

Table 0.1: Simulations results, 5,000 iterations, $\lambda_Z = 1$. 22 January 2021.

model	n=100				n=500				n=1000			
	bias	RMSE	Coverage rate	CI size	bias	RMSE	Coverage rate	CI size	bias	RMSE	Coverage rate	CI size
$\lambda_X=0.2, \lambda_Z=1, \alpha_Y=6 - b_2 + d_2=0.97$												
standard kernel	-4.2	0.249	0.0	0.28	-3.981	0.246	0.0	0.214	-3.89	0.228	0.0	0.187
standard xavier	-4.2	0.249	0.0	0.333	-3.981	0.246	0.0	0.293	-3.89	0.228	0.0	0.275
smooth kernel	-4.223	0.238	0.093	130481653508.908	-4.004	0.235	0.311	8.58379289831059e+121	-3.913	0.218	0.454	3.509816233149707e+145
smooth ls	-4.223	0.238	0.0	0.528	-4.004	0.235	0.0	0.441	-3.913	0.218	0.0	0.411
smooth xavier	-4.223	0.238	0.0	0.401	-4.004	0.235	0.0	0.361	-3.913	0.218	0.0	0.344
$\lambda_X=0.2, \lambda_Z=1, \alpha_Y=7 - b_2 + d_2=0.94$												
standard kernel	-1.856	0.201	0.0	0.222	-1.7	0.168	0.0	0.166	-1.626	0.164	0.0	0.146
standard xavier	-1.856	0.201	0.001	0.262	-1.7	0.168	0.001	0.22	-1.626	0.164	0.0	0.205
smooth kernel	-1.874	0.192	0.1	2652804172938.914	-1.717	0.161	0.291	1.4675870576888567e+107	-1.642	0.157	0.412	3.787365431778582e+138
smooth ls	-1.874	0.192	0.003	0.415	-1.717	0.161	0.001	0.33	-1.642	0.157	0.0	0.303
smooth xavier	-1.874	0.192	0.001	0.316	-1.717	0.161	0.001	0.27	-1.642	0.157	0.0	0.253
$\lambda_X=0.2, \lambda_Z=1, \alpha_Y=10 - b_2 + d_2=0.9$												
standard kernel	-0.598	0.107	0.005	0.134	-0.513	0.087	0.002	0.097	-0.474	0.082	0.002	0.085
standard xavier	-0.598	0.107	0.007	0.156	-0.513	0.087	0.005	0.123	-0.474	0.082	0.004	0.113
smooth kernel	-0.609	0.102	0.09	44452415546858.52	-0.522	0.083	0.249	8.420441043019625e+97	-0.483	0.079	0.353	2.8835041552341265e+133
smooth ls	-0.609	0.102	0.016	0.242	-0.522	0.083	0.008	0.182	-0.483	0.079	0.006	0.165
smooth xavier	-0.609	0.102	0.009	0.185	-0.522	0.083	0.005	0.15	-0.483	0.079	0.005	0.139
$\lambda_X=0.3, \lambda_Z=1, \alpha_Y=4 - b_2 + d_2=0.95$												
standard kernel	-3.827	0.461	0.002	0.554	-3.538	0.42	0.002	0.416	-3.436	0.341	0.0	0.358
standard xavier	-3.827	0.461	0.004	0.697	-3.538	0.42	0.004	0.593	-3.436	0.341	0.001	0.555
smooth kernel	-3.875	0.432	0.151	9365315208052264.0	-3.583	0.397	0.445	5.922211593906475e+141	-3.479	0.322	0.582	1.751123403646776e+148
smooth ls	-3.875	0.432	0.006	0.941	-3.583	0.397	0.004	0.772	-3.479	0.322	0.001	0.711
smooth xavier	-3.875	0.432	0.005	0.806	-3.583	0.397	0.004	0.701	-3.479	0.322	0.0	0.658
$\lambda_X=0.3, \lambda_Z=1, \alpha_Y=6 - b_2 + d_2=0.87$												
standard kernel	-0.619	0.194	0.035	0.281	-0.502	0.149	0.021	0.198	-0.461	0.132	0.021	0.167
standard xavier	-0.619	0.194	0.054	0.338	-0.502	0.149	0.043	0.262	-0.461	0.132	0.039	0.233
smooth kernel	-0.641	0.184	0.17	28224286310749.63	-0.521	0.141	0.397	9.756939766851726e+110	-0.478	0.125	0.503	8.74914581730665e+144
smooth ls	-0.641	0.184	0.073	0.451	-0.521	0.141	0.058	0.337	-0.478	0.125	0.054	0.296
smooth xavier	-0.641	0.184	0.056	0.387	-0.521	0.141	0.05	0.307	-0.478	0.125	0.046	0.273
$\lambda_X=0.3, \lambda_Z=1, \alpha_Y=7 - b_2 + d_2=0.84$												
standard kernel	-0.402	0.139	0.056	0.222	-0.315	0.109	0.037	0.154	-0.284	0.094	0.035	0.129
standard xavier	-0.402	0.139	0.077	0.263	-0.315	0.109	0.065	0.199	-0.284	0.094	0.066	0.174
smooth kernel	-0.419	0.132	0.171	21251001267965.42	-0.329	0.103	0.356	1.7739579693804936e+115	-0.297	0.09	0.46	8.735767456130746e+146
smooth ls	-0.419	0.132	0.105	0.353	-0.329	0.103	0.085	0.253	-0.297	0.09	0.08	0.219
smooth xavier	-0.419	0.132	0.081	0.303	-0.329	0.103	0.072	0.23	-0.297	0.09	0.069	0.203
$\lambda_X=0.3, \lambda_Z=1, \alpha_Y=10 - b_2 + d_2=0.8$												
standard kernel	-0.18	0.078	0.105	0.135	-0.132	0.055	0.087	0.091	-0.114	0.047	0.075	0.076
standard xavier	-0.18	0.078	0.138	0.157	-0.132	0.055	0.127	0.113	-0.114	0.047	0.123	0.097
smooth kernel	-0.189	0.074	0.205	108000509693.843	-0.14	0.052	0.332	3.9211331700453784e+66	-0.121	0.045	0.423	1.8708253031083243e+145
smooth ls	-0.189	0.074	0.178	0.209	-0.14	0.052	0.157	0.142	-0.121	0.045	0.149	0.121
smooth xavier	-0.189	0.074	0.144	0.18	-0.14	0.052	0.136	0.13	-0.121	0.045	0.131	0.112
$\lambda_X=0.5, \lambda_Z=1, \alpha_Y=3 - b_2 + d_2=0.83$												

standard kernel	-0.791	0.613	0.169	0.804	-0.619	0.351	0.143	0.545	-0.566	0.291	0.117	0.445
standard xavier	-0.791	0.613	0.228	1.024	-0.619	0.351	0.222	0.773	-0.566	0.291	0.201	0.643
smooth kernel	-0.853	0.562	0.329	9.850973465144841e+17	-0.668	0.322	0.612	8.306525876585012e+146	-0.606	0.275	0.73	4.103212307514596e+147
smooth ls	-0.853	0.562	0.242	1.196	-0.668	0.322	0.227	0.868	-0.606	0.275	0.205	0.719
smooth xavier	-0.853	0.562	0.219	1.116	-0.668	0.322	0.218	0.84	-0.606	0.275	0.198	0.702
$\lambda_X=0.5, \lambda_Z=1, \alpha_Y=4 - b_2 + d_2=0.75$												
standard kernel	-0.259	0.236	0.342	0.459	-0.175	0.169	0.335	0.295	-0.151	0.129	0.318	0.237
standard xavier	-0.259	0.236	0.412	0.561	-0.175	0.169	0.432	0.386	-0.151	0.129	0.434	0.321
smooth kernel	-0.291	0.22	0.437	2.0922518201318768e+17	-0.198	0.158	0.625	1.810379135215617e+139	-0.17	0.121	0.716	3.412045305404165e+147
smooth ls	-0.291	0.22	0.424	0.644	-0.198	0.158	0.428	0.432	-0.17	0.121	0.431	0.355
smooth xavier	-0.291	0.22	0.4	0.605	-0.198	0.158	0.418	0.419	-0.17	0.121	0.421	0.347
$\lambda_X=0.5, \lambda_Z=1, \alpha_Y=6 - b_2 + d_2=0.67$												
standard kernel	-0.09	0.101	0.498	0.236	-0.053	0.063	0.528	0.144	-0.042	0.05	0.531	0.115
standard xavier	-0.09	0.101	0.558	0.274	-0.053	0.063	0.6	0.175	-0.042	0.05	0.615	0.142
smooth kernel	-0.104	0.095	0.551	332133952.549	-0.063	0.06	0.677	3.393354952733603e+144	-0.049	0.048	0.73	2.239196295880778e+147
smooth ls	-0.104	0.095	0.574	0.315	-0.063	0.06	0.601	0.194	-0.049	0.048	0.611	0.155
smooth xavier	-0.104	0.095	0.547	0.296	-0.063	0.06	0.589	0.188	-0.049	0.048	0.602	0.152
$\lambda_X=0.5, \lambda_Z=1, \alpha_Y=7 - b_2 + d_2=0.64$												
standard kernel	-0.062	0.082	0.55	0.191	-0.034	0.049	0.593	0.115	-0.028	0.038	0.593	0.09
standard xavier	-0.062	0.082	0.598	0.222	-0.034	0.049	0.659	0.138	-0.028	0.038	0.672	0.11
smooth kernel	-0.074	0.077	0.592	311395382699201.0	-0.042	0.046	0.713	6.269387595946944e+129	-0.034	0.036	0.758	3.257595229218994e+146
smooth ls	-0.074	0.077	0.615	0.252	-0.042	0.046	0.661	0.152	-0.034	0.036	0.668	0.12
smooth xavier	-0.074	0.077	0.587	0.238	-0.042	0.046	0.65	0.148	-0.034	0.036	0.659	0.118
$\lambda_X=0.5, \lambda_Z=1, \alpha_Y=10 - b_2 + d_2=0.6$												
standard kernel	-0.031	0.046	0.633	0.119	-0.017	0.026	0.675	0.069	-0.013	0.021	0.677	0.054
standard xavier	-0.031	0.046	0.68	0.135	-0.017	0.026	0.73	0.08	-0.013	0.021	0.739	0.063
smooth kernel	-0.038	0.043	0.658	695872.202	-0.021	0.025	0.752	1.67032676510566e+89	-0.016	0.02	0.786	1.6664200612467174e+125
smooth ls	-0.038	0.043	0.692	0.154	-0.021	0.025	0.728	0.088	-0.016	0.02	0.733	0.069
smooth xavier	-0.038	0.043	0.67	0.145	-0.021	0.025	0.717	0.086	-0.016	0.02	0.724	0.068
$\lambda_X=0.8, \lambda_Z=1, \alpha_Y=1.5 - b_2 + d_2=0.87$												
standard kernel	-1.938	3.408	0.245	3.743	-1.575	4.108	0.225	2.669	-1.561	2.908	0.193	2.193
standard xavier	-1.938	3.408	0.3	4.907	-1.575	4.108	0.319	3.938	-1.561	2.908	0.293	3.39
smooth kernel	-2.22	2.823	0.359	4.2464169766092066e+23	-1.793	3.85	0.625	7.745522917145668e+147	-1.717	2.843	0.748	4.78051740549114e+147
smooth ls	-2.22	2.823	0.284	5.16	-1.793	3.85	0.292	3.952	-1.717	2.843	0.268	3.219
smooth xavier	-2.22	2.823	0.279	4.987	-1.793	3.85	0.292	3.883	-1.717	2.843	0.268	3.202
$\lambda_X=0.8, \lambda_Z=1, \alpha_Y=2 - b_2 + d_2=0.7$												
standard kernel	-0.205	0.949	0.576	1.445	-0.133	0.738	0.591	0.891	-0.145	0.352	0.579	0.661
standard xavier	-0.205	0.949	0.63	1.809	-0.133	0.738	0.676	1.213	-0.145	0.352	0.687	0.901
smooth kernel	-0.304	0.802	0.616	1.2533464494243085e+22	-0.192	0.7	0.755	8.139979990543152e+147	-0.187	0.329	0.827	2.1936814572504377e+148
smooth ls	-0.304	0.802	0.612	1.915	-0.192	0.7	0.655	1.221	-0.187	0.329	0.66	0.912
smooth xavier	-0.304	0.802	0.611	1.853	-0.192	0.7	0.654	1.206	-0.187	0.329	0.662	0.906
$\lambda_X=0.8, \lambda_Z=1, \alpha_Y=3 - b_2 + d_2=0.53$												
standard kernel	-0.043	0.216	0.764	0.538	-0.022	0.117	0.805	0.299	-0.016	0.081	0.819	0.226
standard xavier	-0.043	0.216	0.798	0.628	-0.022	0.117	0.855	0.361	-0.016	0.081	0.872	0.273
smooth kernel	-0.071	0.196	0.776	667335203507737.8	-0.037	0.108	0.862	4.9073361572887645e+147	-0.027	0.076	0.903	7.549040485225829e+145
smooth ls	-0.071	0.196	0.788	0.659	-0.037	0.108	0.841	0.37	-0.027	0.076	0.865	0.279
smooth xavier	-0.071	0.196	0.787	0.646	-0.037	0.108	0.841	0.366	-0.027	0.076	0.865	0.277

	$\lambda_X=0.8, \lambda_Z=1, \alpha_Y=4 - b_2 + d_2=0.45$													
standard kernel	-0.015	0.122	0.819		0.325	-0.007	0.056	0.864		0.17	-0.006	0.04	0.878	0.127
standard xavier	-0.015	0.122	0.847		0.368	-0.007	0.056	0.898		0.195	-0.006	0.04	0.913	0.145
smooth kernel	-0.03	0.113	0.833	599185930858630.0		-0.015	0.053	0.899	1.9062831022009145e+146		-0.011	0.039	0.926	3.1454576333047676e+142
smooth ls	-0.03	0.113	0.842		0.387	-0.015	0.053	0.889		0.2	-0.011	0.039	0.906	0.148
smooth xavier	-0.03	0.113	0.837		0.38	-0.015	0.053	0.89		0.199	-0.011	0.039	0.903	0.147
	$\lambda_X=0.8, \lambda_Z=1, \alpha_Y=6 - b_2 + d_2=0.37$													
standard kernel	-0.009	0.055	0.854		0.173	-0.003	0.027	0.895		0.089	-0.002	0.019	0.898	0.066
standard xavier	-0.009	0.055	0.87		0.19	-0.003	0.027	0.914		0.098	-0.002	0.019	0.922	0.072
smooth kernel	-0.016	0.052	0.861	20520859.342		-0.006	0.026	0.916	8.912959783322243e+130		-0.004	0.019	0.928	3.6964688597327267e+140
smooth ls	-0.016	0.052	0.866		0.198	-0.006	0.026	0.913		0.1	-0.004	0.019	0.921	0.073
smooth xavier	-0.016	0.052	0.865		0.195	-0.006	0.026	0.911		0.1	-0.004	0.019	0.92	0.073
	$\lambda_X=0.8, \lambda_Z=1, \alpha_Y=7 - b_2 + d_2=0.34$													
standard kernel	-0.005	0.045	0.871		0.142	-0.002	0.021	0.906		0.072	-0.001	0.016	0.908	0.053
standard xavier	-0.005	0.045	0.883		0.155	-0.002	0.021	0.924		0.078	-0.001	0.016	0.929	0.057
smooth kernel	-0.011	0.043	0.876	3340951611.985		-0.005	0.02	0.921	4.5171789838078945e+116		-0.003	0.015	0.937	4.4163580722825475e+118
smooth ls	-0.011	0.043	0.876		0.162	-0.005	0.02	0.922		0.08	-0.003	0.015	0.928	0.058
smooth xavier	-0.011	0.043	0.875		0.159	-0.005	0.02	0.921		0.079	-0.003	0.015	0.928	0.058
	$\lambda_X=0.8, \lambda_Z=1, \alpha_Y=10 - b_2 + d_2=0.3$													
standard kernel	-0.003	0.027	0.882		0.09	-0.001	0.013	0.915		0.045	-0.001	0.009	0.917	0.033
standard xavier	-0.003	0.027	0.898		0.097	-0.001	0.013	0.928		0.048	-0.001	0.009	0.927	0.035
smooth kernel	-0.006	0.026	0.888	58189348.722		-0.002	0.013	0.929	3.3129761423137907e+71		-0.002	0.009	0.939	1.0693053842538742e+121
smooth ls	-0.006	0.026	0.897		0.101	-0.002	0.013	0.927		0.049	-0.002	0.009	0.929	0.036
smooth xavier	-0.006	0.026	0.893		0.1	-0.002	0.013	0.926		0.049	-0.002	0.009	0.929	0.035
	$\lambda_X=0.9, \lambda_Z=1, \alpha_Y=1.5 - b_2 + d_2=0.77$													
standard kernel	-0.454	2.975	0.51		3.17	-0.322	1.856	0.507		2.113	-0.346	1.237	0.5	1.621
standard xavier	-0.454	2.975	0.552		3.88	-0.322	1.856	0.59		2.874	-0.346	1.237	0.604	2.271
smooth kernel	-0.655	2.579	0.545	1.9637040991725527e+24		-0.474	1.596	0.683	5.876494043535382e+148		-0.445	1.144	0.763	4.402593123971064e+147
smooth ls	-0.655	2.579	0.524		3.929	-0.474	1.596	0.552		2.788	-0.445	1.144	0.572	2.18
smooth xavier	-0.655	2.579	0.528		3.843	-0.474	1.596	0.557		2.774	-0.445	1.144	0.576	2.177
	$\lambda_X=0.9, \lambda_Z=1, \alpha_Y=2 - b_2 + d_2=0.6$													
standard kernel	-0.05	0.686	0.731		1.247	-0.039	0.328	0.772		0.684	-0.036	0.469	0.768	0.526
standard xavier	-0.05	0.686	0.761		1.495	-0.039	0.328	0.825		0.864	-0.036	0.469	0.824	0.666
smooth kernel	-0.121	0.615	0.744	6.679305753021648e+23		-0.078	0.294	0.838	6.4402027447990555e+146		-0.063	0.462	0.865	1.0591324303943241e+148
smooth ls	-0.121	0.615	0.742		1.52	-0.078	0.294	0.809		0.872	-0.063	0.462	0.809	0.665
smooth xavier	-0.121	0.615	0.744		1.517	-0.078	0.294	0.812		0.867	-0.063	0.462	0.809	0.665
	$\lambda_X=0.9, \lambda_Z=1, \alpha_Y=3 - b_2 + d_2=0.43$													
standard kernel	-0.013	0.193	0.836		0.482	-0.004	0.087	0.867		0.25	-0.005	0.059	0.889	0.184
standard xavier	-0.013	0.193	0.857		0.543	-0.004	0.087	0.899		0.288	-0.005	0.059	0.917	0.211
smooth kernel	-0.035	0.176	0.841	6.333582955486067e+17		-0.015	0.081	0.899	4.0308178532161565e+145		-0.012	0.056	0.92	5.058208275860935e+143
smooth ls	-0.035	0.176	0.842		0.558	-0.015	0.081	0.889		0.292	-0.012	0.056	0.912	0.213
smooth xavier	-0.035	0.176	0.842		0.55	-0.015	0.081	0.889		0.291	-0.012	0.056	0.912	0.212
	$\lambda_X=0.9, \lambda_Z=1, \alpha_Y=4 - b_2 + d_2=0.35$													
standard kernel	-0.007	0.092	0.871		0.289	-0.002	0.044	0.901		0.145	-0.001	0.032	0.917	0.107
standard xavier	-0.007	0.092	0.884		0.319	-0.002	0.044	0.923		0.161	-0.001	0.032	0.936	0.118
smooth kernel	-0.019	0.086	0.875	43346314559.907		-0.007	0.042	0.921	3.1400160023397993e+95		-0.005	0.031	0.941	2.232237419934491e+128
smooth ls	-0.019	0.086	0.875		0.327	-0.007	0.042	0.918		0.163	-0.005	0.031	0.932	0.119

smooth xavier	-0.019	0.086	0.874	0.324	-0.007	0.042	0.918	0.163	-0.005	0.031	0.934	0.119
$\lambda_X=0.9, \lambda_Z=1, \alpha_Y=6 - b_2 + d_2=0.27$												
standard kernel	-0.001	0.049	0.897	0.159	-0.001	0.022	0.927	0.078	-0.0	0.016	0.931	0.057
standard xavier	-0.001	0.049	0.903	0.171	-0.001	0.022	0.939	0.083	-0.0	0.016	0.944	0.06
smooth kernel	-0.007	0.046	0.901	3541424885771.844	-0.003	0.021	0.942	5.862234416551322e+61	-0.002	0.015	0.95	1.0609545227947695e+110
smooth ls	-0.007	0.046	0.901	0.176	-0.003	0.021	0.941	0.084	-0.002	0.015	0.944	0.061
smooth xavier	-0.007	0.046	0.9	0.174	-0.003	0.021	0.939	0.084	-0.002	0.015	0.945	0.061
$\lambda_X=0.9, \lambda_Z=1, \alpha_Y=7 - b_2 + d_2=0.24$												
standard kernel	-0.002	0.039	0.903	0.129	-0.001	0.018	0.918	0.063	-0.001	0.012	0.931	0.046
standard xavier	-0.002	0.039	0.912	0.138	-0.001	0.018	0.93	0.067	-0.001	0.012	0.939	0.048
smooth kernel	-0.006	0.037	0.904	4225389.993	-0.002	0.018	0.931	5.5372932386303236e+85	-0.002	0.012	0.945	8.639086303369974e+138
smooth ls	-0.006	0.037	0.907	0.143	-0.002	0.018	0.932	0.068	-0.002	0.012	0.939	0.049
smooth xavier	-0.006	0.037	0.906	0.141	-0.002	0.018	0.931	0.068	-0.002	0.012	0.938	0.049
$\lambda_X=0.9, \lambda_Z=1, \alpha_Y=10 - b_2 + d_2=0.2$												
standard kernel	-0.001	0.025	0.901	0.083	-0.0	0.011	0.923	0.04	-0.0	0.008	0.927	0.029
standard xavier	-0.001	0.025	0.908	0.088	-0.0	0.011	0.932	0.042	-0.0	0.008	0.935	0.03
smooth kernel	-0.003	0.024	0.906	21864921.361	-0.001	0.011	0.93	2.4565587587068585e+56	-0.001	0.008	0.939	1.1094500512279063e+116
smooth ls	-0.003	0.024	0.906	0.09	-0.001	0.011	0.929	0.042	-0.001	0.008	0.936	0.03
smooth xavier	-0.003	0.024	0.905	0.089	-0.001	0.011	0.928	0.042	-0.001	0.008	0.936	0.03

Table 0.2: Simulations – Gaussian DGP, 5,000 iterations. 25 January 2021.

model	n=100				n=500				n=1000			
	bias	RMSE	Coverage rate	CI size	bias	RMSE	Coverage rate	CI size	bias	RMSE	Coverage rate	CI size
$\sigma_X^2=0.1, \mu_X=0 - b_1 = b_2=0.9$												
standard kernel	0.003	0.16	0.962	0.675	-0.0	0.072	0.959	0.293	0.003	0.05	0.955	0.205
standard xavier	0.003	0.16	0.943	0.627	-0.0	0.072	0.951	0.282	0.003	0.05	0.948	0.199
smooth kernel	0.003	0.159	0.963	0.675	-0.0	0.072	0.959	0.293	0.002	0.05	0.955	0.205
smooth ls	0.003	0.159	0.937	0.63	-0.0	0.072	0.948	0.282	0.002	0.05	0.949	0.199
smooth xavier	0.003	0.159	0.938	0.628	-0.0	0.072	0.949	0.282	0.002	0.05	0.949	0.199
$\sigma_X^2=0.1, \mu_X=0.5 - b_1 = b_2=0.9$												
standard kernel	-0.003	0.171	0.953	0.688	-0.0	0.076	0.951	0.302	0.0	0.053	0.954	0.212
standard xavier	-0.003	0.171	0.932	0.653	-0.0	0.076	0.943	0.294	0.0	0.053	0.95	0.208
smooth kernel	-0.009	0.169	0.956	0.693	-0.001	0.076	0.952	0.302	-0.0	0.053	0.955	0.213
smooth ls	-0.009	0.169	0.931	0.66	-0.001	0.076	0.944	0.294	-0.0	0.053	0.95	0.208
smooth xavier	-0.009	0.169	0.932	0.657	-0.001	0.076	0.943	0.294	-0.0	0.053	0.95	0.208
$\sigma_X^2=0.1, \mu_X=1 - b_1 = b_2=0.9$												
standard kernel	-0.008	0.189	0.941	0.734	-0.001	0.085	0.949	0.332	-0.002	0.06	0.948	0.236
standard xavier	-0.008	0.189	0.931	0.741	-0.001	0.085	0.948	0.335	-0.002	0.06	0.946	0.237
smooth kernel	-0.025	0.185	0.946	0.748	-0.005	0.085	0.95	0.334	-0.003	0.06	0.947	0.236
smooth ls	-0.025	0.185	0.932	0.758	-0.005	0.085	0.949	0.336	-0.003	0.06	0.947	0.237
smooth xavier	-0.025	0.185	0.933	0.755	-0.005	0.085	0.949	0.336	-0.003	0.06	0.948	0.237
$\sigma_X^2=0.1, \mu_X=3 - b_1 = b_2=0.9$												
standard kernel	-0.571	0.402	0.072	0.261	-0.194	0.31	0.321	0.39	-0.097	0.261	0.52	0.454
standard xavier	-0.571	0.402	0.114	0.372	-0.194	0.31	0.401	0.522	-0.097	0.261	0.6	0.605
smooth kernel	-0.628	0.396	0.189	0.699	-0.251	0.303	0.431	0.629	-0.151	0.253	0.596	0.647

smooth ls	-0.628	0.396	0.436	1.7	-0.251	0.303	0.684	1.149	-0.151	0.253	0.759	0.968
smooth xavier	-0.628	0.396	0.227	0.834	-0.251	0.303	0.494	0.763	-0.151	0.253	0.652	0.767
$\sigma_X^2=0.1, \mu_X=5 - b_1 = b_2=0.9$												
standard kernel	-2.45	0.472	0.0	0.035	-1.972	0.361	0.0	0.031	-1.765	0.341	0.0	0.016
standard xavier	-2.45	0.472	0.0	0.044	-1.972	0.361	0.0	0.067	-1.765	0.341	0.0	0.032
smooth kernel	-2.48	0.459	0.0	1.203	-1.99	0.353	0.005	1.1	-1.78	0.335	0.008	0.8
smooth ls	-2.48	0.459	0.004	1.939	-1.99	0.353	0.01	1.681	-1.78	0.335	0.022	1.584
smooth xavier	-2.48	0.459	0.0	1.519	-1.99	0.353	0.007	1.307	-1.78	0.335	0.011	0.83
$\sigma_X^2=0.2, \mu_X=0 - b_1 = b_2=0.8$												
standard kernel	0.001	0.158	0.96	0.66	0.0	0.07	0.963	0.288	0.001	0.05	0.953	0.202
standard xavier	0.001	0.158	0.946	0.621	0.0	0.07	0.954	0.278	0.001	0.05	0.946	0.197
smooth kernel	0.001	0.157	0.962	0.66	0.0	0.07	0.963	0.288	0.001	0.05	0.953	0.202
smooth ls	0.001	0.157	0.944	0.624	0.0	0.07	0.955	0.278	0.001	0.05	0.947	0.197
smooth xavier	0.001	0.157	0.945	0.622	0.0	0.07	0.954	0.278	0.001	0.05	0.947	0.197
$\sigma_X^2=0.2, \mu_X=0.5 - b_1 = b_2=0.8$												
standard kernel	-0.006	0.167	0.954	0.673	-0.001	0.074	0.953	0.296	-0.0	0.053	0.955	0.208
standard xavier	-0.006	0.167	0.94	0.645	-0.001	0.074	0.947	0.29	-0.0	0.053	0.95	0.205
smooth kernel	-0.013	0.165	0.957	0.679	-0.003	0.074	0.953	0.297	-0.001	0.053	0.955	0.209
smooth ls	-0.013	0.165	0.939	0.652	-0.003	0.074	0.948	0.29	-0.001	0.053	0.952	0.205
smooth xavier	-0.013	0.165	0.938	0.65	-0.003	0.074	0.947	0.29	-0.001	0.053	0.952	0.205
$\sigma_X^2=0.2, \mu_X=1 - b_1 = b_2=0.8$												
standard kernel	-0.003	0.189	0.935	0.71	-0.005	0.084	0.946	0.325	0.0	0.059	0.95	0.23
standard xavier	-0.003	0.189	0.931	0.719	-0.005	0.084	0.945	0.329	0.0	0.059	0.952	0.233
smooth kernel	-0.023	0.185	0.943	0.728	-0.009	0.084	0.946	0.326	-0.002	0.059	0.951	0.231
smooth ls	-0.023	0.185	0.937	0.745	-0.009	0.084	0.946	0.331	-0.002	0.059	0.952	0.234
smooth xavier	-0.023	0.185	0.936	0.74	-0.009	0.084	0.945	0.331	-0.002	0.059	0.951	0.233
$\sigma_X^2=0.2, \mu_X=3 - b_1 = b_2=0.8$												
standard kernel	-0.588	0.405	0.073	0.244	-0.219	0.298	0.319	0.375	-0.136	0.242	0.46	0.406
standard xavier	-0.588	0.405	0.115	0.323	-0.219	0.298	0.406	0.503	-0.136	0.242	0.561	0.537
smooth kernel	-0.638	0.398	0.176	0.574	-0.272	0.291	0.41	0.598	-0.185	0.234	0.541	0.574
smooth ls	-0.638	0.398	0.482	1.618	-0.272	0.291	0.656	1.086	-0.185	0.234	0.72	0.892
smooth xavier	-0.638	0.398	0.211	0.676	-0.272	0.291	0.481	0.721	-0.185	0.234	0.606	0.693
$\sigma_X^2=0.2, \mu_X=5 - b_1 = b_2=0.8$												
standard kernel	-2.522	0.407	0.0	0.083	-1.972	0.36	0.0	0.013	-1.766	0.347	0.0	0.011
standard xavier	-2.522	0.407	0.0	0.094	-1.972	0.36	0.0	0.025	-1.766	0.347	0.0	0.017
smooth kernel	-2.542	0.4	0.002	1.258	-1.982	0.359	0.001	0.364	-1.775	0.344	0.003	0.249
smooth ls	-2.542	0.4	0.006	1.757	-1.982	0.359	0.024	1.479	-1.775	0.344	0.065	1.502
smooth xavier	-2.542	0.4	0.002	1.333	-1.982	0.359	0.0	0.396	-1.775	0.344	0.003	0.254
$\sigma_X^2=0.3, \mu_X=0 - b_1 = b_2=0.7$												
standard kernel	0.001	0.158	0.962	0.654	-0.0	0.072	0.952	0.286	-0.002	0.051	0.953	0.201
standard xavier	0.001	0.158	0.947	0.619	-0.0	0.072	0.945	0.278	-0.002	0.051	0.946	0.197
smooth kernel	0.001	0.157	0.964	0.654	-0.0	0.071	0.952	0.286	-0.002	0.051	0.953	0.201
smooth ls	0.001	0.157	0.95	0.621	-0.0	0.071	0.945	0.278	-0.002	0.051	0.945	0.197
smooth xavier	0.001	0.157	0.949	0.619	-0.0	0.071	0.944	0.278	-0.002	0.051	0.945	0.196
$\sigma_X^2=0.3, \mu_X=0.5 - b_1 = b_2=0.7$												
standard kernel	-0.002	0.163	0.956	0.665	-0.005	0.073	0.954	0.294	0.001	0.051	0.957	0.207
standard xavier	-0.002	0.163	0.949	0.642	-0.005	0.073	0.948	0.289	0.001	0.051	0.956	0.205

smooth kernel	-0.011	0.161	0.959	0.671	-0.007	0.073	0.955	0.295	0.0	0.051	0.958	0.207
smooth ls	-0.011	0.161	0.953	0.652	-0.007	0.073	0.948	0.289	0.0	0.051	0.956	0.205
smooth xavier	-0.011	0.161	0.952	0.649	-0.007	0.073	0.948	0.289	0.0	0.051	0.956	0.205
	$\sigma_X^2=0.3, \mu_X=1 - b_1 = b_2=0.7$											
standard kernel	-0.012	0.184	0.931	0.696	0.0	0.084	0.948	0.322	-0.002	0.059	0.947	0.229
standard xavier	-0.012	0.184	0.929	0.711	0.0	0.084	0.95	0.328	-0.002	0.059	0.95	0.232
smooth kernel	-0.033	0.18	0.938	0.718	-0.005	0.084	0.949	0.324	-0.004	0.058	0.946	0.229
smooth ls	-0.033	0.18	0.934	0.74	-0.005	0.084	0.95	0.33	-0.004	0.058	0.949	0.233
smooth xavier	-0.033	0.18	0.933	0.733	-0.005	0.084	0.949	0.33	-0.004	0.058	0.948	0.233
	$\sigma_X^2=0.3, \mu_X=3 - b_1 = b_2=0.7$											
standard kernel	-0.61	0.396	0.083	0.266	-0.259	0.277	0.29	0.357	-0.163	0.232	0.405	0.367
standard xavier	-0.61	0.396	0.116	0.335	-0.259	0.277	0.375	0.472	-0.163	0.232	0.499	0.482
smooth kernel	-0.659	0.389	0.164	0.548	-0.307	0.27	0.378	0.557	-0.207	0.225	0.483	0.527
smooth ls	-0.659	0.389	0.477	1.532	-0.307	0.27	0.622	1.0	-0.207	0.225	0.684	0.835
smooth xavier	-0.659	0.389	0.208	0.658	-0.307	0.27	0.441	0.662	-0.207	0.225	0.549	0.629
	$\sigma_X^2=0.3, \mu_X=5 - b_1 = b_2=0.7$											
standard kernel	-2.507	0.416	0.0	0.037	-1.956	0.363	0.0	0.013	-1.752	0.351	0.0	0.011
standard xavier	-2.507	0.416	0.0	0.046	-1.956	0.363	0.0	0.019	-1.752	0.351	0.0	0.019
smooth kernel	-2.521	0.413	0.001	0.622	-1.964	0.36	0.002	0.196	-1.76	0.349	0.002	0.143
smooth ls	-2.521	0.413	0.006	1.566	-1.964	0.36	0.063	1.625	-1.76	0.349	0.089	1.502
smooth xavier	-2.521	0.413	0.001	0.694	-1.964	0.36	0.001	0.204	-1.76	0.349	0.002	0.154
	$\sigma_X^2=0.5, \mu_X=0 - b_1 = b_2=0.5$											
standard kernel	-0.003	0.16	0.954	0.651	-0.003	0.072	0.954	0.288	0.001	0.051	0.946	0.203
standard xavier	-0.003	0.16	0.948	0.627	-0.003	0.072	0.949	0.282	0.001	0.051	0.942	0.2
smooth kernel	-0.003	0.159	0.957	0.651	-0.003	0.072	0.955	0.288	0.001	0.051	0.946	0.203
smooth ls	-0.003	0.159	0.948	0.629	-0.003	0.072	0.949	0.283	0.001	0.051	0.943	0.2
smooth xavier	-0.003	0.159	0.948	0.626	-0.003	0.072	0.949	0.282	0.001	0.051	0.942	0.199
	$\sigma_X^2=0.5, \mu_X=0.5 - b_1 = b_2=0.5$											
standard kernel	-0.003	0.167	0.951	0.663	0.0	0.076	0.949	0.295	-0.002	0.053	0.95	0.209
standard xavier	-0.003	0.167	0.947	0.649	0.0	0.076	0.947	0.293	-0.002	0.053	0.951	0.207
smooth kernel	-0.013	0.165	0.956	0.671	-0.002	0.075	0.95	0.296	-0.003	0.053	0.95	0.209
smooth ls	-0.013	0.165	0.951	0.662	-0.002	0.075	0.947	0.294	-0.003	0.053	0.951	0.208
smooth xavier	-0.013	0.165	0.951	0.658	-0.002	0.075	0.947	0.294	-0.003	0.053	0.951	0.208
	$\sigma_X^2=0.5, \mu_X=1 - b_1 = b_2=0.5$											
standard kernel	-0.012	0.188	0.92	0.68	-0.007	0.086	0.931	0.321	-0.001	0.06	0.941	0.229
standard xavier	-0.012	0.188	0.923	0.701	-0.007	0.086	0.936	0.33	-0.001	0.06	0.945	0.235
smooth kernel	-0.036	0.184	0.932	0.708	-0.014	0.085	0.934	0.324	-0.005	0.06	0.944	0.231
smooth ls	-0.036	0.184	0.934	0.747	-0.014	0.085	0.938	0.335	-0.005	0.06	0.947	0.237
smooth xavier	-0.036	0.184	0.926	0.731	-0.014	0.085	0.937	0.334	-0.005	0.06	0.947	0.236
	$\sigma_X^2=0.5, \mu_X=3 - b_1 = b_2=0.5$											
standard kernel	-0.651	0.38	0.08	0.29	-0.32	0.259	0.229	0.329	-0.212	0.221	0.328	0.33
standard xavier	-0.651	0.38	0.109	0.353	-0.32	0.259	0.304	0.432	-0.212	0.221	0.416	0.427
smooth kernel	-0.697	0.373	0.142	0.535	-0.363	0.251	0.299	0.508	-0.251	0.214	0.393	0.485
smooth ls	-0.697	0.373	0.434	1.413	-0.363	0.251	0.542	0.926	-0.251	0.214	0.612	0.773
smooth xavier	-0.697	0.373	0.178	0.632	-0.363	0.251	0.369	0.608	-0.251	0.214	0.461	0.566
	$\sigma_X^2=0.5, \mu_X=5 - b_1 = b_2=0.5$											
standard kernel	-2.478	0.447	0.0	0.036	-1.967	0.363	0.0	0.014	-1.77	0.341	0.0	0.015

standard xavier	-2.478	0.447	0.0	0.058	-1.967	0.363	0.0	0.019	-1.77	0.341	0.0	0.019
smooth kernel	-2.491	0.439	0.001	0.384	-1.974	0.36	0.001	0.104	-1.776	0.338	0.003	0.089
smooth ls	-2.491	0.439	0.039	2.021	-1.974	0.36	0.073	1.498	-1.776	0.338	0.078	1.29
smooth xavier	-2.491	0.439	0.003	0.416	-1.974	0.36	0.001	0.112	-1.776	0.338	0.002	0.092
$\sigma_X^2=0.7, \mu_X=0 - b_1 = b_2=0.3$												
standard kernel	0.002	0.166	0.952	0.659	0.002	0.074	0.951	0.293	0.002	0.053	0.947	0.207
standard xavier	0.002	0.166	0.946	0.641	0.002	0.074	0.949	0.29	0.002	0.053	0.943	0.205
smooth kernel	0.002	0.164	0.954	0.657	0.002	0.073	0.951	0.293	0.002	0.053	0.947	0.207
smooth ls	0.002	0.164	0.948	0.642	0.002	0.073	0.948	0.29	0.002	0.053	0.942	0.205
smooth xavier	0.002	0.164	0.946	0.639	0.002	0.073	0.948	0.289	0.002	0.053	0.943	0.205
$\sigma_X^2=0.7, \mu_X=0.5 - b_1 = b_2=0.3$												
standard kernel	-0.002	0.17	0.945	0.665	0.0	0.079	0.944	0.3	-0.003	0.054	0.952	0.213
standard xavier	-0.002	0.17	0.941	0.658	0.0	0.079	0.944	0.3	-0.003	0.054	0.952	0.213
smooth kernel	-0.014	0.167	0.951	0.675	-0.003	0.079	0.945	0.301	-0.004	0.053	0.953	0.213
smooth ls	-0.014	0.167	0.951	0.676	-0.003	0.079	0.945	0.302	-0.004	0.053	0.954	0.213
smooth xavier	-0.014	0.167	0.948	0.669	-0.003	0.079	0.945	0.301	-0.004	0.053	0.953	0.213
$\sigma_X^2=0.7, \mu_X=1 - b_1 = b_2=0.3$												
standard kernel	-0.033	0.187	0.914	0.672	-0.006	0.086	0.936	0.322	-0.003	0.062	0.94	0.232
standard xavier	-0.033	0.187	0.916	0.696	-0.006	0.086	0.943	0.334	-0.003	0.062	0.947	0.24
smooth kernel	-0.057	0.183	0.922	0.704	-0.014	0.085	0.939	0.328	-0.008	0.061	0.94	0.235
smooth ls	-0.057	0.183	0.923	0.751	-0.014	0.085	0.947	0.343	-0.008	0.061	0.95	0.244
smooth xavier	-0.057	0.183	0.918	0.728	-0.014	0.085	0.945	0.341	-0.008	0.061	0.949	0.243
$\sigma_X^2=0.7, \mu_X=3 - b_1 = b_2=0.3$												
standard kernel	-0.686	0.366	0.077	0.314	-0.352	0.251	0.194	0.314	-0.252	0.215	0.259	0.303
standard xavier	-0.686	0.366	0.105	0.375	-0.352	0.251	0.256	0.402	-0.252	0.215	0.341	0.388
smooth kernel	-0.73	0.358	0.124	0.53	-0.392	0.243	0.252	0.47	-0.288	0.209	0.317	0.488
smooth ls	-0.73	0.358	0.403	1.344	-0.392	0.243	0.487	0.867	-0.288	0.209	0.541	0.726
smooth xavier	-0.73	0.358	0.159	0.625	-0.392	0.243	0.311	0.562	-0.288	0.209	0.389	0.518
$\sigma_X^2=0.8, \mu_X=0 - b_1 = b_2=0.2$												
standard kernel	0.005	0.168	0.951	0.661	-0.003	0.076	0.95	0.296	-0.004	0.052	0.955	0.209
standard xavier	0.005	0.168	0.944	0.647	-0.003	0.076	0.948	0.293	-0.004	0.052	0.953	0.208
smooth kernel	0.004	0.166	0.954	0.659	-0.003	0.075	0.951	0.296	-0.004	0.052	0.955	0.209
smooth ls	0.004	0.166	0.946	0.649	-0.003	0.075	0.948	0.293	-0.004	0.052	0.953	0.208
smooth xavier	0.004	0.166	0.945	0.644	-0.003	0.075	0.949	0.293	-0.004	0.052	0.953	0.208
$\sigma_X^2=0.8, \mu_X=0.5 - b_1 = b_2=0.2$												
standard kernel	-0.01	0.172	0.945	0.666	-0.002	0.077	0.952	0.303	0.004	0.056	0.944	0.215
standard xavier	-0.01	0.172	0.941	0.661	-0.002	0.077	0.952	0.304	0.004	0.056	0.945	0.216
smooth kernel	-0.022	0.169	0.951	0.676	-0.005	0.076	0.953	0.304	0.002	0.056	0.946	0.216
smooth ls	-0.022	0.169	0.948	0.683	-0.005	0.076	0.954	0.307	0.002	0.056	0.948	0.217
smooth xavier	-0.022	0.169	0.944	0.674	-0.005	0.076	0.954	0.306	0.002	0.056	0.947	0.216
$\sigma_X^2=0.8, \mu_X=1 - b_1 = b_2=0.2$												
standard kernel	-0.034	0.186	0.914	0.668	-0.006	0.09	0.927	0.324	-0.005	0.064	0.934	0.234
standard xavier	-0.034	0.186	0.916	0.69	-0.006	0.09	0.934	0.337	-0.005	0.064	0.944	0.242
smooth kernel	-0.059	0.181	0.922	0.702	-0.015	0.089	0.929	0.331	-0.01	0.063	0.937	0.255
smooth ls	-0.059	0.181	0.934	0.755	-0.015	0.089	0.939	0.348	-0.01	0.063	0.945	0.248
smooth xavier	-0.059	0.181	0.923	0.727	-0.015	0.089	0.936	0.345	-0.01	0.063	0.945	0.246
$\sigma_X^2=0.8, \mu_X=3 - b_1 = b_2=0.2$												

standard kernel	-0.71	0.365	0.074	0.318	-0.371	0.247	0.174	0.31	-0.28	0.207	0.23	0.293
standard xavier	-0.71	0.365	0.099	0.375	-0.371	0.247	0.232	0.396	-0.28	0.207	0.295	0.374
smooth kernel	-0.751	0.357	0.118	0.518	-0.41	0.239	0.233	0.462	-0.314	0.201	0.282	0.446
smooth ls	-0.751	0.357	0.377	1.28	-0.41	0.239	0.456	0.854	-0.314	0.201	0.497	0.696
smooth xavier	-0.751	0.357	0.144	0.596	-0.41	0.239	0.288	0.553	-0.314	0.201	0.349	0.495
	$\sigma_X^2=0.9, \mu_X=0 - b_1 = b_2=0.1$											
standard kernel	0.007	0.171	0.946	0.666	0.002	0.077	0.946	0.299	-0.002	0.054	0.953	0.212
standard xavier	0.007	0.171	0.943	0.655	0.002	0.077	0.945	0.298	-0.002	0.054	0.952	0.211
smooth kernel	0.007	0.168	0.947	0.664	0.002	0.077	0.947	0.299	-0.002	0.054	0.954	0.211
smooth ls	0.007	0.168	0.943	0.658	0.002	0.077	0.945	0.298	-0.002	0.054	0.953	0.211
smooth xavier	0.007	0.168	0.943	0.653	0.002	0.077	0.946	0.297	-0.002	0.054	0.952	0.21
	$\sigma_X^2=0.9, \mu_X=0.5 - b_1 = b_2=0.1$											
standard kernel	-0.005	0.175	0.942	0.669	0.001	0.079	0.945	0.306	0.0	0.056	0.946	0.217
standard xavier	-0.005	0.175	0.939	0.667	0.001	0.079	0.947	0.308	0.0	0.056	0.947	0.219
smooth kernel	-0.017	0.172	0.948	0.68	-0.003	0.078	0.949	0.308	-0.002	0.056	0.949	0.218
smooth ls	-0.017	0.172	0.949	0.691	-0.003	0.078	0.951	0.311	-0.002	0.056	0.949	0.22
smooth xavier	-0.017	0.172	0.946	0.68	-0.003	0.078	0.949	0.31	-0.002	0.056	0.948	0.22
	$\sigma_X^2=0.9, \mu_X=1 - b_1 = b_2=0.1$											
standard kernel	-0.045	0.194	0.903	0.669	-0.003	0.089	0.931	0.325	-0.004	0.064	0.928	0.235
standard xavier	-0.045	0.194	0.906	0.693	-0.003	0.089	0.942	0.338	-0.004	0.064	0.938	0.245
smooth kernel	-0.069	0.189	0.91	0.704	-0.012	0.088	0.937	0.333	-0.01	0.063	0.934	0.242
smooth ls	-0.069	0.189	0.919	0.764	-0.012	0.088	0.95	0.352	-0.01	0.063	0.944	0.252
smooth xavier	-0.069	0.189	0.908	0.732	-0.012	0.088	0.947	0.348	-0.01	0.063	0.942	0.25
	$\sigma_X^2=0.9, \mu_X=3 - b_1 = b_2=0.1$											
standard kernel	-0.717	0.357	0.07	0.326	-0.404	0.245	0.146	0.302	-0.304	0.213	0.198	0.284
standard xavier	-0.717	0.357	0.092	0.383	-0.404	0.245	0.196	0.377	-0.304	0.213	0.268	0.36
smooth kernel	-0.759	0.348	0.105	0.528	-0.439	0.238	0.191	0.444	-0.336	0.207	0.251	0.417
smooth ls	-0.759	0.348	0.356	1.272	-0.439	0.238	0.405	0.807	-0.336	0.207	0.445	0.677
smooth xavier	-0.759	0.348	0.143	0.61	-0.439	0.238	0.242	0.52	-0.336	0.207	0.306	0.478