

$$T_{r=0} \begin{bmatrix} i_c, n_c \\ i_o, n_o \end{bmatrix} = \left(1 - \frac{n_c - 1}{N}\right) \frac{n_c - i_c}{n_c} \sum_{r=0}^{r_{max}} T_r \begin{bmatrix} i_c, n_c - 1 \\ i_o, n_o - 1 \end{bmatrix} \quad \begin{array}{c} \text{Diagram (A)} \end{array} \quad (A)$$

$$+ \frac{n_c - i_c}{N} \sum_{r=0}^{r_{max}} T_r \begin{bmatrix} i_c, n_c \\ i_o, n_o - 1 \end{bmatrix} \quad \begin{array}{c} \text{Diagram (B)} \end{array} \quad (B)$$

$$+ \left(1 - \frac{n_c - 1}{N}\right) \frac{i_c}{n_c} (1 - s) \sum_{r=0}^{r_{max}} \left(\frac{s}{1 - s}\right)^{\delta_{r, r_{max}}} T_r \begin{bmatrix} i_c - 1, n_c - 1 \\ i_o - 1, n_o - 1 \end{bmatrix} \quad \begin{array}{c} \text{Diagram (C)} \end{array} \quad (C)$$

$$+ \frac{i_c}{N} (1 - s) \sum_{r=0}^{r_{max}} \left(\frac{s}{1 - s}\right)^{\delta_{r, r_{max}}} T_r \begin{bmatrix} i_c, n_c \\ i_o - 1, n_o - 1 \end{bmatrix} \quad \begin{array}{c} \text{Diagram (D)} \end{array} \quad (D)$$

$$T_r \begin{bmatrix} i_c, n_c \\ i_o, n_o \end{bmatrix} = \left(1 - \frac{n_c - 1}{N}\right) \frac{i_c}{n_c} s T_{r-1} \begin{bmatrix} i_c - 1, n_c - 1 \\ i_o, n_o \end{bmatrix} \quad \begin{array}{c} \text{Diagram (rC)} \end{array} \quad (rC)$$

$$+ \frac{i_c}{N} s T_{r-1} \begin{bmatrix} i_c, n_c \\ i_o, n_o \end{bmatrix} \quad \begin{array}{c} \text{Diagram (rD)} \end{array} \quad (rD)$$