

Q21 A business has earned profit of ₹ 1,20,000 during the last four years and the normal rate of return in similar business is 15%. If goodwill of the firm is valued at ₹ 1,35,000 at 3 years' purchase of average super profit, find the capital employed of the firm.

Value of goodwill=Super profit x number of year purchase

$$1,35,000 = \text{super profit} \times 3$$

$$\frac{1,35,000}{3} = \text{super profit}$$

$$\text{Super profit} = 45000$$

Super profit = average profit - normal profit

$$45000 = 1,20,000 - \text{normal profit}$$

$$\text{Normal profit} = 1,20,000 - 45000$$

$$\text{Normal profit} = 75000$$

$$\text{Normal profit} = \text{average capital employed} \times \frac{\text{NRR}}{100}$$

$$75000 = \text{average capital employed} \times \frac{15}{100}$$

$$\frac{75000 \times 100}{15} = \text{average capital employed}$$

$$\text{average capital employed} = 500,000$$

SUPER PROFIT METHOD WHEN PAST ADJUSTMENTS ARE MADE:-

Q22. Average profit earned by a firm is 1, 00,000 which includes undervaluation of stock of 40,000 on an average basis. The capital invested in the business is 6, 30,000 and the normal rate of return is 5%. Calculate goodwill of the firm on the basis of 5 times the super profit.

Solution –

$$\text{Actual Average Profit} = 1,00,000 + 40,000 = 1,40,000$$

$$\begin{aligned}\text{Normal Profit} &= \text{Capital employed} \times \text{NRR} \\ &= 6,30,000 \times 5\% \\ &= 31,500\end{aligned}$$

$$\begin{aligned}\text{Super Profit} &= \text{Average Profit} - \text{Normal Profit} \\ &= 1,40,000 - 31,500 \\ &= 1,08,500\end{aligned}$$

$$\begin{aligned}\text{Goodwill} &= \text{Super Profit} \times \text{year of Purchase} \\ &= 1,08,500 \times 5 \\ &= 5,42,500\end{aligned}$$

Q23. Average profit earned by a firm is 7,50,000 which includes overvaluation of stock of 30,000 on an average basis. The capital invested in the business is 42,00,000 and the normal rate of return is 15%. Calculate goodwill of the firm on the basis of 3 times the super profit.

Solution –

$$\text{Average Profit} = 7,50,000 - 30,000 = 7,20,000$$

$$\begin{aligned}\text{Normal Profit} &= \text{Capital employed} \times \text{NRR} \\ &= 42,00,000 \times 15\% \\ &= 6,30,000\end{aligned}$$

$$\begin{aligned}\text{Super Profit} &= \text{Average Profit} - \text{Normal Profit} \\ &= 7,20,000 - 6,30,000 \\ &= 90,000\end{aligned}$$

$$\begin{aligned}\text{Goodwill} &= \text{Super Profit} \times \text{year of Purchase} \\ &= 90,000 \times 3 \\ &= 2,70,000\end{aligned}$$

Q24. Ayub and Amit are partners in a firm and they admit Jaspal into partnership 1st April, 2024. They agreed to value goodwill at 3 years purchase of Super Profit Method for which they decided to average profit of last 5 years. The profits for the last 5 years were:

Year Ended	Net Profit
31 st March, 2020	1,50,000

31 st March, 2021	1, 80,000
31 st March, 2022	1, 00,000 (including abnormal loss of 1, 00,000)
31 st March, 2023	2, 60,000 (including abnormal gain (profit) of 40,000)
31 st March, 2024	2, 40,000

The firm has total assets of 20, 00,000 and Outside Liabilities of 5, 00,000 as on that date. Normal Rate of return in similar business is 10%

Calculate value of goodwill.

Solution – Profit 2020 = 1, 50,000

$$2021 = 1, 80,000$$

$$2022 = 1, 00,000 + 1, 00,000 = 2, 00,000$$

$$2023 = 2, 60,000 - 40,000 = 2, 20,000$$

$$2024 = 2, 40,000$$

$$\text{Average Profit} = \frac{1,50,000 + 1,80,000 + 2,00,000 + 2,20,000 + 2,40,000}{5}$$

$$= \frac{9, 90,000}{5}$$

$$= 1, 98,000$$

Capital Employed = Total Assets – Outside Liabilities

$$= 20, 00,000 - 5, 00,000$$

$$= 15, 00,000$$

Normal Profit = Capital employed x NRR

$$= 15, 00,000 \times 10\%$$

$$= 1, 50,000$$

Super Profit = Average Profit – Normal Profit

$$= 1, 98,000 - 1, 50,000$$

$$= 48,000$$

Goodwill = Super Profit x year of Purchase

$$= 48,000 \times 3$$

$$= 1, 44,000$$

CAPITALISATION METHOD:-

Q25. From the following information, calculate value of goodwill of the firm by applying Capitalisation Method:

Total capital of the firm 16, 00,000

Normal rate of return 10%

Profit for the year 2, 00,000

Solution –

$$\begin{aligned}\text{Capitalisation Value of the firm} &= \frac{\text{Average Profit}}{\text{Normal Rate of Returns}} \times 100 \\ &= \frac{2, 00,000 \times 100}{10} \\ &= 20, 00,000\end{aligned}$$

$$\begin{aligned}\text{Goodwill} &= \text{Capitalisation Value of Firm} - \text{Capital employed (net assets)} \\ &= 20, 00,000 - 16, 00,000 \\ &= 4, 00,000\end{aligned}$$

Q26. A firm earned average profit of 3, 00,000 during the last few years. The normal rate of return of the industry is 15%. The assets of the business were 17, 00,000 and its liabilities were 2, 00,000.

Calculate the goodwill of the firm by Capitalisation of average profit.

Solution –

$$\begin{aligned}\text{Capitalised Value of Firm} &= \frac{\text{Average Profit} \times 100}{\text{NRR}} \\ &= \frac{3, 00,000 \times 100}{15} \\ &= 20, 00,000\end{aligned}$$

$$\begin{aligned}\text{Capital employed} &= \text{Assets} - \text{Liabilities} \\ &= 17, 00,000 - 2, 00,000 \\ &= 15, 00,000\end{aligned}$$

$$\begin{aligned}\text{Goodwill} &= \text{Capitalised value of firm} - \text{Capital employed} \\ &= 20, 00,000 - 15, 00,000 \\ &= 5, 00,000\end{aligned}$$

Q27. A & B were partners in a firm with capitals of 3, 00,000 and 2, 00,000 respectively. The normal rate of return was 20% and the capitalised value of average profits was 7, 50,000. Calculate goodwill of the firm by capitalisation of average profits method.

Solution –

Capitalised Value of firm = 7, 50,000

Capital employed = 3, 00,000 + 2, 00,000
= 5, 00,000

Goodwill = Capitalised Value – Capital employed
= 7, 50,000 – 5, 00,000
= 2, 50,000

Q28. Puneet and Tarun are in restaurant business having credit balance in their fixed Capital Accounts as 2, 50,000 each. They have credit balances in their Current Accounts of 30,000 and 20,000 respectively. The firm does not have any liability. They are regularly earning profits and their average profit of last 5 years is 1, 00,000. If the normal rate of return is 10%, find the value of goodwill by Capitalisation of Average Profit Method.

Solution –

Total Capitalised Value of the firm = $\frac{\text{Average Profit} \times 100}{\text{NRR}}$
= $1, 00,000 \times \frac{100}{10}$
= 10, 00,000

Capital employed = Fixed capital account + Current account
= (2, 50,000 x 2) + 30,000 + 20,000
= 5, 50,000

Goodwill = Capitalised Value – Capital employed
= 10, 00,000 – 5, 50,000
= 4, 50,000

Q29. From the following particulars, calculate value of goodwill of a firm by Capitalisation of Average Profit Method:

- I. Profits of last five consecutive years ending 31st March, are: 2022 – 54,000; 2021 – 42,000; 2020 – 39,000; 2019 – 67,000 and 2018 – 59,000
- II. Capitalisation rate 20%
- III. Net assets of the firm 2, 00,000.

Solution –

Average Profit of Last 5 years

$$\begin{aligned} &= \frac{54,000 + 42,000 + 39,000 + 67,000 + 59,000}{5} \\ &= 2, 61,000 \\ &= 52,200 \end{aligned}$$

Total Capitalised Value of Firm = $\frac{\text{Average Profit} \times 100}{\text{NRR}}$

$$\begin{aligned} &= \frac{52,200 \times 100}{20} \\ &= 2, 61,000 \end{aligned}$$

Goodwill = Total Capitalised value – Capital Employed

$$\begin{aligned} &= 2, 61,000 - 2, 00,000 \\ &= 61,000 \end{aligned}$$

Q30. A business has earned average profit of 4, 00,000 during the last few years and the normal rate of return in similar business is 10%. Find value of goodwill by:

- I. Capitalisation of Super Profit Method
- II. Super Profit Method if the goodwill is valued at 3 years purchase of super profits.

Assets of the business were 40, 00,000 and its external liabilities 7, 20,000

Solution –

$$\begin{aligned}\text{Capital Employed} &= \text{Assets} - \text{External Liabilities} \\ &= 40,00,000 - 7,20,000 \\ &= 36,80,000\end{aligned}$$

$$\begin{aligned}\text{Normal Profit} &= \text{Capital employed} \times \text{NRR} \\ &= 36,80,000 \times 10\% \\ &= 3,28,000\end{aligned}$$

$$\begin{aligned}\text{Super Profit} &= \text{Average Profit} - \text{Normal Profit} \\ &= 4,00,000 - 3,28,000 \\ &= 72,000\end{aligned}$$

$$\begin{aligned}\text{Capitalised Value of firm} &= \frac{\text{Super Profit} \times 100}{\text{NRR}} \\ &= \frac{72,000 \times 100}{10} \\ &= 7,20,000\end{aligned}$$

$$\begin{aligned}\text{Goodwill} &= \text{Super Profit} \times \text{year of Purchase} \\ &= 72,000 \times 3 \\ &= 2,16,000\end{aligned}$$

Q31. A firm profit of 5,00,000 .Normal Rate of Return in a similar type of business is 10%. The value of total assets (excluding goodwill) and total outsiders liabilities as on the date of goodwill are 55,00,000 and 14,00,000 respectively. Calculate value of goodwill according to Capitalisation of Super Profit Method as well as Capitalisation of Average Profit Method.

Solution –

$$\begin{aligned}\text{Capital Employed} &= \text{Total Assets} - \text{External Liabilities} \\ &= 55,00,000 - 14,00,000 \\ &= 41,00,000\end{aligned}$$

$$\begin{aligned}\text{Capitalised Value of firm} &= \frac{\text{Average Profit} \times 100}{\text{NRR}} \\ &= \frac{5,00,000 \times 100}{10} \\ &= 50,00,000\end{aligned}$$

$$\begin{aligned}\text{Goodwill} &= \text{Total Capitalised Value} - \text{Capital Employed} \\ &= 50,00,000 - 41,00,000 \\ &= 9,00,000\end{aligned}$$

Q32. On 1st April, 2018, a firm had assets of 1, 00,000 excluding stock of 20,000. The current liabilities were 10,000 and the balance constituted Partners Capital Accounts. If the normal rate of return is 8%, the Goodwill of the firm is valued of 60,000 at four years purchase of Super profit, find the actual profits of the firm.

Solution –

Capital Employed = Total Assets – External Liabilities

$$= 1, 20,000 - 10,000$$

$$= 1, 10,000$$

Normal Profit = Capital employed x NRR

$$= 1, 10,000 \times 8\%$$

$$= 8,800$$

Goodwill = Super Profit x No of year purchase

Goodwill = (Average Profit – Normal Profit) x No of year purchase

$$60,000 = (\text{Average Profit} - 8,800) \times 4$$

$$60,000/4 = \text{Average Profit} - 8,800$$

$$15,000 = \text{Average Profit} - 8,800$$

$$\text{Average Profit} = 15,000 + 8,800$$

$$= 23,800$$

CAPITALISATION OF SUPER PROFIT:-

Q33. Average profit of a firm during the last few years is 1, 50,000. In similar business, the normal rate of return is 10% of the capital employed. Calculate the value of goodwill by capitalisation of super `profit method if super profits of the firm are 50,000.

Solution –

Goodwill = $\frac{\text{Super Profit} \times 100}{\text{NRR}}$

NRR

$$= \frac{5,000 \times 100}{10}$$

10

$$= 5, 00,000$$

Q34. Raja Brothers earn an average profit of 30,000 with a capital of 2, 00,000. The normal rate of return in the business is 10%. Using capitalisation of super profit method, workout the value of the goodwill of the firm

Solution – Average Profit = 30,000

Normal Profit = Capital employed x NRR

$$= 2,00,000 \times 10\%$$

$$= 20,000$$

Super Profit = Average Profit – Normal Profit

$$= 30,000 - 20,000$$

$$= 10,000$$

Goodwill = $\frac{\text{Super Profit} \times 100}{\text{NRR}}$

NRR

$$= \frac{10,000 \times 100}{10}$$

10

$$= 1,00,000$$

Q35. Rajan and Rajani are partners in a firm. Their capitals were Rajan 3, 00,000; Rajani 2, 00,000. During the year ended 31st March, 2024, the firm earned a profit of 1, 50,000. Calculate the value of goodwill of the firm by capitalisation of super profit assuming that the normal rate of return is 20%.

Solution – Average Profit = 1, 50,000

Capital Employed = 3, 00,000 + 2, 00,000 = 5, 00,000

Normal Profit = Capital employed x NRR

$$= 5,00,000 \times 20\%$$

$$= 1,00,000$$

Super Profit = Average Profit – Normal Profit

$$= 1,50,000 - 1,00,000$$

$$= 50,000$$

Goodwill = $\frac{\text{Super Profit} \times 100}{\text{NRR}}$

NRR

$$= \frac{50,000 \times 100}{20}$$

20

$$= 2,50,000$$

Q36. A business has earned average profit of 8, 00,000 during the last few years and the normal rate of return in similar business is 10%. Find value of goodwill by:

- I. Capitalisation of Super Profit Method**
- II. Super Profit Method if the goodwill is valued at 3 years purchase of super profit.**

Assets of the business were 80, 00,000 and its external liabilities 14, 40,000.

Solution – 1

$$\begin{aligned}\text{Capital Employed} &= \text{Total Assets} - \text{Outside Liabilities} \\ &= 80, 00,000 - 14, 40,000 \\ &= 65, 60,000\end{aligned}$$

$$\begin{aligned}\text{Normal Profit} &= \text{Capital employed} \times \text{NRR} \\ &= 65, 60,000 \times 10\% \\ &= 6, 56,000\end{aligned}$$

$$\begin{aligned}\text{Super Profit} &= \text{Average Profit} - \text{Normal Profit} \\ &= 8, 00,000 - 6, 56,000 \\ &= 1, 44,000\end{aligned}$$

$$\begin{aligned}\text{Goodwill} &= \frac{\text{Super Profit} \times 100}{\text{NRR}} \\ &= \frac{1, 44,000 \times 100}{10} \\ &= 14, 40,000\end{aligned}$$

$$\begin{aligned}2. \text{ Goodwill} &= \text{Super Profit} \times \text{No of Year Purchase} \\ &= 1, 44,000 \times 3 \\ &= 4, 32,000\end{aligned}$$

Q39. From the following information, calculate value of goodwill of the firm:

- I. At three years purchase of Average Profit.**
- II. At three years purchase of Super Profit.**
- III. On The basis of Capitalisation of Super Profit**
- IV. On the basis of Capitalisation of Average Profit.**

Information:

- I. Average capital Employed is 6,00,000
- II. Net Profit/(Loss) of the firm for the last three years ended are: 31st March, 2024 – 2,00,000, 31st March, 2023 – 1,80,000 and 31st March, 2022 – 1,60,000
- III. Normal Rate of Return in similar business is 10%
- IV. Remuneration of 1, 00,000 to partners is to be taken as charge against profit.
- V. Assets of the firm (excluding goodwill, fictitious assets and non-trade investments) is 7, 00, 000 whereas Partners Capital is 6, 00,000 and Outside Liabilities 1, 00,000.

Solution –

$$\text{Average Profit} = \frac{2, 00,000 + 1, 80,000 + 1, 60,000}{3}$$

$$= \frac{5, 40,000}{3}$$

$$= 1, 80,000 - 1, 00,000$$
$$= 80,000$$

$$\text{Normal Profit} = 6, 00,000 \times \frac{10}{100}$$
$$= 6, 00,000$$

$$\begin{aligned} 1. \text{ Goodwill} &= \text{Average Profit} \times \text{No of Year Purchase} \\ &= 80,000 \times 3 \\ &= 2, 40,000 \end{aligned}$$

$$\begin{aligned} 2. \text{ Super Profit} &= \text{Average Profit} - \text{Normal Profit} \\ &= 80,000 - 60,000 \\ &= 20,000 \end{aligned}$$

$$\begin{aligned} \text{Goodwill} &= \text{Super Profit} \times \text{No of year Purchase} \\ &= 20,000 \times 3 \\ &= 60,000 \end{aligned}$$

$$\begin{aligned} 3. \text{ Goodwill} &= \frac{\text{Super Profit} \times 100}{\text{NRR}} \\ &= \frac{20,000 \times 100}{10} \end{aligned}$$

$$= 2,00,000$$

$$4. \text{ Total Capitalised Value} = 80,000 \times \frac{100}{10}$$

$$= 8,00,000$$

$$\text{Capital Employed} = \text{Assets} - \text{Liabilities}$$

$$= 7,00,000 - 1,00,000$$

$$= 6,00,000$$

$$\text{Goodwill} = \text{Capitalised Value} - \text{Capital employed}$$

$$= 8,00,000 - 6,00,000$$

$$= 2,00,000$$