

Assignment 2

Subject :- Business Finance - 2

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- 1) D. IRR is the most reliable means of choosing between mutually exclusive events.
- 2) A. market price of share / earnings per share
- 3) D. All of the above
- 4) operating $cf = op. income + depreciation + change in WC = 1200000$

5) i) Cash inflow = 2500

Cash outflow = 1500.

$$\text{net cash flow} = 2500 - 1500 = 1000.$$

$$\text{tax} = 0.4 \times 1000 = 400.$$

$$\text{cash flow at date 1} = 1000 - 400 = \boxed{600}$$

ii) Net present value is the net present cash flows of the project where it discounts all cash flows of the project to present day using cost of capital.

$$NPV = PV \text{ of inflow} - PV \text{ of outflow.}$$

iii) The NPV of the project will increase.

$$6) 1) \text{ Stock turnover period} = \frac{\text{inventories}}{\text{cost of sales}} \times 365$$

it assesses how much inventory the company holds in relation to the scale of company's operations. It shows how long inventory is held on average, it shows how well company is turning inventory to sales & how costs associated with inventories is managed.

$$2) \text{ Trade receivables turnover period} = \frac{\text{trade receivables}}{\text{net credit sales}} \times 365$$

measure of average length of time taken for trade receivables to settle their balance. It represents the number of days a business holds debt on their books and can impact cash flow.

$$3) \text{ Payables turnover period} = \frac{\text{payables}}{\text{credit purchases}} \times 365$$

measures the average number of days it takes a company to pay back suppliers, vendors or financiers. It shows how many days can company hold on its cash and how does it pay its creditors i.e. company reputation.

$$4) \text{ Cash Conversion Cycle} = \text{Inventory turnover period} + \text{trade receivables TP} - \text{payables turnover period}$$

it is the time from payment to suppliers for the materials to receiving cash from sale of goods produced from the materials. it overall assesses how efficiently a company is managing its working capital.

- 7) → it diverts attention from the figures and statement themselves. it does not consider the size of the company and can divert attention from figures & statement.
- Comparisons can be affected by different accounting policies or by other external factors. For example, two companies may use different methods to find depreciation, ∴ their ratios cannot be comparable.
 - 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. This involves making assumptions which tend to create bias or deliberate abuse of the subjectivity inherent in accounting to select accounting policies.

- 8) i) Beta is calculated using regression analysis. This is due to high standard error associated with regression. Also, diversification reduces risk. The variance of returns on individual stock are different to market as a whole.

- 10) i) Systematic risk refers to the risk inherent to the entire market or market segment. It affects the overall market. This type of risk is unpredictable and unavoidable. Cannot be mitigated through diversification, only by hedging or by using correct asset allocation strategy. Specific risk is specific to that particular project and can be diversified away by the company.
- ii) Systematic risk arises due to various external factors and is non-diversifiable in nature. This risk has a tendency to disrupt not just the whole market but an economy too. Major sources of risk are purchasing power, interest rate and inflation risk & unemployment are some common examples. Specific risks are diversifiable in nature. Has a tendency to disrupt wellbeing of an organization & sometimes the industry too. Major sources of risks are risk pertaining to finances, insolvency, business & common examples are higher rate of operational costs, ~~the~~ rise in labour turnover.

11) i) Beta is the measure of the systematic risk of the project relative to the market. The market value of β is 1.

$$\beta_p = \frac{\sigma_{pm}}{\sigma_m^2}$$

σ_{pm} = covariance b/w returns expected from company & returns exp from market

σ_m^2 = Variance of returns expected from the market

ii) $\rightarrow$ looking at company's historical returns on equity and comparing against market returns, subject to variation
 $\rightarrow$ considering the industry beta based on range of companies with similar activities

$\rightarrow$ estimating, based on knowledge and how the industry might react to changes in market

iii) A stock with beta 1 means it behaves in line with the market. Depending on expectations of market movements, to maximize short term gains, you can invest in stocks with higher beta.

A stock with beta -1 means it behaves opposite to the market. if market index improves, the stock will lose its value and vice-versa. if a downturn in market is expected, low beta stocks may be attractive in short to medium term.

v) Cash

2) i) cost of equity = $0.07 + 1.5 \times 0.05 = 0.145$
cost of debt = $0.07 \times (1 - 0.25) = 0.0675$
WACC = $(0.5 \times 0.145) + (0.5 \times 0.0675)$
 $= \boxed{10.625\%}$

ii) $1.5 = \text{ungeared beta} \times (1 + (1/1) \times (0.75))$
ungeared beta = $\frac{1.5}{1.75} = 0.857$

cost of equity = $0.07 + (0.857 \times 0.05)$
 $= \boxed{11.29\%}$

12) (i)

14) i) $\text{Current ratio} = \frac{\text{current assets}}{\text{current liabilities}}$

to assess whether the company will be able to pay its bills over the next few months. Estimate of amount of money due to be received in short-term with an estimate of amount of money paid over same period.

Debtors turnover period = $\frac{\text{trade receivables}}{\text{credit sales}} \times 365$

measure of time taken in days for debtors to settle their balance. ~~it is~~ the shorter the period, the better.

ii) Quick ratio which is equal to $\frac{\text{Current assets} - \text{inventory}}{\text{current liabilities}}$

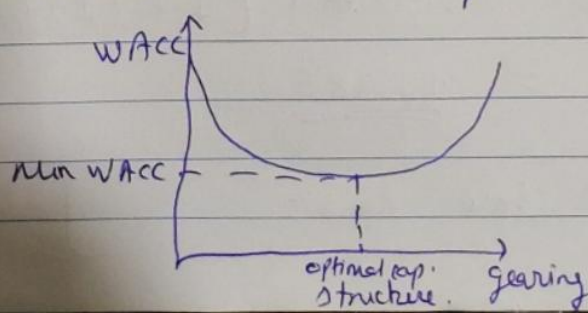
15) i) → to diversify portfolio

→ to maximise return to earn higher returns

→ strategic holding, or personal attachment.

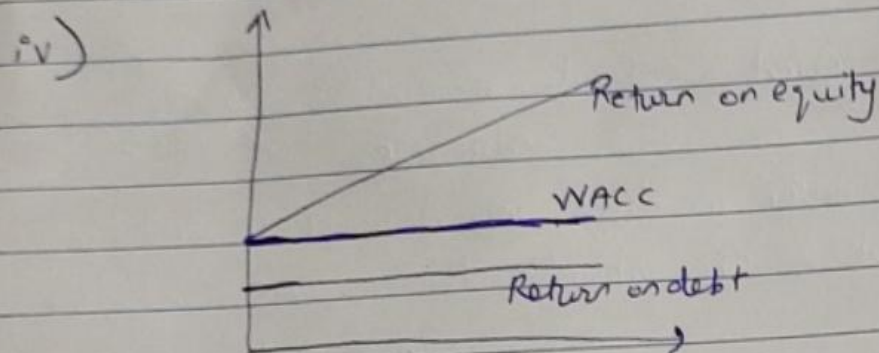
Suitable cost of Capital is above 6%.

ii) As debt increases, WACC should fall as debt is cheaper than equity finance. Increasing in proportion of debt finance increases the risk to shareholders demand a greater return for greater risk. Therefore beyond a certain level of gearing, the downward effect on WACC of increasing debt in business will be more than offset by increase in return required by shareholders.



iii) the market value of any firm is independent of its capital structure.

- There are no taxes in the economy
- unlimited personal & company borrowings is possible at same rate of interest.
- debt is risk-free.
- there is no agency costs.



v) (a) cost of equity = $0.06 + 1.4 \times 0.05$
 $= 13\%$

(b) geared beta = $1.4 \times (1 + (1) \times (0.7))$
 $= 1.4 \times 1.7$
 $= 2.38$

(c) cost of equity = $0.06 + 2.38 \times 0.05$
 $= 17.9\%$

8) ii) ungeared beta = $\frac{\text{geared beta}}{(1 + (\text{debt/equity}) \times (1 - \text{tax rate}))}$
 $= \frac{1.1}{(1 + (0.5 \times 0.7))} = \underline{\underline{0.8148}}$

geared beta for (2:2) = $0.8148 \times (1 + (1 \times 0.7))$
 $= \underline{\underline{1.385}}$