$$+\left(1-\frac{n_{c}-1}{N}\right)\frac{i_{c}}{n_{c}}(1-s)\sum_{t=0}^{t_{max}}P_{f,t}\left[\frac{i_{o}-1}{n_{o}-1}\left|\frac{i_{c}-1}{n_{c}-1}\right|\right]$$

$$+\frac{i_{c}}{N}(1-s)\sum_{t=0}^{t_{max}}P_{f,t}\left[\frac{i_{o}-1}{n_{o}-1}\left|\frac{i_{c}}{n_{c}}\right|\right]$$

$$+\frac{n_{c}-i_{c}}{N}\sum_{t=0}^{t_{max}}P_{f,t}\left[\frac{i_{o}}{n_{o}-1}\left|\frac{i_{c}}{n_{c}}\right|\right]$$

$$+\left(1-\frac{n_{c}-1}{N}\right)\frac{i_{c}}{n_{c}}sP_{f,t_{max}}\left[\frac{i_{o}-1}{n_{o}-1}\left|\frac{i_{c}-1}{n_{c}-1}\right|\right]$$

$$+\frac{i_{c}}{N}sP_{f,t_{max}}\left[\frac{i_{o}-1}{n_{o}-1}\left|\frac{i_{c}}{n_{c}}\right|\right]$$

$$P_{f,t}\left[\frac{i_{o}}{n_{o}}\right] = \left(1-\frac{n_{c}-1}{N}\right)\frac{i_{c}}{n_{c}}sP_{f,t_{max}}\left[\frac{i_{o}}{n_{o}-1}\left|\frac{i_{c}-1}{n_{c}}\right|\right]$$

}; ...]

t-1

 $P_0\left[\frac{i_o}{n_o}\left|\frac{i_c}{n_c}\right|\right] = \left(1 - \frac{n_c - 1}{N}\right)\frac{n_c - i_c}{n_c}\sum_{t=0}^{t_{max}}P_{f,t}\left[\frac{i_o}{n_o - 1}\left|\frac{i_c}{n_c - 1}\right|\right]$

$$+\frac{{}^{\circ}_{c}}{N}sP_{f,t_{max}}\left[\frac{\overrightarrow{s_{o}}}{n_{o}-1}\Big|\frac{\overrightarrow{s_{c}}}{n_{c}}\right]$$

$$P_{f,t}\left[\frac{\overrightarrow{i_{o}}}{n_{o}}\Big|\frac{i_{c}}{n_{c}}\right] = \left(1-\frac{n_{c}-1}{N}\right)\frac{i_{c}}{n_{c}}sP_{f,t-1}\left[\frac{\overrightarrow{i_{o}}}{n_{o}}\Big|\frac{i_{c}-1}{n_{c}-1}\right]$$

 $+\frac{i_c}{N}sP_{f,t-1}\left|\frac{i_o}{n_c}\left|\frac{i_c}{n_c}\right|\right|$

 $P_{f,t=0} = P_{0,t_{max}} \left| \frac{i_o}{n} \right| \frac{i_c}{n} \right|$