

$$Q\theta // N_{w_1 u_2 \rightarrow 3}$$

$$\begin{aligned} & \frac{1}{1+b_3 f_{2,1}} \mathbb{E} \left[c_1 f_1 + c_2 f_2 + c_3 f_3 + u_1 w_2 f_{1,2} + u_1 w_3 f_{1,3} + \right. \\ & \frac{u_3 w_3 f_{2,1}}{1+b_3 f_{2,1}} + \frac{u_3 (w_2 f_{2,2} + w_3 f_{2,3})}{1+b_3 f_{2,1}} + \frac{w_3 (u_1 f_{1,1} + u_3 f_{3,1})}{1+b_3 f_{2,1}} - \\ & \left. \frac{b_3 (w_2 f_{2,2} + w_3 f_{2,3}) (u_1 f_{1,1} + u_3 f_{3,1})}{1+b_3 f_{2,1}} + u_3 w_2 f_{3,2} + u_3 w_3 f_{3,3} \right] \end{aligned}$$