

Table S.4: Type I errors ($\delta = 0$) and power ($\delta \neq 0$) given by the investigated test statistics based on bootstrap approach in detecting location shift between two samples generated from the four pairs of $F(x)$ and $G(x)$ with the non-independent variance-covariance matrix and sample sizes $n = m = 10$.

Type I errors ($\delta = 0$) and power ($\delta \neq 0$)																	
$G(x)$	δ	value	T^2	$\hat{\Delta}_1^{\max}$	$\hat{\Delta}_2^{\max}$	$\hat{\Delta}_3^{\max}$	T_1	T_2	T_3	T_4	T_5	T_1^*	T_2^*	T_3^*	T_4^*	T_5^*	U
(i)	0	0	0.034	0.013	0.039	0.035	0.015	0.036	0.042	0.032	0.039	0.009	0.036	0.049	0.025	0.040	0.077
	0.50	0	0.264	0.148	0.337	0.348	0.166	0.345	0.367	0.351	0.380	0.084	0.262	0.310	0.243	0.299	0.261
	1.00	0	0.878	0.778	0.946	0.938	0.758	0.940	0.948	0.942	0.947	0.464	0.856	0.895	0.837	0.890	0.829
	1.50	0	1.000	0.995	1.000	0.979	1.000	1.000	1.000	1.000	1.000	0.823	1.000	1.000	1.000	1.000	1.000
	2.00	0	1.000	0.995	1.000	1.000	0.998	1.000	1.000	1.000	1.000	0.966	1.000	1.000	1.000	1.000	1.000
(ii)	0	0	0.010	0.004	0.016	0.005	0.016	0.038	0.038	0.007	0.007	0.013	0.023	0.036	0.003	0.004	0.060
	0.50	0	0.045	0.022	0.044	0.010	0.085	0.094	0.110	0.020	0.028	0.050	0.086	0.107	0.018	0.021	0.057
	1.00	0	0.182	0.110	0.207	0.069	0.351	0.333	0.378	0.141	0.156	0.204	0.331	0.399	0.104	0.140	0.139
	1.50	0	0.373	0.290	0.452	0.170	0.650	0.651	0.662	0.325	0.345	0.518	0.632	0.705	0.277	0.340	0.288
	2.00	0	0.578	0.506	0.658	0.330	0.861	0.841	0.866	0.536	0.574	0.735	0.842	0.889	0.455	0.534	0.447
(iii)	0	0	0.028	0.018	0.034	0.024	0.022	0.043	0.047	0.032	0.033	0.007	0.030	0.037	0.013	0.017	0.063
	0.50	0	0.153	0.072	0.173	0.109	0.141	0.211	0.224	0.154	0.166	0.061	0.187	0.230	0.120	0.160	0.071
	1.00	0	0.637	0.482	0.727	0.620	0.620	0.785	0.803	0.722	0.746	0.344	0.704	0.760	0.600	0.681	0.314
	1.50	0	0.904	0.867	0.969	0.927	0.915	0.983	0.988	0.969	0.978	0.727	0.962	0.976	0.917	0.955	0.724
	2.00	0	0.986	0.968	0.997	0.990	0.990	1.000	1.000	0.996	0.998	0.904	0.998	1.000	0.992	0.994	0.938
(iv)	0	0	0.034	0.014	0.032	0.017	0.024	0.046	0.060	0.025	0.032	0.007	0.038	0.045	0.020	0.029	0.072
	0.50	0	0.085	0.024	0.069	0.045	0.034	0.090	0.105	0.062	0.070	0.022	0.065	0.102	0.038	0.059	0.090
	1.00	0	0.237	0.102	0.256	0.169	0.148	0.312	0.353	0.216	0.272	0.091	0.256	0.343	0.156	0.234	0.235
	1.50	0	0.522	0.341	0.650	0.485	0.455	0.720	0.750	0.588	0.648	0.266	0.616	0.696	0.456	0.568	0.531
	2.00	0	0.778	0.597	0.874	0.754	0.692	0.914	0.916	0.847	0.869	0.457	0.877	0.918	0.743	0.829	0.735