

Figure 1: Dynamics of group-wise loss disparity for **ACSIncome-CA** data when $\rho \in \{0, 1.0, 3.0\}$. When $\rho = 0$, the policy is just RERM. It is clear that when ρ becomes larger, the groupwise loss disparity becomes lower.

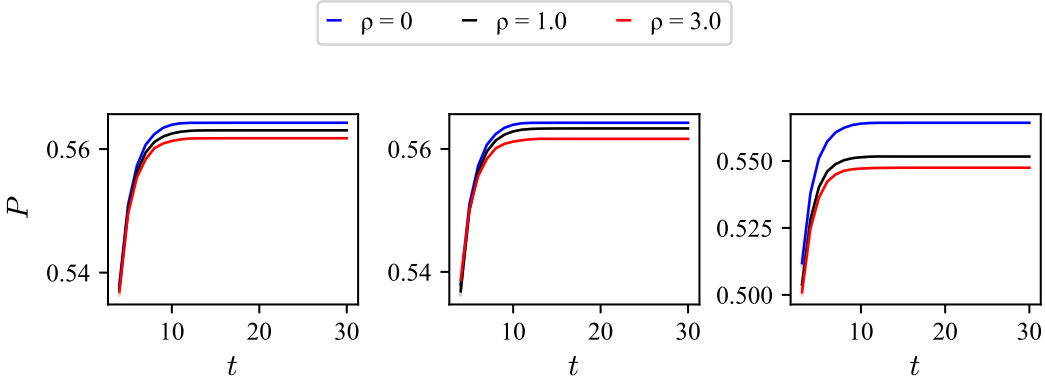
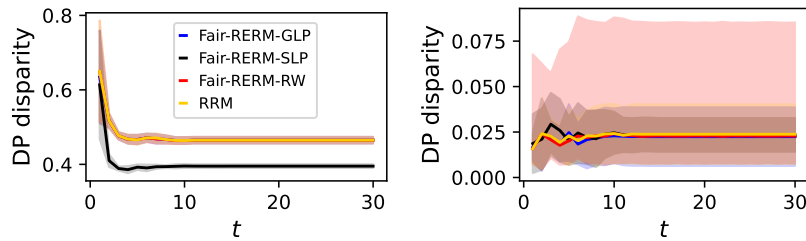


Figure 2: The evolution of majority group for **ACSIncome-CA** data when $\rho \in \{0, 1.0, 3.0\}$. When $\rho = 0$, the policy is just RERM. It is clear that when ρ becomes larger, the group fraction becomes lower.



(a) **Credit data** ($\rho = 0.3$).

(b) **Gaussian classification** ($\rho = 0.3$).

Figure 3: Demographic Parity disparity for 2 classification datasets.