

YIELD METHOD

38. From the following information, calculate the value of an equity share :
- (a) Paid up capital of a company consists of 1,000 15% preference shares of ₹ 100 each and 20,000 equity shares of ₹ 10 each.
 - (b) The average annual profits of the company after providing for depreciation and taxation amounted to ₹ 75,000. It is considered necessary to transfer ₹ 10,000 to general reserve before declaring any dividend.
 - (c) The normal return expected by investors on equity shares from the type of business carried on by the company is 10%.

39. From the following information, calculate the value per equity share :

2,000 9% preference shares of ₹ 100 each

50,000 equity shares of ₹ 10 each, ₹ 8 per share paid up

Expected profit per year before tax

Rate of tax

Transfer to general reserve every year 20% of the profit

Normal earning rate

₹ 2,00,000

₹ 4,00,000

₹ 2,18,000

50%

15%

[ICSI, Inter.]

40. Calculate the value of each equity share from the following information :

(i) 60,000 equity shares of ₹ 10 each, ₹ 7 paid up.

(ii) ₹ 2,00,000 10% preference shares of ₹ 100 each fully paid up.

(iii) Expected annual profits before tax ₹ 4,00,000.

(iv) Tax rate 35%.

(v) Transfer to general reserve 20%.

(vi) Normal rate of return 20%.

[C.U., B.Com. (Hons.) '10]

41. From the following figures, calculate the value of a fully paid equity share of ₹ 10 on

(a) Dividend basis ; and (b) Return on capital employed basis, assuming in each case the market expectation to be 12%.

Year ended	Capital employed	Profit earned	Dividend
	₹	₹	
2011-12	50 crore	8 crore	12%
2012-13	80 "	16 "	15%
2013-14	100 "	22 "	18%
2014-15	120 "	30 "	20%

[ICSI, Inter. (June) '02 – Adapted]

42. Prema Ltd.'s capital is ₹ 11,00,000 dividend in shares of ₹ 10 each. Of these, 40,000 shares are 8% preference and remaining are equity shares. The average profit (after tax @ 50%) earned during past 3 years is ₹ 1,50,000. In future, expenses will increase by ₹ 12,000 per annum. The expected yield for risk capital is 10% net of tax.

Find the value of equity shares.

Calculation of profit available to Eq. sh. holder

Average profit

less: Transfer to general reserve

less: Preference share dividend for current year

Profit available to Eq. sh. holder.

	75000
	(10000)
	<hr/> 65000
	15000
	<hr/> 50000

Expected rate of return = $\frac{\text{Profit available to Eq. sh. holder}}{\text{Paid up value of Eq. sh. Capital}} \times 100$

$$= \frac{50,000}{200,000} \times 100$$

So, Yield value or Market Value per share = $\frac{\text{Expected rate of return}}{\text{Normal rate of return}} \times \text{Paid up value of each share}$

$$= \frac{25}{10} \times 10$$

39. Calculation of profit available to Eq. sh. holder

Profit

less: Tax (Rate of tax 50%)

less: general reserve $(10000 \times \frac{20}{100})$

less: Preference share holder's dividend $(20000 \times \frac{10}{100})$

Profit available to Eq. sh. holder.

	21800
	10000
	<hr/> 11800
	21800
	<hr/> 87200
	18000
	<hr/> 69200

Expected rate of return = $\frac{\text{Profit available to Eq. sh. holder}}{\text{Paid up value of Eq. share}} \times 100$

$$= \frac{69200 \times 100}{400,000} = 17.3\%$$

Yield Value or Market Value per share = $\frac{\text{Expected rate of return}}{\text{Normal rate of return}} \times \text{Paid up value of each share}$

$$= \frac{17.3}{15} \times 8 = 9.28$$

Calculation of profit available to Eq. M. holder

Annual profit	400,000
Less: Tax (@ 35%)	140,000
	<u>260,000</u>
Less: Transfer to general reserve	50,000
	<u>210,000</u>
Less: Preference share holder's dividend	20,000
	<u>180,000</u>
Profit available to Eq. M. holder.	<u>180,000</u>

Expected rate of return = $\frac{\text{Profit available to Eq. M. holder}}{\text{Paid up value of Eq. M. Capital}} \times 100$

$$= \frac{180,000 \times 100}{420,000}$$

$$= 42.86\%$$

Yield value or, Market value per share = $\frac{\text{Expected rate of return}}{\text{Normal rate of return}} \times \text{Paid up Value of each Eq.}$

$$= \frac{42.86}{20} \times 7$$

$$= \text{Rs. } 15.67$$

Average Profit before tax (150,000 x $\frac{100}{50}$)

	300,000
Less: Expenses	120,000
	<u>280,000</u>
Less: Tax (@ 50%)	140,000
	<u>140,000</u>
Less: Preference share dividend (400,000 x $\frac{8}{100}$)	32,000
Profit available to Eq. M. holders.	<u>112,000</u>

$$\text{Expected rate of return} = \frac{\text{Profit available to Eq. St. holder} \times 100}{\text{Paid up value of Eq. St. Capital}}$$

$$= \frac{112000 \times 100}{700000}$$

$$= 16\%$$

So, Yield Value or Market Value per share = $\frac{\text{Expected rate of return}}{\text{Normal rate of return}} \times \text{Paid up value per Eq. share}$

$$= \frac{16}{10} \times 10$$

$$= \text{Rs. } 16$$