$$S(x) = \prod_{i=1}^{x} (1 - B_i) + \sum_{i=1}^{x} B_i \cdot e^{(i - x - 1) \cdot r} \cdot \prod_{j=1}^{i-1} (1 - B_j)$$

$$B_x = \begin{cases} 0 & \text{if } x < -\frac{b}{a} = t_0 \\ ax + b & \text{if } -\frac{b}{a} \le x \le \frac{1 - b}{a} \\ 1 & \text{if } x > \frac{1 - b}{a} = t_1 \end{cases}$$

$$(1)$$

$$S(x) = \prod_{i=1}^{\min(x,t_1)} (1 - ai - b) + \sum_{i=1}^{\min(x,t_1)} (ai + b) \cdot e^{(i-x-1)r} \cdot \prod_{j=1}^{i-1} (1 - aj - b) \quad (2)$$