

Q1

Company K has just paid a dividend of \$6.75 per share. You project that its dividend grows at a rate of 5%, what should be the fair price of K today if $r = 13.75\%$?

Price today (P_0)

$$P_0 = \frac{D_1}{r-g} = \frac{6.75 \times (1+5\%)}{13.75\% - 5\%} = 81$$

Q2 (Microsoft price and dividends)

Quarters	Dividends	Price	Returns
2009Q4	0.13	28.67	
2010Q1	0.13	25.80	-0.0956
2010Q2	0.13	23.47	-0.0853
2010Q3	0.16	25.26	0.0831
2010Q4	0.16	27.91	0.1112

What are realized returns from 2010Q1 to Q4?

What are the annualized returns?

$$(1-9.56\%) \times (1-8.53\%) \times (1+8.31\%) \times (1+11.12\%) - 1 = -4.37\%$$

Q3

Suppose your company has an equity beta of 0.58 and the current risk-free rate is 6.1%. If the expected market risk premium is 8.6%, what is your cost of equity capital?

$$R_E = R_f + \beta_E \times (E(R_M) - R_f)$$

Note that market risk premium is $(E(R_M) - R_f)$, which is 8.6%.

The cost of equity capital R_E is
 $R_E = 6.1\% + 0.58 \times (8.6\%) = 11.1\%$