

FIN401 - Capital Structure Template

(W_E) = Weight of Equity

(W_D) = Weight of Debt

(V_U) = Value of Unlevered Firm (V_L) = Value of Levered Firm

(R_E) = Cost of Equity

(R_D) = Cost of Debt

(R_U) = Cost of Unlevered Equity

Note: Each step will have two versions of the same formula. The first version is the formula WITHOUT TAXES (M&M Case 1), the second version is the formula WITH TAXES (M&M Case 2).

Step 1: Find V_U (Value of the unlevered firm)

[This is an M&M Prop 1 Step](#)

$$V_U = \text{EBIT} / R_U$$

$$V_U = \text{EBIT} (1 - \text{Tax}) / R_U$$

Step 2: Find V_L (Value of the levered firm) & then the new Equity Value

[This is an M&M Prop 1 Step](#)

$$V_L = V_U$$

$$\text{Equity} = V_L - \text{Debt}$$

$$V_L = V_U + (\text{Debt})(\text{Tax Rate})$$

$$\text{Equity} = V_L - \text{Debt}$$

Note: M&M Proposition 1 speaks of Firm Value, thus, Step 1 and 2 relate to M&M Proposition 1.

Step 3: Find R_E (Cost of Equity)

[This is an M&M Prop 2 Step](#)

$$R_E = R_U + (R_U - R_D)(\text{Debt}/\text{Equity})$$

$$R_E = R_U + (R_U - R_D)(\text{Debt}/\text{Equity})(1 - \text{Tax Rate})$$

Step 4: Find WACC

[This is an M&M Prop 2 Step](#)

$$\text{WACC} = (W_E)(R_E) + (W_D)(R_D)$$

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

Note: M&M Proposition 2 speaks of WACC, thus, Step 3 and 4 relate to M&M Proposition 2.