

## **DCF Question: Walk me through a DCF Model**

4 stages to a discounted cash flow:

### **1. Project Unlevered Free Cash Flow (UFCF) 5-10 yrs into the future**

- a. Use UFCF because you want to obtain value of firm's core operations regardless of capital structure
- b. Project 5-10 years into future because after that period, you can assume a constant growth rate ( $g \leq \text{gdp}$ )
- c.  $\text{UFCF} = \text{EBIT}(1-t) + \text{D\&A} - \text{CapEx} - \Delta\text{NWC}$

### **2. Calculate Terminal Value**

- a. Exit Multiple
- b. Perpetuity Method:  $\frac{\text{FCF}_n(1+g)}{\text{WACC}-g}$

### **3. Establish WACC**

- a.  $\text{WACC} = (w_d)(r_d)(1-t) + (w_e)(r_e) + (w_p)(r_p)$
- b.  $r_d = \text{average rate on firm's outstanding long term debt}$
- c.  $r_e = \text{CAPM} = r_f + \beta(r_m - r_f)$
- d. Discount @ WACC because UFCF is cash available to both debt and equity holders, so discount rate must reflect cost of debt ( $r_d$ ) and cost of equity ( $r_e$ )

### **4. Discount Cash Flows to obtain Enterprise Value**