

Business Finance -2

Muskaan Puri
57

1. D-IRR is the most reliable means of choosing between mutually exclusive projects.
2. $\rightarrow A \frac{\text{Marketing Price of share}}{\text{Earning Per share}}$
3. $\rightarrow D$ - All of the above
4. $\rightarrow C$ 9,00,000
5.
 - (i) Cash Flow $\Rightarrow$ Sales - Cost $\Rightarrow 2500 - 1500 \Rightarrow 1000$
 Tax deduction $\Rightarrow 1000 - 40\% \Rightarrow 600$
 - (ii) Discount rate $\Rightarrow 20\%$
 Net present value $\Rightarrow \frac{2500}{(1+20\%)} - \frac{1500}{(1+20\%)} - \frac{400}{(1+20\%)} \Rightarrow 500.333$
 - (iii) The net present value of the project will increase due to the increase in the time of the payment.
6. There are several ratio used to measure the efficiency of a business are as follows: -
 - (i) Trade receivable turnover period $\rightarrow$ It is,

6. To measure efficiency, we use the trade payables turnover period, trade receivable turnover period and the inventory turnover period. These ratios help us calculate the cash conversion cycle of a business which is the time taken by the business to convert its investments in inventory and other resources into cashflows from sales. The inventory into sales. The trade receivable turnover period tells us how long trade receivable takes to settle their balance and the trade payable turnover period tells us how long a company takes to pay off its creditors.

7.

- a) Ratio analysis uses historical information that may not give the true picture about the current state of the business. Hence, it does not account for inflation as well.
- b) Ratio analysis relies heavily on the reports provided by the company, so if the reports are found to be misleading then the analysis may also be deemed fallacious.
- c) It does not consider the human element of a firm. Ratio analysis cannot predict how well the company will do based on its leadership and the decisions that will be taken by them in the future.
- d) Changes in accounting policies of a firm from one year to the next years to the latest.
- e) Ratio analysis relies on financial statements as and when published by the firm, so it does

not consider the seasonal changes in business.

8

- 1) β measures the volatility of a stock in relation to the market. Different stocks tend to have different β values as various businesses will have varying levels of profit, desirability, and price movements in the markets.

Stocks can trade at different β as

- They might be of different industries
- The two companies will have different business strategy, and
- Market sentiment towards stock
- Varying degree of performance
- Demand for the stock

$$(11) \quad \text{Gearing beta} = \text{Ungeared beta} + \left(1 + \frac{D}{E}\right) \times (1 - \text{tax})$$

$$1.1 = \text{Ungeared beta} + \left(1 + \frac{1}{2} \times 7\right)$$

$$\text{Ungeared beta} = 0.8148$$

$$\text{New geared beta} = 0.8148 + \left(1 + \frac{2}{2} \times 7\right)$$

$$= 1.385$$

9. Option A.

A - In general the market value of investment trust is lower than the net present value.

10. The first problem is in measuring shareholder wealth. This is clearly indicated by the share

price, but that can be a volatile indicator, that is not necessarily affected by just the company's efforts to manage the shareholder wealth. Furthermore, management decisions that enhance shareholder wealth will only be recognised in the share price once the decision itself is announced. This info information might be withheld for commercial reasons. The second problem is that the directors are often perceived as having their own interests that are at odds with those of the shareholders. They might have an interest in enhancing their own rewards at the expense of the shareholders or of avoiding acceptable risks in order to put their jobs security before the wellbeing of the shareholders.

(11) Given,

Price of the share = 70

$Div_0 = 10$

Growth (g) = 8%

Risk free rate (R_F) = 6%

Risk Premium ($R_M - R_F$) = 5%

$$\text{Expected Dividend } Div_1 = Div_0 * (1 + g) = 10 * 1.08 = 10.8$$

$$\begin{aligned} R_e &= (Div_1 / \text{Price}) + g \\ &= (10.8 / 70) + 0.08 \\ &= 23.43\% \end{aligned}$$

Now, as per CAPM

$$R_e = R_F + (R_M - R_F) * \text{Beta}$$

$$23.43 = 6 + 5 * \text{Beta}$$

$$\text{Hence Beta} = 3.486$$

Now, systematic risk is increased by 80% i.e. Beta is increased by 80%.

$$\text{New Beta} = 6.275$$

$$\begin{aligned}\text{So, new } R_e &= 6 + 5 * 6.275 \\ &= 37.375\%\end{aligned}$$

$$\begin{aligned}\text{New share price} &= \text{Div 1} / (R_e - g) \\ &= 10.8 / (37.375 - .08) \\ &= 36.77\end{aligned}$$

Hence share price is expected to fall from current level of Rs. 70 to Rs. 36.77 i.e. by 33.23%

11.

(i) The beta of a project is a measure of the systematic risk of the project relative to a diversified portfolio of all risky assets. The market would have a beta of 1.

The beta of the company (β_p) is given by the following

$$\beta_p = \frac{\sigma_{pm}}{\sigma^2_m}$$

where .

σ_{pm} is the covariance between the returns expected from the company and the returns expected from the market.

σ_m^2 is the variance of the returns expected from the market.

- (ii) The beta of the company may be measured by
- looking at the company's historical returns on equity and comparing against market returns, but subject to significant variation. ~~for example~~ for example dependent upon the time period considered.
 - considering the industry.