Simultaneous Selection and Weighting of Moments in GMM using a Trapezoidal Kernel

Ivan A. Canay*
Department of Economics, Northwestern University

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SUPPLEMENTARY APPENDIX

1 Additional Simulations

This appendix contains additional tables not included in the paper. Table 1 presents the results for Model 1 when the error term is heteroskedastic (simulated in the same way as Model 2 in the paper). Table 2 is the same as Table 6 in the paper but for Model 2 rather than Model 1. Tables 3, 4 and 5 have the same specification as Table 7 in the paper but for those cases not included there. Tables 6 and 7 compare the performance of the bootstrap procedure proposed in the paper as a data-dependent bandwidth rule for the 2SLS estimator proposed by Donald and Newey. Tables 8 and 9 present results for the bootstrap Empirical Likelihood Estimator (BsEL). This estimator is an EL estimator that picks the optimal number of instruments using the bootstrap approach discussed in the paper. Finally, Table 10 show results where subsampling instead of the bootstrap is used a data-dependent bandwidth rule. The number of subsampling samples is equal to 200 in all cases (Nb=200) and the subsample size is set to b=30 and b=40.

*Email: iacanay@northwestern.edu. Website: http://faculty.wcas.northwestern.edu/~iac879. First Draft: October 2005. This appendix contains simulations that were not included in the paper.

		$R_f^2 = 0.1$, $n = 100$					$R_f^2 = 0.01$, $n = 100$				
Sigma	Estimator	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate
0.1	OLS	0.071	0.071	0.007	0.115	0.605	0.079	0.079	0.008	0.118	0.556
	GMM	0.032	0.079	0.015	0.293	0.917	0.066	0.127	0.039	0.461	0.912
	EL	0.009	0.157	0.072	0.612	0.619	0.122	0.762	352.3	3.891	0.359
	DN2SLS	0.027	0.098	0.026	0.384	0.900	0.064	0.206	9501	1.101	0.965
	S2SLS	0.034	0.093	0.023	0.359	0.882	0.077	0.144	0.070	0.540	0.913
	BsKGMM	0.031	0.079	0.016	0.299	0.917	0.061	0.123	0.047	0.480	0.902
	InKGMM	0.031	0.079	0.015	0.294	0.917	0.066	0.127	0.039	0.461	0.912
0.5	OLS	0.357	0.357	0.131	0.118	0.000	0.394	0.394	0.159	0.119	0.000
	GMM	0.134	0.136	0.029	0.280	0.707	0.322	0.322	0.132	0.440	0.434
	EL	-0.030	0.155	0.070	0.600	0.654	0.340	0.797	511.4	3.740	0.450
	DN2SLS	0.059	0.117	0.032	0.422	0.823	0.314	0.363	9.515	0.969	0.714
	S2SLS	0.123	0.153	0.040	0.408	0.697	0.354	0.361	0.170	0.479	0.458
	BsKGMM	0.116	0.135	0.029	0.344	0.723	0.321	0.322	0.137	0.468	0.441
	InKGMM	0.068	0.095	0.020	0.317	0.820	0.272	0.279	0.126	0.548	0.536
0.9	OLS	0.648	0.648	0.421	0.115	0.000	0.712	0.712	0.509	0.121	0.000
	GMM	0.223	0.223	0.059	0.250	0.322	0.567	0.567	0.347	0.348	0.014
	EL	-0.055	0.131	0.061	0.510	0.829	0.407	0.808	284.0	3.441	0.511
	DN2SLS	0.086	0.137	0.037	0.439	0.797	0.516	0.573	22.350	0.976	0.450
	S2SLS	0.152	0.192	0.063	0.515	0.619	0.622	0.622	0.397	0.438	0.087
	BsKGMM	0.119	0.139	0.036	0.392	0.657	0.563	0.563	0.342	0.359	0.040
	InKGMM	0.080	0.112	0.024	0.331	0.807	0.426	0.428	0.251	0.628	0.369

Table 1: Model 1 (Heteroskedasticity), $n = 500$

DN2SLS: 2SLS with Donald and Newey's optimal instruments, S2SLS: shrinkage 2SLS; BsKGMM: Bootstrap Kernel Weighted GMM; InKGMM: Infeasible Kernel Weighted GMM. 200 Bootstrap replications.

		$R_f^2 = 0.1$, $n = 100$					$R_f^2 = 0.01$, $n = 100$				
Sigma	Estimator	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate
0.1	DN2SLS	0.033	0.245	25.02	1.592	0.814	0.057	0.582	990.5	7.524	0.949
	S2SLS	0.032	0.145	0.514	0.831	0.772	0.055	0.161	0.748	0.823	0.836
	BsKGMM	0.021	0.072	0.028	0.317	0.880	0.037	0.084	0.028	0.347	0.880
	DN2SLS*	0.029	0.282	8.942	1.730	0.826	0.070	0.860	448.8	9.052	0.945
	S2SLS*	0.040	0.172	0.519	0.954	0.745	0.055	0.222	1.778	1.353	0.804
	BsKGMM*	0.015	0.083	0.073	0.401	0.892	0.039	0.119	3.719	0.552	0.882
0.5	DN2SLS	0.139	0.281	3920	1.601	0.713	0.354	0.740	9250	6.775	0.819
	S2SLS	0.190	0.238	0.600	0.861	0.564	0.274	0.296	1.193	0.972	0.544
	BsKGMM	0.123	0.134	0.053	0.310	0.664	0.194	0.196	0.112	0.397	0.535
	DN2SLS*	0.150	0.315	281.1	1.855	0.741	0.380	0.960	1077	9.202	0.847
	S2SLS*	0.194	0.254	0.506	0.995	0.571	0.307	0.343	1.051	1.201	0.549
	BsKGMM*	0.118	0.143	0.631	0.421	0.718	0.210	0.222	12.62	0.616	0.631
0.9	DN2SLS	0.259	0.362	18.31	1.585	0.555	0.699	0.967	182.2	6.111	0.576
	S2SLS	0.353	0.378	0.881	0.852	0.265	0.525	0.526	1.781	1.118	0.097
	BsKGMM	0.248	0.249	0.100	0.346	0.292	0.391	0.391	0.229	0.356	0.107
	DN2SLS*	0.258	0.427	2331	2.134	0.591	0.833	1.180	3270	6.771	0.640
	S2SLS*	0.358	0.406	1.052	1.038	0.300	0.569	0.575	1.759	1.173	0.155
	BsKGMM*	0.223	0.235	1.403	0.455	0.440	0.394	0.395	13.20	0.633	0.237
		$R_f^2 = 0.1$, $n = 500$					$R_f^2 = 0.01$, $n = 500$				
Sigma	Estimator	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate
0.1	DN2SLS	0.008	0.163	0.163	0.777	0.637	0.037	0.364	409.2	3.629	0.853
	S2SLS	0.020	0.156	0.325	0.887	0.608	0.049	0.185	1.396	1.373	0.702
	BsKGMM	0.019	0.052	0.008	0.209	0.934	0.043	0.084	0.025	0.338	0.914
	DN2SLS*	0.013	0.168	0.199	0.754	0.627	0.047	0.929	747.5	8.754	0.849
	S2SLS*	0.027	0.164	0.214	0.775	0.595	0.038	0.446	3.878	3.109	0.621
	BsKGMM*	0.018	0.057	0.015	0.224	0.947	0.037	0.114	2.255	0.595	0.941
0.5	DN2SLS	0.043	0.190	0.195	0.809	0.571	0.259	0.441	74.72	3.940	0.724
	S2SLS	0.096	0.199	0.380	0.965	0.496	0.263	0.310	1.704	1.575	0.507
	BsKGMM	0.075	0.088	0.015	0.236	0.773	0.204	0.205	0.063	0.307	0.540
	DN2SLS*	0.030	0.186	0.222	0.811	0.595	0.296	0.939	7909	8.735	0.769
	S2SLS*	0.094	0.236	0.323	0.975	0.472	0.315	0.534	3.451	2.905	0.494
	BsKGMM*	0.058	0.091	0.024	0.285	0.819	0.193	0.213	4.201	0.612	0.722
0.9	DN2SLS	0.077	0.191	0.230	0.822	0.576	0.472	0.562	838.9	3.552	0.496
	S2SLS	0.158	0.292	0.503	0.999	0.378	0.481	0.490	2.179	1.551	0.172
	BsKGMM	0.075	0.096	0.023	0.314	0.671	0.361	0.362	0.157	0.307	0.121
	DN2SLS*	0.057	0.198	0.254	0.864	0.587	0.557	1.156	13518.8	9.622	0.639
	S2SLS*	0.134	0.348	0.503	1.460	0.377	0.574	0.727	3.984	2.902	0.304
	BsKGMM*	0.058	0.093	0.353	0.334	0.824	0.341	0.348	3.349	0.584	0.378

Table 2: Model 2: EL as Preliminary Estimator.

DN2SLS: 2SLS with Donald and Newey's optimal instruments, S2SLS: shrinkage 2SLS; BsKGMM: Bootstrap Kernel Weighted GMM (all with usual preliminary estimators). * means that EL is used as preliminary estimator.

		$R_f^2 = 0.1$, $n = 100$					$R_f^2 = 0.01$, $n = 100$				
Sigma	Estimator	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate
0.5	GMM	0.317	0.317	0.142	0.478	0.384	0.478	0.478	0.286	0.574	0.236
	DN2SLS	0.215	0.273	11.56	0.682	0.780	0.464	0.538	277.1	1.853	0.757
	BsKGMM	0.287	0.298	0.129	0.564	0.485	0.486	0.487	0.302	0.652	0.297
	BsKGMM:c=1	0.290	0.302	0.133	0.580	0.492	0.489	0.490	0.302	0.644	0.304
	BsKGMM:c=0.5	0.246	0.261	0.111	0.574	0.573	0.461	0.462	0.302	0.726	0.331
	BsKGMM:c=0	0.199	0.224	0.091	0.555	0.612	0.446	0.447	0.296	0.752	0.328
	BsKGMM*	0.203	0.251	0.109	0.668	0.638	0.446	0.469	40.94	0.907	0.424
	BsKGMM*:c=1	0.220	0.278	79.71	0.789	0.704	0.447	0.526	234.1	1.447	0.620
	BsKGMM*:c=0.5	0.173	0.245	79.70	0.812	0.737	0.439	0.527	234.2	1.631	0.636
	BsKGMM*:c=0	0.044	0.349	84.48	1.609	0.959	0.418	0.879	370.2	5.156	0.979
0.9	GMM	0.573	0.573	0.352	0.342	0.009	0.860	0.860	0.758	0.318	0.000
	DN2SLS	0.274	0.313	13.78	0.686	0.649	0.774	0.802	48.17	1.317	0.371
	BsKGMM	0.354	0.361	0.186	0.630	0.366	0.850	0.850	0.743	0.368	0.009
	BsKGMM:c=1	0.372	0.375	0.192	0.631	0.394	0.851	0.851	0.746	0.373	0.010
	BsKGMM:c=0.5	0.303	0.320	0.145	0.618	0.471	0.834	0.834	0.718	0.419	0.011
	BsKGMM:c=0	0.318	0.320	0.14	0.520	0.350	0.804	0.804	0.687	0.461	0.008
	BsKGMM*	0.234	0.266	3204	0.617	0.579	0.781	0.784	34.60	0.655	0.116
	BsKGMM*:c=1	0.317	0.378	3218	0.995	0.534	0.800	0.824	80.55	1.010	0.269
	BsKGMM*:c=0.5	0.273	0.338	3218	1.014	0.577	0.780	0.809	80.55	1.095	0.286
	BsKGMM*:c=0	0.068	0.337	3229	1.781	0.882	0.606	0.776	1689	3.785	0.759

		$R_f^2 = 0.1$, $n = 100$					$R_f^2 = 0.01$, $n = 100$				
Sigma	Estimator	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate
0.1	GMM	0.067	0.145	0.052	0.537	0.830	0.091	0.185	0.081	0.671	0.822
	EL	0.060	0.334	38.352	1.585	0.440	0.138	0.595	172.24	2.931	0.399
	DN2SLS	0.064	0.185	116.96	1.452	0.976	0.107	0.408	145.48	3.092	0.991
	S2SLS	0.065	0.124	0.042	0.452	0.947	0.102	0.156	0.068	0.564	0.955
	BsKGMM	0.062	0.151	0.064	0.571	0.831	0.091	0.190	0.108	0.740	0.817
0.5	GMM	0.317	0.317	0.142	0.478	0.384	0.478	0.478	0.286	0.574	0.236
	EL	0.163	0.357	29.85	1.449	0.444	0.451	0.651	144.81	2.442	0.375
	DN2SLS	0.389	0.454	916.36	1.571	0.658	0.494	0.614	2576.27	2.665	0.760
	S2SLS	0.331	0.332	0.135	0.395	0.476	0.477	0.478	0.277	0.473	0.321
	BsKGMM	0.306	0.313	0.141	0.523	0.453	0.478	0.480	0.306	0.646	0.286
0.9	GMM	0.573	0.573	0.352	0.342	0.009	0.860	0.860	0.758	0.318	0.000
	EL	0.085	0.309	9.83	1.443	0.664	0.798	0.836	28.82	1.817	0.239
	DN2SLS	0.804	0.848	638.32	1.808	0.557	0.902	0.914	31.97	1.170	0.366
	S2SLS	0.604	0.604	0.378	0.285	0.024	0.867	0.867	0.757	0.262	0.001
	BsKGMM	0.541	0.541	0.325	0.401	0.056	0.861	0.861	0.760	0.353	0.002

Table 3: Model 1: (top) Fixed c versus optimal c. (bottom) Unordered Instruments.
DN2SLS: 2SLS with Donald and Newey's optimal instruments, S2SLS: shrinkage 2SLS; BsKGMM: Bootstrap Kernel Weighted GMM (c=1, c=0.5 and c=0 denote cases where c is fixed at the corresponding values). * means that an IV estimator with the first instrument is used as preliminary estimator.

		$R_f^2 = 0.1$, $n = 100$					$R_f^2 = 0.01$, $n = 100$				
Sigma	Estimator	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate
0.5	GMM	0.137	0.138	0.039	0.286	0.524	0.206	0.208	0.064	0.331	0.424
	DN2SLS	0.156	0.274	16.47	1.502	0.722	0.341	0.676	840.6	6.522	0.820
	BsKGMM	0.128	0.137	0.045	0.324	0.618	0.206	0.211	0.088	0.386	0.497
	BsKGMM:c=1	0.128	0.136	0.044	0.313	0.632	0.201	0.207	0.088	0.383	0.515
	BsKGMM:c=0.5	0.116	0.133	0.053	0.361	0.644	0.212	0.221	0.112	0.445	0.489
	BsKGMM:c=0	0.117	0.143	0.072	0.433	0.568	0.225	0.243	0.1	0.534	0.386
	BsKGMM*	0.107	0.176	215.9	0.872	0.688	0.262	0.332	1424	2.248	0.622
	BsKGMM*:c=1	0.122	0.219	109.1	2.647	0.784	0.270	0.418	1421	5.344	0.780
	BsKGMM*:c=0.5	0.113	0.236	109.3	2.883	0.766	0.287	0.471	1421	5.506	0.753
	BsKGMM*:c=0	0.318	1.592	558.1	9.395	0.908	0.809	2.813	1468	18.756	0.933
0.9	GMM	0.270	0.270	0.095	0.272	0.101	0.391	0.391	0.179	0.306	0.051
	DN2SLS	0.262	0.351	60.83	1.430	0.549	0.668	0.894	1510	5.577	0.583
	BsKGMM	0.244	0.246	0.097	0.372	0.302	0.391	0.391	0.211	0.355	0.107
	BsKGMM:c=1	0.248	0.251	0.093	0.367	0.306	0.388	0.388	0.210	0.349	0.119
	BsKGMM:c=0.5	0.226	0.230	0.106	0.410	0.348	0.398	0.398	0.253	0.443	0.118
	BsKGMM:c=0	0.206	0.216	0.13	0.461	0.317	0.408	0.408	0.3	0.512	0.096
	BsKGMM*	0.204	0.235	7.52	1.000	0.503	0.486	0.501	14.06	3.166	0.326
	BsKGMM*:c=1	0.219	0.297	1736	2.638	0.587	0.490	0.583	2061	5.133	0.529
	BsKGMM*:c=0.5	0.201	0.303	1737	2.720	0.578	0.532	0.651	2062	5.312	0.507
	BsKGMM*:c=0	0.544	1.460	2404	8.330	0.809	1.692	2.780	2665	14.397	0.814

		$R_f^2 = 0.1$, $n = 100$					$R_f^2 = 0.01$, $n = 100$				
Sigma	Estimator	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate
0.1	GMM	0.022	0.065	0.015	0.277	0.863	0.035	0.078	0.018	0.305	0.863
	EL	0.024	0.217	6.434	1.225	0.302	0.059	0.355	10.00	2.367	0.315
	DN2SLS	0.040	0.233	10.00	1.726	0.969	0.055	0.322	10.00	2.498	0.988
	S2SLS	0.033	0.137	0.128	0.600	0.856	0.053	0.147	0.105	0.591	0.933
	BsKGMM	0.018	0.070	0.022	0.301	0.870	0.033	0.086	0.036	0.355	0.880
0.5	GMM	0.137	0.137	0.040	0.280	0.546	0.201	0.202	0.066	0.320	0.440
	EL	0.115	0.240	10.00	1.167	0.304	0.266	0.389	10.00	2.491	0.282
	DN2SLS	0.230	0.346	10.00	1.863	0.829	0.280	0.432	10.00	2.430	0.915
	S2SLS	0.186	0.213	0.197	0.619	0.613	0.273	0.287	0.266	0.635	0.592
	BsKGMM	0.139	0.143	0.056	0.334	0.605	0.199	0.204	0.087	0.400	0.511
0.9	GMM	0.274	0.274	0.097	0.286	0.115	0.398	0.398	0.185	0.294	0.051
	EL	0.191	0.284	10.00	1.100	0.323	0.429	0.502	10.00	1.707	0.173
	DN2SLS	0.435	0.506	10.00	1.917	0.654	0.470	0.534	10.00	1.943	0.742
	S2SLS	0.349	0.353	0.342	0.624	0.254	0.515	0.515	0.557	0.651	0.099
	BsKGMM	0.277	0.277	0.119	0.357	0.206	0.395	0.395	0.220	0.354	0.108

Table 4: Model 2: (top) Fixed c versus optimal c. (bottom) Unordered Instruments.
DN2SLS: 2SLS with Donald and Newey's optimal instruments, S2SLS: shrinkage 2SLS; BsKGMM: Bootstrap Kernel Weighted GMM (c=1, c=0.5 and c=0 denote cases where c is fixed at the corresponding values). * means that an IV estimator with the first instrument is used as preliminary estimator.

		$R_f^2 = 0.1$, $n = 500$					$R_f^2 = 0.01$, $n = 500$				
Sigma	Estimator	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate
0.5	GMM	0.081	0.084	0.014	0.200	0.740	0.209	0.209	0.0591	0.294	0.508
	DN2SLS	0.038	0.190	0.262	0.832	0.568	0.262	0.439	626.8	3.392	0.704
	BsKGMM	0.076	0.090	0.016	0.246	0.754	0.208	0.209	0.0632	0.321	0.526
	BsKGMM:c=1	0.077	0.089	0.016	0.244	0.755	0.207	0.208	0.0639	0.316	0.531
	BsKGMM:c=0.5	0.058	0.079	0.015	0.262	0.801	0.202	0.205	0.0695	0.372	0.551
	BsKGMM:c=0	0.041	0.071	0.015	0.260	0.809	0.188	0.193	0.0757	0.438	0.547
	BsKGMM*	0.030	0.093	0.498	0.396	0.832	0.213	0.270	2116	1.609	0.738
	BsKGMM*:c=1	0.040	0.116	9.777	1.020	0.864	0.220	0.457	2346	8.060	0.838
	BsKGMM*:c=0.5	0.029	0.126	9.808	1.226	0.859	0.224	0.504	2347	8.089	0.833
	BsKGMM*:c=0	0.010	1.073	13.65	5.015	0.896	0.892	3.407	2684	19.595	0.936
0.9	GMM	0.152	0.152	0.030	0.201	0.351	0.368	0.368	0.156	0.284	0.069
	DN2SLS	0.062	0.189	0.243	0.800	0.571	0.486	0.568	345.5	3.071	0.467
	BsKGMM	0.079	0.099	0.024	0.316	0.668	0.367	0.367	0.157	0.300	0.118
	BsKGMM:c=1	0.082	0.106	0.024	0.318	0.667	0.368	0.368	0.159	0.300	0.120
	BsKGMM:c=0.5	0.060	0.095	0.023	0.314	0.711	0.352	0.352	0.154	0.359	0.164
	BsKGMM:c=0	0.067	0.088	0.019	0.274	0.704	0.326	0.326	0.2	0.409	0.167
	BsKGMM*	0.049	0.102	0.198	0.384	0.742	0.370	0.387	3693	2.584	0.462
	BsKGMM*:c=1	0.068	0.134	166.7	0.770	0.760	0.389	0.501	1515	6.498	0.635
	BsKGMM*:c=0.5	0.046	0.125	166.7	0.944	0.787	0.402	0.540	1511	6.856	0.641
	BsKGMM*:c=0	0.017	1.055	174.3	5.333	0.851	1.480	2.876	1542	17.486	0.840

		$R_f^2 = 0.1$, $n = 500$					$R_f^2 = 0.01$, $n = 500$				
Sigma	Estimator	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate
	GMM	0.020	0.053	0.007	0.201	0.930	0.045	0.087	0.018	0.312	0.921
	EL	-0.002	0.119	0.095	0.523	0.496	0.064	0.690	10.00	4.930	0.380
	DN2SLS	0.023	0.138	8.345	0.633	0.766	0.049	0.255	10.00	1.833	0.992
	S2SLS	0.020	0.141	0.091	0.632	0.670	0.047	0.158	0.117	0.669	0.877
	BsKGMM	0.020	0.052	0.007	0.207	0.930	0.045	0.085	0.023	0.328	0.916
0.5	GMM	0.084	0.087	0.014	0.197	0.749	0.204	0.205	0.060	0.288	0.512
	EL	-0.026	0.113	0.150	0.497	0.572	0.210	0.730	10.00	5.377	0.445
	DN2SLS	0.139	0.184	10.00	0.723	0.683	0.249	0.343	10.00	1.643	0.873
	S2SLS	0.097	0.155	0.112	0.627	0.592	0.259	0.270	0.202	0.679	0.586
	BsKGMM	0.080	0.085	0.014	0.207	0.774	0.203	0.204	0.064	0.311	0.542
0.9	GMM	0.150	0.151	0.030	0.194	0.339	0.368	0.368	0.154	0.284	0.059
	EL	-0.052	0.099	0.233	0.420	0.764	0.252	0.694	10.00	4.647	0.484
	DN2SLS	0.331	0.403	10.00	1.356	0.561	0.471	0.521	10.00	1.628	0.654
	S2SLS	0.180	0.203	0.143	0.579	0.454	0.479	0.480	0.411	0.650	0.174
	BsKGMM	0.133	0.133	0.027	0.217	0.462	0.368	0.369	0.161	0.293	0.093

Table 5: Model 2: (top) Fixed c versus optimal c. (bottom) Unordered Instruments.
DN2SLS: 2SLS with Donald and Newey's optimal instruments, S2SLS: shrinkage 2SLS; BsKGMM: Bootstrap Kernel Weighted GMM (c=1, c=0.5 and c=0 denote cases where c is fixed at the corresponding values). * means that an IV estimator with the first instrument is used as preliminary estimator.

		Model 1: $R_f^2 = 0.1$					Model 1: $R_f^2 = 0.01$				
Sigma	Estimator	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate
0.1	OLS	0.087	0.092	0.017	0.247	0.822	0.097	0.102	0.020	0.253	0.807
	2SLS	0.067	0.137	0.038	0.472	0.947	0.098	0.169	0.063	0.577	0.937
	DN2SLS	0.039	0.153	8.175	0.648	0.972	0.074	0.316	1344	1.806	0.987
	Bs2SLS-CV	0.067	0.139	0.041	0.491	0.948	0.100	0.175	0.073	0.611	0.942
	Bs2SLS-IV	0.046	0.159	2.443	0.571	0.952	0.097	0.222	1310	0.888	0.946
0.5	OLS	0.455	0.455	0.214	0.224	0.000	0.494	0.494	0.253	0.228	0.002
	2SLS	0.315	0.315	0.130	0.440	0.503	0.478	0.478	0.258	0.496	0.335
	DN2SLS	0.211	0.265	0.465	0.721	0.769	0.439	0.529	7680	1.715	0.763
	Bs2SLS-CV	0.307	0.312	0.128	0.522	0.531	0.471	0.471	0.264	0.513	0.346
	Bs2SLS-IV	0.231	0.264	0.117	0.653	0.679	0.453	0.469	7672	0.767	0.514
0.9	OLS	0.812	0.812	0.661	0.130	0.000	0.891	0.891	0.794	0.115	0.000
	2SLS	0.568	0.568	0.339	0.308	0.023	0.856	0.856	0.748	0.274	0.000
	DN2SLS	0.260	0.309	12.46	0.764	0.675	0.766	0.805	488.2	1.463	0.393
	Bs2SLS-CV	0.366	0.369	0.190	0.619	0.431	0.854	0.854	0.739	0.300	0.010
	Bs2SLS-IV	0.250	0.283	0.128	0.642	0.678	0.803	0.803	167.1	0.634	0.147

		Model 2: $R_f^2 = 0.1$					Model 2: $R_f^2 = 0.01$				
Sigma	Estimator	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate
0.1	OLS	0.048	0.068	0.019	0.240	0.888	0.059	0.073	0.014	0.240	0.869
	2SLS	0.038	0.140	0.127	0.618	0.812	0.065	0.152	0.103	0.611	0.874
	DN2SLS	0.040	0.235	92.59	1.547	0.814	0.053	0.590	3864	7.240	0.940
	Bs2SLS-CV	0.041	0.146	0.201	0.683	0.803	0.063	0.153	0.185	0.684	0.868
	Bs2SLS-IV	0.040	0.236	1.118	1.403	0.772	0.068	0.294	4380	2.286	0.899
0.5	OLS	0.240	0.240	0.085	0.251	0.158	0.268	0.268	0.097	0.255	0.076
	2SLS	0.190	0.215	0.162	0.581	0.638	0.276	0.283	0.235	0.571	0.567
	DN2SLS	0.144	0.270	48.53	1.540	0.744	0.307	0.613	699	5.973	0.829
	Bs2SLS-CV	0.186	0.222	0.206	0.643	0.639	0.266	0.281	0.361	0.650	0.593
	Bs2SLS-IV	0.143	0.258	1.492	1.260	0.678	0.292	0.389	5.764	2.061	0.745
0.9	OLS	0.440	0.440	0.238	0.281	0.018	0.486	0.486	0.296	0.295	0.006
	2SLS	0.337	0.345	0.266	0.565	0.247	0.500	0.500	0.538	0.697	0.099
	DN2SLS	0.243	0.345	14.695	1.427	0.561	0.632	0.840	519	4.826	0.535
	Bs2SLS-CV	0.330	0.345	0.332	0.676	0.313	0.501	0.502	0.989	0.877	0.121
	Bs2SLS-IV	0.279	0.329	1621	1.319	0.503	0.628	0.652	17.64	2.987	0.405

Table 6: Models 1 and 2. Plug in rule vs. Bootstrap - 2SLS, $n = 100$

Bs2SLS-CV: 2SLS estimator that uses bootstrap to pick instruments and cross validation as preliminary estimator. Bs2SLS-IV: 2SLS estimator that uses bootstrap to pick instruments and a just identified IV as preliminary estimator. The number of bootstrap replications is 200.

		Model 3: $R_f^2 = 0.1$					Model 3: $R_f^2 = 0.01$				
Sigma	Estimator	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate
0.1	OLS	0.084	0.092	0.017	0.246	0.832	0.101	0.106	0.020	0.257	0.802
	2SLS	0.070	0.136	0.039	0.476	0.941	0.094	0.161	0.064	0.586	0.920
	DN2SLS	0.047	0.161	1.048	0.752	0.981	0.074	0.346	35.92	1.991	0.982
	Bs2SLS-CV	0.072	0.139	0.042	0.494	0.941	0.085	0.168	0.073	0.626	0.931
	Bs2SLS-IV	0.054	0.157	0.075	0.623	0.941	0.085	0.236	0.732	0.947	0.939
0.5	OLS	0.445	0.445	0.205	0.201	0.001	0.492	0.492	0.251	0.224	0.001
	2SLS	0.323	0.323	0.130	0.422	0.478	0.473	0.473	0.264	0.530	0.310
	DN2SLS	0.243	0.303	2.026	0.825	0.742	0.435	0.515	97.65	1.815	0.740
	Bs2SLS-CV	0.314	0.316	0.127	0.464	0.511	0.473	0.473	0.272	0.549	0.330
	Bs2SLS-IV	0.252	0.279	0.132	0.655	0.674	0.462	0.473	10.49	0.839	0.505
0.9	OLS	0.809	0.809	0.657	0.130	0.000	0.888	0.888	0.792	0.110	0.000
	2SLS	0.577	0.577	0.345	0.302	0.018	0.854	0.854	0.745	0.287	0.000
	DN2SLS	0.222	0.365	27.31	1.249	0.673	0.775	0.824	5.174	1.461	0.397
	Bs2SLS-CV	0.492	0.493	0.261	0.519	0.261	0.855	0.855	0.738	0.300	0.007
	Bs2SLS-IV	0.335	0.347	0.258	0.655	0.572	0.807	0.807	24.12	0.563	0.107

		Model 4: $R_f^2 = 0.1$					Model 4: $R_f^2 = 0.01$				
Sigma	Estimator	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate
0.1	OLS	0.086	0.092	0.017	0.247	0.824	0.098	0.103	0.020	0.256	0.813
	2SLS	0.072	0.142	0.042	0.494	0.933	0.091	0.164	0.063	0.593	0.937
	DN2SLS	0.066	0.186	31.50	0.905	0.978	0.097	0.342	1327	2.196	0.986
	Bs2SLS-CV	0.071	0.149	0.048	0.510	0.931	0.091	0.164	0.075	0.623	0.940
	Bs2SLS-IV	0.063	0.181	0.310	0.696	0.955	0.094	0.231	986.7	0.951	0.949
0.5	OLS	0.445	0.445	0.206	0.200	0.000	0.489	0.489	0.247	0.225	0.001
	2SLS	0.322	0.322	0.134	0.432	0.474	0.473	0.473	0.260	0.513	0.317
	DN2SLS	0.346	0.391	101.1	0.913	0.669	0.462	0.557	163.9	1.937	0.753
	Bs2SLS-CV	0.316	0.317	0.133	0.480	0.499	0.473	0.473	0.270	0.544	0.326
	Bs2SLS-IV	0.302	0.317	0.232	0.680	0.620	0.480	0.486	76.671	0.826	0.485
0.9	OLS	0.810	0.810	0.656	0.129	0.000	0.895	0.895	0.801	0.110	0.000
	2SLS	0.571	0.571	0.337	0.293	0.017	0.857	0.857	0.744	0.263	0.000
	DN2SLS	0.583	0.636	39.37	1.585	0.543	0.866	0.895	150.2	1.168	0.369
	Bs2SLS-CV	0.547	0.547	0.304	0.402	0.147	0.856	0.856	0.741	0.281	0.004
	Bs2SLS-IV	0.517	0.518	2.525	0.521	0.255	0.853	0.854	185.1	0.490	0.075

Table 7: Models 3 and 4. Plug in rule vs. Bootstrap - 2SLS, $n = 100$

Bs2SLS-CV: 2SLS estimator that uses bootstrap to pick instruments and cross validation as preliminary estimator. Bs2SLS-IV: 2SLS estimator that uses bootstrap to pick instruments and a just identified IV as preliminary estimator. The number of bootstrap replications is 200.

		$R_f^2 = 0.1$, $n = 100$					$R_f^2 = 0.01$, $n = 100$				
Sigma	Estimator	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate
0.1	GMM	0.071	0.148	0.049	0.520	0.821	0.105	0.187	0.081	0.674	0.821
	EL	0.022	0.312	36.71	1.373	0.467	0.077	0.570	74.85	2.892	0.395
	DN2SLS	0.039	0.153	8.175	0.648	0.972	0.102	0.334	54.02	2.061	0.986
	S2SLS	0.066	0.135	0.039	0.460	0.956	0.097	0.162	0.067	0.572	0.941
	BsKGMM	0.062	0.150	0.056	0.564	0.837	0.105	0.196	0.102	0.724	0.835
	BsEL	0.027	0.280	23.01	1.266	0.558	0.084	0.546	122.6	2.714	0.462
o.5	GMM	0.308	0.308	0.130	0.492	0.412	0.477	0.477	0.279	0.573	0.253
	EL	0.128	0.345	11.33	1.371	0.462	0.413	0.618	118.60	2.362	0.392
	DN2SLS	0.209	0.257	0.803	0.684	0.780	0.426	0.509	19899	1.701	0.755
	S2SLS	0.308	0.318	0.125	0.483	0.534	0.481	0.481	0.266	0.492	0.320
	BsKGMM	0.268	0.276	0.123	0.612	0.527	0.459	0.461	0.287	0.638	0.321
	BsEL	0.117	0.339	14.47	1.279	0.571	0.434	0.612	147.53	2.259	0.425
0.9	GMM	0.573	0.573	0.345	0.338	0.008	0.859	0.859	0.752	0.301	0.000
	EL	0.100	0.302	17.88	1.317	0.649	0.790	0.843	100.6	1.634	0.215
	DN2SLS	0.274	0.309	1.396	0.693	0.632	0.761	0.800	3109	1.169	0.373
	S2SLS	0.480	0.480	0.251	0.467	0.241	0.856	0.856	0.732	0.299	0.012
	BsKGMM	0.353	0.360	0.187	0.614	0.363	0.847	0.847	0.732	0.372	0.015
	BsEL	0.055	0.248	12.86	1.120	0.776	0.793	0.833	109.3	1.682	0.232
		$R_f^2 = 0.1$, $n = 500$					$R_f^2 = 0.01$, $n = 500$				
Sigma	Estimator	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate
0.1	GMM	0.024	0.082	0.016	0.308	0.911	0.087	0.139	0.044	0.487	0.905
	EL	-0.007	0.121	0.041	0.464	0.776	0.069	0.530	226.6	3.182	0.494
	DN2SLS	0.023	0.086	0.018	0.340	0.943	0.067	0.183	9.653	0.868	0.991
	S2SLS	0.025	0.079	0.015	0.305	0.934	0.094	0.134	0.043	0.462	0.949
	BsKGMM	0.024	0.084	0.017	0.317	0.909	0.085	0.143	0.049	0.506	0.907
	BsEL	-0.008	0.117	0.038	0.445	0.801	0.087	0.494	224.6	2.864	0.509
0.5	GMM	0.164	0.165	0.036	0.274	0.603	0.406	0.406	0.201	0.461	0.278
	EL	0.010	0.112	0.032	0.445	0.809	0.153	0.527	272.4	2.934	0.586
	DN2SLS	0.069	0.105	0.023	0.340	0.853	0.316	0.381	24.35	0.863	0.682
	S2SLS	0.139	0.146	0.033	0.314	0.702	0.405	0.405	0.200	0.449	0.328
	BsKGMM	0.099	0.123	0.030	0.367	0.718	0.402	0.402	0.193	0.494	0.294
	BsEL	0.015	0.103	0.027	0.408	0.839	0.161	0.507	253.6	2.725	0.599
0.9	GMM	0.272	0.272	0.079	0.225	0.168	0.739	0.739	0.560	0.265	0.000
	EL	-0.002	0.103	0.026	0.387	0.906	0.129	0.393	106.5	2.190	0.720
	DN2SLS	0.105	0.126	0.026	0.324	0.826	0.474	0.509	398.5	0.933	0.468
	S2SLS	0.152	0.161	0.037	0.348	0.748	0.699	0.699	0.489	0.414	0.056
	BsKGMM	0.097	0.120	0.023	0.309	0.764	0.701	0.701	0.474	0.488	0.055
	BsEL	0.008	0.099	0.025	0.374	0.936	0.141	0.387	115.5	2.060	0.722

Table 8: Model 1: Choosing Instruments for EL

DN2SLS: 2SLS with Donald and Newey's optimal instruments, S2SLS: shrinkage 2SLS; BsKGMM: Bootstrap Kernel Weighted GMM with Trapezoidal Kernel; BsEL: Empirical Likelihood estimator that uses the bootstrap to pick the number of instruments. The number of boostrap replications is 200 for BsKGMM and 100 for BsEL.

		$R_f^2 = 0.1$, $n = 100$					$R_f^2 = 0.01$, $n = 100$				
Sigma	Estimator	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate
0.1	OLS	0.055	0.072	0.019	0.230	0.886	0.059	0.071	0.014	0.209	0.864
	GMM	0.029	0.073	0.014	0.281	0.847	0.038	0.091	0.019	0.325	0.862
	EL	0.023	0.211	26.10	1.107	0.292	0.065	0.375	172.36	2.317	0.297
	DN2SLS	0.041	0.216	3.49	1.363	0.819	0.076	0.575	11027	6.068	0.943
	S2SLS	0.050	0.146	0.505	0.778	0.768	0.071	0.149	0.476	0.817	0.823
	BsKGMM	0.028	0.077	0.021	0.322	0.863	0.037	0.094	0.031	0.381	0.874
	BsEL	0.010	0.198	38.0	1.019	0.402	0.044	0.354	179.2	2.506	0.410
0.5	OLS	0.251	0.251	0.088	0.262	0.139	0.278	0.278	0.099	0.258	0.080
	GMM	0.143	0.145	0.036	0.273	0.514	0.202	0.202	0.066	0.338	0.413
	EL	0.119	0.241	22.57	1.171	0.288	0.258	0.404	60.93	2.083	0.280
	DN2SLS	0.163	0.257	39917	1.328	0.729	0.357	0.639	3831	6.350	0.819
	S2SLS	0.205	0.240	0.520	0.766	0.560	0.303	0.314	0.785	0.853	0.529
	BsKGMM	0.131	0.136	0.046	0.310	0.597	0.197	0.202	0.087	0.384	0.504
	BsEL	0.102	0.229	34.9	1.073	0.377	0.250	0.391	120.6	2.472	0.350
0.9	OLS	0.444	0.444	0.246	0.286	0.016	0.495	0.495	0.292	0.300	0.005
	GMM	0.273	0.273	0.093	0.270	0.107	0.395	0.395	0.183	0.304	0.038
	EL	0.182	0.272	16.28	1.057	0.322	0.430	0.472	39.04	1.727	0.156
	DN2SLS	0.250	0.328	91.13	1.265	0.562	0.643	0.808	10781	4.898	0.570
	S2SLS	0.354	0.380	0.516	0.741	0.261	0.521	0.522	1.114	0.930	0.088
	BsKGMM	0.244	0.245	0.086	0.335	0.277	0.391	0.391	0.215	0.365	0.089
	BsEL	0.154	0.260	46.3	1.190	0.425	0.417	0.470	40.2	1.770	0.179
		$R_f^2 = 0.1$, $n = 500$					$R_f^2 = 0.01$, $n = 500$				
Sigma	Estimator	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate
0.1	OLS	0.048	0.053	0.009	0.133	0.759	0.055	0.056	0.006	0.117	0.681
	GMM	0.012	0.052	0.008	0.196	0.944	0.043	0.090	0.018	0.326	0.920
	EL	-0.012	0.119	0.089	0.501	0.492	0.005	0.660	351.7	4.488	0.351
	DN2SLS	-0.003	0.163	0.291	0.801	0.622	0.038	0.406	380.3	4.286	0.840
	S2SLS	0.007	0.151	0.582	0.874	0.585	0.049	0.192	2.530	1.347	0.694
	BsKGMM	0.012	0.050	0.007	0.202	0.939	0.041	0.091	0.023	0.338	0.931
	BsEL	-0.008	0.109	14.54	0.432	0.580	0.022	0.577	319.0	3.941	0.400
0.5	OLS	0.242	0.242	0.066	0.123	0.015	0.283	0.283	0.088	0.138	0.008
	GMM	0.091	0.104	0.015	0.187	0.750	0.197	0.199	0.058	0.319	0.555
	EL	-0.044	0.140	0.114	0.485	0.529	0.175	0.692	303.1	4.323	0.412
	DN2SLS	0.022	0.189	0.212	0.710	0.559	0.254	0.444	240.4	3.772	0.728
	S2SLS	0.088	0.183	0.546	0.969	0.485	0.273	0.335	3.309	1.538	0.485
	BsKGMM	0.079	0.102	0.015	0.234	0.721	0.190	0.193	0.076	0.320	0.581
	BsEL	-0.045	0.124	0.070	0.426	0.618	0.153	0.581	219.4	3.778	0.466
0.9	OLS	0.461	0.461	0.234	0.155	0.009	0.509	0.509	0.277	0.149	0.003
	GMM	0.144	0.144	0.030	0.195	0.393	0.366	0.366	0.156	0.279	0.067
	EL	-0.061	0.103	0.076	0.433	0.746	0.253	0.784	185.6	5.165	0.499
	DN2SLS	0.035	0.177	0.396	0.796	0.619	0.444	0.561	137.8	3.224	0.517
	S2SLS	0.137	0.286	0.707	0.971	0.401	0.488	0.508	3.214	1.414	0.190
	BsKGMM	0.072	0.099	0.022	0.321	0.692	0.364	0.364	0.167	0.312	0.124
	BsEL	-0.029	0.084	0.046	0.351	0.845	0.241	0.628	209.1	4.836	0.499

Table 9: Model 2: Choosing Instruments for EL

DN2SLS: 2SLS with Donald and Newey's optimal instruments, S2SLS: shrinkage 2SLS; BsKGMM: Bootstrap Kernel Weighted GMM with Trapezoidal Kernel; BsEL: Empirical Likelihood estimator that uses the bootstrap to pick the number of instruments. The number of boostrap replications is 200 for BsKGMM and 100 for BsEL.

		$R_f^2 = 0.1$, $n = 100$					$R_f^2 = 0.01$, $n = 100$				
Sigma	Estimator	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate
0.1	OLS	0.087	0.092	0.017	0.247	0.822	0.097	0.102	0.020	0.256	0.819
	2SLS	0.067	0.137	0.038	0.472	0.947	0.090	0.160	0.056	0.568	0.953
	DN2SLS	0.039	0.153	8.175	0.648	0.972	0.078	0.294	80.00	1.723	0.987
	SuDN_CV2	0.063	0.143	0.042	0.492	0.950	0.090	0.162	0.065	0.582	0.958
	SuDN_CV3	0.066	0.145	0.046	0.512	0.937	0.093	0.169	0.072	0.621	0.949
	SuDN_IV2	0.046	0.164	0.104	0.593	0.943	0.086	0.203	0.381	0.784	0.962
	SuDN_IV3	0.043	0.173	0.080	0.676	0.942	0.078	0.229	0.251	0.906	0.961
0.5	OLS	0.452	0.452	0.207	0.212	0.000	0.499	0.499	0.255	0.222	0.001
	2SLS	0.322	0.323	0.134	0.453	0.477	0.484	0.484	0.268	0.492	0.310
	DN2SLS	0.221	0.274	51.34	0.721	0.749	0.441	0.544	311.3	1.770	0.745
	SuDN_CV2	0.315	0.320	0.133	0.539	0.499	0.482	0.483	0.275	0.522	0.325
	SuDN_CV3	0.304	0.310	0.131	0.548	0.525	0.484	0.484	0.278	0.552	0.336
	SuDN_IV2	0.209	0.276	0.125	0.746	0.685	0.457	0.476	0.438	0.832	0.493
	SuDN_IV3	0.177	0.252	0.125	0.766	0.732	0.456	0.478	268.6	0.975	0.511
0.9	OLS	0.806	0.806	0.655	0.132	0.000	0.893	0.893	0.798	0.108	0.000
	2SLS	0.570	0.570	0.342	0.290	0.013	0.853	0.853	0.743	0.284	0.001
	DN2SLS	0.262	0.300	2.236	0.744	0.669	0.767	0.798	201.7	1.248	0.373
	SuDN_CV2	0.408	0.409	0.214	0.544	0.323	0.852	0.852	0.733	0.304	0.008
	SuDN_CV3	0.421	0.421	0.218	0.509	0.296	0.850	0.850	0.730	0.333	0.010
	SuDN_IV2	0.239	0.268	0.115	0.603	0.697	0.809	0.812	1.524	0.592	0.143
	SuDN_IV3	0.231	0.259	31.13	0.592	0.725	0.800	0.802	7.678	0.680	0.164

		$R_f^2 = 0.1$, $n = 100$					$R_f^2 = 0.01$, $n = 100$				
Sigma	Estimator	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate	Med. Bias	Med. AD	Mean SE	Dec. Rge.	Cov. Rate
0.1	OLS	0.055	0.070	0.021	0.253	0.874	0.052	0.067	0.014	0.230	0.876
	2SLS	0.048	0.144	0.139	0.641	0.813	0.058	0.150	0.112	0.627	0.889
	DN2SLS	0.042	0.245	226.5	1.556	0.808	0.091	0.581	9511	6.588	0.946
	SuDN_CV2	0.047	0.144	0.167	0.681	0.806	0.060	0.154	0.142	0.664	0.897
	SuDN_CV3	0.047	0.148	0.162	0.692	0.802	0.060	0.156	0.136	0.691	0.889
	SuDN_IV2	0.049	0.241	2707	1.514	0.775	0.069	0.315	2156	2.200	0.904
	SuDN_IV3	0.040	0.276	2674	1.738	0.762	0.072	0.366	634.5	2.520	0.899
0.5	OLS	0.244	0.244	0.082	0.248	0.156	0.272	0.272	0.098	0.261	0.080
	2SLS	0.186	0.207	0.144	0.576	0.623	0.287	0.291	0.251	0.584	0.559
	DN2SLS	0.145	0.261	1254	1.486	0.720	0.386	0.699	857.0	6.770	0.821
	SuDN_CV2	0.185	0.211	0.153	0.615	0.626	0.285	0.292	0.305	0.631	0.572
	SuDN_CV3	0.181	0.210	0.152	0.627	0.631	0.286	0.292	0.288	0.645	0.564
	SuDN_IV2	0.161	0.276	8156	1.405	0.670	0.347	0.440	4502	2.683	0.705
	SuDN_IV3	0.148	0.282	2.093	1.482	0.674	0.369	0.478	453.0	2.865	0.719
0.9	OLS	0.445	0.445	0.260	0.302	0.020	0.486	0.486	0.289	0.289	0.008
	2SLS	0.341	0.342	0.314	0.624	0.257	0.495	0.495	0.523	0.629	0.097
	DN2SLS	0.253	0.352	65.16	1.444	0.546	0.616	0.786	266.7	5.450	0.595
	SuDN_CV2	0.337	0.342	0.358	0.688	0.304	0.490	0.490	0.582	0.664	0.117
	SuDN_CV3	0.324	0.337	0.356	0.691	0.319	0.491	0.491	0.563	0.647	0.122
	SuDN_IV2	0.319	0.373	517.1	1.529	0.449	0.641	0.658	59.27	3.405	0.449
	SuDN_IV3	0.311	0.374	57.45	1.595	0.474	0.650	0.666	27.40	3.418	0.473

Table 10: Models 1 and 2: Subsampling as bandwidth selection

SuDN_CV2 is the DN estimator that uses subsampling with b=20 and Cross validation as preliminary estimator while SuDN_IV3 is the DN estimator that uses subsampling with b=30 and just identified IV as preliminary estimator