

APPENDIX 3: ADDITIONAL TABLES

Table A3a: Sri Lanka Data - Simulation Results for 30 Observations Sample

	Average difference (in std. dev.)	Difference at 95th centile (in std. dev.)	Difference at 99th centile (in std. dev.)	Average p-value	Proportion p-values < 0.05	Proportion p-values < 0.1	Proportion where dummies lowers p-value
<u>Single random draw</u>							
Baseline profits	0.006	0.701	0.888	0.495	0.048	0.104	
Baseline unobservables	-0.001	0.803	1.001	0.520	0.049	0.090	
Follow-up profits w/o controls	0.001	0.713	0.899	0.497	0.052	0.105	
Follow-up profits w/ controls	0.000	0.800	1.016	0.501	0.051	0.103	0.486
<u>Stratified on 2 variables (8 strata)</u>							
Baseline profits	-0.002	0.420	0.482	0.570	0.000	0.000	
Baseline unobservables	-0.001	0.824	1.035	0.514	0.044	0.093	
Follow-up profits w/o strata dummies	0.000	0.627	0.774	0.536	0.022	0.059	
Follow-up profits w/ strata dummies	-0.001	0.657	0.824	0.505	0.043	0.091	0.690
<u>Stratified on iid noise (8 strata)</u>							
Baseline profits	0.001	0.698	0.873	0.496	0.046	0.102	
Baseline unobservables	-0.002	0.803	0.983	0.519	0.043	0.089	
Follow-up profits w/o strata dummies	0.002	0.691	0.862	0.504	0.042	0.091	
Follow-up profits w/ strata dummies	0.002	0.695	0.867	0.495	0.050	0.101	0.486
<u>Pairwise greedy matching (Mahalanobis distance)</u>							
Baseline profits	0.002	0.598	0.759	0.552	0.016	0.049	
Baseline unobservables	0.000	0.879	1.036	0.537	0.045	0.088	
Follow-up profits w/o pair dummies	-0.002	0.587	0.708	0.545	0.010	0.044	
Follow-up profits w/ pair dummies	-0.002	0.587	0.708	0.496	0.046	0.104	1.000
<u>Pairwise greedy matching on iid noise</u>							
Baseline profits	0.000	0.428	0.528	0.645	0.000	0.001	
Baseline unobservables	0.000	0.889	1.083	0.500	0.064	0.108	
Follow-up profits w/o pair dummies	0.001	0.556	0.661	0.554	0.003	0.027	
Follow-up profits w/ pair dummies	0.001	0.556	0.661	0.490	0.041	0.098	1.000
<u>Big stick rule (re-draw if any p-value < 0.05)</u>							
Baseline profits	0.004	0.606	0.689	0.517	0.000	0.054	
Baseline unobservables	-0.001	0.834	0.923	0.523	0.046	0.086	
Follow-up profits w/o controls	-0.003	0.705	0.896	0.497	0.048	0.101	
Follow-up profits w/ controls	-0.004	0.763	0.961	0.497	0.051	0.103	0.493
<u>Draw with minmax t-stat out of 1000 draws</u>							
Baseline profits	0.001	0.192	0.221	0.798	0.000	0.000	
Baseline unobservables	-0.001	0.803	0.985	0.532	0.039	0.078	
Follow-up profits w/o controls	0.002	0.708	0.863	0.479	0.048	0.109	
Follow-up profits w/ controls	0.002	0.719	0.889	0.471	0.061	0.122	0.555
<u>Draw with minmax t-stat on iid noise out of 1000 draws</u>							
Baseline profits	-0.003	0.648	0.826	0.523	0.029	0.073	
Baseline unobservables	-0.001	0.834	1.001	0.516	0.055	0.092	
Follow-up profits w/o controls	-0.006	0.721	0.899	0.493	0.054	0.112	
Follow-up profits w/ controls	-0.007	0.733	0.912	0.503	0.048	0.103	0.427

Notes:

Statistics are based on 10,000 simulations of each method. Details on methods and variables are in Table A2.

Table A3b: Sri Lanka Data - Simulation Results for 100 Observations Sample

	Average difference (in std. dev.)	Difference at 95th centile (in std. dev.)	Difference at 99th centile (in std. dev.)	Average p-value	Proportion p-values < 0.05	Proportion p-values < 0.1	Proportion where controlling for dummies lowers p-value
<u>Single random draw</u>							
Baseline profits	0.001	0.386	0.493	0.504	0.047	0.097	
Baseline unobservables	0.000	0.434	0.546	0.501	0.051	0.101	
Follow-up profits w/o controls	0.002	0.344	0.414	0.439	0.019	0.066	
Follow-up profits w/ controls	0.002	0.339	0.417	0.459	0.028	0.086	0.480
<u>Stratified on 2 variables (8 strata)</u>							
Baseline profits	0.000	0.195	0.244	0.698	0.000	0.000	
Baseline unobservables	0.000	0.417	0.537	0.503	0.050	0.096	
Follow-up profits w/o strata dummies	0.003	0.322	0.384	0.451	0.007	0.043	
Follow-up profits w/ strata dummies	0.003	0.319	0.384	0.427	0.026	0.087	0.471
<u>Stratified on iid noise (8 strata)</u>							
Baseline profits	0.001	0.381	0.502	0.505	0.045	0.092	
Baseline unobservables	0.000	0.414	0.535	0.504	0.050	0.095	
Follow-up profits w/o strata dummies	-0.002	0.345	0.412	0.449	0.018	0.067	
Follow-up profits w/ strata dummies	-0.001	0.346	0.413	0.449	0.019	0.073	0.474
<u>Stratified on 3 variables (24 strata)</u>							
Baseline profits	0.000	0.229	0.298	0.658	0.000	0.004	
Baseline unobservables	0.000	0.417	0.552	0.501	0.049	0.098	
Follow-up profits w/o strata dummies	-0.001	0.338	0.399	0.444	0.013	0.059	
Follow-up profits w/ strata dummies	0.000	0.208	0.263	0.473	0.064	0.126	0.376
<u>Stratified on 4 variables (48 strata)</u>							
Baseline profits	-0.001	0.241	0.307	0.642	0.001	0.005	
Baseline unobservables	0.000	0.414	0.533	0.505	0.046	0.095	
Follow-up profits w/o strata dummies	0.004	0.338	0.399	0.440	0.012	0.058	
Follow-up profits w/ strata dummies	0.001	0.210	0.261	0.495	0.051	0.102	0.358
<u>Stratified on iid noise (48 strata)</u>							
Baseline profits	0.000	0.387	0.500	0.498	0.047	0.101	
Baseline unobservables	0.000	0.441	0.571	0.500	0.052	0.099	
Follow-up profits w/o strata dummies	0.000	0.340	0.408	0.436	0.015	0.062	
Follow-up profits w/ strata dummies	0.001	0.353	0.435	0.512	0.010	0.039	0.376
<u>Pairwise greedy matching (Mahalanobis distance)</u>							
Baseline profits	-0.003	0.313	0.397	0.566	0.011	0.037	
Baseline unobservables	0.000	0.434	0.543	0.519	0.041	0.082	
Follow-up profits w/o pair dummies	0.001	0.306	0.365	0.498	0.004	0.028	
Follow-up profits w/ pair dummies	0.001	0.306	0.365	0.450	0.022	0.078	1.000
<u>Pairwise greedy matching on iid noise</u>							
Baseline profits	-0.003	0.419	0.546	0.463	0.068	0.136	
Baseline unobservables	0.000	0.440	0.615	0.497	0.055	0.107	
Follow-up profits w/o pair dummies	-0.002	0.352	0.414	0.415	0.021	0.079	
Follow-up profits w/ pair dummies	-0.002	0.352	0.414	0.429	0.014	0.062	0.000
<u>Big stick rule (re-draw if any p-value < 0.05)</u>							
Baseline profits	0.001	0.324	0.373	0.541	0.000	0.045	
Baseline unobservables	0.000	0.434	0.546	0.505	0.049	0.098	
Follow-up profits w/o controls	0.004	0.335	0.402	0.443	0.014	0.057	
Follow-up profits w/ controls	0.004	0.331	0.404	0.450	0.025	0.081	0.497
<u>Draw with minmax t-stat out of 1000 draws</u>							
Baseline profits	0.000	0.091	0.106	0.817	0.000	0.000	
Baseline unobservables	0.001	0.434	0.546	0.512	0.045	0.091	
Follow-up profits w/o controls	-0.002	0.316	0.374	0.462	0.006	0.035	
Follow-up profits w/ controls	-0.002	0.318	0.379	0.426	0.020	0.074	0.740
<u>Draw with minmax t-stat on iid noise out of 1000 draws</u>							
Baseline profits	-0.001	0.386	0.503	0.507	0.047	0.092	
Baseline unobservables	0.001	0.434	0.546	0.500	0.053	0.103	
Follow-up profits w/o controls	0.002	0.351	0.420	0.429	0.020	0.074	
Follow-up profits w/ controls	0.002	0.351	0.424	0.436	0.018	0.068	0.415

Notes:

Statistics are based on 10,000 simulations of each method. Details on methods and variables are in Table A2.

Table A3c: Sri Lanka Data - Simulation Results for 300 Observations Sample

	Average difference (in std. dev.)	Difference at 95th centile (in std. dev.)	Difference at 99th centile (in std. dev.)	Average p-value	Proportion p-values < 0.05	Proportion p-values < 0.1	Proportion where controlling for dummies lowers p-value
<u>Single random draw</u>							
Baseline profits	0.000	0.228	0.293	0.499	0.051	0.101	
Baseline unobservables	0.000	0.241	0.311	0.499	0.053	0.101	
Follow-up profits w/o controls	0.000	0.220	0.272	0.484	0.043	0.100	
Follow-up profits w/ controls	0.000	0.210	0.261	0.485	0.041	0.098	0.499
<u>Stratified on 2 variables (8 strata)</u>							
Baseline profits	-0.001	0.121	0.152	0.680	0.000	0.001	
Baseline unobservables	0.000	0.236	0.307	0.502	0.050	0.098	
Follow-up profits w/o strata dummies	0.001	0.210	0.258	0.510	0.030	0.080	
Follow-up profits w/ strata dummies	0.002	0.209	0.258	0.492	0.043	0.103	0.668
<u>Stratified on iid noise (8 strata)</u>							
Baseline profits	0.001	0.225	0.304	0.499	0.049	0.102	
Baseline unobservables	0.000	0.236	0.308	0.499	0.052	0.102	
Follow-up profits w/o strata dummies	-0.001	0.222	0.277	0.489	0.045	0.103	
Follow-up profits w/ strata dummies	-0.001	0.223	0.276	0.489	0.045	0.103	0.496
<u>Stratified on 3 variables (24 strata)</u>							
Baseline profits	0.000	0.125	0.157	0.670	0.000	0.001	
Baseline unobservables	0.000	0.238	0.303	0.504	0.048	0.096	
Follow-up profits w/o strata dummies	0.002	0.213	0.258	0.499	0.033	0.091	
Follow-up profits w/ strata dummies	0.001	0.208	0.259	0.479	0.053	0.114	0.481
<u>Stratified on 4 variables (48 strata)</u>							
Baseline profits	0.001	0.130	0.166	0.661	0.000	0.003	
Baseline unobservables	0.000	0.234	0.307	0.506	0.046	0.094	
Follow-up profits w/o strata dummies	0.001	0.209	0.258	0.506	0.031	0.080	
Follow-up profits w/ strata dummies	0.001	0.213	0.258	0.465	0.065	0.133	0.731
<u>Stratified on iid noise (48 strata)</u>							
Baseline profits	0.000	0.222	0.288	0.508	0.046	0.096	
Baseline unobservables	0.000	0.239	0.314	0.497	0.053	0.103	
Follow-up profits w/o strata dummies	0.001	0.218	0.274	0.490	0.043	0.102	
Follow-up profits w/ strata dummies	0.001	0.218	0.274	0.492	0.041	0.098	0.481
<u>Pairwise greedy matching (Mahalanobis distance)</u>							
Baseline profits	-0.002	0.178	0.227	0.569	0.010	0.038	
Baseline unobservables	0.000	0.246	0.318	0.505	0.049	0.094	
Follow-up profits w/o pair dummies	0.000	0.211	0.258	0.507	0.031	0.085	
Follow-up profits w/ pair dummies	0.000	0.211	0.258	0.492	0.045	0.103	1.000
<u>Pairwise greedy matching on iid noise</u>							
Baseline profits	0.000	0.243	0.318	0.474	0.068	0.129	
Baseline unobservables	0.000	0.252	0.320	0.502	0.052	0.098	
Follow-up profits w/o pair dummies	0.000	0.195	0.242	0.509	0.017	0.057	
Follow-up profits w/ pair dummies	0.000	0.195	0.242	0.474	0.038	0.094	1.000
<u>Big stick rule (re-draw if any p-value < 0.05)</u>							
Baseline profits	0.000	0.188	0.216	0.537	0.000	0.047	
Baseline unobservables	0.000	0.241	0.311	0.501	0.051	0.098	
Follow-up profits w/o controls	0.000	0.216	0.268	0.495	0.039	0.092	
Follow-up profits w/ controls	0.000	0.212	0.261	0.487	0.042	0.102	0.526
<u>Draw with minmax t-stat out of 1000 draws</u>							
Baseline profits	0.000	0.057	0.063	0.808	0.000	0.000	
Baseline unobservables	0.000	0.241	0.307	0.508	0.047	0.092	
Follow-up profits w/o controls	0.001	0.212	0.262	0.503	0.033	0.088	
Follow-up profits w/ controls	0.001	0.211	0.261	0.485	0.045	0.108	0.689
<u>Draw with minmax t-stat on iid noise out of 1000 draws</u>							
Baseline profits	0.002	0.228	0.290	0.497	0.052	0.104	
Baseline unobservables	0.000	0.243	0.311	0.499	0.053	0.101	
Follow-up profits w/o controls	0.000	0.224	0.281	0.486	0.047	0.103	
Follow-up profits w/ controls	0.000	0.224	0.282	0.487	0.047	0.101	0.476

Notes:

Statistics are based on 10,000 simulations of each method. Details on methods and variables are in Table A2.

Table A3d: ENE Data - Simulation Results for 30 Observations Sample

	Average difference (in std. dev.)	Difference at 95th centile (in std. dev.)	Difference at 99th centile (in std. dev.)	Average p-value	Proportion p-values < 0.05	Proportion p-values < 0.1	Proportion where controlling for dummies lowers p-value
<u>Single random draw</u>							
Baseline income	-0.002	0.684	0.854	0.485	0.042	0.098	
Baseline unobservables	0.000	0.775	1.001	0.503	0.052	0.088	
Follow-up income w/o controls	-0.003	0.703	0.874	0.491	0.047	0.101	
Follow-up income w/ controls	-0.002	0.787	0.998	0.499	0.052	0.102	0.488
<u>Stratified on 2 variables (8 strata)</u>							
Baseline income	0.003	0.412	0.492	0.630	0.000	0.000	
Baseline unobservables	0.001	0.771	1.001	0.514	0.041	0.078	
Follow-up income w/o strata dummies	0.000	0.713	0.865	0.499	0.050	0.106	
Follow-up income w/ strata dummies	0.000	0.731	0.893	0.499	0.051	0.109	0.477
<u>Stratified on iid noise (8 strata)</u>							
Baseline income	-0.003	0.686	0.868	0.491	0.042	0.093	
Baseline unobservables	0.000	0.824	1.001	0.497	0.052	0.085	
Follow-up income w/o strata dummies	-0.006	0.776	0.958	0.461	0.079	0.142	
Follow-up income w/ strata dummies	-0.006	0.792	0.985	0.493	0.050	0.105	0.235
<u>Pairwise greedy matching (Mahalanobis distance)</u>							
Baseline income	0.000	0.177	0.183	0.810	0.000	0.000	
Baseline unobservables	0.000	0.834	1.001	0.510	0.044	0.078	
Follow-up income w/o pair dummies	0.000	0.503	0.592	0.598	0.000	0.007	
Follow-up income w/ pair dummies	0.000	0.503	0.592	0.493	0.050	0.107	1.000
<u>Pairwise greedy matching on iid noise</u>							
Baseline income	0.000	0.600	0.704	0.489	0.009	0.049	
Baseline unobservables	0.000	0.879	1.112	0.511	0.057	0.096	
Follow-up income w/o pair dummies	0.001	0.711	0.822	0.475	0.051	0.132	
Follow-up income w/ pair dummies	0.001	0.711	0.822	0.494	0.039	0.109	0.000
<u>Big stick rule (re-draw if any p-value < 0.05)</u>							
Baseline income	0.000	0.618	0.684	0.498	0.000	0.062	
Baseline unobservables	-0.001	0.775	1.001	0.505	0.050	0.086	
Follow-up income w/o controls	0.000	0.688	0.851	0.499	0.041	0.093	
Follow-up income w/ controls	0.001	0.777	0.975	0.500	0.052	0.102	0.496
<u>Draw with minmax t-stat out of 1000 draws</u>							
Baseline income	-0.002	0.207	0.217	0.774	0.000	0.000	
Baseline unobservables	0.000	0.834	1.001	0.514	0.043	0.078	
Follow-up income w/o controls	0.001	0.704	0.868	0.498	0.048	0.103	
Follow-up income w/ controls	0.001	0.721	0.910	0.487	0.059	0.117	0.532
<u>Draw with minmax t-stat on iid noise out of 1000 draws</u>							
Baseline income	0.001	0.673	0.806	0.491	0.034	0.093	
Baseline unobservables	-0.001	0.834	1.112	0.500	0.052	0.085	
Follow-up income w/o controls	-0.001	0.654	0.809	0.514	0.031	0.077	
Follow-up income w/ controls	-0.002	0.665	0.815	0.483	0.061	0.117	0.630

Notes:

Statistics are based on 10,000 simulations of each method. Details on methods and variables are in Table A2.

Table A3e: ENE Data - Simulation Results for 100 Observations Sample

	Average difference (in std. dev.)	Difference at 95th centile (in std. dev.)	Difference at 99th centile (in std. dev.)	Average p-value	Proportion p-values < 0.05	Proportion p-values < 0.1	Proportion where dummies lowers p-value
<u>Single random draw</u>							
Baseline income	0.000	0.384	0.488	0.493	0.045	0.100	
Baseline unobservables	0.000	0.457	0.543	0.501	0.048	0.108	
Follow-up income w/o controls	0.002	0.364	0.442	0.467	0.032	0.091	
Follow-up income w/ controls	0.002	0.311	0.375	0.467	0.030	0.087	0.496
<u>Stratified on 2 variables (8 strata)</u>							
Baseline income	0.000	0.280	0.340	0.597	0.001	0.015	
Baseline unobservables	0.000	0.448	0.533	0.510	0.040	0.095	
Follow-up income w/o strata dummies	-0.002	0.335	0.407	0.498	0.015	0.056	
Follow-up income w/ strata dummies	-0.002	0.335	0.410	0.473	0.026	0.081	0.673
<u>Stratified on iid noise (8 strata)</u>							
Baseline income	-0.002	0.389	0.498	0.491	0.048	0.098	
Baseline unobservables	0.000	0.439	0.533	0.498	0.048	0.107	
Follow-up income w/o strata dummies	0.000	0.365	0.441	0.468	0.031	0.091	
Follow-up income w/ strata dummies	0.000	0.366	0.441	0.471	0.027	0.087	0.477
<u>Stratified on 3 variables (24 strata)</u>							
Baseline income	-0.002	0.277	0.337	0.595	0.002	0.013	
Baseline unobservables	0.000	0.439	0.531	0.504	0.042	0.097	
Follow-up income w/o strata dummies	0.000	0.327	0.404	0.516	0.013	0.049	
Follow-up income w/ strata dummies	0.000	0.347	0.423	0.471	0.035	0.096	0.739
<u>Stratified on 4 variables (48 strata)</u>							
Baseline income	0.000	0.304	0.375	0.570	0.006	0.029	
Baseline unobservables	0.000	0.439	0.519	0.507	0.040	0.093	
Follow-up income w/o strata dummies	0.000	0.344	0.412	0.495	0.017	0.065	
Follow-up income w/ strata dummies	0.000	0.367	0.449	0.476	0.039	0.101	0.515
<u>Stratified on iid noise (48 strata)</u>							
Baseline income	-0.001	0.418	0.526	0.472	0.068	0.126	
Baseline unobservables	0.000	0.450	0.565	0.495	0.049	0.111	
Follow-up income w/o strata dummies	0.001	0.382	0.453	0.455	0.041	0.116	
Follow-up income w/ strata dummies	0.001	0.386	0.460	0.465	0.034	0.101	0.395
<u>Pairwise greedy matching (Mahalanobis distance)</u>							
Baseline income	0.000	0.100	0.104	0.818	0.000	0.000	
Baseline unobservables	0.000	0.457	0.583	0.504	0.045	0.103	
Follow-up income w/o pair dummies	0.000	0.229	0.286	0.652	0.000	0.002	
Follow-up income w/ pair dummies	0.000	0.229	0.286	0.491	0.046	0.100	1.000
<u>Pairwise greedy matching on iid noise</u>							
Baseline income	0.001	0.408	0.516	0.477	0.063	0.119	
Baseline unobservables	0.001	0.457	0.559	0.503	0.045	0.105	
Follow-up income w/o pair dummies	0.001	0.362	0.439	0.479	0.028	0.084	
Follow-up income w/ pair dummies	0.001	0.362	0.439	0.476	0.031	0.090	1.000
<u>Big stick rule (re-draw if any p-value < 0.05)</u>							
Baseline income	-0.001	0.332	0.377	0.520	0.000	0.053	
Baseline unobservables	0.000	0.457	0.543	0.506	0.044	0.102	
Follow-up income w/o controls	0.003	0.351	0.426	0.484	0.023	0.073	
Follow-up income w/ controls	0.003	0.308	0.379	0.463	0.031	0.089	0.521
<u>Draw with minmax t-stat out of 1000 draws</u>							
Baseline income	0.000	0.088	0.098	0.826	0.000	0.000	
Baseline unobservables	0.000	0.427	0.543	0.520	0.037	0.090	
Follow-up income w/o controls	0.000	0.305	0.368	0.527	0.006	0.028	
Follow-up income w/ controls	0.000	0.303	0.369	0.462	0.032	0.091	0.759
<u>Draw with minmax t-stat on iid noise out of 1000 draws</u>							
Baseline income	0.001	0.391	0.490	0.488	0.051	0.107	
Baseline unobservables	0.000	0.457	0.543	0.499	0.049	0.110	
Follow-up income w/o controls	0.001	0.360	0.436	0.475	0.028	0.083	
Follow-up income w/ controls	0.001	0.361	0.438	0.473	0.029	0.087	0.521

Notes:

Statistics are based on 10,000 simulations of each method. Details on methods and variables are in Table A2.

Table A3f: ENE Data - Simulation Results for 300 Observations Sample

	Average difference (in std. dev.)	Difference at 95th centile (in std. dev.)	Difference at 99th centile (in std. dev.)	Average p-value	Proportion p-values < 0.05	Proportion p-values < 0.1	Proportion where controlling for dummies lowers p-value
Single random draw							
Baseline income	0.001	0.225	0.284	0.495	0.049	0.101	
Baseline unobservables	0.000	0.259	0.320	0.500	0.050	0.093	
Follow-up income w/o controls	0.001	0.223	0.285	0.493	0.047	0.100	
Follow-up income w/ controls	0.001	0.192	0.244	0.489	0.046	0.100	0.509
Stratified on 2 variables (8 strata)							
Baseline income	0.001	0.163	0.207	0.590	0.004	0.018	
Baseline unobservables	0.000	0.259	0.302	0.507	0.046	0.088	
Follow-up income w/o strata dummies	0.000	0.196	0.245	0.527	0.018	0.056	
Follow-up income w/ strata dummies	0.000	0.195	0.245	0.490	0.042	0.095	0.874
Stratified on iid noise (8 strata)							
Baseline income	0.000	0.229	0.293	0.496	0.053	0.108	
Baseline unobservables	0.000	0.259	0.315	0.498	0.051	0.095	
Follow-up income w/o strata dummies	0.000	0.224	0.283	0.488	0.048	0.103	
Follow-up income w/ strata dummies	0.000	0.225	0.283	0.486	0.049	0.105	0.492
Stratified on 3 variables (24 strata)							
Baseline income	0.000	0.165	0.209	0.585	0.004	0.022	
Baseline unobservables	0.000	0.257	0.304	0.509	0.044	0.085	
Follow-up income w/o strata dummies	0.000	0.196	0.252	0.533	0.022	0.057	
Follow-up income w/ strata dummies	0.000	0.197	0.256	0.497	0.042	0.093	0.708
Stratified on 4 variables (48 strata)							
Baseline income	0.000	0.167	0.213	0.588	0.006	0.025	
Baseline unobservables	0.000	0.257	0.298	0.512	0.042	0.082	
Follow-up income w/o strata dummies	0.000	0.198	0.252	0.528	0.022	0.062	
Follow-up income w/ strata dummies	0.000	0.202	0.254	0.493	0.044	0.101	0.712
Stratified on iid noise (48 strata)							
Baseline income	-0.001	0.222	0.288	0.500	0.046	0.093	
Baseline unobservables	0.000	0.257	0.315	0.497	0.052	0.097	
Follow-up income w/o strata dummies	-0.002	0.213	0.275	0.506	0.037	0.087	
Follow-up income w/ strata dummies	-0.002	0.213	0.277	0.495	0.044	0.100	0.605
Pairwise greedy matching (Mahalanobis distance)							
Baseline income	0.001	0.107	0.110	0.661	0.000	0.000	
Baseline unobservables	0.000	0.259	0.325	0.509	0.044	0.084	
Follow-up income w/o pair dummies	-0.001	0.149	0.193	0.615	0.003	0.011	
Follow-up income w/ pair dummies	-0.001	0.149	0.193	0.489	0.047	0.104	1.000
Pairwise greedy matching on iid noise							
Baseline income	0.001	0.210	0.268	0.515	0.033	0.076	
Baseline unobservables	0.000	0.261	0.336	0.500	0.049	0.091	
Follow-up income w/o pair dummies	0.001	0.188	0.245	0.550	0.017	0.047	
Follow-up income w/ pair dummies	0.001	0.188	0.245	0.497	0.046	0.100	1.000
Big stick rule (re-draw if any p-value < 0.05)							
Baseline income	0.001	0.191	0.216	0.524	0.000	0.052	
Baseline unobservables	0.000	0.259	0.309	0.504	0.047	0.088	
Follow-up income w/o controls	0.001	0.213	0.276	0.504	0.038	0.087	
Follow-up income w/ controls	0.000	0.191	0.245	0.489	0.046	0.100	0.525
Draw with minmax t-stat out of 1000 draws							
Baseline income	0.000	0.056	0.063	0.810	0.000	0.000	
Baseline unobservables	0.000	0.259	0.317	0.516	0.041	0.078	
Follow-up income w/o controls	-0.002	0.195	0.247	0.529	0.020	0.058	
Follow-up income w/ controls	-0.002	0.193	0.244	0.481	0.051	0.112	0.725
Draw with minmax t-stat on iid noise out of 1000 draws							
Baseline income	-0.001	0.227	0.290	0.497	0.052	0.097	
Baseline unobservables	0.000	0.259	0.320	0.501	0.049	0.091	
Follow-up income w/o controls	0.000	0.224	0.284	0.487	0.046	0.102	
Follow-up income w/ controls	0.000	0.224	0.284	0.488	0.045	0.102	0.474

Notes:

Statistics are based on 10,000 simulations of each method. Details on methods and variables are in Table A2.

Table A3g: IFLS School Data - Simulation Results for 30 Observations Sample

	Average difference (in std. dev.)	Difference at 95th centile (in std. dev.)	Difference at 99th centile (in std. dev.)	Average p-value	Proportion p-values < 0.05	Proportion p-values < 0.1	Proportion where controlling for dummies lowers p-value
<u>Single random draw</u>							
Follow-up in school dummy w/o controls	-0.005	0.834	0.834	0.532	0.052	0.052	
Follow-up in school dummy w/ controls	-0.003	0.668	0.856	0.501	0.054	0.103	0.540
<u>Stratified on 2 variables (8 strata)</u>							
Follow-up in school dummy w/o strata dummies	-0.010	0.745	0.944	0.492	0.071	0.113	
Follow-up in school dummy w/ strata dummies	-0.010	0.769	0.961	0.498	0.067	0.117	0.373
<u>Stratified on iid noise (8 strata)</u>							
Follow-up in school dummy w/o strata dummies	-0.002	0.652	0.834	0.526	0.042	0.072	
Follow-up in school dummy w/ strata dummies	-0.001	0.664	0.758	0.495	0.042	0.099	0.777
<u>Pairwise greedy matching (Mahalanobis distance)</u>							
Follow-up in school dummy w/o pair dummies	-0.002	0.556	0.834	0.551	0.033	0.033	
Follow-up in school dummy w/ pair dummies	-0.002	0.556	0.834	0.535	0.033	0.033	0.686
<u>Pairwise greedy matching on iid noise</u>							
Follow-up in school dummy w/o pair dummies	-0.004	0.834	0.834	0.505	0.070	0.070	
Follow-up in school dummy w/ pair dummies	-0.004	0.834	0.834	0.532	0.070	0.070	0.000
<u>Big stick rule (re-draw if any p-value < 0.05)</u>							
Follow-up in school dummy w/o controls	0.004	0.556	0.834	0.552	0.041	0.041	
Follow-up in school dummy w/ controls	0.003	0.635	0.806	0.505	0.047	0.098	0.567
<u>Draw with minmax t-stat out of 1000 draws</u>							
Follow-up in school dummy w/o controls	-0.006	0.556	0.556	0.609	0.010	0.010	
Follow-up in school dummy w/ controls	-0.005	0.574	0.705	0.514	0.047	0.108	0.854
<u>Draw with minmax t-stat on iid noise out of 1000 draws</u>							
Follow-up in school dummy w/o controls	-0.004	0.834	1.112	0.505	0.072	0.072	
Follow-up in school dummy w/ controls	-0.003	0.825	1.077	0.512	0.069	0.075	0.436

Notes:

Statistics are based on 10,000 simulations of each method. Details on methods and variables are in Table A2.

Table A3h: IFLS School Data - Simulation Results for 100 Observations Sample

	Average difference (in std. dev.)	Difference at 95th centile (in std. dev.)	Difference at 99th centile (in std. dev.)	Average p-value	Proportion p-values < 0.05	Proportion p-values < 0.1	Proportion where controlling for dummies lowers p-value
Single random draw							
Follow-up in school dummy w/o controls	-0.001	0.427	0.512	0.513	0.055	0.132	
Follow-up in school dummy w/ controls	-0.003	0.377	0.488	0.498	0.053	0.102	0.526
Stratified on 2 variables (8 strata)							
Follow-up in school dummy w/o strata dummies	-0.001	0.399	0.512	0.496	0.057	0.104	
Follow-up in school dummy w/ strata dummies	-0.001	0.394	0.516	0.496	0.053	0.093	0.515
Stratified on iid noise (8 strata)							
Follow-up in school dummy w/o strata dummies	0.001	0.369	0.485	0.509	0.045	0.093	
Follow-up in school dummy w/ strata dummies	0.002	0.379	0.497	0.497	0.052	0.110	0.604
Stratified on 3 variables (24 strata)							
Follow-up income w/o strata dummies	-0.001	0.346	0.454	0.530	0.034	0.071	
Follow-up income w/ strata dummies	-0.001	0.355	0.456	0.496	0.051	0.099	0.590
Stratified on 4 variables (48 strata)							
Follow-up income w/o strata dummies	0.001	0.369	0.485	0.522	0.041	0.081	
Follow-up income w/ strata dummies	0.000	0.384	0.497	0.504	0.047	0.097	0.538
Stratified on iid noise (48 strata)							
Follow-up profits w/o strata dummies	-0.001	0.373	0.485	0.512	0.050	0.096	
Follow-up profits w/ strata dummies	-0.001	0.375	0.490	0.505	0.049	0.089	0.640
Pairwise greedy matching (Mahalanobis distance)							
Follow-up in school dummy w/o pair dummies	0.002	0.427	0.512	0.510	0.051	0.126	
Follow-up in school dummy w/ pair dummies	0.002	0.427	0.512	0.512	0.051	0.126	0.051
Pairwise greedy matching on iid noise							
Follow-up in school dummy w/o pair dummies	0.002	0.427	0.512	0.505	0.056	0.135	
Follow-up in school dummy w/ pair dummies	0.002	0.427	0.512	0.506	0.056	0.135	0.056
Big stick rule (re-draw if any p-value < 0.05)							
Follow-up in school dummy w/o controls	0.003	0.341	0.512	0.519	0.047	0.124	
Follow-up in school dummy w/ controls	0.000	0.370	0.482	0.500	0.050	0.100	0.545
Draw with minmax t-stat out of 1000 draws							
Follow-up in school dummy w/o controls	0.001	0.341	0.469	0.534	0.034	0.104	
Follow-up in school dummy w/ controls	0.001	0.358	0.469	0.500	0.048	0.102	0.738
Draw with minmax t-stat on iid noise out of 1000 draws							
Follow-up in school dummy w/o controls	0.000	0.427	0.512	0.507	0.054	0.136	
Follow-up in school dummy w/ controls	0.000	0.413	0.519	0.508	0.053	0.109	0.479

Notes:

Statistics are based on 10,000 simulations of each method. Details on methods and variables are in Table A2.

Table A3i: IFLS School Data - Simulation Results for 300 Observations Sample

	Average difference (in std. dev.)	Difference at 95th centile (in std. dev.)	Difference at 99th centile (in std. dev.)	Average p-value	Proportion p-values < 0.05	Proportion p-values < 0.1	Proportion where controlling for dummies lowers p-value
<u>Single random draw</u>							
Follow-up in school dummy w/o controls	0.002	0.227	0.287	0.494	0.069	0.121	
Follow-up in school dummy w/ controls	0.002	0.213	0.278	0.499	0.053	0.098	0.491
<u>Stratified on 2 variables (8 strata)</u>							
Follow-up in school dummy w/o strata dummies	0.003	0.219	0.287	0.509	0.048	0.087	
Follow-up in school dummy w/ strata dummies	0.003	0.218	0.290	0.499	0.050	0.102	0.705
<u>Stratified on iid noise (8 strata)</u>							
Follow-up in school dummy w/o strata dummies	0.000	0.227	0.295	0.499	0.055	0.101	
Follow-up in school dummy w/ strata dummies	0.000	0.224	0.296	0.500	0.047	0.103	0.495
<u>Stratified on 3 variables (24 strata)</u>							
Follow-up income w/o strata dummies	0.000	0.211	0.272	0.521	0.037	0.075	
Follow-up income w/ strata dummies	0.000	0.211	0.272	0.502	0.046	0.098	0.717
<u>Stratified on 4 variables (48 strata)</u>							
Follow-up income w/o strata dummies	-0.001	0.212	0.279	0.518	0.040	0.082	
Follow-up income w/ strata dummies	-0.001	0.218	0.283	0.499	0.053	0.104	0.634
<u>Stratified on iid noise (48 strata)</u>							
Follow-up profits w/o strata dummies	-0.002	0.227	0.295	0.503	0.051	0.095	
Follow-up profits w/ strata dummies	-0.002	0.226	0.295	0.502	0.047	0.101	0.503
<u>Pairwise greedy matching (Mahalanobis distance)</u>							
Follow-up in school dummy w/o pair dummies	0.000	0.227	0.287	0.513	0.055	0.098	
Follow-up in school dummy w/ pair dummies	0.000	0.227	0.287	0.498	0.055	0.098	1.000
<u>Pairwise greedy matching on iid noise</u>							
Follow-up in school dummy w/o pair dummies	-0.001	0.196	0.287	0.520	0.048	0.095	
Follow-up in school dummy w/ pair dummies	-0.001	0.196	0.287	0.499	0.048	0.095	1.000
<u>Big stick rule (re-draw if any p-value < 0.05)</u>							
Follow-up in school dummy w/o controls	-0.002	0.227	0.287	0.501	0.063	0.111	
Follow-up in school dummy w/ controls	-0.002	0.214	0.274	0.499	0.053	0.104	0.506
<u>Draw with minmax t-stat out of 1000 draws</u>							
Follow-up in school dummy w/o controls	-0.002	0.196	0.257	0.514	0.050	0.096	
Follow-up in school dummy w/ controls	-0.002	0.211	0.270	0.493	0.052	0.104	0.674
<u>Draw with minmax t-stat on iid noise out of 1000 draws</u>							
Follow-up in school dummy w/o controls	-0.001	0.227	0.287	0.497	0.067	0.119	
Follow-up in school dummy w/ controls	-0.001	0.227	0.292	0.499	0.047	0.117	0.424

Notes:

Statistics are based on 10,000 simulations of each method. Details on methods and variables are in Table A2.

Table A3j: IFLS Expenditure Data - Simulation Results for 30 Observations Sample

	Average difference (in std. dev.)	Difference at 95th centile (in std. dev.)	Difference at 99th centile (in std. dev.)	Average p-value	Proportion p-values < 0.05	Proportion p-values < 0.1	Proportion where controlling for dummies lowers p-value
<u>Single random draw</u>							
Baseline ln hh expenditure p. cap.	0.003	0.718	0.936	0.492	0.052	0.106	
Follow-up ln hh expenditure p. cap. w/o controls	0.000	0.721	0.951	0.497	0.053	0.102	
Follow-up ln hh expenditure p. cap. w/ controls	0.004	0.690	0.877	0.496	0.053	0.102	0.495
<u>Stratified on 2 variables (8 strata)</u>							
Baseline ln hh expenditure p. cap.	-0.002	0.351	0.448	0.711	0.000	0.000	
Follow-up ln hh expenditure p. cap. w/o strata dummies	0.002	0.643	0.797	0.525	0.028	0.069	
Follow-up ln hh expenditure p. cap. w/ strata dummies	0.003	0.652	0.801	0.497	0.050	0.098	0.622
<u>Stratified on iid noise (8 strata)</u>							
Baseline ln hh expenditure p. cap.	0.003	0.629	0.803	0.546	0.024	0.061	
Follow-up ln hh expenditure p. cap. w/o strata dummies	0.001	0.700	0.881	0.501	0.046	0.094	
Follow-up ln hh expenditure p. cap. w/ strata dummies	0.001	0.688	0.874	0.499	0.047	0.097	0.480
<u>Pairwise greedy matching (Mahalanobis distance)</u>							
Baseline ln hh expenditure p. cap.	-0.001	0.413	0.510	0.662	0.000	0.001	
Follow-up ln hh expenditure p. cap. w/o pair dummies	0.002	0.496	0.617	0.609	0.001	0.014	
Follow-up ln hh expenditure p. cap. w/ pair dummies	0.002	0.496	0.617	0.502	0.050	0.097	1.000
<u>Pairwise greedy matching on iid noise</u>							
Baseline ln hh expenditure p. cap.	0.000	0.748	0.932	0.480	0.064	0.123	
Follow-up ln hh expenditure p. cap. w/o pair dummies	0.000	0.712	0.898	0.499	0.051	0.101	
Follow-up ln hh expenditure p. cap. w/ pair dummies	0.000	0.712	0.898	0.505	0.052	0.098	0.078
<u>Big stick rule (re-draw if any p-value < 0.05)</u>							
Baseline ln hh expenditure p. cap.	0.005	0.602	0.683	0.527	0.000	0.050	
Follow-up ln hh expenditure p. cap. w/o controls	0.000	0.677	0.867	0.515	0.039	0.083	
Follow-up ln hh expenditure p. cap. w/ controls	-0.003	0.666	0.843	0.497	0.053	0.101	0.523
<u>Draw with minmax t-stat out of 1000 draws</u>							
Baseline ln hh expenditure p. cap.	-0.001	0.206	0.216	0.781	0.000	0.000	
Follow-up ln hh expenditure p. cap. w/o controls	-0.006	0.590	0.770	0.553	0.017	0.046	
Follow-up ln hh expenditure p. cap. w/ controls	-0.007	0.594	0.756	0.501	0.046	0.094	0.657
<u>Draw with minmax t-stat on iid noise out of 1000 draws</u>							
Baseline ln hh expenditure p. cap.	-0.006	0.714	0.905	0.503	0.052	0.100	
Follow-up ln hh expenditure p. cap. w/o controls	0.001	0.746	0.950	0.482	0.063	0.117	
Follow-up ln hh expenditure p. cap. w/ controls	0.000	0.761	0.968	0.500	0.051	0.099	0.350

Notes:

Statistics are based on 10,000 simulations of each method. Details on methods and variables are in Table A2.

Table A3k: IFLS Expenditure Data - Simulation Results for 100 Observations Sample

	Average difference (in std. dev.)	Difference at 95th centile (in std. dev.)	Difference at 99th centile (in std. dev.)	Average p-value	Proportion p-values < 0.05	Proportion p-values < 0.1	Proportion where controlling for dummies lowers p-value
Single random draw							
Baseline ln hh expenditure p. cap.	-0.002	0.390	0.507	0.498	0.050	0.102	
Follow-up ln hh expenditure p. cap. w/o controls	0.000	0.385	0.502	0.499	0.047	0.097	
Follow-up ln hh expenditure p. cap. w/ controls	0.000	0.341	0.448	0.502	0.048	0.101	0.495
Stratified on 2 variables (8 strata)							
Baseline ln hh expenditure p. cap.	0.001	0.145	0.186	0.773	0.000	0.000	
Follow-up ln hh expenditure p. cap. w/o strata dummies	0.001	0.337	0.441	0.546	0.023	0.057	
Follow-up ln hh expenditure p. cap. w/ strata dummies	0.001	0.336	0.436	0.501	0.049	0.099	0.727
Stratified on iid noise (8 strata)							
Baseline ln hh expenditure p. cap.	0.001	0.391	0.515	0.502	0.050	0.098	
Follow-up ln hh expenditure p. cap. w/o strata dummies	0.000	0.384	0.491	0.508	0.046	0.093	
Follow-up ln hh expenditure p. cap. w/ strata dummies	0.000	0.382	0.490	0.505	0.048	0.098	0.537
Stratified on 3 variables (24 strata)							
Baseline ln hh expenditure p. cap.	-0.002	0.175	0.228	0.730	0.000	0.000	
Follow-up ln hh expenditure p. cap. w/o strata dummies	-0.001	0.335	0.442	0.553	0.022	0.054	
Follow-up ln hh expenditure p. cap. w/ strata dummies	0.000	0.327	0.426	0.502	0.049	0.102	0.643
Stratified on 4 variables (48 strata)							
Baseline ln hh expenditure p. cap.	-0.001	0.191	0.246	0.710	0.000	0.000	
Follow-up ln hh expenditure p. cap. w/o strata dummies	-0.002	0.343	0.452	0.543	0.026	0.061	
Follow-up ln hh expenditure p. cap. w/ strata dummies	-0.001	0.354	0.467	0.503	0.050	0.102	0.617
Stratified on iid noise (48 strata)							
Baseline ln hh expenditure p. cap.	0.000	0.405	0.534	0.485	0.059	0.117	
Follow-up ln hh expenditure p. cap. w/o pair dummies	-0.004	0.376	0.494	0.514	0.039	0.085	
Follow-up ln hh expenditure p. cap. w/ pair dummies	-0.004	0.376	0.496	0.516	0.041	0.083	0.495
Pairwise greedy matching (Mahalanobis distance)							
Baseline ln hh expenditure p. cap.	-0.002	0.268	0.339	0.601	0.001	0.013	
Follow-up ln hh expenditure p. cap. w/o strata dummies	-0.001	0.351	0.455	0.531	0.028	0.068	
Follow-up ln hh expenditure p. cap. w/ strata dummies	-0.001	0.351	0.455	0.500	0.049	0.099	1.000
Pairwise greedy matching on iid noise							
Baseline ln hh expenditure p. cap.	0.000	0.403	0.523	0.489	0.058	0.113	
Follow-up ln hh expenditure p. cap. w/o pair dummies	-0.002	0.352	0.455	0.536	0.029	0.066	
Follow-up ln hh expenditure p. cap. w/ pair dummies	-0.002	0.352	0.455	0.500	0.053	0.103	1.000
Big stick rule (re-draw if any p-value < 0.05)							
Baseline ln hh expenditure p. cap.	-0.001	0.328	0.373	0.534	0.000	0.049	
Follow-up ln hh expenditure p. cap. w/o controls	0.000	0.370	0.486	0.516	0.039	0.081	
Follow-up ln hh expenditure p. cap. w/ controls	-0.001	0.342	0.450	0.501	0.051	0.100	0.523
Draw with minmax t-stat out of 1000 draws							
Baseline ln hh expenditure p. cap.	-0.002	0.107	0.117	0.794	0.000	0.000	
Follow-up ln hh expenditure p. cap. w/o controls	0.000	0.329	0.437	0.550	0.022	0.050	
Follow-up ln hh expenditure p. cap. w/ controls	0.001	0.329	0.435	0.499	0.048	0.096	0.738
Draw with minmax t-stat on iid noise out of 1000 draws							
Baseline ln hh expenditure p. cap.	0.000	0.396	0.513	0.492	0.053	0.106	
Follow-up ln hh expenditure p. cap. w/o controls	-0.001	0.400	0.513	0.494	0.056	0.106	
Follow-up ln hh expenditure p. cap. w/ controls	-0.001	0.403	0.515	0.501	0.050	0.098	0.368

Notes:

Statistics are based on 10,000 simulations of each method. Details on methods and variables are in Table A2.

Table A3I: IFLS Expenditure Data - Simulation Results for 300 Observations Sample

	Average difference (in std. dev.)	Difference at 95th centile (in std. dev.)	Difference at 99th centile (in std. dev.)	Average p-value	Proportion p-values < 0.05	Proportion p-values < 0.1	Proportion where controlling for dummies lowers p-value
<u>Single random draw</u>							
Baseline ln hh expenditure p. cap.	0.000	0.224	0.297	0.502	0.047	0.100	
Follow-up ln hh expenditure p. cap. w/o controls	-0.001	0.226	0.298	0.505	0.050	0.101	
Follow-up ln hh expenditure p. cap. w/ controls	-0.001	0.193	0.258	0.504	0.046	0.099	0.503
<u>Stratified on 2 variables (8 strata)</u>							
Baseline ln hh expenditure p. cap.	0.000	0.092	0.118	0.756	0.000	0.000	
Follow-up ln hh expenditure p. cap. w/o strata dummies	-0.001	0.194	0.252	0.547	0.022	0.056	
Follow-up ln hh expenditure p. cap. w/ strata dummies	-0.001	0.194	0.253	0.500	0.049	0.100	0.869
<u>Stratified on iid noise (8 strata)</u>							
Baseline ln hh expenditure p. cap.	0.000	0.227	0.302	0.498	0.051	0.102	
Follow-up ln hh expenditure p. cap. w/o strata dummies	0.000	0.224	0.293	0.499	0.048	0.103	
Follow-up ln hh expenditure p. cap. w/ strata dummies	0.000	0.225	0.293	0.499	0.049	0.102	0.515
<u>Stratified on 3 variables (24 strata)</u>							
Baseline ln hh expenditure p. cap.	0.000	0.095	0.124	0.745	0.000	0.000	
Follow-up ln hh expenditure p. cap. w/o strata dummies	0.001	0.193	0.253	0.558	0.022	0.054	
Follow-up ln hh expenditure p. cap. w/ strata dummies	0.001	0.191	0.254	0.506	0.051	0.099	0.817
<u>Stratified on 4 variables (48 strata)</u>							
Baseline ln hh expenditure p. cap.	0.000	0.098	0.127	0.741	0.000	0.000	
Follow-up ln hh expenditure p. cap. w/o strata dummies	0.000	0.191	0.250	0.555	0.021	0.052	
Follow-up ln hh expenditure p. cap. w/ strata dummies	0.000	0.191	0.250	0.503	0.051	0.099	0.733
<u>Stratified on iid noise (48 strata)</u>							
Baseline ln hh expenditure p. cap.	-0.001	0.228	0.298	0.498	0.051	0.103	
Follow-up ln hh expenditure p. cap. w/o pair dummies	0.001	0.221	0.291	0.507	0.044	0.093	
Follow-up ln hh expenditure p. cap. w/ pair dummies	0.001	0.220	0.291	0.498	0.050	0.103	0.585
<u>Pairwise greedy matching (Mahalanobis distance)</u>							
Baseline ln hh expenditure p. cap.	0.001	0.116	0.149	0.694	0.000	0.000	
Follow-up ln hh expenditure p. cap. w/o strata dummies	-0.001	0.200	0.262	0.532	0.027	0.064	
Follow-up ln hh expenditure p. cap. w/ strata dummies	-0.001	0.200	0.262	0.497	0.048	0.101	1.000
<u>Pairwise greedy matching on iid noise</u>							
Baseline ln hh expenditure p. cap.	0.001	0.229	0.301	0.498	0.053	0.104	
Follow-up ln hh expenditure p. cap. w/o pair dummies	0.000	0.230	0.295	0.497	0.053	0.105	
Follow-up ln hh expenditure p. cap. w/ pair dummies	0.000	0.230	0.295	0.507	0.047	0.094	0.000
<u>Big stick rule (re-draw if any p-value < 0.05)</u>							
Baseline ln hh expenditure p. cap.	0.000	0.191	0.217	0.531	0.000	0.053	
Follow-up ln hh expenditure p. cap. w/o controls	-0.001	0.219	0.289	0.512	0.042	0.092	
Follow-up ln hh expenditure p. cap. w/ controls	-0.001	0.194	0.259	0.500	0.048	0.105	0.522
<u>Draw with minmax t-stat out of 1000 draws</u>							
Baseline ln hh expenditure p. cap.	0.000	0.056	0.063	0.813	0.000	0.000	
Follow-up ln hh expenditure p. cap. w/o controls	-0.001	0.198	0.252	0.548	0.024	0.059	
Follow-up ln hh expenditure p. cap. w/ controls	-0.001	0.195	0.250	0.503	0.051	0.100	0.738
<u>Draw with minmax t-stat on iid noise out of 1000 draws</u>							
Baseline ln hh expenditure p. cap.	0.000	0.231	0.303	0.500	0.055	0.106	
Follow-up ln hh expenditure p. cap. w/o controls	0.002	0.224	0.291	0.505	0.048	0.095	
Follow-up ln hh expenditure p. cap. w/ controls	0.002	0.224	0.292	0.503	0.049	0.100	0.542

Notes:

Statistics are based on 10,000 simulations of each method. Details on methods and variables are in Table A2.

Table A3m: LEAPS Math Test Score Data - Simulation Results for 30 Observations Sample

	Average difference (in std. dev.)	Difference at 95th centile (in std. dev.)	Difference at 99th centile (in std. dev.)	Average p-value	Proportion p-values < 0.05	Proportion p-values < 0.1	Proportion where controlling for dummies lowers p-value
<u>Single random draw</u>							
Baseline math test score	0.000	0.711	0.926	0.492	0.050	0.101	
Follow-up math test score w/o controls	0.001	0.717	0.911	0.498	0.052	0.101	
Follow-up math test score w/ controls	0.001	0.599	0.767	0.501	0.049	0.099	0.492
<u>Stratified on 2 variables (8 strata)</u>							
Baseline math test score	0.002	0.407	0.501	0.664	0.000	0.001	
Follow-up math test score w/o strata dummies	0.002	0.448	0.571	0.639	0.001	0.006	
Follow-up math test score w/ strata dummies	-0.001	0.378	0.482	0.501	0.051	0.102	0.684
<u>Stratified on iid noise (8 strata)</u>							
Baseline math test score	-0.003	0.715	0.905	0.494	0.051	0.103	
Follow-up math test score w/o strata dummies	-0.006	0.703	0.922	0.507	0.048	0.094	
Follow-up math test score w/ strata dummies	-0.006	0.703	0.909	0.501	0.051	0.099	0.480
<u>Pairwise greedy matching (Mahalanobis distance)</u>							
Baseline math test score	0.001	0.258	0.273	0.680	0.000	0.000	
Follow-up math test score w/o pair dummies	0.001	0.350	0.421	0.695	0.000	0.000	
Follow-up math test score w/ pair dummies	0.001	0.350	0.421	0.489	0.045	0.103	1.000
<u>Pairwise greedy matching on iid noise</u>							
Baseline math test score	-0.002	0.698	0.849	0.446	0.046	0.114	
Follow-up math test score w/o pair dummies	0.001	0.621	0.781	0.534	0.021	0.061	
Follow-up math test score w/ pair dummies	0.001	0.621	0.781	0.502	0.045	0.101	1.000
<u>Big stick rule (re-draw if any p-value < 0.05)</u>							
Baseline math test score	-0.001	0.598	0.678	0.523	0.000	0.048	
Follow-up math test score w/o controls	-0.003	0.648	0.840	0.522	0.032	0.072	
Follow-up math test score w/ controls	-0.003	0.580	0.743	0.499	0.048	0.098	0.522
<u>Draw with minmax t-stat out of 1000 draws</u>							
Baseline math test score	-0.001	0.158	0.184	0.833	0.000	0.000	
Follow-up math test score w/o controls	0.005	0.525	0.668	0.591	0.006	0.022	
Follow-up math test score w/ controls	0.006	0.516	0.655	0.500	0.046	0.098	0.740
<u>Draw with minmax t-stat on iid noise out of 1000 draws</u>							
Baseline math test score	0.003	0.711	0.898	0.502	0.050	0.099	
Follow-up math test score w/o controls	0.004	0.713	0.923	0.494	0.051	0.107	
Follow-up math test score w/ controls	0.003	0.723	0.918	0.496	0.052	0.109	0.486

Notes:

Statistics are based on 10,000 simulations of each method. Details on methods and variables are in Table A2.

Table A3n: LEAPS Math Test Score Data - Simulation Results for 100 Observations Sample

	Average difference (in std. dev.)	Difference at 95th centile (in std. dev.)	Difference at 99th centile (in std. dev.)	Average p-value	Proportion p-values < 0.05	Proportion p-values < 0.1	Proportion where controlling for dummies lowers p-value
<u>Single random draw</u>							
Baseline math test score	0.003	0.392	0.503	0.497	0.051	0.100	
Follow-up math test score w/o controls	0.003	0.392	0.514	0.503	0.051	0.100	
Follow-up math test score w/ controls	0.001	0.293	0.375	0.496	0.051	0.102	0.505
<u>Stratified on 2 variables (8 strata)</u>							
Baseline math test score	0.000	0.164	0.211	0.747	0.000	0.000	
Follow-up math test score w/o strata dummies	0.000	0.285	0.375	0.601	0.008	0.025	
Follow-up math test score w/ strata dummies	0.001	0.284	0.368	0.502	0.051	0.096	0.802
<u>Stratified on iid noise (8 strata)</u>							
Baseline math test score	0.000	0.387	0.498	0.501	0.047	0.099	
Follow-up math test score w/o strata dummies	0.001	0.391	0.502	0.499	0.050	0.102	
Follow-up math test score w/ strata dummies	0.001	0.391	0.503	0.499	0.050	0.104	0.490
<u>Stratified on 3 variables (24 strata)</u>							
Baseline math test score	0.001	0.208	0.268	0.691	0.000	0.002	
Follow-up math test score w/o strata dummies	-0.001	0.298	0.400	0.584	0.012	0.032	
Follow-up math test score w/ strata dummies	0.000	0.279	0.364	0.500	0.048	0.098	0.676
<u>Stratified on 4 variables (48 strata)</u>							
Baseline math test score	-0.001	0.237	0.310	0.649	0.001	0.006	
Follow-up math test score w/o strata dummies	0.001	0.316	0.415	0.571	0.014	0.041	
Follow-up math test score w/ strata dummies	0.001	0.314	0.407	0.503	0.050	0.100	0.611
<u>Stratified on iid noise (48 strata)</u>							
Baseline math test score	-0.001	0.390	0.510	0.492	0.050	0.105	
Follow-up math test score w/o pair dummies	0.000	0.417	0.535	0.488	0.066	0.120	
Follow-up math test score w/ pair dummies	0.000	0.418	0.538	0.500	0.058	0.105	0.420
<u>Pairwise greedy matching (Mahalanobis distance)</u>							
Baseline math test score	0.000	0.074	0.083	0.863	0.000	0.000	
Follow-up math test score w/o strata dummies	-0.002	0.262	0.346	0.624	0.003	0.013	
Follow-up math test score w/ strata dummies	-0.002	0.262	0.346	0.505	0.048	0.097	1.000
<u>Pairwise greedy matching on iid noise</u>							
Baseline math test score	-0.001	0.410	0.539	0.482	0.062	0.114	
Follow-up math test score w/o pair dummies	0.001	0.386	0.503	0.499	0.047	0.096	
Follow-up math test score w/ pair dummies	0.001	0.386	0.503	0.499	0.048	0.097	0.174
<u>Big stick rule (re-draw if any p-value < 0.05)</u>							
Baseline math test score	0.002	0.328	0.374	0.530	0.000	0.048	
Follow-up math test score w/o controls	0.003	0.363	0.463	0.521	0.033	0.075	
Follow-up math test score w/ controls	0.001	0.291	0.375	0.498	0.052	0.104	0.528
<u>Draw with minmax t-stat out of 1000 draws</u>							
Baseline math test score	0.000	0.106	0.117	0.802	0.000	0.000	
Follow-up math test score w/o controls	0.000	0.283	0.367	0.598	0.007	0.022	
Follow-up math test score w/ controls	0.000	0.278	0.358	0.501	0.046	0.097	0.768
<u>Draw with minmax t-stat on iid noise out of 1000 draws</u>							
Baseline math test score	0.001	0.394	0.507	0.499	0.052	0.104	
Follow-up math test score w/o controls	0.002	0.398	0.514	0.495	0.056	0.107	
Follow-up math test score w/ controls	0.002	0.399	0.515	0.499	0.051	0.104	0.443

Notes:

Statistics are based on 10,000 simulations of each method. Details on methods and variables are in Table A2.

Table A3o: LEAPS Math Test Score Data - Simulation Results for 300 Observations Sample

	Average difference (in std. dev.)	Difference at 95th centile (in std. dev.)	Difference at 99th centile (in std. dev.)	Average p-value	Proportion p-values < 0.05	Proportion p-values < 0.1	Proportion where controlling for dummies lowers p-value
<u>Single random draw</u>							
Baseline math test score	-0.001	0.231	0.299	0.502	0.054	0.102	
Follow-up math test score w/o controls	-0.001	0.227	0.298	0.497	0.051	0.101	
Follow-up math test score w/ controls	0.000	0.174	0.229	0.495	0.050	0.101	0.501
<u>Stratified on 2 variables (8 strata)</u>							
Baseline math test score	0.000	0.092	0.122	0.751	0.000	0.000	
Follow-up math test score w/o strata dummies	0.000	0.180	0.235	0.570	0.013	0.038	
Follow-up math test score w/ strata dummies	0.000	0.178	0.233	0.499	0.048	0.097	0.882
<u>Stratified on iid noise (8 strata)</u>							
Baseline math test score	-0.002	0.226	0.297	0.501	0.050	0.101	
Follow-up math test score w/o strata dummies	-0.002	0.228	0.302	0.499	0.052	0.106	
Follow-up math test score w/ strata dummies	-0.002	0.228	0.301	0.502	0.050	0.104	0.344
<u>Stratified on 3 variables (24 strata)</u>							
Baseline math test score	0.000	0.094	0.122	0.750	0.000	0.000	
Follow-up math test score w/o strata dummies	-0.001	0.181	0.240	0.571	0.015	0.042	
Follow-up math test score w/ strata dummies	-0.001	0.181	0.239	0.500	0.051	0.098	0.855
<u>Stratified on 4 variables (48 strata)</u>							
Baseline math test score	0.000	0.106	0.141	0.716	0.000	0.000	
Follow-up math test score w/o strata dummies	0.000	0.184	0.243	0.568	0.015	0.042	
Follow-up math test score w/ strata dummies	0.000	0.184	0.242	0.502	0.050	0.099	0.735
<u>Stratified on iid noise (48 strata)</u>							
Baseline math test score	0.004	0.231	0.302	0.491	0.055	0.108	
Follow-up math test score w/o pair dummies	0.002	0.223	0.293	0.499	0.047	0.099	
Follow-up math test score w/ pair dummies	0.002	0.223	0.293	0.498	0.048	0.100	0.511
<u>Pairwise greedy matching (Mahalanobis distance)</u>							
Baseline math test score	0.001	0.064	0.068	0.797	0.000	0.000	
Follow-up math test score w/o strata dummies	-0.001	0.167	0.220	0.588	0.008	0.028	
Follow-up math test score w/ strata dummies	-0.001	0.167	0.220	0.497	0.048	0.097	1.000
<u>Pairwise greedy matching on iid noise</u>							
Baseline math test score	0.002	0.218	0.285	0.509	0.042	0.091	
Follow-up math test score w/o pair dummies	0.002	0.229	0.301	0.492	0.053	0.107	
Follow-up math test score w/ pair dummies	0.002	0.229	0.301	0.501	0.047	0.098	0.000
<u>Big stick rule (re-draw if any p-value < 0.05)</u>							
Baseline math test score	-0.001	0.188	0.216	0.540	0.000	0.047	
Follow-up math test score w/o controls	-0.001	0.209	0.270	0.518	0.033	0.076	
Follow-up math test score w/ controls	-0.001	0.171	0.221	0.496	0.047	0.100	0.533
<u>Draw with minmax t-stat out of 1000 draws</u>							
Baseline math test score	0.000	0.054	0.062	0.816	0.000	0.000	
Follow-up math test score w/o controls	0.001	0.175	0.226	0.576	0.010	0.032	
Follow-up math test score w/ controls	0.000	0.173	0.221	0.496	0.051	0.102	0.776
<u>Draw with minmax t-stat on iid noise out of 1000 draws</u>							
Baseline math test score	0.001	0.228	0.294	0.499	0.052	0.101	
Follow-up math test score w/o controls	0.000	0.226	0.297	0.500	0.050	0.099	
Follow-up math test score w/ controls	0.000	0.226	0.296	0.498	0.051	0.100	0.533

Notes:

Statistics are based on 10,000 simulations of each method. Details on methods and variables are in Table A2.

Table A3p: LEAPS Height Data - Simulation Results for 30 Observations Sample

	Average difference (in std. dev.)	Difference at 95th centile (in std. dev.)	Difference at 99th centile (in std. dev.)	Average p-value	Proportion p-values < 0.05	Proportion p-values < 0.1	Proportion where controlling for dummies lowers p-value
<u>Single random draw</u>							
Baseline height z-score	0.006	0.710	0.887	0.502	0.050	0.097	
Follow-up height z-score w/o controls	0.007	0.710	0.917	0.503	0.050	0.097	
Follow-up height z-score w/ controls	0.003	0.487	0.624	0.502	0.050	0.100	0.498
<u>Stratified on 2 variables (8 strata)</u>							
Baseline height z-score	-0.001	0.442	0.576	0.650	0.001	0.006	
Follow-up height z-score w/o strata dummies	0.001	0.620	0.828	0.545	0.026	0.056	
Follow-up height z-score w/ strata dummies	0.003	0.597	0.784	0.503	0.051	0.097	0.579
<u>Stratified on iid noise (8 strata)</u>							
Baseline height z-score	0.003	0.758	0.983	0.481	0.067	0.127	
Follow-up height z-score w/o strata dummies	0.006	0.765	0.971	0.479	0.070	0.125	
Follow-up height z-score w/ strata dummies	0.006	0.779	0.984	0.507	0.050	0.097	0.212
<u>Pairwise greedy matching (Mahalanobis distance)</u>							
Baseline height z-score	0.003	0.644	0.779	0.494	0.024	0.075	
Follow-up height z-score w/o pair dummies	0.004	0.557	0.669	0.550	0.005	0.030	
Follow-up height z-score w/ pair dummies	0.004	0.557	0.669	0.489	0.041	0.101	1.000
<u>Pairwise greedy matching on iid noise</u>							
Baseline height z-score	-0.004	0.559	0.703	0.571	0.008	0.029	
Follow-up height z-score w/o pair dummies	-0.003	0.753	0.959	0.478	0.065	0.124	
Follow-up height z-score w/ pair dummies	-0.003	0.753	0.959	0.502	0.054	0.100	0.003
<u>Big stick rule (re-draw if any p-value < 0.05)</u>							
Baseline height z-score	-0.001	0.585	0.675	0.535	0.000	0.041	
Follow-up height z-score w/o controls	-0.003	0.620	0.789	0.539	0.023	0.059	
Follow-up height z-score w/ controls	-0.002	0.471	0.596	0.500	0.048	0.100	0.537
<u>Draw with minmax t-stat out of 1000 draws</u>							
Baseline height z-score	0.002	0.142	0.178	0.848	0.000	0.000	
Follow-up height z-score w/o controls	0.001	0.443	0.559	0.654	0.001	0.007	
Follow-up height z-score w/ controls	0.000	0.435	0.558	0.503	0.054	0.103	0.825
<u>Draw with minmax t-stat on iid noise out of 1000 draws</u>							
Baseline height z-score	-0.001	0.625	0.796	0.541	0.024	0.061	
Follow-up height z-score w/o controls	0.001	0.692	0.869	0.508	0.045	0.092	
Follow-up height z-score w/ controls	0.002	0.698	0.877	0.488	0.061	0.117	0.605

Notes:

Statistics are based on 10,000 simulations of each method. Details on methods and variables are in Table A2.

Table A3q: LEAPS Height Data - Simulation Results for 100 Observations Sample

	Average difference (in std. dev.)	Difference at 95th centile (in std. dev.)	Difference at 99th centile (in std. dev.)	Average p-value	Proportion p-values < 0.05	Proportion p-values < 0.1	Proportion where controlling for dummies lowers p-value
Single random draw							
Baseline height z-score	0.001	0.395	0.517	0.500	0.053	0.100	
Follow-up height z-score w/o controls	0.001	0.393	0.509	0.500	0.051	0.101	
Follow-up height z-score w/ controls	-0.001	0.284	0.376	0.506	0.050	0.100	0.490
Stratified on 2 variables (8 strata)							
Baseline height z-score	0.001	0.160	0.208	0.750	0.000	0.000	
Follow-up height z-score w/o strata dummies	-0.002	0.297	0.385	0.588	0.008	0.030	
Follow-up height z-score w/ strata dummies	-0.002	0.293	0.380	0.498	0.051	0.101	0.863
Stratified on iid noise (8 strata)							
Baseline height z-score	0.000	0.387	0.509	0.505	0.047	0.093	
Follow-up height z-score w/o strata dummies	-0.002	0.385	0.503	0.500	0.047	0.098	
Follow-up height z-score w/ strata dummies	-0.002	0.390	0.502	0.499	0.051	0.099	0.497
Stratified on 3 variables (24 strata)							
Baseline height z-score	-0.001	0.172	0.225	0.736	0.000	0.000	
Follow-up height z-score w/o strata dummies	-0.001	0.299	0.398	0.582	0.011	0.032	
Follow-up height z-score w/ strata dummies	-0.001	0.300	0.396	0.505	0.046	0.091	0.733
Stratified on 4 variables (48 strata)							
Baseline height z-score	0.000	0.206	0.262	0.691	0.000	0.001	
Follow-up height z-score w/o strata dummies	0.000	0.310	0.408	0.570	0.013	0.037	
Follow-up height z-score w/ strata dummies	0.000	0.301	0.391	0.509	0.046	0.092	0.613
Stratified on iid noise (48 strata)							
Baseline height z-score	-0.002	0.385	0.502	0.503	0.046	0.095	
Follow-up height z-score w/o pair dummies	-0.004	0.420	0.556	0.472	0.071	0.128	
Follow-up height z-score w/ pair dummies	-0.004	0.423	0.567	0.502	0.047	0.096	0.251
Pairwise greedy matching (Mahalanobis distance)							
Baseline height z-score	0.000	0.102	0.131	0.826	0.000	0.000	
Follow-up height z-score w/o pair dummies	0.000	0.252	0.319	0.636	0.001	0.008	
Follow-up height z-score w/ pair dummies	0.000	0.252	0.319	0.502	0.050	0.098	1.000
Pairwise greedy matching on iid noise							
Baseline height z-score	0.001	0.367	0.475	0.516	0.035	0.080	
Follow-up height z-score w/o pair dummies	-0.003	0.360	0.476	0.523	0.033	0.072	
Follow-up height z-score w/ pair dummies	-0.003	0.360	0.476	0.499	0.050	0.098	1.000
Big stick rule (re-draw if any p-value < 0.05)							
Baseline height z-score	-0.001	0.319	0.371	0.536	0.000	0.038	
Follow-up height z-score w/o controls	-0.003	0.358	0.461	0.525	0.032	0.073	
Follow-up height z-score w/ controls	-0.002	0.279	0.361	0.504	0.048	0.098	0.519
Draw with minmax t-stat out of 1000 draws							
Baseline height z-score	0.000	0.089	0.109	0.826	0.000	0.000	
Follow-up height z-score w/o controls	0.000	0.285	0.375	0.601	0.007	0.025	
Follow-up height z-score w/ controls	0.000	0.277	0.370	0.501	0.052	0.101	0.754
Draw with minmax t-stat on iid noise out of 1000 draws							
Baseline height z-score	0.002	0.392	0.501	0.501	0.051	0.097	
Follow-up height z-score w/o controls	0.002	0.402	0.519	0.489	0.058	0.117	
Follow-up height z-score w/ controls	0.002	0.404	0.522	0.497	0.050	0.108	0.303

Notes:

Statistics are based on 10,000 simulations of each method. Details on methods and variables are in Table A2.

Table A3r: LEAPS Height Data - Simulation Results for 300 Observations Sample

	Average difference (in std. dev.)	Difference at 95th centile (in std. dev.)	Difference at 99th centile (in std. dev.)	Average p-value	Proportion p-values < 0.05	Proportion p-values < 0.1	Proportion where controlling for dummies lowers p-value
Single random draw							
Baseline height z-score	0.000	0.227	0.300	0.502	0.051	0.101	
Follow-up height z-score w/o controls	-0.001	0.222	0.289	0.505	0.046	0.097	
Follow-up height z-score w/ controls	-0.001	0.181	0.239	0.504	0.046	0.094	0.499
Stratified on 2 variables (8 strata)							
Baseline height z-score	-0.001	0.084	0.109	0.774	0.000	0.000	
Follow-up height z-score w/o strata dummies	0.000	0.186	0.246	0.554	0.017	0.044	
Follow-up height z-score w/ strata dummies	0.000	0.185	0.244	0.498	0.045	0.097	0.860
Stratified on iid noise (8 strata)							
Baseline height z-score	0.000	0.226	0.289	0.503	0.050	0.095	
Follow-up height z-score w/o strata dummies	0.000	0.221	0.293	0.512	0.045	0.094	
Follow-up height z-score w/ strata dummies	0.000	0.221	0.292	0.505	0.050	0.102	0.771
Stratified on 3 variables (24 strata)							
Baseline height z-score	0.000	0.092	0.122	0.751	0.000	0.000	
Follow-up height z-score w/o strata dummies	-0.001	0.191	0.253	0.554	0.021	0.051	
Follow-up height z-score w/ strata dummies	-0.001	0.189	0.250	0.501	0.048	0.099	0.788
Stratified on 4 variables (48 strata)							
Baseline height z-score	0.000	0.103	0.136	0.728	0.000	0.000	
Follow-up height z-score w/o strata dummies	0.000	0.189	0.248	0.553	0.019	0.049	
Follow-up height z-score w/ strata dummies	0.000	0.188	0.242	0.503	0.049	0.097	0.655
Stratified on iid noise (48 strata)							
Baseline height z-score	0.002	0.232	0.304	0.489	0.057	0.111	
Follow-up height z-score w/o pair dummies	0.000	0.222	0.294	0.505	0.046	0.092	
Follow-up height z-score w/ pair dummies	0.000	0.222	0.293	0.496	0.054	0.104	0.620
Pairwise greedy matching (Mahalanobis distance)							
Baseline height z-score	0.000	0.067	0.087	0.814	0.000	0.000	
Follow-up height z-score w/o pair dummies	0.000	0.189	0.251	0.560	0.021	0.049	
Follow-up height z-score w/ pair dummies	0.000	0.189	0.251	0.504	0.050	0.098	1.000
Pairwise greedy matching on iid noise							
Baseline height z-score	0.002	0.215	0.283	0.508	0.039	0.084	
Follow-up height z-score w/o pair dummies	0.002	0.226	0.294	0.496	0.050	0.100	
Follow-up height z-score w/ pair dummies	0.002	0.226	0.294	0.500	0.048	0.097	0.000
Big stick rule (re-draw if any p-value < 0.05)							
Baseline height z-score	0.002	0.187	0.217	0.540	0.000	0.044	
Follow-up height z-score w/o controls	0.002	0.212	0.279	0.519	0.037	0.081	
Follow-up height z-score w/ controls	0.000	0.183	0.243	0.502	0.048	0.095	0.522
Draw with minmax t-stat out of 1000 draws							
Baseline height z-score	0.000	0.056	0.064	0.820	0.000	0.000	
Follow-up height z-score w/o controls	0.000	0.186	0.239	0.560	0.015	0.045	
Follow-up height z-score w/ controls	0.000	0.184	0.236	0.499	0.049	0.098	0.754
Draw with minmax t-stat on iid noise out of 1000 draws							
Baseline height z-score	0.000	0.226	0.295	0.497	0.050	0.102	
Follow-up height z-score w/o controls	0.000	0.225	0.296	0.500	0.049	0.097	
Follow-up height z-score w/ controls	0.000	0.225	0.298	0.498	0.051	0.102	0.538

Notes:

Statistics are based on 10,000 simulations of each method. Details on methods and variables are in Table A2.

Table A3s: Sri Lanka Data - Power of Detecting a Treatment Effect with Different Methods

	Sample size					
	30		100		300	
	Proportion p-values < 0.05	Proportion p-values < 0.1	Proportion p-values < 0.05	Proportion p-values < 0.1	Proportion p-values < 0.05	Proportion p-values < 0.1
Single draw						
Without controls	0.083	0.144	0.063	0.149	0.194	0.288
With controls	0.073	0.130	0.073	0.157	0.205	0.301
Stratified on 2 variables (8 strata)						
Without strata dummies	0.049	0.106	0.044	0.129	0.183	0.274
With strata dummies	0.075	0.135	0.088	0.186	0.210	0.305
Stratified on iid noise (8 strata)						
Without strata dummies	0.069	0.132	0.060	0.139	0.190	0.286
With strata dummies	0.078	0.144	0.062	0.146	0.190	0.285
Stratified on 3 variables (24 strata)						
Without strata dummies	-	-	0.058	0.138	0.185	0.281
With strata dummies	-	-	0.182	0.273	0.231	0.327
Stratified on 4 variables (48 strata)						
Without strata dummies	-	-	0.058	0.144	0.186	0.278
With strata dummies	-	-	0.156	0.242	0.246	0.343
Stratified on iid noise (48 strata)						
Without strata dummies	-	-	0.061	0.139	0.192	0.288
With strata dummies	-	-	0.033	0.085	0.190	0.288
Pairwise greedy matching (Mahalanobis distance)						
Without pair dummies	0.041	0.095	0.035	0.100	0.179	0.267
With pair dummies	0.085	0.153	0.085	0.168	0.201	0.290
Pairwise greedy matching on iid noise						
Without pair dummies	0.031	0.086	0.072	0.163	0.175	0.279
With pair dummies	0.089	0.164	0.058	0.140	0.234	0.338
Big stick rule (re-draw if any p-value < 0.05)						
Without controls	0.080	0.139	0.057	0.144	0.188	0.280
With controls	0.072	0.131	0.077	0.165	0.209	0.302
Draw with minmax t-stat out of 1000 draws						
Without controls	0.083	0.154	0.038	0.115	0.184	0.280
With controls	0.094	0.167	0.077	0.169	0.212	0.309
Draw with minmax t-stat on iid noise out of 1000 draws						
Without controls	0.078	0.143	0.066	0.157	0.195	0.290
With controls	0.070	0.128	0.061	0.146	0.193	0.289

Notes:

Statistics are based on 10,000 simulations of each method.

Details on methods and variables are in Table A2.

The simulated treatment effect is a 1,000 Sri Lankan Rupee increase in profits (about 25% of average baseline profits) for the treatment group.

Table A3t: ENE Data - Power of Detecting a Treatment Effect with Different Methods

	Sample size					
	30		100		300	
	Proportion p-values < 0.05	Proportion p-values < 0.1	Proportion p-values < 0.05	Proportion p-values < 0.1	Proportion p-values < 0.05	Proportion p-values < 0.1
Single draw						
Without controls	0.106	0.181	0.119	0.206	0.370	0.494
With controls	0.093	0.164	0.149	0.237	0.466	0.584
Stratified on 2 variables (8 strata)						
Without strata dummies	0.105	0.177	0.085	0.170	0.354	0.486
With strata dummies	0.103	0.172	0.116	0.204	0.444	0.561
Stratified on iid noise (8 strata)						
Without strata dummies	0.132	0.215	0.118	0.204	0.372	0.489
With strata dummies	0.092	0.165	0.111	0.197	0.375	0.490
Stratified on 3 variables (24 strata)						
Without strata dummies	-	-	0.081	0.161	0.352	0.486
With strata dummies	-	-	0.126	0.212	0.432	0.551
Stratified on 4 variables (48 strata)						
Without strata dummies	-	-	0.100	0.180	0.351	0.480
With strata dummies	-	-	0.120	0.199	0.417	0.541
Stratified on iid noise (48 strata)						
Without strata dummies	-	-	0.136	0.216	0.356	0.479
With strata dummies	-	-	0.115	0.200	0.377	0.501
Pairwise greedy matching (Mahalanobis distance)						
Without pair dummies	0.039	0.098	0.015	0.056	0.306	0.475
With pair dummies	0.151	0.242	0.222	0.333	0.654	0.761
Pairwise greedy matching on iid noise						
Without pair dummies	0.131	0.203	0.113	0.198	0.343	0.484
With pair dummies	0.104	0.173	0.115	0.200	0.473	0.602
Big stick rule (re-draw if any p-value < 0.05)						
Without controls	0.102	0.178	0.105	0.193	0.363	0.489
With controls	0.096	0.167	0.154	0.245	0.467	0.584
Draw with minmax t-stat out of 1000 draws						
Without controls	0.109	0.184	0.063	0.150	0.345	0.474
With controls	0.117	0.196	0.152	0.244	0.464	0.582
Draw with minmax t-stat on iid noise out of 1000 draws						
Without controls	0.091	0.165	0.107	0.196	0.372	0.488
With controls	0.126	0.208	0.110	0.201	0.369	0.487

Notes:

Statistics are based on 10,000 simulations of each method.

Details on methods and variables are in Table A2.

The simulated treatment effect is a 920 Peso increase in income (about 20% of average baseline income) for the treatment group.

Table A3u: IFLS School Data - Power of Detecting a Treatment Effect with Different Methods

	Sample size					
	30		100		300	
	Proportion p-values < 0.05	Proportion p-values < 0.1	Proportion p-values < 0.05	Proportion p-values < 0.1	Proportion p-values < 0.05	Proportion p-values < 0.1
Single draw						
Without controls	0.123	0.123	0.136	0.257	0.407	0.606
With controls	0.055	0.109	0.174	0.284	0.466	0.608
Stratified on 2 variables (8 strata)						
Without strata dummies	0.089	0.146	0.154	0.303	0.433	0.585
With strata dummies	0.063	0.131	0.152	0.278	0.476	0.596
Stratified on iid noise (8 strata)						
Without strata dummies	0.083	0.116	0.143	0.301	0.423	0.567
With strata dummies	0.053	0.118	0.154	0.313	0.435	0.559
Stratified on 3 variables (24 strata)						
Without strata dummies	-	-	0.138	0.267	0.416	0.574
With strata dummies	-	-	0.185	0.301	0.474	0.596
Stratified on 4 variables (48 strata)						
Without strata dummies	-	-	0.148	0.273	0.407	0.562
With strata dummies	-	-	0.156	0.255	0.457	0.589
Stratified on iid noise (48 strata)						
Without strata dummies	-	-	0.138	0.290	0.412	0.560
With strata dummies	-	-	0.149	0.272	0.556	0.458
Pairwise greedy matching (Mahalanobis distance)						
Without pair dummies	0.111	0.111	0.147	0.265	0.391	0.607
With pair dummies	0.057	0.121	0.147	0.268	0.476	0.602
Pairwise greedy matching on iid noise						
Without pair dummies	0.144	0.144	0.150	0.268	0.385	0.610
With pair dummies	0.038	0.144	0.151	0.273	0.488	0.607
Big stick rule (re-draw if any p-value < 0.05)						
Without controls	0.115	0.115	0.136	0.260	0.392	0.597
With controls	0.057	0.112	0.178	0.290	0.451	0.600
Draw with minmax t-stat out of 1000 draws						
Without controls	0.066	0.066	0.125	0.245	0.387	0.600
With controls	0.064	0.095	0.157	0.336	0.484	0.595
Draw with minmax t-stat on iid noise out of 1000 draws						
Without controls	0.144	0.144	0.142	0.263	0.394	0.603
With controls	0.054	0.146	0.142	0.265	0.420	0.566

Notes:

Statistics are based on 10,000 simulations of each method.

Details on methods and variables are in Table A2.

The simulated treatment effect is that one in three randomly selected children in the treatment group who would have dropped out don't.

Table A3v: IFLS Expenditure Data - Power of Detecting a Treatment Effect with Different Methods

	Sample size					
	30		100		300	
	Proportion p-values < 0.05	Proportion p-values < 0.1	Proportion p-values < 0.05	Proportion p-values < 0.1	Proportion p-values < 0.05	Proportion p-values < 0.1
Single draw						
Without controls	0.267	0.390	0.717	0.812	0.995	0.999
With controls	0.283	0.409	0.819	0.894	1.000	1.000
Stratified on 2 variables (8 strata)						
Without strata dummies	0.251	0.382	0.742	0.852	0.998	0.999
With strata dummies	0.299	0.424	0.839	0.904	0.999	1.000
Stratified on iid noise (8 strata)						
Without strata dummies	0.269	0.388	0.723	0.820	0.995	0.998
With strata dummies	0.265	0.387	0.732	0.827	0.996	0.998
Stratified on 3 variables (24 strata)						
Without strata dummies	-	-	0.747	0.850	0.999	1.000
With strata dummies	-	-	0.854	0.914	1.000	1.000
Stratified on 4 variables (48 strata)						
Without strata dummies	-	-	0.734	0.845	0.999	1.000
With strata dummies	-	-	0.795	0.876	1.000	1.000
Stratified on iid noise (48 strata)						
Without strata dummies	-	-	0.718	0.819	0.996	0.999
With strata dummies	-	-	0.698	0.809	0.997	0.999
Pairwise greedy matching (Mahalanobis distance)						
Without pair dummies	0.192	0.342	0.7297	0.8327	0.998	1.000
With pair dummies	0.428	0.580	0.7873	0.8753	0.999	1.000
Pairwise greedy matching on iid noise						
Without pair dummies	0.269	0.387	0.737	0.840	0.996	0.999
With pair dummies	0.233	0.356	0.803	0.884	0.995	0.998
Big stick rule (re-draw if any p-value < 0.05)						
Without controls	0.255	0.382	0.726	0.825	0.997	0.999
With controls	0.288	0.419	0.825	0.898	1.000	1.000
Draw with minmax t-stat out of 1000 draws						
Without controls	0.224	0.360	0.743	0.850	0.999	1.000
With controls	0.325	0.461	0.846	0.913	1.000	1.000
Draw with minmax t-stat on iid noise out of 1000 draws						
Without controls	0.278	0.397	0.708	0.808	0.995	0.998
With controls	0.228	0.345	0.685	0.791	0.995	0.998

Notes:

Statistics are based on 10,000 simulations of each method.

Details on methods and variables are in Table A2.

The simulated treatment effect is an increase of 0.4 in ln household expenditure per capita, which corresponds to about one half a standard deviation or moving a household from the 25th to the 50th percentile.

Table A3w: LEAPS Math Test Score Data - Power of Detecting a Treatment Effect with Different Methods

	Sample size					
	30		100		300	
	Proportion p-values < 0.05	Proportion p-values < 0.1	Proportion p-values < 0.05	Proportion p-values < 0.1	Proportion p-values < 0.05	Proportion p-values < 0.1
Single draw						
Without controls	0.097	0.167	0.206	0.308	0.494	0.615
With controls	0.111	0.183	0.328	0.441	0.713	0.812
Stratified on 2 variables (8 strata)						
Without strata dummies	0.016	0.051	0.123	0.236	0.497	0.654
With strata dummies	0.202	0.313	0.343	0.464	0.691	0.792
Stratified on iid noise (8 strata)						
Without strata dummies	0.086	0.154	0.201	0.299	0.494	0.620
With strata dummies	0.086	0.159	0.202	0.300	0.488	0.615
Stratified on 3 variables (24 strata)						
Without strata dummies	-	-	0.135	0.245	0.494	0.649
With strata dummies	-	-	0.340	0.464	0.685	0.790
Stratified on 4 variables (48 strata)						
Without strata dummies	-	-	0.147	0.254	0.494	0.650
With strata dummies	-	-	0.279	0.399	0.674	0.781
Stratified on iid noise (48 strata)						
Without strata dummies	-	-	0.207	0.309	0.507	0.631
With strata dummies	-	-	0.185	0.285	0.507	0.630
Pairwise greedy matching (Mahalanobis distance)						
Without pair dummies	0.000	0.016	0.104	0.215	0.489	0.655
With pair dummies	0.215	0.320	0.356	0.482	0.733	0.829
Pairwise greedy matching on iid noise						
Without pair dummies	0.068	0.131	0.207	0.304	0.508	0.624
With pair dummies	0.096	0.170	0.200	0.300	0.482	0.603
Big stick rule (re-draw if any p-value < 0.05)						
Without controls	0.077	0.139	0.189	0.295	0.494	0.619
With controls	0.112	0.187	0.330	0.443	0.713	0.816
Draw with minmax t-stat out of 1000 draws						
Without controls	0.035	0.087	0.127	0.237	0.502	0.657
With controls	0.131	0.217	0.336	0.461	0.729	0.826
Draw with minmax t-stat on iid noise out of 1000 draws						
Without controls	0.101	0.175	0.205	0.308	0.493	0.619
With controls	0.096	0.168	0.196	0.298	0.496	0.620

Notes:

Statistics are based on 10,000 simulations of each method.

Details on methods and variables are in Table A2.

The simulated treatment effect is an increase of one quarter of a standard deviation in the test score.

Table A3x: LEAPS Height Data - Power of Detecting a Treatment Effect with Different Methods

	Sample size					
	30		100		300	
	Proportion p-values < 0.05	Proportion p-values < 0.1	Proportion values < 0.05	p- Proportion p-values < 0.1	Proportion p-values < 0.05	Proportion p-values < 0.1
Single draw						
Without controls	0.103	0.174	0.229	0.340	0.609	0.728
With controls	0.155	0.246	0.377	0.512	0.779	0.863
Stratified on 2 variables (8 strata)						
Without strata dummies	0.067	0.134	0.156	0.286	0.628	0.757
With strata dummies	0.121	0.201	0.363	0.487	0.757	0.849
Stratified on iid noise (8 strata)						
Without strata dummies	0.121	0.195	0.226	0.335	0.617	0.738
With strata dummies	0.155	0.161	0.228	0.337	0.635	0.748
Stratified on 3 variables (24 strata)						
Without strata dummies	-	-	0.161	0.295	0.629	0.757
With strata dummies	-	-	0.340	0.463	0.754	0.843
Stratified on 4 variables (48 strata)						
Without strata dummies	-	-	0.176	0.297	0.635	0.756
With strata dummies	-	-	0.328	0.457	0.769	0.854
Stratified on iid noise (48 strata)						
Without strata dummies	-	-	0.241	0.346	0.616	0.727
With strata dummies	-	-	0.183	0.286	0.637	0.741
Pairwise greedy matching (Mahalanobis distance)						
Without pair dummies	0.060	0.133	0.124	0.257	0.633	0.766
With pair dummies	0.128	0.206	0.451	0.586	0.763	0.853
Pairwise greedy matching on iid noise						
Without pair dummies	0.113	0.194	0.206	0.322	0.613	0.728
With pair dummies	0.087	0.157	0.249	0.369	0.600	0.721
Big stick rule (re-draw if any p-value < 0.05)						
Without controls	0.068	0.134	0.205	0.319	0.623	0.743
With controls	0.155	0.251	0.384	0.515	0.781	0.867
Draw with minmax t-stat out of 1000 draws						
Without controls	0.015	0.052	0.155	0.274	0.631	0.767
With controls	0.184	0.281	0.405	0.540	0.787	0.866
Draw with minmax t-stat on iid noise out of 1000 draws						
Without controls	0.094	0.169	0.239	0.342	0.610	0.726
With controls	0.116	0.195	0.221	0.326	0.614	0.727

Notes:

Statistics are based on 10,000 simulations of each method.

Details on methods and variables are in Table A2.

The simulated treatment effect is an increase of one quarter of a standard deviation in the z-score, where the z-score is defined as standard deviations from mean US height for age.

APPENDIX 4: ADDITIONAL FIGURES

Figure A4a: Sri Lanka Data
P-Values on Difference in Outcome Variable
at Follow-up vs. Baseline

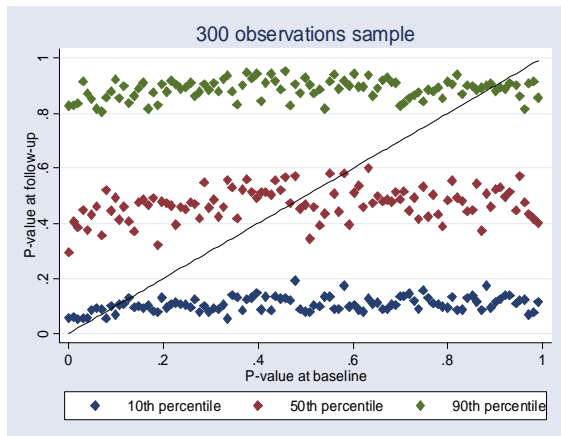
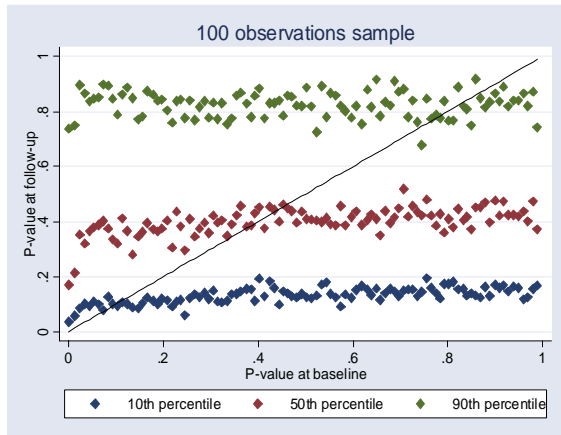
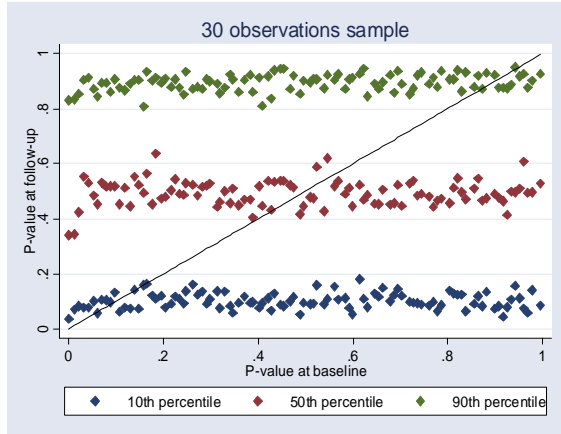


Figure A4b: ENE Income Data
P-Values on Difference in Outcome Variable
at Follow-up vs. Baseline

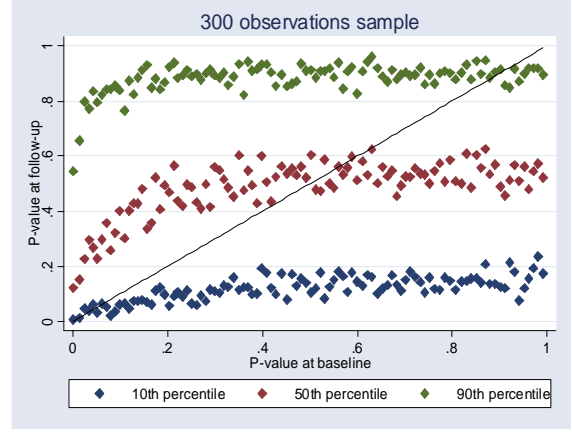
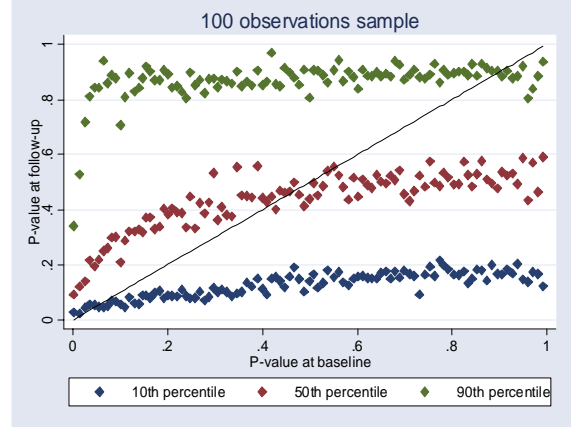
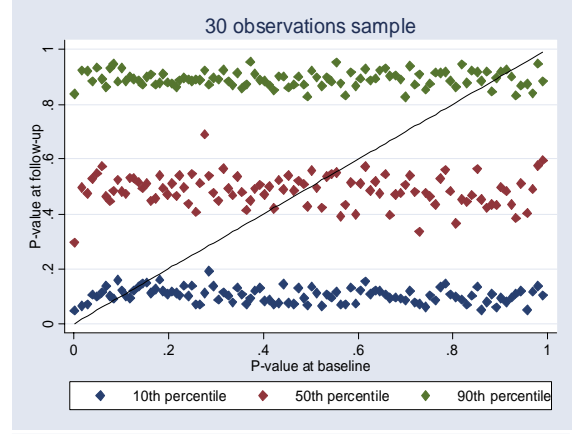


Figure A4c: IFLS Expenditure Data
P-Values on Difference in Outcome Variable
at Follow-up vs. Baseline

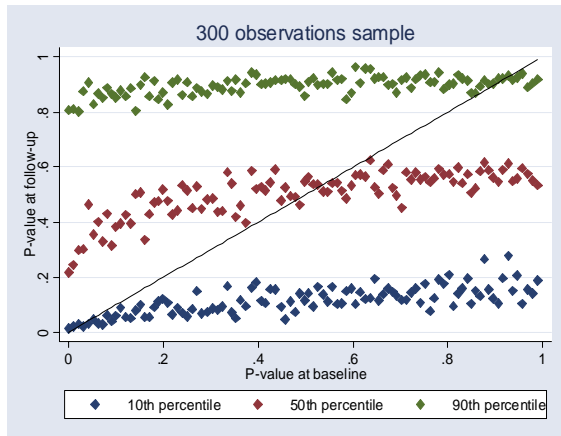
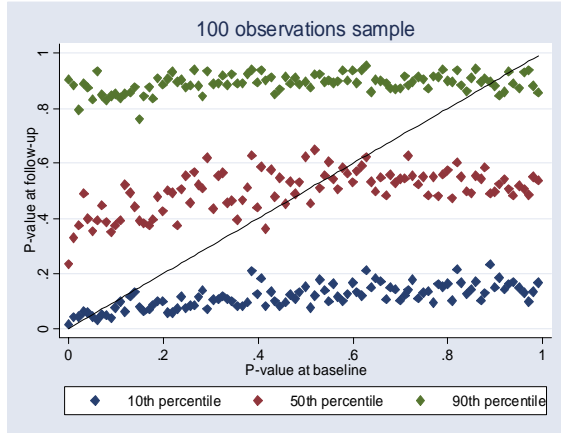
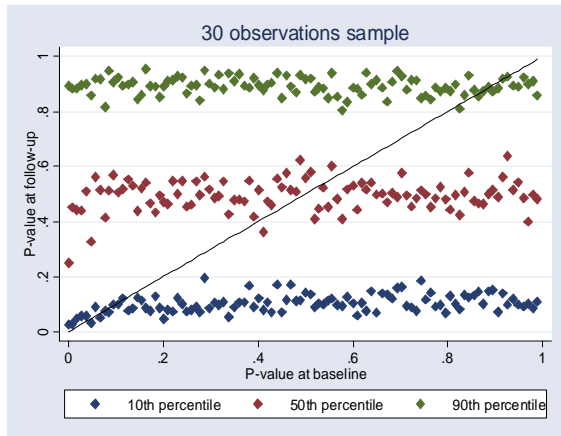
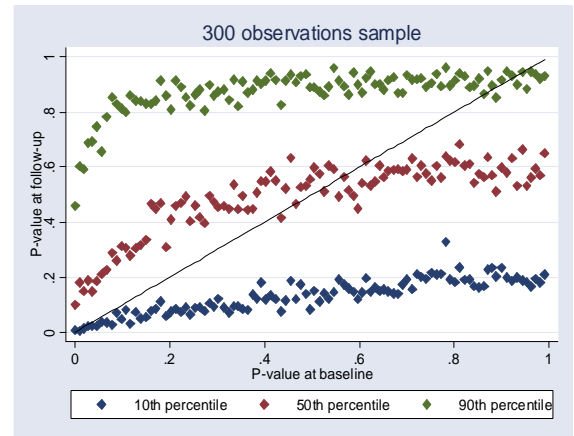
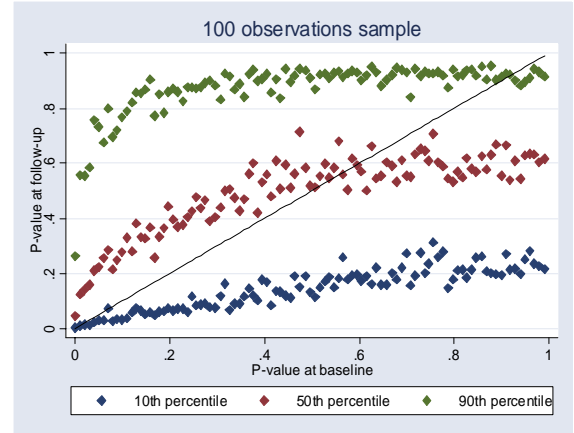
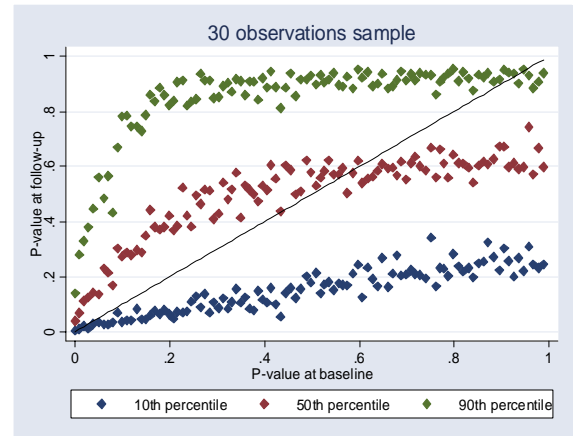
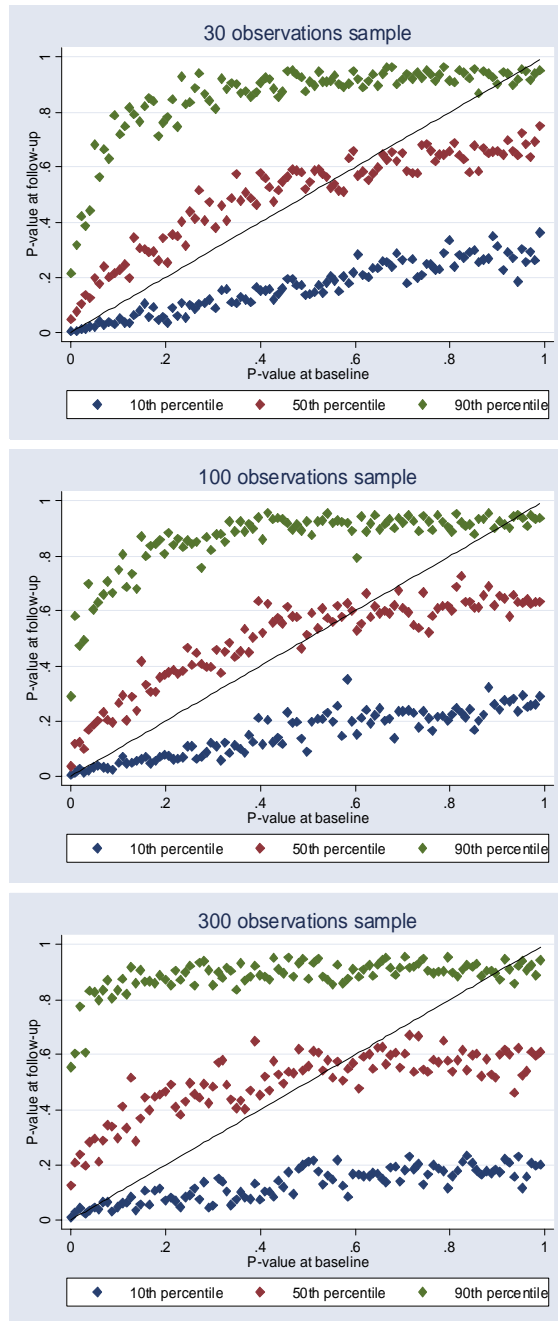


Figure A4d: LEAPS Math Test Score Data
P-Values on Difference in Outcome Variable
at Follow-up vs. Baseline



**Figure A4e: LEAPS Height Z-Score Data
P-Values on Difference in Outcome Variable
at Follow-up vs. Baseline**



If we observe baseline imbalance, and control for baseline variables, is there any difference in follow-up balance? (Figure 2 in the paper)

Results for other sample sizes and datasets

Figure A4f: Sri Lanka Data 30 Observations

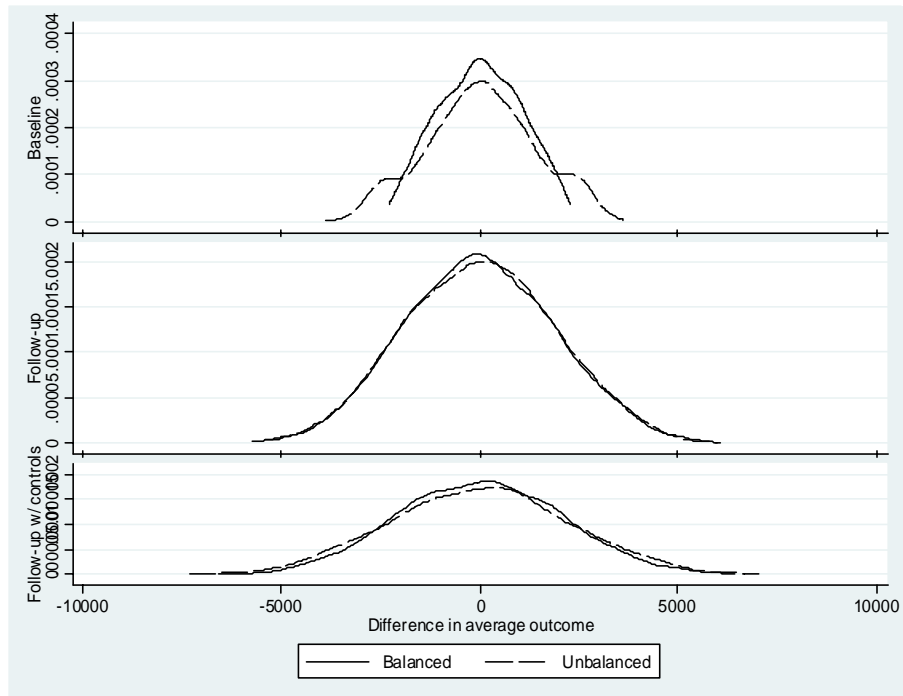


Figure A4g: Sri Lanka Data 100 Observations

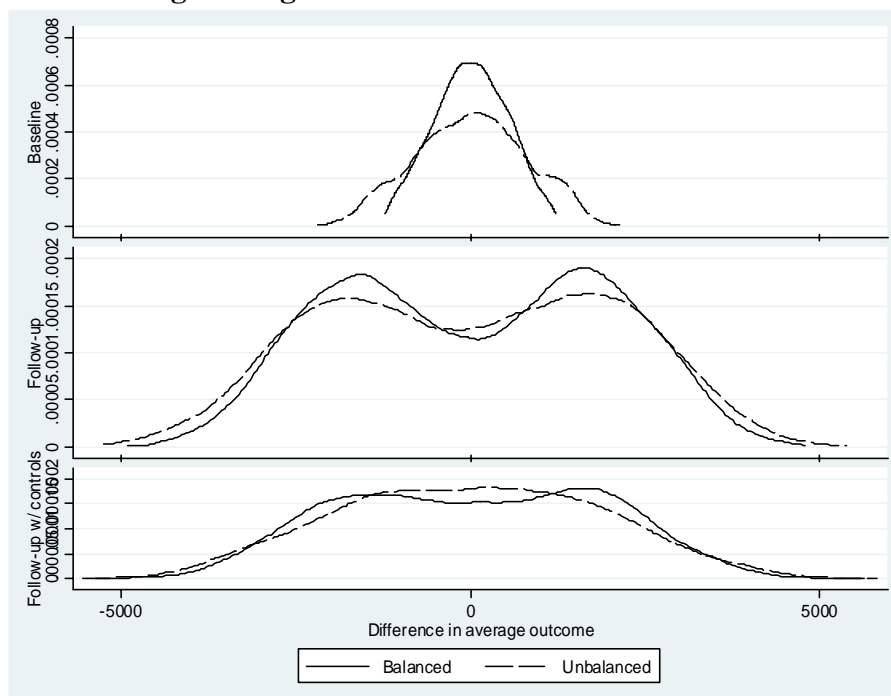


Figure A4h: Sri Lanka Data 300 Observations

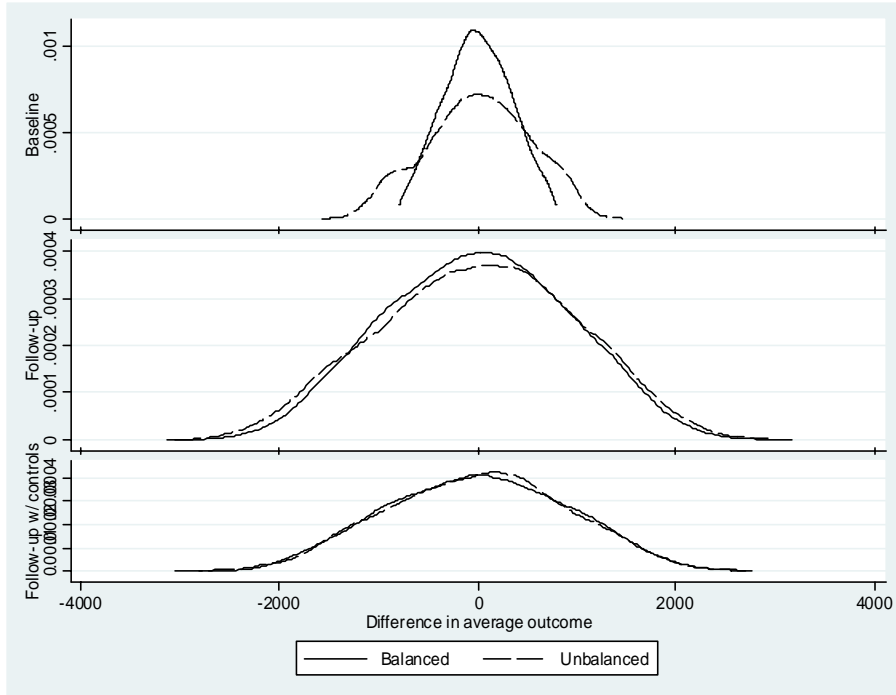


Figure A4i: ENE Data 30 Observations

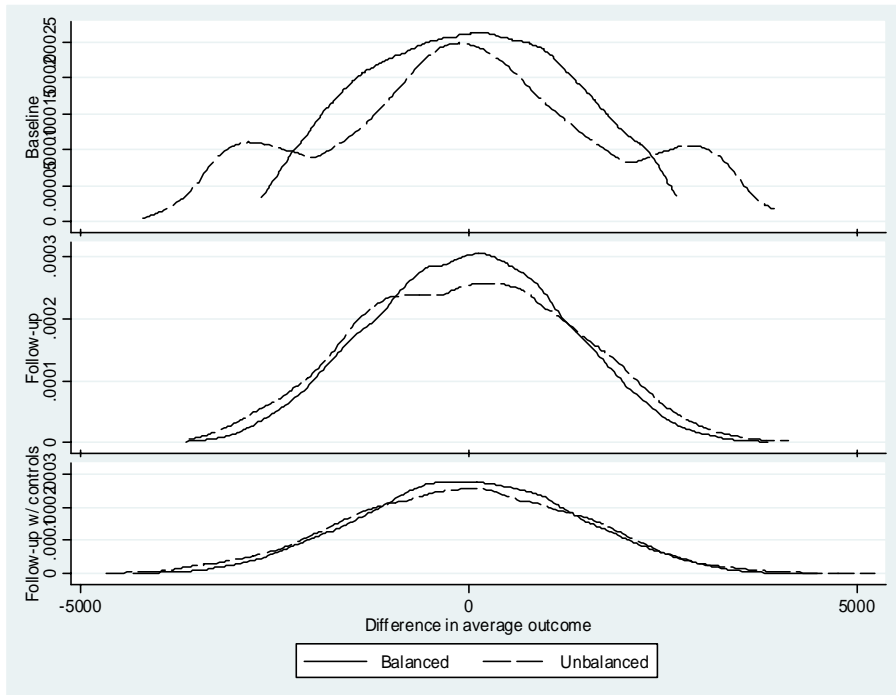


Figure A4j: ENE Data 100 Observations

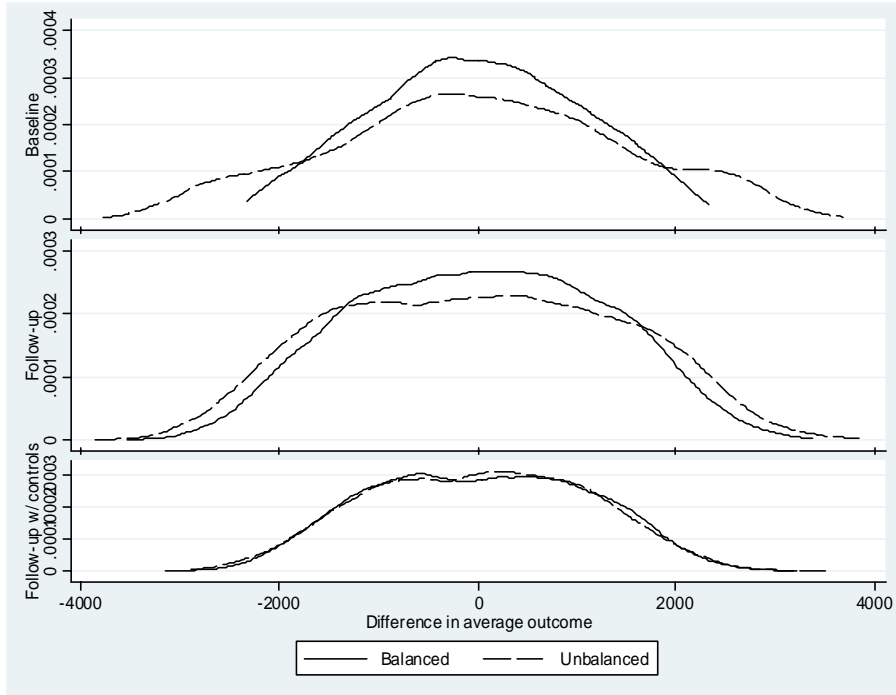


Figure A4k: ENE Data 300 Observations

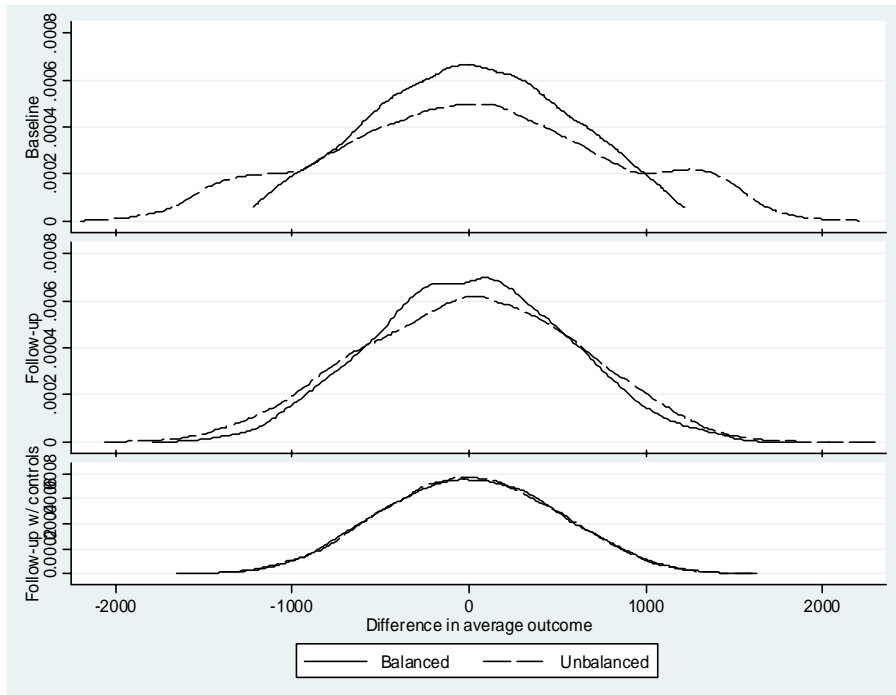


Figure A4l: IFLS Expenditure Data 30 Observations

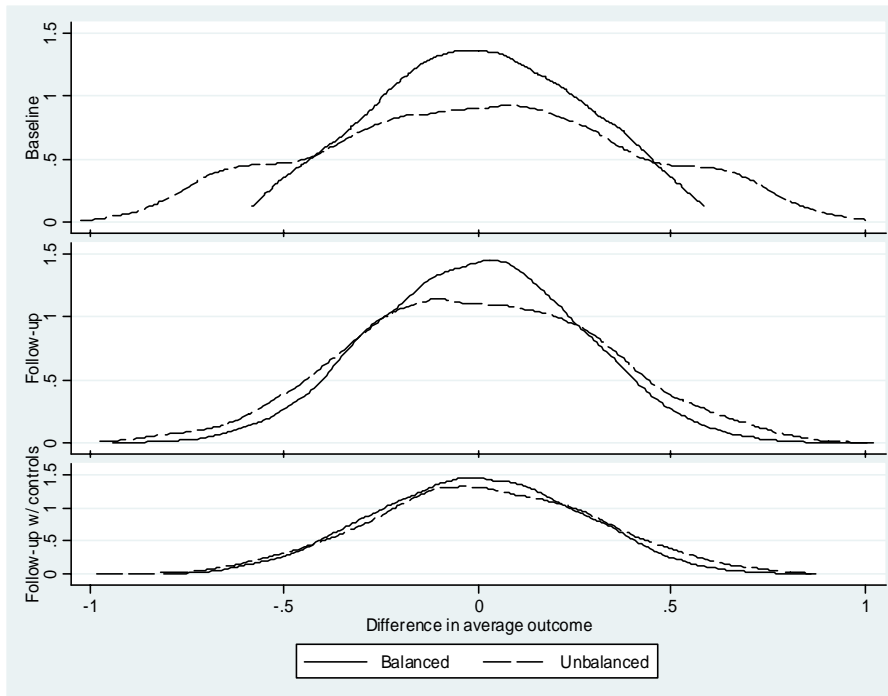


Figure A4m: IFLS Expenditure Data 100 Observations

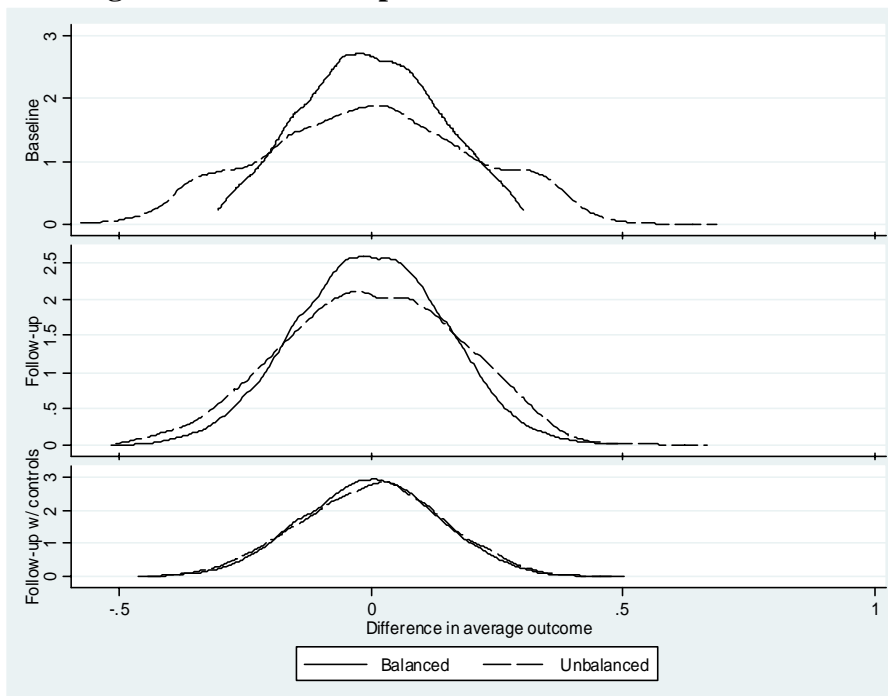


Figure A4n: IFLS Expenditure Data 300 Observations

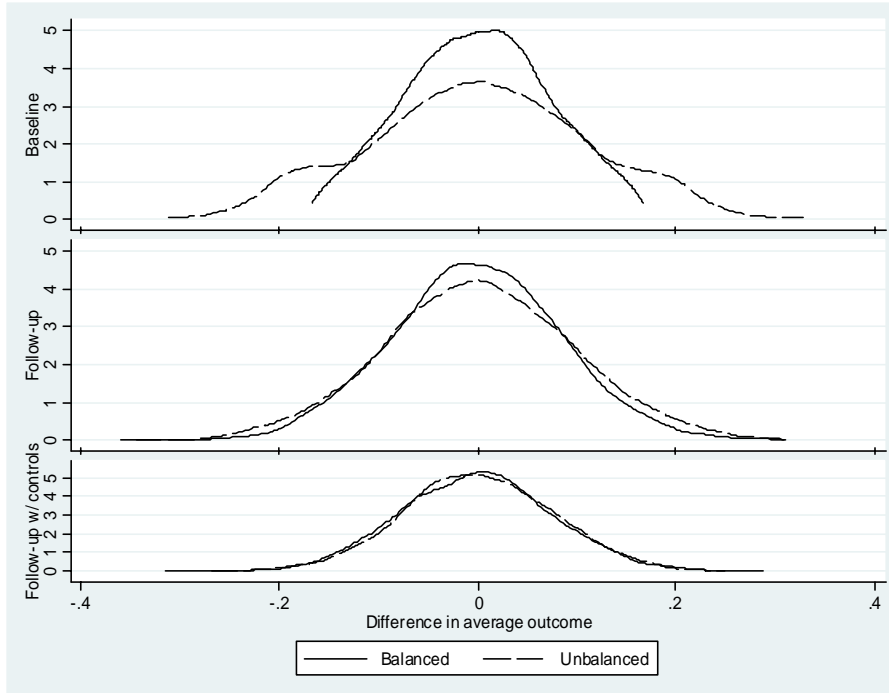


Figure A4o: LEAPS Math Test Score Data 30 Observations

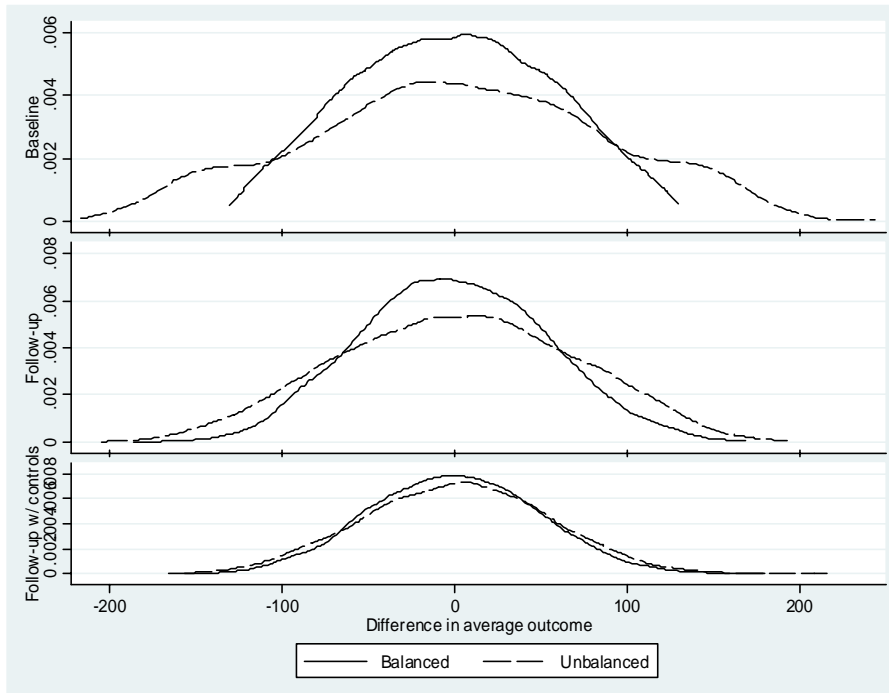


Figure A4p: LEAPS Math Test Score Data 100 Observations

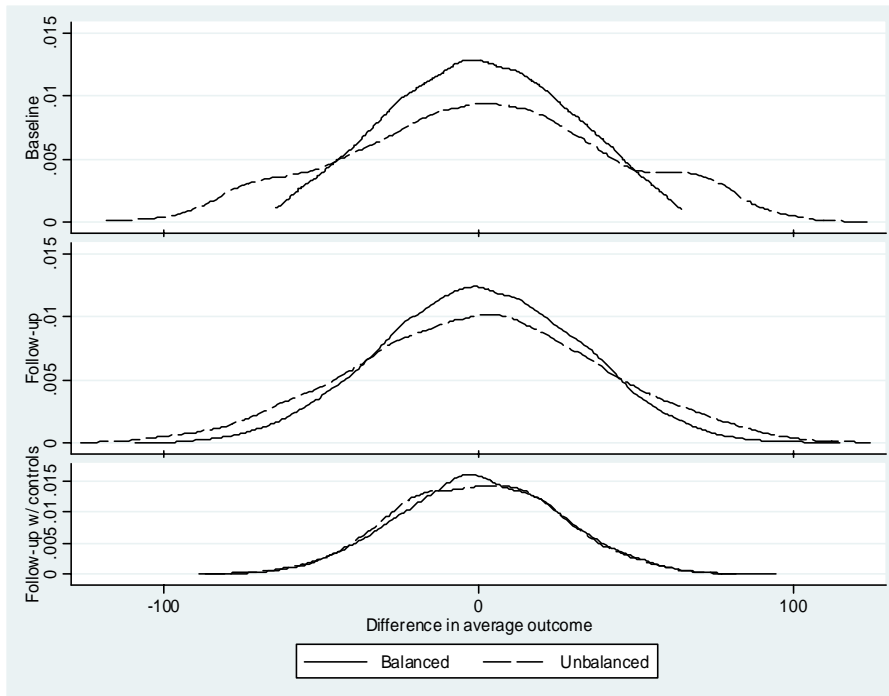


Figure A4q: LEAPS Math Test Score Data 300 Observations

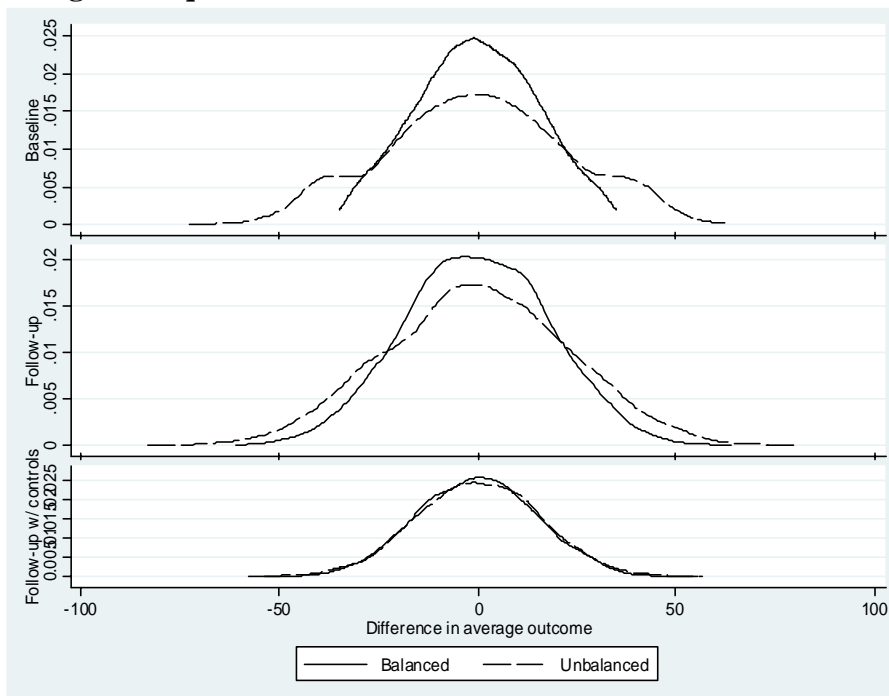


Figure A4r: LEAPS Height Z-Score Data 30 Observations

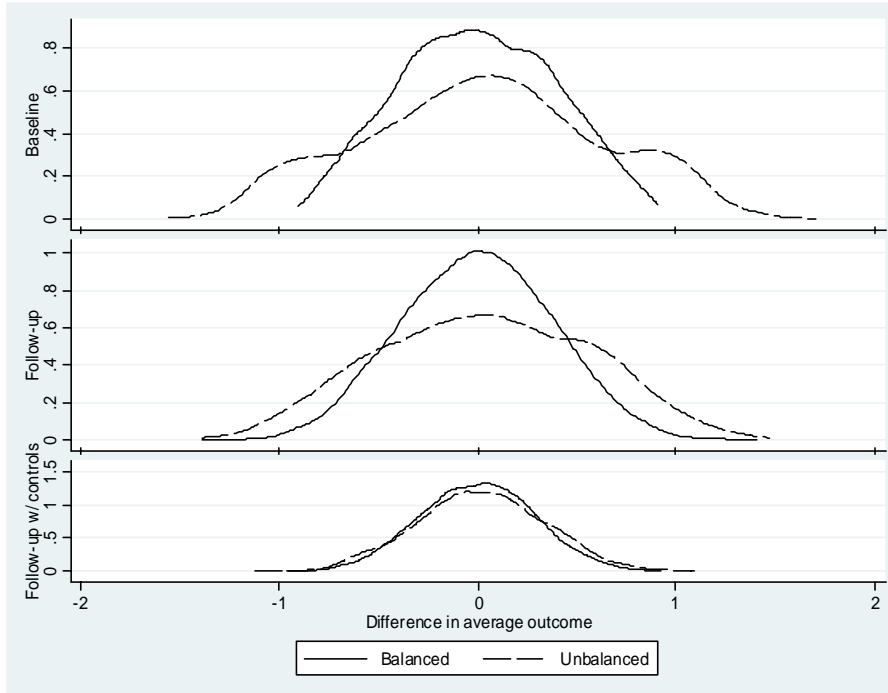


Figure A4s: LEAPS Height Z-Score Data 100 Observations

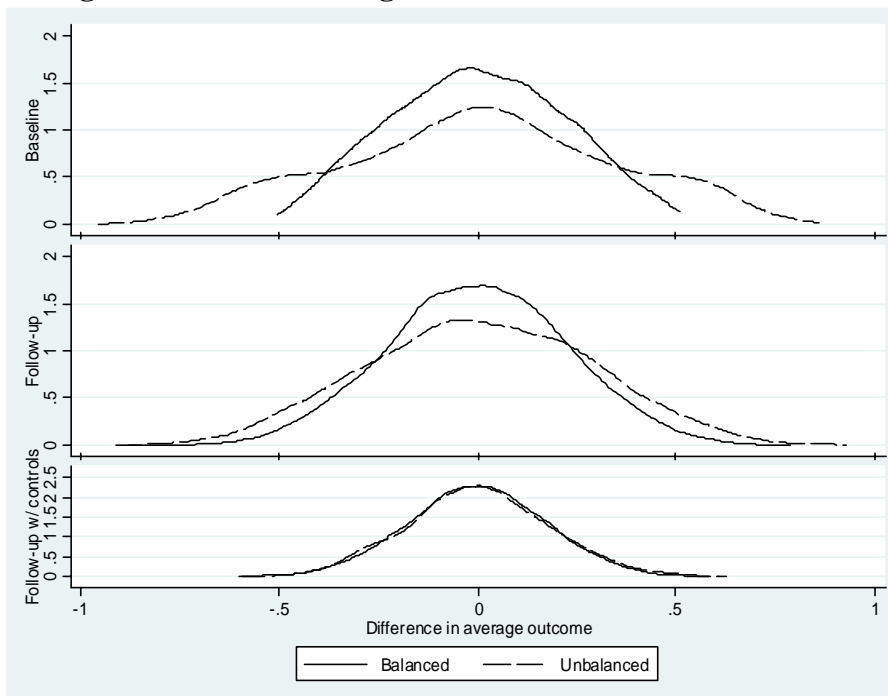


Figure A4t: LEAPS Height Z-Score Data 300 Observations

