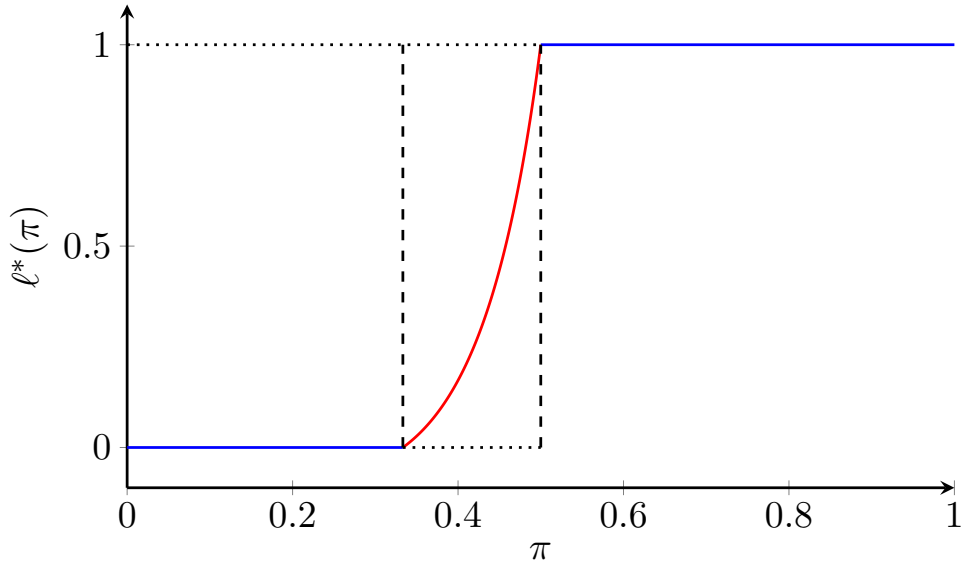

Figure 1: Equilibrium threshold $\ell^*(\pi)$ as a function of π. For illustration, we set $b = 1.5$. When $\pi < 1/3$, the threshold is zero (players always defect). For $\pi > 1/2$, the threshold is one (players always cooperate). In the intermediate range $\pi \in [1/3, 1/2]$, an interior threshold emerges from the indifference condition. As π increases, the equilibrium threshold rises, reflecting a higher likelihood of meeting an honest cooperator and thus a stronger reputational deterrent against defection.