

Cost of capital mini cases assignment

Business



Mini Cases: Cost of Capital Part A: Cost of Debt Mini Case 1: Cost of perpetual/Irredeemable debt Ashok Leyland issued Rs 100 Lakhs 12% debentures of Rs. 100 each. Calculate the cost of debt in each of the following cases. (Assume corporate tax rate being 40%). Case (a) If debentures are issued at par with no floatation cost. Case (b) If debentures are issued at par with 5% floatation cost. Case (c) If debentures are issued at 10% premium with 5% floatation cost. Case (d) If debentures are issued at 10% discount with 5% floatation cost.

Mini Case 2: Cost of debt redeemable [at par] in Lumpsum Ashok Leyland issued Rs 100 Lakhs 12% debentures of Rs. 100 each, redeemable at par after 5 years. Calculate the cost of debt in each of the following cases. (Assume corporate tax rate being 40%). Case (a) If debentures are issued at par with no floatation cost. Case (b) If debentures are issued at par with 5% floatation cost. Case (c) If debentures are issued at 10% premium with 5% floatation cost. Case (d) If debentures are issued at 10% discount with 5% floatation cost.

Mini Case 3: Cost of debt redeemable [at premium] in Lumpsum Ashok Leyland issued Rs 100 Lakhs 12% debentures of Rs. 100 each, redeemable at premium of 5% after 5 years. Calculate the cost of debt in each of the following cases. (Assume corporate tax rate being 40%). Case (a) If debentures are issued at par with no floatation cost. Case (b) If debentures are issued at par with 5% floatation cost. Case (c) If debentures are issued at 10% premium with 5% floatation cost. Case (d) If debentures are issued at 10% discount with 5% floatation cost.

Special Note: Cost of debt redeemable [at discount] in Lumpsum *Note that nobody will subscribe to debt which is redeemable at discount. Special Note: “ Cost of debt” redeemable in Installments: We are not solving cases which deal with determining “ cost of debt” redeemable in Installments in FM-1 course. Part B: Cost of Preference shares Mini Case 1: Cost of perpetual/Irredeemable Preference shares Note* Irredeemable preference shares are cannot be issued in India. Maximum duration of issue can be 20 Years.

Mini Case 2: Cost of Preference shares redeemable [at par] in Lumpsum Ashok Leyland issued Rs 100 Lakhs 12% Preference shares of Rs. 100 each, redeemable at par after 5 years. Calculate the cost of Preference shares in each of the following cases. (Dividend distribution tax being 20%). Case (a) If Preference shares are issued at par with no floatation cost. Case (b) If Preference shares are issued at par with 5% floatation cost. Case (c) If Preference shares are issued at 10% premium with 5% floatation cost.

Case (d) If Preference shares are issued at 10% discount with 5% floatation cost. Mini Case 3: Cost of Preference shares redeemable [at premium] in Lumpsum Ashok Leyland issued Rs 100 Lakhs 12% Preference shares of Rs. 100 each, redeemable at premium of 5% after 5 years. Calculate the cost of Preference shares in each of the following cases. (Dividend distribution tax being 20%). Case (a) If Preference shares are issued at par with no floatation cost. Case (b) If Preference shares are issued at par with 5% floatation cost. Case (c) If Preference shares are issued at 10% premium with 5% floatation cost. Case (d) If Preference shares are issued at 10% discount with 5%

floatation cost. Part C: Cost of Equity Capital (Including Retained Earnings)

Terms useful to study different approaches as to Cost of Equity capital: 1. 2.

3. 4. 5. 6. 7. What is Retention ratio? What is Price-Earnings ratio? What is

the rate of return on retained earnings? What is growth rate? What is

expected dividend? What is current market price? Estimating k_e using

Dividend growth model and CAPM.

Mini case 1: Calculation of retention ratio (Abbreviated as “ b ”) Calculate the

Retention ratio for Dream Ltd: Case (a) Earnings per share (EPS) is Rs. 10,

Dividend per share (DPS) is Rs. 6. Case (b) Dividend Payout ratio is 80% Mini

case 2: Calculation of Price-Earning ratio (P/E ratio) Calculate the Price-

Earning ratio (P/E ratio) in each of the following situations: Case (a) Current

Market price of the share is Rs 50/- & Current Earnings per share (EPS) is Rs.

10, Dividend per share (DPS) is Rs. 6.

Case (b) Rate of return on retained earnings is 25%. Case (c) Current Market

price of the share is Rs 50/- & Current Dividend per share (DPS) is Rs. 10 and

dividend payout ratio is 80%. Mini case 3: Calculation of rate of return on

retained earnings (“ r ”) Calculate the rate of return on retained earnings (“

r ”) in each of the following situations: Case (a) Current Market price of the

share is Rs 50/- & Current Earnings per share (EPS) is Rs. 10, Dividend per

share (DPS) is Rs. 6. Case (b) Price-Earning ratio (P/E ratio) is 4.

Case (c) Current Market price of the share is Rs 50/- & Current Dividend per

share (DPS) is Rs. 10 and dividend payout ratio is 80%. Mini case 4:

Calculation of growth rate (“ g ”) Calculate the growth rate (“ g ”) in each of

the following situations: Case (a) Retention ratio (“ b ”) is 40%, & rate of

return on retained earnings (“ r ”) is 20% Case (b) Dividend payout ratio is 70% & rate of return on retained earnings (“ r ”) is 20% Case (c) Dividend payout ratio is 80%, Price Earning ratio is 8 Case (d) Dividend payout ratio is 90%, Earnings Yield is 20%.

Mini case 5: Expected Dividend (D_1) Calculate the Expected Dividend (D_1) in each of the following cases: Case (a) Present Dividend per share is Rs. 10 & Growth Rate is 8% Case (b) Present Earnings per share is Rs. 10, Dividend payout ratio: 60% & Growth Rate: 8% Mini case 6: Calculation of Current Market Price (P_0) Calculate the Current Market Price (P_0) of an equity share in each of the following alternative cases: Case (a) Price Earning ratio is 5 & Present Earnings per share is Rs. 10. Case (b) Price Earning ratio: 5, Present Dividend per share: Rs. , Dividend payout ratio: 60% Mini case 7: Calculation of “ Cost of Equity” (K_e) Calculate the “ Cost of Equity” (K_e) according to (a) Dividend growth model (b) CAPM Model 1. 2. 3. 4. 5. 6. 7. Current Market Price of an equity share: Rs 100/Expected Earnings per share at the end of the year: Rs 10/Dividend Payout ratio is 80% Growth rate is 6% Rate of return on risk free investment is 8% Rate of return on market portfolio is 18%. Volatility of securities return relative to the return of a broad based market portfolio : 1. 275.