Supporting information for “Expertise and Inequality amid Environmental Crisis: A View from the Yukon-Kuskokwim Delta”

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A Formal Statement of Assumption 1

Assumption A.1. *The cost κ of bycatch restrictions for G is large, such that $\kappa > \tilde{\kappa}$. Specifically,*

$$\tilde{\kappa} \equiv \frac{\psi_S \left(\delta \psi_S + \sqrt{(2\gamma\theta\psi_G)^2 + (\delta\psi_S)^2} \right)}{2\gamma\theta^2\psi_G^2}.$$

B Proof of Proposition 1

From the main text, we have two cases for E's choice of x_2. Where m is small, E chooses $x_2 = \frac{\psi_S}{\psi_G \kappa}$. Where m is large, E chooses $x_2 = \theta - m$.

We now consider G's choice in Period 1. Player G determines whether or not to invest in supporting a climate policy m. Player G's utility when choosing m is

$$U^G = \begin{cases} -\frac{\kappa}{2}{x_1}^2 - \delta\frac{\kappa}{2}\left(\frac{\psi_S}{\psi_G\kappa}\right)^2 - \frac{\gamma}{2}m^2 & m < \theta - \frac{\psi_S}{\psi_G\kappa} \\ -\frac{\kappa}{2}{x_1}^2 - \delta\frac{\kappa}{2}\left(\theta - m\right)^2 - \frac{\gamma}{2}m^2 & \text{otherwise} \end{cases} \tag{B.1}$$

Note that we can rule out the case in which $m > \theta$. In the first case, G chooses $m = 0$. In the second case, maximizing with respect to m, G has an interior optimum of $m^\circ = \frac{\delta\theta\kappa}{\gamma + \delta\kappa}$. Observe that $m^\circ \geq \theta - \frac{\psi_S}{\psi_G\kappa}$ by the assumption that $\gamma < \frac{\delta\psi_S}{\theta\psi_G}$. Additionally, m° is less than θ and greater than zero.

G always chooses $m = 0$ when

$$-\delta\frac{\kappa}{2}\left(\frac{\psi_S}{\psi_G\kappa}\right)^2 - \frac{\gamma}{2}0^2 > -\delta\frac{\kappa}{2}\left(\theta - \left(\frac{\delta\theta\kappa}{\gamma + \delta\kappa}\right)\right)^2 - \frac{\gamma}{2}\left(\frac{\delta\theta\kappa}{\gamma + \delta\kappa}\right)^2 \tag{B.2}$$

By Assumption 1, this condition holds. Therefore, G always chooses $m = 0$. □