

SOLUZIONE MATEMATICA FINANZIARIA

03/08/2014

EX1) $100.000,00 \left[(1+i_s) + 2(i_s - 2\%) \right] = 112.930,75$

ovvero $i_s = 0.044$

M = ? $100.000,00 \left[1 + 6(i_s + 6\%) \right] = 130.261,50$

EX2) $3 R_m \cdot \frac{(1+i_{te})^{100} - 1}{i_{te}} = 200.000,00$ DA CUI

$$R_m = \frac{200.000,00}{3 \cdot \frac{(1+i_{te})^{100} - 1}{i_{te}}} = \frac{200.000,00}{3 \cdot \left[(1+i_{te})^{100} - 1 \right]} =$$

$$= \frac{200.000,00}{\left[(1+i_{te})^{100} - 1 \right]} \cdot \left[(1+i_{te})^{\frac{1}{3}} - 1 \right] \approx 53,166$$

EX3) $C = 15.000$ $\frac{(1+i_{te})^{27} - 1}{i_{te}} = 2\%$ $T = 27$ mesi

$$M = C \left\{ 1 + \frac{(1+i_{te})^{27} - 1}{i_{te}} \left[(1+i_{te})^{\frac{25}{3}} + (1+i_{te})^{\frac{23}{3}} + (1+i_{te})^{\frac{21}{3}} + (1+i_{te})^{\frac{19}{3}} + \right. \right.$$

$$+ (1+i_{te})^{\frac{17}{3}} + (1+i_{te})^{\frac{15}{3}} + (1+i_{te})^{\frac{13}{3}} + (1+i_{te})^{\frac{11}{3}} + (1+i_{te})^{\frac{9}{3}} +$$

$$\left. + (1+i_{te})^{\frac{7}{3}} + (1+i_{te})^{\frac{5}{3}} + (1+i_{te})^{\frac{3}{3}} + (1+i_{te})^{\frac{1}{3}} \right] \right\} +$$

$$+ C \left[\left(1 + \frac{(1+i_{te})^{27} - 1}{i_{te}} \right)^{\frac{1}{2}} - 1 \right]$$

(Ex 4) @, 0 $\mu=10$ $t = \text{even}$ metal. value

$$C_0 = \frac{\bar{C}}{10}; \quad \bar{C} = C(1+i)^2 \quad R_1 = I_1 + C_0; \quad I_1 = \bar{C} \cdot i$$

$$C^{(2)} = \bar{C} - C_0; \quad R_2 = I_2 + C_0; \quad I_2 = C^{(1)} \cdot i; \quad C^{(2)} = C^{(1)} - C_0$$

$$t=12 \quad R_{10} = I_{10} + C_0$$

$$t=4 \quad I_2 = 0 \Rightarrow \bar{C}^{(2)} = C^{(2)} - C_0 + I_2$$

ann. finanzia $R = \frac{\bar{C}^{(2)}}{0.87i}; \quad \bar{I}_3 = \bar{C}^{(2)} \cdot i; \quad \bar{C}_3 = R - \bar{I}_3;$
(3° - 10°)

$$\bar{C}^{(3)} = \bar{C}^{(2)} - \bar{C}_3 \quad \dots \quad t=12 \quad R, \quad \bar{I}_{10} = \bar{C}^{(3)} \cdot i; \quad \bar{C}_{10} = R - \bar{I}_{10}$$

$t=9 \quad 7^\circ R=0$ counting quello finanzia costante e
al $T=12$ insieme alle 10° rete nasce quello del tempo $9 (k 7^a)$
capitalemp:

$$t=12 \quad \tilde{R} = R + R(1+i)^3$$

$$CF: \{ (-C, 0) \text{ oppure } (-\bar{C}, 2) (R_1, 3) (C_0, 4) (R_1, 5) (R_6) (R_7) \\ (R_8) (0, 9) (R_{10}) (R_{11}) (\tilde{R}, 12) \}$$

$$A^{(2)}(i_1) = R_1(1+i_1)^{-1} + C_0(1+i_1)^{-2} + R[(1+i_1)^{-3} + (1+i_1)^{-4} + (1+i_1)^{-5} + \\ (1+i_1)^{-6} + (1+i_1)^{-7} + (1+i_1)^{-8} + (1+i_1)^{-9} + (1+i_1)^{-10}] + \tilde{R}(1+i_1)^{-11}$$

Usa il tuo - - - - -