

Selected Formulae for “Introduction to Corporate Finance”

$$AAR = \frac{Avg. NI}{Avg. Inv.}$$

$$EAR = \left(1 + \frac{r}{m}\right)^m - 1$$

$$FV = C_0(1+r)^T$$

$$FV = C_0 \left(1 + \frac{r}{m}\right)^{mT}$$

$$FV = C_0 e^{rT}$$

$$FV = C \left[\frac{(1+r)^T}{r} - \frac{1}{r} \right] = C \left[\frac{(1+r)^T - 1}{r} \right]$$

$$NPV = C_0 + \sum_{t=1}^T \frac{C_t}{(1+r)^t}$$

$$NPV = C_0 + \sum_{t=1}^T \frac{C_t}{(1+IRR)^t} := 0$$

$$P_0 = \frac{D_1}{1+r} + \frac{P_1}{1+r}$$

$$P_0 = \sum_{t=1}^{\infty} \frac{D_t}{(1+r)^t}$$

$$P_0 = \frac{D_1}{r}$$

$$P_0 = \frac{D_1}{r-g}$$

$$P_0 = \sum_{t=1}^T \frac{D_1(1+g_1)^t}{(1+r)^t} + \frac{D_{T+1}}{(1+r)^T} + \frac{r-g_2}{(1+r)^T}$$

$$PI = \frac{\sum_{t=1}^T \frac{C_t}{(1+r)^t}}{C_0}$$

$$PV = \frac{C_T}{(1+r)^T}$$

$$PV = \frac{C}{r}$$

$$PV = \frac{C}{r-g}$$

$$PV = C \left[\frac{1}{r} - \frac{1}{r(1+r)^T} \right] = C \left[\frac{1 - \frac{1}{(1+r)^T}}{r} \right]$$

$$PV = C \left[\frac{1 - \left(\frac{1+g}{1+r}\right)^T}{r-g} \right]$$

$$PV = C_0 + \sum_{t=1}^T \frac{C_t}{(1+APR)^t}$$

$$PV = \frac{F}{(1+r)^T}$$

$$PV = C \cdot A_r^T + \frac{F}{(1+r)^T}$$

$$PV = \frac{C}{r}$$

$$r^{real} = \frac{1+r^{nom}}{1+inf} - 1 \approx r^{nom} - inf$$

NB: Although we did our best to avoid typing errors, we do not guarantee that this compilation is free of them. You should compare the above formulae to those printed in the textbook(s) underlying the course before using them.