

## C TABLES OF SIMULATION RESULTS

**TABLE C1** Results for Figures 3–6. Mean and Standard Deviation of Effect Estimates, 95% Confidence Interval Coverage, and Type I Error/Power for 4 Risk Difference Scenarios across 1,000 Simulations

Method		$\beta = 0$				$\beta = -0.10$			
		Mean	Std. Dev.	Coverage	TIE	Mean	Std. Dev.	Coverage	Power
Scenario 1. Common Time Effects, $\nu = 0$									
Mixed Effects Model-Based Methods	MEM	0.000	0.022	0.946	0.054	-0.100	0.023	0.940	0.985
	CPI	0.000	0.022	0.945	0.055	-0.100	0.023	0.940	0.983
	MEM-a	0.000	0.022	0.947	0.053	-0.100	0.023	0.937	0.991
	CPI-a	0.000	0.022	0.947	0.053	-0.100	0.023	0.940	0.989
Non-Parametric Within-Period	NPWP	-0.001	0.049	0.959	0.041	-0.100	0.051	0.937	0.572
Synthetic Control	SC-1	-0.001	0.041	0.952	0.048	-0.100	0.042	0.937	0.644
	SC-2	0.000	0.038	0.935	0.065	-0.100	0.037	0.939	0.747
Crossover	CO-1	0.000	0.033	0.952	0.048	-0.101	0.033	0.948	0.829
	CO-2	0.000	0.032	0.958	0.042	-0.101	0.032	0.953	0.844
	CO-3	0.001	0.030	0.951	0.049	-0.100	0.029	0.949	0.911
Crossover-Synthetic Control	COSC	0.000	0.034	0.947	0.053	-0.101	0.034	0.941	0.788
Ensemble	ENS	0.000	0.029	0.951	0.049	-0.101	0.029	0.947	0.920
Scenario 2. Common Time Effects, $\nu = 0.01$									
Mixed Effects Model-Based Methods	MEM	-0.000	0.024	0.944	0.056	-0.099	0.023	0.946	0.988
	CPI	-0.000	0.024	0.944	0.056	-0.099	0.023	0.946	0.985
	MEM-a	-0.000	0.024	0.934	0.066	-0.099	0.023	0.942	0.991
	CPI-a	-0.000	0.024	0.935	0.065	-0.099	0.023	0.945	0.990
Non-Parametric Within-Period	NPWP	-0.003	0.049	0.953	0.047	-0.100	0.050	0.942	0.564
Synthetic Control	SC-1	-0.001	0.041	0.949	0.051	-0.100	0.042	0.942	0.649
	SC-2	0.000	0.036	0.945	0.055	-0.100	0.037	0.949	0.742
Crossover	CO-1	0.001	0.034	0.945	0.055	-0.101	0.034	0.943	0.805
	CO-2	0.000	0.034	0.942	0.058	-0.101	0.033	0.951	0.828
	CO-3	0.000	0.031	0.945	0.055	-0.101	0.031	0.948	0.886
Crossover-Synthetic Control	COSC	0.001	0.035	0.945	0.055	-0.101	0.035	0.962	0.784
Ensemble	ENS	0.000	0.029	0.944	0.056	-0.100	0.029	0.947	0.918
Scenario 3. Varying Time Effects, $\nu = 0$									
Mixed Effects Model-Based Methods	MEM	0.000	0.050	0.943	0.057	-0.101	0.051	0.942	0.510
	CPI	0.000	0.051	0.941	0.059	-0.101	0.052	0.944	0.503
	MEM-a	0.000	0.050	0.626	0.374	-0.101	0.051	0.580	0.871
	CPI-a	0.000	0.051	0.753	0.247	-0.101	0.052	0.765	0.756
Non-Parametric Within-Period	NPWP	-0.002	0.064	0.944	0.056	-0.102	0.065	0.943	0.380
Synthetic Control	SC-1	-0.001	0.050	0.942	0.058	-0.100	0.050	0.947	0.471
	SC-2	0.000	0.046	0.942	0.058	-0.098	0.045	0.952	0.526
Crossover	CO-1	0.000	0.040	0.961	0.039	-0.102	0.041	0.939	0.681
	CO-2	-0.000	0.037	0.963	0.037	-0.102	0.038	0.940	0.727
	CO-3	0.000	0.035	0.957	0.043	-0.102	0.036	0.948	0.791
Crossover-Synthetic Control	COSC	0.000	0.042	0.956	0.044	-0.103	0.042	0.947	0.644
Ensemble	ENS	0.000	0.036	0.957	0.043	-0.100	0.036	0.950	0.765
Scenario 4. Varying Time Effects, $\nu = 0.01$									
Mixed Effects Model-Based Methods	MEM	0.001	0.051	0.940	0.060	-0.099	0.050	0.952	0.482
	CPI	0.001	0.051	0.935	0.065	-0.100	0.051	0.948	0.477
	MEM-a	0.001	0.051	0.622	0.378	-0.099	0.050	0.604	0.866
	CPI-a	0.001	0.051	0.778	0.222	-0.100	0.051	0.784	0.747
Non-Parametric Within-Period	NPWP	-0.000	0.064	0.937	0.063	-0.102	0.064	0.943	0.353
Synthetic Control	SC-1	0.000	0.048	0.947	0.053	-0.102	0.050	0.946	0.473
	SC-2	0.001	0.044	0.949	0.051	-0.101	0.045	0.949	0.557
Crossover	CO-1	-0.001	0.042	0.940	0.060	-0.100	0.042	0.950	0.642
	CO-2	-0.001	0.039	0.944	0.056	-0.100	0.039	0.951	0.706
	CO-3	0.000	0.036	0.953	0.047	-0.100	0.036	0.953	0.776
Crossover-Synthetic Control	COSC	-0.001	0.043	0.951	0.049	-0.100	0.043	0.958	0.607
Ensemble	ENS	0.000	0.037	0.948	0.052	-0.101	0.036	0.953	0.759

**TABLE C2** Results for Figures 8–11. Mean and Standard Deviation of Effect Estimates, 95% Confidence Interval Coverage, and Type I Error/Power for 4 Odds Ratio Scenarios across 1,000 Simulations

Method		$\beta = 0$				$\beta = -0.10$			
		Mean	Std. Dev.	Coverage	TIE	Mean	Std. Dev.	Coverage	Power
Scenario 1. Common Time Effects, $\nu = 0$									
Mixed Effects Model-Based Methods	MEM	0.001	0.089	0.939	0.061	-0.418	0.088	0.946	0.993
	CPI	0.001	0.090	0.938	0.062	-0.418	0.088	0.947	0.993
	MEM-a	0.001	0.089	0.924	0.076	-0.418	0.088	0.931	0.996
	CPI-a	0.001	0.090	0.926	0.074	-0.418	0.088	0.935	0.995
Non-Parametric Within-Period	NPWP	-0.001	0.114	0.934	0.066	-0.418	0.110	0.947	0.943
Synthetic Control	SC-1	-0.001	0.111	0.947	0.053	-0.418	0.111	0.949	0.940
	SC-2	-0.003	0.114	0.949	0.051	-0.420	0.113	0.947	0.932
Crossover	CO-1	0.002	0.145	0.957	0.043	-0.430	0.141	0.948	0.832
	CO-2	0.003	0.142	0.957	0.043	-0.430	0.138	0.953	0.831
	CO-3	0.002	0.129	0.962	0.038	-0.429	0.124	0.954	0.908
Crossover-Synthetic Control	COSC	-0.000	0.146	0.951	0.049	-0.425	0.146	0.951	0.781
Ensemble	ENS	0.000	0.110	0.946	0.054	-0.425	0.107	0.947	0.962
Scenario 2. Common Time Effects, $\nu = 0.01$									
Mixed Effects Model-Based Methods	MEM	-0.002	0.090	0.943	0.057	-0.417	0.091	0.935	0.995
	CPI	-0.002	0.090	0.943	0.057	-0.417	0.091	0.938	0.994
	MEM-a	-0.002	0.090	0.924	0.076	-0.417	0.091	0.919	0.998
	CPI-a	-0.002	0.090	0.927	0.073	-0.417	0.091	0.921	0.998
Non-Parametric Within-Period	NPWP	-0.000	0.114	0.948	0.052	-0.418	0.113	0.930	0.940
Synthetic Control	SC-1	-0.000	0.114	0.951	0.049	-0.417	0.112	0.952	0.932
	SC-2	-0.000	0.114	0.955	0.045	-0.417	0.114	0.937	0.915
Crossover	CO-1	0.002	0.137	0.954	0.046	-0.421	0.145	0.947	0.813
	CO-2	0.001	0.136	0.951	0.049	-0.422	0.144	0.946	0.830
	CO-3	0.000	0.123	0.961	0.039	-0.421	0.133	0.940	0.888
Crossover-Synthetic Control	COSC	0.002	0.145	0.948	0.052	-0.420	0.151	0.948	0.777
Ensemble	ENS	0.001	0.107	0.955	0.045	-0.420	0.110	0.948	0.950
Scenario 3. Varying Time Effects, $\nu = 0$									
Mixed Effects Model-Based Methods	MEM	0.003	0.190	0.945	0.055	-0.407	0.196	0.966	0.485
	CPI	0.003	0.190	0.950	0.050	-0.412	0.197	0.964	0.478
	MEM-a	0.003	0.190	0.639	0.361	-0.407	0.196	0.604	0.885
	CPI-a	0.003	0.190	0.771	0.229	-0.412	0.197	0.758	0.801
Non-Parametric Within-Period	NPWP	-0.001	0.192	0.949	0.051	-0.416	0.193	0.955	0.515
Synthetic Control	SC-1	0.000	0.161	0.948	0.052	-0.425	0.160	0.960	0.663
	SC-2	0.002	0.155	0.946	0.054	-0.424	0.152	0.951	0.691
Crossover	CO-1	0.006	0.170	0.954	0.046	-0.430	0.173	0.950	0.663
	CO-2	0.006	0.160	0.958	0.042	-0.428	0.164	0.951	0.706
	CO-3	0.004	0.144	0.952	0.048	-0.425	0.151	0.949	0.772
Crossover-Synthetic Control	COSC	0.007	0.174	0.959	0.041	-0.429	0.184	0.945	0.611
Ensemble	ENS	0.004	0.139	0.949	0.051	-0.426	0.141	0.950	0.815
Scenario 4. Varying Time Effects, $\nu = 0.01$									
Mixed Effects Model-Based Methods	MEM	0.011	0.204	0.944	0.056	-0.408	0.208	0.947	0.481
	CPI	0.010	0.206	0.947	0.053	-0.414	0.207	0.951	0.499
	MEM-a	0.011	0.204	0.581	0.419	-0.408	0.208	0.587	0.869
	CPI-a	0.010	0.206	0.738	0.262	-0.414	0.207	0.721	0.795
Non-Parametric Within-Period	NPWP	0.001	0.202	0.942	0.058	-0.418	0.204	0.959	0.517
Synthetic Control	SC-1	-0.003	0.170	0.949	0.051	-0.424	0.167	0.947	0.645
	SC-2	-0.004	0.163	0.941	0.059	-0.422	0.158	0.947	0.692
Crossover	CO-1	-0.006	0.171	0.950	0.050	-0.423	0.179	0.951	0.652
	CO-2	-0.006	0.163	0.947	0.053	-0.422	0.170	0.949	0.700
	CO-3	-0.005	0.151	0.950	0.050	-0.420	0.157	0.951	0.747
Crossover-Synthetic Control	COSC	-0.007	0.180	0.948	0.052	-0.424	0.188	0.947	0.620
Ensemble	ENS	-0.005	0.144	0.948	0.052	-0.422	0.145	0.956	0.817