

Business Finance - II

Assignment - I

Ans 1. (D) IRR is the most reliable means of choosing between mutually exclusive projects.

Ans 2. (A) Market Price of Share / Earnings per share.

Ans 3. (D) All of the above

Ans 4. (C) 909000.

Ans 5 (i.) Sales - Cost - tax = $2500 - 1500 - 400$
 $= \underline{\underline{Rs. 600}}$

(ii.) NPV = $1000 (1 - 20\%) = \underline{\underline{Rs. 800}}$

(iii.) NPV = $2500 (1 - 20\%) - 1500 (1 - 20\%)^2$
 $= \underline{\underline{Rs. 1040}}$

~~Ans 6~~ $\Rightarrow$ The NPV has increased by ~~Rs. 20~~ Rs. 240.

Ans 6 The ratios used to analyse a company's efficiency are:-

- (i.) Inventory Turnover Ratio.
- (ii.) Asset Turnover Ratio
- (iii.) Trade Receivables Turnover Ratio
- (iv.) Trade Payables Turnover Ratio

Ques 7 The limitations of the ratio analysis are:-

- a.) False accounting data gives false ratio
- b.) Comparison not possible if different firms adopt different accounting policies.
- c.) Ratio analysis becomes less effective due to price level changes.
- d.) Ratios may be misleading in the absence of absolute data.
- e.) Limited use of a single ratio.
- f.) Window-dressing
- g.) Lack of proper standards.
- h.) Ignores qualitative factors.
- i.) Ratios alone are not adequate for proper conclusions.
- j.) Effect of personal ability and bias of the analyst.

Ques 8 (i) The beta of a stock market indicates how volatile is its price in comparison to the overall stock market. Following are the levels of beta -

- Negative Beta: A beta less than 0, which would indicate an inverse relation to the market, is possible but highly unlikely.
- Beta of 0: Basically, cash cash has a beta of 0.
- Beta between 0 & 1: Companies that are less volatile than the market have a beta of less than 1 ~~but~~ more than 0.
- Beta of 1: It means the stock ~~is~~ mirrors the volatility of whatever index is used to represent the overall market.

- Beta greater 1: This denotes a volatility that is greater than the broad-based index.
- Beta greater than 100: This is impossible, as it indicates volatility that is 100 times greater than the market.

$$(ii) \text{ Geared Beta} = \text{ungeared beta} \times \left[1 + \frac{\text{debt: equity ratio}}{\text{ratio}} \times (1 - \text{tax rate}) \right]$$

→ let ungeared beta = x

→ Current geared beta = 1.1

→ Current debt: Current ~~debt~~ equity = 1:2

→ Tax rate = 30%

$$\rightarrow 1.1 = x \times \left[1 + 1:2 (1 - 30\%) \right]$$

$$x = \frac{1.1}{1 + 1:2 (1 - 30\%)} = \frac{1.1}{1 + \frac{1}{2} (1 - 0.3)}$$

$$x = \frac{1.1}{1.35}$$

$$\Rightarrow \underline{\underline{x = 0.815}}$$

→ New debt: equity = 2:2

$$\rightarrow \text{New geared beta} = 0.815 \left[1 + 2:2 (1 - 30\%) \right]$$

$$= 0.815 (1 + 0.7)$$

$$= 0.815 \times 1.7$$

$$= \underline{\underline{1.3855}}$$

$$\Rightarrow \text{New geared beta} = \underline{\underline{1.4}}$$

Ans 9. (D) In general the Market value of investment trust is not correlated to the net present value.

Ans 10. (i) The shareholders wealth can be maximised by improving the stock price. The problem with this is that stock price is a variable of many things and its value is affected by the smallest news and so the company has to keep all the positive news so that the wealth of the shareholder's can be maximised.

Ans 11 (i) Beta of a stock is a measure of a stock's volatility in relation to the overall market

$$\beta_i = \frac{\rho(R_i, R_m)}{\sigma_{R_m}^2} \times \sigma_i^2$$

ρ = correlation

σ^2 = Standard Deviation

R_i = Return on an individual stock

R_m = Return on overall market.

(ii) β can be determined using the above formula.

(iii) As an active stock market investor, I would invest in a stock with β of 1.

(iv) Cash has a beta of 0. Its value does not change with the movement of the market given that there is no inflation.

Ans 12. (i) Cost of equity = $7\% + 5\%(1.5)$
 $= 14.5\%$

Cost of debt = $9\%(1 - 25\%)$
 $= 6.75\%$

WACC = $\frac{1}{2}(6.75) + \frac{1}{2}(14.5)$
 $= 10.625\%$

(ii) $\beta_G = \beta_{UG} (1 + D/E(1-t))$

$1.5 = \beta_{UG} [1 + 1(1 - 25\%)]$

$1.5 = \beta_{UG} (1.75)$

$\beta_{UG} = \frac{1.5}{1.75} = 0.8571$

New D/E = 0:1

$\therefore \text{New } \beta_G = 0.8571 (1 + 0(1 - 25\%))$
 $= 0.8571$

ROE = $7\% + 5\%(0.8571)$
 $= 11.2857\%$

Ans 13 (i) NPV = $40000 a_{\overline{41}|15\%} = \underline{\underline{1,14,199.1345}}$

- Ans 14. (a) **Current Ratio** = It is a liquidity ratio that measures a company's ability to pay short-term obligations or those due within one year. It tells investors & analysts how a company can minimize the current assets on its balance sheet to satisfy its current debt & other payables.
- (b) **Debtors Turnover Period** = It is an accounting measure used to calculate the average period of time in which the company pay back the debt.

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