority holding) may determine the value of his shares on dividend basis since he has to satisfy himself having the rate of

dividend which is recommended by the Board of Directors, i.e., he has no such power to control the affairs of the company. On the contrary, the shareholders holding maximum number of shares (i.e., majority holding) has got more controlling rights over the affairs of the company including the recommendation for the rate of dividend among others. Under the circumstances, valuation of shares should be made on profit basis.

In short, Profit Basis should be followed in the case of Majority Holding and Dividend Basis should be followed in the case of Minority Holding.

The same principle may be represented in the following form:

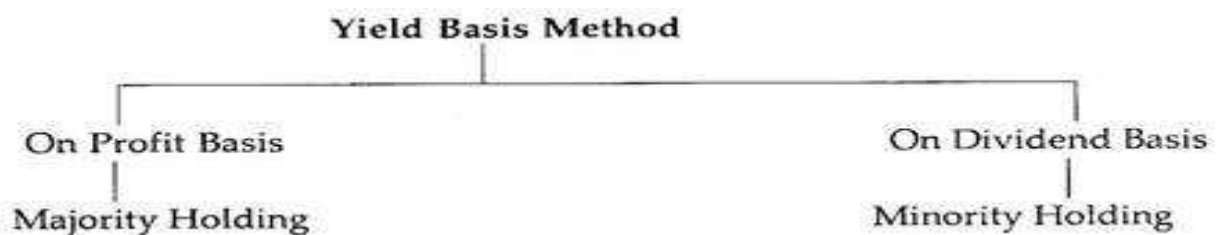


Illustration 3:

On December 31, 2003 the Balance Sheet of MAKALI Ltd disclosed the following position:

<i>Liabilities</i>	Rs.	<i>Assets</i>	Rs.
Issued Capital in Rs. 10 shares	4,00,000	Fixed Assets	5,00,000
Reserves	90,000	Current Assets	2,00,000
Profit and Loss Account	20,000	Goodwill	40,000
5% Debentures	1,00,000		
Current Liabilities	1,30,000		
	<u>7,40,000</u>		<u>7,40,000</u>

The Net Profit for the three years were :

	Rs.
2001	51,600
2002	52,000
2003	51,650

On which 20% was placed to Reserve, this proportion being considered reasonable in the industry in which the company is engaged and where a fair investment return may be taken at 10%.

Compute the value of the company's share under yield-basis method.

Solution :

$$\text{Average Profit} = \frac{\text{Rs. 51,600} + \text{Rs. 52,000} + \text{Rs. 51,650}}{3} = \text{Rs. 51,750}$$

$$\text{Less : Transfer to Reserve @ 20\%} = \text{Rs. 10,350}$$

$$\text{Maintainable Profit} = \text{Rs. 41,400}$$

Here, the rate of dividend is not given, the same can be found out with the help of the following :

$$\text{Rate of Dividend} = \frac{\text{Profit}}{\text{Equity Capital (Paid-up)}} \times 100$$

$$= \frac{\text{Rs. 41,000}}{\text{Rs. 4,00,000}} \times 100 = 10.35\%$$

$$\therefore \text{Value of each Equity Share} = \left(\frac{\text{Rate of Dividend}}{\text{Normal rate of return}} \right) \times (\text{Paid-up value of each Equity share})$$

$$= \text{Rs. } \frac{10.35}{10} \times \text{Rs. 10}$$

$$= \text{Rs. 10.35}$$

Alternatively, it can also be found out by profit basis method—

$$= \frac{\text{Profit}}{\text{Normal rate of return}} \times 100$$

$$= \frac{\text{Rs. 41,400}}{10} \times 100 = \text{Rs. 4,14,000}$$

$$\text{Value of each Equity share} = \frac{\text{Capitalised value of Profit}}{\text{Number of Equity Shares}}$$

$$= \frac{4,14,000}{40,000} = \text{Rs. 10.35}$$

II. Fair Value Method:

There are some accountants who do not prefer to use Intrinsic Value or Yield Value for ascertaining the correct value of shares. They, however, prescribe the Fair Value Method which is the mean of Intrinsic Value and Yield Value method and the same provides a better

indication about the value of shares than the earlier two methods.

$$\therefore \text{Fair Value} = \frac{\text{Intrinsic Value} + \text{Yield Value}}{2}$$

Illustration 4:

The following is the Balance Sheet of Sweet Mithu Ltd as on 31.12.2000:

<i>Liabilities</i>	Rs.	<i>Assets</i>	Rs.
<i>Share Capital :</i>		Land and Building	55,000
10,000 shares of Rs. 10 each	1,00,000	Plant at cost less Dep.	65,000
General Reserve	20,000	Trademarks	10,000
Taxation Reserve	30,000	Stock	24,000
Workmen's Savings A/c	15,000	Debtors	44,000
Profit and Loss A/c	16,000	Cash at Bank	26,000
Sundry Creditors	49,000	Preliminary Expenses	6,000
	2,30,000		2,30,000

The Plant is worth Rs. 60,000 and Land and Building have been valued at Rs. 1,20,000. Debtors include Rs. 4,000 as bad. The profits of the company have been 1998 Rs. 40,000; 1999 Rs. 45,000, and 2000 Rs. 53,000. It is the company's practice to transfer 25% of profit to Reserve.

Similar companies give a yield of 10% on the market value of shares. Value of Goodwill is Rs. 80,000. Ignore Income-tax. Find out the Fair Value of the Equity Share.

Solution :

	Rs.	Rs.
(a) Under Asset-backing Method :		
Goodwill		80,000
Land and Building		1,20,000
Plant and Machinery		60,000
Trade-marks		10,000
Stock		24,000
Debtors	44,000	
Less : Bad Debts	<u>4,000</u>	
		40,000

	Rs.	Rs.
Cash at Bank		26,000
		3,60,000
Less : Workmen's Saving A/c	15,000	
Sundry Creditors	49,000	
		64,000
Funds available for Equity Shareholders		2,96,000

∴ Intrinsic value of each Equity Share = Rs. $\frac{2,96,000}{10,000}$ = Rs. 29.60

Note : It has been assumed that Taxation Reserved represents a Contingency Reserve which may be created out of appropriation of profit, and not like Provision for Taxation.

(b) Under Yield-Basis Method :

Since the trend of profit is rising, Weighted Average Method is to be taken to find out the average maintainable profit :

	Years	Profits	Weights	Product
		Rs.		Rs.
Weighted Average :	1998	40,000	1	40,000
	1999	45,000	2	90,000
	2000	49,000 (Rs. 53,000 – Rs. 4,000)	3	1,47,000
			6	2,77,000

	Rs.	
Hence, Average Maintainable Profit	= Rs. $\frac{2,77,000}{6}$	= 46,167
Less : Dep., say, @ 5%, on increased value of Land and Building Rs. 65,000 (Rs. 1,20,000 – Rs. 55,000)		= 3,250
		42,917
Add : Dep., say, @ 10%, on decreased value of Plant and Machinery Rs. 5,000 (Rs. 65,000 – Rs. 60,000)		= 500
		43,417
Less : Transfer to Reserve 25% ($43,417 \times \frac{25}{100}$)		= 10,854
Actual Maintainable Profit		= 32,563
∴ Capitalised value of profit	= Rs. $\frac{32,563}{10} \times 100$	= 3,25,630
∴ Value of each equity share	= Rs. $\frac{3,25,630}{10,000}$	= 32.56 (approx.)
∴ Fair Value	= $\frac{\text{Intrinsic value} + \text{Yield-basis}}{2}$	
	= Rs. $\frac{29.60 + \text{Rs. } 32.56}{2}$	= Rs. 31.08