

Party A: $\overbrace{5\% \text{ p.a.}}^{3m + 2\%}$

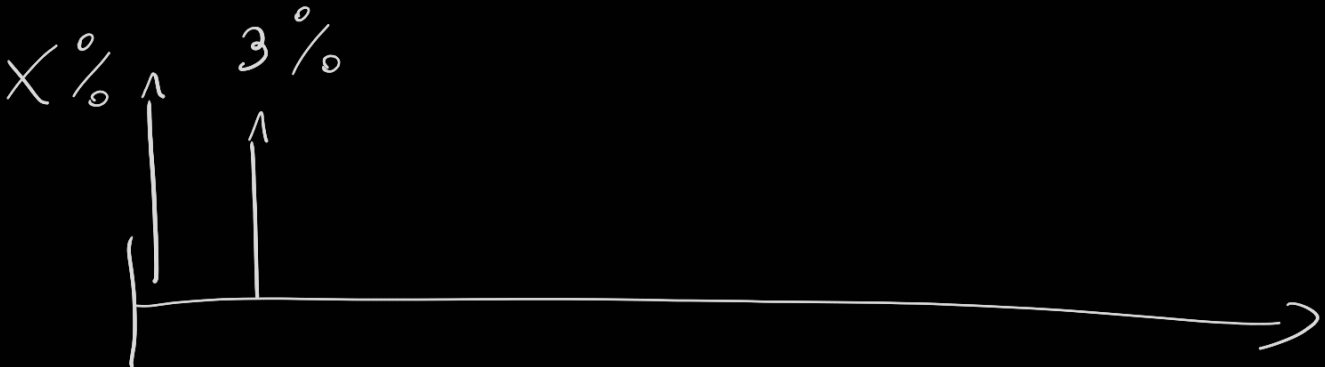


$$NPV = 1 - B(0, T_N) +$$

$$\sum \delta_i \cdot \delta \cdot B(0, T_i)$$

$$\delta_{\text{p.a.}} BPV^{3m}$$

Party B:



Up to & including 5y

$\int 3\% \quad 1^{\text{st}} \text{ quarter}$

$$\left(\max(3m + 1.1\%, 4.3\%) \text{ next } 3 \right)$$

After 5 year end upto (including) 10y

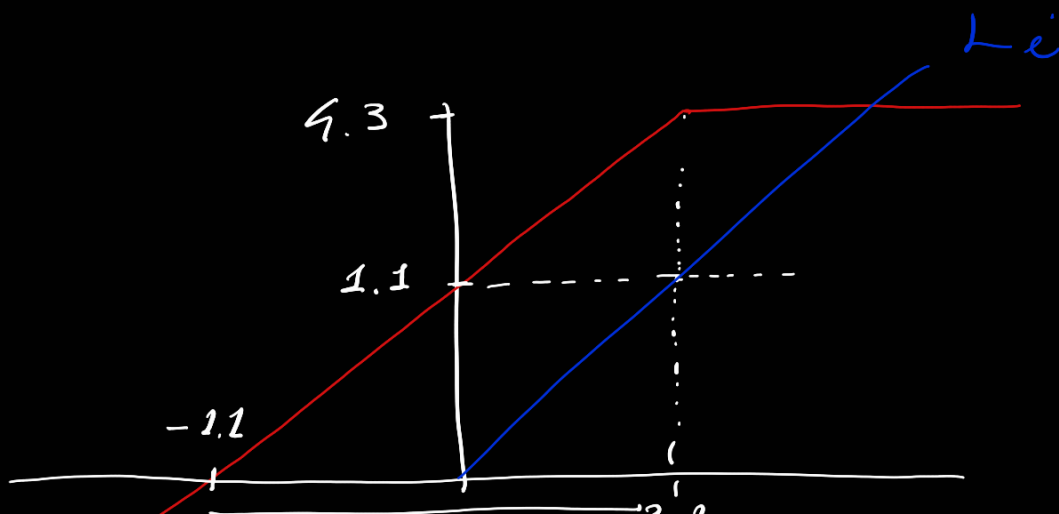
$$\begin{cases} 3\% \\ \max(3m + 1.10\%, 4.6\%) \end{cases}$$

After 10y:

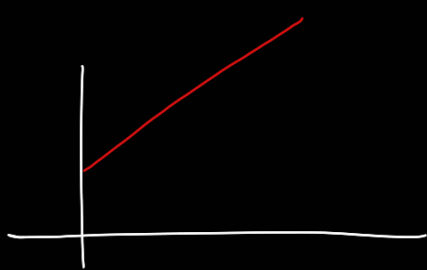
$$\begin{cases} 3\% \\ \max(3m + 1.10\%, 5.10\%) \end{cases}$$

$$NPV^B = X_{100} + \sum_{i=0}^{5y} \overbrace{\delta(T_i, T_{i+3m}) B(0, T_{i+3m})}^{Q_1} \cdot 3\%$$

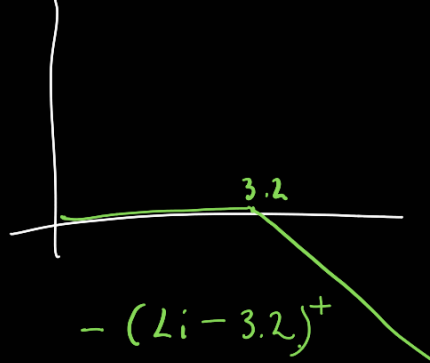
$$Q_2 \sum_{i=0}^{5y} \delta(T_{i+3m}, T_{i+6m}) E_0 \left\{ D(0, T_{i+6m}) \cdot \min(L(0, T_{i+3m}, T_{i+6m}) + 1.1\%, 4.3\%) \right\}$$



$$\min(L_i + 1.1\%, 4.3\%)$$



$$(L_i + 1.1\%)$$



$$-(L_i - 3.2)^+$$

$$L_i + 1.1\% - \text{Caplet}(\tilde{K}) \quad \tilde{K} = 3.2\%$$

$$\text{Caplet}_{6m} = B(T_0, T_{6m}) \delta(3m, 6m) \left\{ L(t_0; 3m, 6m) - K \right\} N(d_n) \quad d_n = \frac{L(3m, 6m) - K}{\sigma \sqrt{3m - T_0}}$$

$$T = [3m, 6m, 9m, 12m]$$

$$\delta = [3m - 0, 6m - 3m, 9m - 6m, 12m - 9m]$$

$$DF = [B(3m), B(6m), B(9m), B(12m)]$$

$$Bf = [B(0, 3m), B(3m, 6m), B(6m, 9m), B(9m, 12m)]$$

$$L = [L(0, 3m), L(3m, 6m), B(6m, 9m), L(9m, 12m)]$$