

# [The required rate of return on the stock](https://assignbuster.com/the-requiredrate-of-returnon-the-stock/)

7-2 - Boehm Incorporated is expected to pay a $1. 50 per share dividend at the end of this year (i. e. , D1 = $1. 50). The dividend is expected to grow at a constant rate of 7% a year. The required rate of return on the stock, rs, is 15%. What is the value per share of Boehm’s stock? D1= $1. 50 per share g = 7% rs= 15% What is the value of a share of Boehm Stock? P^0 =   D1 /(rs – g) P^0 =   1. 50/(0. 15-0. 07) P^0 =   $18. 75 7-4 - Nick’s Enchiladas Incorporated has preferred stock outstanding that pays a dividend of $5 at the end of each year. The preferred sells for $50 a share.

What is the stock’s required rate of return? Dividend = $5 Preferred   = $50 What is the stock’s required rate of return ^P 0 = D/rs rs = D/^P 0 rs = 5/50 rs = 0. 10 or 10% 7-5 - A company currently pays a dividend of $2 per share (D0 = $2). It is estimated that the company’s dividend will grow at a rate of 20% per year for the next 2 years, then at a constant rate of 7% thereafter. The company’s stock has a beta of 1. 2, the risk- free rate is 7. 5%, and the market risk premium is 4%. What is your estimate of the stock’s current price? D0 = $2. 00 g = 20% for 2 years g = 7% there after Bi = 1. 2 Rf = 7. 5%

RPm = 4% Rs = Rf +(bi\* RPm) Rs = 7. 5 +(1. 2\*4) Rs = 12. 3 What is your estimate of the stock’s current price? D0 $2. 00 g0 to 1 20. 0% g1 to 2 20. 0% gn 7. 0% rs 12. 3% Year 1 2 D1 D2 Expected dividends $2. 40 $2. 88 Expected P2 $58. 14 PV of expected dividends $4. 42 PV of expected P2 $46. 10 Expected P0 $50. 53 Problems (p. 371) 9-2 After-Tax Cost of Debt LL Incorporated’s currently outstanding 11% coupon bonds have a yield to maturity of 8%. LL believes it could issue new bonds at par that would provide a similar yield to maturity. If its marginal tax rate is 35%, what is LL’s after-tax cost of debt?

After Tax cost of debt = rd \* (1- tx rate) 0. 08 \* (1 - 0. 35) = 0. 08 \* (0. 65) = 0. 052 Answer: 5. 2% 9-4 Cost of Preferred Stock with Flottion Costs Burnwood Tech plans to issue some $60 par preferred stock with a 6% dividend. A similar stock is selling on the market for $70. Burnwood must pay flotation costs of 5% of the issue price. What is the cost of the preferred stock? E= Dividend/ (Market price-Flotation Costs)=(60/6)/(70-(70X0. 05)= 0. 0541= 5. 41 Answer: 5. 41% 9-5 Cost of Equity - DCF Summerdahl Resorts' common stock is currently trading at $36 a share. The stock is expected to pay a dividend of $3. 0 a share at the end of the year (D1 \_ $3. 00), and the dividend is expected to grow at a constant rate of 5% a year. What is the  cost of common equity? P0 = $36; D1 = $3. 00; g = 5%; rs = ? rs = D1/P0+g=(3/36)+0. 05= 0. 01333 Answer: 13. 33% 9-6 Cost of Equity - CAPM Booher Book Stores has a beta of 0. 8. The yield on a 3-month T-bill is 4% and the yield on a 10-year T-bond is 6%. The market risk premium is 5. 5%, and the return on an average stock in the market last year was 15%. What is the estimated cost of common equity using the CAPM? rs = rRF + bi(RPM) = 0. 06 + 0. 8(0. 55) = 0. 14 Answer: 10. 4% 9-7 WACC Shi Importers' balance sheet shows $300 million in debt, $50 million in preferred stock, and $250 million in total common equity. Shi faces a 40% tax rate and the following data: rd \_ 6%, rps \_ 5. 8%, and rs \_ 12%. If Shi has a target capital structure of 30% debt, 5% preferred stock, and 65% common stock, what is Shi's WACC? 30% Debt; 5% Preferred Stock; 65% Equity; rd = 6%; T = 40%; rps = 5. 8%; rs = 12%. WACC = (wd)(rd)(1 - T) + (wps)(rps) + (wce)(rs) WACC = 0. 30(0. 06)(1-0. 40) + 0. 05(0. 058) + 0. 65(0. 12) = 0. 0917 Answer: 9. 17%