

$$\tilde{P}_3 = \frac{w_2 P_2 + P_3}{1 + w_2}$$

$$\tilde{P}_2 = \frac{P_1 + w_2 P_2}{1 + w_2}$$

$$\tilde{P}_4 = P_3 \quad \tilde{w}_2 = \tilde{w}_3 = \frac{1}{2}(1 + w_2) \quad \tilde{P}_1 = P_1$$

$$\tilde{w}_1 = \tilde{w}_4 = 1$$

$$\theta$$