

## FIN401 - Weighted Average Cost of Capital (WACC) Template

$$\text{WACC} = (W_E)(R_E) + (W_D)(R_D)(1 - \text{Tax Rate}) + (W_P)(R_P)$$

Note: If the question doesn't mention anything about Preferred Shares, simply exclude the end of the formula.

Where  $(W_E)$  = Weight of Equity       $(W_D)$  = Weight of Debt       $(W_P)$  = Weight of Preferred  
 $(R_E)$  = Cost of Equity       $(R_D)$  = Cost of Debt       $(R_P)$  = Cost of Preferred

Step 1: Find the Weights ( $W_E$ ,  $W_D$ ,  $W_P$ )

a) Market Value of Equity (MVE) = (Number of Shares Outstanding)(Stock Price)

Market Value of Debt (MVD) = (Number of Bonds Outstanding)(PV)

Market Value of Preferred (MVP) = (Number of Preferred Shares Outstanding)(Stock Price)

b) Firm Value (V) = MVE + MVD + MVP

$$W_E = \text{MVE} / V$$

$$W_D = \text{MVD} / V$$

$$W_P = \text{MVP} / V$$

Step 2: Find the Costs of Capital ( $R_E$ ,  $R_D$ ,  $R_P$ )

a)  $R_E = \frac{D_1}{P_0} + g$       OR       $R_E = R_f + B(\text{Erm} - R_f)$

b)  $R_D$  is found using the TVM Function of your financial calculator

N = Years      FV = 1000      PMT = (FV)(Coupon Rate)      P/Y = 1      C/Y = 1      PV = Given

I = ?      ->       $R_D = I$

Note: If the Bonds are semi-annual, then multiply N and I by 2, and divide PMT by 2.

c)  $R_P = \frac{D_1}{P_0} + g$

Step 3: Plug values into WACC formula and Solve.