

FIN 533
Test 4 equations

$$V_0 = \sum_{t=1}^N \frac{D_t}{(1+k)^t} + \frac{V_N}{(1+k)^N}$$

$$V_0 = \frac{D_0(1+g)}{(k-g)} = \frac{D_1}{(k-g)}$$

$$V_N = \frac{D_{N+1}}{(k-g)}$$

$$P_0 = \frac{E_1}{k} + PVGO$$

$$g = ROE_1(b)$$

$$k = k_{rf} + \beta(k_M - k_{rf})$$

$$\frac{P}{E_0} = \frac{\text{payout ratio}(1+g)}{k-g}$$

$$\frac{P}{E_1} = \frac{1-b}{k-ROE(b)} = \frac{\text{payout ratio}}{k-g}$$

$$PEG = \frac{PE}{g}$$

$$HPR = \frac{\text{Cash flows} + (\text{sell price} - \text{buy price})}{\text{buy price}}$$

$$V_N = \frac{FCFE_{N+1}}{(k-g)}$$

$$C \geq S_0 - PV(X) - PV(D)$$

$$H = \frac{C_u - C_d}{uS_0 - dS_0}$$

$$H = \frac{C_{uu} - C_{ud}}{uuS_0 - udS_0}$$

$$C_0 = S_0 N(d_1) - Xe^{-rt} N(d_2)$$

$$d_1 = \frac{\ln(S_0 / X) + (r + \frac{\sigma^2}{2})T}{\sigma\sqrt{T}}$$

$$d_2 = d_1 - \sigma\sqrt{T}$$

$$P = C + PV(X) - S_0 = C + Xe^{-rt} - S_0$$

$$P = Ke^{-rt} [1 - N(d_2)] - S_0 [1 - N(d_1)]$$

$$\text{Delta} = \frac{\text{change in option value}}{\text{change in value of stock}}$$

$$\frac{(F_0 + D) - S_0}{S_0} = r_f$$