Algunas Formulas Útiles:

$$\text{NPV} = \sum_{k=1}^{n} \frac{c}{(1+r)^k} = \frac{c}{r}\left[1 - \frac{1}{(1+r)^n}\right]$$

$$\text{NPV} = \sum_{k=1}^{\infty} \frac{c}{(1+r)^k} = \frac{c}{r}$$

$$\text{NPV} = \sum_{k=1}^{\infty} \frac{c(1+g)^{k-1}}{(1+r)^k} = \frac{c}{r-g}; r > g$$

$$MacD = \frac{\sum_{t=1}^{T} t \cdot PV_t}{P}$$

$$ModD = \frac{MacD}{1+y}$$

$$Convexity = \frac{1}{P \cdot (1+y)^2} \cdot \sum_{t=1}^{T} \frac{CF_t}{(1+y)^t} \cdot (t^2 + t)$$

$$\Delta P = \left[(-ModD \cdot \Delta y) + \frac{1}{2} \cdot Cv \cdot (\Delta y)^2\right] \cdot P$$

$$MacD(P) = \sum_{i=1}^{n} w_i \cdot MacD_i$$

$$C_i = \frac{M_i}{P_i}$$