

## Cost of capital formulas

$$\text{Cost of debt} = r_d^* = r_d (1 - t)$$

t = marginal tax rate

$r_d$  = yield on debt

$$\text{Cost of preferred equity} = r_p = \frac{D_p}{P_0}$$

$D_p$  = periodic dividend

$P_0$  = current price

$$\text{Cost of equity (DVM)} = r_e = (D_1 / P) + g$$

g = expected growth rate of dividends

$D_1$  = next period's dividend

$P_0$  = current price

$$\text{Cost of equity (CAPM)} = r_e = r_f + \beta (r_m - r_f)$$

$r_f$  = expected risk free rate of interest

B = beta

$r_m$  = expected return on the market

$$\text{WACC} = w_d r_d^* + w_p r_p + w_e r_e$$

$w_d$  is the proportion of debt in the capital structure

$w_p$  is the proportion of preferred stock in the capital structure

$w_e$  is the proportion of common stock in the capital structure.