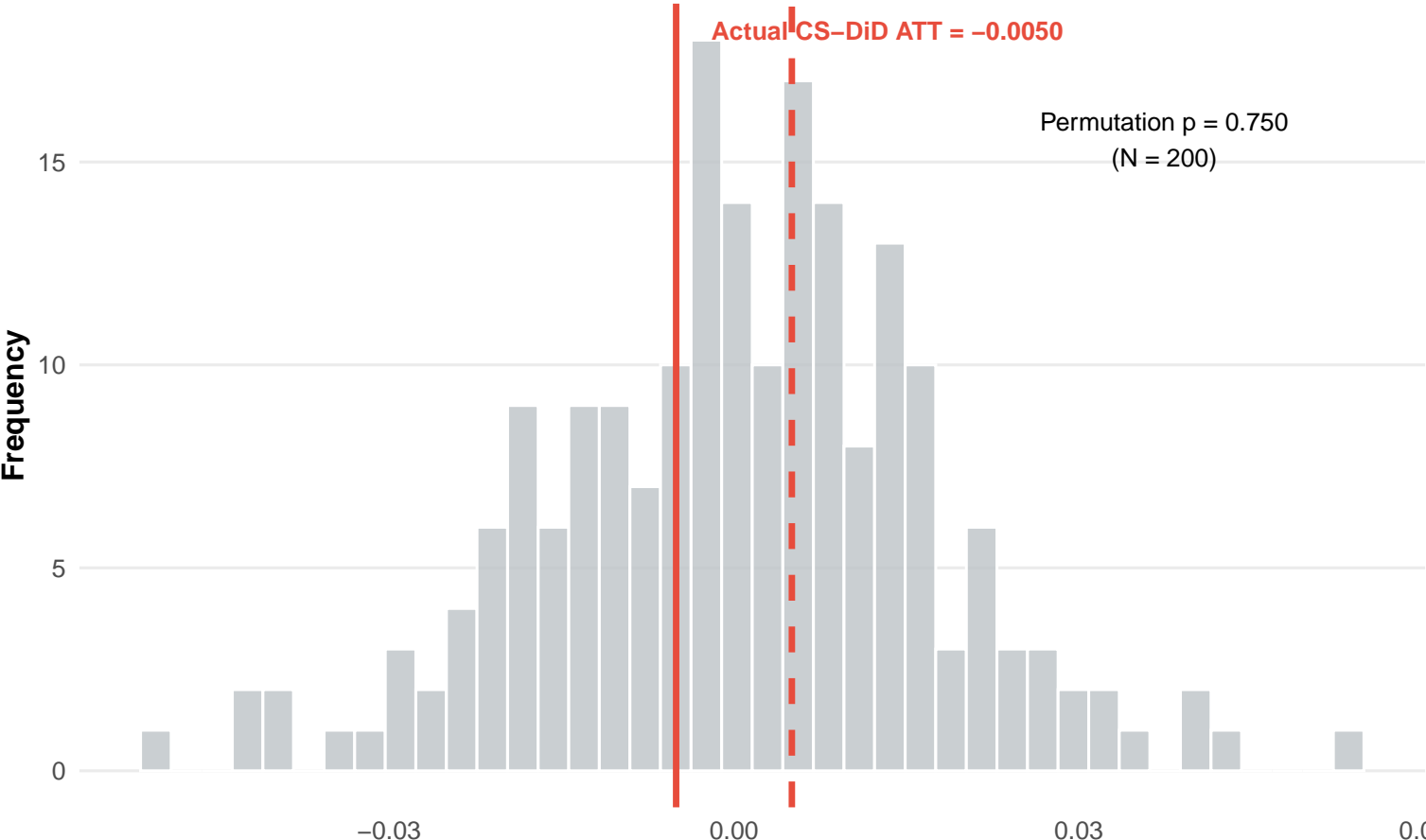


# Permutation Inference: CS-DiD ATT Null Distribution

Randomly reassigning adoption years across states (200 permutations)



200 random permutations of adoption years across states.  
Each permutation re-runs the full Callaway-Sant'Anna estimator.  
Red solid line: actual CS-DiD ATT. Red dashed: mirror. Two-sided p-value shown.