

a) $k_b = ?$

$$B_0 = A_t \cdot \overline{IV}_{k_b}^t \rightarrow$$

$$\overline{IV}_{k_b}^t = \frac{B_0}{A_t}$$

$$\overline{IV}_{k_b}^{10} = \frac{8000}{1600}$$

$$\overline{IV}_{k_b}^{10} = 5$$

$$y_1 = k_{b1} = 15\%$$

$$x_1 = \overline{IV}_{15}^{10} = 5,019$$

$$y_2 = k_{b2} = 16\%$$

$$x = \frac{5}{\overline{IV}_{16}^{10}} = 4,833$$

$$y(k_b) = y_1 + \frac{y_2 - y_1}{x_2 - x_1} (x - x_1)$$

$$y(k_b) = 15 + \frac{16 - 15}{4,833 - 5,019} (5 - 5,019)$$

$$y(k_b) = 15,10\%$$

b) $i = ?$

$$A_t = N \cdot \overline{V}_i^t \rightarrow$$

$$\overline{V}_i^t = \frac{A_t}{N}$$

$$\overline{V}_i^{10} = \frac{1600}{10000}$$

$$\overline{V}_i^{10} = 0,16$$

$$y_1 = i_1 = 9\%$$

$$x_1 = \overline{V}_9^{10} = 0,156$$

$$y_2 = i_2 = 10\%$$

$$x_2 = \overline{V}_{10}^{10} = 0,163$$

$$y(i) = 9 + \frac{10 - 9}{0,163 - 0,156} (0,16 - 0,156)$$

$$y(i) = 9,57\%$$