Convex Mixtures Imputation and Applications

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Supplementary Material

S1 Simulation Case 3

$$
\text{Case 3}\begin{cases}
m_3(x) & = 2x, \\
\sigma_3^2(x) & = \begin{cases} 0.16, & 0 < x < 1, \\ 1.0, & -1 < x \le 0, \end{cases} \\
p_3(x) & = \frac{e^x}{1+e^x}, \\
X & \sim U(-1,1), \\
E(Y) & = 0,\ E(Y_{obs}) = 0.318,\ P(\delta=1) = 0.500,\ \sigma_{KR}^2 = 2.823.
\end{cases}
$$

Tables S1 and S2 list calculated results of Case 3.

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Table S1: Average estimates using KR, IPW, k-NN and CM imputation under Case 3

Method			Sample Size n											
			100				500				1000			
	h	k	Bias	n·VAR	n·MSE	CCI	Bias	n·VAR	n·MSE	CCI	Bias	n·VAR	n·MSE	CCI
KR	0.05	-	0.071	3.605	4.113	0.934	0.002	3.126	3.127	0.951	0.002	2.829	2.835	0.943
	0.15	-	0.014	3.139	3.160	0.952	0.004	3.050	3.057	0.950	0.006	2.780	2.811	0.939
	0.20	-	0.013	3.060	3.078	0.952	0.007	3.043	3.066	0.949	0.009	2.775	2.847	0.941
	0.30	-	0.018	2.979	3.013	0.951	0.014	3.028	3.131	0.944	0.016	2.773	3.035	0.934
IPW	0.05	-	0.072	3.626	4.138	0.933	0.002	3.175	3.176	0.950	0.002	2.889	2.893	0.944
	0.15	-	0.012	3.202	3.217	0.950	0.001	3.054	3.054	0.953	0.002	2.789	2.794	0.941
	0.20	-	0.009	3.130	3.138	0.954	0.001	3.042	3.043	0.953	0.002	2.794	2.799	0.942
	0.30	-	0.008	3.026	3.032	0.951	0.002	3.044	3.046	0.949	0.003	2.781	2.791	0.942
k-NN	-	1	0.006	3.304	3.308	0.945	-0.000	3.677	3.677	0.948	0.002	3.379	3.383	0.952
	-	2	0.010	3.164	3.173	0.947	0.000	3.264	3.264	0.944	0.002	3.085	3.088	0.944
	-	4	0.019	3.108	3.143	0.956	0.001	3.144	3.144	0.945	0.002	2.938	2.944	0.941
	-	8	0.038	3.131	3.277	0.955	0.002	3.143	3.145	0.949	0.003	2.841	2.847	0.943
	-	16	0.095	3.287	4.181	0.922	0.006	3.119	3.139	0.948	0.004	2.790	2.805	0.941
CM	0.15	1	0.003	3.039	3.047	0.944	0.001	3.293	3.294	0.948	0.003	3.039	3.047	0.944
	0.20	1	0.004	3.035	3.049	0.944	0.002	3.286	3.288	0.948	0.004	3.035	3.049	0.944
	0.30	1	0.006	3.031	3.067	0.942	0.004	3.277	3.285	0.949	0.006	3.031	3.067	0.942
	0.15	2	0.003	2.918	2.925	0.939	0.001	3.123	3.124	0.947	0.003	2.918	2.925	0.939
	0.20	2	0.003	2.915	2.927	0.940	0.002	3.116	3.118	0.946	0.003	2.915	2.927	0.940
	0.30	2	0.006	2.910	2.942	0.939	0.004	3.110	3.119	0.948	0.006	2.910	2.942	0.939
	0.15	4	0.003	2.859	2.869	0.941	0.002	3.085	3.086	0.946	0.003	2.859	2.869	0.941
	0.20	4	0.004	2.857	2.872	0.941	0.002	3.080	3.083	0.946	0.004	2.857	2.872	0.941
	0.30	4	0.006	2.854	2.892	0.943	0.004	3.075	3.084	0.949	0.006	2.854	2.892	0.943
	0.05	8	0.002	2.830	2.836	0.942	0.002	3.123	3.124	0.945	0.002	2.830	2.836	0.942
	0.15	8	0.003	2.811	2.822	0.938	0.003	3.101	3.105	0.950	0.003	2.811	2.822	0.938
	0.20	8	0.004	2.809	2.826	0.939	0.003	3.098	3.103	0.949	0.004	2.809	2.826	0.939
	0.05	16	0.004	2.788	2.801	0.941	0.005	3.102	3.115	0.948	0.004	2.788	2.801	0.941
	0.15	16	0.004	2.783	2.802	0.939	0.006	3.094	3.110	0.947	0.004	2.783	2.802	0.939
	0.20	16	0.005	2.783	2.809	0.939	0.006	3.093	3.114	0.948	0.005	2.783	2.809	0.939

Table S2: Average estimates using CMIPW and CR imputation under Case 3

Method			Sample Size n											
			100				500				1000			
	h	k	Bias	n·VAR	n·MSE	CCI	Bias	n·VAR	n·MSE	CCI	Bias	n·VAR	n·MSE	CCI
CMIPW	0.05	1	-0.004	3.013	3.045	0.943	-0.001	3.275	3.276	0.943	0.002	3.097	3.102	0.949
	0.15	1	-0.007	2.965	3.053	0.941	-0.003	3.243	3.277	0.939	0.002	3.041	3.045	0.945
	0.20	1	-0.009	2.966	3.123	0.938	-0.006	3.235	3.330	0.941	0.002	3.039	3.044	0.943
	0.05	2	-0.004	2.911	2.941	0.946	-0.001	3.208	3.210	0.943	0.002	3.014	3.017	0.941
	0.15	2	-0.007	2.871	2.957	0.943	-0.003	3.180	3.216	0.939	0.002	2.971	2.975	0.941
	0.20	2	-0.009	2.875	3.030	0.935	-0.006	3.172	3.272	0.941	0.002	2.969	2.973	0.941
	0.05	4	-0.004	2.888	2.923	0.947	-0.001	3.144	3.146	0.948	0.002	2.947	2.951	0.939
	0.15	4	-0.007	2.856	2.948	0.941	-0.003	3.120	3.156	0.934	0.002	2.896	2.899	0.939
	0.20	4	-0.009	2.862	3.025	0.937	-0.006	3.113	3.210	0.936	0.002	2.895	2.899	0.940
	0.05	8	-0.004	2.878	2.912	0.942	-0.001	3.123	3.125	0.949	0.002	2.902	2.906	0.940
	0.15	8	-0.007	2.849	2.942	0.937	-0.004	3.099	3.137	0.941	0.002	2.835	2.839	0.938
	0.20	8	-0.009	2.857	3.021	0.936	-0.006	3.091	3.193	0.933	0.002	2.833	2.837	0.938
	0.05	16	-0.004	2.854	2.881	0.944	-0.001	3.087	3.089	0.943	0.002	2.873	2.877	0.946
	0.15	16	-0.006	2.838	2.919	0.943	-0.003	3.068	3.104	0.941	0.002	2.798	2.802	0.939
	0.20	16	-0.009	2.847	2.995	0.940	-0.006	3.061	3.159	0.941	0.002	2.798	2.803	0.939
CR	0.15	1	0.004	3.272	3.274	0.947	-0.003	3.321	3.325	0.947	-0.001	3.071	3.072	0.948
	0.20	1	0.003	3.252	3.253	0.948	-0.005	3.308	3.320	0.946	-0.003	3.079	3.090	0.948
	0.30	1	-0.003	3.188	3.189	0.950	-0.011	3.323	3.380	0.945	-0.009	3.067	3.148	0.951
	0.05	2	0.010	3.154	3.164	0.948	0.001	3.269	3.269	0.948	0.001	3.064	3.066	0.945
	0.20	2	0.006	3.193	3.196	0.950	-0.005	3.133	3.143	0.952	-0.004	2.960	2.973	0.944
	0.30	2	-0.000	3.149	3.149	0.954	-0.010	3.153	3.205	0.952	-0.009	2.946	3.032	0.943
	0.15	4	0.015	3.123	3.144	0.955	-0.002	3.105	3.107	0.948	-0.001	2.889	2.890	0.941
	0.20	4	0.014	3.134	3.153	0.954	-0.004	3.093	3.102	0.948	-0.003	2.899	2.909	0.939
	0.30	4	0.007	3.097	3.102	0.953	-0.010	3.116	3.167	0.947	-0.009	2.886	2.964	0.943
	0.15	8	0.030	3.117	3.206	0.952	-0.001	3.107	3.108	0.951	-0.001	2.835	2.835	0.942
	0.20	8	0.029	3.127	3.209	0.952	-0.003	3.100	3.106	0.951	-0.003	2.847	2.856	0.939
	0.30	8	0.022	3.088	3.137	0.951	-0.009	3.127	3.167	0.951	-0.009	2.836	2.911	0.946
	0.15	16	0.072	3.205	3.725	0.942	0.002	3.084	3.086	0.952	0.000	2.796	2.796	0.942
	0.20	16	0.071	3.198	3.695	0.941	-0.000	3.077	3.077	0.954	-0.002	2.810	2.814	0.946
	0.30	16	0.063	3.144	3.547	0.947	-0.006	3.104	3.122	0.951	-0.008	2.802	2.860	0.942

S2 Simulation Case 4

$$\text{Case 4}\begin{cases} m_4(x) & = 2x+1,\ x\in(-3,4) \\ \sigma_4^2(x) & = 1 \\ p_4(x) & = \frac{e^{2.5x}}{1+e^{2.5x}} \\ X & \sim 0.3U(-3,0)+0.7U(0,4), \\ E(Y) & = 2.90,\ E(Y_{obs})=5.009,\ P(\delta=1)=0.679,\ \sigma_{KR}^2=88.275. \\ \sigma_{CM}^2 & = 88.275+0.242\times\frac{1}{k}(1+\frac{1}{k}) \\ \sigma_{CR}^2 & = 88.275+0.267\times\frac{1}{k} \end{cases}$$

Table S3 lists calculated results of Case 4 using sample sizes 1000 to 3000.

Table S3: Average estimates using all imputation estimators under simulation Case 4

Method			Sample Size n											
			1000				2000				3000			
	h	k	Bias	n·VAR	n·MSE	CCI	Bias	n·VAR	n·MSE	CCI	Bias	n·VAR	n·MSE	CCI
KR	0.8	-	0.579	118.789	453.643	0.585	0.446	149.409	547.509	0.609	0.350	168.826	537.329	0.682
	1.0	-	0.536	99.137	386.341	0.591	0.420	110.974	464.544	0.589	0.346	109.398	468.950	0.613
IPW	1.0	-	0.440	109.245	302.776	0.718	0.315	128.036	326.155	0.749	0.234	130.136	294.553	0.790
	1.4	-	0.388	68.301	218.457	0.697	0.316	61.803	261.625	0.604	0.281	55.096	291.600	0.478
k-NN	-	1	0.186	57.295	92.070	0.878	0.139	68.908	107.469	0.872	0.103	77.745	109.745	0.909
	-	2	0.240	42.569	100.386	0.781	0.178	52.970	116.515	0.809	0.138	58.590	115.358	0.837
CM	0.2	1	0.188	57.189	92.394	0.874	0.140	68.687	107.909	0.868	0.104	77.491	110.164	0.907
	0.4	1	0.191	57.112	93.659	0.871	0.144	68.579	109.853	0.863	0.108	77.394	112.388	0.906
	0.2	2	0.241	42.565	100.730	0.781	0.179	52.915	117.160	0.807	0.139	58.559	116.144	0.831
	0.4	2	0.245	42.504	102.365	0.778	0.183	52.827	119.675	0.803	0.142	58.488	119.124	0.826
CMIPW	0.2	1	0.187	57.202	92.023	0.874	0.139	68.710	107.307	0.871	0.103	77.515	109.478	0.909
	0.8	1	0.190	57.038	92.966	0.871	0.142	68.457	108.767	0.864	0.106	77.252	111.145	0.906
	0.2	2	0.230	44.343	97.345	0.803	0.169	55.232	112.230	0.830	0.128	61.281	110.294	0.849
	0.8	2	0.218	48.868	96.328	0.837	0.160	59.520	110.990	0.847	0.121	65.454	109.098	0.865
CR	0.8	1	0.132	63.452	80.797	0.913	0.075	78.328	89.472	0.918	0.033	90.690	93.948	0.947
	1.0	1	0.112	66.217	78.664	0.922	0.053	83.397	89.012	0.933	0.010	95.601	95.905	0.955
	1.0	2	0.165	49.747	76.912	0.888	0.092	65.304	82.236	0.917	0.044	73.405	79.241	0.942
	1.4	2	0.144	53.990	74.619	0.901	0.072	70.533	80.865	0.930	0.024	79.968	81.766	0.951

S3 On Wine Quality Data

S3.1 Modified weights of weighted k-NN estimators

Definition: Weighted k-NN and CM estimator for tolerance interval $[0, T]$.

Let uniform k-NN weights, $\frac{1}{k}$, be replaced with a triangular set of weights:

$k = 2,$ weights are 0.5 for each of two nearest neighbors (NN);

$k = 4,$ center 2 NN have weight $\frac{3}{4}$; outer 2 NN use the remainig $\frac{1}{4}$.

$k = 8,$ center 2 NN use weight $\frac{1}{2}$; next 2 NN use weight $\frac{1}{4}$, outer 4 NN use weight $\frac{1}{4}$.

$k = 16,$ center 2 NN use weight $\frac{3}{8}$; next 2 NN use weight $\frac{2}{8}$; then, next 4 NN use weight $\frac{2}{8}$; the outer 8 NN use weight $\frac{1}{8}$.

$k = 32,$ center 2 NN use weight $\frac{1}{4}$, next 2 NN use weight $\frac{3}{16}$; further 4 NN use weight $\frac{3}{16}$; then, next 8 NN use weight $\frac{3}{16}$; outer 16 NN also use weight $\frac{3}{16}$.

S3.2 Descriptions and computations of wine quality data

Table S4: Description of red and white wine data (Cortez et al., 2009, Table 1)

	Red wine			White wine		
Attribute	Min	Max	Mean	Min	Max	Mean
Fixed acidity	4.6	15.9	8.3	3.8	14.2	6.9
Volatile acidity	0.1	1.6	0.5	0.1	1.1	0.3
Citric acid	0.0	1.0	0.3	0.0	1.7	0.3
Residual sugar	0.9	15.5	2.5	0.6	65.8	6.4
Chlorides	0.01	0.61	0.08	0.01	0.35	0.05
Free sulfur dioxide	1	72	14	2	289	35
Total sulfur dioxide	6	289	46	9	440	138
Density	0.990	1.004	0.996	0.987	1.039	0.994
pH	2.7	4.0	3.3	2.7	3.8	3.1
Sulphates	0.3	2.0	0.7	0.2	1.1	0.5
Alcohol	8.4	14.9	10.4	8.0	14.2	10.4

Table S5: MAD(se) and PA(T)(se) of k-NN, KR prediction for red wine

Method	k/h	MAD	PA($T = 0.25$)	PA($T = 0.5$)	PA($T = 1.0$)
	1	0.555(0.025)	0.534(0.018)	0.534(0.018)	0.921(0.010)
Weighted	2	0.559(0.018)	0.332(0.019)	0.691(0.017)	0.904(0.011)
k-NN	4	0.551(0.014)	0.370(0.019)	0.596(0.017)	0.876(0.011)
	8	0.540(0.012)	0.338(0.018)	0.583(0.015)	0.876(0.010)
	16	0.538(0.011)	0.294(0.019)	0.568(0.016)	0.875(0.009)
	32	0.537(0.011)	0.254(0.021)	0.569(0.016)	0.879(0.009)
	0.1	0.627(0.011)	0.105(0.009)	0.458(0.012)	0.833(0.009)
KR	0.5	0.615(0.012)	0.127(0.010)	0.468(0.012)	0.836(0.009)
	1.0	0.594(0.013)	0.216(0.014)	0.498(0.014)	0.849(0.009)
	1.5	0.567(0.015)	0.287(0.017)	0.532(0.016)	0.870(0.010)
	1.8	0.559(0.014)	0.258(0.018)	0.543(0.016)	0.877(0.010)
	2.0	0.557(0.013)	0.235(0.019)	0.554(0.016)	0.877(0.010)
	2.2	0.554(0.012)	0.216(0.018)	0.560(0.016)	0.878(0.010)
	2.5	0.551(0.011)	0.202(0.017)	0.568(0.016)	0.880(0.009)

Table S6: MAD(se) and PA(T)(se) of CM prediction for red wine

	h\k	1	2	4	8	16	32
MAD	0.1	0.555(0.025)	0.546(0.018)	0.536(0.015)	0.522(0.012)	0.518(0.012)	0.516(0.011)
	0.5	0.555(0.025)	0.546(0.018)	0.534(0.015)	0.520(0.012)	0.516(0.012)	0.514(0.011)
	1.0	0.559(0.025)	0.549(0.018)	0.538(0.015)	0.523(0.012)	0.518(0.012)	0.515(0.011)
	1.5	0.562(0.023)	0.555(0.017)	0.545(0.014)	0.533(0.012)	0.529(0.011)	0.526(0.011)
	1.8	0.560(0.021)	0.555(0.016)	0.545(0.014)	0.536(0.012)	0.533(0.011)	0.532(0.011)
	2.0	0.558(0.020)	0.554(0.015)	0.545(0.013)	0.537(0.012)	0.535(0.011)	0.535(0.011)
	2.2	0.557(0.019)	0.553(0.015)	0.545(0.013)	0.538(0.011)	0.537(0.011)	0.537(0.011)
	2.5	0.555(0.019)	0.552(0.014)	0.544(0.012)	0.539(0.011)	0.538(0.011)	0.539(0.010)
PA ($T = 0.25$)	0.1	0.534(0.018)	0.365(0.019)	0.390(0.018)	0.364(0.018)	0.324(0.018)	0.290(0.020)
	0.5	0.533(0.018)	0.364(0.019)	0.390(0.018)	0.367(0.018)	0.328(0.018)	0.295(0.020)
	1.0	0.525(0.018)	0.347(0.019)	0.372(0.018)	0.354(0.018)	0.324(0.019)	0.297(0.020)
	1.5	0.498(0.018)	0.326(0.019)	0.329(0.018)	0.314(0.018)	0.297(0.020)	0.276(0.020)
	1.8	0.482(0.018)	0.325(0.019)	0.312(0.018)	0.293(0.019)	0.278(0.020)	0.257(0.021)
	2.0	0.474(0.018)	0.324(0.018)	0.307(0.018)	0.283(0.019)	0.269(0.020)	0.247(0.021)
	2.2	0.469(0.018)	0.326(0.018)	0.303(0.018)	0.277(0.019)	0.261(0.021)	0.238(0.022)
	2.5	0.464(0.018)	0.327(0.019)	0.298(0.018)	0.268(0.020)	0.252(0.021)	0.229(0.022)
PA ($T = 0.5$)	0.1	0.534(0.018)	0.696(0.017)	0.613(0.017)	0.603(0.016)	0.591(0.016)	0.595(0.016)
	0.5	0.534(0.018)	0.694(0.017)	0.615(0.017)	0.605(0.016)	0.593(0.016)	0.596(0.016)
	1.0	0.533(0.018)	0.655(0.017)	0.599(0.017)	0.595(0.016)	0.588(0.016)	0.593(0.016)
	1.5	0.534(0.018)	0.582(0.017)	0.567(0.017)	0.571(0.016)	0.571(0.015)	0.576(0.015)
	1.8	0.537(0.017)	0.570(0.017)	0.561(0.017)	0.565(0.015)	0.566(0.016)	0.571(0.015)
	2.0	0.538(0.017)	0.568(0.016)	0.560(0.016)	0.565(0.015)	0.566(0.015)	0.570(0.015)
	2.2	0.540(0.017)	0.568(0.016)	0.561(0.016)	0.565(0.015)	0.566(0.015)	0.569(0.015)
	2.5	0.542(0.017)	0.568(0.016)	0.562(0.016)	0.566(0.015)	0.567(0.016)	0.569(0.015)
PA ($T = 1.0$)	0.1	0.921(0.010)	0.904(0.010)	0.878(0.011)	0.880(0.010)	0.880(0.009)	0.885(0.009)
	0.5	0.921(0.010)	0.904(0.010)	0.878(0.011)	0.880(0.010)	0.880(0.009)	0.886(0.009)
	1.0	0.912(0.011)	0.896(0.011)	0.875(0.011)	0.878(0.010)	0.879(0.010)	0.885(0.009)
	1.5	0.885(0.011)	0.879(0.011)	0.870(0.011)	0.874(0.010)	0.877(0.010)	0.882(0.009)
	1.8	0.878(0.011)	0.874(0.011)	0.869(0.011)	0.875(0.010)	0.878(0.010)	0.883(0.009)
	2.0	0.873(0.011)	0.872(0.011)	0.869(0.011)	0.875(0.010)	0.878(0.009)	0.882(0.009)
	2.2	0.871(0.011)	0.871(0.011)	0.869(0.011)	0.875(0.010)	0.878(0.009)	0.881(0.009)
	2.5	0.868(0.011)	0.869(0.011)	0.868(0.011)	0.875(0.010)	0.877(0.009)	0.880(0.009)

Table S7: MAD(se) and PA(T)(se) of k-NN, KR prediction for white wine

Method	k/h	MAD	PA($T = 0.25$)	PA($T = 0.5$)	PA($T = 1.0$)
	1	0.658(0.024)	0.469(0.014)	0.469(0.014)	0.891(0.010)
Weighted	2	0.642(0.015)	0.285(0.012)	0.637(0.013)	0.869(0.009)
k-NN	4	0.628(0.012)	0.327(0.013)	0.542(0.012)	0.831(0.009)
	8	0.610(0.010)	0.305(0.013)	0.531(0.011)	0.829(0.007)
	16	0.604(0.010)	0.279(0.013)	0.516(0.011)	0.826(0.007)
	32	0.600(0.009)	0.261(0.014)	0.515(0.011)	0.830(0.006)
	0.1	0.660(0.008)	0.505(0.006)	0.505(0.006)	0.731(0.005)
KR	0.5	0.651(0.008)	0.511(0.006)	0.512(0.006)	0.736(0.005)
	1.0	0.633(0.009)	0.509(0.007)	0.521(0.007)	0.766(0.006)
	1.5	0.636(0.011)	0.406(0.010)	0.497(0.010)	0.813(0.007)
	1.8	0.633(0.011)	0.330(0.011)	0.494(0.010)	0.821(0.008)
	2.0	0.627(0.011)	0.292(0.012)	0.493(0.011)	0.828(0.007)
	2.2	0.622(0.010)	0.267(0.013)	0.493(0.010)	0.831(0.007)
	2.5	0.617(0.009)	0.245(0.013)	0.490(0.009)	0.832(0.006)

Table S8: MAD(se) and PA(T)(se) of CM prediction for white wine

	h\k	1	2	4	8	16	32
MAD	0.1	0.658(0.024)	0.634(0.015)	0.618(0.012)	0.597(0.011)	0.590(0.010)	0.584(0.009)
	0.5	0.659(0.024)	0.634(0.015)	0.617(0.012)	0.596(0.011)	0.589(0.010)	0.583(0.009)
	1.0	0.661(0.024)	0.636(0.015)	0.619(0.012)	0.598(0.011)	0.590(0.010)	0.584(0.009)
	1.5	0.664(0.023)	0.641(0.015)	0.625(0.012)	0.605(0.010)	0.598(0.010)	0.592(0.009)
	1.8	0.663(0.022)	0.641(0.014)	0.626(0.012)	0.608(0.010)	0.602(0.010)	0.597(0.009)
	2.0	0.662(0.022)	0.641(0.014)	0.626(0.012)	0.609(0.010)	0.604(0.010)	0.600(0.009)
	2.2	0.661(0.021)	0.640(0.014)	0.625(0.012)	0.610(0.010)	0.605(0.010)	0.602(0.009)
	2.5	0.660(0.021)	0.640(0.013)	0.625(0.011)	0.610(0.010)	0.606(0.009)	0.605(0.009)
PA ($T = 0.25$)	0.1	0.469(0.014)	0.306(0.012)	0.339(0.013)	0.321(0.013)	0.297(0.013)	0.282(0.014)
	0.5	0.469(0.014)	0.304(0.012)	0.338(0.013)	0.321(0.013)	0.298(0.013)	0.283(0.014)
	1.0	0.465(0.014)	0.295(0.012)	0.330(0.013)	0.313(0.013)	0.294(0.013)	0.281(0.014)
	1.5	0.450(0.014)	0.281(0.012)	0.300(0.012)	0.290(0.013)	0.280(0.013)	0.271(0.014)
	1.8	0.438(0.014)	0.278(0.012)	0.284(0.012)	0.279(0.013)	0.272(0.013)	0.263(0.014)
	2.0	0.429(0.014)	0.274(0.012)	0.275(0.013)	0.271(0.013)	0.264(0.013)	0.255(0.014)
	2.2	0.419(0.014)	0.269(0.012)	0.267(0.012)	0.263(0.013)	0.259(0.013)	0.249(0.014)
	2.5	0.403(0.014)	0.259(0.012)	0.257(0.012)	0.254(0.013)	0.251(0.013)	0.243(0.014)
PA ($T = 0.5$)	0.1	0.469(0.014)	0.641(0.013)	0.555(0.012)	0.547(0.011)	0.533(0.011)	0.533(0.011)
	0.5	0.469(0.014)	0.638(0.013)	0.555(0.012)	0.547(0.012)	0.534(0.011)	0.534(0.011)
	1.0	0.469(0.014)	0.617(0.013)	0.546(0.012)	0.541(0.012)	0.531(0.011)	0.531(0.011)
	1.5	0.468(0.014)	0.550(0.012)	0.519(0.012)	0.521(0.011)	0.519(0.011)	0.522(0.011)
	1.8	0.466(0.014)	0.519(0.012)	0.507(0.012)	0.513(0.011)	0.514(0.011)	0.517(0.011)
	2.0	0.466(0.014)	0.509(0.012)	0.504(0.012)	0.510(0.011)	0.512(0.011)	0.515(0.011)
	2.2	0.467(0.014)	0.504(0.012)	0.502(0.012)	0.508(0.011)	0.511(0.011)	0.513(0.011)
	2.5	0.467(0.014)	0.501(0.012)	0.501(0.012)	0.508(0.011)	0.510(0.011)	0.510(0.011)
PA ($T = 1.0$)	0.1	0.891(0.010)	0.870(0.009)	0.832(0.009)	0.832(0.007)	0.830(0.007)	0.836(0.006)
	0.5	0.890(0.010)	0.869(0.009)	0.832(0.009)	0.832(0.007)	0.831(0.007)	0.837(0.006)
	1.0	0.886(0.010)	0.866(0.009)	0.831(0.009)	0.832(0.007)	0.830(0.007)	0.837(0.006)
	1.5	0.860(0.010)	0.845(0.010)	0.823(0.009)	0.827(0.007)	0.828(0.007)	0.834(0.006)
	1.8	0.839(0.011)	0.831(0.010)	0.819(0.009)	0.823(0.008)	0.825(0.007)	0.831(0.006)
	2.0	0.832(0.010)	0.827(0.010)	0.817(0.009)	0.821(0.007)	0.824(0.007)	0.830(0.006)
	2.2	0.825(0.010)	0.824(0.009)	0.815(0.009)	0.821(0.007)	0.824(0.007)	0.830(0.006)
	2.5	0.819(0.009)	0.819(0.008)	0.814(0.008)	0.821(0.007)	0.825(0.007)	0.830(0.006)