

Business Finance - Assignment 1

Unit 3 & 4

Q1 D

Q2 A

Q3 D

Q4 I

Q5 i) Cashflow = $2500 - 1500$
 $= +1000$

ii) $NPV = \text{Net Cashflow} \times \text{Discounting factor}$

$$= 1000 \times \left(\frac{1}{1.20} \right)^1$$

$$= \frac{1000}{1.2}$$

$$= 833.3$$

iii) $NPV_2 = \frac{2500}{1.20} + \frac{(-1500)}{(1.20)^2}$

$$= 2083 - 1041.7$$

$$= 1041.3$$

$\therefore NPV$ increases

Q6 The ratios which can be used to measure the efficiency of business are as follows:

- Inventory Turnover Ratio - Inventory turnover is the rate that inventory stock is sold, or used and replaced

$$= \frac{\text{Cost of goods sold}}{\text{Average Inventory}}$$

- Trade Payable Turnover period:- This ratio is used to measure the number of times the business is paying off its creditors or suppliers in an accounting period

$$= \frac{\text{Supplier Purchases}}{\text{Average Accounts Payables}}$$

- Trade receivable turnover Ratio - The receivables turnover ratio measures the efficiency with which a company is able to collect on its receivables of the credit it extends to customers

Q7 • Ratio analysis information is historic it is not current.

• Ratio analysis does not take into account external factors such as World wide recession.

• Ratio analysis does not measure human element of a firm

• Ratio analysis can only be used for comparison with other firms of same size & type.

Q8 i) Beta is a concept that measures the expected move in a stock ~~market~~ relative to overall movements in the market. A stock's beta will change over time because it compares the stock's return with the returns of the overall market.

Q9 ii) $\beta_{\text{geared}} = \beta_{\text{ungeared}} \left[1 + \frac{D}{E} (1 - t) \right]$

$$\beta_{\text{ungeared}} \left[1 + \frac{1}{2} (1 - 30\%) \right]$$

$$\beta_{\text{ungeared}} = 0.8148$$

$$\begin{aligned}
 B_{geared} &= B_{unreared} \times \left[1 + \frac{1}{2} (1 - 30\%) \right] \\
 &= 0.8148 \times 1.70 \\
 &= 1.4
 \end{aligned}$$

Q9 D

Q10 i) There can be a conflict of interests between the management.

* ii) ~~Share Price~~ = 70

$$D/S = 10$$

$$\text{Growth} = 8\%$$

$$\text{Risk-free} = 6\%$$

$$\text{Market risk} = 5\%$$

$$= \frac{10}{76} + 8\%$$

$$= 22.3\% \text{ (Cost of Equity)}$$

$$22.3\% + 80\% \text{ of } 22.3\%$$

$$22.3\% + 17.84\%$$

$$= 40.14\%$$

Q11 i) Beta is a concept that measures the expected move in a stock relative to movement in the overall market.

$$\beta_i = \frac{\text{Cov}(r_i, r_m)}{\text{Var}(r_m)}$$

ii) Beta could be calculated by first dividing the security's standard deviation of returns by the benchmark's standard deviation of returns. The resulting value is multiplied

ii) Beta can be calculated by Covariance and Variance and then dividing them. Covariance measures how two stocks move together. Variance refers to how far a stock moves relative to its mean.

iii) Shareholder should invest in the stock with beta 1 as the price of stock will tend to move with the market

iv) Government Bonds

Q12 i) $WACC = \text{Net cost of Debt} \times \frac{\text{Debt}}{\text{Debt} + \text{Equity}}$
 ~~$+ \text{Net cost of Equity} \times \frac{\text{Equity}}{\text{Debt} + \text{Equity}}$~~

$$\begin{aligned} &= \cancel{6.8 \times 14.5 \times 0.5 \times 0.5} \\ &= (6.8 \times 0.5) + (14.5 \times 0.5) \\ &= 10.65 \\ &= 10.7\% \end{aligned}$$

ii) As debt is repaid which states that debt is 0 only equity is remaining

Q13 NPV =

Q14 i) a) Current ratio - is a liquidity ratio that is used to measure whether a firm has enough resources to meet its short term obligation.

b) Debtors turnover period - this ratio is used to measure how many times a company's receivables are converted to cash in a certain period of time

ii) The super quick ratios can be used as this ratio calculator and estimated by dividing super quick assets by current liabilities of any business