

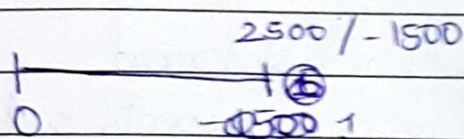
Business Finance - 2 Assignment

Q1) c) IRR has the benefit of highlighting the return achieved by the project.

Q2) a) Market price of share / Earning per share.

Q3) d) all of the above.

Q4) c) 9,00,000

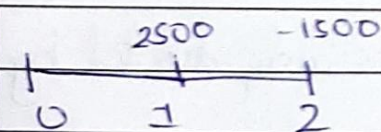
Q5) 

$d = 20\%$, $t = 40\%$.

i) The cash flow at date 1 is $\Rightarrow 2500 - 1500 = 1000$ cash inflow

ii) NPV = Present value of net cash flows.

$$= 2500 \times (1 - 0.2)^1 + (-1500)(1 - 0.2)^1$$
$$= 800$$

iii) 

$$= 2500(1 - 0.2) + (-1500)(1 - 0.2)^2$$
$$= 1000$$

The NPV is reduced as they are allowed to pay for the supplies a year later.

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Q6) The efficiency ratios are related to the liquidity ratios. They give an insight into the effectiveness of the company's management of the components of working capital. These ratios tend to be multiplied by 365 and so expressed as a period of time.

$$\text{Inventory Turnover Ratio} = \frac{\text{Gross Sales}}{\text{C.E}}$$

Q7) Ratio Analysis is a very useful technique for the interpretation of financial statements. Some limitations of ratio analysis are →

- * It diverts attention from the figures and statement themselves. It is important to look at aspects such as the sheer size of the company. A larger company will have more borrowing power.
- * Comparisons can be affected by different accounting policies or by other external factors.
- * There could be peculiarities of the trade which make it difficult to interpret certain ratios.
- * The statements could have been deliberately distorted by so called creative accounting.

Q8)

i) The ~~different~~ possible reasons for different betas for different stocks are →

- * Beta is an indicator of systematic risk associated with a particular stock.

- * Nature of the business $\rightarrow$ What type of sector is the company in.
- * The Capital Structure of the company, if it's levered or not.
- * Risks related to that particular business.

ii) $B_G = 1.1$

$d/e = 1/2$

$t = 30\%$

$$B_G = B_{UG} \left[1 + \frac{D}{E} (1 - t) \right]$$

$$\therefore 1.1 = B_{UG} \left[1 + \frac{1}{2} (1 - 0.3) \right]$$

$$\therefore 1.1 = B_{UG} \left[1 + \frac{0.7}{2} \right]$$

$$\therefore 1.1 = B_{UG} \times \frac{27}{20}$$

$$B_{UG} = \frac{1.1 \times 20}{27}$$

$$= 0.814814$$

$$\therefore B_G = B_{UG} \left(1 + \frac{D}{E} (1 - t) \right)$$

$$= 0.814 (1 + \frac{1}{2} (1 - 0.3))$$

New $B_G = 1.3852$

Q9) c) In general the market value of investment - trust is equal to the net present value.

Q10) The problems

ii) $CPM = ₹ 70$

Dividend = ₹ 10

$g = 8\%$

$R_f = 6\%$

β is increased by 80%.

$$\begin{aligned} CCE &= R_f + MRP \times \beta \\ &= 6\% + 5\% \times (\beta \times 80\%) \\ &= 6\% + \frac{5 \times \beta \times 80}{100} \\ &= \frac{6}{100} + \frac{4\beta}{100} \\ &= \frac{6 + 4\beta}{100} \end{aligned}$$

Value of stock = $\frac{EDPS}{CCE - DGR}$

$$70 = \frac{10}{CCE - 8\%}$$

$$CCE - 8\% = \frac{1}{7}$$

$$CCE = \frac{1}{7} + 8\%$$

$$= \frac{39}{175} = 0.22285714$$

$$CCE = R_f + MRP \times \beta$$

$$22.28\% = 6\% + 5\% \times \beta$$

$$\therefore \beta = 3.256$$

$$\begin{aligned} \text{New } \beta &= 3.256 (1 + 80\%) \\ &= 5.8608 \end{aligned}$$

$$\therefore \text{New } CCE = 35.304\%$$

$$\begin{aligned} \text{Value of stock} &= \frac{210}{35.304\% - 8\%} \\ &= ₹ 36.62 \end{aligned}$$

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$$WACC = \frac{1}{2} \times 0.0675 + \frac{1}{2} \times 0.145$$

$$= 10.625\%$$

ii) $B_E = 1.5$

$$1.5 = B_{UA} \left[1 + \frac{D}{E} (1-t) \right]$$

$$1.5 = B_{UA} \left[1 + \frac{1}{1} (1-25\%) \right]$$

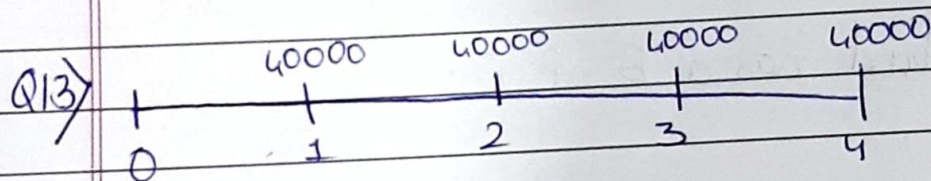
$$1.5 = B_{UA} [1 + 0.75]$$

$$B_{UA} = 0.8571$$

$$\therefore COE = R_F + MRP \times B$$

$$= 7\% + 5\% \times B_{UA}$$

$$= 11.2857\%$$



$$IRR = 15\%$$

$$NPV = 40000 (1 + 0.15)^{-1} + \dots$$

$$= 114199.1345$$

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This type of ratio is used to assess whether the company will be able to pay it's bill over the next few months. A low ratio indicates the company may have problems paying it's creditors.

b) Debtors turnover period $\rightarrow$ This ratio shows us how quickly can the company collect its credit given to the customers. The investors would prefer a company with a much higher ratio for investing.

ii) We should use the quick ratio in this particular incident. It is aimed at looking at short-term liquidity. It focuses on readily available cash. The quick ratio considers what would happen if all creditors and debtors accounts were settled immediately.

Q15)

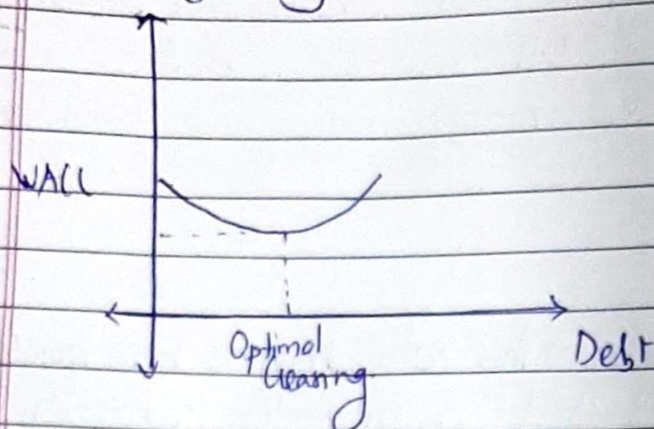
i) Investors may buy the shares to diversify his portfolio.
The suitable price for this company could be $\rightarrow$

$\frac{D}{E} = \frac{1}{1} \quad i = 8\%, \text{ div. yield} = 4\%$

$$\therefore \text{Approx. WACC} = \frac{1}{2} \times 8\% + \frac{1}{2} \times 4\% = 6\%$$

The WACC has to be ~~at least~~ more than 6% for this particular company.

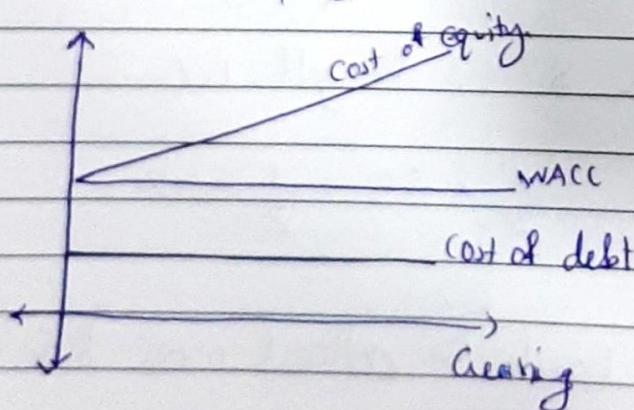
ii) The traditional view says that up till a point gearing helps us reduce the WACC. This point is known as optimal gearing. But as gearing increases, so does the cost of equity as the beta also increases on more gearing.



iii) It states that the capital structure of a company has no effect on the market value of the company. The assumption under it are $\rightarrow$

- * Debt is risk free
- * No taxes
- * No agency costs
- * No information asymmetry.

iv) The MM model says that gearing has no effect on market value of the company and also its WACC.



1) a) $R_F = 6\%$

$MRP = 5\%$

$B = 1.4$

$$\begin{aligned} \therefore COE &= R_F + MRP \times \beta \\ &= 6\% + 5\% \times 1.4 \\ &= 13\% \end{aligned}$$

b) $\frac{D}{E} = \frac{0.5}{0.5} = \frac{1}{1}$

$$\begin{aligned} B_q &= B_{MC} \times \left(1 + \frac{D}{E} (1 - t)\right) \\ &= 1.4 \times \left(1 + 1(1 - 0.3)\right) \\ &= 1.4 (1 + 0.7) \\ &= 2.38 \end{aligned}$$

c) $\therefore \text{New COE} = R_F + MRP \times \beta_q$
 $= 6\% + 5\% \times 2.38$
 $= 17.9\%$