$$\theta_{ij}^{U}(\rho) = \rho_i, \text{ if } S_j > S_i, \tag{2.9}$$

$$\theta_{ij}^A(\rho) = \frac{\rho_i + \rho_j}{2} \tag{2.10}$$

$$\theta_{ij}(\rho) = \begin{cases} \theta_{ij}(\rho) = \rho_i, & \text{if } \beta_j > \beta_i, \\ \theta_{ij}^A(\rho) = \frac{\rho_i + \rho_j}{2} & (2.10) \\ \theta_{ij}^L(\rho) = \frac{\rho_i - \rho_j}{\log(\rho_i) - \log(\rho_j)}. & (2.11) \end{cases}$$

(1)

$$\oint \theta_{ij}^U(\rho) = \rho_i, \text{ if } S_j > S_i,$$
(2)

$$\theta_{ij}^A(\rho) = \frac{\rho_i + \rho_j}{2} \tag{3}$$

$$\theta_{ij}(\rho) = \begin{cases} \theta_{ij}^{U}(\rho) = \rho_i, & \text{if } S_j > S_i, \\ \theta_{ij}^{A}(\rho) = \frac{\rho_i + \rho_j}{2} & \text{(3)} \\ \theta_{ij}^{L}(\rho) = \frac{\rho_i - \rho_j}{\log(\rho_i) - \log(\rho_j)}. & \text{(4)} \end{cases}$$

(5)

$$\theta_{ij}^{U}(\rho) = \rho_i, \text{ if } S_j > S_i, \tag{6a}$$

$$\theta_{ij}^{A}(\rho) = \frac{\rho_i + \rho_j}{2} \tag{6b}$$

$$\theta_{ij}(\rho) = \begin{cases} \theta_{ij}(\rho) = \rho_i, & \text{if } S_j > S_i, \\ \theta_{ij}^A(\rho) = \frac{\rho_i + \rho_j}{2} & \text{(6b)} \\ \theta_{ij}^L(\rho) = \frac{\rho_i - \rho_j}{\log(\rho_i) - \log(\rho_j)}. & \text{(6c)} \end{cases}$$

(6d)