

$$\begin{cases} N_{n+1} = N_n + N_n K p \left(1 - \frac{N_n + r \sum_{i=0}^{n-1} N_i}{C_n} \right) - N_n r \\ C_{n+1} = C_n + (N_{n+1} - N_n (1 - r)) K \left(1 - \frac{C_n}{T} \right) \end{cases}$$