

$$x_{p,q}^{f,g,f} = x_{q,p}^{f,g,f}$$

$$\begin{aligned} & \psi_f^{-1}(\text{W}(q) \cdot [\text{W}(p) \cdot [\psi_f(x^f) - \psi_f(\rho^{f \rightarrow g})] + \psi_g(\rho^{g \leftarrow f}) - \psi_g(\rho^{g \rightarrow f}) + \frac{1}{W(q)} \cdot \psi_g(\rho^{f \leftarrow g})]) = \\ & \psi_f^{-1}(\text{W}(p) \cdot [\text{W}(q) \cdot [\psi_f(x^f) - \psi_f(\rho^{f \rightarrow g})] + \psi_g(\rho^{g \leftarrow f}) - \psi_g(\rho^{g \rightarrow f}) + \frac{1}{W(p)} \cdot \psi_g(\rho^{f \leftarrow g})]) \end{aligned}$$

$$\begin{aligned} & \psi_f^{-1}(\text{W}(p) \cdot \text{W}(q) \cdot \psi_f(x^f) - \text{W}(p) \cdot \text{W}(q) \cdot \psi_f(\rho^{f \rightarrow g}) + \text{W}(q) \cdot \psi_g(\rho^{g \leftarrow f}) - \text{W}(q) \cdot \psi_g(\rho^{g \rightarrow f}) + \psi_g(\rho^{f \leftarrow g})) = \\ & \psi_f^{-1}(\text{W}(p) \cdot \text{W}(q) \cdot \psi_f(x^f) - \text{W}(p) \cdot \text{W}(q) \cdot \psi_f(\rho^{f \rightarrow g}) + \text{W}(p) \cdot \psi_g(\rho^{g \leftarrow f}) - \text{W}(p) \cdot \psi_g(\rho^{g \rightarrow f}) + \psi_g(\rho^{f \leftarrow g})) \end{aligned}$$

$$\begin{aligned} & \psi_f^{-1}(W(p) \cdot W(q) \cdot \psi_f(x^f) - W(p) \cdot W(q) \cdot \psi_f(\rho^{f \rightarrow g}) + W(q) \cdot \psi_g(\rho^{g \leftarrow f}) - W(q) \cdot \psi_g(\rho^{g \rightarrow f}) + \psi_g(\rho^{f \leftarrow g})) = \\ & \psi_f^{-1}(W(p) \cdot W(q) \cdot \psi_f(x^f) - W(p) \cdot W(q) \cdot \psi_f(\rho^{f \rightarrow g}) + W(p) \cdot \psi_g(\rho^{g \leftarrow f}) - W(p) \cdot \psi_g(\rho^{g \rightarrow f}) + \psi_g(\rho^{f \leftarrow g})) \end{aligned}$$

$$\begin{aligned} x_{p,q}^{f,g,f} &= \psi_f^{-1}(W(q) \cdot [\psi_g(x_p^{f,g}) - \psi_g(\rho^{g \rightarrow f})] + \psi_g(\rho^{f \leftarrow g})) \\ x_{p,q}^{f,g,f} &= \psi_f^{-1}(W(q) \cdot [\psi_g(\psi_g^{-1}(W(p) \cdot [\psi_f(x^f) - \psi_f(\rho^{f \rightarrow g})] + \psi_g(\rho^{g \leftarrow f}))) - \psi_g(\rho^{g \rightarrow f})] + \psi_g(\rho^{f \leftarrow g})) \\ x_{p,q}^{f,g,f} &= \psi_f^{-1}(W(q) \cdot [W(p) \cdot [\psi_f(x^f) - \psi_f(\rho^{f \rightarrow g})] + \psi_g(\rho^{g \leftarrow f}) - \psi_g(\rho^{g \rightarrow f})] + \psi_g(\rho^{f \leftarrow g})) \\ x_{p,q}^{f,g,f} &= \psi_f^{-1}(W(q) \cdot W(p) \cdot [\psi_f(x^f) - \psi_f(\rho^{f \rightarrow g})] + \psi_g(\rho^{g \leftarrow f}) - \psi_g(\rho^{g \rightarrow f}) + \frac{1}{W(q)} \cdot \psi_g(\rho^{f \leftarrow g})) \end{aligned}$$

$$\begin{aligned} \psi_g(x_p^{f,g}) - \psi_g(\rho^{g \leftarrow f}) &= W(p) \cdot [\psi_f(x^f) - \psi_f(\rho^{f \rightarrow g})] \\ x_p^{f,g} &= \psi_g^{-1}(W(p) \cdot [\psi_f(x^f) - \psi_f(\rho^{f \rightarrow g})] + \psi_g(\rho^{g \leftarrow f})) \end{aligned}$$

reference: standard

reference: target

production factor: p

production factor: q