Summary of key identification assumptions

Strategy/Estimator	Assumption
Randomized experiments	Mean Independence $E[Y_i(0) D_i = 1] = E[Y_i(0) D_i = 0]$
Regression&Matching	Conditional Mean Independence $E[Y_i(0) X_i, D_i = 1] = E[Y_i(0) X_i, D_i = 0]$
Instrumental Variables	Exogeneity&Relevance of the instrument(s) $Cov(Z_i, u_i) = 0$; $Cov(Z_i, D_i) \neq 0$
Differences-in-Differences	Common Trends $E[Y_{i1}(0) - Y_{i0}(0) D_{i1} = 1] = E[Y_{i1}(0) - Y_{i0}(0) D_{i1} = 0]$
Regression Discontinuity	Continuity of Conditional Means $E[Y_k W_i]$ is a continuous function of $W_i \forall k = \{0,1\}$