

# **Beyond Linear Logic: A Machine Learning Analysis of the High-Dimensional Drivers of Redistribution Preferences in China**

**Abstract:** Understanding public attitudes toward economic redistribution is essential for designing resilient social policies and evaluating social mobility trajectories. Utilizing a machine learning ensemble with SHapley Additive exPlanations (SHAP) on the China Family Panel Studies (CFPS) 2020, this study examines the determinants of redistribution preferences. Our analysis documents a state of significant attitudinal divergence where the population splits almost evenly; 50 percent favor intervention while 50 percent oppose it. We find that fairness attribution beliefs exert a dominant influence and explain 40 percent of the variance, which is more than double the effect of household income. Crucially, we formalize a belief-mediated self-interest model revealing that material stakes only translate into specific policy preferences when filtered through meritocratic beliefs. We further identify a notable correlation where university graduates exhibit the highest demand for redistribution, potentially reflecting structural shifts in the labor market. Additionally, generational shift in preferences suggests the social attitudes may evolve as younger cohorts take on more influential roles. These findings suggest that addressing structural fairness and anti-corruption is more effective for building policy consensus than traditional poverty-alleviation narratives.

**Keywords:** Redistribution preferences, fairness perceptions, social mobility, machine learning.

**JEL Classification:** D31, D63, H23.